Monetary Policy and the Recent Extraordinary Measures Taken by the Federal Reserve

Testimony before the
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Thank you Chairman Frank, Ranking Member Bachus, and other members of the House Committee on Financial Services for inviting me to testify on monetary policy and the "extraordinary measures" taken by the Federal Reserve over the past 18 months.

The best way to begin examining these extraordinary measures is to look at the extraordinary increase in reserve balances at the Fed shown in Figure 1. Reserve

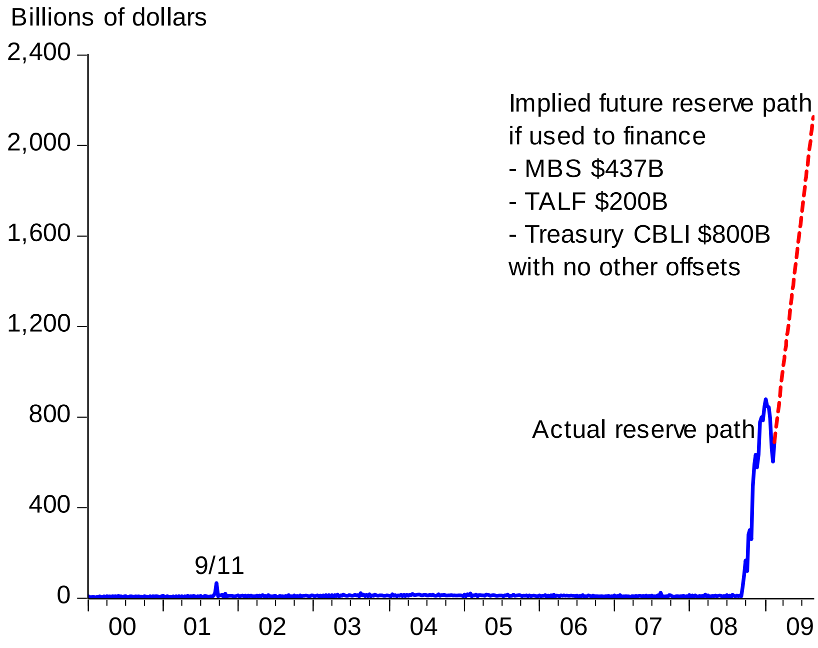

Figure 1. Reserve Balances The solid line shows the actual movements and the dashed line shows the implied future movements.

balances, or deposits at the Fed, are the key component—along with currency—of base money or central bank money which the Federal Reserve is responsible for controlling and which ultimately brings about changes in the broader money supply measures. The sharp increase in reserve balances began in mid September 2008. For the week ending September 10, banks and other depository institutions held $8 billion in reserve balances at the Fed. By the week ending December 31, 2008, they held $848 billion. The Fed had increased the supply of reserve balances by 100-fold in a very short period of time. Note also how large this increase is compared with the then-extraordinary increase around the time of 9/11 and the physical damage to the financial markets.

The recent increase came about as a direct result of the Fed's decision to purchase securities and make loans to certain sectors and financial institutions. More specifically, the Fed financed these securities purchases and loans by creating reserve balances—creating money. The Federal Reserve has since called this action credit easing.[1] It is more like *selective* credit easing, or perhaps an industrial policy, because expansions of the Fed's balance sheet always lead to credit easing in some form. Moreover, the Fed has been financing these actions by creating money; that is why I had earlier used the term mondustrial policy as a way to help explain this complex combination of monetary policy and industrial policy to those not familiar with monetary issues or with the details of the Fed's balance sheet.[2]

As a matter of accounting the Fed can obtain additional funds to finance its purchases of private securities and lending in the three ways. First, it can create money; that is, it can pay for the purchases by crediting banks with deposits at the Fed. Second, the U.S. Treasury can borrow the funds and deposit them at the Fed. Third, the Fed can borrow the funds itself by issuing debt. Of course, the Fed can also adjust the composition of its own portfolio, by selling government securities to make room for more private securities and loans.

Indeed, for the first thirteen months of the financial crisis, up until the week of Sept 10, 2008, the Fed adjusted the composition of its portfolio by selling off government securities and using the funds to increase loans to depository institutions through its Term Auction Facility, to provide loans to investment banks through its Primary Dealer Credit Facility, or to purchase private assets such as those in the Bear Stearns intervention. By simply adjusting its asset portfolio it kept reserves from increasing. However, starting in September there were apparently not enough government securities left in its portfolio to sell without interfering with its operations or disrupting other programs.

Hence, the Fed resorted to the first method of finance listed above and started to create money for its purchases and loans starting in the week of September 17. The Fed also used the second method to a smaller degree as the Treasury borrowed and the Fed created a special account where the Treasury deposited funds; that account is now diminishing, so reserve creation has had the main financing role.

[1] Ben Bernanke, "The Crisis and the Policy Response," January 13, 2009, The Stamp Lecture, London School of Economics, London England.

[2] John B. Taylor, "The Need to Return to a Monetary Framework," Prepared for the National Association of Business Economics Panel, "Long-Run Economic Challenges: A Federal Reserve Perspective," San Francisco, January 3, 2009 and forthcoming in *Business Economics*, Vol. 43, No 2. A list of the major private securities and loan programs is found Table 1 which is drawn from that paper.

As Figure 1 shows the actual level of reserve balances came down in the first six weeks of this year, but has increased again, according to the latest available data, as the Fed has started to buy mortgage backed securities (MBS) which increased by $85 billion in the most recent reporting week. Where will reserve balances go in the next few months?

The Fed's program to purchase mortgage backed securities is now at $63 billion and is expected to grow to $500 billion. So that is an additional $437 billion to come. There is also the Term Asset-Backed Loan Facility (TALF) to buy securities backed by credit card debt, student loans, and auto loans which will grow to $200 billion. The U.S. Treasury has recently requested another Fed program, the Consumer and Business Loan Initiative (CBLI), for $1 trillion, though that is apparently net of the TALF program adding another $800 billion. Thus the total increase could be as much as $1,437 billion. In Fig 1 I have drawn in the implied increase in reserve balances (dashed line) if these additional purchases are financed by creating reserve balances and there is no other change. This is not a forecast but rather an implication of the practice of continuing to finance purchases of this size by money creation.

Relation to the Near Zero Interest Rate and the Quantity of Money

It is sometimes said that the policy of increasing reserves by large amounts as shown in Figure 1 started when the Federal Reserve interest rate target hit zero, and there was no more easing possible in the sense of lowering the interest rate further. However, this is incorrect. In fact, the explosion of reserves took place when the federal funds rate target was at 2 percent. The decline in the interest rate from 2 percent to near 0 percent took place over the next several months. The decline followed the expansion of reserves and was likely caused by the expansion. The FOMC decisions to lower the target for the federal funds rate followed the declines in the federal funds rate, effectively ratifying them. So the increase in reserves did not start because the interest rate was at zero, but because of the need to finance securities purchases and loans.

In any case, now that the interest rate is effectively at zero, decisions about monetary policy ought to shift to quantities like the quantity of money. For example, a traditional monetary policy framework of the kind discussed widely before interest rate guidelines became popular would focus on the level or the growth rate of the quantity of a monetary aggregate. The decisions would be about what is the appropriate growth rate of money for dealing with the recession and helping the recovery from recession. If an increase in money growth is called for then monetary policy would bring this about by open market operations. An increase in base money would then increase the growth rate of a monetary aggregate by some amount.

But this is not the type of policy that is in place at this time. Rather, as described above, it is a policy where the driver is intervention into particular markets with the amount of base money growth determined by the amount of this intervention. The increase in M1 or M2 is determined by that reserve growth and by how much banks decide to hold as excess reserves. So far the banks have held a large amount of the increase in reserves, though there has been a marked increase in the growth rate of currency, demand deposits, and M1

Questions and Concerns

I have a number of questions and concerns about the current policy.

First, the enormous increase in reserves is potentially inflationary. Many people ask me if it is inflationary, so I know it is on people's minds. With the economy in a weak state and commodity and many other prices falling, inflation is not now a problem, but at some time the Federal Reserve will have to remove these reserves or we will have a large increase in inflation. Recall that increases in money growth affect inflation with a long lag. The question is whether the Fed will be able to reduce the reserves in time and whether people will expect the Fed to do so. If reserves get to the level shown by the dashed line in Figure 1 it will have to sell a huge amount of securities backed by consumer credit, mortgages, student loans, and auto loans. This will be difficult to do politically.

Second, if we are to have a selective credit policy with the inherent credit risks involved in such a policy, I believe it is more appropriate for the Treasury or some other agency to take it on with the approval of the Congress with the purposes stated and debated transparently. What justification is there for an independent government agency to engage in such a selective credit policy? For the Federal Reserve to be taking on these responsibilities raises questions about its independence. Indeed, the recent request by the Treasury for the Fed to assist in creating a Consumer and Business Loan Initiative is certainly reminiscent of the request by Treasury for the Fed to help out in its own borrowing operations before the Accord of 1950. The request has the appearances of breaking the Accord, even though the Federal Reserve Board is in agreement.[3]

Third, it is not clear how effective these interventions are, and they may be counterproductive. Though the Federal Reserve has argued that these actions are necessary because of the financial crisis and many in the financial markets agree, I have found that, for example, the Term Auction Facility had no noticeable impact on interest rate spreads. I have a concern that such actions prolonged the crisis by not addressing the fundamental problem of counterparty risk in the banks.[4] At the least the Fed should increase its policy evaluation work in this area.

Fourth, the extraordinary measures have the potential to change the role of the central bank in the future in ways that could be harmful. The success of monetary policy during the great moderation period of long expansions and mild recessions was not due to a lot of discretion but to following predictable policies and guidelines that worked. While the Fed uses the authority in Section 13(3) of the Federal Reserve Act, one can question its applicability now and one can certainly imagine it being cited in many other contexts in the future. For example, the recovery might be viewed as too slow, with calls to provide more assistance to financial firms to help the auto loan market or the consumer loan market. Can one continue to apply Section 13(3)

[3] Milton Friedman and Anna Schwartz argue that the pre-Accord situation was not one where Treasury and the Federal Reserve were in much disagreement. See *A Monetary History of the United States,* Princeton University Press, 1963. P. 625

[4] John B. Taylor. *Getting Off Track; How Government Actions and Interventions Caused, Prolonged, and Worsened the Financial Crisis.* Hoover Press, Stanford University, Stanford, California, 2009

when firms and people assisted can get credit but at a rate that seems too high? Will such interventions only take place in recessions, or will Fed officials use them in the future to try to make economic expansions stronger or to assist certain sectors and industries for other reasons?

Recommendations

In my testimony before your committee one year ago I urged more transparency about the Federal Reserve's balance sheet, mentioning for example the need for daily data[5] and I have reiterated those recommendations since then especially since the explosion of reserve balances. I am very encouraged that, following your hearing of February 10, 2009, the Fed has created a web page to explain its new programs and its balance sheet. This is excellent news. The Fed has also has clarified some of the line items such as "other Federal Reserve assets" which had contained hundreds of billions of dollars of loans to other central banks. I still recommend that daily rather than only weekly data be provided for more accurate and timely analysis.

As soon as conditions warrant, the policy framework should again focus on systematic procedures for setting the overnight interest rate—a policy which works well, as has been demonstrated during the great moderation period of the past quarter century. In the meantime, other instruments of monetary policy such as reserve growth, or base money growth, or the growth of a monetary aggregate should be the focus of decision making and accountability to Congress.

Currently the only broad quantitative statement by the Federal Open Market Committee is that it will keep the size of its balance sheet "at a high level for some time" (Minutes of January 27-28 meeting). That seems too vague. Does it mean the scenario like the dashed line in Figure 1? Or does it mean that reserves will stay where they are now?

Instead, the FOMC could give ranges for the growth of reserve balances, base money, and broader monetary aggregates. The Federal Reserve staff could study the impact of various growth rates for the quantity of reserve balances or the money supply, and the FOMC could discuss and vote on these quantities, until such time as the interest rate goes above zero. Right now we do not know if the outcome in Figure 1 is the intent of the Fed or what the contingency plan is for reversing this increase

[5] John B. Taylor "Monetary Policy and the State of the Economy," Testimony before the Committee on Financial Services, U.S. House of Representatives February 26, 2008

Table 1   Major Factors Supplying Reserves

Securities (Treasury and Agency) held outright
Repos
Loans from the TAF
Other Loans
- o Primary Credit Facility (discount window)
- *o Primary Dealer Credit Facility*
- *o Asset Back Commercial Paper Money Market Mutual Fund Liquidity Facility*
- *o Loans to AIG*
- *o Term Asset-Backed Securities Loan Facility (credit card, student, auto)*

Private Portfolio holdings
- *o Commercial Paper Funding Facility*
- *o Maiden Lane I (Bear Stearns)*
- *o Maiden Lane II (AIG)*
- *o Maiden Lane III (AIG)*
- *o Money Market Investor Funding Facility*
- *o Mortgage Backed Securities Purchase Program*

Loans to foreign central banks