Central Banking in the Credit Turmoil: An Assessment of Federal Reserve Practice

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Outline

1) Monetary Policy, Credit Policy, and Interest on Reserves Policy
2) Fiscal Aspects of the Three Central Bank Policies
3) Five Fed Initiatives in the Credit Turmoil
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The Fed in the Credit Turmoil

- By April 2009, Fed grew balance sheet from around $900 billion in mid-2007 to $2.1 trillion
- Reduced holdings of US Treasury securities from nearly $800 billion to around $550 billion
- Extended $500 billion loans to depository institutions; purchased over $400 billion of mortgage-backed securities; extended nearly $200 billion to SPEs to buy commercial paper
- By Dec 2009, $1 trillion excess bank reserves created, Fed holds $777 billion Treasuries, $160 billion agency debt, and $910 billion MBS, plus…

Money, Credit, and Interest on Reserves Policies

- **<u>Monetary Policy</u>**: open market operations that expand or contract high-powered money (bank reserves and currency) by buying or selling Treasury securities
- In the past, Fed satisfied virtually all asset acquisition needs in support of monetary policy by purchasing Treasuries to avoid carrying credit risk on its balance sheet
- A policy known as "<u>Treasuries only</u>"

Money, Credit, Interest on Reserves

- **Credit Policy**: shifting the composition of the central bank balance sheet (holding high-powered money fixed) between Treasuries and credit to the private sector or other government entities in the form of loans or security purchases
- **Combination monetary and credit policy**: credit policy financed with newly-created bank reserves
- $1 trillion of credit extended by the Fed has been financed with newly-created with bank reserves

Money, Credit, Interest on Reserves

- **Interest on Reserves Policy**: changing interest paid on bank reserves holding monetary policy and credit policy fixed
- Frees interest rate policy from monetary policy
- Can be utilized to free credit policy from interest rate policy
- Allows monetary policy to finance credit policy independently of interest rate policy

Money, Credit, Interest on Reserves

- **<u>Interest on Reserves Policy</u>**:

----CB pays interest on reserves at intended (overnight) interbank rate target

----Creates enough bank reserves to satiate market

----Banks won't lend below target because they earn target rate by holding reserves at CB

----Overnight rate won't trade above target if reserves market is satiated

----CB can expand reserves with little effect on interbank rate

Fiscal Aspects of Central Bank Policies

- **Pure Monetary Policy**:

----Influences the spread between interbank rate and interest paid on reserves by maintaining a "scarcity" of reserves, a positive marginal monetary services yield, and a positive interest opportunity-cost spread to holding reserves

----Reserves scarcity imposes a *tax* reflected in a below market interest on reserves

----CB collects tax on reserves (and currency) as interest on Treasury securities

----"Treasuries only" transfers all tax revenue net of interest on reserves to the Treasury

Fiscal Aspects of Central Bank Policies

- **Pure Credit Policy**:

----Pure credit policy executed by CB is really debt-financed fiscal policy

----Interest on Treasuries held by CB is returned to the Treasury—sale of Treasuries by CB is as if Treasury issued new debt in the market

----Pure credit policy interposes government creditworthiness between borrowers and lenders

----CB puts taxpayer funds at risk

----Credit losses reduce CB remittances to Treasury

Fiscal Aspects of Central Bank Policies

- **<u>Pure Credit Policy</u>**:

----Even if CB takes good collateral and assumes negligible credit risk itself, it exposes taxpayers to losses if borrower fails subsequently

----A CB whose loans finance the withdrawal of uninsured claimants of an institution that fails subsequently <u>strips</u> that institution of collateral that would be available otherwise to cover the cost of insured deposits or government guarantees

Fiscal Aspects of Central Bank Policies

- <u>**Interest on Reserves Policy**</u>:

----Utilizes fiscal instrument—the payment of interest on reserves--to eliminate the *tax* on reserves

----Improves efficiency of payments system

----Could be run with "Treasuries only"

----Relatively small expansion of reserves sufficient to push interbank rate nearly to the interest on reserves floor

----Beyond that, monetary policy free to finance credit policy with little effect on interbank rate

Fiscal Aspects of Central Bank Policies

- **<u>Interest on Reserves Policy</u>**:

----Can increase net fiscal transfers from CB to the government

1) Small loss of CB transfers to government due to loss of interest paid on <u>preexisting</u> reserve balances

2) But positive term spread earned by CB on each <u>new</u> dollar of reserves used to acquire longer-term Treasury securities

[Should CB have a large or small footprint?]

Fiscal Aspects of Fed Initiatives

- Term Auction Facility
- Acquisition of Bear Stearns by JPMC
- Fed Support for AIG
- Authority to Pay Interest on Reserves
- Joint Treasury-Fed Statement, March 23, 2009

Term Auction Facility

- The TAF program established as pure credit policy financed with funds from sale of Treasuries
- Provided infra-marginal relief from elevated funding costs for depositories dependant on the federal funds market (bigger banks)
- TAF interest rate exceeded interest opportunity cost on Treasuries sold to fund TAF credit
- TAF credit virtually riskless for Fed because TAF loans secured by collateral

Term Auction Facility

- However, TAF extended the term of Fed loans to 24 and 84 days, greatly increasing chance that a borrowing institution could fail before repaying the Fed
- In that event, TAF credit that financed the exit of uninsured depositors or unsecured creditors would strip the failed bank of collateral pledged to the Fed that would be available otherwise to cover the cost of deposit insurance or other government guarantees
- Thus, the TAF program exposed <u>taxpayers</u> to losses even if the Fed itself did not bear appreciable credit risk---TAF interest over Treasuries generates CB transfers to Treasury as compensation for risk bearing

Acquisition of Bear Stearns by JPMC

- Loan to Maiden Lane LLC formed for purpose of acquiring risky mortgage obligations, derivatives, hedging products from Bear
- Maiden Lane funded by $29 billion Fed loan and $1 billion loan from JPMC
- Loss after first $1 billion borne by Fed, and revaluation gains above $30 accrue to Fed
- In effect, Fed purchased assets in Maiden Lane

Acquisition of Bear Stearns by JPMC

- Loan funded from sale of Treasuries
- Credit policy---a debt-financed fiscal policy <u>purchase</u> of a pool of risky private financial assets
- Loan acknowledged to be fiscal policy—Maiden Lane brought onto Fed balance sheet, Treasury accepted responsibility for any loss
- In April 2008, Volcker described Fed as acting at the “very edge of its lawful and implied powers”

Acquisition of Bear Stearns by JPMC

- In retrospect, Volcker's remarks can be seen as a "life preserver" to help Fed persuade Congress to make resources available, if need be, to stabilize the financial markets
- Instead, fiscal authorities were not then so involved
- Fed remained exposed to having its balance sheet utilized as an "off budget" arm of fiscal policy

Support for AIG

- Fed credit policy cannot be the front line of fiscal support for the financial system
- A credit policy decision that <u>commits</u> substantial taxpayer resources in support of the financial system or one that <u>denies</u> taxpayer resources is inherently a highly-charged, political, fiscal policy matter
- Such credit policy actions must be authorized by the fiscal authorities through the political appropriations process
- Otherwise, they will lack political legitimacy and undermine support for the Fed as an independent central bank
- Events surrounding the Fed's rescue of AIG illustrate the problem

Support for AIG

- Starting Sept 7, 2008, GSEs seized, Lehman fails, Fed $85 billion loan to AIG, Congress criticizes Fed for AIG support, panic, flight to quality, run on MMFs, Bernanke says Fed stretched to limit, Bernanke insists Congress must appropriate financial resources to stabilize the system---otherwise risk severe contraction if not another Great Depression, US government appears to be paralyzed, Congress rejects funding at first, then votes TARP funds…
- Equity markets down over 30 percent in month to October 10, high-yield corporate bond spreads over Treasuries jump to 16 percentage points, well above prior 6 percentage point peak in credit turmoil
- Public frightened by financial panic, political recriminations, talk of Great Depression, and sharp jump in saving rate helps to create "Great Recession"

Authority to Pay Interest on Reserves

- Financial Services Regulatory Relief Act of 2006 gave Fed authority starting in October 2011 to pay interest on reserves
- May 2008, Fed asked for emergency authority to expedite interest on reserves
- Began to pay interest on reserves on October 6, 2008 under authority granted in the Emergency Stabilization Act of 2008
- Interest on reserves enabled monetary policy to fund credit policy somewhat independently of interest rate policy in fall 2008

Authority to Pay Interest on Reserves

- Interest on reserves became less important when federal funds rate target reduced to ¼ percentage point in mid-December 2008
- Nevertheless, authority to pay interest on reserves is timely and valuable because, in principle, gives the Fed the operational capacity to <u>exit</u> the zero bound without first drawing down the stock of excess bank reserves

Joint Treasury-Fed Statement

- On March 23, 2009 the Treasury and the Fed issued a joint statement clarifying the relationship between the two institutions in promoting financial stability
- The statement recognizes the principle that the <u>boundary</u> between the Fed and the Treasury must be managed carefully
- It reasserts the Fed's independence on monetary policy
- Implicitly recognizes the fiscal nature of three Maiden Lane facilities created by the Fed to support the JPMC acquisition of Bear and AIG

Joint Treasury-Fed Statement

- March 23rd statement does not specify the principles that one should use to clarify the boundary of responsibilities between the two institutions

Accord Principles for Credit Policy

- Expansion of Fed lending today—in scale, in reach beyond depositories, in acceptable collateral—demands an accord for Fed credit policy to supplement the famous “1951 Treasury-Fed Monetary Policy Accord”
- A “Credit Accord” should establish guidelines so that the misuse of Fed credit policy for fiscal purposes does not undermine Fed independence

Accord Principles for Credit Policy

- The “Volcker Fed” established low inflation as the nominal anchor for monetary policy in the 1980s---and Fed independence today is the institutional foundation of the nation’s commitment to low inflation
- The Fed—precisely because it is exempted from the appropriations process—should avoid, to the fullest extent possible, taking actions that can properly be regarded as within the province of fiscal policy and the fiscal authorities

Accord Principles for Credit Policy

- A "Treasuries only" asset acquisition policy respects the integrity of fiscal policy fully, returning all net revenue from money creation to the Treasury after CB expenses and interest paid on reserves
- Fed credit policy is another matter entirely because all financial securities other than Treasuries carry some credit risk and all lending involves the Fed in potentially costly and controversial disputes regarding credit allocation

Accord Principles for Credit Policy

- The Fed must be accountable for its credit allocations and the returns or losses on its loans or security holdings
- The public deserves transparency on Fed credit beyond ordinary "last resort lending" to solvent depositories
- Yet congressional oversight opens the door to political interference in Fed credit choices
- The Fed is exposed to congressional pressure to exploit its off-budget status to circumvent the appropriations process

Accord Principles for 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 flexibly and aggressively with monetary and interest rate policy, and (limited) credit policy

Accord Principles for Credit Policy

- **Principle 1**: As a long run matter, a significant, sustained expansion of Fed credit initiatives beyond ordinary, temporary last resort lending to solvent depositories is <u>incompatible</u> with Fed independence

  The Fed should adhere to "Treasuries only" except for occasional and limited last resort lending to depositories

Accord Principles for Credit Policy

- **Principle 2**: As the economy recovers, credit assets on the Fed balance sheet will come to be seen as credit allocation rather than emergency lending

  Rather than incur a congressional audit, the Fed should ask the Treasury and Congress to take the problematic credit assets off its balance sheet in exchange for Treasuries, so that the credit assets can be managed elsewhere in the government [Fed off-budget status should not be used to bypass the debt ceiling.]

Accord Principles for Credit Policy

- **Principle 3**: The Fed has employed monetary policy in the service of credit policy by creating $1 trillion of bank reserves to finance its credit initiatives

  The Congress, the Treasury, and the Fed should agree that the use of monetary policy for the fiscal purpose of funding credit policy must not undermine price stability

Implications for the Exit Strategy

- **<u>Interest on Reserves Policy</u>**
- The Fed regards interest on reserves as "perhaps the most important tool" enabling it to raise the federal funds rate without first shrinking its balance sheet
- Yet, some large lenders in the federal funds market, notably GSEs, are legally ineligible to receive interest on balances held at the Fed
- GSE lending in the fed funds market could impair the power of interest on reserves to put a floor under the funds rate in the exit strategy

Exit Strategy

- **<u>Interest on Reserves Policy</u>**
- Interest on reserves has worked well for central banks abroad to put a floor under interbank rates even as aggregate bank reserves expanded aggressively
- Given the demonstrated power of interest on reserves abroad, the Fed should <u>ask</u> Treasury and Congress to modify regulations in the fed funds market either to exclude all but depositories from lending, or alternatively to allow all those eligible to lend to earn interest on deposits at the Fed

Exit Strategy

- **Interest on Reserves Policy**
- If the interest-on-reserves floor were secured, then the Fed could raise the federal funds rate significantly, precisely, and flexibly without any lead time by paying interest on reserves at the desired federal funds rate target

Exit Strategy

- **<u>Monetary Policy</u>**
- Beyond interest on reserves, the Fed's options to raise the federal funds rate all involve monetary policy in the sense that they work by reducing aggregate bank reserves
- Given the demand for excess reserves as a function of the spread between the fed funds rate and interest on reserves, the Fed would have to drain nearly $1 trillion of reserves for monetary policy alone to raise the fed funds rate significantly

Exit Strategy

- **Monetary Policy**
- Such large-scale operations on bank reserves would have to be undertaken in advance over a span of time to preposition monetary policy to take the modest operations needed to adjust the federal funds rate precisely and flexibly to exit the zero bound

Exit Strategy

- **Monetary Policy**
- The Fed contemplates four options for draining reserves--each has a serious drawback

----Fed could sell Treasuries: Not enough in portfolio

----Treasury could sell securities and deposit the proceeds in the Fed: Must depend on Treasury

----Fed could do reverse RPs: Would expose Fed to widespread counterparties, complicate its management of financial markets in times of stress; Fed should manage its balance sheet independently of private counterparties

Exit Strategy

- **Monetary Policy**

----Fed could offer term deposits: Would divert loanable funds from other uses to finance Fed credit policy, and could destabilize demand for reserves and complicate targeting the federal funds rate with monetary policy

- In general, utilization of non-monetary managed liabilities by the Fed is inadvisable because it would turn the Fed into a financial intermediary and facilitate a perpetual funding of credit policy

Conclusion

- Decisions that govern economic activity are forward looking, so the Fed must make the public confident of the soundness of its exit strategy to facilitate the recovery
- Fed should utilize the proposed 3-way classification of central bank policies in its internal and external communications

Conclusion

1) to improve the transparency of its operations for purposes of accountability
2) to distinguish the fiscal aspects of its policies for purposes of clarifying the boundary of its independent responsibilities
3) to secure its operational capacity to raise interest rates in a timely manner to sustain a non-inflationary recovery, and
4) to reinforce the sense that it has the political independence and the determination to act decisively when the time comes