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# Three Issues for Near-Term Monetary Policy

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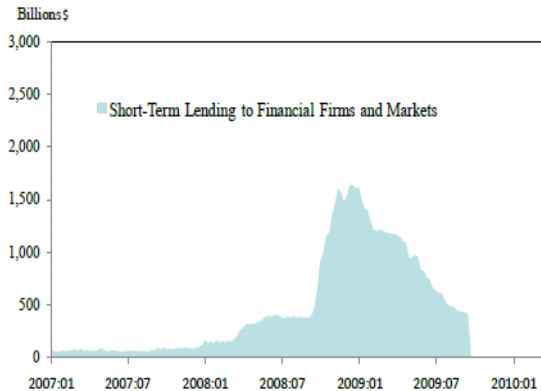
## PLAN FOR THIS TALK

- 1 The nature of current monetary policy
- 2 How to react to shocks during the ongoing period of near-zero nominal interest rates?
- 3 How should we think about U.S. monetary policy with interest on reserves?
- 4 Is there an over-emphasis on output gaps?

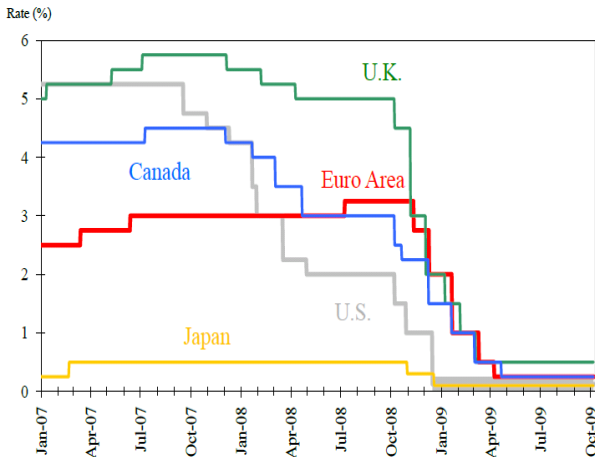
## THREE EASY PIECES

- A variety of liquidity programs
  - Standard central bank response to financial crisis ...
  - ... this time on a grand scale.
- A near-zero interest rate policy
  - Depends on the meaning of “extended period” language.
- An asset purchase program
  - Considered successful as quantitative easing.
  - Causing a large and persistent increase in the monetary base ...
  - ... and a medium-term inflation risk.

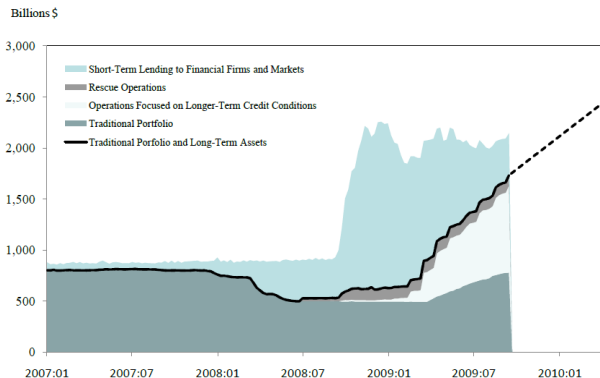
## LIQUIDITY PROGRAMS ARE SHRINKING



## NEAR-ZERO POLICY RATES GLOBALLY



## THE ASSET PURCHASE PROGRAM IS ONLY PARTIALLY COMPLETE



## KEY ASPECTS OF THE CURRENT SITUATION

- The key issue is how to think about the asset purchase program.
- Past two recessions: 2.5 – 3.0 years after the recession end before policy rate increases began.
  - The “too low for too long” argument may weigh heavily on the FOMC this time.
- The economy will experience further shocks while interest rates remain near zero.
- How to run an active monetary policy in this environment?

## WHY WE LIKE TAYLOR

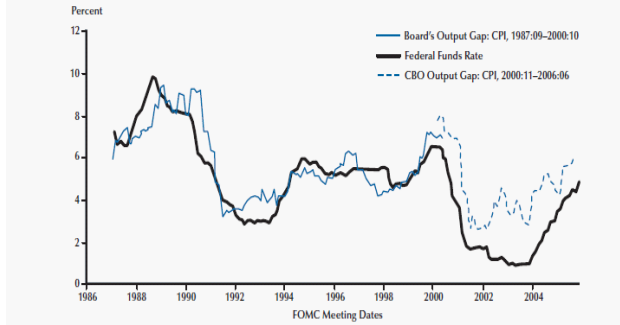
- Taylor (1993) and subsequent literature (including optimal policy) studied state-contingent rules for the adjustment of short-term nominal interest rates.
- The rule was consistent with a steady state with inflation at target and output at potential.
- In short, good policy means ...
  - ... that the Fed needs to communicate to the private sector how it intends to react to shocks in the future.
- Before December 2008, the Fed was able to communicate future monetary policy because the likely path of interest rate adjustment was relatively well understood.
- With nominal interest rates currently at zero, the Fed has lost this ability to communicate future policy.



## EVOLUTION OF SYSTEMATIC POLICY: TAYLOR

### Greenspan Years: Federal Funds Rate and Taylor Rule

(CPI  $p^* = 2.0$ ,  $r^* = 2.0$ )  $a = 1.5$ ,  $b = 0.5$



Source: Poole, William. "Understanding the Fed." Federal Reserve Bank of St. Louis Review January/February 2007.

## THE ASSET PURCHASE PROGRAM

- The FOMC asset purchase program does not have a state-contingent character.
- The Committee announced an intention to buy up to \$1.75 trillion in assets by 2010 Q1.
- There has been little indication of how or whether these amounts might be adjusted given incoming information on economic performance.
- It is unclear whether the policy is ultimately consistent with a steady state with inflation at target and output at potential.
- Confusion is creating uncertainty in financial markets.

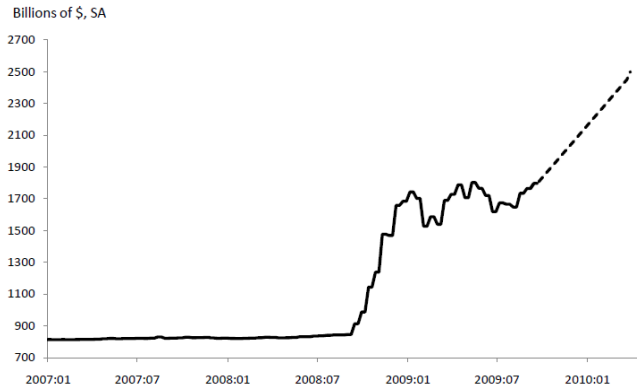
## A POLICY RULE FOR ASSET PURCHASES?

- An optimal asset purchase program would have a state-contingent character.
- A Taylor-type rule for asset purchases could communicate how purchases would be adjusted as information arrives on the economy.
  - This rule could serve as a guide to policy adjustment, like Taylor's rule.
- This would help communicate to markets how it is that the purchase program is ultimately consistent with a steady state with inflation at target and output at potential.
- This would reduce uncertainty and make the program more effective.
- It would also help to pin down the optimal size of the program.

## WHY QUANTITATIVE RULES?

- We have spent 20 years refining ideas about interest rate rules and optimal monetary policy.
- We should consider quantitative rules because we are at the zero bound and may remain there for some time, depending on how the economy performs.
- Quantitative rules are generally not as satisfactory as interest rate rules.
- But it is still worthwhile to use them because of the need to communicate future monetary policy to markets.

## THE MONETARY BASE IS EXPANDING RAPIDLY



## WHAT IS THE NATURE OF THE MEDIUM TERM RISK?

- Small changes in the monetary base may not feed into inflation reliably ...
  - ... but this is a very large change.
- Consider a textbook experiment.
- “A permanent doubling of the money supply eventually doubles the price level.”
- Suppose this process takes 10 years. Then the average inflation rate would be 7 percent per year.
- Is the current policy the textbook experiment? Not exactly.
  - The monetary base is not the money supply.
  - The increase in the monetary base will be persistent, but is not intended to be permanent.
  - Much depends on expected future policy.

## COPING WITH LARGE RESERVE BALANCES

- Allow assets to run off at maturity.
  - Agency MBS will mature only slowly.
- Tools to keep reserves on deposit at the Fed.
  - Interest on reserves, reverse repos, term deposits.
  - *Untested.*
- Sell assets as appropriate.
- All tools put upward pressure on interest rates.

## POLICY IMPLEMENTATION IN THE FUTURE

- The focus in the U.S. has been on the federal funds rate.
- Authority to pay interest on reserves granted Fall 2008.
- Interest rate on reserves was expected to put a floor under the federal funds rate.
  - Did not work as expected during November-December 2008.
- With interest on reserve holdings, the Fed could implement monetary policy differently.



## MORE ON POLICY IMPLEMENTATION IN THE FUTURE

- Many central banks operate with three rates:
  - An interest rate paid on deposits at the central bank.
  - A lending rate for loans from the central bank.
    - Primary credit versus TAF?
  - A policy rate which lies between the two.
- The lending and deposit rates can be implemented via standing facilities.
- The stance of policy then depends on all three rates, although they might often be adjusted together.

## TOO MUCH EMPHASIS ON THE OUTPUT GAP?

- I am concerned about a popular narrative in use today.
- The narrative is that the output gap must be large since the recession is severe ...
- ... and so any medium term inflation threat is negligible ...
- ... even in the face of an extraordinarily accommodative monetary policy.
- I think this narrative overplays the output gap story for understanding medium term risks.

## PROBLEMS WITH THE OUTPUT GAP

- Gap-based theories of inflation were badly discredited in the 1970s.
- Athanasios Orphanides has argued that much of the run-up in 70s inflation can be attributed to a misreading of the output gap.
- There are three main issues:
  - Measurement of the gap itself is difficult.
    - There are both theoretical and practical issues.
  - Even accepting a particular measure, the empirical relationship with inflation is not robust.
  - Traditional output gaps have no concept of a collapsing bubble.

## BUBBLES AND OUTPUT GAPS

- It has been popular to describe recent events in the economy as a collapse of a bubble in housing.
- A look at the housing data makes a convincing case.
- But when it comes to calculating traditional output gaps, there is no notion of a bubble.
- If part or most of the fall in output was a collapsed bubble, then today's output gap would be smaller than it appears.
- This is mainly an issue for assessing medium term inflation risk.

## CONCLUSIONS

- The near-term action on monetary policy will be with the asset purchase program.
- A state-contingent quantitative easing program may be helpful during the period of near-zero nominal interest rates.
  - Allows policy to react to incoming information on the economy.
- Interest on reserves may change the way we think about monetary policy implementation in the U.S.
- The output gap argument is overemphasized with respect to assessing medium term inflation risk.



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