Securities Lending in a crisis environment: Lessons learned

Joshua Lavender
Executive Director, Securities Lending

Securities lending and its risk/reward profile have been in the headlines as the credit and liquidity crisis has continued to unfold. Market events have focused attention on certain important aspects of the business for all parties involved. First, securities lending is a major driver of market liquidity, from both the lending of securities and the investment of cash collateral, through which the beneficial owner generates alpha.

Second, that with return comes risk. Beneficial owners, typically through agents (financial firms who provide securities lending services), lend securities and accept cash collateral can earn a return from reinvesting their cash. In doing so, they also take on interest rate and credit risk from the investments; therefore, strong risk management coupled with transparency is an essential component of a successful securities lending program.

Third, agent lender indemnification has real value to beneficial owners because broker-dealer counterparties can default. Given the importance of fully understanding all aspects of securities lending, including market liquidity, reinvestment risk and value generation, it bears reviewing how securities lending works, how it has been affected by the credit crisis and what specific actions are needed to restore beneficial owner confidence.

Securities Lending Fundamentals

Securities lending monetizes the intrinsic value of a portfolio of securities. It provides an opportunity for incremental income (alpha) that can be used to increase portfolio returns or reduce portfolio expenses. In a basic transaction securities are lent short-term, collateralized by either cash or securities and should be marked daily. If securities are held as collateral, the loan transaction is complete. If cash is taken as collateral, there is another leg to the loan transaction as this cash is typically reinvested in short-term money market securities. The transaction is unwound when the borrowed securities are returned to the beneficial owner and the collateral returned to the borrower.

Beneficial owners, who lend the securities, include mutual funds, pension funds, endowments, foundations, central banks, sovereign wealth funds, and other government entities, all of which are seeking to optimize portfolio returns. In a securities lending transaction, a component of the beneficial owner's return is affected by a particular security's available supply versus aggregate borrower demand. Initially, securities lending was a back-office function and the need to facilitate trade settlements generated demand. Today, demand for securities is driven by borrowers' need to facilitate settlements, financing and trading strategies.

As demand outstrips supply, the intrinsic value of a security increases, making it more profitable for the beneficial owner to make the security available in the market. When a transaction is collateralized with securities, the borrower pays the beneficial owner a basis point fee on the market value of the borrowed security. Again, this fee varies by how much the borrower is willing to pay to borrow the specific security. When a borrower pledges cash as collateral, a rebate rate or yield on the collateral is negotiated. The greater the demand for the security being lent, the lower the yield paid to the borrower on the cash collateral. Securities that "go special" or have an extremely high borrowing demand could have negative rebate rates, requiring the borrower to not only pledge cash but also pay a fee to the beneficial owner. The cash received as collateral is typically invested in high quality short term instruments under guidelines agreed with the beneficial owner. The difference between the yield paid on the cash collateral to the borrower and the yield earned on the investment is the basis for the return to the beneficial owner.

Beneficial owners who accept cash collateral increase the leverage of their portfolio through the investments made with the cash collateral. For them, securities lending is an investment overlay strategy-generating incremental alpha while taking on additional risk. Beneficial owners who accept cash collateral should ensure that investment professionals are engaged in securities lending transactions, monitoring how risk is managed and cash collateral is invested.

Securities lending like all market activities has a risk/reward trade-off for both the beneficial owner and borrower. The three primary risks for beneficial owners to consider are: borrower/counterparty default risk, operational risk and

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cash collateral reinvestment risk, as discussed above. Participants in securities lending can manage these risks through a variety of controls, and with the assistance of their agent lenders. Although none of the risk management techniques below are new, the credit and liquidity crisis has caused the industry to refocus their attention on the importance of risk management and transparency. Beneficial owners should be aware that broker-dealers are more diligently considering the risks associated with certain beneficial owners as well.

Risk Management Techniques

- Robust counterparty and issuer credit analysis
- Indemnification against borrower default
- Over-collateralization of loans to borrowers
- Operational flexibility to restrict securities or borrowers when necessary
- Diverse universe of borrowers
- Reinvestment account liquidity
- Reporting transparency and ongoing program reviews
- Separate account management structure with customized guidelines for cash collateral reinvestment

The Impact of the Credit and Liquidity Crisis on Securities Lending

The credit and liquidity crisis that began in August 2007 has impacted securities lending in four ways:

1. Reduction in borrower demand
2. Reduction in beneficial owner supply
3. Increased government intervention in financial markets, including securities lending
4. Increased attention on risk and transparency

First, as the credit markets deteriorated throughout 2008, there was a significant drop in demand for securities as a result of de-leveraging by hedge funds and broker/dealers, driven primarily by the need to decrease balance sheets and, for hedge funds, to raise cash to meet investor redemptions. These dynamics, combined with the downturn in the markets, caused the value of securities on loan to fall from a high of approximately $3.9 trillion (May 2008) to just under $2 trillion at year-end 2008, according to Data Explorers.

Second, risk aversion on the part of beneficial owner reduced supply. As noted above, agent lenders typically provide indemnification against broker dealer default, and all borrowers provide cash or securities collateral at rates typically greater than 100%. Despite these safeguards, many beneficial owners restricted the counterparties to which they were willing to lend securities. In addition, some restricted their collateral guidelines by type, preferring secured investments instead of unsecured, and bringing in the maximum maturity for cash collateral investments. These restrictions reduced risk, but also reduced yield so dramatically as to effectively eliminate the ability to generate alpha.

Third, governments/regulators have increased their intervention in all financial markets, and in an extremely short time frame. For example, regulators around the world imposed short selling restrictions to varying degrees and lengths of time in an effort to stem falling equity prices. The Federal Reserve also recently established the Term Securities Lending Facility (TSLF), which is providing access to US treasuries against various collateral types while the market settles. Both of these interventions, and other programs, were meant to stabilize the markets. The need for swift action set against a constantly changing market has made some solutions more effective than others. During the ban on short selling, bid/ask spreads on relevant securities widened and liquidity disappeared as transaction costs increased and volume declined. Similarly, the TSLF provided the backdrop to meet the market's liquidity needs, but beneficial owners are now unable to fully lend their fixed income portfolios because the Fed has become a lender at fixed auction prices.

Fourth, and perhaps most importantly, all participants have become more focused on two particular aspects of all programs: the importance of the agent lender's indemnification, and the role that account type plays in the flexibility of a program, particularly in times of stress.

With regard to the indemnification, the Lehman Brother's bankruptcy in September 2008 severely tested the industry's ability to protect beneficial owners. In the end, however, the indemnification worked and beneficial owners were made whole by either the return of their securities or the cash value of the security borrowed. The protection offered by the indemnification demonstrated its value as insurance against borrower default and the importance of having a franchise equipped to execute on this obligation quickly and efficiently. Today beneficial owners are examining in much greater detail the capital strength of their agent lender as an indication of the agent lender's ability to meet indemnification obligations.

With regard to account type, beneficial owners are now acutely aware of the difference between cash collateral invested via commingled funds versus separately managed accounts. Commingled funds pool all beneficial owners together according to a common guideline for risk taking. In this scheme, each participant owns a pro-rata share of the fund and transacts typically at a net asset value of $1. Separately managed accounts, on the other hand, allow beneficial owners to customize a reinvestment program to meet their unique risk and reward requirements, offering them increased transparency and control.

Most cash collateral investments were/are part of a buy and hold strategy, with the cash that was pledged by borrowers invested in repurchase agreements, bank paper (e.g., certificates of deposit, time deposits, and bank notes) and corporate notes (e.g., medium-term notes, commercial paper and asset-backed commercial paper). Prior to the crisis, when markets were relatively calm and credit spreads fairly narrow, many beneficial owners enhanced diversification and returns by investing in AAA-rated structured product as well.

In a buy and hold strategy, beneficial owners could access liquidity by making new loans, by not reinvesting proceeds from maturing investments, and/or by selling investment positions. When new loan activity contracted as a result of decreased supply and demand, some beneficial owners had to sell cash collateral investments if they needed additional liquidity. Due to the seizure in the secondary markets and lack of natural buyers, the cost of this liquidity was dramatic for those who did have to sell. For beneficial owners investing through commingled funds, exiting the fund meant liquidating their fund position, instead of selling specific securities.

The Lehman bankruptcy and overall volatility in the market subjected what had been quality paper to daily uncertainty. Since the value of the underlying securities was changing so dramatically, beneficial owners may have been restricted to receipt of assets in kind instead of cash, or required to exit the fund over an extended timeline. As a result, separately managed accounts have become increasingly attractive to clients who want to have direct line of sight into, and control over, decisions about their cash collateral investments.

These experiences have reminded beneficial owners of the risks they are subject to when earning a return, the need take into account liquidity demands in an overall buy and hold strategy, and the importance of understanding the maturity profile of their reinvestments. As beneficial owners consider the market environment and their risk appetite, many have reduced their investment guidelines for cash collateral, and some have decided that going forward they will only accept securities as collateral, eliminating reinvestment risk (and return) altogether. In short, over the last 12-18 months there has been a greater emphasis on reining in risk, increasing liquidity, and "back to basics" approach by investing in overnight repurchase agreements, short term commercial paper, and certificates of deposit.

In summary, the credit and liquidity crisis has reminded beneficial owners that securities lending should be treated like any other market activity, and assessed in terms of its risks and rewards. Today, beneficial owners who reinvest cash collateral are reviewing their securities lending programs more frequently and, when reinvesting cash collateral, are considering them in the same light as any other money-market or short duration fixed income mandate. To the benefit of all, investment professionals are now more frequently involved in the beneficial owners' decision making and oversight process, asking questions about collateral, borrower exposures, return attribution and drivers of securities lending demand. This strengthens the risk management of—and therefore confidence in—the industry, which should lead to increased activity and increased liquidity over time.

The Future of Securities Lending

As we collectively move forward, several themes will be important to help rebuild confidence and activity in the market. Most importantly, transparency and control must be increased so participants can monitor the risks in their program. When a beneficial owner accepts cash as collateral, it should ensure that its investment professionals are actively involved in decisions about the program. The beneficial owner must have oversight of the investment guidelines, the specific assets purchased under those guidelines, and the indicative market pricing of those assets on a daily or weekly basis even under a typical "buy and hold" strategy. Beneficial owners must also understand how account types impact control and transparency—separate accounts enhance them, commingled accounts provide less control and transparency.

Second, intrinsic value rather than investment return will likely dominate the risk/return calculation in the near term, with earnings from securities lending programs driven primarily from the demand to borrow specific securities (i.e., specials, yield enhancement) rather than the lending of securities to raise cash collateral for investment.

Third, with regard to collateral, a back to basics approach should become standard, with the focus on protecting principal and maintaining liquidity while generating incremental alpha. Going forward, reinvestment portfolios will likely be of shorter duration with maximum guidelines more standardized, possibly along the lines of 2a-7 funds. Some beneficial owners may look to reduce or eliminate the use of cash collateral altogether, accepting only high quality, liquid securities as collateral. While this could decrease earnings, it also reduces risk.

Fourth, beneficial owners that participate in securities lending programs will look to align themselves with well capitalized, high quality agents. The indemnification provided against borrower default was tested by the Lehman Brothers bankruptcy, and beneficial owners quickly realized that their lending agent must have the capital to deliver on the indemnification commitment, as well as the market expertise and execution platform to unwind and replace collateral positions.

All of these elements are playing an important role in rebuilding beneficial owner confidence and activity in the market. Many beneficial owners have recently re-engaged in securities lending programs since the ability to generate incremental alpha continues to be important, as long as these earnings come with the appropriate risk management. There is no question that securities lending, currently a $2 trillion market, remains critical both in terms of enhancing returns and providing liquidity to the market. There is certainly room for improvement and strong risk management, encompassing credit risk, interest rate risk, collateral valuation and/or counterparty risk, needs to be a central focus for beneficial owners and their lending agents. Time needs to be allocated for review, transparency provided and demanded, and expertise valued. Performance needs to be considered in terms of risk adjusted return not just basis points generated. While questions are raised and addressed during the current financial crisis, it is important to note that even in this extreme environment, securities lending generated aggregate positive returns in 2008, and certainly over time, the use of securities lending and reinvestment as an overlay strategy has generated alpha for market participants.

J.P. Morgan makes risk management a cornerstone of its securities lending program. Our proactive approach to managing risk ensures that we are able to move swiftly to protect our clients during times of crisis. During September's financial crisis, J.P. Morgan's security lending program successfully unwound over $10 billion in outstanding loans with Lehman within a few days. In addition to the conservative quality of collateral held, our use of dedicated trading specialists also contributed to the speedy position reversal despite volatile markets.

The Securities Lending business outsourced market trading to J.P. Morgan's Transition Management Group (TMG). TMG managed risk throughout the execution process, efficiently buying lent securities from the market whilst simultaneously selling instruments held as collateral. TMG leveraged J.P. Morgan's trading capabilities together with external liquidity sources to achieve best execution for the security lending program and to mitigate counterparty exposure risk throughout the process. In the end, TMG traded 3,492 securities in 4,129 trades, completing approximately 80% of trades on the first day and 99% by the end of the second day. Cash in-lieu of replacement securities was paid out on less than 1% of the securities out on loan.

Throughout this period, clients were able to trade as normal on their portfolios, with no interruption.

J.P. Morgan provides an indemnification against borrower default backed by our $2 trillion balance sheet.