

Making the Rescue Package Work: Asset and Equity Purchases

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SUMMARY

If the main purpose of the Emergency Economic Stabilization Act of 2008 is to give banks confidence in each other, then enabling Treasury directly to bolster the capital positions of banks that need more capital may be an even more effective way to restoring confidence to the inter-bank market than the purchased of troubled assets. Whatever Congress may have intended about the pricing of the distressed assets, it also authorized a much more direct way to recapitalize the financial system and weak banks in particular: direct purchases by Treasury of securities that individual institutions may wish to issue to bolster their capital. At this writing, Treasury reportedly is considering ways do this. In this essay, we outline a specific bank recapitalization plan for Treasury to consider.

In particular, Treasury could announce its willingness to entertain applications for capital injections, using a set pricing formula. For publicly traded banks, Treasury could buy at the price as of a given date, such as the price one or more days before its plan was announced. For privately-owned banks, Treasury could use a price based on the average price-to-book value for publicly traded banks as of that date. To prevent government intrusion into the affairs of the banks, the stock should be non-voting. Treasury would make clear that it only would take minority positions. There should be no takeovers of more companies—AIG, Fannie and Freddie are quite enough. Treasury also should announce that it will dispose (or sell back to the bank) any stock

acquired through these actions as soon as the financial system has stabilized and the bank is in sound financial condition (perhaps a time limit, such as three years, should be a working presumption).

We believe Treasury can accommodate a systematic recapitalization plan within the funding it has been given – initially \$350 billion and another \$350 billion later upon request to Congress (unless it disapproves) – by using the required disclosures about its asset purchases as a way of jump starting private sector pricing and trading of these securities. This should conserve Treasury’s resources it might otherwise use for asset purchases, and thus free up funds to recapitalize weak banks directly, but in an orderly fashion.

Treasury will have to be careful when it buys distressed assets to guard against the possibility that banks will just dump their worst stuff on taxpayers. The Department will also have to be careful when buying equity in banks. There cannot be an open invitation for bank owners to move assets out of the bank and then, in effect, say: “We don’t want this bank, you buy it.” To avoid this problem, Treasury should work closely with the FDIC and other regulators to determine whether or not a particular bank is eligible for an equity injection. The Department also may need to limit the scope of the recapitalization program to larger national banks, if it becomes infeasible to allow smaller banks to participate.

Making the Rescue Package Work: Asset and Equity Purchases

The unprecedented financial rescue plan – technically the Emergency Economic Stabilization Act of 2008 (“EESA,” the “Act”, or the “plan”) – has now been enacted by the Congress. One of the goals of the plan is to end the immediate panic in inter-bank lending markets, and on this basis several omens are not encouraging.

The Dow Jones stock index has been dropping daily, by large amounts, since EESA was enacted. The TED spread measures the difference between the interest rate on short term Treasury bills and the interest rate banks pay to borrow from each other (the LIBOR) and is a widely accepted measure of perceived risk in the financial sector. For several years this spread had hovered around 50 basis points or half a percentage point, reflecting the fact that lending to other financial institutions was considered almost as safe as buying Treasury bills. However, the spread shot up to 2.4 percentage points in July 2007 as the financial crisis hit, and it fluctuated widely in subsequent months. Following passage of the plan it remains even more elevated than it was last July—it was 3.8 percentage points as of October 7 and broke 4 percent on October 8. Financial institutions simply do not trust each other’s credit worthiness. Some of the market worries, of course, reflect the fragile state of the U.S. and global economies, but clearly the passage of the rescue plan itself has not calmed markets.

A second and related goal for the plan, according to media accounts, is to facilitate the recapitalization of the financial system, but the language of the bill is surprisingly coy about this. While the Act aims to “restore liquidity and stability to the financial system” it also directs the Treasury Secretary to prevent “unjust enrichment of financial institutions participating” in the asset purchase program. It is not yet clear whether Treasury will choose to recapitalize banks through its asset purchases – by buying them at prices above the values to which banks and other sellers have already written them down – or whether Treasury will simply use its purchases to stabilize prices for these securities and thus provide liquidity to the market, even if it may result in additional write-downs of their values (and thus additional reductions in capital).

Whatever Congress may have intended about the pricing of the distressed assets, it also authorized a much more direct way to recapitalize the financial system and weak banks in particular: direct purchases by Treasury of securities that individual institutions may wish to issue to bolster their capital. Of course, in normal times, such authority would be unnecessary because financial institutions would seek to tap private sources of capital first. But these are not normal times, to say the least.

If the main purpose of the plan is to give banks confidence in each other, then enabling Treasury directly to bolster the capital positions of banks that need more capital may be an even more effective way to restoring confidence to the inter-bank market. Accordingly, we outline here a possible supplementary bank recapitalization plan that we believe Treasury should pursue, at the same time it purchases distressed assets. As this paper is being completed on October 9, 2008, The New York Times reports that the Treasury is now considering such a move. We are encouraged by this and in this essay we provide both a rationale for doing so and some concrete suggestions for how such a direct recapitalization program might work. We do not support further nationalization of the banking system beyond what has already been done but we believe that the crisis has become so severe that the asset purchase plan on its own will not be enough to turn the current situation around. Additional capital is urgently needed and could be supplied by Treasury purchases of minority, non-voting equity stakes, or by warrants.

We believe Treasury can accommodate a systematic recapitalization plan within the funding it has been given – initially \$350 billion and another \$350 billion later upon request to Congress (unless it disapproves) – by using the required disclosures about its asset purchases as a way of jump starting private sector pricing and trading of these securities. This should conserve Treasury’s resources it might otherwise use for asset purchases, and thus free up funds to recapitalize weak banks directly, but in an orderly fashion, as we describe below.

Why Do Banks Need More Capital?

Financial institutions make money by borrowing money on favorable terms, that is, at low interest rates, and then lending it out at higher rates or by buying assets that yield higher returns. They may make money in other ways too, but the state of their balance sheets of assets and liabilities is crucial. In order to create a viable financial institution that can accommodate requests by depositors to take money out, someone has to put up capital and typically this comes from the equity in the company. The owners of the company have an incentive to keep this equity capital low and to build a large volume of borrowing and lending off a small base of capital—to increase leverage. This is because the profits earned are divided among the equity owners and the less capital there is, the higher the return on equity.

Governments for many years and in almost all countries have regulations in place setting capital requirements for banks in particular to stop them from taking too much risk in the pursuit of high returns and also protect any fund that insures their deposits against loss (the FDIC in this country). But some of our larger banks in recent years found a way around these rules by establishing “off-balance sheet” entities – Structured Investment Vehicles (“SIVs”) – to purchase mortgage-related and other assetbacked securities that the banks were issuing. In addition, large investment banks significantly increased their leverage in the years running up to the recent crisis, and were able to do so without mandated capital requirements. As a result, when the mortgage crisis hit, our financial system was weaker than was widely believed, and in the case of large banks in particular, than was officially reported.¹

The mortgage crisis, which first surfaced in 2006 and has escalated rapidly since then, has hit bank balance sheets severely. As banks were forced to recognize losses on the mortgages they held in their portfolio, and especially to write down the values of their mortgage securities to their “market values” (even though the prices in those “markets” reflected relatively few “fire-sale” trades), they suffered reductions of their capital. Furthermore, the large banks that had created SIVs to escape such events found they could not hide from them when the SIVs could no longer roll over the commercial paper they had issued to finance their holdings of mortgage securities. To avoid dumping these securities on the market to satisfy their creditors, the banks took the SIVs back on their balance sheets, only to suffer further losses to their capital.

As we have seen, some of our largest banks – Washington Mutual and Wachovia, to name two – have not been able to survive all of this, and have been forced or are or being forced into the hands of stronger survivors. Other banks have been doing their best to shore up their capital bases by issuing new equity to replace the losses they have absorbed on delinquent loans and declining prices of their asset-backed securities. According to media reports, financial institutions (largely banks) worldwide have suffered over \$700 billion in such losses to date, of which they replaced approximately \$500 billion by issuing new equity.

But more losses are sure to come; indeed Secretary Paulson has said to expect further bank failures. Earlier this year, the International Monetary Fund projected that losses due to the credit crisis worldwide could hit \$1 trillion. The IMF has recently

1. The government’s reported bank capital ratios, for example, did not take account of the off-balance sheet assets and liabilities of the SIVs, which large banks later had to take back on their balance sheets directly.

upped that forecast to \$1.4 trillion. If anything close to this latest forecast is realized, then many banks – here and abroad – will need to raise even more equity, but in a capital market that is now highly more risk averse than only a few months ago.

It is in this environment that banks have grown much less comfortable dealing with each other, even though they must to keep the financial system running. Every day, some banks have more cash on hand, or reserves, than they need to meet reserve requirements and ordinary demands for liquidity, while others are short of such funds. In the United States, banks thus trade with each other in the Federal Funds market while global banks borrow and lend to each other through the London Interbank market using the LIBOR rate of interest. The Federal Reserve's main objective of monetary policy is to stabilize the "Fed funds" rate around a target, now just lowered to 1.5%, down from 2% where it has been for some months (and down from 5.25% before subprime mortgage crisis). To do so, the Fed has added a huge amount of liquidity to the financial system, even going so far this week as to buy up commercial paper issued by corporations, an unprecedented step. But the Fed does not and probably cannot control the longer term inter-bank market, in which banks lend to each other typically over a 3-month period.

The steep jump in the 3-month inter-bank lending rate – well over 4 percent – reflects two fundamental facts that EESA is designed to address. One is that banks don't trust each others' valuations of the mortgage and possibly other asset-backed securities they are all holding, precisely because the "markets" in those securities are so thin and thus not generating reliable prices. The second problem is that banks either are short of capital themselves, or fear that their counterparties are. No wonder that banks are so unwilling to lend to each other for a period even as short as three months – which in this environment, can seem like an eternity.

The capital shortage in the banking system, in particular, has severe implications for the rest of the

economy. An institution that is short of capital is forced to cut back on its lending and this shows up in denials of lines of credit to companies and reductions in credit limits for consumers. Households cut back on spending; it is difficult to get a mortgage or a car loan; and companies reduce investment and curtail operations. And as we learn in any college course on banking, the impact of a loss of capital on bank lending can be multiplied. Each dollar of bank capital supports roughly ten dollars of overall lending in the economy. Each dollar of lost capital thus can result in ten dollars of lending contraction. The impact of an economy-wide bank contraction can be devastating for Main Street. The Great Depression was greatly exacerbated by the collapse of banks. The long stagnation in Japan was in large part the result of a failure to recapitalize the banks.

How bad is the current problem? We do not know how many banks, insurance companies or other financial institutions are in a weakened state, or perhaps even more important, may become weakened as the overall economy deteriorates. The official data published so far don't really help on this score. The FDIC compiles information on the number and collective assets held by "problem banks," or those in danger of failing. As of the second quarter of 2008, there were 117 such banks with assets of \$78 billion up from 90 in the second quarter with assets of \$28 billion. These figures did not include Washington Mutual, which would have failed had it not been bought by J.P. Morgan, or Wachovia, which at this writing, looks like it will be acquired by Wells Fargo (but also was in danger of failing without being acquired by someone). Together these banks hold more than \$500 billion in customer deposits. Furthermore, according to recent media reports, even some large insurance companies (beyond AIG) may be having capital problems, having suffered large losses on the securities they hold in reserve to meet future claims.

Can the Asset Purchase Plan Succeed in Recapitalizing the Banks?

In principle, there are two ways in which the original Treasury asset purchase plan would recapitalize the banks. The first method is premised on the view that private markets are unwilling to supply capital to the banks because investors do not know how much their assets are worth. The Treasury, it is argued, would use its asset purchase plan as a way of revealing the prices of the assets and once that information is known, the banks will be able to raise new capital again from private markets. But better pricing will only attract capital if there are investors out there who are willing to supply it. Given the dramatic downturn in equities markets, finding such willing investors will be difficult, to say the least. Those investors that provided capital to banks early on in the crisis have been hit hard by the subsequent decline in equity prices and are reluctant to get burned again. When Bank of America said it would raise \$10 billion from the markets, for example, its stock price fell sharply, suggesting there is a lot of market resistance to be overcome before private investors are willing to recapitalize the banking system.

Second, in principle, Treasury could recapitalize the banks by buying distressed assets at prices above those at which the securities are currently carried on the books of the institutions that sell them (original book or purchase value minus any write-offs).² In this case, the bank would be able to report a capital gain from its sale to the Treasury, a gain that would reverse, at least in part, the capital losses it had taken

in the past and thereby add to its capital.

Treasury has said it will use reverse auctions³ when it buys assets, and it is possible that the Department will be able to construct some auctions that will enable some holders of troubled assets to sell them to the Treasury at prices that earn a capital gain. But we are somewhat skeptical how many securities will fall into this category. For one thing, asset-backed securities are not homogenous, like traditional equity or bonds. In addition, it would be surprising in the current environment if reverse auctions would reveal prices that are above the written-down values of many of these securities. After all, an auction does not necessarily produce valuations that reflect the “hold to maturity” price rather than the “liquidation” price for the securities, as Fed Chairman Ben Bernanke suggested the purchase plan would accomplish.

Accordingly, we strongly suspect that Treasury will have to purchase many securities in one-on-one deals rather than through auctions. But in doing this, it may be both legally and politically difficult for the Treasury to pay prices in negotiations that are above the valuations banks or other sellers already have given them. Section 101 (e) of EESA specifically requires the Treasury Secretary “to take such steps as may be necessary to prevent unjust enrichment” of participating financial institutions, and Congress could construe such language to preclude such sales.⁴ Furthermore, even if there were

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2. Some institutions holding these securities may not have fully marked them to “market” under current accounting rules, but instead simply have added to their reserves for possible future losses to reflect the likelihood of such writedowns. In the lattercase, the securities may implicitly be marked down by a percentage reflecting the loan loss reserve attributable to them. If this latter percentage is not publicly stated, Treasury may require participating institutions to break it out for the Department as a condition for participating in the program (and if the Department does not do this, it may be compelled to do so either by the Executive branch Oversight authority or the Congressional oversight committee established under the Act).
 3. A regular auction is where the seller puts an item out on the market and then potential buyers bid for it. The seller then takes the highest price. In a reverse auction, the buyer puts out a notice of what item he or she wants to buy and then sellers compete to supply this item. The buyer then chooses the lowest price. Reverse auctions are the way a lot of private companies and government entities manage their procurement processes.
 4. The rest of this subsection includes as an example of such unjust enrichment the sale of a troubled asset to the Treasury at a higher price than what the seller paid to acquire it. But this language is not exclusive. Congress, the public or the media could construe unjust enrichment also to include sales of securities at prices above those implicitly or explicitly carried by the institution on its books.

not a specific prohibition in the EESA, Treasury may wish to avoid the public criticism it would face if it purchased assets at prices that would allow participating institutions to book gains. And, in the case of sales at prices below the explicit or implicit price of the securities carried on an institution's books, the sales will trigger further accounting losses and thus additional deductions from reported capital.

In short, we are not at all confident that the Treasury's planned purchases of troubled securities, by themselves, will do much to recapitalize the banking system. This does not mean that the planned asset purchases will not deliver some needed help. Although at this writing the inter-bank lending market remains frozen even though EESA has been enacted and signed into law, one reason why banks and others may not yet have confidence that it will lead to a thaw in credit markets is that the guidelines for the asset purchases have not yet been issued. Once these guidelines are announced and the purchases begin, and the markets start to see real results, it is possible that some of the missing trust in the banking system will come back.⁵

However, Treasury may not need to spend, and for reasons elaborated below we do not believe it should spend, anywhere near the full \$700 billion, or perhaps even most of the initial \$350 billion tranche in borrowing authority, to liquefy the markets for mortgage and other asset-backed securities. EESA requires Treasury to publish (within two days) information about each of these purchases. We urge the Department to include in such publications

(presumably on its website) regular data on the defaults and delinquencies to date of the loans underlying each batch of securities it purchases. Such information should enable financial institutions that are still holding similar securities not only to price them more accurately, but also to give market participants enough confidence to begin trading these securities without further Treasury purchases.

Husbanding its resources should be a prime objective for Treasury. In conducting its purchases of troubled assets, it should target first those asset categories that are the most illiquid. The main objective always should be jump-starting private sector activity or at least bringing greater clarity to the pricing of particular classes of securities. There is no need for Treasury, therefore, to make repeat purchases of similar securities (such as collateralized debt obligations issued within several months of each other, structured in roughly a similar way). Rather, the aim should be to make a market in as many different asset categories as are reasonably necessary to provide guidance to market participants, no more, no less.

Yet no one can be confident at this point that asset purchases alone will give banks sufficient confidence to begin dealing with each other at much lower interest rates. If the asset purchases do the trick, fine. But if they don't, Treasury should make sure it has enough financial ammunition to pursue a second, more direct, strategy for restoring banks' confidence – the direct bank recapitalization strategy to which we now turn.

5. The Treasury asset purchase plan would also provide a valuable service by speeding the de-leveraging process. As we described earlier, banks are leveraged and hold capital that is only a fraction of their assets or liabilities. When they take a hit to their capital base, they must either replenish the capital or scale back their balance sheets. When it became impossible to sell the assets except at fire-sale prices, they were not able to do this. Selling the asset to the Treasury will help them scale down. To get bank lending going again, however, we want them to be able to make new lending, not to just scale back.

Recapitalizing the Financial System Directly

Having the government put capital into financial institutions directly is not a new idea. It is the approach followed in this crisis for Fannie and Freddie and has been used in other countries. Sweden recapitalized its banks by adding capital to them during its crisis in the 1980s. Most recently, the British government has announced a sweeping bank recapitalization amidst the current crisis. And of more relevance to the U.S. situation, Congress specifically added authority in EESA for Treasury to make direct capital injections into banks.

In recent days, Treasury Secretary Paulson has acknowledged that the Department may take advantage of this authority and thus use some of its funds to buy equity in troubled banks. This is a welcome development. Even if Treasury's asset purchase program restores confidence in the pricing of troubled securities, many banks still believe that many other banks lack sufficient capital, and thus can still be reluctant to lend to them. The fact that the FDIC stands ready (especially with its new unlimited line of credit at the Treasury) to assist acquiring banks in taking over failing banks is probably not sufficient, even with a successful Treasury asset purchase program, to provide this confidence. Bank lenders to failed banks can still lose money in such transactions, or at the very least may have difficulty accessing their funds for some period, at times when all banks seem to want or need as much liquidity as they can get.

How might such a capital injection program work? Treasury could announce its willingness to entertain applications for capital injections, using a set pricing formula. For publicly traded banks, Treasury could buy at the price as of a given date, such as the price one or more days before its plan was announced, as has been suggested by former St. Louis Federal Reserve Bank President William Poole.⁶ For private-

lyowned banks, Treasury could use a price based on the average price-to-book value for publicly traded banks as of that date. To prevent government intrusion into the affairs of the banks, the stock should be non-voting. Treasury would make clear that it only would take minority positions. There should be no takeovers of more companies—AIG, Fannie and Freddie are quite enough. Treasury also should announce that it will dispose (or sell back to the bank) any stock acquired through these actions as soon as the financial system has stabilized and the bank is in sound financial condition (perhaps a time limit, such as three years, should be a working presumption).

The Treasury will have to be careful when it buys distressed assets to guard against the possibility that banks will just dump their worst stuff on the taxpayers. The Department also will have to be careful when buying equity in banks, especially if it decides to go for a broad, nationwide program. There cannot be an open invitation for owners to move assets out of the bank and then, in effect, say: "We don't want this bank, you buy it." This problem suggests that Treasury would need to work closely with the FDIC and other regulators to determine whether or not a particular bank is eligible for an equity injection. Treasury also may need to limit the scope of the program to larger banks, if it becomes infeasible to allow smaller banks to participate.

We presume that Treasury did not initially embrace the idea of a more systematic recapitalization of the banking system out of concern not to have any further government involvement in the banking system, especially on the heels of the Fannie/Freddie conservatorship and the Fed's rescue of AIG. That Treasury is now considering direct capital injections indicates that this may no longer be a concern. In our view, limiting Treasury's purchases to non-voting stock in any event would address this concern directly.

6. Speech made at the National Association of Business Economists conference, Washington DC, October 6, 2008.

Conclusion

Ben Bernanke has compared the current financial crisis to a heart attack in the economy. For some heart attacks, it is enough to administer drugs and change diet and exercise habits. But in acute cases, major surgery is needed and the current crisis is in the acute phase. Direct surgery in the form of capital injected into financial institutions, along with direct asset purchases, should help calm the inter-banking lending market.

Based on recent monthly data it appears that GDP started to fall in mid-year and the economy is moving into recession so the proposals made here will not change that. Nor can the proposals compel banks to make loans to their traditional customers – consumers and businesses – in the current climate of fear. But Treasury can do something to mitigate that fear and thus, along with the recent further easing of monetary policy, likely additional fiscal stimulus and further homeowner relief, the Department will help reduce the severity of the current recession if it uses all the tools in its financial arsenal.

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