

CHALLENGES IN BALANCING RISK, ACCOUNTING AND SETTLEMENT FOR REPOS



Since the 2008 economic shakeup, the financial industry has demanded changes in regulations and practices in order to foster more transparency and expose risks in transactions. One practice under review involves repurchase agreements, or “repos,” which institutions had executed for decades without issue. But fallout from the 2008 debacle highlighted the systemic risks in – and the need for increased transparency around – these common financial agreements.

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A repurchase agreement (repo) is a contract under which two parties agree to exchange cash for a security(ies) used as collateral and to unwind that transaction after a specified period of time. Brokers execute repos mainly to help them self-fund so they can settle trades and use the proceeds to fund other investments. For example, a manager owning \$1,000 worth of a security might use it as collateral in a repo, receiving \$980 in cash (discounted by a 2% cushion on the collateral) and paying 1% interest. By using the \$980 to buy another bond that pays perhaps 5% interest, the manager can profit from the 4% spread between the interest paid and received. The lender of the \$980 also benefits because it gains an opportunity to optimize the return on its cash by loaning it at a higher interest rate than it otherwise might receive from a typical cash deposit. Using this method of funding in the market is significant. Current estimates put the volume at \$1.7 trillion per month for just tri-party repos.

TYPES OF REPOS

Each type of repurchase agreement – bi-lateral (a repo deal done directly between the cash borrower and lender) and tri-party (a repo deal where a third party clearing bank acts as an intermediary between the two parties) – has issues and challenges. In the United States, an industry effort is underway to align the U.S. market with global markets like Euroclear®

and to provide greater transparency. In 2010, the New York Federal Reserve issued a white paper¹ about the current practices and issues for tri-party repos, the most common type of repo. Among other findings, the report surmised that the 2008 financial collapse exposed the massive intra-day credit risk inherent in the way these transactions occur. For example, tri-party clearing banks commonly would provide intra-day credit to brokers between the time the deals were unwound at 8:00 AM ET and re-collateralized at 4:00 PM ET. During the intervening time, the securities used to collateralize the cash were being returned to the broker, yet the cash was still available during the day.

In response to these findings, the industry in a collaborative effort by the New York Federal Reserve, tri-party agents and brokers is changing the way tri-party repos are handled². Basically, there are three main changes being implemented by the U.S. clearing banks this year:

- Not unwinding the collateral on repo deals that are not due to mature that day;
- Matching all repo deals with brokers and lenders; and
- Having a single, one-hour settlement window at the clearing banks (3:30 PM ET – 4:30 PM ET).

Once these changes are enacted, they should reduce the intra-day credit risk at the clearing banks and provide better protection for the



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cash investor. However, the cash investor will have its cash lock-up, too, and will be unable to access it until the single settlement time of 3:30 PM ET.

These are all mainly constructive changes providing protection for the clearing banks and more transparency for the cash lenders, who will be able to track the collateral backing their cash intra-day. However, there will be challenges as well, including meeting and enforcing the new one-hour settlement window. Currently, funding for repos can be sent as late as 6:00 PM ET – which is the Fed wire cut-off. This gave investment managers a full business day to net their cash instructions and send out the wire. Under the single settlement window beginning at 3:30 PM ET, all repo trades must be matched and the cash funding wires must be prepared earlier in order to make the new deadline. (One exception exists to the settlement window and that is for funds that close at 5:00 PM ET; even then, 90% of funding should be during the settlement window.) However, enforcing that window may be difficult, as the clearing banks have no authority to impose penalties for late payments. And clearly, if everybody were among the 10% exception, it would strain the clearing banks to process the deals efficiently. Regardless, these changes are certainly positive. The single settlement window reduces systemic risk with intra-day credit, and broker collateral is locked up during the day so lenders have transparency into the instruments backing their cash loans.

Bi-lateral Repos

Besides the tri-party industry changes, some proposals could also affect bi-lateral repos, where the lender and borrower transfer the security and cash directly to each other without a third party clearing banking overseeing administration of the deal. In the market, the movements are mainly conducted using delivery versus payment instructions (like buys and sells). The delivery versus payment

instructions ensures the collateral and cash are exchanged simultaneously to reduce the risk of one side failing. The two changes occurring in the market today are around re-hypothecation and improving transparency into the balance sheet.

Re-hypothecation

One benefit of a bi-lateral repo is that the collateral holder has direct control over the collateral and can “re-hypothecate” it. In a tri-party repo, the clearing bank holds the collateral and the lender of the cash does not control it (unless, of course, there is a default). Re-hypothecation basically means the holder of the collateral either has pledged it as collateral to financially back a third transaction or has sold the actual collateral while still holding it in order to make money on a short position. The idea of re-hypothecation has moved more into the light since the financial collapse of 2008, when some investors did not realize their collateral was being used this way. Re-hypothecation made a bad situation worse. Once an institution was in danger of going under, investors had a harder time getting their collateral back from an institution. Because the security was sold or re-pledged somewhere else, it was not easily retrieved. In the case of repos, the party pledging the securities would end up keeping the cash in the event of a default. As this practice has come more into the light, investors have looked to add stipulations to their collateral agreements that limit the ability to re-hypothecate or have asked for their collateral to be segregated in separate custody accounts. The IMF researched³ the decrease in volume of re-hypothecation and securities lending in 2009 and 2010 and discovered that re-hypothecation was more widespread than investors thought. After 2008, volume had significantly declined as collateral quality was harder to find and risk-adverse investors reduced counterparty exposure. With more light focused on re-hypothecation, regulatory

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efforts around leverage are being re-examined and investors are requesting more transparency into the practice.

In addition to restricting re-hypothecation, there is additional scrutiny on the reporting of repos. Because the two parties in a repo agree to exchange back the cash and the security(ies) at a later date, the deal has specific accounting requirements. U.S. GAAP guidance published by the Financial Accounting Standards Board (FASB) states that a repurchase transaction should be accounted for as a secured borrowing, where the agreement both entitles and obligates the transferor to repurchase or redeem the assets before maturity (subject to certain prescribed conditions)⁴. Where effective control is maintained, the party giving the security in the repo deal needs to keep the security on its balance sheet (along with a liability to repay the borrowed cash), even though the security has moved to another party.

Despite these repo guidelines, there have been some high profile misrepresentations in which repos were either erroneously or deliberately booked as buys and sells or were purposely engineered so that the deals failed the test of effective control, causing the balance sheets to lose their true exposure.

FASB Change

In response to the lack of transparency in these cases, the FASB has recently implemented a change to the guidance regarding effective control by eliminating one criterion related to the amount of cash or other collateral exchanged⁵. The change may mean that some transactions that previously were accounted for as sales and purchases now must be

accounted for as secured borrowings, a step in the right direction to provide greater transparency.

But even these changes fail to address the issue of processing a repurchase agreement incorrectly and accidentally booking a repo as a buy and sell. Clearly, mistakes will occur, but the industry is working toward clearer direction on repurchase agreements so that lenders, borrowers and regulators all will have greater transparency into these financial transactions. That is a good thing considering the Standard & Poor's downgrading of U.S. Treasury securities from the top rating of AAA. If further downgrades occurred, cash lenders would require more collateral backing their cash loan, which in turn would create fewer opportunities for cash borrowers to raise liquidity. With most repo agreements assuming U.S. Treasuries (and other government bonds) to be top-rated, collateral agreements would most likely be examined and amended to reflect the downgrade of the securities. In some cases, cash investors would pull out of the repo market, making raising liquidity even more difficult, which could result in a repeat of 2008, when mortgage-backed securities were being scaled back. For example, there are not a lot of repurchase agreements using Greece government bonds with a 2% hair cut. The CC S&P rating is just too risky to front cash against low-rated collateral. Therefore, the lower the quality, the less cash the repurchase agreement will generate. So as the quality of the collateral goes, so goes the repo market and the importance of monitoring and knowing the collateral backing the repurchase agreements.

- 1 Fed White Paper:
http://www.newyorkfed.org/banking/nyfrb_triparty_whitepaper.pdf
- 2 NY Fed Repo Infrastructure Changes
http://www.newyorkfed.org/tripartyrepo/pdf/tpr_proposal_101203.pdf
- 3 IMF Paper:
<http://www.imf.org/external/pubs/ft/wp/2009/wp0942.pdf>
- 4 FASB Accounting Standards Codification® Topic 860, *Transfers and Servicing*
<http://www.fasb.org/home>
- 5 FASB Accounting Standards Update No. 2011-03, *Transfers and Servicing (Topic 860): Reconsideration of Effective Control for Repurchase Agreements*
http://www.fasb.org/cs/ContentServer?site=FASB&c=Document_C&pagename=FASB%2FDocument_C%2FDocumentPage&cid=1176158507347

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