BlackRock Securities Lending
Unlocking the potential of portfolios

Introduction
Securities lending is a well-established practice whereby mutual funds make loans of securities to seek an incremental increase in returns for fund shareholders.

This paper explains the basics of securities lending, outlines the benefits and risks for investors, and describes BlackRock’s leading approach to securities lending.

In summary:
• While not without risk, securities lending seeks to benefit the fund.
• BlackRock has focused on delivering competitive returns while balancing return, risk and cost in three decades of lending securities on behalf of shareholders.
• Since 1981, BlackRock has delivered positive monthly lending income for every fund that has participated in securities lending, including mutual funds.

Basics of Securities Lending
In securities lending transactions, mutual funds lend stocks or bonds to generate additional returns for the funds.

Here’s how it works: first, a large financial institution asks to borrow a stock or bond from a mutual fund. In order to borrow the stock or bond, the financial institution must pay a fee and provide collateral to the mutual fund. The mutual fund keeps the collateral to secure repayment in case the borrower fails to return the loaned stock or bond. We require the value of the collateral to at least equal the market value of the loaned stock or bond. The financial institution typically uses the stock or bond to hedge against market risks, facilitate a short sale, or use as collateral in another transaction.

See the flow chart on the next page for an example of how a securities lending transaction works.

Benefits of Securities Lending
Mutual fund investors can benefit from securities lending in the form of better fund performance. How? The mutual fund seeks to generate additional income through the rate that it charges for lending securities, and/or income on the reinvestment of the collateral that the borrower provides in exchange for the loan.
Securities lending returns typically vary by asset class and upon the underlying demand for securities. Of the BlackRock mutual funds that participated in securities lending during the 12-months ended December 31, 2016, approximately 56% of the funds earned less than 0.01%, 32% of the funds earned between 0.01% and 0.05%, 5% of the funds earned between 0.05% and 0.10%, and 8% of the funds earned greater than 0.10% of the total net assets of the fund.

Risks of Securities Lending

While every investment bears some risk, BlackRock takes a rigorous, hands-on approach to securities lending and has delivered positive lending income for every fund that has participated in securities lending since 1981, including BlackRock mutual funds.

The primary risks of securities lending are borrower default risk and collateral re-investment risk.

Borrower default risk

Securities lending involves the risk that the borrower may fail to return the securities in a timely manner or at all. In order to minimize the risk of borrower default, each borrower is assessed by our internal risk unit and monitored over time. The risk team performs regular borrower reviews. New transactions are systematically prevented if a borrower reaches its limits.

As an additional safeguard, BlackRock provides an indemnity for its mutual funds for a shortfall in collateral in the event of a borrower default. If a shortfall existed between the collateral amount received and the cost to repurchase a loaned security and that shortfall is not due to reinvestment risk, BlackRock would reimburse the fund in full.

Re-investment risk

When a mutual fund receives cash as collateral, it is reinvested in money market funds with the objective of preserving principal and liquidity while generating income. This re-investment of cash collateral exposes the fund to various investment risks and the potential loss of principal. These risks include market, liquidity and credit risks, and are not covered by BlackRock’s borrower default indemnity.

Market risk is the potential for losses due to changing prices. Liquidity risk is the possibility that securities or instruments in which the cash is invested become difficult to sell or can only be sold at discounted prices. Credit risk is the potential that securities or instruments in which the cash is invested default or sell at discounted prices due to changes in credit quality.

Here’s an example of how it works:

To start the process:
1. A large financial institution asks to borrow a stock or bond from a mutual fund. The fund asks for collateral to secure the loan.
2. Once it receives collateral, the mutual fund lends the stock or bond to the financial institution (the borrower).

While the security is out on loan…
3. The mutual fund invests cash collateral in money market funds to seek incremental return.
4. If the stock pays dividends while on loan, the financial institution will pay the mutual fund what it would have received if it had been holding the stock.

To end the process…
5. At the end of the loan (or at the mutual fund’s request), the financial institution must return the security back to the mutual fund.
6. The mutual fund then releases the collateral back to the financial institution to close out the process.
7. Through the process, the mutual fund seeks to generate additional income for its shareholders.
Securities lending increases market liquidity, and in doing so, facilitates transactions, helps to mitigate price volatility, and reduces transaction costs. Since securities lending transactions can lead to short sales – where investors sell borrowed securities in anticipation of price declines – some have criticized securities lending as a risk to market stability. In fact, the Federal Reserve has found that short sales can actually improve market stability. Their research has shown that short selling does not systematically drive down asset prices, and that restricting short selling can actually lead to reduced liquidity and higher transaction costs for investors. This is driven by the dynamics mentioned above – securities lending and short sales help to improve liquidity and enable investors to hedge risk.

To mitigate against these risks, BlackRock invests cash collateral in affiliated money market funds. These funds invest in diversified pools of high quality, short-term securities and are subject to rigorous restrictions regarding credit quality, maturity and liquidity. BlackRock brings world-class cash management capabilities to bear in this process. As of December 31, 2016, BlackRock is one of the largest money market fund managers in the world with $403.6 billion in cash assets under management.

Transparency into Securities Lending Practices

We encourage all investors to ask their fund managers about securities lending practices, and seek information about the fees managers earn or payments they make to third-party lending agents.

For every BlackRock fund that engages in securities lending, BlackRock publishes securities lending revenues in the fund’s annual report and includes a separate line item that details BlackRock’s share of revenues. In these reports, investors can clearly identify both the fund’s and BlackRock’s earnings from securities lending. Fund shareholders can also find the following in each fund’s Statement of Additional Information (SAI):

- If a particular fund is allowed to engage in securities lending
- Disclosure that BlackRock serves as the lending agent, and that it will be paid a fee for the provision of these services
- Confirmation that cash collateral will be invested in a BlackRock money market fund.
- Disclosure of any risk factors and potential conflicts of interest.

Q & A

Q: How does securities lending benefit the financial markets?
A: Securities lending is a vital component of the financial markets. As of December 31, 2016, more than $15.8 trillion of assets were available for lending globally, with more than $1.9 trillion on loan on an average day. Securities lending increases market liquidity, and in doing so, facilitates transactions, helps to mitigate price volatility, and reduces transaction costs. Since securities lending transactions can lead to short sales – where investors sell borrowed securities in anticipation of price declines – some have criticized securities lending as a risk to market stability.

In fact, the Federal Reserve has found that short sales can actually improve market stability. Their research has shown that short selling does not systematically drive down asset prices, and that restricting short selling can actually lead to reduced liquidity and higher transaction costs for investors. This is driven by the dynamics mentioned above – securities lending and short sales help to improve liquidity and enable investors to hedge risk.

Q & A

Q: Has there ever been a borrower default in BlackRock’s history?
A: Since BlackRock’s lending program started in 1981, only three borrowers with active loans have defaulted. In each case, BlackRock was able to repurchase every security out on loan with the proceeds of the collateral received and without any losses to our clients.

Since 1981, BlackRock has delivered positive monthly lending income for every fund that has participated in securities lending, including BlackRock mutual funds.

We encourage all investors to ask their mutual fund managers about securities lending practices and returns.
**Q & A**

**Q: How much of the securities lending proceeds are paid to the mutual funds?**

**A:** The BlackRock mutual funds have one of two different arrangements, referred to as either “full lending” or “specials lending.” In the “full lending” program, the mutual funds receive 71.5-80% of the income generated from securities lending depending on the asset class held. For example, mutual funds that predominantly hold US equities receive 71.5% of the income from securities lending. All other mutual funds (i.e., fund of funds, and funds that invest predominantly in fixed income or international equities) receive 80% of the income from securities lending.

For funds participating in the “full lending” program, once the aggregate securities lending income exceeds a certain income threshold amount, each mutual fund in the program will receive an increased percentage of the income above original levels, i.e. from 71.5% to 75% for US equity mutual funds and from 80% to 85% for all other mutual funds, for the remainder of the calendar year.

In the “specials lending” program, the mutual funds receive 80% of the income generated from securities lending on securities where the lending spread exceeds 3% at the time the loan is made (“specials”). Once the aggregate securities lending income exceeds a certain income threshold amount, each mutual fund in the program will receive an additional 5% of the income above original levels, i.e. from 80% to 85%, for the remainder of that calendar year.

In either program, a BlackRock affiliate serves as the securities lending agent and retains the remainder of the income and the funds bear up to 0.04% in either cash vehicle expenses or cash collateral management fees, as applicable.

From its share of revenues, BlackRock covers all direct operational and custodial costs, including:

- **Transaction charges and custodial fees.** BlackRock pays the transaction charges and custodial fees related to the securities lending transactions along with related market-based charges.

- **Platform maintenance.** BlackRock’s team of professionals in London, Edinburgh, New York, Delaware, San Francisco, Hong Kong and Tokyo use advanced risk management technology to monitor risks and extract value for our clients. We believe that our proprietary technology is a key differentiator that contributes to strong performance and lower risk.

- **Indemnity against the risk of collateral shortfall in case of borrower default.** BlackRock provides an indemnity against collateral shortfall for mutual fund investors in the rare event that a borrower defaults under a lending agreement, including if a borrower fails to return a security (although BlackRock does not indemnify against cash collateral reinvestment risk).

BlackRock’s fees as the securities lending agent are disclosed in the mutual fund’s financial statements.

We encourage investors to ask their mutual fund providers for details on their securities lending program. BlackRock believes investors should evaluate the benefits from securities lending by considering the net returns in light of the associated risks.

We periodically benchmark our performance versus competitors using data from independent third-party providers. Over three decades, BlackRock has focused on delivering competitive returns while balancing return, risk and cost.
BlackRock’s Approach to Securities Lending

We believe in managing our securities lending operations on our proprietary platforms and to that end, we have built a proprietary securities lending infrastructure so that our lending agency activity is executed in our clients’ best interest and with prudent risk management.

Skillful risk management

BlackRock is hired by many of the largest companies and governments in the world to manage risk.

Our approach to securities lending is no different. We take a conservative approach and use our proprietary risk and investment management platform, Aladdin, to integrate the capabilities of our dedicated research, trading and risk management teams.

All investment and trading teams, across asset classes and around the globe, utilize Aladdin to capture opportunities for our clients in a highly risk-controlled environment.

This synergy among securities lending professionals and portfolio and risk management teams enables us to reduce the operational risks of securities lending in a way that a third-party custodian or lending agent may not.

Proprietary technology

Our dedicated team works on custom-built reporting, operations and trading systems to help ensure transparency and operational efficiency.

Our core trading system enables our traders to extract value for our clients in rapidly changing markets by incorporating proprietary trading research and securities lending supply and demand data in a rapid, consistent and scalable manner. Capturing re-pricing opportunities is a key component in outperforming competitors; with tens of thousands of loans outstanding at any given time, our trading system helps ensure that traders focus on the most significant opportunities.

Our proprietary collateral and loan processing application delivers a seamless exception-based process for loan management. While borrower default is rare, the application is designed to manage the default process systematically, and mitigate risk to the investor.

Robust assessment of borrowers

We select highly creditworthy borrowers based on conservative credit standards defined by our risk team, which operates independently from our securities lending business.

We continuously monitor the financial performance of borrowers and set individual lending limits for every borrower to help minimize default risk. We monitor all trading activity against these limits and systematically prevent new transactions if the limits are reached.

We also reserve the right to recall a security or require a borrower to provide additional collateral at any time.

Collateral standards

Acceptable collateral may include cash, an irrevocable letter of credit issued by a bank, or securities issued or guaranteed by the U.S. government. Cash is the most common form of collateral in the U.S. We require borrowers to post initial collateral of at least 102% of the loan value and the mutual fund retains the borrower’s collateral until the borrower has returned the loaned stock or bond.

Careful collateral management

We invest cash collateral conservatively in BlackRock money market funds. Clients’ collateral is also segregated from the assets of other borrowers and BlackRock.

The team currently managing the money market funds has acted in advance of credit rating agency downgrades in 99 out of 101 instances over the past decade—nine months in advance of those defaults, on average.1

1 As of December 31, 2016.

Constant monitoring and application of best practices

Since securities lending income is taxed differently than qualified dividend income (QDI), BlackRock closely monitors the impact and tax consequences that securities lending income could have on fund shareholders. We may limit lending activities to ensure that income generated from securities lending does not adversely impact fund shareholders on an after-tax basis.

BlackRock’s risk management capabilities, proprietary technology, and stringent management processes set it apart
Conclusion
As the world’s largest asset manager, BlackRock’s priority is acting as a fiduciary to its clients, investors and shareholders. Securities lending is a strategy for funds to seek additional value from their portfolios.

While not without risk, securities lending seeks to benefit the fund. In three decades of lending securities on behalf of clients, BlackRock has focused on delivering competitive returns while balancing return, risk and cost.

Please consider the investment objectives, risks, charges and expenses of each fund carefully before investing. The funds’ prospectuses and, if available, the summary prospectuses contain this and other information about the funds and are available, along with information on other BlackRock funds, by calling 800-882-0052 or from your financial professional. The prospectuses should be read carefully before investing.

Why BlackRock®
BlackRock helps people around the world, as well as the world’s largest institutions and governments, pursue their investing goals. We offer:

• A comprehensive set of innovative solutions, including mutual funds, separately managed accounts, alternatives and iShares® ETFs

• Global market and investment insights

• Sophisticated risk and portfolio analytics

We work only for our clients, who have entrusted us with managing $5.15 trillion*, earning BlackRock the distinction of being trusted to manage more money than any other investment firm in the world.

*AUM as of 12/31/16.

Diversification may not protect against market risk. There is no guarantee that there will be borrower demand for shares of the BlackRock mutual funds, or that securities lending will generate any level of income. Distributions paid out of the funds’ net investment income, including income from securities lending, if any, are taxable to investors as ordinary income. Buying and selling shares of BlackRock mutual funds will result in brokerage commissions.

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