Securities Lending Best Practices

A Guidance Paper for Institutional Investors

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Executive Summary

We are pleased to update this paper, and for the benefit of those familiar both with the securities lending industry and previous versions of this paper, the main changes are summarized below. For those who are new to the industry (after all, you are the audience for this paper), please go straight to the background and introduction on the next page.

Key additional topics since the last version:

- 1. Non-cash collateral is becoming more prevalent for U.S.-domiciled lenders as some borrowers prefer to offer non-cash for balance sheet reasons.
- 2. Globally, term transactions are becoming more prevalent, again because of benefits to borrower balance sheets.
- For agent lenders providing indemnification, costs are rising based on Dodd Frank and Basel III requirements, leading to potentially revised pricing for lenders and/or changes to program trading patterns.
- 4. There is growing interest in peer-to-peer transactions and new trading platforms.
- 5. It is more important than ever for lenders to continue to evaluate their securities lending programs and establish whether or not changes should be made based on the evolving landscape.

Background and Introduction

Securities lending plays a significant role in today's global capital markets. The practice improves overall market efficiency and liquidity, provides a critical element for hedging, acts as a useful tool for risk management for both trading and investment strategies and helps to facilitate timely settlement of securities. With the balance of securities on loan exceeding \$2.3 trillion globally ¹ in January 2018, securities lending has evolved from what 25 years ago was a back office, operational function to an investment management and trading function worthy of greater focus and attention.

The market events of 2008 and 2009 caused many institutional investors to re-examine their securities lending programs. During that period of market turmoil, credit, volatility and liquidity challenges affected all short-term cash markets, including most cash collateral pools. The default of Lehman Brothers tested the unwinding procedures of the lending and collateralization processes of agent and principal lenders alike. Short sale bans and negative press only added to the negativity around the securities lending product. Increased focus was centered on the investment management and risk management practices of lending programs after many well publicized investment losses and collateral vehicle redemption restrictions. Institutional investors spent considerable amounts of time reviewing all aspects of their securities lending programs, refocusing on the value proposition and responding to and educating their boards on the mechanics, risks and market effects of their programs. As a result, many lenders restricted, curtailed or suspended their securities lending programs.

Today, as we approach the 10th anniversary of the global credit crisis, there are a number of regulatory themes that have developed. One is that there have been multiple, global regulatory initiatives focused on transparency from market participants, including institutional investors engaged in the product, which has resulted in disclosure such as the Securities Finance Transaction Regulation (SFTR). Another is the focus of regulators on banks operating with stronger balance sheets. The result of this focus on securities lending, however, has been mixed in that some lenders who are able to be more flexible in their securities lending programs benefit, while those who cannot be as flexible (due to regulation or other reasons) will suffer in comparison.

Over the last few years, many institutional investors have reengaged in the product. This renewed interest comes with varying perspectives, oversight and control expectations as firms and providers learn from the challenges of the past. The market events of 2008/9 have reminded securities lending participants that securities lending has a risk/return profile and should be evaluated based on the risks inherent to each lending program's specific structural characteristics, just like any other investment decision.

Securities lending product knowledge across the financial industry has improved, in part, as a result of this and other best practice guides. In 2012, eSecLending assembled a working group from across the U.S. mutual fund industry, including lending providers, beneficial owners, investment management attorneys, independent directors, compliance firms, consultants and academics. The goal of the working group was to produce a practical guidance document which identified sound securities lending practices, enhance understanding of the product and highlight key issues and concerns that arise when starting, monitoring, or changing a lending program. The paper was updated in 2015 and now is more fully updated to reflect the changing landscape of securities lending. Specifically, this paper includes references to the changing regulatory landscape and discusses the practical implications to institutional investors.

This paper will provide both education and guidance, but it is not intended to be a lengthy or highly technical publication. Rather, it is a basic explanation, with practical guidance notes incorporated, of the market mechanics, program structures, associated risks and risk mitigation and the lending program approval process, including how programs are overseen by those responsible for securities lending at institutional investors. Where appropriate, we have noted additional information that is available in certain areas that the reader may wish to reference. As the industry continues to evolve, eSecLending will review and update the paper accordingly. The document will be available on the eSecLending website, www.eseclending.com.

Readers of this paper will understand the following key points:

- Securities lending is an established market practice
- Lenders need a clear securities lending policy that is shared with their service providers
- The securities lending business is changing as regulatory practice evolves
- Regulation is impacting borrowers more than it is impacting lenders, but the latter need to react
- Reinvestment of cash collateral needs additional focus
- Risks exist but can be managed

Section 1 – What is Securities Lending?

Securities lending is a collateralized transaction that takes place between two institutions.

The beneficial owner (lender) temporarily transfers title of the security and associated rights and privileges to a borrower which is required to return the security either on demand (commonly referred to as an open loan) or at an agreed date in the future (commonly referred to as a term loan). The borrower, which as the new legal owner of the security will receive dividends, interest, corporate action rights etc., is required to "manufacture" all economic benefits back to the original lender. The "manufactured" payment from the borrower to the lender is a substitute payment that replaces the dividend or interest the lender would have received had the security still been in custody. The lender maintains an economic interest in the security on loan and, therefore, is still exposed to the price fluctuations of the security as if it was still physically held in its custodial account.

During the term of the loan, proxy voting rights transfer from the lender to the borrower of the security, as the borrower has legal title over the security. However, under the legal contract between the lender and the borrower, the lender has the right to recall the security for any reason, including voting at an annual general meeting (AGM) or extraordinary general meeting (EGM).

Best Practice Notes:

Lenders should ensure that the person responsible for corporate governance is part of the internal securities lending oversight group. Language describing the approach to lending should be defined in the Securities Lending Policy document and should focus on types of votes for which it is important to recall securities. For example, where a strategic stake is held. For further information relating to the securities lending oversight group and the Securities Lending Policy, please refer to Section 8 which highlights how important these two elements are to program best practice.

In return for lending the security, the lender receives collateral from the borrower, generally either cash or liquid securities such as government bonds or equities that are valued higher than the value of the lent securities. The typical market practice for the collateral value is 102% (same currency) or 105% (different currency) of the value of the lent security. It should be noted that in recent years, the margin (2% or 5% in this example) has become more dynamic with lenders looking to set unique margin levels based on the asset class lent and the asset class taken as collateral, as well as the credit quality of the borrower, etc. The margin levels are "marked-to-market," or valued, on a daily basis to ensure that the loan is sufficiently collateralized at all times.

It should be noted that the words "securities lending" and "securities financing" are sometimes used interchangeably; in fact, securities financing typically refers to both securities lending and repurchase agreements, both of which are collateralized transactions.

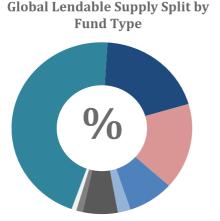


The majority of lenders employ an agent to act on their behalf in negotiating and administering the securities lending program. These intermediaries are either the lender's custodian, a specialist third party lending agent (non-custodian) or another custodian that offers a third-party lending product. The agent receives a minority share of gross earnings from the securities lending program as compensation for their service.

Some lenders, particularly those with a large asset pool, choose to lend directly (i.e., not appoint an agent). Others may choose to utilize multiple providers, lend assets through both a custodian and third-party agent or a combination of the above.

Section 2 – Who Lends and Why?

As indicated in the chart below, lenders include mutual funds, global pension funds, insurance companies, investment funds, exchange traded funds and sovereign wealth funds. In January 2018, there was available inventory of \$19 trillion².



Source: IHS Markit/ISLA

46% Mutual/Retail Funds 20% Pension Plans 16% Undisclosed / Other 8% Insurance Companies 6% Govt / Sovereign Entities / Central Banks 2% Banks / Broker Dealers 1% Foundation Endowment 1% Corporations, LLP & LLC

In the majority of cases, institutional investors lend securities for one reason only: to improve performance. For mutual funds and Undertakings for Collective Investment in Transferable Securities (UCITS), the revenue from securities lending is returned to the fund, adding additional yield to improve performance against a fund's specific benchmark. In some cases, securities lending revenue is perceived as an offset to expenses. Most institutional investors do not permit lending across all funds, as some portfolios hold securities that are not appropriate for lending, either from a demand, risk, liquidity or revenue perspective (i.e., municipal bonds).

In recent years, securities lending has become more attractive as a means to generate liquidity. This generally means lending a security and receiving cash collateral which can either be reinvested or utilized for other short-term needs, such as variation margin requirements on cleared transactions (e.g., derivatives). Another example is closed-end mutual funds which are increasingly utilising securities lending to decrease their cost of financing on the leverage component of their

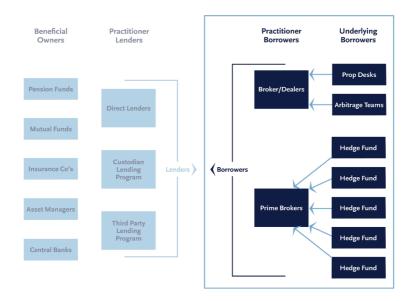
investment strategy. Securities lending is often paired with a margin loan facility or a traditional bank loan to accomplish the overall leverage objective.

Best Practice Notes:

Lenders should be clear about the objectives of their securities lending program, and this should be articulated in their Securities Lending Policy, which is shared with the agent. A lender's objectives and parameters are important factors driving its risk/ return profile. The objectives for lending may also include liquidity, leverage or both.

Section 3 – Who Borrows and Why?

The majority of securities borrowing is conducted through intermediaries, commonly referred to as prime brokers or broker/dealers.



There are a number of generators of demand for the securities that are being lent. In many cases, it is demand from the prime brokers and broker/dealers themselves that is driving the need for a security. The reasons for this demand are as follows:

Market-Making and Sell Fail Protection – The broker/dealers are market-makers that are required to make two-way prices in a security. The market-makers do not hold every security for which they make a market, and the only reason they are able to perform their function is because they can borrow a security to settle a purchase request from their clients. In addition, the broker/dealer is able to assist clients (both internal and external) with providing securities via a stock borrow to prevent sales failing in a market, particularly where there may be significant costs associated with a fail (e.g., buy-ins).

Collateralization – A significant contribution to the demand for high quality sovereign debt in a securities lending program is the requirement to borrow the security in order to collateralize other transactions, including securities lending. For example, a broker/dealer's equity desk may be borrowing equities from a lender which requires sovereign debt as collateral; therefore, they will borrow the sovereign debt to collateralize this transaction. Other financial transactions that may require sovereign debt as collateral include derivatives, futures and options. The Dodd Frank

Act (DFA) and European Market Infrastructure Regulation (EMIR) rules mandate moving over the counter (OTC) derivatives to central clearing, which will likely drive more demand for High Quality Liquid Assets (HQLA), such as government bonds, which could be beneficial to institutional investors willing to lend their HQLA. However, some institutional investors will possibly be using their HQLA to satisfy their own internal demand for these assets for collateralization of their derivatives activity, thus reducing the HQLA available for lending.

Bank Balance Sheet Management – Regulation affecting bank counterparties has also had an impact on demand for HQLA as banks seek to comply with capital requirements required by Basel III regulations, including the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR), both of which drive Banks to seek HQLA held on a long-term basis (typically over three months). This has driven a demand to borrow HQLA on a term basis requiring loans of three months or longer.

Arbitrage – Arbitrage strategies exist to take advantage of discrepancies between prices or markets, for example:

Index Arbitrage: Simultaneous buying (selling) of stock index futures while selling (buying) the underlying stocks of that index with the goal of capturing the profit between the two baskets.

Share Class Arbitrage: Discrepancies between prices of a company listed on more than one exchange and/or different classes of securities trading on the same exchange. The borrower will sell short the security with the higher price and purchase the security with the lower price in the expectation that the gap between prices will eventually close.

Convertible Bond and Preferred Stock Arbitrage: Discrepancies between prices of the convertible bond and preferred stock issued by the same company. Similar to the index arbitrage, the borrower will short one and purchase the other.

Dividend Yield Enhancement: Discrepancies between the net dividend received by beneficial owners in different markets. The borrower will take shares from a lender required to pay withholding tax on a dividend and transfer the shares to a beneficial owner subject to less, or no, withholding tax. The lender is essentially able to receive a higher dividend, in the form of additional securities lending revenue, than if the security remained in custody. In recent years, the harmonisation of tax rates in the European Union has led to a significant reduction in securities lending revenues from this source.

Hedge Funds

Prime brokers service the requirements of their clients-- hedge funds. There are many reasons why a hedge fund will borrow securities, including some of those listed above. The following chart shows hedge fund strategies as of January 2018:

Current Sector Weights



Source: Dow Jones Credit Suisse Hedge Fund Indexes

Hedge funds employ prime brokers for a variety of services; one of the most important services is sourcing securities when they are required to perform a short sale. "Shorting" a security is the practice of selling a security you do not own. However, it is important to distinguish between the following two types of short selling, as one type is considered beneficial to capital markets while the other is not:

Covered Short Selling

Covered short selling necessitates securities lending as it requires the entity to either have obtained, or be in the process of obtaining, the security they are selling by borrowing it. This is a legitimate tool, recognized by regulators as adding liquidity and price discovery to the capital markets.

Naked Short Selling

Naked short selling is not, nor should it be confused with, securities lending as it is a sale by a counterparty that does not have, and has no intention of obtaining, the security they are selling. This practice has now been banned by a number of regulators worldwide and has also been condemned by the international securities lending community.

In many investment strategies, the ability to short a security is part of a broader strategy and is not a pure short sale in the expectation that the share price of the company will fall. As the previous chart demonstrates, pure directional short strategies account for less than 1% of hedge fund strategies.

It should also be noted that institutional investors are increasingly broadening their investments into alternative asset classes such as hedge funds which require a liquid securities lending market to facilitate their strategies such as those listed above.

Substantial transparency into securities lending activity currently exists as a result of services provided by organizations such as IHS Markit Securities Finance, FIS Astec Analytics and DataLend. Portfolio managers and chief investment officers (CIOs) have more direct access to securities lending data from these organizations, which helps to provide information on short interest in their portfolio investments.

Further reading: For more information on the impact of short selling, refer to the International Securities Lending Association's (ISLA's) "Securities Lending: Your Questions Answered."³ This includes sections on regulators and short selling and academic studies on short selling, as well as securities lending and negative stock returns.

In many cases, hedge funds are the end borrower, but lenders rarely lend directly to hedge funds for the following reasons:

- Hedge funds are unlikely to have the required collateral as the prime broker sources it for them. Most international regulation requires that institutional investors receive collateral; therefore, the inability to provide it hinders a direct relationship.
- The lending agent appointed by the lender will typically indemnify or protect the lender against a borrower default. As hedge funds are generally smaller and less-capitalized entities, the lending agent prefers to take the risk of the prime broker which is generally a bank subsidiary.

Peer-to-Peer

There has been an increase in peer-to-peer (P2P) lending in the last two to three years, although this still remains a very small percentage of the overall securities finance industry. This growth has been between buy-side participants such as insurance companies and pension funds lending to each other, rather than transacting with banks and broker/dealers as an intermediary. Increasingly, there are now companies offering tools that facilitate peer-to-peer transactions on trading platforms. Examples include Elixium and DBV-x, and these support both repurchase agreements (repo) and securities lending transactions. The key drivers of peer-to-peer transactions relate to regulatory change and bank balance sheets. Banks that are balance sheet conscious are inclined to reduce balances at month end and quarter end statement dates, so transacting with a non-bank investor avoids these volatility challenges. It can also result in better trade execution terms for both sides, and there may potentially be a higher quality counterparty for both investors. Challenges exist to growth in peer-to-peer transactions, including a lack of traditional credit ratings applied to the investor, along with the operational and legal demands that are typically supported by intermediaries.

Central Counterparties

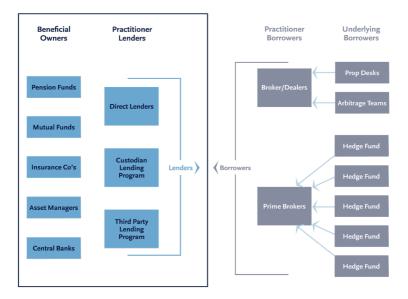
The advent of a central counterparty (CCP) in securities lending may, over time, change the borrowing dynamic by opening up new distribution opportunities to lenders, and there is increasing interest from borrowers in utilising a Securities Lending CCP, including offerings from Eurex, the Options Clearing Corporation (OCC) and, more recently, EuroCCP. Indeed, Eurex has just announced the first institutional investor is joining its platform with the first loan expected in early 2018. As CCP offerings evolve, lenders should understand how this might assist them and how their agent may utilize the CCP service. It is likely that some transactions will be processed over a CCP as it provides some capital relief for borrowers under Basel III regulations.

Best Practice Notes:

- It is important to understand what is driving the demand for the lenders' securities. Lenders should be receiving market colour that discusses the strategies and interest for individual securities and asset classes. It is useful to be able to provide this colour to boards, for example, highlighting the top five revenue–earning securities each quarter.
- Lenders should question and understand their agent's position on the use of a CCP and the relative benefits for doing so. Lenders should continue to monitor developments with respect to CCPs and ensure their securities lending strategy is updated to reflect these changes.
- It is important to understand if there are any service changes with a peer-topeer transaction. For example, will the agent continue to provide counterparty indemnification? Any changes should be approved by the securities lending oversight group with policies updated accordingly.

Section 4 – How to Lend: Route-to-Market Options

Today's lender has more securities lending options than ever before. This section describes the options and the potential routes-to-market.



Custodian Agency Model

Historically custodians have been the primary facilitator of securities lending, lending as an agent on behalf of their underlying custody clients. This allows the client to benefit from "bundled" pricing options, which include custody, fund administration, etc. However, it is becoming more common to have all products unbundled and priced on an individual basis so that market prices for the services performed can be evaluated.

Custodian lending pools are large, which can be attractive to borrowers that like the liquidity that large pools provide. The lenders' accounts and assets are pooled together and allocated to individual loans through the use of a queue. The allocation of assets selected from the queue is calculated using an automated algorithm to ensure lenders are treated fairly. The algorithm model is changing as borrowers express preferences for certain lender types who present as better credit counterparties and where netting opinions exist. Therefore, this type of request would bypass the normal algorithm process.

Both cash and non-cash collateral received can be pooled for operational efficiency. Cash collateral may be pooled for reinvestment purposes to provide more stable cash balances. Reinvestment

options include a custodian's in-house investment management subsidiary, if available, but can also include selecting an independent cash liquidity fund. Increased customization is more common today with lenders favoring separately managed cash collateral strategies.

Third Party (Non-Custodial) Agency Model

The third-party agency model has similarities to the custodian model, but the securities lending program is segregated from any other custodial activities. Third party agents specialize in securities lending only-- although some are linked to prime brokerage operations. Typically, lenders' assets are pooled for lending purposes, and loans are negotiated with the borrowers as an agent on behalf of the underlying lenders. Most third-party agents have the capability to manage the cash collateral, but, generally speaking, lenders have options which also include selection of an independent cash liquidity fund or, in some cases, placing cash in their own proprietary money market products.

Custodian banks also offer third party lending capabilities for assets not held in their custodial operations.

Once a lender has chosen to utilize the third-party agent (decoupling from custody), the securities lending mandate is more portable and can be transitioned regularly to different providers if desired.

Direct Lending Model

Certain lenders have chosen to lend directly to the borrowing community. This is principal-toprincipal lending activity, with the relationship clearly understood to be between the lender and the borrower. The main advantage of this model is that the lender retains all the securities lending revenue. The downside, however, is that the lender may need to invest in more resources and infrastructure to support functions that might otherwise be handled by a custodian or third-party agent.

Best Practice Notes:

- Lenders should examine the algorithm being used by their lending agent (if any), in particular the circumstances where an allocation of a loan to a client may fall outside the algorithm.
- In considering the route-to-market, the lender should ensure that it understands the fee implications. For example, in a custodian program, the custodian typically covers the fees associated with the security movements. The lender should ask how this will this work in a third-party program.
- In comparing different routes-to-market, a revenue estimate may be received; lenders should spend time assessing each estimate and understanding the assumptions made by each agent. Estimates should be consistent in assumptions around the use of past historical rates, market growth, portfolio growth, dividend rates and demand growth. Ultimately, it is difficult to predict which securities will be most in demand in the next year. However, it is possible

to demonstrate average returns for an individual asset or asset class over a preceding period. Assumptions on future growth should not be relied on for estimate purposes unless all agents are allowed to include the same assumption in their estimates.

 All agents should be able to provide lenders with a SOC-1 report relating to their Statement on Standards for Attestation Engagements (SSAE) 18 examination, which details their lending controls.

Once a securities lending model has been established, there are then options as to the loan execution strategy:

Discretionary Lending

The lending agent or principal will negotiate each loan with the borrower. Loans are negotiated directly with the borrower by telephone or Bloomberg communication. In this execution strategy, pricing can fluctuate daily with market changes, and all lending is conducted on a "best efforts" basis. Increasingly, loans are also transacted electronically through EquiLend's Next Generation Trading (NGT) function. It is likely over the next year or two that CCPs will also offer some distribution opportunities, as well as new trading platforms, such as Wematch, GLMX or Collex.

Principal Exclusive

The lender or its agent will negotiate an exclusive arrangement with a principal counterparty. The borrower pays a guaranteed fee for exclusive access to borrow a portfolio or subset thereof. Unlike the discretionary strategy, income is guaranteed, and lending fees are stable and consistent during the term of the exclusive (typically one year). The lender is protected on the downside for revenue decline but also typically gives up "upside" revenue potential over and above the guaranteed revenue level. It is possible for other financial arrangements to be included, such as tiered revenue or additional profit sharing over and above the guarantee revenue.

It is possible for a lender to have multiple exclusives with a variety of borrowers for different portions of its portfolio(s).

In an agent-arranged exclusive, the lender benefits from indemnification and full program administration and operational support. Without an agent, the lender must contract with their custodian for administration and operational support, and there may be no indemnification for borrower default.

In any lending facilitation option, the lender should have the full ability to buy and sell within the portfolio, recall for proxy voting or place any restrictions on the program strategy.

Best Practice Notes:

- Each lender should ensure their agent provides a comprehensive trading strategy for their funds. Will exclusives be part of the trading mix, and will electronic trading tools be used? How will this provide value from a risk adjusted return perspective?
- Lenders should be aware of the agent's approach to lending to an agentaffiliated borrower, if any. due diligence should cover implications to indemnification policies, operations, demand for securities and loan fee benchmarking.
- Lenders should ensure that their agent understands the lender's preferences regarding proxy voting and security restrictions.
- Lenders should work with their agent to demonstrate that best execution is being achieved.
- Lenders should ask agents for details of the costs of indemnification and how this might affect the lending strategies and collateral types utilized.

Section 5 – What Securities Can be Lent?

Most readily marketable securities can be lent, including the following asset types:

Government Bonds Mortgage Backed Securities Corporate Bonds Agency Bonds Supranational Bonds Global Equities Exchange Traded Funds American Depository Receipts Global Depository Receipts

Securities have been lent in the U.S. for many years, with the majority of developed markets following suit in the late 1980s and early 1990s. Emerging markets such as South Korea, Mexico and Turkey have been active for over a decade and are now considered mainstream, while markets such as Taiwan, Brazil and Malaysia have become active in the last four or five years. There are expectations that India, Indonesia, the Philippines and some Middle Eastern markets will have a securities lending structure eligible for foreign investors in 2018 or 2019.

In general, before commencing lending in a new market, the lender or agent will conduct due diligence to establish whether there are any tax, legal, regulatory or operational considerations with lending securities in the local market.

It is worth noting that this section refers to transactions conducted under a securities lending agreement, and it is possible that borrowers are able to gain access to securities in emerging markets via swaps or synthetic routes. Therefore, it is possible for lenders to benefit from securities lending type revenues through a different investment strategy. However, this is beyond the scope of this paper.

Best Practice Notes:

- When presented with an opportunity to move into a new market, the lender should ensure that it is familiar with the due diligence undertaken by the agent. This should include introducing the portfolio manager, who is invested in the market and aware of the nuances from an investing perspective.
- As with traditional investing, each asset class may require its own securities lending strategy. This could relate to collateral options, route-to-market and security level restrictions. The extent to which a lender considers breaking out its strategy will depend on the size of the assets and its ability to manage multiple strategies with potentially different vendors.
- The lender should decide which securities to lend and what restrictions should apply. These should be programd into the agent's systems and monitored from a compliance perspective.

Section 6 – Types of Loans

When considering a securities lending transaction, it is important to separate this into two separate types – loans against non-cash collateral and loans against cash collateral.

Supply and demand dynamics drive the negotiation of a securities lending transaction. Generally, there are many securities that are very liquid and widely available, known as general collateral (GC) securities and some that are heavily in demand and are hard to borrow, known as specials. Specials can earn revenue between 100 bps to 6,000 bps or higher on an annualized basis.

When lending a special, the lender can be more demanding in terms of the fee required (if accepting non-cash collateral) or the rebate to be paid (if accepting cash collateral). Also borrowers will be flexible in providing the collateral that a lender is requiring even if this is quite restrictive.

When borrowing general collateral securities, however, the borrower will only take the securities from a low fee source which is prepared to accept the most available collateral. Lenders that are more flexible on collateral and are more credit friendly for the borrower are likely to secure more general collateral volume.

The term of the loan is also important. Most securities lending transactions are "on open" or callable (i.e., they can be recalled at any time), which allows the investment manager to continue buying and selling securities irrespective of whether a security is on loan. However, some strategies that lead to securities being in demand require securities to be available to the end borrower for a long duration, referred to as "term." The Basel III Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) rules pressure borrowers to prefer term loans over 30 days in duration and increasingly for maturities up to a year. Lenders can generate higher fees by agreeing to lend securities, generally HQLA, for a defined term, which generally means that securities cannot be recalled. However, even in these cases, there is usually a "right of substitution," whereby the borrower is borrowing a "basket" of securities but is not too concerned with what the individual securities are so these can be interchanged as required. Recently, there has been increased interest from the borrowing community in single equity term where they can gain certainty of supply (as the portfolio manager would have to agree not to sell the security). These are particularly attractive for assets that mirror an index such as ETFs. For the same reason, there is also interest in equity baskets on a term basis, particularly those that constitute an underlying index. The vast majority of market volume consists of loans that are "on open" or callable daily as it provides the most flexibility to the portfolio manager. It should be noted that some institutional investors may be prevented from lending on a term basis due to regulatory constraints. This includes UCITS funds that are subject to ESMA guidelines, which prescribe a maximum loan duration of seven days.

MiFID II, which implemented on January 3, 2018, requires lenders and lending agents to incorporate a Best Execution policy for securities lending transactions.

Best Practice Notes:

- Term trades are not always popular with lenders who like flexibility, however, for
 passive funds which are aware that they will hold an asset for a longer period
 of time, it may be possible to utilize this certainty to provide term options to
 borrowers. Lenders should discuss these options with agents to understand the
 risk/reward dynamic of doing so.
- Lenders can be specific about the type of lending transactions they wish their agents to undertake. For example, approaches can include:
 - Special loans only (intrinsic lending-- high fee, low volume)
 - Special loans and general collateral loans (lower weighted average fees, higher volume)
 - Lending only for international dividend yield enhancement opportunities (high fees, short duration)
 - Lending with minimum fee criteria and loan balance limitations
 - Recalling securities on loan for proxy voting
 - Retaining a percentage of each security (referred to as a buffer)
- Lenders that allow general collateral loans should be aware that this will result in higher transaction volumes and higher asset values on loan. This means that there is more susceptibility to operational and market risk, hence, program controls and risk management practices become more important.
- Lenders should request a copy of their agent's Best Execution policy and review any changes on a regular basis.

Cash Securities Lending Transactions

In the U.S., cash collateral represents approximately 62% of the collateral received in securities lending programs. Cash collateral is typically U.S. dollars (USD), although it can include other currencies such as euro or British pounds, etc.

Cash collateral is more commonly delivered against payment, thus the cash collateral and the lent security move simultaneously. If this is not possible then, as with non-cash collateral, the cash will be pre-paid.

Cash collateral received is typically placed in a commingled fund or separate account comprising short-term money market instruments. The lender retains any income earned from the investment of the cash collateral, less the rebate paid to the borrower. The rebate required by the borrower is negotiated at the outset of the loan and represents the equivalent calculation to the securities lending fee in the non-cash collateral transaction. The rebate is usually referred to in respect of a benchmark, normally the Federal Reserve Bank of New York's Overnight Bank Funding Rate (OBFR) for USD.

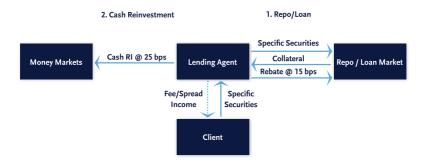
A general collateral loan lent against USD cash collateral may be negotiated with a rebate close to the OBFR. Therefore, the investment of cash collateral will need to earn a yield that is higher than

the OBFR in order for the lender to generate any revenue on the loan.

A special loan lent against USD cash collateral is often negotiated with a negative rebate (i.e., the borrower actually pays a fee to the lender), thus the lender retains the full investment earnings on the cash collateral and, in the case of a negative rebate, earns an additional premium.

When the loan terminates, the borrower returns the lent security and the lender returns the cash collateral to the borrower.

If a rebate is due to be paid to the borrower, there are different processes for paying the rebate depending on the underlying security being lent. For U.S. Treasuries, the process occurs daily, whereas for international fixed income the rebate is generally settled at the close of the loan. For other securities such as equities, rebates are reconciled and paid as part of the month-end billing cycle between the lender and borrower.



Non-Cash Securities Lending Transactions

There is a wide range of non-cash collateral that is accepted. In the first instance, this is defined by regulation. For example, U.S. mutual funds can accept non-cash collateral in the form of U.S. government securities and letters of credit from unaffiliated banks. Other lenders, certainly those domiciled in Europe, can also accept international government securities and, in some cases, equities. Increasingly, borrowers prefer to pledge assets that are not defined as HQLA, as HQLA assets are in demand elsewhere in their organizations. Consequently, lenders that can be flexible on collateral will be more attractive to borrowers.

We have already acknowledged that there is increased demand for borrowing HQLA. Borrowers are using the HQLA assets to improve their balance sheet and would prefer to provide equities or corporate bonds as collateral. This is known as a collateral upgrade or downgrade trade (depending on your perspective). It stands to reason that a lender who can only accept HQLA as collateral, or who cannot participate in term trades will not benefit from this demand.

The lender or its agent ensures that collateral, including margin, is received in advance (known as pre-pay) before releasing the securities to the borrower, ensuring that the lender is fully collateralized in the event of a borrower default.

The borrower pays a fee, calculated in basis points (bps), during the period the security is on loan.

The loan and collateral are marked-to-market (i.e., the prices of both the lent security and the collateral security are checked) daily, to ensure that the collateral is sufficient and meets the value, including margin, contractually required by the lender.

Non-cash collateral management requires the establishment of either a bilateral account at a custodian bank or a tri-party relationship to hold the securities collateral. Bilateral accounts generally offer less operational efficiency for lending agents and borrowers, so tri-party accounts are often preferred. Tri-party account set-up requires legal documentation and certain associated fees, which are typically paid for by the borrower.

As the demand for non-cash collateral has grown, so has the level of sophistication on the part of both the borrowers and the tri-party agents. In the U.S. and Europe, there are currently four major tri-party collateral agents: Bank of New York Mellon, JPMorgan Chase, Clearstream and Euroclear. Typically, a broker will use one or more tri-party custodians, depending on their individual clearing and custody arrangements and the type of collateral they wish to pledge.

A tri-party collateral program gives both borrowers and lenders the freedom to engage in their normal daily lending activities, while removing the operational burden of allocating, pricing, verifying, delivering and substituting large volumes of individual securities collateral. Using an agreed-upon collateral schedule that identifies eligible securities and daily margin requirements, the tri-party agent takes on the role of overseeing the acceptable collateral, pricing it, marking it to market and managing all activity on the securities collateral.

Other features offered by tri-party agents include collateral reporting which is provided to the lender and/or its agent daily. This provides complete disclosure and transparency to all parties and enables the collateral receiver to perform the appropriate due diligence on the progress of the programs. Combined with each tri-party agent's expertise in resolving all issues concerning operations, legal, credit and the market, utilising a tri-party agent is an effective way for a lender to manage collateral risk.

Lenders with the flexibility to take cash and non-HQLA non-cash collateral will be more attractive as a lending counterparty to the borrower. Borrowers increasingly prefer to provide non-cash collateral, and in recent years, there has been an increase in non-cash collateral transactions as lenders have responded with program adjustments of their own (where regulation allows).

Best Practice Notes:

- If there is one essential area of due diligence, it is the collateral management process. Understanding how an agent collateralizes loans, what happens operationally to ensure loans are not released before collateral is received and how exceptions are reported is critical to a sound securities lending program.
- Where tri-party agents are utilized, the lender should review the agent's due diligence of the tri-party agent and understand how the arrangement is managed operationally and legally.
- Regardless of how collateral is held, the use of segregated and commingled collateral accounts, and understanding rights to the collateral in the event of a borrower default, needs to be clearly understood.
- Lenders should discuss collateral options with their lending agent to assess if there are opportunities that may result from changing collateral parameters.

It is important to note in both of these types of lending transactions, when a lending agent is employed, the agent will typically be paid a minority share of the gross revenue earned from the loan. This is usually referred to as a "fee split," which is when the agent and lender retain a standard proportion of the revenue from each loan. The fee split is defined in the Securities Lending Agreement between the lender and the agent.

When an exclusive arrangement is negotiated, the securities lending fee (for non-cash collateral) and rebate (for cash collateral) are agreed at the outset and will apply to the full term of the exclusive.

Best Practice Notes:

- It is important for lenders to consider the risk/reward benefit of different types
 of collateral transactions. The returns against non-cash collateral may be lower
 because lenders do not benefit from the cash reinvestment yield. However,
 reinvesting cash may involve additional risk to achieve the additional returns.
- Lenders should place as much emphasis as possible on due diligence surrounding the reinvestment process of securities lending.
- When accepting cash collateral, lenders should be clear in directing their agent
 regarding appropriate rebate levels. This is particularly important if a third-party
 cash manager is being utilized. The lender needs to ensure that communication
 about cash forecasting, cash yields and rebate expectations between the
 lender and the cash manager is frequent to prevent potential negative spread
 loans (where the rebate is higher than the cash yield). Lenders should also be
 particularly aware of management fees for third party cash funds.
- Lenders need to understand the impact of the rebate cash flow, particularly when cash collateral is being reinvested in third party liquidity funds that only pay income to fund holders on a monthly basis.

- Lenders should consider fee splits with their agent in the context of the service being provided. Agents should be compensated for their trading activity but may deserve additional reward if they provide comprehensive risk management tools aligned with quality reporting and additional market colour. However, if cash management is segregated from the lending agent, there may need to be differing levels of compensation that reflect this. Performance related fee splits are also a potential option.
- Most agents now provide securities lending benchmarking services using industry standard vendor solutions. Lenders should become familiar with the process for benchmarking. This typically involves the use of filters to ensure a fair comparison can be made, although some elements can never be fully compared as individual lenders have differing program tolerances and restrictions. Lenders should also ensure benchmarking is provided in all asset classes and, as a result, understand their agent's strengths and weaknesses.
- When participating in a commingled cash fund, lenders should ensure they
 receive information about what will happen in the event that an investor pulls
 out of the fund, particularly if there are liquidity or credit issues within the
 portfolio.

Regulators now require increased transparency regarding securities lending programs. MIFID II and the EU Securities Financing Transactions Regulation (SFTR) will require comprehensive reporting of securities lending and repo transactions from 2019. In the U.S., the SEC adopted new rules and forms for 1940 Act Mutual Funds that will require reporting on securities lending activity. The Modernization Reporting Requirements will require new information to be reported about a fund's securities lending activities via Forms N-Port and N-CEN. Other global regulators are also considering what reporting they will require. Lenders should familiarise themselves with the implications of this reporting including feeds to obtain this information from your lending agent and other requirements such as obtaining a Legal Entity Identifier (LEI) in order to facilitate this reporting.

Section 7 – What are the Risks? How Can They be Mitigated?

Like all investment activities, securities lending involves certain potential risks, primarily counterparty, collateral, operational and tax/legal/regulatory risks. However, lenders may mitigate securities lending program risk by carefully planning, executing and managing their programs. The best practice notes within this paper will highlight areas of focus for those overseeing their fund's lending program-- to help them better understand the nature of the risks posed. The notes are also intended to summarize how these risks may be mitigated by the fund's adviser through such methods as effective legal agreements, indemnification, credit quality guidelines for collateral, strong internal controls and audit, etc.

Careful consideration of the information below may assist those with oversight responsibilities with regard to their funds' securities lending programs.

In summary, securities lending risks can be described as follows:

Counterparty Risk – The risk that the borrower defaults and fails to return the borrowed securities. This triggers the process of liquidating collateral and repurchasing lent securities.

Mitigation

- Focus on lending to well-capitalized, high-quality borrowers
- Extensive and ongoing credit reviews
- Daily collateral marked-to-market
- Indemnification from lending agent in the event of borrower default

The costs associated with banks providing indemnifications are changing. As a result of Basel III, banks have to put aside capital to "guarantee" the indemnity provided to clients.

Reinvestment Risk – The risk that the invested cash collateral incurs losses or underperforms relative to other investment options or relative to rebates paid.

Mitigation

- Establish appropriate reinvestment guidelines that maintain sufficient liquidity and preserve principal
- Monitor weighted average maturity (WAM), credit quality, sector allocations and issuer diversification
- Establish guidelines on minimum profitability of individual loans and/or overall cash collateral assets under management (AUM) limits
- Utilize in-house cash management capabilities (where applicable) to exercise greater control

• Use non-cash collateral (where possible)

Market Risk and Liquidity Risk – The risk that market movements affect security value following a default thus causing a deficiency after the liquidation of collateral or that the collateral cannot be liquidated at all.

Mitigation

- Establish appropriate margins that ensure over-collateralization, factor in price volatility and liquidity risk of the collateral held
- Collateral schedules with minimum thresholds on credit quality and concentration limits

Operational Risk – The risk of processing, bookkeeping or other errors including compliance failure, buy-ins and corporate actions.

Mitigation

- Daily reconciliation between program participants
- Control and confirmation procedures
- Effective use of technology and reporting
- Active monitoring of securities lending recalls
- Review of SSAE 18 / SOC-1
- Regular due diligence of the agent including detailed on-site visits

Legal/Contractual Risk – The risk that the parties are out of compliance, either inadvertently or purposely, with either contractual covenants or laws and regulations governing securities lending activities. There is also the risk that the contracts do not provide the lender with the protections that they should, or that the lender does not fully understand its rights and obligations.

Mitigation

- Audit and compliance reporting
- Standardized industry documentation
- External legal counsel with expertise in securities lending
- Adherence to rules and regulations

Best Practice Notes:

- Collateral and indemnification against broker default are valuable insurance policies but do not eliminate the need to implement comprehensive riskmitigating policies, procedures and controls. Risk mitigation processes should be regularly reviewed and revised if necessary.
- Lenders should review how changing costs associated with the provision of indemnification affects the securities lending program. For example:
 - Is the fee or rebate on the loan sufficient to cover the costs of the

transaction including indemnity and settlement costs?

- Is there a minimum fee hurdle rate required for the lending agent to transact?
- How do different collateral types affect the indemnification? As borrowers seek to provide equities as collateral more often in the future will the indemnity costs change?
- Lenders should ensure that their risk requirements are understood by their agent and should require agents to provide periodic reporting to verify compliance with the lender's risk policies and profile.
- Lenders should be fully aware of the operational procedures to be followed when a counterparty defaults, including the respective responsibilities of the lender and the agent, and ensure that these procedures are consistent with the terms of the legal agreement.
- Lenders should plan for and monitor market risk. This includes understanding the potential exposure in certain past-crisis scenarios (i.e., stress testing) as well as utilising value-at-risk (VaR) models.

Section 8 – Approval and Oversight of Securities Lending Programs

This section provides practical and useful information for all lenders as it incorporates best practice suggestions helpful inside and outside of the board room.

Those responsible for approving and overseeing their fund's securities lending service providers will play a role in defining the parameters of the program and overseeing it on an ongoing basis.

The lender should be satisfied that full due diligence has been undertaken at the commencement of a securities lending arrangement and that compliance and due diligence are regularly reviewed as the program continues. On an ongoing basis, the lender should employ its business judgment to evaluate the nature and quality of the services provided by the securities lending agent, as well as the competitiveness of the fees charged by the agent.

Best Practice Notes:

Some lenders have found it useful to form a small working group comprised of
operations, compliance, portfolio management, risk management, trading, legal
and tax departments to assist in monitoring the securities lending program and
performing due diligence with respect to providers. The group's activities focus
primarily on monitoring the key elements of the Securities Lending Policy and
reporting periodically to an oversight board. See below for a section discussing
the content and scope of the Securities Lending Policy.

Securities Lending Policy

Note: The following section should be recognized as forming part of the best practice and can be read in conjunction with other best practice notes in this paper.

The lender should have written securities lending policies and procedures that have been approved by the oversight board. The Securities Lending Policy should reflect the nature and extent of the risks the lender is willing to accept in the program and set parameters that will ensure the program will remain within its risk tolerances.

Best Practice Notes:

In programs where a lending agent is being appointed, the policies and procedures should state that the lending agent must be aware of the written Securities Lending Policy and the Securities Lending Agreement should adhere to this. Policy elements may include:

- Choice of route-to-market (custodian, third party, direct, etc.)
- Fees that should be paid (transaction, agent fees) for securities lending services
- Revenues that should be paid to the fund

- What borrowers are approved or what criteria will determine borrower choice (e.g., adherence to internal counterparty requirements)
- What borrowers are restricted (e.g., affiliate companies)
- What markets are approved for lending or what criteria will determine market choice
- What assets are approved for or excluded from lending
- What buffer should be maintained to ensure the lender receives all corporate action notifications (i.e., one share, 1%, etc.)
- What fund NAV limits exist on lending and specifically how limits should be calculated (e.g., 33 1/3 rule for 40 Act funds)
- What limits, if any, are on the term of loans
- Minimum expected spread requirements, if any (e.g., only special transactions with intrinsic value of 20 bps)
- Proxy voting policy
 - Should all loans be recalled to vote
 - Should loans be recalled for certain votes
 - Should loans be recalled for votes on strategic stakes
 - Who has responsibility for resolving lending/voting conflicts
- Policy on recalls over dividend dates for tax reasons
- Collateral policies
 - Types of collateral (e.g., non-cash and cash)
 - Margin levels (e.g., 102%, 105%)
 - Restrictions on collateral (e.g., securities issued by borrowers)
 - How collateral can be held (e.g., bilateral or tri-party arrangements, custody arrangements)
- Reinvestment policies
 - Include liquidity guidelines for cash and cash equivalents within reinvestment vehicles
 - Minimum profitability limits on general collateral loans to meet risk/ return expectations
 - Consider floating NAV fund to minimize disproportionate interest gains and losses among investors in cash collateral pool (last man standing risk)
 - Consider that rising interest rates can cause lending to be less profitable in the short-term as the cash reinvestment portfolio may not be reset based on current rates
 - Consider that unrealized losses can result from rising interest rates diluting investors' interest in the cash collateral pool
 - Consider that in periods of market volatility, margin calls on the cash reinvestment portfolio can be managed by putting additional loan balance with the broker to avoid the need to sell securities in a bad market

Restriction on assets that can be purchased, for example securities issued
by borrowers

Oversight Board Reporting

The oversight board should receive regular securities lending reporting from the working group (which monitors reporting from the lending agent). These periodic reports should include:

- Compliance reporting Adherence to the Securities Lending Policy
- Risk management- updates can include the following:
 - Borrower ratings
 - Collateral and reinvestment
 - Operational tracking (e.g., sell fails, late manufactured dividends)
- Income earned
- Performance benchmarking
 - Compared to goals
 - Compared to peers
- Market update
- Relevant information concerning securities lending trends

External Information

In some cases, particularly for UCITS funds and U.S. mutual funds, information about the lender's securities lending policy and activities may need to be disclosed for shareholders in the fund's prospectus and annual reports. To further improve transparency, lenders may find it beneficial to have a public statement of their approach to securities lending on their website. This should also be shared with other external facing employees such as a call center or public relations departments in the form of a frequently asked questions (FAQ) document. This allows for controlled and consistent disclosure when responding to external queries.

Changes to the Securities Lending Program

Proposed changes to the securities lending program that require alteration to the Securities Lending Policy must be approved by the oversight board.

Proposed changes to the securities lending program that are within the existing parameters set forth in the Securities Lending Policy should be reported to the oversight board as an update.

Section 9 – Conclusion

The securities lending market continues to evolve and those responsible for managing a securities lending program need to stay informed of these changes. Each securities lending program is different and this paper can assist in establishing and assessing a program. It is not intended to be an all-encompassing guide on how to administer a program. The approach to oversight should, and will, vary by lender.

The regulatory landscape for securities lending, like many financial services, is changing rapidly. Some changes do not directly impact securities lending transactions, but they do impact those participating in the transactions. Consequently, the dynamics of securities lending will vary on a client-by-client, trade-by-trade and borrower-by-borrower basis – a securities lending program is no longer a commodity. It is more important than ever before to understand how regulation will affect each lender's program and react to these changes.

There is more change in securities finance markets now than we have seen since the credit crisis. The advent of new trading platforms, CCP options and peer-to-peer transactions provide distribution opportunities that did not exist previously. The regulatory agenda to increase transparency in relation to securities finance transactions will result in an increase in reporting in 2018 and 2019. Securities lending as a tool for a broader investment approach is increasing with liquidity and leverage options for treasurers and others requiring short-term cash and collateral options. The growth of non-cash collateral and term transactions provide revenue opportunities to those that can be flexible in their program parameters.

For these reasons, more than at any time in the past, we encourage all lenders to work closely with their lending agents and ensure that communication is open and transparent. This in itself should enable a program to be well constructed and will provide solid risk-adjusted returns in a changing environment.

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