



Securities lending: Key considerations

Vanguard Commentary

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- Securities lending—the short-term loan of securities in exchange for collateral and fees—can modestly enhance an investment portfolio’s return. The practice is widespread. At the end of 2015, the global value of securities on loan was more than \$2 trillion.¹
- Securities-lending strategies exist along a spectrum. A value-lending strategy seeks to capture a “scarcity premium” by lending only hard-to-borrow securities. A volume-lending strategy puts many securities on loan, independent of scarcity value. Collateral reinvestment strategies also sit along a spectrum. Some lenders take minimal risk, reinvesting cash collateral in high-quality money market securities. Others try to augment their lending fees by taking on greater credit or maturity risk.
- Regulatory guidelines and industry practice provide robust protection against counterparty risk. The greater source of risk has been collateral reinvestment strategies. We share Vanguard’s views on best practices and highlight questions to consider as you evaluate a securities-lending program.

¹ Source: ISLA Securities Lending Market Report, March 2016.

What is securities lending?

Securities lending, as the term suggests, is the short-term loan of securities in exchange for fees and the borrower's collateral.² Securities lending is a common portfolio management activity among global investment managers. At the end of 2015, the value of securities on loan totaled more than \$2 trillion.³

Securities lending can modestly enhance an investment portfolio's return. In 2014, for example, index mutual funds and exchange-traded funds earned an asset-weighted average of about 3 basis points (0.03%) from securities lending (Rowley, 2016). (Because of their limited trading activity and extensive holdings, index funds are attractive sources of securities loans.) In smaller-capitalization and international stock funds, returns from lending can average 10 basis points or more. Profits also depend on the market environment. Some years are better than others.

Rather than being covered by a single statute, securities lending is regulated by the laws and rules that govern the lender more generally. For U.S. mutual funds, for example, regulatory guidelines are based on the Investment Company Act of 1940. The practices of U.S. insurance companies, on the other hand, are subject to state laws and state insurance commissions.

We review the participants and mechanics in a securities-lending transaction. We explore the strategies used to generate return, the primary sources of risk, and the role of the lending agent (if any) in shaping both. We also provide an overview of Vanguard's securities-lending program.

Participants and mechanics

In a typical securities loan, a borrower approaches a lender (also known as the beneficial owner), or the lender's agent, to request the loan of a security or securities. The lender's goal is to earn fees that enhance an investment portfolio's return. The Federal Reserve Bank of New York has characterized the practice as "the collection of rental fees on idle assets through fully collateralized loans" (Baklanova, 2015).

The borrower's goal may be to facilitate a strategy such as short-selling (borrowing a stock to sell it), to settle a trade, or to complete an arbitrage operation. Short-selling occasionally causes controversy, particularly in regions where the practice is less established. Such transactions nevertheless have benefits for all market participants, enhancing liquidity and facilitating efficient price discovery (Baklanova, 2015).

Lenders are typically institutional investors with large portfolios such as mutual funds, pension plans, insurance companies, and endowments; the primary borrowers of securities are broker-dealers, hedge funds, and the proprietary trading desks of broker-dealers. An owner can lend directly to borrowers, but most rely on a "lending agent" to administer the program.

² The term "securities lending" may be a bit of a misnomer, as absolute title over the securities on loan passes between lender and borrower.

³ Source: ISLA Securities Lending Market Report.

Figure 1 illustrates the flow of securities, collateral, and collateral reinvestment income in a loan facilitated by a lending agent. The key elements of this transaction include the terms of the loan and the lender's (or lending agent's) reinvestment of cash collateral. These elements determine the loan's potential profitability and the transaction's potential for risk.

Loan terms

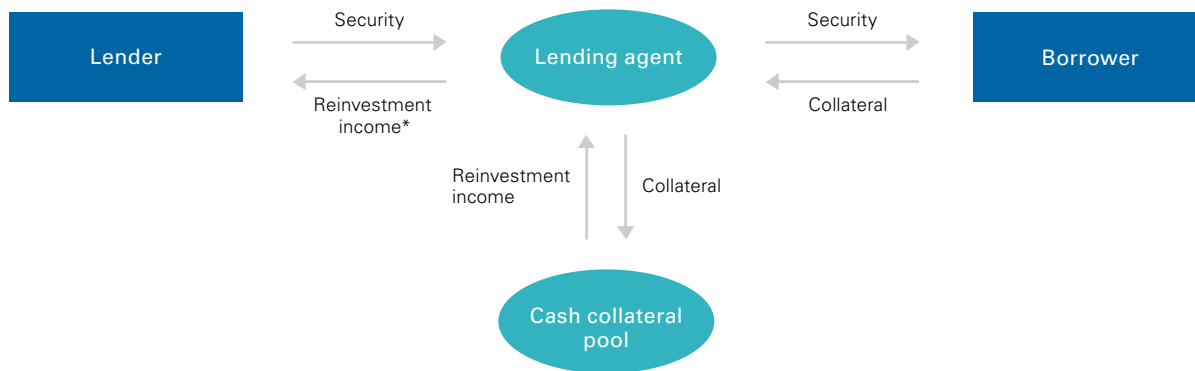
When a lender (or lending agent) and borrower enter into a securities loan, they negotiate the following terms:

- **The collateral amount.** In the United States, borrowers generally pledge cash collateral equal to 102% of the value of domestic securities and 105% of the value of non-U.S. shares. The lender can request that the borrower pledge more or less collateral, based on the kind of collateral posted. Outside the United States, borrowers typically pledge non-cash collateral. Lenders may demand that the value of non-cash collateral be greater than 105% of the security's value to account for any volatility in the collateral.

- **The lending fee.** The lending fee can be a separate fee, a function of the "rebate rate," or a combination of the two. The rebate rate, which is based on a benchmark overnight rate such as the federal funds rate, specifies what percentage of the cash collateral's reinvestment return the lender must rebate to the borrower.
- **The duration of the loan.** Loans are usually "open," with no specified term, giving lenders the flexibility to recall the securities from the borrower at any time.
- **The dividend/reclaim rate and other economic benefits.** Because ownership passes to the borrower, the borrower must make cash-in-lieu-of-dividend payments to the lender and compensate the lender for other distributions such as stock dividends and warrants.

Because most loans are open, they are subject to daily renegotiation of the lending fee/rebate. The two parties mark the values of both the loaned security and the collateral to market values to ensure that the collateral remains at 102% or 105% (higher, if required by the lender) of the borrowed security's value.

Figure 1. A typical scenario for securities lending



*A portion of the reinvestment income from the lending agent to the lender may be rebated back to the borrower. The net earnings are split between the lender and the lending agent.

Source: Vanguard.

Collateral reinvestment

Once the parties agree to terms, the borrower delivers the collateral to the lender (or lending agent), and the lender delivers the securities to the borrower's custodian bank or subcustodian. The lender reinvests cash collateral to generate income. (The lender holds non-cash collateral with a tri-party custodian bank.) As with any investment decision, the lender can invest cash collateral in a lower-risk, lower-expected-return vehicle such as a money market fund or in a potentially higher-returning vehicle that includes lower-rated or longer-maturity securities.

Two lending strategies: Value and volume

Securities-lending strategies can be characterized as either value or volume lending.

Value lending, also known as intrinsic-value lending, seeks to capture a scarcity premium by lending hard-to-borrow securities, or "specials." The scarcity premiums provide the lender with a high return per dollar of securities lent, though with fewer opportunities to lend. In volume lending, also known as general collateral lending, the owner seeks to lend many securities, independent of scarcity value. Per-loan fees are lower, but there are more opportunities to lend.

In 2015, general collateral loans—some 80% of global loans by volume—generated annualized lending fees of 20 basis points (0.20%) or less. The most valuable specials, by contrast, represented just 4.4% of loan volume, but commanded fees of 250 basis points or more. These loans accounted for 62% of the gross fees from securities lending in 2015.⁴

Regulation in '40 Act funds

Securities lending in U.S. mutual funds and exchange-traded funds registered under the Investment Company Act of 1940 is subject to oversight by the fund's board, which must approve its lending policies. In addition, the Securities and Exchange Commission has established guidelines based on its interpretation of the '40 Act. The guidelines include:

- **Limits on lending.** The value of securities on loan at any one time may not represent more than one-third of the fund's value. Separate analyses by the Investment Company Institute (ICI) and Rowley (2016) have found that, in practice, funds lend far less.
- **Collateral.** The borrower must pledge collateral equal to at least 100% of the security's value. As noted on page 3, funds and other lenders generally demand collateral equal to 102% or 105% of the security's value. The values are marked to market daily. If the value of the loaned securities rises, the borrower must provide additional collateral.

- **Collateral reinvestment.** The fund should reinvest cash collateral in securities that offer maximum liquidity and reasonable return. "In practice, U.S. regulated funds most often invest cash collateral in money market funds" (ICI, 2014).
- **Loan termination.** The loan is subject to termination by the fund at any time.
- **Reasonable return.** The fund must earn a reasonable return on the loan, including any distributions from the loaned security.
- **Corporate governance.** When the fund lends a security, its voting rights pass to the borrower. If fund management knows of a "material" vote, fund directors should recall the loaned securities to vote the proxies.

A fund's Statement of Additional Information contains information about a fund's securities-lending practices. The financial statements in a fund's annual and semiannual reports include information about the income earned from securities lending and the value of the collateral held for securities on loan.

⁴ Source: FIS Global.

Because per-loan fees are high, a value lender can generate high returns on the lending program while minimizing risk in the reinvestment of cash collateral. The cash can be invested in a high-quality money market-like fund, as the lender profits more from “rental fees” than from investment activity. With general collateral loans, by contrast, lenders have typically tried to augment low lending fees by taking on more risk in collateral reinvestment (Bank of New York, 2009).

Although the definitions of the two lending strategies are well established, the characterization of any one lender’s strategy is in the eye of the beholder. Value and volume lending sit at ends of a spectrum. Some value-oriented owners may lend specials exclusively; others may lend both specials and general collateral.

Securities-lending risks

Both value- and volume-lending programs are subject to counterparty risk, the risk that a borrower will fail to return the loaned securities. If the collateral is insufficient to purchase replacement securities, the lender can experience a loss. Lenders mitigate counterparty risk through daily marks to market of the collateral value and by scrutinizing counterparties. “Overcollateralization” in a typical lending agreement provides additional protection if a borrower fails to return a security that has since increased in price.

The reinvestment of cash collateral introduces different risks. The lowest-risk strategy is to invest in a conservative money market fund made up of short-term government securities, overnight repurchase agreements, or high-quality certificates of deposit. Such vehicles are not risk-free, of course, but their primary goal is the capital preservation and liquidity necessary to return the borrower’s collateral at any time, in any market environment.

A higher-returning and higher-risk alternative is to invest cash collateral in lower-rated and/or longer-maturity securities. Even if such cash management vehicles are generally liquid and stable, they can be vulnerable during periods of extreme stress in the financial markets.

These risks materialized during the depths of the 2007–2009 global financial crisis. Yields on all but the shortest-term, highest-quality securities spiked (and their prices declined). Some cash management pools—and their investors—sustained losses as the value of the pool’s securities tumbled below the value of the cash collateral owed to borrowers. These losses led to lawsuits and settlements between lenders and lending agents (Karmin and Scism, 2008). The episode spotlighted an underappreciated reality: The most significant risk in securities lending lies not in the lending itself, but in the reinvestment of the cash collateral.

In evaluating securities-lending losses during the crisis, Frank M. Keane of the Federal Reserve Bank of New York concluded: “If investment activity [had been] limited to the money market instruments, the attendant risks would [have been] more manageable because these assets are typically liquid and have a short maturity But the risk increases when the cash is reinvested in less liquid instruments” (Keane, 2013). Regulation enacted or proposed since the financial crisis may raise the cost of security lending and diminish the low-margin volume lending that has tended to be associated with aggressive reinvestment strategies.⁵

Potential agency risk

A portfolio’s securities-lending returns depend not only on the lending strategy, the markets’ supply-and-demand dynamics, and the collateral reinvestment strategy, but also on the fee split negotiated with the lending agent (if any). A typical fee split is 70% for the lender, 30% for the agent (Baklanova, 2015), though agreements vary widely. (Vanguard serves as the lending agent for Vanguard funds’ U.S. securities as explained on page 6. Vanguard returns 100% of all lending revenue, net of operating costs, to the funds.)

The fee split depends on the services provided by the agent. These services can include administrative and trading support, management of the collateral reinvestment pool, or indemnification against losses from a borrower default.

⁵ For example, Basel III banking reforms, developed by the Basel Committee on Banking Supervision, impose new capital charges on the custodian banks/lending agents that offer indemnification against a loss on a securities loan, which may lead to higher fees. Basel III and the Dodd-Frank Act in the United States also impose more stringent counterparty exposure limits on banks. Securities lending would fall within these limits. The result could be less appetite and/or higher charges for lending agent services, again rendering some volume lending uneconomical.

A note on indemnification: If the counterparty fails to return a security, and the collateral is insufficient to repurchase the security, the agent will make up the difference between the value of the collateral and the security's price. Indemnification does not cover losses in the collateral reinvestment pool. At its discretion, the agent may decide to reimburse clients for losses in the pool, but such indemnification is not part of the typical agency agreement.

The fee split and the agent's role in managing or selecting the collateral pool can raise concerns about agency risk (Keane, 2013). The lender bears the investment risk in the cash collateral pool, while the agent shares in the income, perhaps giving the agent an incentive to stretch for yield. To minimize these risks, lenders should understand the terms of the agency

agreement—including the reinvestment guidelines for the cash collateral, the approval process for potential borrowers, and any indemnification provisions (Comptroller of the Currency, 2002).

Considerations for due diligence

Securities lending can enhance a portfolio's return. But like any source of return, the practice has risks. Different lending strategies, and the agreements with lending agents (if any), help determine a lending program's returns and risks. In Vanguard's view, a value-lending strategy coupled with conservative reinvestment of cash collateral offers the best balance of risk and return. And whatever the strategy, a lending agreement between the beneficial owner and a lending agent should reflect the owner's risk preferences and maximize its share of program revenue.

Vanguard's approach to securities lending

Vanguard serves as the lending agent for the Vanguard funds' securities-lending program in the United States. Outside the United States, Vanguard works with an independent lending agent. Vanguard funds do not lend fixed income securities.

All Vanguard portfolios—mutual funds, UCITS (Undertakings for Collective Investment in Transferable Securities), OEICs (Open-Ended Investment Companies)—follow the same policies and risk constraints.

Our program seeks to capture the scarcity premium found in hard-to-borrow securities. We minimize risk in the reinvestment of cash collateral by investing in a money market fund managed by Vanguard Fixed Income Group. The fund's average weighted maturity is capped at 60 days.

Outside the United States, Vanguard accepts sovereign debt as non-cash collateral and invests any cash collateral in overnight repurchase agreements, subject to daily monitoring by Vanguard's Risk Management Group.

Vanguard has developed a monitoring program and lending limits for individual securities to ensure that any securities on loan can be recalled for important proxy votes.

To reduce the risk of counterparty default, Vanguard lends to a limited number of preapproved broker-dealers and maintains strict internal guidelines on the aggregate dollar amount of loans to any one borrower. In addition, Vanguard ensures proper collateral coverage by valuing the loaned securities on a daily basis—using current market prices—and by calling for additional collateral when necessary to bring the coverage up to the 102% or 105% floors for U.S. or foreign securities, respectively. Vanguard's agency agreement requires the lending agent to indemnify our fund in the case of a counterparty default by replacing either the security or the security's current market value to the fund.

Consistent with Vanguard's client-owned structure, Vanguard returns all net lending revenues—after subtracting program costs, agent fees (on non-U.S. securities), and any broker rebates—to the funds. In 2015, program costs amounted to about 5% of gross revenue.

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