THE BNP PARIBAS GUIDE TO SECURITIES LENDING

AN OVERVIEW FOR BENEFICIAL OWNERS

BNP PARIBAS

The bank
for a changing
world

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INTRODUCTION

We are pleased to welcome you to the BNP Paribas Guide to Securities Lending. We have prepared this guide to help you gain a better understanding of the securities lending business and to develop insights into how firms like BNP Paribas support investors. We aim to equip you with a better understanding of how to engage in this important capital markets tool.

Securities lending generates incremental revenues, but before embarking on a program you need to start by thinking through how to lend, who the right partners are, and what program policies should be in place. We hope that by reading this publication, you will achieve a solid, conceptual understanding of the subject of securities lending.

The guide also shows how market participants accrue benefits; how they generate income and liquidity; and how each mitigates the risks involved through collateral or indemnification. You will learn more about how regulators, public and private infrastructure, banks, agents, brokers and other financial institutions have created standards and best practices that promote an efficient and secure marketplace. Lastly, we present how a partnership with BNP Paribas creates the underlying structure for a successful securities lending program.

Partnership is a consistent theme throughout this publication. We emphasize this because securities lending is a business in which all parties must achieve their distinct goals in order for the process to be successful and sustainable. By forging a strong partnership with an agent lender at the beginning of a securities lending program, institutional investors substantially increase the likelihood of a successful program with a robust risk management framework.

BNP Paribas, one of the world's leading capital markets firms, represents thousands of institutional investors. Our clients range from some of the largest public pension funds to some of the smallest private investment trusts; from global mutual funds to specialized investment vehicles targeting a specific regional trading strategy. While all of our customers have basic needs in common, each has unique goals and requirements for participation in the securities lending marketplace.

Please be sure to check at the end of this publication for a glossary of common terms associated with securities lending and information on next steps as you move forward in creating or strengthening your program. We look forward to hearing from you with any questions or further thoughts.

AN OVERVIEW OF SECURITIES LENDING

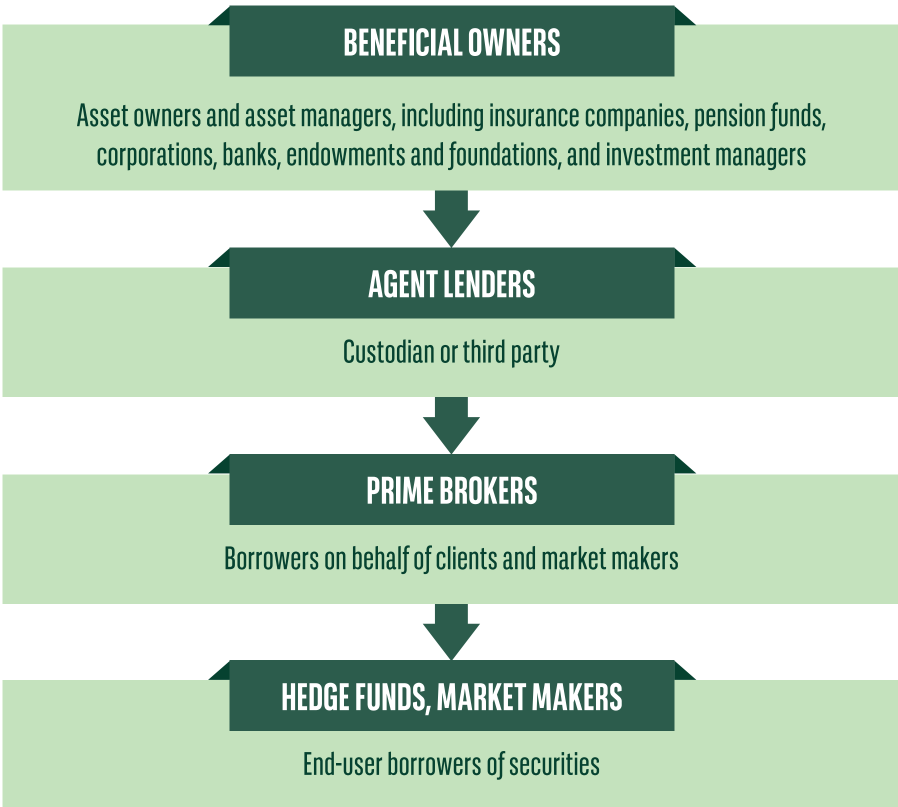
Securities lending is a $2.2 trillion industry with thousands of participating institutions. By facilitating liquidity and collateral movements, it has become a pillar upon which efficient capital markets have been built. Securities lending has been recognized by governments, regulators and industry participants as an effective strategy to earn incremental income on idle assets while providing market liquidity. When structured properly, many of the risks inherent in today's market can become neutralized. This guide will provide some of these risk mitigation strategies, while offering insights on the current market environment.

Securities lending is the process by which one party lends an equity or fixed income asset to another party. Equities include stocks, ETFs and preferred stock. The fixed Income market covers corporate bonds, government debt as well as agency, semi-governmental and supranational debt.

Securities loans are a short-term agreement that a security will be lent over a specific period of time and then returned, all in exchange for a fee. At the end of the loan, both the lender and borrower have no further obligation and the loan is unwound. While the loan is in place, the lender grants conditional rights of ownership to the borrower for the duration of the loan. Often times, this is done to facilitate a short sale according to SEC Rule 204. The borrower may sell the securities in the open market and buy them back later in order to return them to the lender; this is the nature of short selling. The borrower may also hold the securities in their own portfolio for balance sheet purposes. The borrower agrees to revert certain rights, entitlements and benefits back to the lender, whether directly or through an equivalent payment. This includes coupon interest or cash dividends that may become payable while the loan is open.

The participants in a securities loan are the investor who owns the shares, the agent lender who manages the loan, prime brokers who borrow on behalf of their clients, and end-users, including hedge funds and market makers, who need to borrow for operational or regulatory purposes (Exhibit 1).

Exhibit 1: Participants in the securities lending marketplace



Over the years, securities lending has grown in both scale and sophistication. Securities lending was once a simple back-office function to facilitate settlement of other activities, a process that solved some mechanical inconveniences in the ways markets operated. Now, however, it has matured into a front-office function that is an integral consideration for almost every trading and investment management strategy. More recently, securities lending has become a key component for many financial institutions to adhere to stricter regulatory requirements around risk and capital utilization. This has expanded the role of securities lending into compliance, risk, treasury and balance sheet management at major banks.

Like all aspects of capital markets, securities lending has undergone intense scrutiny in the last decade. This has led to increased transparency, a reduction of operational risk and tightening of credit standards to the benefit of institutional lenders.

Why do institutional investors lend securities?

Institutional investors lend securities primarily to earn incremental income on their otherwise idle portfolio holdings. This revenue is uncorrelated with market returns and can produce steady income, which can be used to cover custodial operating costs, fund expenses or administrative costs.

Besides revenue generation, there are other ways that institutions use securities lending to support their operations and investment objectives. Some examples include:

- **Pensions and Sovereign Wealth Funds** lend their portfolios to finance short term cash outlays, while avoiding detrimental asset liquidations in down markets
- **Mutual funds** use securities lending revenues to offset trading and management costs and to outperform competitive benchmarks, particularly in ETF indices like the Russell 2000
- **Insurance companies and Corporations** lend portions of their investment portfolios to raise their short term liquidity positions without having to sell off assets
- **Endowments, foundations and Taft-Hartley funds** lend securities to earn additional returns on their portfolios

Who are the borrowers and why do they borrow?

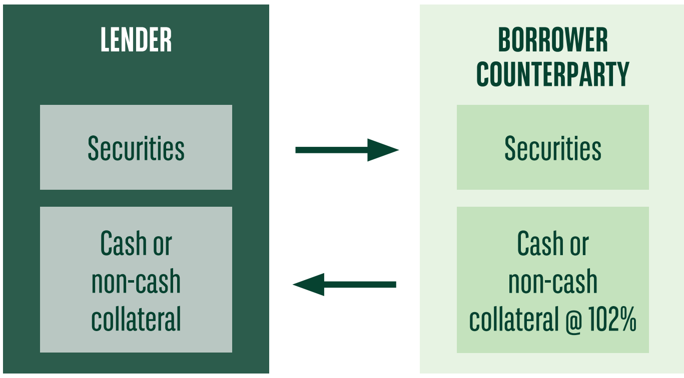
Borrowers of securities are primarily banks and broker-dealers, and the vast majority of securities loans are made to ensure delivery of a security after a client short sale. The underlying clients of these borrowers include hedge funds, traditional asset managers with long/short strategies, market makers, large pensions and corporations. Securities lending plays a critical role in ensuring that these institutions can execute their portfolio strategies.

Of increasing importance to securities lending, and in particular to fixed income markets, is a balance sheet practice known as a “collateral transformation” trade. By borrowing government debt and posting corporate bonds or equities in return, banks are able to increase their supply of High Quality Liquid Assets for balance sheet purposes. These trades support banks in meeting their Dodd-Frank and Basel III capital requirements. They can also be used in the event of posting derivative transaction margin.

Broker-dealers may also borrow securities in order to facilitate collateral and derivatives trading, for example in the ETF and ADR/GDR markets. In this case, the borrower provides the underlying equities in an ETF or ADR/GDR to a conversion or transfer agent, and receives back the derivative security.

How are revenues generated?

Revenues in securities lending come from fees paid by borrowers (the intrinsic value of the trade) and by reinvesting collateral posted by borrowers. Collateral can be either cash or non-cash collateral (for example, equities) depending on the lender's reinvestment strategies. (In this example, we will use cash collateral.) The combination of the fee and cash collateral returns is known as the spread. When cash is posted as collateral, it can be placed in a range of investment products customized for the risk tolerance of the investor. Cash collateral is typically invested in high credit quality assets that are liquid and short term in nature. Securities lending agents permit investors to reinvest the cash collateral if they elect to do so. A diagram of the securities lending transaction flow for a domestic U.S. loan can be found below for reference:

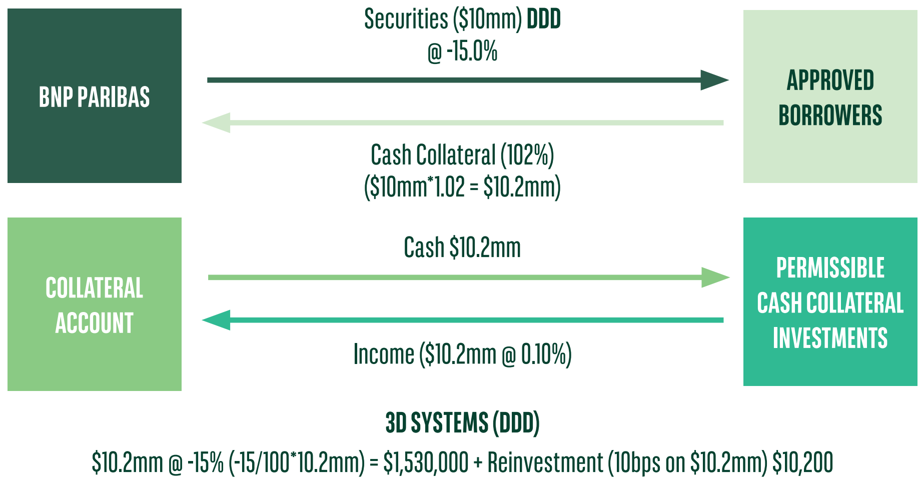


Four main factors impact pricing in securities lending: market demand, collateral acceptance, counterparty selection and trade structure.

- **Market demand.** Some securities are in shorter supply or in greater demand by borrowers than others. Where there is greater demand and limited supply, lenders can charge higher fees – this is referred to as a "special" or "hard to borrow" security. Where there is low demand and greater supply, lenders cannot charge a premium fee – this is a "general collateral" or "easy to borrow" security
- **Collateral acceptance.** A willingness to accept cash or non-cash collateral, including government bonds, corporate bonds and equities, may increase a borrower's incentive to pay a higher fee, depending on the supply vs. demand dynamic of the underlying security. Loans against cash and government bond collateral typically have lower fees, while loans against corporate bonds and equities carry slightly higher fees
- **Counterparty selection.** The higher the credit quality of a borrower, the lower the rate they will pay. Conversely, smaller banks and broker-dealers may incur higher fees to borrow the same security to compensate for the perceived increase in transaction risk
- **Trade structure.** Borrowers may increase fees for loans that meet their specific balance sheet requirements. For example, a securities loan for a term of 35 days allows banks to avoid an additional capital charge in their Liquidity Coverage Ratio, and so will garner higher fees than an open-ended loan

These four factors combine to generate revenues from an actual transaction. In the example below of 3D Systems (DDD) for cash collateral, a loan is made for US$10 million at a rate of -15% (Exhibit 2). The agent lender receives back US$10.2 million in cash, or 102% in collateral. That cash is reinvested at a rate of 10 bps. The revenues generated from the loan amount to US$1,540,200.

Exhibit 2: Revenue generation in securities lending (cash collateral loan)



REWARD VS. RISK

Securities lending is a form of investment and carries potential risks in exchange for revenues. There are three main categories of risk that investors must consider: counterparty (credit) risk, market risk, and reinvestment risk (Exhibit 3).

Counterparty or credit risk is the risk that a borrower will go out of business while holding a lender's securities. Agent lenders work closely with their clients to determine the right borrowers. Selecting too few borrowers means that lenders may lose out on revenue opportunities due to a small number of borrowers with market demand. It is the agent lender's responsibility to monitor lending activity to ensure that no challenges emerge in risk exposure.

Agent lenders typically offer counterparty default indemnification against counterparty credit risk. This is a form of insurance in which the agent sets aside its own capital to protect its clients against a potential counterparty default. If a borrower fails to return securities, agent lenders first turn to the available collateral (102%). If that is insufficient to make the lender whole, the agent will use its own funds to repurchase securities or reimburse the client. This insurance gives agent lenders a real economic interest – "skin in the game" – to ensure that loans go to only credit-worthy counterparties.

Market risk is the risk that the value of collateral held falls below the value of the securities loaned. Agent lenders mitigate market risk through daily marking-to-market on the value of collateral relative to the loan outstanding. In order to reduce the lender's risk, borrowers post collateral of 102% or more. This over-collateralization means that in case of default, the lender has 102% of the market value of their loan to buy back their securities. At the same time, agent lenders are responsible for ensuring that collateralization amounts reflect mark-to-market pricing.

When the price of a security on loan goes up, the lending agent will collect more collateral from the borrower to ensure that the lender always holds excess collateral. If prices go down, the agent lender will return the extra collateral, but still maintain at least 102% of collateralization. In the US and other mature markets, these mark-to-market processes are almost entirely automated by vendors through Central Securities Depositories.

Reinvestment risk is the risk that the investments in which an investor has placed cash collateral lose principal value. Cash collateral reinvestment vehicles must be conservative and closely managed. Some lenders have turned to overnight repo only, while others invest in government money funds or prime money market funds. Vehicles can be commingled or separately managed according to the needs of each investor. Some of these cash collateral pools can carry indemnification from the agent lender, where the agent offers insurance against a possible decline in the value of the cash reinvestment. Agent lenders managing this cash have strong incentives to ensure safety and stability. Other pools may invest in assets outside of SEC Rule 2a-7 guidelines and may carry greater risk than money market funds. Similar to the indemnification mentioned above, some providers offer indemnification on the reinvestment of cash collateral, providing participants a fully-indemnified or "wrapped" securities lending program.

Exhibit 3: Risks and Safeguards – BNP Paribas Agency Securities Lending

RISKS	EXPLANATION	INDUSTRY STANDARD PROTECTIONS	BNP PARIBAS UNIQUE SAFEGUARDS
COUNTERPARTY RISK WITH INSUFFICIENT COLLATERAL	Simultaneous borrower default and insufficient collateral to buy-in the security	• Agents provide **indemnification** against borrower default	• BNP Paribas' Risk Management Group, which is independent of the securities lending business, assigns credit limits to each borrower and monitors exposures on a daily basis • Indemnification is provided at no additional charge
MARKET RISK	The market value of collateral received falls below the market value of the securities out on loan	• Collateral is **maintained at 102%** • Daily mark-to-market	• The mark-to-market function is performed daily through **automated processes**, overseen by a robust Operations team • Margin exposure and collateralization positions are fully disclosed to clients on a daily basis
REINVESTMENT RISK	Cash collateral investment becomes impaired	• Cash collateral is invested in **eligible securities** • Client manages cash reinvestment • Intrinsic (fee-focused) lending only programs	• Customized, client-specific investment guidelines, which are tailored to meet clients' individual risk parameters • **Strong indemnification protections** on certain type of investment instruments

Avoiding the problems of 2008

The root cause of the 2008 financial crisis was the collapse of the US housing market. This caused the sudden and precipitous devaluation and loss of liquidity in the Mortgage Backed Securities (MBS) market. Investing cash collateral into these assets had been considered standard industry practice, but the crisis exposed weaknesses across capital markets activity, including counterparty creditworthiness, market pricing and reinvestment risks.

Investors in cash collateral pools found that the MBS they thought were secure were in fact illiquid and suffered a short-term pricing collapse. While many of these pools later recovered, securities lenders responded by moving cash to very conservative instruments, including overnight repo. Non-cash collateral holders suffered no losses during this period.

Securities lenders learned that all three areas of risk – counterparty risk, market risk and reinvestment risk – can appear on short notice. The best mitigation of these risks is a sound securities lending policy, a partnership with an experienced agent lender, and a close monitoring of the lending program.

SEVEN BEST PRACTICES IN LENDING POLICY

The best securities lending programs start with clear, well-thought-out objectives that lead to policies supporting those goals. If the purpose is for incremental revenues with little to no risk, then a limited number of borrowers and a government securities-only cash reinvestment pool might be the best solution. If the objective is to beat a benchmark, then the lender may seek opportunities from both general collateral and special securities, as well as a more comprehensive reinvestment schedule. We have identified seven areas that institutional investors should consider in formulating their securities lending policies:

(1) A strong partnership with the agent lender

An agent lender is an investor's primary connection to the market and is a trusted partner in setting up, executing and monitoring a lending program. The lender should provide regulatory and compliance monitoring; reporting and analytics; data; access to in-house market experts with the customer's core systems; and support with strategic decision-making. These are all factors that impact the success of an investor's program.

Investors should expect a dedicated relationship manager who will be a key resource to understanding their needs and requirements. Investors should speak and meet with their relationship manager on a frequent and periodic basis – whether weekly, monthly or quarterly. The relationship manager should be available and responsive on an ad hoc basis between scheduled contacts.

Selecting an agent lender is one of the most important decisions in setting up a securities lending program. Institutional investors are best served by agent lenders that demonstrate the highest commitment to understanding the unique aspects of the investor's business, objectives, strategy and operating environment – and that can best tailor a program to those needs.

(2) Routes to market

Investors and their agent lenders have multiple options when it comes to making loans. The traditional, single security loan remains the most popular. A small portion of the market prefers an exclusive arrangement, where one borrower is granted exclusive access to a portfolio for a fixed fee over a specific period of time. Central counterparties (CCPs) could become a compelling option in the future. Investors should also be aware of the opportunities and the costs of selecting their custodian as agent lender vs. working with a third party. Recent developments in peer-to-peer lending should also be monitored as an alternative route to market.

(3) Counterparties

The majority of agent lenders lend 80% of their clients' assets to a set of 10 major banks and brokers. These borrowers are typically the largest prime brokers and this is where demand lies in the market. Investors have the option to limit loans to these institutions, or expand to additional firms with borrowing demand, perhaps at better rates, or that offer geographic diversity. Some investors have begun to lend directly to other large institutions or hedge funds as a way to diversify their risk. The decision regarding which counterparties to lend to must be made carefully, in accordance with investor risk tolerances, and in cooperation with agent lenders.

(4) Indemnification

Depending on the lending strategy that an investor chooses to implement, indemnification for both counterparty default and cash collateral reinvestments is a critical component of a securities lending program. Indemnification based on a bank's balance sheet ensures that both the investor and their agent are aligned on the risks and opportunities in lending, and that no loan or reinvestment will stretch beyond the clearly agreed-upon guidelines of the lending program.

(5) Minimum spreads

Some investors require a minimum spread before a loan goes out. The spread may apply to the fee paid by the borrower, or a combination of the fee and the expected cash collateral return. The objective of minimum spreads is to maximize the value of lending returns relative to counterparty and collateral risk exposure. Higher spreads will lead to higher-value loans being made. Lower minimum spreads or no minimums mean that more loans will be made, some of which will have relatively low returns.

(6) Cash collateral

Every investor receiving cash collateral must decide where to invest that cash. Options range from the most conservative (overnight government bond repo and government money market funds), to slightly more expansive (prime money market funds), to slightly more aggressive (separately managed accounts or selected ultra-short funds). The most conservative choices carry the lowest risk, but also the lowest returns. Investors selecting separately managed accounts must be certain that their investments meet their risk/reward criteria, and that their agent has the expertise to select appropriate portfolio instruments from an execution and credit monitoring perspective.

(7) Non-cash collateral

Investors have a wide range of options when it comes to non-cash collateral, including government debt, corporate bonds and equities. While some investors are legally prohibited from accepting certain non-cash collateral types, a willingness to engage in non-cash can mean the difference between making a loan or not. It can also mean that borrowers would pay more for the right to deliver preferable non-cash instruments as collateral. Selecting a provider willing to indemnify a wide array of assets outside of US Treasuries is also beneficial to increasing return.

CHECKLIST FOR BENEFICIAL OWNERS

Beneficial owners that are launching and/or monitoring a securities lending program should take into account the following lending and oversight considerations:

- Global presence to distribute your assets internationally
- Indemnification against borrower default and/or the reinvestment of cash collateral
- Robust financial strength of the provider offering you indemnification
- Comprehensive operational due diligence
- Differences and benefits of using a third-party lender vs. the funds' custodian
- Capability to run a customized, separately-managed account tailored to your unique financial goals and risk profile
- Broad collateral policy including cash and non-cash collateral programs
- Resources to monitor counterparty credit exposures and reinvestment of cash collateral
- Flexible fee structures, such as revenue floors and guarantees
- Industry leaders in particular asset classes, and access to desk experts
- Contractual compliance monitoring
- Flexibility to implement customized program restrictions, liquidity parameters and minimum spread thresholds
- Transparent and customizable reporting
- Dedicated relationship manager available to service account
- Investment in infrastructure, technology and business architecture
- Thought leadership and access to continuing education

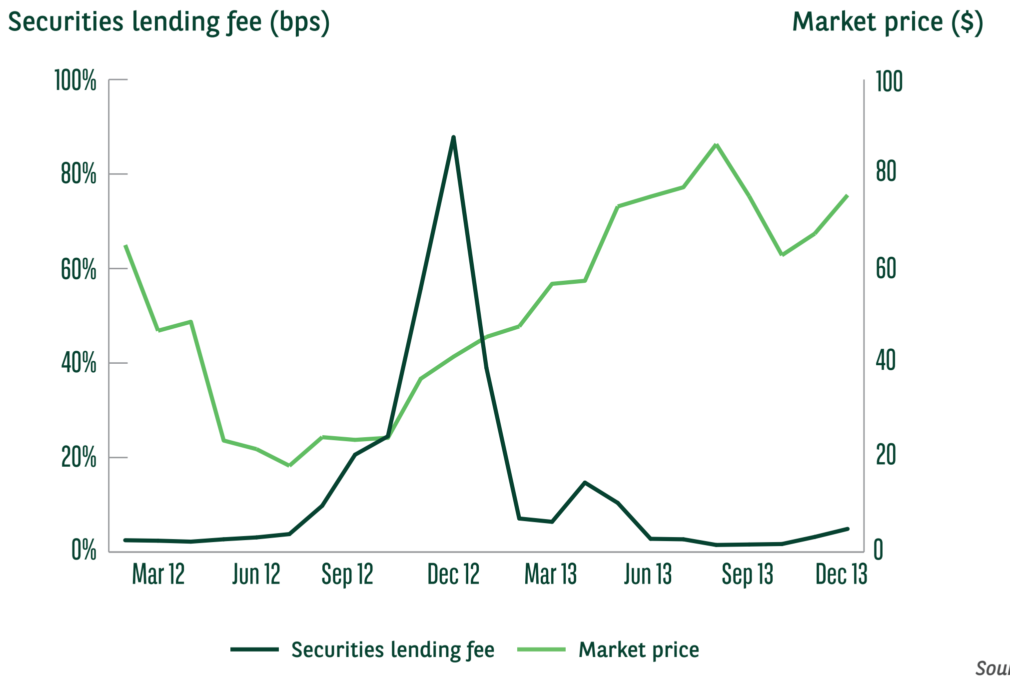
FREQUENTLY ASKED QUESTIONS

Institutional Investors contemplating engaging in securities lending often have many questions. Some of the most common are:

Q: If my borrower is facilitating a client short sale, does this make the price of my security go down?

A: This is the number-one question from all portfolio managers about securities lending and short selling. The short answer is no. The price of a security fluctuates with its perceived value by investors, predicated on earnings, peer performance and technical metrics (Exhibit 4). It is heavily influenced by the relationship of supply and demand in the marketplace. To suggest that selling a security short drives the price down is inaccurate. For every share sellers (including short-sellers) sell, there needs to be a buyer who generally sees value at that specific price point and believes that the stock's price will go up. Furthermore, a plethora of academic research recognized by regulators and market participants alike supports that securities lending provides market liquidity.

Exhibit 4: Green Mountain Coffee market price and loan price, 2012-2013



Source: DataLend

Q: How do I know how well my agent lender is performing?

A: There are three independent vendors that provide market data on securities lending and benchmarking services. These vendors will provide third party reports conveying your lending activity performance. BNP Paribas subscribes to these vendor services and can provide this information as part of its reporting.

Q: Are there restrictions or limitations placed on lender assets while they are on loan?

A: Unless the securities are committed to a loan for a fixed period of time (term), there should be no restrictions placed on buying or selling them. In many cases, the agent can sometimes replace your loaned shares with another owner's shares. The securities will be in the possession of the borrower, so you will not be able to transfer or perform other types of activities that involve their physical custody. The agent will recall the securities from the borrower when advised of a sale to ensure they are back in custody.

Q: How are fees to agent lenders determined?

A: The commercial relationship between the investor and the lending agent is based on a fee split rather than a fixed service or transaction charge. Revenues from the investor's lending activity are divided between the investor and the lending agent. It is in the interest of the agent to maximize the lender's revenues while recognizing the risk parameters of the program, and to make the most of lendable assets. Indemnification helps ensure that the risk parameters of both the investor and the agent lender are aligned.

Q: What are the impacts on entitlements, dividends and voting rights?

A: Lenders transfer conditional rights of ownership to the borrower for the period of the loan. When lenders want to exercise their corporate actions or vote, the loan can be restricted from lending around record dates or recalled as it approaches record date. If a dividend is paid while a loan is outstanding, the lender will receive a payment in lieu of dividend. Securities lending agreements have specific stipulations on the right to recall securities for the lender when entitlements, dividends and voting rights arise. It is critical to find a provider capable of restricting or recalling assets on loan for purposes of participating in a proxy.

Q: What happens in the event of a counterparty default?

A: The lender's recourse is well-defined within the securities lending agreement, and work-out procedures are well understood from both legal and regulatory perspectives. The first line of defense is collateral; if a borrower defaults or even fails to return a security, the lender can use collateral to buy back the stock or bond. This process is called a buy-in. Any excess cash remaining after the buy-in purchase reverts back to the borrower, or is held as a payable against potential claims if the borrower is out of business.

If there is insufficient cash, agents offering indemnification will pay you the shortfall and assume the liability of collecting the difference. Agents will charge the borrower for the shortfall; if the borrower is in receivership, the amount of the shortfall will become a creditor claim against the borrower with the receiver.

GLOSSARY OF COMMONLY USED TERMS IN SECURITIES LENDING

Agent lender: A financial intermediary that assumes responsibility for a securities lending program on behalf of an investor.

Buy in: This is where a lender uses the collateral pledged by the borrower (which they are holding) to purchase securities in the open market. This is done to replace securities that the borrower fails to return after a recall, or in the event of a default.

Cash collateral: Cash received as collateral in exchange for a loan of securities to a borrower.

Easy to borrow: Securities with supply that exceeds borrower demand. Loans in these securities are common, have low spreads, and may require reinvesting cash collateral for a positive overall return. Also called general collateral.

Fee: The rate charged by the lender to the borrower for the use of the securities in a non-cash collateral transaction. Also called the rebate rate in a cash collateral transaction.

General collateral (GC): Securities with supply that exceeds borrower demand. Loans in these securities are common, have low spreads, and may require reinvesting cash collateral for a positive overall return. See also easy to borrow.

Hard to borrow: A security with strong borrower demand and limited lender supply that carries a high fee. See also special.

Indemnification: Insurance provided by an agent lender that covers the return of securities to an investor in case of a borrower default. May also cover selected cash collateral investments.

Mark-to-market: The daily confirmation that the amount of collateral a lender holds reflects the market value of the loan. Agent lenders issue calls for additional collateral or return excess collateral based on the mark-to-market prices.

Non-cash collateral: Securities received as collateral from a borrower, in contrast to cash collateral.

Payment in lieu (of dividend): When a security is on loan over the dividend record date (or coupon record date), the lender will receive a substitute payment from the borrower equaling the amount of the dividend.

Rebate rate: When demand for a security is high, and the availability of that security is low, lenders will be paid a rebate rate (or fee) by the borrower.

Recall: When a lender officially notifies a borrower they must return a securities loan. Failure by the borrower to return the securities may result in a buy in.

Repo: An investment contract ranging between one day to 365 days, over-collateralized with financial assets. Frequently used in cash collateral reinvestment portfolios.

Special: A security with strong borrower demand and limited lender supply that carries a high fee. See also hard to borrow.

Spread: The return in basis points of a securities loan. Synonymous with fee.

Third Party lending: Utilizing a non-custodial agent to conduct securities lending.

Utilization rate: The percent of a security on loan versus the amount owned in a portfolio.

ADDITIONAL RESOURCES

Datalend
datalend.com

Markit Securities Finance
markit.com/product/pricing-data-securities-finance

Securities Finance Monitor
secfinmonitor.com

ISLA
isla.co.uk

RMA
rmahq.org

Securities Lending Times
securitieslendingtimes.com

WHAT'S NEXT?
GETTING STARTED WITH BNP PARIBAS

We hope that you have found this guide useful, and have gained a greater understanding of securities lending. We at BNP Paribas appreciate your interest in our agency securities lending service, and are pleased to have this opportunity to provide you with this material. Our goal is to provide information and transparency, which in turn leads to the best possible decision-making for you.

Because no brief publication can describe a process like securities lending in complete detail, we would welcome the opportunity to discuss our program with you in greater detail. We will work with you to better understand your existing business and strategic objectives, and provide a proposal outlining how we can partner with you to build, customize and manage a successful program.

FOR MORE INFORMATION, PLEASE CONTACT

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