Securities Lending 101

Los Angeles City Employees' Retirement System

What is Securities Lending?

DEFINITION

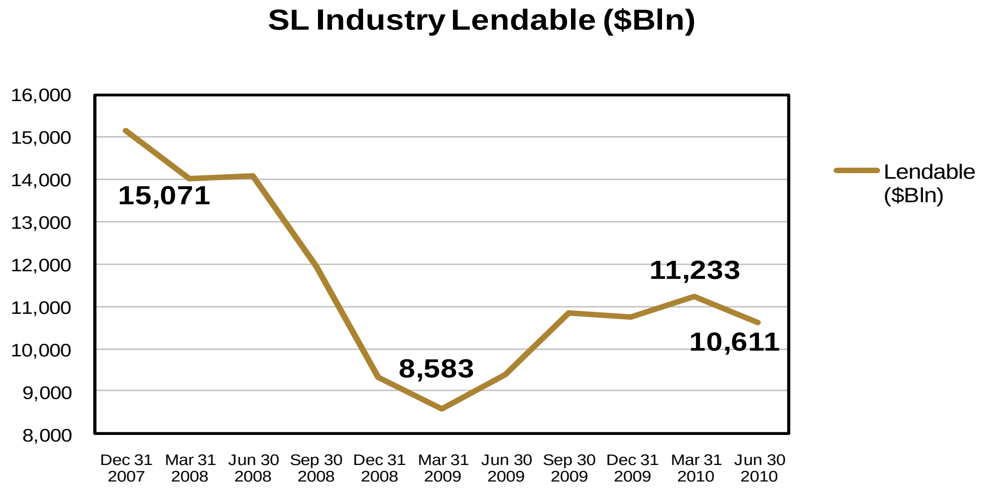
Securities lending is the market practice where securities are temporarily borrowed by one party (the borrower) from another party (the lender), often via an intermediary called a lending agent.

- The securities are borrowed and the borrower provides collateral allowing for an agreed margin in exchange for the securities and pays a fee for the transaction.
- This provides lenders with an opportunity to receive incremental revenue from their asset portfolio while borrowers can reduce the time and cost of obtaining securities temporarily for the purpose of facilitating settlements and supporting trade strategies.
- Where borrowers provide cash as collateral, the cash is invested according to agreed investment guidelines in order to provide an additional opportunity for revenue generation. Borrowers that provide cash collateral receive a rebate from the lender, which is offset against income earned from the cash reinvestment activity.
- The value of loaned securities is daily marked-to-market by the lending agent. In general terms, this results in the borrower providing further collateral if prices increase or the lending agent returning collateral if prices decline.

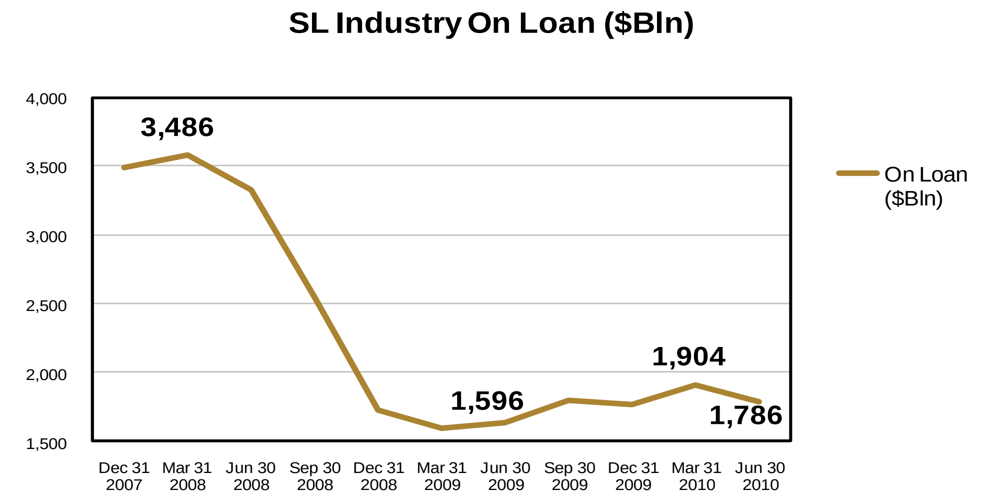
What is Securities Lending?

- Securities lending is typically designed to add incremental income to an institutional portfolio.
- The securities lending collateral is typically invested in money market fund like vehicles.
- Even money market funds take risk. They are not risk free.
- In the global credit crunch many securities lending programs lost a lot of money; they were forced to freeze client assets because the securities on loan went under.
- If your portfolio had conservative guidelines, you suffered significantly less in 2008.
- Securities lending portfolios with more aggressive guidelines got into trouble.

How Large is the Securities Lending Market?



$10.6 Trillion
<u>Lendable</u> Assets as of 6/30/2010



$1.8 Trillion
<u>On-Loan</u> Assets as of 6/30/2010

Source: BNY Mellon

Lendable and Non-Lendable Securities

ASSET CLASSES

- U.S. Government Market
  - U.S. Treasuries (Bills, Bonds, Notes, Strips & TIPS)
  - Agency Debentures
  - Mortgage-backed Securities
- Other Securities
  - Corporate Bonds (U.S. & International)
  - Equities (U.S. & International)
  - Sovereign Bonds
  - Eurobonds
- Non-Lendable Securities
  - Municipals, Commercial Paper, Certificates of Deposit, Bankers Acceptances & other Money Market Securities (Repo, MMFs)

Source: BNY Mellon

Who Lends and Why?

Institutional Investor:

An organization that invests its own assets or those it holds in trust for others.

Who lends?

- State & local governments
- Foundations & Endowments
- Insurance companies
- Money managers
- Corporations
- Mutual funds
- Central banks
- Wealthy individuals

Why lend?

- Offset custody fees
- Offset other administrative expenses
- Earn incremental returns on idle assets
- Enhance portfolio yield

Source: BNY Mellon

Who Borrows and Why?

Broker :
Handles buy and sell orders for individuals or institutions

Dealer:
Buys and sells securities for their own account or the firm account

Broker/Dealer:
all inclusive

Short Selling:

Broker/dealer anticipates a price decline of the sold (shorted) security. The broker/dealer profits if the security can be purchased later at a lower price.

Who borrows?

- Brokers
- Dealers
- Banks

Why borrow?

- Avoid settlement failure
  - Broker/dealers borrow securities to make delivery to their customers, avoiding costly *settlement fails*
- Cover short sales
  - To sell a security they do not yet own, broker/dealers borrow to make delivery on the sale
- Dividend/Tax arbitrage
  - Dividend arbitrage capitalizes upon different entitlements specified by tax treaties for the purpose of creating revenue

Source: BNY Mellon

Lender's Rights

Lender retains all benefits of ownership.

- Dividends and interest
- Corporate actions
- Economic exposure (market gains / losses)
- Right to sell/trade at will
- Ability to recall stock (satisfy proxy)
  - Beneficial owner forfeits voting rights only for assets that are on loan over proxy record date

Source: BNY Mellon

Loans

NEGOTIATION

Negotiation of the loan includes**:**

- Type of collateral
- Term of the loan
- Rebates/Loan fees

Rebate: similar to an interest payment. Made from agent to the borrower for the use of cash collateral.

High Demand Securities = Low Rebate

Loan Fee: A fixed amount paid to agent by the borrower.

Loan types**:**

- Open loans
  - Most loans are transacted on an overnight, or open basis. The loan remains open, or rolls over each night, until termination occurs.
- Term loans
  - Term loans can be negotiated for a fixed period of time. Fully callable since lender retains right to sell.

Source: BNY Mellon

Key Operational Issues

ISSUES

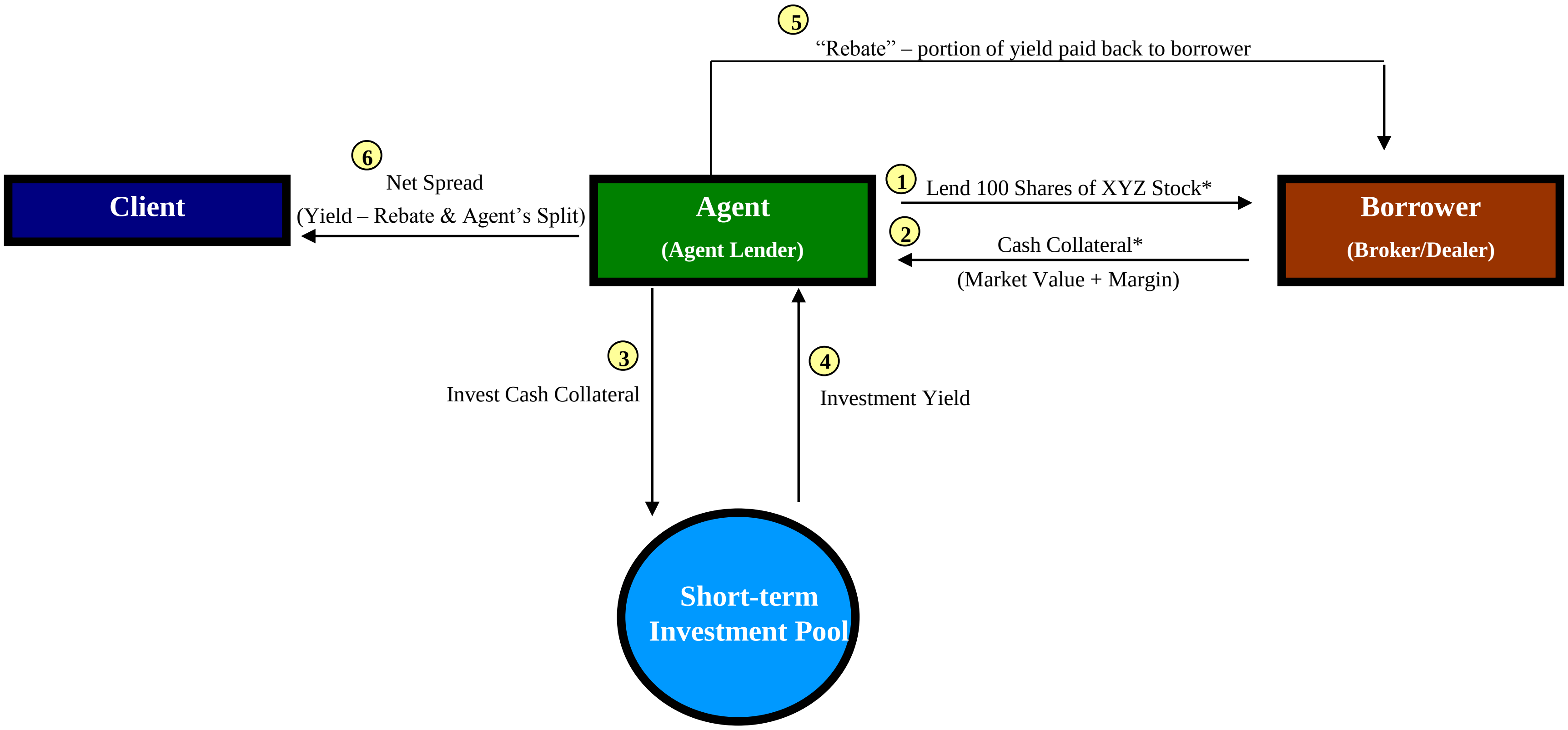
Key tasks that occur in conjunction with the loan transaction**:**

- Marking-to-market
- Collecting dividends and interest
- Moving funds
- Tracking investments
- Collecting interest on investments
- Charging borrower fees
- Paying borrower rebates
- Controlling delivery and return of loans and collateral
- Ensuring timely and accurate client reporting
- Maintaining lending, investment, operations and client service systems

Source: BNY Mellon

Transaction Flow

SECURITIES LENDING



* Loan and collateral re-valued ("marked-to-market") daily

Source: BNY Mellon

How is Revenue Generated?

Profit = Investment Earnings - Rebate

- The difference between the YIELD received on the investment of cash collateral and the REBATE paid out to the borrower is the SPREAD.
- The SPREAD times the dollar amount of the loan is the GROSS REVENUE.
- A fee split arrangement is applied to the gross revenue.
- Alternatively for *non-cash* loans, a FEE is a flat basis point payment paid by the borrower based on the value of the securities borrowed.
- This FEE is also the GROSS REVENUE that is then split.

Cash Loan

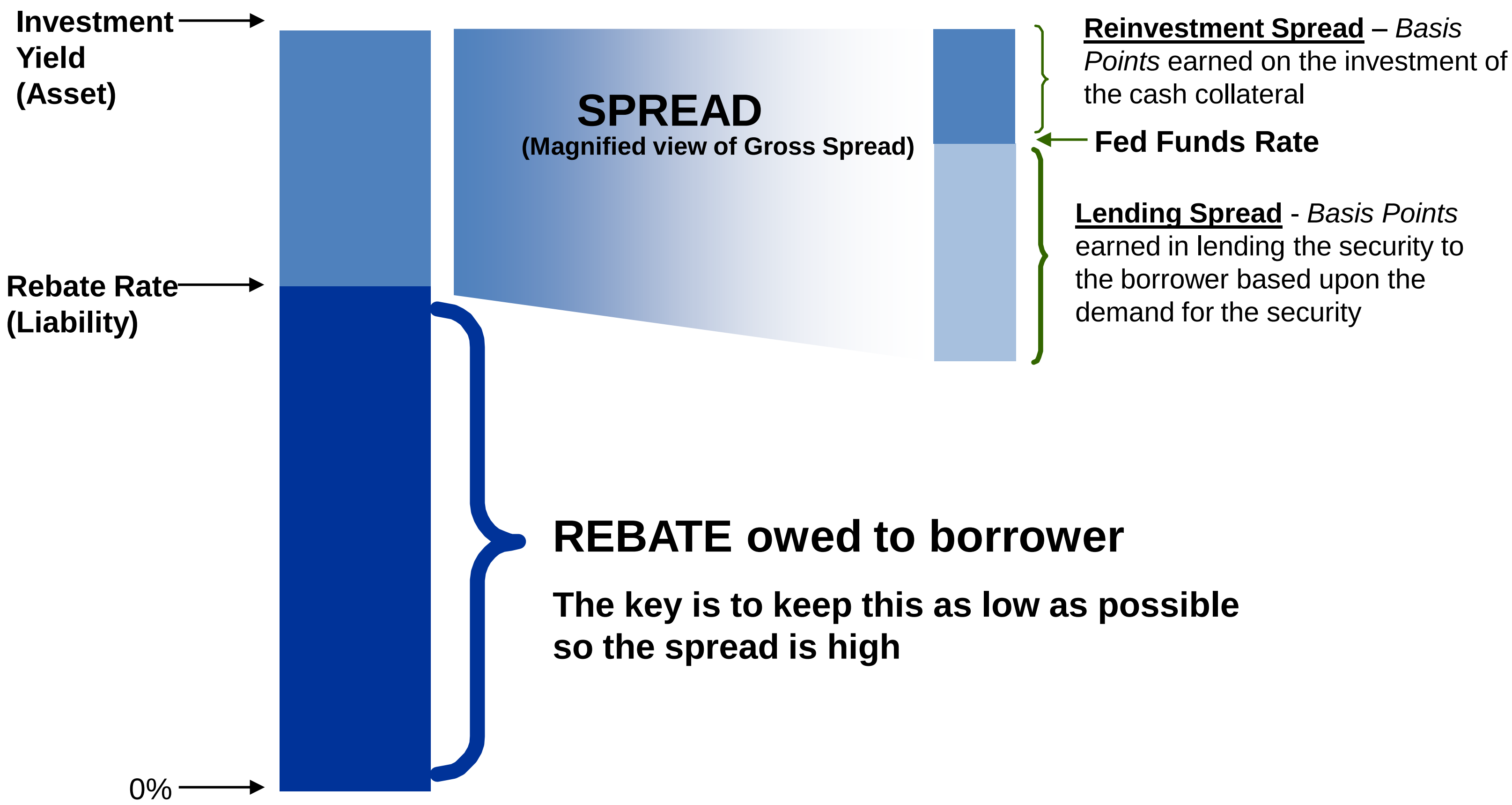
Yield	2.25%
Rebate	(1.75%)
Spread	**0.50%**

Non-Cash Loan

Yield	N/A%
Rebate	N/A%
Fee	0.50%

Source: BNY Mellon

Spread Components for Cash Collateral Loans



Source: BNY Mellon

Collateral Reinvestment

INVESTMENT VEHICLES

Commingled Pools
Pools that contain the assets of many clients and governed by the same set of investment guidelines

Separately Managed Pools
Individual client assets governed by customized investment guidelines

Common types of investments

- Repurchase agreements
- Commercial paper
- Money funds
- Time deposits
- Certificates of Deposit
- Fixed / Floating Rate notes
- Asset-backed securities

Investment priorities

- Preservation of principal
- Diversification
- Liquidity management
- Spread

Collateral Reinvestment

COMMINGLED POOL VS. SEPARATE ACCOUNT

	Advantages	**Disadvantages**
Commingled Pool	▪ A participant in a large pool of assets ▪ Well diversified ▪ Shared liquidity	▪ Reduced control over investment guidelines
Separate Account	▪ Control and flexibility in constructing guidelines. ▪ Risk tolerance matched to client requirements	▪ No economies of scales ▪ No shared liquidity ▪ Higher percent of overnight liquidity can lead to lower returns

Industry Trends

- Lending is largely accepted as an asset management activity that can provide incremental enhancement to returns if done within prudent risk guidelines, although some institutions, including smaller ones, have pulled out.

- A movement towards intrinsic value lending with less reliance on investment spread will mean lower volumes on-loan and loan activity concentrated in more intrinsically valuable securities.

- A downward pressure on earning opportunity from Broker / Dealer balance sheets constraints, hedge fund consolidation and low interest rates. The contraction in lending volumes, spreads and profits continued throughout 2009 and the beginning of 2010, but has since leveled off. Modest improvement is anticipated in 2011.

- Gravitation to 2a-7 like, or overnight only guidelines, where feasible.

- There's evolving regulations suppressing utilizations. Regulators are moving forward to place securities lending in a more clearly defined category within financial markets. There is recognition of the liquidity benefits of lending and legal short-selling, but regulators are coming to the view that securities lending is both a market to be regulated and a means of identifying trading irregularities in underlying products.

- There's greater transparency. Regulators directed their attention toward increasing transparency in the securities lending market. This trend that may be accelerated with the advent of electronic securities lending marketplaces and central counterparties.

Lessons Learned from the Global Liquidity Crunch

- Liquidity risk is extremely important
- Rating agencies should only supplement your own manager's analysis
- Avoid complex instruments
- Do not take unnecessary or underpriced risks
- Avoid concentration risks
- Must stress test portfolios
- Keep some powder dry; down markets create the greatest opportunities

Risks, Mitigating Factors and Controls

	Borrower	Operational	Collateral Investment
Risk	Borrower does not return lent security and insufficient collateral to buy-in the security.	Interest or dividends are not posted, delivery fails, failure to adequately mark- to-market, etc.	Investment in collateral option becomes impaired or decreases in value and under performs rebate or principal loss occurs.
Mitigating Factor	**Indemnified**	**Indemnified**	**Client Retains** Handled by investment guidelines
Controls	• Independent approval • Continuous review • Diversification • Mark-to-market • Borrowing limits • Limited number of borrowers • Contractual indemnification	• Extensive policies and procedures • Cross-training • Contractual settlement • Automatic posting of distributions • Contractual indemnification	• Conservative credit policy and procedures • Dedicated research team • Regular reviews • Bank and asset management subsidiary oversight committees • Conservative guidelines • Trading and control systems • Buy and hold strategy

Source: BNY Mellon and Northern Trust