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# Regulating Wall Street

# The Dodd-Frank Wall Street Reform and Consumer Protection Act and a Little Known Corner of Wall Street: the Repo Market

By Sabri Oncuon July 16, 2010 6:22 PM | Permalink | Comments (0) | TrackBacks (0)

by Viral V. Acharya and T. Sabri Öncü

Although one of the main concerns of the Dodd-Frank Wall Street Reform and Consumer Protection Act soon to be signed by President Obama to law is systemic risk, it is disconcerting that the Act is completely silent about how to reform one of the systemically most important corners of Wall Street: the repo market, whose size based on daily amount outstanding now surpasses the total GDP of China and Germany combined. The financial crisis of 2007-2009 to which the Dodd-Frank Act is a response was a crisis not only of the traditional banks, but also of the *shadow* banks, those nonbank financial institutions that borrow short-term in rollover debt markets, leverage significantly, and lend and invest in longer-term and illiquid assets. Unlike traditional banks, shadow banks did not have access to the safety nets designed to prevent wholesale runs on banks - namely, deposit insurance and the central bank as the lender of last resort - until 2008. Although there was no wholesale run on the traditional banking system during the crisis of 2007-2009, we effectively observed a run on shadow banks that led to the demise of a significant part of the shadow banking system. Since repo financing was the basis of most of the leveraged positions of the shadow banks, a large part of the run occurred in the repo market. Indeed, the financial crisis of 2007-2009 was triggered by a shadow bank run on two Bear Stearns hedge funds speculating in the potentially illiquid subprime mortgages by borrowing short-term in the repo market.

A sale and repurchase agreement as executed in the U.S. is a short-term transaction between two parties in which one party borrows cash from the other by -in effectpledging a financial security as collateral. From the point of view of the borrower of cash, this transaction is called a repo, whereas from the point of view of the lender of cash, it is called a reverse repo. Although loans secured by some collateral have been traced back at least 3000 years to ancient China, repos as we know them were introduced to the U.S. financial market by the Federal Reserve in 1917 to extend credit to its member banks after a war time tax on interest payments on commercial paper had made it difficult for banks to raise funds in the commercial paper market. Later in the 1920s, the New York Fed used repos secured with bankers' acceptances to extend credit to dealers to encourage the development of a liquid secondary market for acceptances. Repos fell from grace during the Great Depression after massive bank failures and suppressed interest rates, only to make a comeback after the Treasury-Federal Reserve Accord of 1951 that renewed emphasis on controlling inflation rather than keeping interest rates low.

During the period of high inflation in the 1970s and early 1980s, rising short-term interest rates made repos a highly attractive short-term investment to holders of large amounts of idle cash. Increasing numbers of corporations; local and state governments; and, at the encouragement of securities dealers, even school districts and other small creditors started depositing their idle cash in "repo banks" to earn interest rather than depositing money in commercial banks which did not pay interest on demand deposits. Furthermore, the U.S. Treasury started borrowing heavily after 1974, eventually changing the status of the U.S. from a creditor to a debtor nation and increasing the volume of marketable Treasury debt by a large amount. This led to a parallel growth in government securities dealers' positions and financing, and the repo market grew by leaps and bounds.

Two big changes in the 1980s further solidified the use of repos in the U.S. financial market. Although repo contracts were introduced by the Federal Reserve in 1917 to extend credit to its member banks, much of the early contracting conventions had not changed until 1982. The first big change came in 1982 in the treatment of accrued interest on repo securities; accrued interest which been excluded from the invoice price of the repo securities now became a part of the invoice price. This change to repo contracts was brought about after the spectacular collapse of Drysdale Government Securities Inc. in 1982. Despite its limited equity, Drysdale had been acquiring substantial amounts of debt securities through reverse repos and at prices that excluded

the accrued interest. Drysdale then short sold these debt securities to third parties at prices that included the accrued interest. Drysdale used the surplus thus generated to raise more capital and to make interest payments to its reverse repo counterparties. However, when interest rates moved against Drysdale in May 1982, the cumulative losses on Drysdale's interest rate bets depleted its capital and on May 17, 1982, Drysdale failed to pay the interest on securities it had borrowed. When the news about Drysdale's failure to pay interest hit the repo market, it came to a near halt, and forced the Fed to intervene as the lender of last resort to calm fears and prevent a collapse. This near collapse exposed the systemic risk associated with the exclusion of accrued interest and therefore, largely at the encouragement of the Federal Reserve Bank of New York, inclusion of accrued interest in the invoice price of repo securities became standard market practice.

The second and more important change came in 1984 via the extension of Federal Bankruptcy laws to repos not only on Treasury and federal agency securities, but also to repos on bank certificates and bankers' acceptances. Until this change, repo securities

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The Dodd-Frank Act, signed into law in July 2010, represented the most significant and controversial overhaul of the U.S. financial regulatory system since the Great Depression. Forty NYU Stern faculty, including editors Viral V. Acharya, Thomas F. Cooley, Matthew P. Richardson, and Ingo Walter, provide a definitive analysis of the Act, expose key flaws and propose solutions to inform the rules' adoption by regulators, in a new book, <u>Regulating Wall</u> <u>Street: The Dodd-Frank Act and</u> the New Architecture of Global Finance (Wiley, November 2010).

#### About Restoring Financial Stability

Previously, many of these faculty developed 18 independent policy papers offering market-focused solutions to the financial crisis, which were published in a book, Restoring Financial Stability: How to Repair a Failed System (Wiley, March 2009).

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Find recent content on the main index or look in the archives to find all content. on bank certificates and bankers' acceptances were subject to automatic stay, an injunction issued automatically upon bankruptcy filing that prohibited collection against either the debtor or the debtor's property. However, after the change repo securities on bank certificates and bankers' acceptances became exempt from automatic stay. The underpinnings of this change were laid when another government securities dealer, Lombard-Wall, with \$2 billion in assets and comparable liabilities, collapsed three months later in August, 1982. Prior to Lombard-Wall's bankruptcy filing on August 12, 1982 with the Federal Bankruptcy Court of New York, there had been no precedent court case in which the question of "whether repos were secured loans or independent sale and repurchase agreements" was directly addressed. If repos were classified as sale and repurchase agreements, then creditors could take immediate possession of the repo securities; if they were classified as secured loans, then repo securities would have been subject to automatic stay. On August 17, 1982, the Federal Bankruptcy Court of New York announced that Lombard-Wall's repos were secured loans and issued a restraining order prohibiting the sale of these repo securities. Although submissions by the Federal Reserve Bank of New York and several others argued that the decision would undermine the liquidity of the repo market, the court reaffirmed its decision a month later. This removed the vagueness associated with whether repos were secured loans or independent sale and repurchase agreements. Despite this ruling, investment banks, mutual funds and other large financial institutions favored the exception of repo securities from the application of automatic stay, although they seemed unwilling to write contracts that clearly stated that a repo was a pair of outright sale and repurchase transactions.

Debates continued until another securities dealer, Lion Capital Group, collapsed in May 1984 and a bankruptcy court placed an automatic stay on Lion's repo securities. Shortly thereafter, Congress ended the debates about the classification of repos by enacting the Bankruptcy Amendments and Federal Judgeship Act of 1984 exempting repos on Treasury and federal agency securities, as well as on bank certificates of deposit and bankers' acceptances, from the application of automatic stay. Since then and to this day, repos on these securities have been exempt from automatic stay.

Dealer delivery failures in the 1980s also gave rise to the emergence of "tri-party repos," in which the counterparties used a third agent, called the *tri-party agent*, to manage the collateral. The tri-party agent ensured that the collateral pledged was sufficient and met eligibility requirements, and all parties agreed to use the collateral prices supplied by the tri-party agent. Today, there are only two tri-party agents in the U.S., called the "tri-party clearing banks," namely, Bank of New York Mellon and J. P. Morgan. Because these two clearing banks have a huge amount of exposure on an intra-day basis, regulators expressed concerns that fears of the financial health of a major dealer or clearing bank could quickly spread contagion throughout the market. Indeed, the Fed's decision to extend its lender of last resort support to the systemically important primary dealers during the current financial crisis through the so-called "Primary Dealer Credit Facility" was partly a result of these concerns. Recently, on May 17, 2010, the Federal Reserve Bank of New York Task Force on Tri-Party Infrastructure published a white paper addressing these concerns that proposed potential solutions that may prevent a bank run on tri-party repo.

Although the repo market grew by leaps and bounds after the Bankruptcy Amendments and Federal Judgeship Act of 1984, until the mid-1990s it remained confined mostly to U.S. government debt, federal agency debt, corporate debt and federal agency mortgage-backed securities. However, since the mid-1990s, it has grown to include a broad range of debt instruments as collateral, including all types of private-label mortgage-backed securities such as residential mortgage-backed securities and commercial mortgage-backed securities, all types of asset backed securities such as auto loans, credit cards and student loans, as well as tranches of structured products such as collateralized mortgage obligations, collateralized loan obligations, collateralized debt obligations and the like. In 2005, the exemption from automatic stay was further extended to mortgage loans, mortgage-related securities, and interest from mortgages or mortgage-related securities.

Then the financial crisis of 2007-2009 came at the end of July 2007, following the collapse of two highly levered Bear Stearns hedge funds on June 20, 2007; these funds invested in subprime mortgages. The collapse of these two Bear Stearns hedge funds was indeed a run on a shadow bank in the repo market. These two funds, one of which at its peak was levered 10 times its equity, speculated mostly in collateralized debt obligations (CDOs) on subprime mortgages, borrowed funds in the repo market and pledged their CDOs as collateral. When the housing market changed course in the first quarter of 2006, the subprime mortgage market began to deteriorate. With the deterioration of the subprime market in the first half of 2007, creditors began asking the two Bear Stearns funds to post more collateral to back the repos by mid-June 2007. When the funds failed to meet these margin calls, creditors led by Merrill Lynch threatened to declare the funds in default of repo agreements and seize the investments. In fact, on June 19, 2007, Merrill did seize \$850 million of the CDOs and tried to auction them. When Merrill was able to sell only about \$100 million worth of CDOs, the illiquid nature and the declining value of subprime assets became evident. This shadow bank run and the systemic crisis which followed provide a feel for the significance of the exemption of repo securities from the application of automatic stay; had the repo securities been subject to automatic stay, or other alternatives such as those we proposed elsewhere, the Bear Stearns funds could have filed for bankruptcy and the forced fire sale of their assets could have been avoided.

The run on the shadow banking system in the repo market came in two phases. After Bear Stearns collapsed in March 2008, the Fed introduced its most radical change in monetary policy since the Great Depression by extending its lender of last resort support to the systemically important primary dealers through the new "Primary Dealer Credit Facility". However, even this extension of the lender of last resort facility did not prevent the run on Lehman Brothers, as investors realized that this support was not unconditional and unlimited. With the Lehman bankruptcy on September 15, 2008, the repo market on even U.S. government debt, federal agency debt, corporate debt and

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federal agency mortgage-backed securities came to a near halt and *settlement fails* of primary dealers skyrocketed. When the Fed and the U.S. government let Lehman collapse, the next in line for a run, Merrill Lynch, had to merge with Bank of America. Shortly thereafter, the two remaining independent broker-dealers, Morgan Stanley and Goldman Sachs, were forced to convert to *bank holding companies* and were formally put under supervision and regulation of the Federal Reserve. In fact, the entire Wall Street system of independent broker-dealers collapsed in a matter of seven months.

The Dodd-Frank Act is completely silent on how to reform the repo market. This is a mistake given the systemic nature of the repo market and its structural weaknesses discussed above. Unlike the liquidity risk that *unsecured* financing may become unavailable to a firm, the liquidity risk that *secured repo* financing may become unavailable to a firm is inherently a systemic risk: the markets for the repo securities held predominantly by the financial sector may become illiquid. Unless this systemic liquidity risk of repo market is resolved, the risk of a run on the repo market will remain. At any rate, leaving the repo market as it currently functions is not an alternative; if this market is not reformed and their participants not made to internalize the liquidity risk, runs on the repo will occur in future, potentially leading to systemic crises.

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