

# Securities Lending Outlook

## Managing Value Generation and Risk

Securities lending and its risk/reward profile remained in the headlines as the credit and liquidity crisis unfolded. 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, with return comes risk. Beneficial owners typically lend securities through agents (financial firms who provide securities lending services). If the owners accept cash collateral, they can earn a return from reinvesting the cash. In doing so, beneficial owners 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 – the protection agent lenders provide to beneficial owners against counterparty default – has real value because broker-dealer counterparties do sometimes 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 the confidence of beneficial owners.

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## 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 reinvested, typically 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 asset managers, 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 compared with 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.

When the demand for a particular security outstrips its supply, its intrinsic value increases, making it more profitable for the beneficial owner to lend the security 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 can obtain 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 generates return for the beneficial owner.

Securities lending, like all market activities, creates a risk/reward trade-off for the beneficial owner, borrower and agent lender. The three primary risks in securities lending are: borrower /counterparty default risk, operational risk and cash collateral reinvestment risk. Participants in securities lending can manage these risks through a variety of controls with the agent lender's assistance. Agent lenders typically provide indemnification against broker dealer default, which they manage by maintaining collateral at levels greater than 100%, and thereby absorb the counterparty default risk. Capital strength and effective collateral management are essential for agent lenders to fulfill their obligation under an indemnification. Operational risk management, too, is an important consideration when beneficial owners select an agent lender. Operational risk can be mitigated by agent lenders through a robust operating framework, global scale and a comprehensive understanding of transactional flows.

Cash collateral reinvestment risk, unlike the other two risk types, sits squarely with the beneficial owner. Beneficial owners who accept cash collateral increase portfolio leverage through investments made with the cash collateral. For them, securities lending is an investment overlay strategy which generates incremental alpha in return for 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.

Agent lenders directly contribute to strong risk management through the account structure, transparency, performance reviews and control the agents employ. An agent lender's ability to provide indepen-

dent, detailed credit analysis, rather than relying on rating agencies alone, is a valuable resource to beneficial owners as they navigate investment decisions. Now more than ever, strong partnerships between agents and beneficial owners are needed.

Although none of the risk management techniques discussed above or listed below is new, the credit and liquidity crisis has caused the industry to refocus its attention on the importance of risk management and transparency. Risk management must be at the forefront of what agent lenders are providing to clients, and must deliver a program that is transparent and understood deeply by both parties.

### Risk Management Techniques Supported by Agent Lenders

- Robust counterparty and issuer credit analysis
- Indemnification against borrower default
- Overcollateralization of loans to borrowers, and robust daily process for collateral management
- Operational flexibility to restrict securities or borrowers when necessary
- Diverse universe of borrowers that are vetted as counterparties, subject to beneficial owner restrictions
- Reinvestment of account liquidity based upon collective agreement between beneficial owner and agent lender
- Reporting transparency and ongoing program reviews by both agent lender and beneficial owner
- Separate account management structure with customized guidelines or commingled funds 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 the securities lending market in four ways:

1. Reduction in borrower demand
2. Reduction in beneficial owner supply

3. Increased attention to risk and transparency
4. Increased government intervention in financial markets, including securities lending

First, as the credit markets deteriorated throughout 2008, there was a significant drop in demand for securities as a result of deleveraging 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 owners 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, all participants have become more focused on a few particular aspects of all programs: the importance of the agent lender's indemnification, and the roles played by account type and reinvestment strategy 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 and reinvestment strategy, there is a difference between cash collateral investment via commingled funds versus a separately managed account, and there are implications for longer duration versus shorter duration strategies in a stressed market. Commingled funds offer beneficial owners the ability to invest using a pooled approach along with other beneficial owners according to a common guideline for risk-taking. Each participant owns a pro rata share of the fund and transacts typically at a net asset value of \$1. Separately managed accounts allow beneficial owners to customize a reinvestment program to meet their unique risk and reward requirements, and provide them with 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 gained liquidity from new loan activity, maturities or the sale of an investment.

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 a 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 regarded as 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 a direct line of sight into, and control over, decisions about their cash collateral investments.

These experiences have reminded beneficial owners of the risks to which they are subject when earning a return, the importance of liquidity even in a buy and hold strategy, and the maturity profile of their reinvestments. As beneficial owners consider the market environment and their risk appetite, many are reducing their investment guidelines for cash collateral, and some are deciding that going forward they will only accept securities as collateral, thus 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 a "back to basics" approach entailing investment in overnight repurchase agreements, short-term commercial paper, and certificates of deposit.

The fourth major impact of the credit crisis is the increased and evolving actions taken by governments/regulators in all financial markets, and in an extremely short time frame. For example, regulators around the world at times imposed short selling restrictions to varying degrees 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 U.S. 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.

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 their approach 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 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. First, transparency and control must be increased so participants can monitor the risks in their program. Agent lenders should provide robust, frequent reporting to help beneficial owners monitor the performance of their securities lending program. When a beneficial owner accepts cash as collateral, investment professionals should be actively involved in decisions about the program, including 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 should also understand how account types impact control and transparency — separate accounts provide greater control and transparency, whereas commingled funds provide less.

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 more standardized maximum guidelines, possibly along the lines of 2a-7 funds. Agent lender leadership is needed to identify the right industry standard for cash collateral investments to drive adoption. Some beneficial owners may seek to reduce or eliminate the use of cash collateral altogether, and accept 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 skill to unwind and replace collateral positions, as needed.

All of these elements are playing an important role in rebuilding beneficial owner confidence and activity in the market. Many beneficial owners have recently reengaged in securities lending programs because the ability to generate incremental alpha continues to be important as long as these earnings come with 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. There is certainly room for improvement — 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 must be allocated for review,

transparency provided and demanded, and expertise valued. Performance needs to be considered in terms of risk-adjusted return, not just total basis points generated. As questions are raised and addressed during the current financial crisis, it is important to note that even in this extreme environment, securities lending generated 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.

## Risk Management at J.P. Morgan

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 securities 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. Transition Management managed risk throughout the execution process, efficiently buying lent securities from the market while simultaneously selling instruments held as collateral. Transition Management leveraged our trading capabilities together with external liquidity sources to achieve best execution for the securities lending program and to mitigate counterparty risk exposure throughout the process. In the end, Transition Management 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.