

Monetary Policy, Credit Policy, and Interest on Reserves Policy in the Economic Recovery

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INTRODUCTION

I am pleased to be invited to testify today before the House Financial Services Committee on “Unwinding Emergency Federal Reserve Liquidity Programs and Implications for Economic Recovery.” The credit turmoil and recession have led the Fed into uncharted waters. While pushing short term interest rates nearly to zero, the Fed has more than doubled the size of its balance sheet by creating a trillion dollars of bank reserves to finance the purchase of a variety of non-Treasury securities and to fund loans to financial institutions through a variety of liquidity facilities. With the recession apparently ending, the time is right to examine the policy options that would allow the Fed to guide the economy back to a non-inflationary balanced-growth path.

Decisions that govern economic activity are forward looking. Hence, to facilitate a recovery from the recession the Fed needs to make the public confident of the soundness of its “exit strategy” for normalizing both short term interest rates and the size and composition of its balance sheet. In my view, the economy is likely to recover slowly. It may be some time before it is appropriate for the Fed to raise short term rates or shrink its balance sheet. The aggressive expansion of the Fed’s balance sheet seems to have stabilized inflation expectations against the disinflationary potential inherent in the large output gap and declining unit labor costs that have characterized the recession. Another negative shock to the global economy could call for more monetary stimulus. In the meantime, the Fed should position itself to deal flexibly and credibly with whatever comes, by improving its actual and perceived independence, its commitment to low inflation, and its mechanical capability to raise interest rates and shrink its balance sheet when the time comes.

In order to improve the effectiveness of its exit strategy, and in keeping with the Fed’s longstanding intention to increase transparency, I believe that the Fed should recognize and describe the strategic initiatives that it undertook in the credit turmoil in terms of three fundamental components: monetary policy, credit policy, and interest on reserves policy. In the balance of my testimony I first distinguish between the three fundamental components, and then I present recommendations for the Fed’s exit strategy using my three-way classification of central bank policies.

DISTINGUISHING MONETARY POLICY, CREDIT POLICY, AND INTEREST ON RESERVES POLICY

According to my classification, pure *monetary policy* consists of open market operations that expand or contract high-powered money (bank reserves plus currency) by buying or selling United States Treasury securities. Since the collapse of the gold standard, and until the recent credit turmoil, the Fed satisfied virtually all its asset acquisition needs in support of monetary policy by purchasing Treasury securities, a policy long known as “Treasuries only.” This was done to avoid carrying credit risk on the Fed’s balance sheet. The main exception was occasional, temporary discount window lending to depository institutions. Importantly, the Fed returns to the Treasury all the interest (net of operating expenses) on the Treasuries that it holds. Hence, by adhering to a “Treasuries only” asset acquisition policy the Fed passes all the revenue from monetary policy back to the Treasury and leaves all the decisions regarding the use of that revenue to the fiscal authorities.

Pure monetary policy works by varying the aggregate quantity of bank reserves to influence the spread between the federal funds rate and interest paid on reserves. For example, an open market purchase of Treasury securities that adds reserves to the banking system lowers the federal funds rate relative to whatever rate the Fed pays on reserves—which until 2008 was always zero. The Fed delivered a powerful monetary stimulus to the economy in the fall of 2008 by creating hundreds of billions of dollars of bank reserves that satiated the market and drove the federal funds rate nearly to zero.

Second, pure *credit policy* consists of changing the composition of the Fed’s asset portfolio between Treasury securities, on one hand, and credit to the private sector and non-Treasury government entities on the other hand, holding high-powered money fixed. For instance, hundreds of billions of dollars of TAF discount window credit auctioned to depositories from the fall of 2007 through the summer of 2008 was pure credit policy financed with funds obtained from the Fed’s sale of Treasury securities. One can also imagine a combination credit and monetary policy in which newly created bank reserves are used to fund discount window lending, or to purchase non-Treasury securities. The trillion dollars of bank reserves that currently finances a like volume of mortgage-backed securities on the Fed’s balance sheet represents a combination credit and monetary policy.

Pure credit policy by itself has basically no effect on the federal funds rate because it does not change aggregate bank reserves or interest paid on reserves. In my classification, the correct way to think of pure credit policy is as debt-financed fiscal policy. Why? Well, at the margin, the Fed returns to the Treasury the interest earned on Treasury securities that it holds; so when the Fed sells Treasuries to finance the acquisition of non-Treasury assets such as discount window loans or mortgage-backed securities, the result is just as if the Treasury financed this purchase by borrowing from the public.

Fed credit policy works by interposing the government between private borrowers and lenders, and exploiting the government’s creditworthiness to lower private borrowing costs and facilitate credit flows. For example, when interbank rates spiked in the credit turmoil, TAF credit provided some relief from elevated borrowing costs for depository institutions then dependant on interbank funding. Likewise, Fed purchases of mortgage-backed securities facilitated the flow of mortgage credit. And Fed loans to three Maiden Lane special purpose entities facilitated the acquisition of Bear Stearns by JPMC and the rescue of AIG.

In contrast to holding United States Treasury securities, all Fed lending carries some credit risk and exposes the Fed, and ultimately taxpayers, to potentially costly and controversial disputes regarding credit allocation. It is important to understand that this is true even though the Fed protects itself with good collateral. For instance, if Fed credit finances the exit of uninsured depositors or creditors of an institution that fails subsequently, then the Fed would strip that failed institution of collateral that would be available otherwise to cover the cost of deposit insurance or other government guarantees.

Credit policy infringes on the fiscal policy prerogatives of Congress and the Treasury whenever it goes beyond collateralized, occasional, temporary lending to solvent depository institutions. “Expansive central bank credit policy” thereby undermines central bank independence. In

contrast, by confining its assets to United States Treasury securities the Fed lends to the Treasury and respects the integrity of fiscal policy fully.

Finally, *interest on reserves policy* consists of varying the interest rate that the Fed pays on bank reserves, while holding monetary and credit policy fixed. The Financial Services Regulatory Relief Act of 2006 gave the Fed the authority starting in 2011 to pay interest on reserves for the first time in its history. In May 2008 the Fed asked Congress for immediate authority to pay interest on reserves, and the Fed began to pay interest on reserves in October 2008 to help put a floor under the federal funds rate. Interest on reserves works in that regard because depository institutions will not lend in the interbank market at interest below the rate they can earn on reserves held at the Fed. By winter 2008 the Fed cut its intended federal funds rate nearly to zero, so the authority to pay interest on reserves didn't matter much then. Nevertheless, the Fed's request to expedite its power to pay interest on reserves was farsighted. The power to put a floor under the federal funds rate should provide the Fed with the mechanical capability to exit the zero bound on interest rate policy regardless of the size of its balance sheet. I have more to say about that below.

RECOMMENDATIONS FOR THE EXIT STRATEGY

CREDIT POLICY

Congress bestows Fed independence only because it is necessary for the Fed to do its job effectively. Hence, the Fed should perform only those functions that must be carried out by an independent central bank. The idea is to preserve the Fed's independence to act credibly, flexibly and aggressively with monetary policy, limited credit policy, and interest rate policy to achieve a non-inflationary recovery.

Expansive credit policy initiatives are fiscal policy and must be subject to the oversight of Congress. The presence of expansive credit policy assets on the Fed's balance sheet should not be allowed to threaten the Fed's actual or perceived political independence, and thereby the credibility of its exit strategy.

To preserve the Fed's independence, the Treasury and Congress should work to remove expansive credit assets from the Fed's balance sheet in exchange for Treasury securities, so the problematic credit assets can be monitored and managed elsewhere in the government. The Fed could then employ conventional monetary policy as implemented for decades, to sell Treasuries and drain bank reserves in order to raise the federal funds rate as the economy recovers.

INTEREST ON RESERVES POLICY

Chairman Bernanke in his written testimony for the July 2009 *Monetary Policy Report to the Congress* expressed the view that the authority to pay interest on reserves is perhaps the most important tool enabling the Fed to raise the federal funds rate without first shrinking its balance sheet. I agree. However, in his July *Wall Street Journal* op-ed, Chairman Bernanke noted that the federal funds rate slipped below interest paid on reserves in the fall of 2008, evidently because some large lenders in the federal funds market, such as government-sponsored enterprises

(GSEs) Fannie Mae and Freddie Mac, and Federal Home Loan Banks (FHLBs), are legally ineligible to receive interest on balances that they hold at the Fed.

Thus, it is reasonable to worry that lending by the GSEs, the FHLBs, and others in the federal funds market could impair the power of interest on reserves to put a floor under the federal funds rate again when the Fed tries to exit the near-zero federal funds rate setting.

The *WSJ* op-ed suggests that if this difficulty arises, the Fed has at its disposal other options by which it could immobilize reserves to help raise the federal funds rate. As I see it, however, these other options are not without problems of their own.

Instead, I think that the Fed should work with Congress and the Treasury to secure the power of interest on reserves to put a floor under the federal funds rate. After all, the Fed's July 2009 *Monetary Policy Report to the Congress* pointed out on page 37 that interest paid on bank reserves worked successfully for other central banks to put a floor under interbank rates in their economies even as aggregate bank reserves expanded aggressively.

Given the demonstrated power of interest on reserves abroad, the Treasury and the Congress should help the Fed to secure the interest on reserves floor in the United States by modifying regulations for the federal funds market so as to exclude all but depository institutions from lending in that market, or alternatively by allowing all institutions eligible to lend in the federal funds market to earn interest on balances at the Fed. So strengthened, interest on reserves policy would provide the Fed with a precise, flexible, and reliable means of raising interest rates as the economy recovers, regardless of the size of the Fed's balance sheet.

It is true that even without such modifications depository institutions eligible to receive interest on reserves have an incentive to attract federal funds from the GSEs and the FHLBs, and to deposit those funds at the Fed. Such arbitrage would tend to keep the federal funds rate from falling very far below interest on reserves. Nevertheless, such arbitrage cannot be counted upon definitively to stabilize the federal funds rate close to interest on reserves. Arbitrage is subject to shocks beyond the Fed's control including the possibility of a recurrence of the credit turmoil.

Without the modifications suggested above, competition and cost minimization among depository institutions for loanable funds will tend to transmit fluctuations in the federal funds rate to deposit rates. But competition in the loan market will tend to keep loan rates in line with interest on reserves plus an external finance premium for monitoring and managing loans. The resulting fluctuations in the spread between loan rates and deposit rates would complicate the transmission of interest rate policy to the economy. Such fluctuations could be eliminated by securing the interest on reserves floor for the federal funds rate.

MONETARY POLICY

According to my classification, the Fed's remaining options to raise the federal funds rate (without raising interest on reserves) all involve monetary policy in the sense that they work by reducing aggregate bank reserves. As a technical matter, however, in order to raise the federal funds rate significantly by means of pure monetary policy, the Fed would have to drain hundreds

of billions of dollars of reserves and return the stock of reserves to a level near to those prior to the credit turmoil. Large-scale operations would have to be undertaken in advance over a span of time to pre-position monetary policy to take the modest operations needed to adjust the federal funds rate precisely and flexibly when the time comes.

The Fed contemplates publicly four options for draining reserves. The Fed itself acknowledges that the first two have serious drawbacks, and I agree. First, the Fed could reduce reserves by selling some of its holdings of Treasury securities. The Fed recognizes that this option is limited by the stock of Treasuries currently available in its portfolio. Second, the Treasury could sell securities and deposit the proceeds with the Fed. But the Fed does not want to rely on the Treasury to achieve its policy objectives.

The Fed is more favorably disposed to the third option. The Fed could drain bank reserves and absorb federal funds otherwise lent by GSEs, FHLBs and other institutions by arranging large-scale reverse repurchase agreements. Such reverses would involve the sale by the Fed of securities from its portfolio with an agreement to buy the securities back at a slightly higher price. I see problems with this approach. Large-scale reverses would expose the Fed to substantial counterparty risk. This could complicate the Fed's management of financial markets, especially in times of financial turmoil. Simply put, I don't think the Fed should put itself in the position of having to depend to such a large extent on contractual arrangements with the private sector.

Fourth, the Fed could drain bank reserves by offering interest-earning term deposits to banks, analogous to certificates of deposits that banks offer their customers. The Fed is favorably disposed to this option, too. But, again, this option is not without problems. Fed term deposits would compete with Treasury bills and potentially create friction with the Treasury. And term deposits would be close substitutes for bank reserves. Hence, the introduction and management of interest on term deposits could destabilize the interest elasticity of demand for reserves and complicate federal funds rate targeting with monetary policy as contemplated.

More generally, I believe it is inadvisable for the Fed to utilize non-monetary "managed liabilities" on a large scale. They would turn the Fed into a "financial intermediary" and facilitate the perpetual funding of credit policy independently of monetary policy. Moreover, there is no reason for the Fed to issue managed liabilities if the Fed exchanges its expansive credit assets for Treasuries, and the federal funds market is regulated to secure the potential for interest on reserves to put a floor under the federal funds rate until the Fed can shrink its balance sheet.

CONCLUSION

My proposed classification of central bank policies could be utilized productively in the Fed's internal deliberations and in its external communications to improve the transparency of the Fed's operations for purposes of accountability and credibility, to distinguish the fiscal aspects of Fed policies for the purpose of clarifying the boundary of its independent responsibilities, to help secure the Fed's operational capability to raise interest rates in a timely manner to sustain a non-inflationary recovery, and to reinforce the sense that the Fed has the political independence and the determination to unwind its emergency liquidity measures while limiting their inflationary potential.