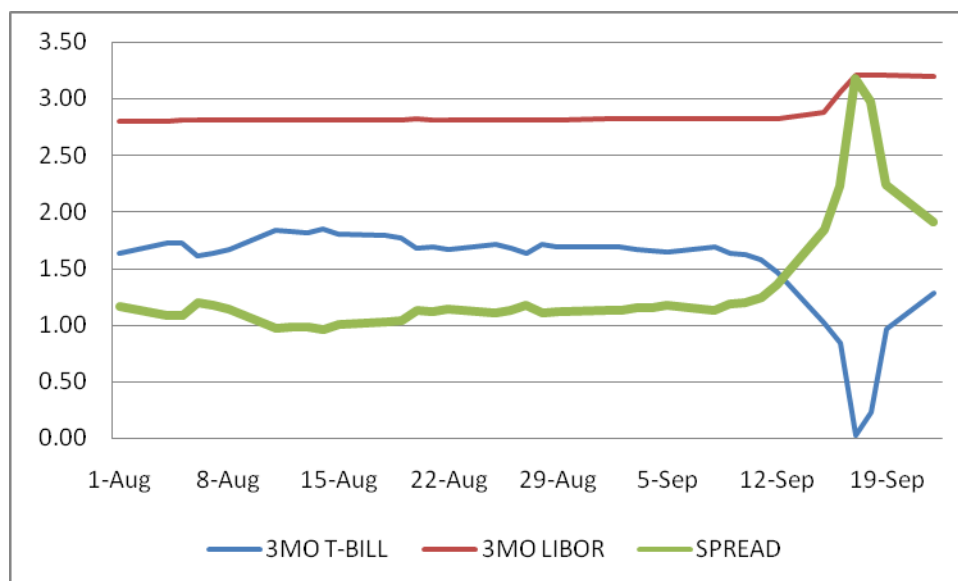


The Liquidity Benefits of the Bailout

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The U.S. Treasury's proposed bailout plan raises a number of serious questions, many of which have been well articulated by politicians and pundits. Many of the plan's merits, however, have been shrouded by confusion. Is the taxpayer losing \$700bn to Wall Street? Is the Treasury paying fair value for assets? How will the bailout help Main Street? In fact, there are a number of merits to this proposal which all stem from *markets currently being extremely illiquid*.

An easy way to illustrate the illiquidity in markets is to look at the price differences between liquid assets and less liquid assets. The figure below plots interest rates over the past month for the 3-month London Inter-Bank Offered Rate (LIBOR) and the 3-month U.S. Treasury bill. LIBOR reflects the rate at which a bank borrows funds from another bank. During less turbulent times, prior to last summer, the spreads between the LIBOR and T-bill rates average around 40 basis points (bps). The spreads recently have been more than 100 bps, punctuated by the surge to 318 bps on September 17.



The unusually large spread between the LIBOR and T-bill rates suggests that a bank would much rather use its assets to buy 3-month Treasury bills than to lend to another bank. There are two main reasons why this would be the case. The T-bill is liquid, so if a bank faces a sudden need for cash — for example, if it's pressed by lenders to provide more collateral — it can sell the T-bill relatively quickly and easily. Also, if it were to make a loan to another bank, the lending bank would be exposing itself to the risk that the borrowing bank would default. Given the large amount of default risk to which banks are already exposed, the last thing they would want to do is to take on even more risk.

Another example of the premium placed on liquid assets can be seen by comparing yields on bonds issued by Fannie Mae to those issued by the Treasury. Since being taken over by the government, Fannie Mae's bonds can effectively be considered as default free as Treasury bonds. However, the current spread between 10-year Fannie Mae bonds and 10-year Treasury bonds is around 75 bps. This spread is due primarily to the benefits of owning the liquid Treasury bond rather than the less liquid Fannie bond.

These examples illustrate the extreme illiquidity in the financial system. But the impacts can be felt far from the trading floors of Wall Street. This widespread illiquidity is a threat to individuals, families, and businesses large and small. When a bank makes a loan to a business or a household, it is making an investment in an illiquid asset. Given the observations described above, reflecting lenders' aversion to illiquid assets, we can guess that banks will be reluctant to extend credit for investment in the illiquid homes and businesses that line Main Streets from coast to coast. This concern about spillover has been prominently expressed by Chairman Bernanke of the Federal Reserve.

Now consider the basic aspects of the bailout proposal. The Treasury would purchase illiquid, private sector assets from banks. The Treasury would finance this purchase by selling more Treasury securities. Given the size of the premium the market has recently placed on liquid assets such as Treasury securities, this could turn out to be a very good deal for taxpayers. Consider that on September 17 the Treasury bill yielded 0%. The government could have issued Treasury securities at 0% and invested in LIBOR to earn 3.2% over three months. Buying mortgage assets and "paying" with Treasury securities could allow the government, the tax payers, to earn a handsome liquidity premium.

The Treasury proposal has been rightly criticized for having not explicitly identified the particular illiquid assets that it will buy. The common understanding, however, is that subprime mortgages will be bought. These mortgages are among the most illiquid assets in the marketplace, meaning, as discussed above, that they should be severely discounted. Thus, taxpayers should earn returns when purchasing these assets that are even higher than the spread between LIBOR and T-bill rates.

How would such a "swap" of liquidity impact bank balance sheets and the illiquidity and risk aversion of banks? If banks could shed \$700 billion of illiquid assets in return for \$700 billion of liquid assets, their balance sheets would become more liquid. Recalling our earlier example of the interbank loan, a bank would then be less averse to investing in an illiquid, interbank loan. The bank would also have far less risk on its books, so it would be more inclined to take on default risk.

Another misconception about the bailout proposal is whether the Treasury should "overpay" or "underpay" for assets. It is very hard to determine fair-value in a market that is illiquid. If one focuses on the profits to taxpayers, it makes sense to underpay for the assets. If one focuses on the banks, it makes sense to overpay so as to shore up the capital of the banking sector.

The asset price, however, is not as important if the economy is considered as a whole, from taxpayers to banks and all points in between. The most important goal, to get credit flowing between banks, businesses, and individuals, is to liquefy bank balance sheets. *Thus, what is important about this proposal is not its particular price, but its sheer size.*

To summarize, consider a hypothetical balance sheet for the entire financial sector:

Assets	Liabilities
Liquid Assets (including Treasury securities)	Equity
Illiquid Assets (including Subprime Mortgages)	Debt

The Treasury proposal would alter the asset side of this balance sheet by swapping illiquid, risky subprime mortgages in exchange for liquid Treasury securities. This should reduce the financial sector's current aversion to risk and illiquidity.

A number of analysts have rejected an asset-side proposal in favor of liability-side proposals. Such proposals aim to reduce financial sector leverage by issuing equity to the government, or forcing a debt-for-equity swap. These proposals are based on the following diagnosis of the underlying problem: The financial sector's aversion to risk and illiquidity stems from its high leverage. Too much debt has led the financial sector to be overly risk averse, creating a credit crunch.

Which solution is better? These proposals are in fact quite similar in that both are aimed at re-engineering the balance sheet of banks to foster liquidity. Moreover, there is nothing that precludes mixing the proposals to alter both asset and liability side.

The asset-side proposal, however, has two key features in its favor. First, the government has already taken over Fannie Mae and Freddie Mac, and with it a large portfolio of mortgage-backed securities. Regardless of whether one was in favor or against this action, the fact is that the government has entered the mortgage business. In this case, it may be best to exclusively focus on the mortgage business by further acquiring subprime mortgages rather than branching out by adding ownership stakes in commercial banks, investment banks, and insurance companies. Second, since the real estate market has been widely recognized as the key, underlying problem in the economy, the purchase of mortgage assets, as with the takeover of Fannie and Freddie, strikes close to the heart of the problem. Ultimately, given that nobody, neither policymaker nor pen-wielder, truly knows the single best way to fix these complex economic problems, the asset-side solution may be the more robust approach.