

**Bailouts and Deficits or Haircuts:
How to Restore U.S. Financial Market Stability**

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Abstract: There is a growing consensus that the U.S. government programs of bailing out the large financial institutions is deeply flawed, and that there are much better ones available. The programs of the U.S. for the purchase of toxic assets potentially transfer trillions of dollars from the US taxpayer to the financial institutions and risk the credit of the U.S. government. Estimates suggest that the troubled asset purchases are inadequate to put the financial institutions on a sound footing. So zombie banks persist, and their avoidance of normal business lending constitutes a roadblock to economic recovery. The right approach is to take the banks that require substantial subsidies into FDIC receivership, wiping out shareholders and giving the bondholders a haircut. Chapter 11 bankruptcy proceedings are another viable option in many cases. The restructured institutions will be re-privatized as financially viable institutions. The smooth resolution of the Lehman Brothers bankruptcy that financial market regulators assessed occurred with “no major operational disruptions or liquidity problems” shows that the allegation of systemic financial market failure from bankruptcy of a large central player in the counterparty transactions is grossly exaggerated. Crucially, bailing out these institutions provides perverse incentives to financial firms that they can take risks at taxpayer expense, sowing the seeds for the next crisis.

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I. Introduction

Numerous economists, including Sachs (2009), Johnson (2009), Stiglitz (2009), Hussman (2009a), Kane (2009), Zingales (2009), Young (2009) and Krugman (2009a) have criticized the U.S. government programs of bailing out the large financial institutions. In this note, I briefly explain the main toxic asset purchase programs of the U.S. and summarize the estimates of how much these programs will cost the U.S. taxpayer. The estimates suggest that the troubled asset purchases are inadequate to put the financial institutions on a sound footing. So undercapitalized banks take subsidies to survive, but their avoidance of normal business lending constitutes a roadblock to economic recovery. Crucially, the large subsidies sow the seeds for the next crisis as financial institutions learn that they can take large risks at taxpayers' expense.

What is required is to take the big banks that require sustained subsidies into receivership, wiping out the shareholders and giving haircuts to bondholders. Despite taking over numerous regional banks, the government appears afraid to take large banks into receivership for fear that bankruptcy of a central player in the counterparty transactions will induce systemic financial market failure. But I explain in section V how the Lehman Brothers bankruptcy shows that such fears are grossly exaggerated.

II. What are the Principal Toxic Asset Purchase Programs?

The key programs of purchases of toxic assets are the following:

The Troubled Asset Relief Program (TARP)

Passed on October 3, 2008, this is a \$700 billion program, the core aspect of which is to buy toxic assets from troubled U.S. financial institutions.

Term Asset Backed Loan Securities Facility (TALF)

On March 17, 2009, the Federal Reserve announced its, a plan to loan \$200 billion to banks for asset backed securities for consumer loans (like securitized credit card debt, auto loans or student loans). The Treasury will infuse \$20 billion of TARP money. The program could be expanded to \$1 trillion.

Public-Private Investment Program (P-PIP)

On March 23, 2009, the Treasury announced its P-PIP, designed to purchase from \$500 billion to \$1 trillion in toxic assets from banks. The Treasury would commit \$75-\$100 billion in TARP money with the Federal Deposit Insurance Corporation (FDIC) providing the bulk of the financing (see below).

The PPIP Losses. Several authors¹ have noted that the PPIP involves substantial subsidies by the government. Take an example to see how the plan works. Say there is a pool of mortgage backed securities with a face value \$2 million that has a 50 percent chance of paying in full and a fifty percent chance of being worthless. A risk free investor

¹ See Stiglitz (2009), Young (2009), Krugman (2009b) and Sachs (2009).

would bid \$1 million for this. The Treasury plans auctions of the assets. If the winning investor bought this for \$1 million, Treasury requires that the winning investors put up \$80 thousand; the Treasury would put up \$80 thousand (and share in the up side profits) and the FDIC would provide a “non-recourse” loan secured only by the underlying assets for the remaining \$840 thousand. If the assets pay off in full, the FDIC loan is repaid and the Treasury and the investors split the \$1 million in profits. If the toxic assets end up in default, the investors and the Treasury lose their \$80 thousand each, the FDIC loses \$840 thousand on its non-recourse loan, but the banks that sold the assets have the full \$1 million.² The expected losses to the FDIC are \$420 thousand (less interest). Since the expected gains to the investors are \$420 thousand (\$500 thousand less \$80 thousand), they will bid more than the expected value of the securities, up to \$1.72 million.

The perverse consequence of the P-PIP is that the expected losses to the government increase with the price paid for the toxic assets. The real cost of the program to the taxpayer is not the \$75-\$100 billion in TARP money put up front by the Treasury, but must include the possible defaults on the non-recourse loans. Keller (2009) and others estimate that the expected losses to the FDIC will make it an insolvent institution. With the benefit of hindsight, Veronosi and Zingales (2009) estimate that similar earlier deals by Treasury under the TARP program cost the taxpayer at least 13 times what the Treasury contributed to the deal, and the costs would likely run considerably higher.

Gaming the System. Moreover, the system can be gamed in various ways. For example, Sachs (2009b) has shown that a big bank could set up a subsidiary to pay inflated prices for its own assets. The subsidiary could go bankrupt eventually, while the bank received large transfers from the FDIC. Or banks could overpay to buy each others toxic assets. When the assets default, the taxpayer would have large losses, but the banks would have the taxpayers’ money.

End Run Around Congress. The Troubled Asset Relief Program (TARP) isn’t large enough to recapitalize the banking system and the Administration does not want to openly go back to Congress for money. So the PPIP brings in the FDIC as an end run around Congress and results in U.S. government obligations many multiples of those authorized by Congress.

III. To Big to Bail--how much will the government’s toxic asset purchase plan cost?

According to the Congressional Oversight Report (2009), as of April 2009, the U.S. Treasury had already spent or committed \$590 billion of the TARP funds, and the total value of all Treasury, FDIC and Federal Reserve capital infusions and guarantees in support of financial stabilization exceeded \$4 trillion. Estimates of private market debt losses of the U.S. financial institutions range from \$2.2 trillion of the International Monetary Fund to \$3.6 trillion by Nouriel Roubini to \$10 trillion by Hussman (2009a).³

² If the bonds pay off, the investors pay off the loan with the proceeds, and split what is left over with the government.

³ The Hussman estimate includes not only bank mortgage losses, but also loan losses of other financial institutions like insurance companies and pension funds, that hold private debt.

On May 7, 2009, the government announced the results of the Fed's "stress tests" of the 19 largest banks. The Fed projected that these 19 banks could suffer additional losses of \$599 billion through the end of 2010 and ordered ten of them to raise a combined \$75 billion in new equity capital.⁴ Taking all banks into consideration, others believe the possible losses to the banking system will be considerably larger. Pomerleano (2009) argues that the Obama Administration is in denial of the extent of the problem as is operating only around the edges. Veronesi and Zingales (2009) estimate that to restore the top ten banks to financial health, the banking system needs at least \$4.5 trillion in purchases of toxic assets. If the government were to extend the P-PIP toxic asset purchase program so the \$4.5 trillion were purchased, taking default possibilities into account, their best estimate is that the plan will cost the US government \$1.2 trillion, and could be higher if there are greater default rates on toxic assets. Given the flaws in the P-PIP program noted by Young, Sachs and others, the cost to the taxpayer of a full bailout of the top ten banks would likely be well above the \$1.2 trillion estimate. If we include Fannie Mae, Freddie Mac and AIG together with the big banks, Chris Whalen (2009) estimates the cost to the U.S. government of a toxic asset purchase program could be as high \$4 trillion if the default rate is high.

As I explain below, there are good ways to allow the big banks to fail. They are not too big to fail. But bailing them will threaten the credit of the U.S.-- they are likely too big to bail.

IV. Why purchasing toxic assets at government expense does not facilitate the recovery.

Large losses by banks on their mortgage holdings have threatened their solvency. Federal Reserve Chief Bernanke and Treasury Secretary Geithner,⁵ however, have mischaracterized the problem as a liquidity problem (Congressional Oversight Report, 2009; Kane, 2009; Johnson, 2009). That is, they have argued that the problems the banks are having rolling over their debt is evidence of short run liquidity rather than the markets' concerns that the banks are insolvent. Geithner and Bernanke hope to revive the securitization markets by infusing some liquidity into the system. But without subsidized buyers, the markets are not being restored. Rather, faced with the risk of insolvency, the "zombie" banks have been trying to limit their exposure to additional risk (Diamand and Kashyap, March 16, 2009). Banks are reluctant to reveal the full extent of their solvency problems, so they take enough capital to survive a little longer. But, this behavior is corrosive: unhealthy banks either don't lend or they make desperate gambles (Johnson, 2009, 53). So they remain troubled institutions and their reluctance to take on new appropriate business impedes a speedy recovery. As Stiglitz has noted, the Administration efforts are "a recipe for Japanese style malaise."⁶

⁴ "Fed Sees Up to \$599 billion in Bank Losses," *Wall Street Journal on-line*, May 8, 2009. Available at: <http://online.wsj.com/article/SB124172137962697121.html>

⁵ See Geithner (2008).

⁶ See McKee and Benjamin (2009).

V. What Can we Learn from the Lehman Brothers Bankruptcy— or why systemic failure of the financial system is exaggerated

It has been alleged that the failure of such a key player in the counterparty operations like Lehman Brothers could cause systemic failure of the financial system (e.g., Jaffe and Perlow, 2008). And there were widespread allegations in the press, sometimes by respected analysts,⁷ that the Lehman Brothers bankruptcy caused major problems. What has been most worrisome is the credit default swaps (CDS), whereby one party buys insurance (or “protection”) from another party against default by a third party, in return for an insurance premium. Presumably the fear is that financial institutions that prudently purchased insurance against default, might not be paid, resulting in insolvency of several financial institutions. However, the official financial supervisors of the U.S., France, U.K., Canada, Germany, Japan and Switzerland investigated the impact on financial markets of the Lehman Brothers bankruptcy, as well as the impact of the financial failures of Fannie Mae, Freddie Mac and Landsbanki Islands. It will likely be surprising to many that they concluded that these “credit events were managed in an orderly fashion, with no major operational disruptions or liquidity problems.”⁸

It is worth examining what happened to the credit default swaps involving Lehman Brothers to explain the disparity between the fears of systemic financial market failure and the minimal actual impact.

With \$600 billion in assets, when Lehman Brothers filed for bankruptcy on September 15, 2008, it was six times larger than the WorldCom bankruptcy, the previous largest bankruptcy in U.S. history. Even more worrisome to many, Lehman was a key player in counterparty transactions, both in the U.S. and internationally. Specifically, Lehman was an intermediary in over \$500 billion of credit default swaps (CDS),⁹ both offering “protection” to buyers of CDS in the event of a default of another company, and buying protection itself in hedging operations regarding third party defaults. Plus there were \$72 billion in CDS written on the possibility of a Lehman default itself.

Nonetheless, within about one month of the Lehman bankruptcy, all these CDS positions were settled with all parties receiving what was due based on the terms of the original contracts. Lehman was a leading participant in the operations of the Depository Trust and Clearing Corporation (DTCC). **DTCC and its subsidiaries “are ‘central counterparties’ guaranteeing that most trades outstanding at the time of a bankruptcy of a member firm like Lehman are settled on the original terms”**¹⁰ Of the \$390 billion in the gross value of mortgage backed securities on which Lehman was an intermediary, DTCC was able to **net out** almost 90 percent of the Lehman positions

⁷ See, for example, Krugman (2009a).

⁸ See Senior Supervisory Group (2009, 2). The U.S. was represented in the report by the Board of Governors of the Federal Reserve, the Federal Reserve Bank of New York, the Securities and Exchange Commission and the Comptroller of the Currency.

⁹ This was comprised of gross positions of \$329 billion in CDS on mortgage backed securities and \$190 billion in gross positions on CDS on U.S. government securities. See Depository Trust and Clearing Corporation (2008, pp. 2-3).

¹⁰ See DTCC (2008, 2).

very quickly. That is, Lehman both bought and sold protection, and its net exposure was only about ten percent of the gross value of its CDS. Moreover, as a member of DTCC, Lehman was required to post collateral on its CDS and make payments (like margin calls) when the price of the CDS changed. Consequently, over the following three weeks, a DTCC subsidiary gradually sold the remaining positions on the market on its original terms. Despite the DTCC guarantee, this was done with no loss to the members of the DTCC. Regarding the \$190 billion in CDS on government securities in which Lehman was an intermediary, another DTCC subsidiary closed out the Lehman positions on its original terms, again without loss to the members of DTCC. Regarding the \$72 billion in gross notional amount of CDS written by other parties on the possibility of a default of Lehman itself, after netting out positions and adjusting for the fact that Lehman bonds paid about nine cents on the dollar, it was necessary to pay out only \$5.2 billion as a result of the Lehman bankruptcy. These payments were made by the parties to the transactions on the terms of the contracts.

VI. What Should be Done?

It is necessary to take financial institutions that cannot survive without substantial and continued infusion of public funds into receivership, either through a government or court managed takeover. The FDIC has the authority to takeover a failing depository institution and liquidate it in an orderly way. With respect to regional banks, this is done routinely. Between January 1 and May 1, 2009, 32 banks have been taken into receivership.¹¹ The problem is that with respect to the big banks, the government has been afraid to apply its standard procedures that work so well. There are several options for reorganizing banks in receivership, all of which are vastly superior to the toxic asset purchase plan and require that the bondholders take a haircut.¹²

In receivership, the financial institution need not fall into disarray. The FDIC could take receivership of the financial institution, defend the customer assets, change the management, wipe out the stockholders' equity entirely, and a share of the bondholders claims, continue the operation of the institution in receivership, and eventually sell or reissue the company to private ownership, leaving the bondholders with the residual. When stockholders value is already low, the main losers in this process are the bondholders, who take a haircut, but who claim the residual after the financial institution is put back in order. Johnson (2009) argues that this is the standard policy recommendation of the IMF in a financial crisis, and there is no reason for the policy response to differ with respect to the U.S. This is how one of the largest bank failures in history – Washington Mutual – was handled so seamlessly in 2008 that it was almost unnoticed. The government took Washington Mutual into receivership, wiped out the stockholders and most of the bondholders, *sold the bank's assets along with the customer liabilities* to J.P. Morgan for \$1.9 billion, and handed those proceeds over as partial recovery for the senior bondholders (Hussman, 2009b).

¹¹ For a list of all closed banks since October 2000 as well as the acquiring financial institution, see <http://www.fdic.gov/bank/individual/failed/banklist.html>.

¹² Hussman (2009b) estimates are that there is more than enough bondholder capital to pay the depositors.

An alternate clever way to handle banks in receivership has been proposed by Bulow and Kemperer (2009). They have suggested a plan for corporate reorganization of banks in receivership in which the bank is divided into a good bank and a bad bank. The bad old bank retains enough of the liabilities so that the new bank is well capitalized and can operate effectively. The old bank retains the stock in the new bank. Crucially, the bondholders of the old bank take a haircut, but are fairly compensated as they become the shareholders in the new bank. The plan avoids having to find a buyer for the bank, which could lead to greater bank concentration, a concern regarding the larger banks.

Still another possibility is traditional Chapter 11 bankruptcy, such as befell Lehman Brothers. What followed the bankruptcy was primarily losses of bondholders, as bondholders received about nine cents on the dollar. The losses were large and geographically diverse. But these kinds of losses are what are required. Whalen (2009a) argues the bankruptcy court did an outstanding job, and that Lehman is a model for what should occur. The components of the Lehman business were sold off, for example, the U.S. broker-dealer business was sold to Barclays, and Nomura purchased the Lehman holdings in Europe, Asia and the Middle East. Some of the Lehman clients, however, especially the hedge funds that used Lehman as a “prime broker,” complained of problems in obtaining access to their funds in a timely manner.¹³

VII. Conclusions

1. It is necessary to take financial institutions that cannot survive without substantial and continued infusion of public funds into receivership.

Bondholder haircuts will allow the big banks to emerge from receivership as viable institutions capable of leading an economic recovery.

2. Systemic Financial Failure from Letting a Key Player in the Counterparty Transactions Fail is Grossly Exaggerated.

The Lehman Brothers bankruptcy shows that a big bank and central player in credit default swaps can fail without systemic problems to the financial system.

3. Purchasing Toxic Assets of the Big Banks has several problems:

(a) it fails to establish financially viable large banks, which are required for economic recovery;

(b) adequate purchases threaten the credit rating of the U.S.; and

(c) banks will use the safety net to take on excessive risks.

¹³ The net positions of many of the hedge funds at Lehman were frozen, causing deleverage. See the Wikipedia account at: http://en.wikipedia.org/wiki/Bankruptcy_of_Lehman_Brothers.

It may be impossible to regulate to protect against the next new financial instrument that is misunderstood. Financial institutions have mismanaged risk on a grand scale. It is crucial that they internalize the risks. For that to happen they have to bear a price for their failed investments. Bailing them out is a sure way to encourage them to take on excessive risks that create the next crisis.

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