



CENTRAL
to
AMERICA'S
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Three Issues for Near-Term Monetary Policy

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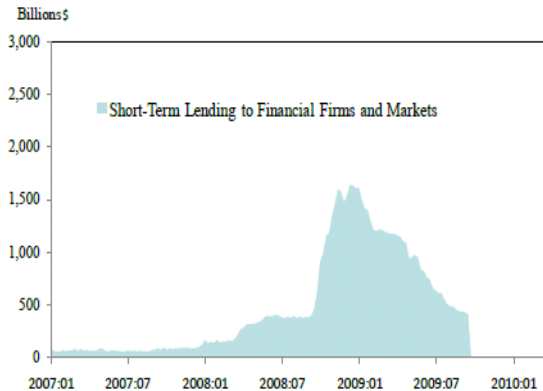
PLAN FOR THIS TALK

- 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?

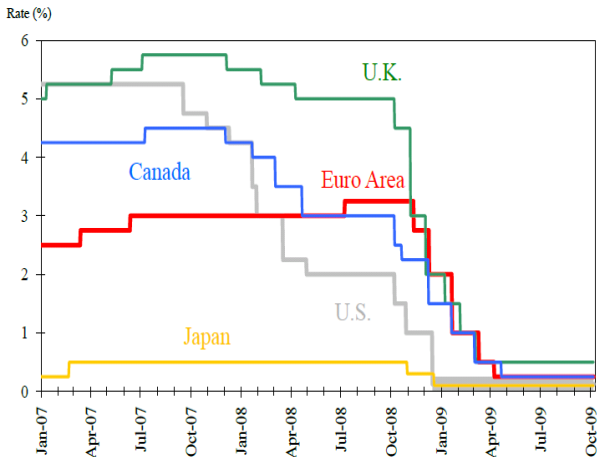
THREE EASY PIECES

- 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.

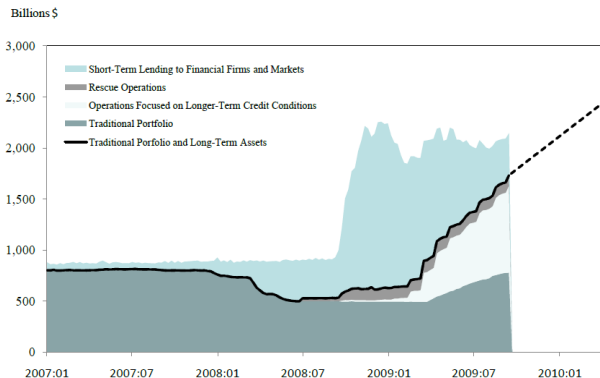
LIQUIDITY PROGRAMS ARE SHRINKING



NEAR-ZERO POLICY RATES GLOBALLY



THE ASSET PURCHASE PROGRAM IS ONLY PARTIALLY COMPLETE



KEY ASPECTS OF THE CURRENT SITUATION

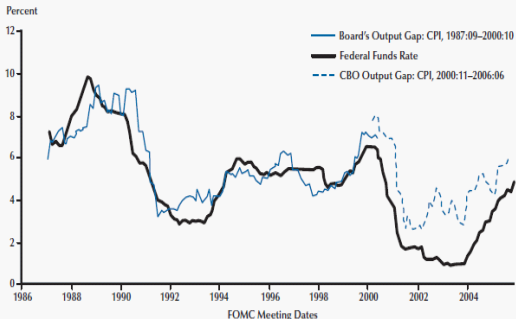
- The key issue is how to think about the asset purchase program.
- Past two recessions: 2.5 – 3.0 years after the recession end before policy rate increases began.
 - The “too low for too long” argument may weigh heavily on the FOMC this time.
- The economy will experience further shocks while interest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

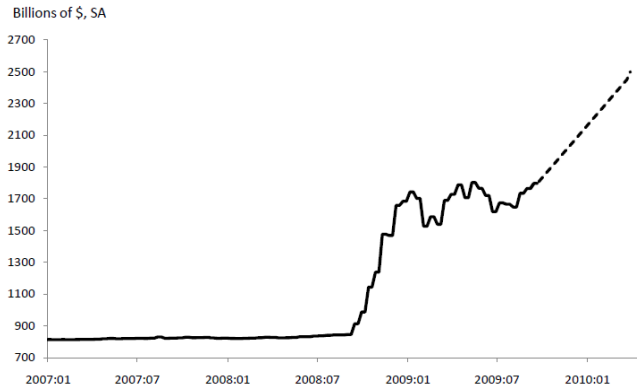
A POLICY RULE FOR ASSET PURCHASES?

- 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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