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Financial Turmoil: Comparing the Troubled Asset Relief Program to the Federal Reserve's Response

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Summary

As financial conditions have deteriorated over the past year, the Federal Reserve (Fed) has greatly increased its lending to financial firms. It has also expanded the scope of eligible borrowers to include non-bank financial firms. As of October 1, 2008, the Fed had loans of $559 billion outstanding, compared with less than $1 billion outstanding one year earlier. In addition, it has provided financial assistance to Bear Stearns and American International Group (AIG).

Some have asked why these loans have not restored financial stability, and if the purchase of up to $700 billion of distressed assets through the recently enacted Troubled Asset Relief Program (TARP) might lead to a different result. H.R. 1424, signed into law on October 3 (P.L. 110-343), authorizes the creation of TARP.

Financial firms have faced two broad problems over the past year — concerns about liquidity and capital adequacy. Liquidity problems refer to the inability of firms to liquidate assets fast enough to meet their short-term obligations; capital problems refer to an inadequate buffer between a firm's assets and its liabilities. The basic difference between the Fed's actions and those under TARP is that the Fed's normal activities can address only the liquidity issue, whereas TARP can address both. Some have suggested that a program similar to TARP could theoretically be carried out through the Fed. The Fed's normal authority would not allow this; however, it has much broader emergency authority. Although the Fed cannot purchase assets directly, the assistance it provided to Bear Stearns is similar in form to the basic concept of TARP.

Financial assistance to financial firms entails similar risks to taxpayers whether it is provided through the Treasury or the Fed. The Fed earns profits on its loans and other investments, and each year nearly all of those profits are remitted to the Treasury. If those loans were to yield losses, the losses would reduce the Fed's profits, and hence its remittances to the Treasury, causing the federal budget deficit to rise from what it would otherwise have been.

The crux of the problem facing financial firms in the current environment stems from the large losses on some of their assets, particularly mortgage-related assets.[1] This has caused a number of problems for the firms related to *capital adequacy*, which is the difference between the value of their assets and the value of their liabilities. First, losses and write-downs associated with those assets have reduced the firms' existing capital. According to Bloomberg, financial firms had written down losses of $501 billion on mortgage-related assets and raised $353 billion in capital to compensate as of August 2008.[2] Second, in the current environment, investors and creditors are demanding that firms hold more capital than before so that firms can better withstand any future losses.

Third, the losses to date have impaired the firms' ability to raise enough new capital. Firms can raise new capital through retained earnings, which have been greatly reduced for many firms by the poor performance of their assets, or by issuing new capital (equity) and selling it to new investors. But in current market conditions, investors have been reluctant to inject new capital into struggling firms. Part of the the explanation for this is that current losses have made the firms less profitable. But another part of the reason is that investors fear that there will be further losses in the future that would reduce the value of their investment, and perhaps even cause the firm to become insolvent. Uncertainty about future losses is partly caused by the opacity surrounding the assets that have been declining in value, which makes it hard for investors to determine which assets remain overvalued and which are undervalued. The result for companies such as Bear Stearns, Lehman Brothers, AIG, Washington Mutual, and Wachovia was a downward spiral in their stock price, which had two self-reinforcing characteristics. First, there was little demand for existing stock because its worth would either be diluted by new capital (raised privately or through government intervention) or lost in insolvency. Second, new capital could not be attracted because the fall in stock value had left the market capitalization of the firms so low. If a firm's capital is completely depleted, there is no longer a buffer between its assets and liabilities, and it becomes insolvent.

Many large financial firms, including the firms that have failed, are heavily dependent on short-term borrowing to meet their current obligations. As financial conditions have worsened, some of the firms that have had the problems described above have had problems accessing the short-term borrowing that in normal conditions could be taken as a given. In an atmosphere where creditors cannot perceive which firms have insufficient capital, they become unwilling to lend for even short intervals. This is the essence of the *liquidity* problem — although the firms' assets may exceed their liabilities, without access to short-term borrowing, the firm cannot meet its current obligations because it cannot convert its assets into cash quickly enough (at least not if it wishes to avoid "fire sale" prices).

The Fed has always been the "lender of last resort" in order for banks to avoid liquidity problems during financial turmoil. To borrow from the Fed, a financial firm must post collateral. In essence, this allows the firm to temporarily convert its illiquid

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[1] For more information, see CRS Report RS22963, *Financial Market Intervention*, by Edward V. Murphy.

[2] Yalman Onaran, "Banks' Subprime Losses Top $500 Billion on Writedowns," *Bloomberg*, August 12, 2008.

assets into cash, enabling the firm to meet its short-term obligations without sacrificing its assets. The Fed has always lent to commercial banks (depository institutions) through the discount window.[3] Over the past year, the Fed has greatly increased the scale of its lending to banks, from daily loans outstanding of less than $1 billion before December 2007 to $351 billion as of October 1, 2008, mostly through the Term Auction Facility created in December 2007. It has also extended borrowing privileges to non-bank financial firms called primary dealers through the Primary Dealer Credit Facility (PDCF).[4] Daily loans outstanding through the PDCF were $147 billion for October 1, 2008. In addition, it had loans outstanding to AIG equal to $61 billion.[5] Because the Fed's normal authority allows it to lend only to commercial banks, it used emergency powers to authorize lending to the primary dealers and AIG under Section 13(3) of the Federal Reserve Act.[6] Section 13(3) reads as follows:

> In unusual and exigent circumstances, the Board of Governors of the Federal Reserve System, by the affirmative vote of not less than five members, may authorize any Federal reserve bank ... to discount for any individual, partnership, or corporation, notes, drafts, and bills of exchange.... Provided, that before discounting any such note, draft, or bill exchange ... the Federal reserve bank shall obtain evidence that such individual, partnership, or corporation is unable to secure adequate credit accommodations from other banking institutions....

With direct loans of $559 billion outstanding on October 1, questions have arisen as to why the Fed's actions have not restored financial normalcy. Borrowing from the Fed increases liquidity but it does not change a firm's capital position because it now has a liability outstanding to the Fed. So borrowing from the Fed cannot solve the problems of undercapitalization that some firms currently face. Indeed, the Fed will generally not lend to firms that are not creditworthy because it wants to provide liquidity only to firms that are solvent, and thus able to repay.[7]

H.R. 1424, which was signed into law on October 3 (P.L. 110-343), created the Troubled Asset Relief Program (TARP). Under TARP, the federal government is authorized to purchase up to $700 billion in unwanted mortgage-related assets from the balance sheets of financial firms. Proponents argue that removing the unwanted assets from the balance sheets would remove uncertainty about future losses and allow the firms to raise capital in private markets again. From this perspective, the program's success

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[3] In normal conditions, borrowing from the discount window is allowed but discouraged, and banks are expected to meet their liquidity needs through private markets. Soon after the financial turmoil began, the Fed began to encourage discount window borrowing.

[4] Primary dealers are about 20 large financial institutions who are the counterparties with which the Fed undertakes open market operations (buying and selling of Treasury securities). To be a primary dealer, an institution must, among other things, meet relevant Basel or SEC capital requirements and maintain a good trading relationship with the Fed.

[5] All data on Fed lending is from Federal Reserve, "Factors Affecting Reserve Balances of Depository Institutions," statistical release H.4.1, October 2, 2008.

[6] For more information on the TAF and PDCF, see CRS Report RL34427, *Financial Turmoil: Federal Reserve Policy Responses*, by Marc Labonte.

[7] In addition, the Fed faces some statutory limitations on lending to undercapitalized banks under normal circumstances. See, for example, Section 10B of the Federal Reserve Act.

will depend on whether it restores confidence to financial markets so that investors become willing to invest in financial firms. In addition, proponents argue that providing a buyer might restore liquidity to the market for these assets, boosting the prices of all similar assets, including the ones that remain on the firms' balance sheets. Whether the latter occurs would partly depend on what price the government is willing to pay for the assets, a matter that is left to the discretion of the Treasury.[8]

If TARP proves insufficient to restore financial calm, some have asked whether there is any program that the Fed could operate to address the financial firms' capital adequacy problems. All of the Fed's standing lending facilities involve collateralized lending, and as discussed above, any program involving collateralized lending would not change a firm's capital position. According to one legal analysis, there is no express statutory authority for the Fed to purchase corporate bonds, mortgages, or equity.[9] But the Fed's assistance in the Bear Stearns merger with JPMorgan Chase took a form that has some similarities to the TARP proposal. In the case of Bear Stearns, the Fed created a limited liability corporation called Maiden Lane, and lent Maiden Lane $28.82 billion. Maiden Lane used the proceeds of that loan and another loan from JPMorgan Chase to purchase mortgage-related assets from Bear Stearns. Thus, although the Fed created and controlled Maiden Lane, the assets were purchased and held by Maiden Lane, not the Fed. Similar to TARP, Maiden Lane plans to hold the assets until markets recover, and then sell the assets to repay its loans to the Fed and JPMorgan Chase. In addition, the Fed announced on October 7, 2008, that it would lend to a special purpose vehicle (SPV) it had created so that the SPV could buy commercial paper, short-term debt issued by firms that can be secured or unsecured, for the purpose of restoring liquidity to that market. Although this facility would not affect a financial firm's capital position, it is another example of a broader interpretation of Fed powers than may have existed before 2007. Both arrangements were made under the Fed's emergency authority under Section 13(3) of the Federal Reserve Act.

The Fed was presumably granted broad emergency powers under Section 13(3) so that it had the flexibility to deal with unforeseen circumstances. Nonetheless, too broad of a reading of its powers could provoke displeasure in Congress or legal challenges. Creating TARP within the Treasury through legislation rather than the Fed through emergency powers avoided the argument whether such a program extended beyond the Fed's intended role.

Any financial transactions undertaken by the Fed, whether involving loans or asset purchases, would have the same ultimate cost to the taxpayer as if the same transactions were undertaken by the Treasury. The Fed's activities generate income that results in profits, but they also entail the potential for losses. The Fed remits about 95% of its profits each year to the Treasury. These remittances, which equaled $34.6 billion in 2007, finance government outlays that would otherwise need to be financed through higher taxes or a larger budget deficit. If transactions undertaken by the Fed boost profits, then

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[8] For more information, see CRS Report RS22957, *Proposal to Allow Treasury to Buy Mortgage-Related Assets to Address Financial Instability*, by Edward V. Murphy and Baird Webel.

[9] David Small and James Clouse, "The Scope of Monetary Policy Actions Authorized under the Federal Reserve Act," Federal Reserve, FEDS Working Paper No. 2004-40, July 2004, p. 29.

remittances to the Treasury will rise; if they yield losses, remittances will fall. The main difference from the perspective of the federal budget is that transactions undertaken by the Treasury require Congressional authorization, and transactions by the Fed do not.

Although loans made by the Fed do not require Congressional authorization, recent loans have required the Treasury to issue additional Treasury securities. When the Fed makes loans to financial institutions, it increases the money supply. If the money supply were to increase too much, it could cause inflation to rise and households' inflationary expectations to shift upward.[10] To offset the effects on the money supply, the Treasury created the Supplementary Financing Program in September 2008.[11] Through this program, the Treasury sells interest-bearing securities to the public and deposits the proceeds at the Fed, thereby allowing the Fed to expand its balance sheet without altering the amount of money circulating in the economy. Thus, recent loans to the financial system have been financed through the issuance of additional federal debt — the same as if the loans had been made directly by the Treasury instead of the Fed.

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[10] For more information, see CRS Report RL34562, *Slow Growth or Inflation? The Federal Reserve's Dilemma*, by Brian W. Cashell and Marc Labonte.

[11] For more information, see CRS Report RL34427, *Financial Turmoil: Federal Reserve Policy Responses*, by Marc Labonte.