QUADRISERV

Ms. Elizabeth Murphy
Secretary
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-1090

Re: File No. S7-08-09 -- Amendments to Regulation SHO

Dear Ms. Murphy:

Quadriserv is submitting this comment letter in response to the Securities and Exchange Commission's ("SEC") request for comment on proposed amendments to Regulation SHO, which contemplate limiting short selling based on price tests (the "Price Test Amendments").

We are of the view that confidence in the markets is best restored by ending abusive naked short selling without impairing useful short selling. As we stated in our comment letter to the proposed extension of temporary interim final Rule 204T, [1] we believe that short sale concerns, and in particular abusive naked short selling, can best be addressed by the development of an efficient, transparent and reliable stock loan market, which would also maintain the benefits of legitimate short selling. Our comment letter to Rule 204T (which is attached hereto) further details our views on amendments to Rule 204T that would achieve this goal, and would also in turn reduce abusive naked short selling.

Quadriserv's perspective on the Price Test Amendments is based on our experience in bringing a new level of automation and risk control to the stock loan market. Quadriserv, through its wholly owned subsidiary, Automated Equity Finance Markets, Inc. (operating as "AQS"), has created and operates the first domestic electronic trading system that provides a public, centralized marketplace for the borrowing and lending of equity securities. AQS is registered with the Commission as a broker-dealer and an Alternative Trading System ("ATS"). Stock loan transactions executed within the AQS market are immediate, transparent, binding, and auditable. They also are backed by the resources, straight-through-processing, and risk management systems of The Options Clearing Corporation ("OCC"), a AAA rated registered clearing agency, acting as central counterparty ("CCP").

We would be happy to discuss these comments with the Commission staff and our views on the relation of the Price Test Amendments to Rule 204T. Please do not hesitate to contact me at (212) 905-5225.

Sincerely,

Thomas J. Perna
Quadriserv, Inc.

[1] Interim Final Temporary Rule. SEC Release No. 34-58773, File No. S7-30-08.

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New York, NY 10017
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QUADRISERV

Attachment A: Quadriserv 204T Comment Letter

Ms. Elizabeth Murphy
Secretary
Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-1090

Re: File No. S7-30-08 -- Temporary Interim Final Rule 204T

Dear Ms. Murphy:

Quadriserv is submitting this comment letter in response to the Securities and Exchange Commission's ("SEC") request for comment on the extension of temporary interim final Rule 204T ("Rule"), which expires on July 31, 2009.[1] In adopting the Rule during last fall's market turmoil, the Commission sought to address longstanding issues relating to fails to deliver of equity securities. The Rule has been highly successful in reducing the overall level of fails in equity securities and the potential for abusive naked short selling.

Quadriserv supports adoption of the Rule on a permanent basis, with additional amendments to improve the Rule's functionality and to simultaneously strengthen the stock lending market. The Rule should be amended in three ways. The first is for the Rule to recognize stock borrow transactions in an automated, central counterparty-backed market as providing pre-fail credit. The second is for the Rule to acknowledge these transactions as arrangements to borrow. The third is for the Rule to allow these transactions to remediate fails. As discussed in greater detail below, these changes would simplify the application of the Rule while fostering a stronger, more efficient market for stock lending transactions, which Quadriserv believes to be critical to remedying problems in the short sale process.

The Commission also has requested comment on five proposals to limit short selling based on price tests.[2] These proposals stem from a lack of public confidence in the equities markets. Confidence in the markets is best restored by ending abusive naked short selling without impairing useful short selling. An efficient stock loan market will reduce involuntary naked short selling, while maintaining the benefits of legitimate short selling. As SEC Commissioner Paredes recently commented, "Short selling contributes to liquidity, capital formation, and more efficiently allocated risk. Short selling can buttress buying by allowing investors going long to hedge their positions; and short selling can encourage market participation by leading to improved price discovery."[3]

Quadriserv's perspective on the Rule and its prospects for strengthening the stock loan market is based on our experience in bringing a new level of automation and risk control to the industry.

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[1] Amendments to Regulation SHO, Exchange Act Release No. 58,773, [2008 Transfer Binder] Fed. Sec. L. Rep. (CCH) ¶88,297, at 87,302 (Oct. 14, 2008).

[2] Amendments to Regulation SHO, Exchange Act Release No. 59748, Fed. Sec. L. Rep. (CCH) ¶ 88,601 (Apr. 10, 2009)

[3] *See* SEC Commissioner Troy Paredes, *Remarks at the Security Traders Association 13th Annual Washington Conference (May 6, 2009)* available at http://www.sec.gov/news/speech/2009/spch050609tap.htm.

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The Rule could act as a catalyst for change in the securities lending market, which is ripe for reform. A technological framework exists today that can produce a securities lending market with less risk, lower costs for investors, more efficiency, and better alignment with the Commission's supervisory objectives. Through amendments to the final Rule, the Commission can improve the operation of the Rule while encouraging private sector structures and technology which will result in a strengthened securities lending market.

As discussed in detail in the attached "Quadriserv Proposal to Modernize the Market for Securities Lending," strengthening the securities lending market does not require re-inventing the wheel; rather, it can be achieved through encouraging a model that has worked to great effect in the past across nearly every other segment of the capital markets: a central counterparty model executed through transparent electronic trade systems.

The over-the-counter market for equity securities lending today is one of the largest and most important decentralized financial markets in existence. It is inter-linked and inter-related with virtually every other major financial market. The global market for equity securities lending has measured between $4 trillion from its recent high point in mid-2008 to $1.6 trillion during its low point earlier this year,[4] and over the last ten years has grown at approximately 15% annually.[5] The securities lending market is roughly the same size as the market for credit default insurance, where the value of the risk premium – actual money being exchanged between buyers and sellers of default protection – is close to $3 trillion.

Despite its structural immaturity as an organized market, the inherent value of securities lending and borrowing is broadly recognized.[6] The structural framework of the stock loan market has not kept pace with its growth. Throughout the dramatic increase in the size and importance of securities lending over the last 30 years, the market has changed little to correct its significant deficiencies. These deficiencies include:

- Poor transparency for end users, with limited best execution monitoring
- High search costs and inefficient pricing
- Significant obstacles to adequate regulatory oversight
- High technology and operational costs
- Limited best-execution monitoring, making performance benchmarking of service providers difficult

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[4] Faulkner, Mark, David Carruthers & Ed Oliver. "Making Better Informed Securities Lending Decisions: Risk Adjusted Returns Framework". Data Explorers (June 2009).

[5] The Risk Management Association: Securities Lending Quarterly Aggregate Composite, Q1 2009. (http://www.rmahq.org/RMA/SecuritiesLending/DataDecisionSupportCenter/SecuritiesLendingQuarterlyAggregateComposite)

[6] Group of 30, *Global Clearing and Settlements: A Plan of Action* (2003).

Each of these deficiencies can be positively affected by encouraging automation of the stock lending process to bring lenders and borrowers together in a regulated, electronic trading market backed by a strong central counterparty. Automating and centralizing the stock lending process will have signal benefits, including:

- Reduced fails to deliver and concomitant naked short selling, with improved methods of facilitating compliance with short sale regulations
- Reduced systemic risk
- Increased transparency with real-time information
- Greatly improved regulatory oversight
- Capital and balance sheet efficiency
- Reduced trading costs
- Improved operational and technology efficiencies
- Reduction in operational losses and fraud
- Increased liquidity
- Trading compatibility and redundancy

These benefits result from an automated trading model and the extension of a central counterparty model similar to that explicitly embraced by Treasury Secretary Geithner for the over-the-counter derivatives market.[7]

The Commission has the opportunity to galvanize change in the securities lending market by reflecting in the Rule the benefits inherent in an automated, visible electronic trading system for stock loan, and the risk reduction provided by a AAA rated central counterparty. This would improve the operation of the Rule while also encouraging the systemic risk benefits of such a system.

Reg SHO and Rule 204T

Rule 204T was based on the framework of existing Reg SHO, which addressed large and protracted fails to deliver in a relatively small number of "threshold securities." In adopting the Rule, the Commission drew on a number of concepts from Reg SHO, but applied them to all securities in a dramatically compressed time frame. As a result, practical issues have arisen that can be addressed by modifying the operation of the Rule, where doing so would preserve the purposes and benefits of the Rule.

In particular, Rule 204T can be modified to improve its functioning and to benefit the stock lending market through three main changes, as follows:

1. Pre-Fail Credit

The FAQs for the Rule make clear that "pre-fail credit" in the form of a stock purchase transaction applies to the calculation of whether a participant in a clearing agency has failed for purposes of the Rule on settlement date, even though the transaction will not have settled in time to prevent the fail. However, the Rule does not recognize verifiable transactions to borrow securities effected in a market that has procedures in place that produce a strong likelihood of settlement as satisfying the pre-fail

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[7] Press Room, U.S. Dep't of the Treas., *Regulatory Reform Over-The-Counter (OTC) Derivatives* (2009), http://www.treas.gov/press/releases/tg129.htm, *see also* President's Working Group on Financial Markets, *Policy Statement on Financial Market Developments* (2008); Letter from Timothy Geithner, U.S. Treas. Sec'y, to Harry Reid, U.S. Senate Majority Leader (May 13, 2009), identifying broad support for central counterparty model in unregulated, over-the-counter markets.

credit requirements[8]; rather, borrowed securities are expected to reduce or prevent the fail itself. Thus, even if the securities necessary to avoid a fail were borrowed before the opening of trading on T+4 in a market with reliable settlement, but received moments after the opening of trading on T+4, the participant would have violated the Rule and be subject to its penalties.

The Commission can make the Rule more workable, while also encouraging the use of a automated stock lending systems backed by a CCP, by giving pre-fail credit to a Qualified Borrow for same day delivery that is effected in a centralized Loan Market that has strong protections against failing on the stock loan transaction, an automated audit trail, and the backing of a central counterparty, and that has not failed. In particular, the Commission could provide that a Qualified Borrow will qualify for pre-fail credit if it has been executed before the opening of trading on the day following settlement date ("T+4") but has not yet settled.

2. "Arranging to Borrow"

Once a broker-dealer enters the "penalty box" after failing to settle in a security without remedying the fail before the opening of trading on T+4, the broker-dealer must borrow or arrange to borrow the security before effecting a new short sale trade. The Commission can achieve its objective of ensuring the broker-dealer will not fail again on its trades, while encouraging a stronger stock loan system, by confirming in the adopting release for the Rule that a broker-dealer engaging in a Qualified Borrow would satisfy the Rule's definition of "arranging to borrow" before a short sale.

3. Remedying a Fail

Long Sales. The Rule provides that fails resulting from long sales and fails resulting from market-maker transactions must be closed out by the purchase of securities no later than T+6. However, the Rule does not allow borrowing of securities to meet this requirement. The Commission was not explicit as to why a borrow transaction was not an acceptable means of satisfying this close-out requirement even though a borrow transaction would be settled days before a stock purchase transaction.

Borrow transactions may not have been included due to the uncertainty that the borrow would be completed, or to increase the penalty value of failing to settle on T+3. The former purpose can be addressed by permitting stock borrows in a system with a high probability of completion to satisfy the requirement. The latter purpose can be addressed by taking enforcement action on the violation directly, rather than causing delay in closing out the fail by only recognizing a stock purchase rather than a stock borrow transaction that settles more quickly. Thus, the Commission can achieve its objective of ensuring the borrow is completed, while encouraging a stronger market structure, by recognizing a Qualified Borrow as satisfying the close out of the long sale fail.

Penalty Box. Once in the "penalty box" after failing, broker-dealers must continue to pre-borrow for short sales until they have purchased securities sufficient to cover the fail and that securities trade has cleared. The Commission can achieve its objective of imposing a penalty and cleaning up the fail, while encouraging a stronger stock loan market, by providing in the Rule that the broker-dealer can escape from the penalty box not only by purchasing and settling securities of like kind and quantity as the fail, but alternatively by engaging in and settling a Qualified Borrow of like kind and quantity sufficient to clean up the fail. In this case, the borrowed stock would have to be received before the Rule's restrictions would be lifted.

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[8] The structure of AQS produces a strong likelihood of settlement through allocation procedures that create an strong incentive to fulfill a trade; verification procedures that ensure the creditworthiness of participants; validation procedures that ensure that participants have the funds and securities available to settle; and surveillance procedures that monitor for delivery delays.

In sum, the Commission can further the purposes of the Rule while fostering new sources of stock loan liquidity for market participants by revising the Rule to take into account stock borrow transactions effected in a central Loan Market that has strong protections against failing on the stock loan transaction, an automated audit trail, and the backing of a CCP. By encouraging the development of efficient, transparent and reliable markets for stock loan, the Commission will ultimately decrease the number of fails in the market and help achieve the purposes of the Rule.

We would be happy to discuss these concepts with the Commission staff and practical ways to incorporate them into a revised Rule 204T. Please do not hesitate to contact me at (212) 905-5225.

Sincerely,

Thomas J. Perna
Quadriserv, Inc.

QUADRISERV PROPOSAL TO MODERNIZE THE MARKET FOR SECURITIES LENDING

"During times of great change, learners inherit the earth, while the learned find themselves beautifully equipped for a world that no longer exists." -Eric Hoffer

Executive Summary

Securities lending and borrowing plays a vital role in the liquidity of markets and is the fundamental process that underlies all short selling activity. The two activities cannot, or should not, be uncoupled. Short selling that occurs without securities borrowing results in "naked" short selling, prominently and universally identified as an important systemic risk.[1] Short selling with securities borrowing strengthens markets. As SEC Commissioner Paredes recently commented, "Short selling contributes to liquidity, capital formation, and more efficiently allocated risk. Short selling can buttress buying by allowing investors going long to hedge their positions; and short selling can encourage market participation by leading to improved price discovery."[2] Securities lending and borrowing also allows buyers and sellers of securities to meet statutory settlement obligations. The decentralized nature of the securities lending market has limited the industry's ability to achieve highly efficient securities settlement processing, which in turn has led to naked short sales, pricing anomalies and other inefficiencies in trading markets.

The over-the-counter ("OTC") market for equity securities lending today is one of the largest and most important decentralized financial markets in existence – inter-linked and inter-related with virtually every other major element of finance. Yet, despite its structural immaturity as an organized market, the inherent value of securities lending and borrowing is broadly embraced.

The securities lending market has grown exponentially in the last decade. The global market for equity securities lending has been measured between $4 trillion from its recent high point in mid-2008 and $1.6 trillion[3] during its low point earlier this year, and for the 10-year period from 1998 through 2008 experienced 15.3% compounded annual growth.[4] To put these figures into equivalent terms, the securities lending market is roughly the same size as the market for credit default insurance, where the value of the risk premium – actual money being exchanged between buyers and sellers of default protection – is close to $3 trillion.[5]

The structural framework of the securities lending industry has not maintained pace with the growth of the market. Throughout the dramatic increase in the size and importance of the securities lending market over the last thirty years little has changed in the way that the market operates.

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[1] Mack, John. "Memo to Employees" September 17, 2008; Statement of Richard S. Fuld, Jr. Before the United States House of Representatives Committee on Oversight and Government Reform, October 6, 2008 (http://oversight.house.gov/documents/20081006125839.pdf).

[2] Paredes, Troy A., "Speech by SEC Commissioner: Remarks at the Security Traders Association 13th Annual Washington Conference." Washington, D.C., May 6, 2009

[3] Faulkner, Mark, David Carruthers & Ed Oliver. "Making Better Informed Securities Lending Decisions: Risk Adjusted Returns Framework". Data Explorers (June 2009).

[4] Performance Explorer Limited, "Securities Lending Quarterly Aggregate Composite, The Risk Management Association, 4th Quarter 2008".

[5] http://www.dtcc.com/products/derivserv/data_table_i.php?id=table6

The current securities lending market has significant deficiencies. These include:

- Poor transparency for end users
- High search costs and inefficient pricing
- Significant obstacles to adequate regulatory oversight
- High technology and operational costs
- Limited best-execution monitoring, making performance benchmarking of service providers difficult

Many of these deficiencies can be positively affected through a simple, battle-tested solution - automating the stock lending process and bringing lenders and borrowers together in a regulated, electronic trading market backed by a strong central counterparty ("CCP").

Automating and centralizing the stock lending process through a centralized loan market will have signal benefits:

- Reduced fails to deliver and concomitant naked short selling, with improved methods of facilitating compliance with short sale requirements
- Reduced systemic risk
- Increased transparency with real-time information
- Greatly improved regulatory oversight
- Capital and balance sheet efficiency
- Reduced trading costs
- Improved operational and technology efficiencies
- Improved trading market quality through encouragement of positive trading practices and discouragement of negative trading practices
- Reduction in operational losses and fraud
- Increased liquidity
- Trading compatibility and redundancy

By supporting responsible, well-conceived and proven private sector solutions, supervisors can encourage the continued evolution of securities lending into a centralized, automated, visible, competitive public market with the risk reduction provided by a CCP. To do so, supervisors need only reflect in their regulations the benefits inherent in such a system. In important respects, this recognition represents the logical extension of the CCP model explicitly embraced by Treasury Secretary Geithner for the over the counter derivatives market[6] while also recognizing important idiosyncrasies of the stock lending market. This could lead to a dramatic improvement in the quality and safety of securities markets for the investing public.

To encourage the development of a modernized securities lending market, revised regulations regarding market structure, broker-dealer financial responsibility, short sales and other topics should be considered, including:

- Application of certain Reg NMS standards to stock loan market operations; specifically Rule 610 (the "Access Rule") and Rule 603 (under the "Market Data Rules") in support of the extension of that regulation's objectives to foster competition among individual markets and competition among individual orders in order to promote efficient and fair price formation across securities markets.

[6] Geithner, Timothy F. Letter to Senator Harry Reid, Washington, D.C. (May 13, 2009).

- Amendments to current Rules governing the short sale process; in particular, the Securities and Exchange Commission, in revising Rule 204T under the Exchange Act of 1934, should reflect the certainty and accountability of stock loan transactions in an electronic trading system backed by a strong CCP in devising the requirements and remedies for failures to settle trades in equity securities.

- The establishment of standards that define a centralized securities loan market ("Loan Market") for the purpose of qualifying such an entity to provide recognized regulated and competitive trading environments for public investors.

- Relating to the application of Rule 203(a) of Reg SHO, consideration of the role that a Loan Market might play in an executing broker-dealer's obligation to document its locate prior to effecting a short sale, or in fact evolving the locate requirement into a new structural framework altogether.

- Relating to pre-borrow requirements, should those requirements be introduced, consideration of the role that a Loan Market might play in providing auditable, public access to borrowable securities for broker-dealers needing to comply with this requirement.

- Clear interpretation of certain aspects of capital treatment under Rule 15c3-3 under the Exchange Act of 1934 that require segregation of funds and securities for the customers of broker-dealers.

- Clear interpretation of certain elements of capital treatment under Rule 15c3-1 under the Exchange Act of 1934 that provide for appropriate risk-based margining of borrowing and lending counterparties in order to ensure that broker-dealers are not forced to take net capital deductions as a result of their exposure to a CCP.

- Granting relief under FIN 39 so as to net receivables and payables arising out of securities lending transactions cleared under a CCP model.

Introduction

Today, a technological framework exists which can transform securities lending into a marketplace with less risk, more efficiency, and a closer alignment with supervisory objectives. In designing regulations that will have a far-reaching impact on the restructuring of the financial services arena, supervisors should encourage private sector solutions and technology that can reshape and improve the securities lending market.

At their core, these structures should not envision the re-invention of the wheel; rather, they should embrace a model that has worked in the past to great effect across nearly every other segment of the capital markets: a CCP model executed through a transparent electronic trade system.[7] Quadriserv recommends the implementation of precisely this system to modernize the market for securities lending.[8]

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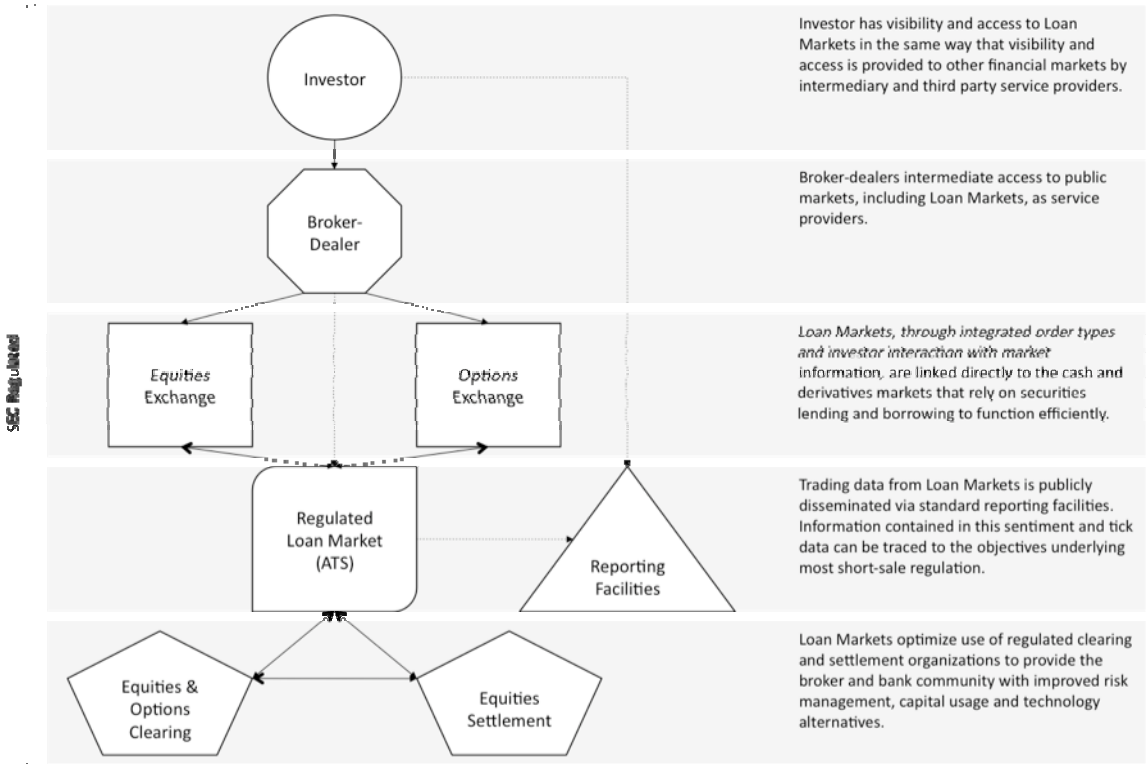
[7] President's Working Group statement on over-the-counter market structure reform. *See also*, Treasury Secretary Geithner's Letter to Majority Leader Reid, 5/13/09, identifying broad support for central counterparty model in unregulated, over the counter markets.

[8] Quadriserv is a New York based Company delivering transformational market structure changes to the securities lending industry (www.quadriserv.com).

Figure 1: Proposed Regulated Loan Market Structure



This modernized structure rests comfortably on the footings poured during nearly every structural advancement preceding it. It is a collaborative, market-driven, private sector solution which creates a regulated trading environment, and provides public access to consolidated, transparent information and a centralized trading venue that supports best execution practices.[9]

ORIGIN AND DEVELOPMENT OF SECURITIES LENDING

The act of securities lending can be traced back as far as the market for United States government war debt in the late 1700's, and the privately traded market for U.S. and British stocks and bonds throughout the 1800's. However, the market truly evolved into a dedicated financial service in the mid-1960's as a flourishing U.S. economy attracted financial market investors in numbers unseen since before the Great Depression[10].

Mid-century economic growth drove new money into equity markets, where companies became more sophisticated in how they raised capital and used their shares to make acquisitions or restructure. Convertible securities created the prospect of share class arbitrage, while mergers and acquisitions created

[9] Regulation NMS. SEC Release No. 34-49325, File No. S7-10-04.
[10] Faulker, Mark C. "An Introduction to Securities Lending". Spitalfield Advisors (London, UK, 2006).

opportunities to profit on the chance that deals might close by buying one company and selling another short.

The dramatic rise in trading activity on Wall Street made it difficult for both exchanges and securities processing firms to maintain their normal course of business, creating massive settlement failures and giving rise in the 1970's to improved trade process automation and the emergence of a nascent securities lending industry. The securities lending process enabled securities firms to greatly reduce the number of settlement failures by borrowing securities and providing them to arbitrageurs and other short sellers who needed to borrow securities that they did not own to conduct their investment strategies.

Suppliers of these securities could be found among their beneficial owners – initially insurance companies, corporations and college endowment funds, asset managers, and later, following Employee Retirement Income Security Act ("ERISA") legislation, public pension funds. Throughout the 1970's and 1980's, custodian banks continued to design lending services that allowed the majority of institutional owners of securities to participate in the lending process, benefitting both the institutions and the markets as a whole.

The institutional growth of the securities lending market was met by a concurrent increase in the demand for securities, initiated in part by the upsurge of equity option and derivatives trading that followed the introduction of the Black-Scholes pricing model. Efficient options and derivatives pricing led to an explosion in trading volume, while the trading strategies underlying this growth relied on effective hedging and risk management - both of which required an ability to borrow and lend shares. That growth continued throughout the 1980's and 1990's with the advent of index products and other complex trading strategies, all of which increased the demand from dealers and investors for borrowed shares to hedge market risks.

The continued growth and transformation of the investment management industry has added an interesting dynamic to the borrowing and lending equation – public funds, accounting for nearly half of the supply of lendable securities, also account for nearly half of the capital invested with the investment managers borrowing those same shares[11].

While the securities lending market may have been slow to mature, equities markets, by contrast, have evolved and progressed significantly. The National Market System ("NMS"), ushered into existence by Congress in 1975, rested on the three-pillared principles of importance of information consolidation, public access to the best available price and the reliance of the market on competitive forces to drive innovation. Order handling rules in the mid-1990's pressured investment professionals to establish best execution practices, and provided public investors a certain comfort around the treatment they received when buying and selling stocks.

Yet, despite the inextricable linkage between securities trading and securities lending, and notwithstanding the cyclical criticisms of short selling as the causal activity of market downturns and trading abuses[12], momentum has never gathered in support of securities lending market structure reform.

[11] The Bank of New York Mellon Corporation, "Strategic Asset Allocation" 2008; The Bank of New York Mellon & Casey, Quirk & Associates. "The Hedge Fund of Tomorrow: Building an Enduring Firm". Thought Leadership Series (April 2009).
[12] Lamont, Owen A., "The Long and Short of Hedge Funds: Effects of Strategies for Managing Market Risk". Testimony for U.S. House of Representatives, Committee of Financial Services, Subcommittee on Capital Markets, Insurance, and Government Sponsored Enterprises. May 22, 2003.

What is Securities Lending?

Securities lending has been called the "oil in the efficient market machine" - it is one of the largest and most liquid global financial market activities in existence. Securities lending is the primary component of vital market functions:

Market Liquidity
Market-makers and specialists enhance the liquidity of securities markets by standing ready to buy or sell securities from or to the end investor. They require access to a liquid securities lending market to maintain fair and orderly markets. Recent regulatory changes, such as the elimination of the market-maker exception under Reg SHO whereby option market-makers were excepted from the requirement to borrow shares they sold short, has dramatically increased the importance of access to the securities lending and borrowing process for this important community of liquidity providers.

Hedging
A wide variety of financial instruments and associated trading strategies require access to a securities lending market for hedging, portfolio management and risk control, including capital structure arbitrage, pairs trading, risk arbitrage, index arbitrage, total-return swap hedging, credit default swap hedging, derivative product arbitrage and others.

Efficient Settlement
Frequently, long sellers are unable to deliver securities they have sold in time for settlement. Brokers require access to the securities lending market in order to cover delivery failures.

Efficient Pricing
Speculative excesses and market inefficiencies provide opportunities for short-sellers and arbitrageurs, who borrow securities in order to take short positions, and who function as profit-motivated watchdogs against corporate fraud and speculative bubbles. A securities loan occurs when the borrower and lender agree on an interest rate for the loan (among other things). This interest rate, in most cases, is a reflection of the demand to sell short a security, and represents important information for the short seller, the issuing company and the beneficial owner of the security being loaned.

Securities *borrowing* is the mechanical process that underlies all short selling activity. Borrowers of securities typically are required to satisfy a settlement delivery obligation or facilitate a short sale pursuant to statutory regulations[13]. In this way, it is important to understand that short selling and securities lending, while not one in the same, are inextricably related.

Short sellers seek to sell a security that they don't own. To settle a short sale, the sellers must obtain the stock. Securities borrowing is the economic equivalent of renting a security for the period of time that it is being shorted. Just like a popular rental property, securities "rental" (borrowing) costs increase as the security being borrowed becomes more desirable to short. Under most market conditions, short selling plays a positive and essential role in the overall liquidity of markets and the effectiveness of the market mechanism to establish the fairest value for traded securities[14]. Under atypical conditions and in the absence of certain controls, short selling can be perceived as negatively impacting the efficient operation of markets[15,16].

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[13] Amendments to Regulation SHO, SEC Release No. 34-58773 (Oct. 14, 2008) and 73 FR 61706 (Oct. 17, 2008).
[14] Kolasinski, Adam C., Adam V. Reed & Jacob R. Thornock (March 2009). "Prohibitions versus Constraints: The 2008 Short Sale Regulations."
[15] Technical Committee of the International Organization of Securities Commissions. "Consultation Report on Regulation of Short Selling", March 2009. NYSE reports that the majority of publicly listed companies perceive that short selling negatively impacts market valuation,

Securities *lending* is the temporary transfer of a security by a beneficial owner to a borrowing counterparty in exchange for collateral. In many cases, particularly in the United States, borrowers post cash as collateral for the loan that is equal to or in excess of the market value of the securities they have received[17]. For the period during which the loan is open, lenders agree to pay the borrower an interest rate on the cash collateral. This interest rate is commonly referred to as the "rebate rate" – an implicit fee paid by the lender to the borrower on cash held as collateral for the loan. The rebate rate is negotiated at the opening of a securities loan and can be renegotiated during the life of the loan. The difference between the rebate rate the borrower receives and the rate of return they would otherwise earn if the cash were invested in "risk free" assets (the "opportunity cost" – the Fed Funds benchmark rate is the most common proxy for the risk-free return) is the primary cost driver for the borrower.

The securities lender generates income from the use of loan collateral, commonly referred to as the "reinvestment" process. Lenders who receive cash as collateral for a securities loan will usually reinvest that cash into approved investment vehicles, earning the difference between what they pay as a "rebate" to borrowers on their cash collateral and the return on the investment they have purchased with the cash collateral. These investment vehicles typically include money market funds, commercial paper, floating rate notes and various other instruments[18].

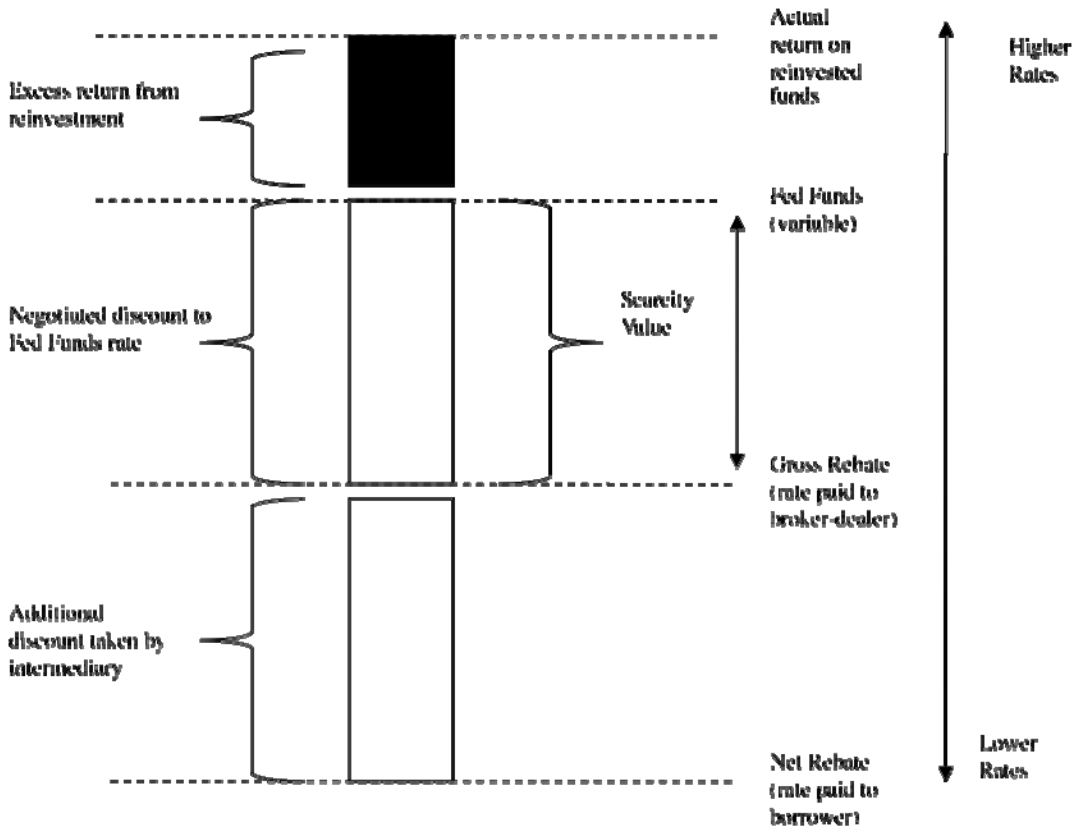
Opinion Research Corporation, "Short Selling Study: The Views of Corporate Issuers" October 2008 (3,6); naked short selling reference, "Naked" Short Selling Anti-Fraud Rule. SEC Release No. 34-57511 (March 21, 2008)

[16] Kolasinksi, Reed & Thornock (March 2009) studied the effects of the short sales regulations issued during the financial crisis of 2008. Their findings include "For both regulations, we analyze changes in market quality as measured by Amihud's (2002) illiquidity, share turnover, as well as the R2 measure of a stock's comovement with the market. The results strongly suggest that market quality, as measured by turnover and the R2, decreased for all financial sample stocks during the EO period and that market quality decreased even more for EO firms." Financial Services Authority."Short Selling", London, 2009.

[17] Performance Explorer Limited, "Securities Lending Quarterly Aggregate Composite, The Risk Management Association, 4th Quarter 2008".

[18] Faulkner, Mark C., David Carruthers & Ed Oliver. "Making Better Informed Securities Lending Decisions: Risk Adjusted Returns Framework". Data Explorers Ltd., June 2009.

Figure 2: Transaction Economics



In the stock lending market, institutions that borrow stock want to minimize borrowing costs, and institutions holding stock want to maximize returns (as represented in the spread between the rebate rate and the reinvestment rate in the diagram above) by lending it out when it would otherwise sit idle.

Securities loans have the following characteristics[19]:

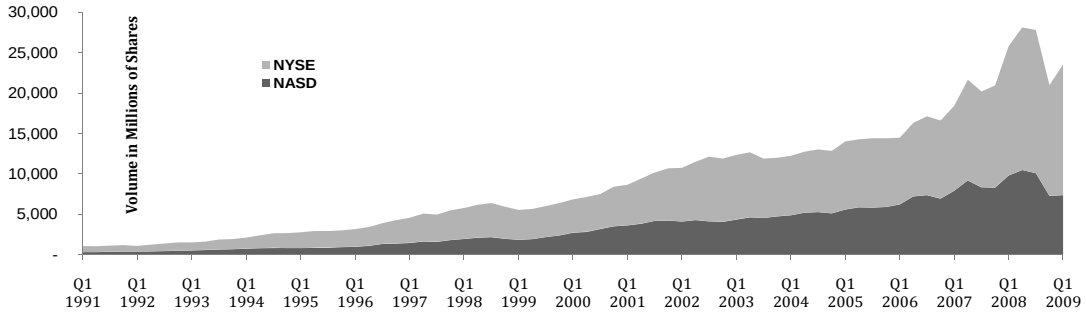
1. *Maturity:* securities loans typically have no fixed maturity and either party can unwind the transaction on demand, known as an "open" trade.[20]
2. *Pricing:* the lender remains exposed to price risk on the loaned securities, as the borrower can return them at a pre-agreed price. The loaned securities remain on-balance sheet of the beneficial owner.
3. *Dividends:* the borrower agrees to compensate the lender for any dividends or similar benefits received on the loaned securities by making ("manufacturing") equivalent payments.
4. *Voting:* the lender transfers the right to vote loaned securities to the borrower, but can recall equivalent securities from the borrower if it wishes to vote.
5. *Fees:* if the borrower provides securities as collateral to the lender, it pays a fee to borrow the loaned securities. If the borrower provides cash as collateral, the lender pays interest to the borrower and reinvests the cash at a higher rate, earning a spread.

[19] International Securities Lending Association. "Securities Lending: Your Questions Answered", April 2009
[20] "Term" trades, which imply a fixed maturity date, are becoming increasingly more common, however, and would likely factor more importantly than they do today in a Loan Market environment

Recent estimates put the market value of "lendable" securities at approximately $15 trillion globally, with about $3 trillion, or 17% of those securities, on-loan.[21] Alternative assets, meanwhile, have trended between $2 trillion under management at their peak during late 2007, and closer to $1 trillion today[22].

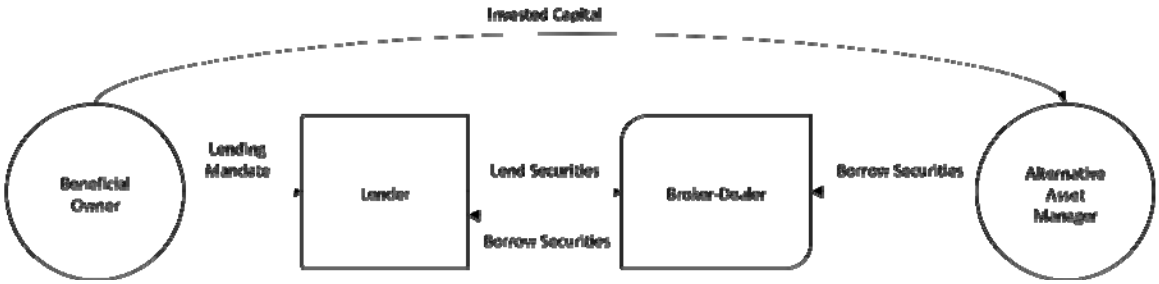
Institutional investors, including non-profit entities, pubic pensions, corporate pensions, financial institutions and Taft-Hartley plans, now account for greater than 40% of total investments in alternative asset managers. [23]

Figure 3: Historical Short Interest, 1991 – 2009



A number of observations can be made from this data. The massive growth in managed public wealth has correlated closely with the diversified allocation of those funds into alternative investment managers, many of which employ strategies that require the borrowing of stock, making the largest lenders of securities, indirectly, also the largest borrowers of those same securities. The importance of optimizing the intermediation process and understanding the risks and costs of intermediation – especially in the related context of short selling and best market practices – has thus also increased in relevance.

Figure 4: Public Funds as Lenders and Implicit Borrowers



[21] Faulkner, Mark C., David Carruthers & Ed Oliver. "Making Better Informed Securities Lending Decisions: Risk Adjusted Returns Framework". Data Explorers Ltd., June 2009.
[22] Nanto, Dick K. "The Global Financial Crisis: Analysis and Policy Implications". Congressional Research Service, April 3, 2009.
[23] The Bank of New York Mellon & Casey, Quirk & Associates. "The Hedge Fund of Tomorrow: Building an Enduring Firm". Thought Leadership Series (April 2009).

There are four major participants in the securities lending market:

Beneficial Owners
These are the owners of securities. They include mutual funds, pension plan sponsors, insurance companies, central banks, foundations and endowments, hedge funds and the retail or institutional clients of brokerage firms.

Lenders
Beneficial owners can and do lend securities directly to the market without the use of a lending agent, although this is relatively rare. Most beneficial owners rely on lending agents, who manage their lending activity for a fee. The lending agent can be the custodian of the assets, known as a custodial lender, an asset manager, or a third-party contracted specifically to lend securities, known as a third-party or non-custody lender.

Brokers-Dealers
Broker-dealers, and prime brokers specifically, borrow securities directly as principal from lending agents or direct lenders on behalf of their clients, the end users. They typically provide securities lending services as part of a broader relationship that can include margin financing, trade execution, risk management, and other related services.

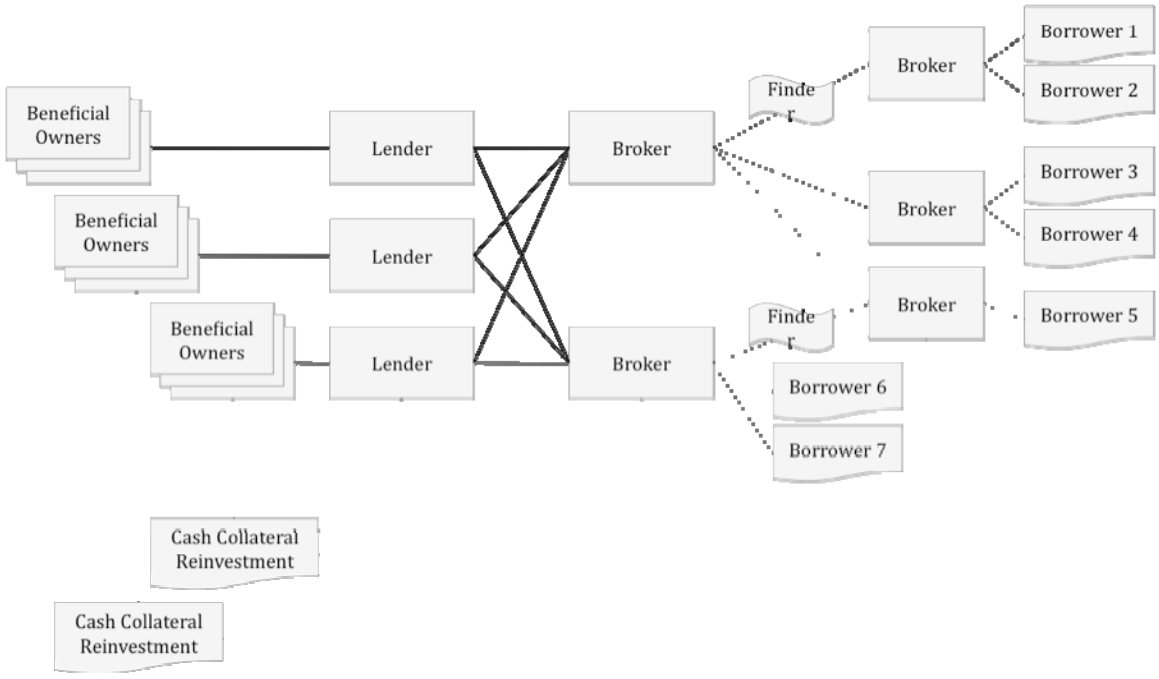
End Users
These are the ultimate borrowers of securities who require the securities to effect short sales, hedge, or facilitate settlements. End users include broker-dealers, market-makers, hedge funds and retail short sellers.

DEFICIENCIES OF THE CURRENT MARKET

To paraphrase Tolstoy, all efficient markets resemble one another, but each inefficient market is inefficient in its own way.[24] In the case of securities lending, while commercial conventions have allowed for a functional market, they can still be adjusted for current day risks, technology capabilities and updated regulatory objectives in a way that encourage industry-wide growth through capital efficiency and modernized market organization.

[24] Steil, Benn & Holly Stark. "Stock Lending: The Next Frontier for Electronic Trading." Efficient Frontiers, October 2008.

Figure 5: Over-the-Counter Market Structure



Commonly identified characteristics of the current market include:

1. *Poor transparency for end users:* As with any OTC market, the absence of standardized or centralized trade reporting, and multilateral, bifurcated wholesale and retail markets make it difficult for market participants to define and deliver transparent information to end-users.

2. *High search costs and inefficient pricing*[25]*:* The high concentration of supply and demand among a limited number of sources, pricing that reflects manual search costs and the need to disperse credit risk among multiple counterparties, in addition to the lack of a centralized price discovery mechanism, can lead to a distorted expression of market supply and demand for securities loans. As a result, prices for otherwise identical loans transacted at identical times can differ significantly across various, disparate liquidity pools.

3. *Significant obstacles to adequate regulatory oversight:* Transactions negotiated bilaterally between counterparties are difficult to regulate, as there is no central repository for transaction data. During the fall of 2008, the inability to monitor transactions was an important missing feature of the market as regulators were forced to simply ban all short-selling in financial stocks: the absence of actionable data compelled regulators to issue a blanket prohibition in lieu of a more targeted enforcement action that may have identified and

[25] "SEC Charges 38 Defendants in Multi-Million Dollar Stock Loan Scams". SEC Release 2007-192. Washington, D.C., September 20, 2007; Kolasinski, Reed, Ringgenberg. "A Multiple Lender Approach to Understanding Supply and Demand in the Equity Lending Market", December 2008.

addressed specific instances of illegality while allowing the rest of the market to operate.

4. *High technology and operational costs:* Securities lending has historically been viewed as an operational function built around legacy systems that have changed little in recent years, and vary dramatically from firm to firm. While the industry has made significant investments in improving processing efficiency, far fewer resources have been committed to price discovery, front-office integration or platform interoperability.

5. *No best-execution, performance benchmarking difficult:* The lack of real-time market-wide information has been a limiting factor in establishing best-execution metrics, and has made the performance benchmarking of service providers difficult to establish – concepts that have become second nature to investors in other, more structurally mature markets.

These commonly cited deficiencies are not the result of malfeasance or ill-intent; to the contrary, they have evolved because the informal set of rules that existed and developed failed to evolve to a rapidly-growing and increasingly important market. As a result (and unlike other areas of the capital markets), there has been little if any top-down focus on optimal market structure. The existing market has evolved incrementally over many years with negligible focus on keeping pace with structural changes in related markets structural improvements.

EVOLUTION TOWARD A CENTRAL MARKET

Markets begin developing at different times under different conditions. The state of technology, for example, was very different in the late 18th century, when the New York Stock Exchange ("NYSE") was founded, and the early 1930s, when the U.S. OTC stock market developed. The NYSE naturally evolved as a physically centralized floor-based auction system. The OTC market, on the other hand, emerged contemporaneously with the advent of long-distance telephony in the United States, allowing a decentralized, telephone-based marketplace to develop. The advance of computer networking technology in the 1960s facilitated the OTC market's transformation into the screen-based Nasdaq dealer market in 1971. The electronic dealer market structure, more heavily intermediated than the NYSE continuous auction structure, made sense for the small-cap stocks which defined the OTC marketplace at the time. Many of these stocks, however, became large-cap stocks over time, eliminating the logic behind dealer intermediation of all Nasdaq trades. Today, of course, NYSE and Nasdaq market structures, based on electronic order books, are virtually identical. Their ownership and governance structures are similar as well. Yet each exchange followed a very different route to reach this convergence.

The stock lending business evolved around the critical roles of two classes of intermediaries: the custodian banks that held stock for the beneficial owners, and the brokers who sought stock on behalf of their institutional clients who desired to borrow it. These transactions rose with the growth of hedge funds and, to a lesser degree, 130/30 funds, which greatly expanded the practice of short selling. In the absence of any overwhelmingly compelling reasons, the cost of trying to centralize and automate the stock lending process has historically exceeded the benefits. Today, that cost-benefit balance has rapidly shifted in favor of structural change. Reasons for this include:

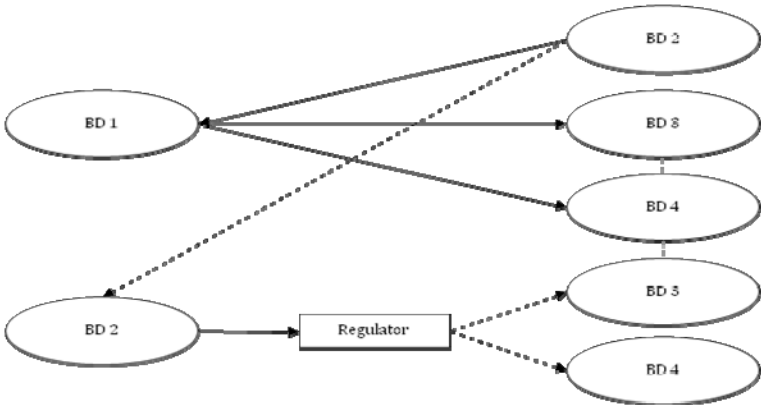
1. The importance of responding to the global call for increased regulation, market transparency and the centralization of credit[26]
2. A deeper awareness of the risk-adjusted return on securities lending for beneficial owners[27]

[26] World Federation of Exchanges. "Public Comment on Regulation of Short Selling". Letter to Secretary General of IOSCO, May 7, 2009; Group of Thirty. "Financial Reform: A Framework for Financial Stability". Washington, D.C., January 15, 2009.

3. Recognition of securities borrowing fees as a significant transaction cost consideration for investment managers[28]
4. Increasing focus on capital costs and balance sheet management by broker-dealers[29]
5. Increasing focus on counterparty risk by lenders, borrowers and intermediaries;[30] similar focus on the value of CCP risk exposure for investment banks[31]

Meanwhile, public awareness - if not concern - about systemic risk management and the structural inefficiencies of OTC financial markets has grown with reports of their massive size as well as the magnitude of financial losses – both realized and unrealized[32] – to which public investors are exposed. Fairly or unfairly, the focus of these concerns has been the credit default swap ("CDS") market, where aggressive steps have been taken to centralize trading activity and credit in an exchange or exchange-like environment that utilizes a CCP to mutualize counterparty risk. The benefits of trading and credit migration, whether partial or complete, from OTC to exchange-based CCP structures have been articulated by most supervisors, central banks, academics and working groups[33]

Figure 6: Regulators centralizing OTC market during default



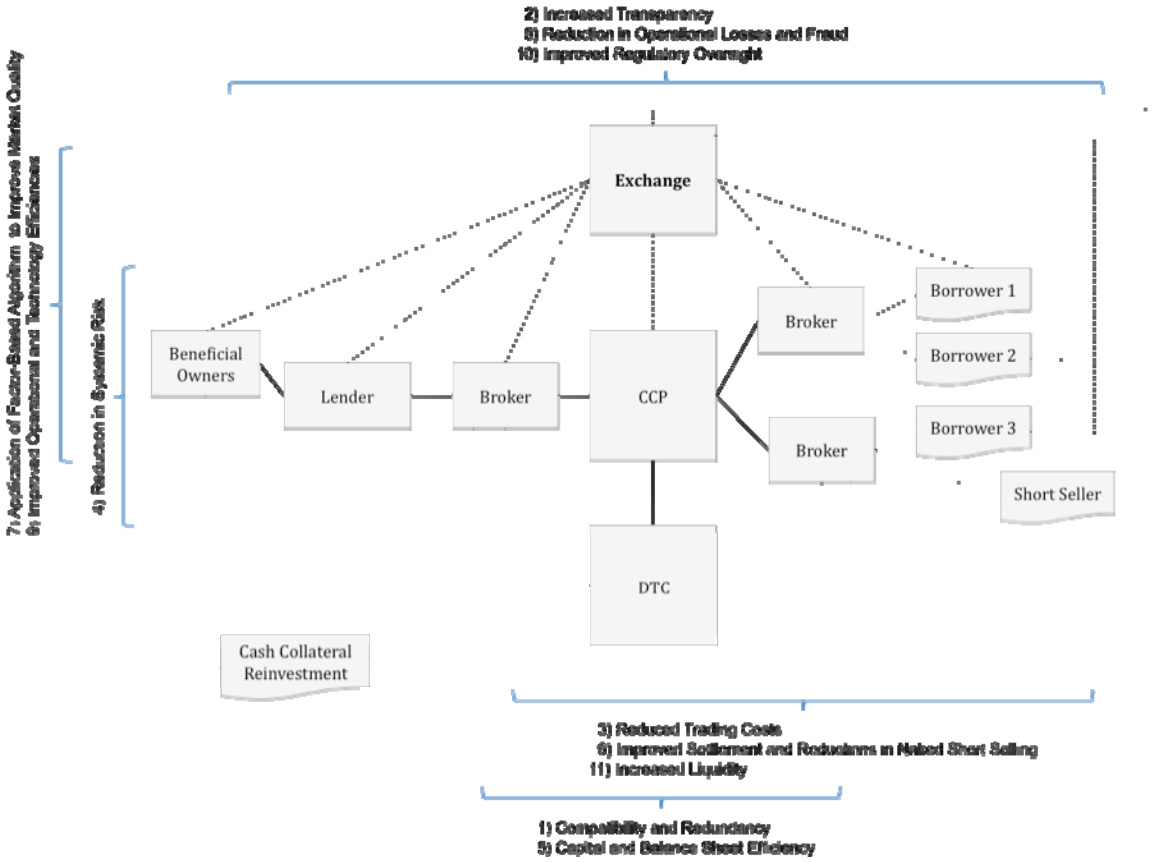
[27] PricewaterhouseCoopers LLP. "Recent Developments in Securities Lending: Are funds' lending programs at risk?" Point of View, February 2009 (http://download.pwc.com/ie/pubs/recent_developments_in_securities_lending.pdf); Mercer Investment Consulting, Inc. "Securities Lending Update" (September 19, 2008).
[28] Galper, Josh. "Securities Lending Exchanges in 2009". Finandium, LLC. Concord, MA. (March 2009).
[29] King, Matt. "Are the Brokers Broken?"Citigroup Global Markets Ltd. London, September 5, 2008.
[30] Aite Group, "Risk and Reward: Hedge funds changing views on counterparty relationships". Pershing Prime Services & The Bank of New York Mellon. (2008).
[31] Global Equity Research, "Counterparty Risk of Listed Derivatives: Options, Futures, ETFs and ETNs". JP Morgan Chase & Co., September 23, 2008.
[32] American International Group, Inc. "AIG Discloses Counterparties to CDS, GIA and Securities Lending Transactions", New York, NY (March 15, 2009); American International Group, Inc., "Payments Under Guaranteed Investment Agreements". Attachments A-D
[33] Most internationally recognized authorities have documented their public support for the organization of OTC trading markets, including:

- Federal Reserve Board of New York, Federal Reserve Announces Agreement for Central Credit Derivatives Counterparty, Kramer Levin Naftalis & Frankel LLP
- Financial Services Authority, "Financial Risk Outlook 2009", London 2009.
- World Federation of Exchanges. "Public Comment on Regulation of Short Selling". Letter to Secretary General of IOSCO, May 7, 2009
- Federal Reserve Board of Governors, Financial Reform to Address Systemic Risk, Chairman Ben S. Bernanke
- Securities and Exchange Commission, Remarks at the Security Traders Association of Chicago Mid-Winter Meeting, SEC, Elizabeth K. King
- President's Working Group, "President's Working Group Announces Initiatives to Strengthen OTC Derivatives Market", Fried, Frank, Harris, Shriver & Jacobson LLP
- Financial Industry Regulatory Authority, Testimony before the Committee on Banking, Housing, and Urban Affairs, FINRA, Richard Ketchum

It has been instructive to note, almost as a harbinger of these proposed changes, that throughout recent market dislocations, when OTC markets break down, they centralize, whether through a liquidation proceeding or a collective industry intervention. This centralization, while perhaps not the formal equivalent of a centralized and mutualized CCP market structure, has manifested itself as the functional equivalent. Formalizing this structure as the natural framework of the market – one that can co-exist with, complement and enhance existing over-the-counter conventions – is the opportunity before us as we consider how to modernize the securities lending industry.

BENEFITS OF A CENTRALIZED LOAN MARKET

Figure 7: Central Counterparty Architecture



A centralized Loan Market would improve the overall efficiency of the market in the following ways.

Reduced Fails to Deliver and Concomitant Naked Short Selling

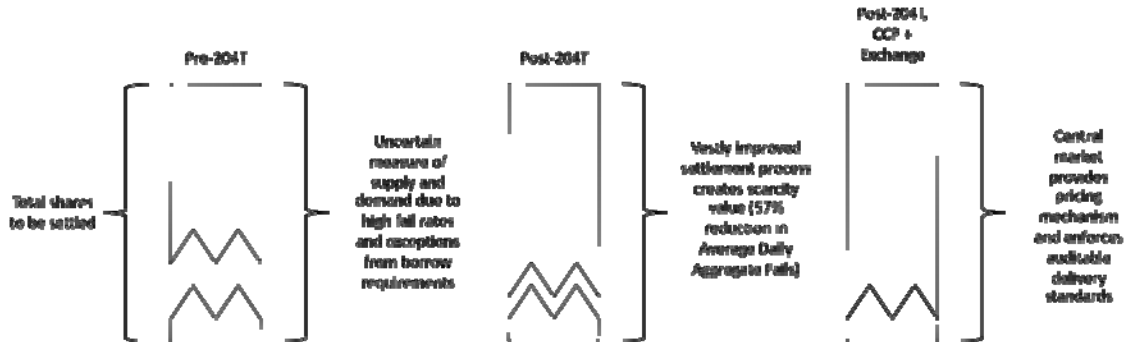
There are generally considered two types of naked short-sellers. The first is the trader who shorts a stock without any intention of ever borrowing and delivering shares to the buyer. This trader is a bad actor and

bad for markets, but this behavior is ultimately an enforcement issue, as opposed to a market issue, and difficult to preemptively detect. The second type is the trader who shorts a stock but cannot find the shares to borrow by settlement date – that is, a willing borrower without access to a supply of lendable shares. This is a market structure issue and can be addressed to a degree through the introduction of a centralized public stock Loan Market. Providing all market participants equal access to a stock Loan Market places the onus on the borrower of securities to demonstrate and document their intent or effort to secure shares to be borrowed, and in the end more accurately reflects the supply and demand dynamics of the lending market.

It is important for a regulated stock loan marketplace, systematically and as a function of the by-laws governing participation, to enforce codified regulations uniformly across all market participants. As a function of increased levels of automation in their securities processing, a centralized Loan Market can take steps to preemptively reduce the likelihood of a fail to deliver. In the interest of demonstrating how a Loan Market could implement preventative measures, please see Appendix A.

Lastly, a regulated Loan Market, complete with reporting and audit tools, can be integrated under existing rules as a market-based instrument used by regulated entities to satisfy their statutory obligations under short sale rules.

Figure 8: Settlement impact of 204T



Reduced Systemic Risk

Systemic risk refers to the risk or probability of breakdowns (losses) in an entire system as opposed to breakdowns in individual parts or components, and is evidenced by co-movements (correlation) among most or all the parts.[34] The systemic risks posed by securities lending can be viewed in terms of the inherent inter-linkages between credit counterparties important to the financial system, as well as the potential for obscured naked short selling in systemically important financial institutions to emerge as an idiosyncratic event that threatens the stability of the broader market.

Systemic Credit Risk

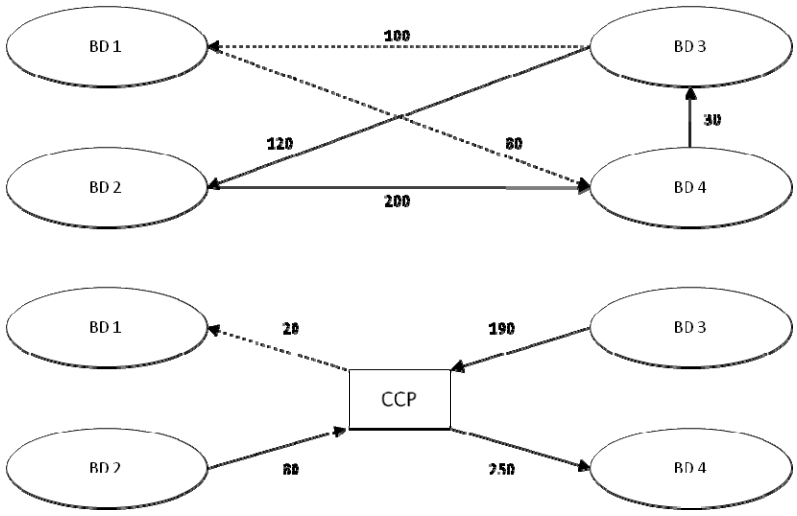
In OTC markets, firms set credit limits according to individualized analysis of counterparty risk. Typically, both gross and net limits are determined for each of a firm's trading relationships. In order to reduce their credit exposure, firms will typically enter into bilateral master netting agreements that define the close-out netting process for a particular group of traded products. In the event of counterparty

[34] Kaufman, George G. "Banking and Currency Crises and Systemic Risk: Lessons from Recent Events". Federal Reserve Bank of Chicago.

default under a netting agreement, offsetting positions would be used to calculate the net payable amounts due between parties. The effectiveness of bilateral netting is a function of two items: 1) the universe of eligible products included in the master netting agreement, and 2) the number of offsetting positions. Today, in the OTC market, the Master Securities Lending Agreement ("MSLA") serves as a master netting agreement for securities lending transactions and firms calculate their net risk exposure as the absolute difference in loans versus borrows against a single counterparty.

In the CCP model, firms face off against a single entity, the clearinghouse, and are governed by a single master netting agreement for all eligible products cleared by the CCP. Most clearinghouses have the ability to process many different types of correlated financial products and therefore an increased number of netting opportunities exist relative to bilateral netting. In this way, the clearinghouse transfers risk out of the bilateral network into a central hub where a firm's risk in one product is offset against other eligible exposures. The clearinghouse manages its own risk through the multilateral netting of positions held by different counterparties, in addition to other risk controls as described below.

Figure 9: Bilateral vs. Multilateral Netting



Typical securities lending counterparty risk is measured as the combination probability of a market increase in excess of the value of collateral collected, typically 2%, concurrently with the insolvency of the borrower[35]. CCP's typically have at least three incremental financial safeguards in place – a membership threshold, an excess margin fund and a clearing fund. As opposed to the bilateral credit convention, the CCP applies risk-based margins to both lenders and borrowers as a function of volatility, concentration risk and a number of other factors[36]. On any single position, this margin calculation will generate a requirement from both the borrower and lender that is likely to be well in excess of 2% for each party. More importantly, all buying (borrowing) and selling (lending) activity is portfolio margined, with greater portfolio diversity resulting in decreased risk for each individual counterparty (and the more likely that the blended margin obligation will be reduced for the clearing member). These margin procedures were an important method of preserving investor protections in derivatives products during the recent market turmoil – the failure of systemically important financial institutions did not result in investor losses in exchange-traded derivatives markets.

[35] Bank for International Settlements & International Organization of Securities Commissions. "Securities Lending Transactions: Market Development and Implications" (July 1999).
[36] http://www.optionsclearing.com/products/margin.jsp

Lastly, all mark-to-markets ("MTMs") are performed daily on an automated basis, and under certain conditions margin can be collected even more frequently. In the event that a CCP member firm is not able to meet its margin obligation, the CCP will use the member's clearing fund contribution to satisfy the deficit. If that clearing fund deposit is not sufficient, the balance of the clearing fund participants would contribute pro-rata to satisfy the deficit.

On a comparative basis, the probability of loss decreases in the CCP environment as a function of the excess margin collected and the remote likelihood that the clearing fund simultaneously defaults, while concentration risk decreases as the use of the CCP by its members increases.

Recent academic analysis of the push toward exchange traded, centralized clearing of CDS has resulted in some important observations about the factors that make central clearing effective[37], namely:

- Under certain conditions, a single CCP clearing a single product, such as credit default insurance, can increase rather than reduce systemic risk
- The participation of a minimum number of dealers, likely 30-40, is required for multilateral netting to prove superior to the bilateral netting that occurs in OTC markets
- In all cases, bifurcating clearing liquidity across multiple CCP's is less preferable as a means of reducing systemic risk

In January 2009, the OCC[38] expanded its business to include the principal intermediation and guarantee of stock loan transactions[39]. Through the margining process, this guarantee extends to counterparty default risk, MTM payments, cash corporate action payments, rebate payments and buy-in settlements – all of the counterparty risks considered in a typical securities loan.

Important distinctions should be made in consideration of a CCP for securities lending as proposed through OCC as it relates to observations, like those above, about the centralized clearing of credit instruments:

1. Through a common clearing fund, OCC clears multiple, 1:1 correlated products, such as equity derivatives and equity options. When these products are portfolio margined, it has the effect of reducing the overall risk exposure of the member
2. OCC has existing, participating membership of approximately 130 broker-dealers
3. OCC is the only active CCP for securities lending in the United States, and thus clearing is singularly centralized

Increased Transparency

CCP markets can operate with an open-architecture whereby firms search for one another through the use of electronic trading platforms. The price at which a transaction is executed is a true measure of a firm's willingness to pay, and as a result, provides better information flows throughout the network.

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[37] Duffie, Darrell. "Credit Derivatives Markets: Policy Issues". International Association of Financial Engineers. Standford University, April 28, 2009; Global Equity Research, "Counterparty Risk of Listed Derivatives: Options, Futures, ETFs and ETNs". JP Morgan Chase & Co., September 23, 2008; Duffie, Darrell and Zhu, Haoxiang, "Does a Central Clearing Counterparty Reduce Counterparty Risk," forthcoming. http://www.stanford.edu/~duffie/DuffieZhu.pdf; http://iafe.org/html/documents/DuffiePolicySlidesCDS.pdf

[38] The OCC, founded in 1973, is the world's largest derivatives clearing organization, and was the first clearinghouse to receive a 'AAA' credit rating from Standard & Poor's Corporation.

[39] Self-Regulatory Organizations; The Depository Trust Company; Notice of Filing and Order Granting Accelerated Approval of a Proposed Rule Change to Provide The Options Clearing Corporation with Settlement Services for Stock Loan Transactions Entered into Under The Market Loan Program, SEC Release No. 34-59298 (Jan. 26, 2009)

Transparency has become a much-obscured concept in recent years, however, and in order for transparency to be meaningful there must first be agreement on the nature of the information being made transparent. In the case of securities lending, lending and credit conventions have made wholesale market (lending from banks to brokers) and retail market (lending from brokers to end borrowers) information very difficult to normalize.

A regulated, centralized Loan Market produces valuable trading information for the following reasons:

- all investors have equal access to price discovery in the central market
- credit is universally and equally provided through the CCP mechanism
- the product being traded is standardized among all participants
- all participants are margined on equal terms based on their actual MTM risk (in contrast to a subjective determination of a the participant's relative credit standing)

A single lender and a single borrower transacting in a common instrument in a common credit environment defines the notion of transparency as something meaningful to all participants, and supports one of the primary benefits of a centralized Loan Market.

Greatly Improved Regulatory Oversight

A central Loan Market can facilitate compliance with regulatory requirements. Implementing regulatory changes at the market hub, rather than at each individual spoke on the hub, can both be more effective and cost efficient for participants, in contrast to the fragmented architecture of the market today, where new directives must be adopted across thousands of disparate internal systems. A central Loan Market can also facilitate compliance with recordkeeping and reporting requirements. Centralized borrowing and lending activity that takes place through a CCP will be subject to well-understood and documented transaction processes and procedures. These codified processes extend from pre-transaction, to transaction, to post-transaction activity, and provide an electronic, standardized and auditable source of information on securities lending transactions.

Capital and Balance Sheet Efficiency

The introduction of a CCP creates opportunities for the broker-dealer community to address important and timely risk, capital and balance sheet concerns. Detailed explanations of these issues can be found in Appendix C.

Reduced Trading Costs

In 1987, Nobel-prize-winning economist Robert Solow famously remarked that "computers are found everywhere except in the productivity data." Whereas tremendous advances documented in US productivity in the 1990s were a relief to economists who had fretted over this apparent "Solow Paradox," it remained difficult to quantify the contribution of computers and automation.

Influential academic work has affirmed these contributions as they apply to securities trading. Specifically, market data and applied standard econometric techniques were utilized to measure the efficiencies gained from trading automation, as well as declines in the cost of trading on volumes and the cost of capital to listed companies.[40]

[40] Domowitz, I., and Steil, B., 1999. "Automation, Trading Costs, and the Structure of the Trading Services Industry, Brookings-Wharton Papers on Financial Services.

The conclusion was that automation of trading in NYSE and Nasdaq securities, through the use of non-intermediated electronic trading systems then known as "electronic communications networks" ("ECNs"), resulted in trading cost reductions of 28-33% during the transitional stages. Further investigation found that for each 10% decline in trading costs, trading volumes rose 8%: an 80% elasticity. As this finding was based on trading in the late 1990s, prior to the dramatic rise in statistical arbitrage and high frequency hedge funds, it is likely that this figure would be considerably higher today – a suspicion which would appear to be borne out by the dramatic rise in exchange trading volumes, almost invariably exceeding analyst expectations, following each successive wave of trading and clearing system reforms. Finally, the research concluded that each 10% decline in trading costs resulted in a cost-of-capital savings to blue-chip listed companies of 1.5%: a 15% elasticity. This is a very significant effect, given the pace at which trading costs have been falling year-on-year over the past decade.

Of course, it is impossible to extrapolate directly from the cash equities trading market to the stock lending market, but there is strong reason to believe that the broad effect would be similar, as it was with equity options trading following the introduction of electronic options markets.[41]

Automating the stock lending process – that is, bringing lenders and borrowers together in a regulated, centralized trading platform should lower the cost of borrowing. This will reduce the cost of portfolio management strategies, stimulating more stock trading and investment. It will further increase the returns that pension and mutual funds earn on their lending, raising returns for the fundholders. All of this contributes to further lowering the cost to companies of raising capital in the equity markets[42].

Separately and unlike more efficient markets where supply reacts to demand and financial products become "more expensive" or "less expensive", it is an unusual, idiosyncratic dynamic of the securities lending market that securities in fact become "hard to borrow" as the number of securities borrowers increase. A corollary outcome for the average investor might be that a security could become "hard-to-buy" if the number of stock purchasers increased in number, which of course isn't a concept familiar to more mature markets – most all financial products are available at a price.

In the normal course of events, "hard to borrow" stock would simply be more expensive to borrow than "easy to borrow" stock. This type of equilibrium pricing should result from an effective Loan Market where borrowers and lenders have the operational flexibility to express pricing sentiment in real-time. This concept, as an enabling tool to facilitate "intrinsic value" lending models, is an important facility for lending agents and beneficial owners. Additionally, this equilibrium pricing dynamic should have a related and positive effect on settlement inefficiencies.

Higher prices for hard-to-borrow securities tend to induce more supply to come into the market, either through new inventory being made available or through the recall of existing loans. To the extent that this dynamic exists, publicly disseminated information can lead to trading opportunities where lending revenue income outweighs any cost considerations surrounding failure to deliver, which should lead to naturally diminishing fails over time. Price transparency is, therefore, far more than a convenience issue for borrowers and lenders – it means that supply and demand will always tend to stay in balance (i.e. no shortages). In other words, better information should make stock loan supply more elastic in the economic sense.

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[41] Weber, Bruce W. "Adoption of Electronic Trading at the International Securities Exchange". London Business School, November 19, 2004.
[42] Steil, Benn & Holly Stark. "Stock Lending: The Next Frontier for Electronic Trading". Efficient Frontiers LLC, October 2008.

Improved Operational and Technology Efficiencies

A central Loan Market can reduce back office complexity by replacing redundant, independently executed, firm specific functions with a uniform set of standardized processes to increase settlement efficiency and the reduction in fails. Automation of trade matching and straight-through processing can reduce manual errors, and automated flows between trading, clearing and settlement can allow traders to view the status of trades in real-time as well as provide information for intraday reporting of open positions.

A centralized Loan Market can provide standard open contract maintenance services including the facilitation of:

- recalls (both partial and full)
- returns (both partial and full)
- rerates
- buy-ins
- corporate action processing
- daily rebate accrual and rebate payment
- daily MTM

Most loan maintenance functions reflect formal or informal industry standards, yet multiple bilateral securities lending relationships still often dictate redundant, independent processing with some variation by each firm against each of their counterparties. Centralizing these functions has the potential to deliver significant overhead reduction while improving overall recordkeeping accuracy.

The securities lending market has recognized the value of centralized loan recordkeeping, accounting and contract comparison as evidenced by the success of specific service providers. A central Loan Market would encourage integration with established vendors providing loan accounting and recordkeeping services with the goal of achieving a seamless process from order entry through books and records maintenance.

In addition to the operational efficiencies realized by automating and centralizing processes, the CCP guarantee can reduce counterparty default risk, corporate action settlement risk, rebate payment risk, MTM payment risk, securities settlement risk and buy-in settlement risk.

Application of Factor-Based Algorithms to Improve Market Quality

The OTC market for securities lending relies on a complex set of relationship-based metrics which encourage or discourage certain trading behaviors that affect market quality. Generally speaking, positive behavior is beneficial for generating liquidity and preserving open interest, while negative behavior is detrimental for liquidity and open interest. The ability to avoid trading with a less desirable counterparty is a requirement fundamental to efficient, high quality markets. Individually measuring each counterparty's behavior can directly affect trading decisions that optimize the quality of the market.

Positive securities lending trading behavior can include the following characteristics (the inverse of each can be inferred to be embody negative behavior):

- Dependable history of delivering securities to make settlement (fewer fails and buy-ins)
- Longer loan or borrow duration (i.e. fewer recalls or returns)
- Lending desirable securities to borrowers

- Borrowing substantial amounts of securities from lenders
- Limiting the re-pricing of open loans to commercially acceptable levels

Positive or negative behavior can generally affect trading decisions by lenders and borrowers, such as:

- Loan or borrow allocations
- Recall or return allocations
- Open loan re-pricing requests

To create the most efficient market, it is important for any electronic, exchange-based structure to reward positive behavior while preserving price priority. In particular, a factor-based algorithm can discourage undesirable behavior such as settlement failure, as well as diminish negative trading behavior within the central Loan Market, or reduce its occurrence overall. For an example of how a factor based algorithm could function in a Loan Market, please refer to Appendix D.

Reduction in Operational Losses and Fraud

The largest pre-Lehman Brothers Securities Investor Protection Corporation ("SIPC") liquidation[43] resulted from the bankruptcy of a registered clearing firm engaged in fraudulent securities lending transactions. On September 27, 2001, SIPC initiated the liquidation of MJK Clearing due to insolvency related to improper processing of MTM payments on securities loans. As of the date of the liquidation, MJK had paid out $70 million more in MTM payments than it had received from one of its counterparties. While failing to receive MTM receivables on one side of the trade, MJK funded MTM payments to the other side by borrowing cash against customer margin securities, replacing the customer funds on a weekly basis to comply with the firm's 15c3-3 Reserve Account requirements. Ultimately, MJK continued paying MTM payments out of customer funds until the firm ran out of margin securities to borrow against.

This activity (i.e. suppressed MTM payments) is not possible in a CCP model as the first occurrence of a missed MTM payment would result in a default scenario at the clearinghouse. Any losses related to the first missed mark would be covered by the clearing member's margin collateral and then additional clearinghouse funds should they be required. DTC's experience during the Lehman crisis is instructive in this regard:

"The liquidation of Lehman was complex, involved multiple asset classes, and required a methodical approach to mitigate potential losses from outstanding trading obligations," said Donald F. Donahue, DTCC chairman and CEO. "Without question, our ability to manage risk and see exposure from a central vantage point was instrumental in helping us ensure that market risk – and systemic risk – was avoided."[44]

Increased Liquidity

The aggregate affect of these benefits results in the most important improvement of all, which is increased liquidity in financial markets.

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[43] As of September, 2001, Deloitte & Touche, "Study of the Failure of MJK Clearing, the Securities Lending Business and the Related Ramifications on the Securities Investor Protection Corporation". May 2002.
[44] http://www.aleablog.com/dtcc-successfully-closes-out-lehman-bankruptcy/

- A CCP removes supply and demand trade-flow bottlenecks by normalizing the credit relationship between its members.
- The effect of reduced capital costs and more efficient balance sheet usage enables firms to do more business and "grow the pie".
- A central market that facilitates public access - particularly for market-makers and those market participants who borrow or lend securities in order to provide liquidity to related markets – is essential in a world without market-maker delivery exceptions[45].

These benefits inure to existing participants as new, safer and more cost effective trading opportunities.

Compatibility and Redundancy

In OTC financial networks, compatibility is often defined by legal contracts as opposed to technical standards, as is the case in telecommunications networks. However, legal contracts are bilateral agreements and are not transferrable across the network; thus there is no compatibility, or redundancy between nodes in the network. As a result, OTC networks like securities lending are exposed to the failure of a single node within the network (i.e. American International Group[46], MJK Clearing).[47] In networks, survivability is achieved through the adoption of standard protocols; for example, the establishment of the Internet Protocol (IP)[48] as a means to reroute packets around failed nodes in data networks.

In financial networks, standard protocols can be achieved through the establishment of harmonized legal contracts. In CCP models, these arrangements are facilitated through membership organizations like clearinghouses and exchanges. The compatibility of all firms connected to the central clearinghouse allows transactions to be easily re-routed via redundant links in the network should a single node fail. Thereby, the CCP architecture has improved survivability as compared to the OTC network.

For example, OTC securities lending transactions are governed by the MSLA. Consider a three-party network where the following MSLA contracts exist: A-B, B-C, (note the lack of contractual relationship between A and C. In a typical OTC transaction, A lends stock to B who then on-lends to C). In the event that B fails, there is no link between A and C. Typically, a bankruptcy trustee or other central agent will facilitate the resolution of any outstanding claims against the failing party. In the case of the CCP model, the central agent is the clearinghouse. Under the same scenario, the compatible nature of the CCP agreements allow for uninterrupted business operations between A and C.

Compatibility is important in exchange-based, CCP structures as it relates to the standardized nature of the trading product. All markets claim degrees of product standardization or customization, making some easier to centralize than others. Debates surrounding the efficacy of standardization in certain derivatives markets typically revolve around this point.[49] The ease of centralizing the standardized portion of equities lending and borrowing in the United States results from the common use of cash as the primary form of collateral, which distinguishes the U.S. from international markets where non-cash collateral is more

[45]Office or Economic Analysis Memorandum, "Impact of Recent SHO Rule Changes on Fails to Deliver", April 16, 2009.
[46] American International Group, Inc. "AIG Discloses Counterparties to CDS, GIA and Securities Lending Transactions". New York, NY, March 15, 2009.
[47] Securities Investor Protection Corporation. "Review of SIPC Risk Profile and Practices: The MJK Clearing Event, the Securities Lending Exposure, Risk Management Practices and Capital Requirements". Fitch Risk Management, January 31, 2003; Securities Investor Protection Corporation. "SIPC: Pending Settlement Announced in MJK Clearing Litigation". Minneapolis, MN, December 22, 2005.
[48] Vinton G. Cerf, Robert E. Kahn, "A Protocol for Packet Network Intercommunication", IEEE Transactions on Communications, Vol. 22, No. 5, May 1974 pp. 637-648
[49] Wallison, Peter J. "Regulation without Reason: The Group of Thirty Report". American Enterprise Institute for Public Policy Research, January 2009.

prevalent. Standardizing securities loans benefits all market participants in their ability to price and benchmark trading activity, in addition to its beneficial impact on operating efficiencies.

RECOMMENDATIONS FOR A MATURING REGULATORY STRUCTURE

Regulatory changes so far implemented in response to the recent market crisis have widely been considered effective, particularly Rule 204T's success in reducing delivery failures. However, Rule 204T and the re-regulation of the short-sale process through circuit breakers and bid tests does not address the underlying problems in the securities lending market that contribute to short sale problems.

1. The re-regulation of short sales offers the single best opportunity in recent history to address the structural deficiencies of the short sale process and create a tool to assist in systemic risk oversight.

2. In contrast to the jurisdictional challenges of migrating various OTC derivatives products to exchange trading and centrally clearing instruments, an equivalent product of equal or greater importance to financial markets is already able to operate under the SEC's regulatory authority.

Minimum Regulatory and Operating Standards for a Recognized Loan Market

In the interest of establishing well-understood operating industry guidelines and fostering competition among market centers, it is important to define the properties of a Loan Market that would receive favorable regulatory treatment. These properties should reflect minimum standards for regulatory oversight and the robustness of the risk management, clearing and settlement processes:

- The market should be operated as an SEC registered exchange, or an SEC registered Alternative Trading System ("ATS") broker-dealer
- Clearance and settlement processing should be provided by a highly-rated SEC registered securities clearing entity
- Proven risk-based margining systems should support clearance and settlement processing
- User agreements should contemplate preventative measures and specific steps to address chronic failures to deliver by participants

Rule 204T

An analysis of the temporary interim final Rule 204T begins with an observation of what its success actually means for markets. There is universal agreement on the fact that settlement failures should not exist within an efficient market. Settlement failures, particularly before the elimination of excepted delivery requirements, make any measure of supply and demand imperfect (this was particularly true before the elimination of excepted delivery requirement). Efficient settlement within the securities lending framework creates truer measure of the supply and demand of securities borrowed and lent. Said another way, a more accurate measure of supply and demand establishes scarcity value.

Scarcity value is a critical piece of an efficiently regulated, centralized loan market, given its effect as a barometer of the market for short sales.

- Scarcity value is expressed in terms of the securities lending rebate rate, the most important indicator of the value of an underlying security and a consequential revenue and cost driver in the

practice of short selling[50]. As a security becomes harder to borrow, i.e. more expensive to short, issuers and beneficial holders of that security become better informed about the value of their asset or the trading interest in their company. Understanding and being able to act on this information is of critical importance to investors and corporate fiduciaries.

- Changing attitudes on the risk-adjusted return of securities lending may pull lenders away from the yield earned on cash reinvestment, refocusing attention on the ability of the lender to receive the best rate for security being loaned, and for that, a public market that maximizes the number of buyers (borrowers) and sellers (lenders) is the optimal pricing mechanism.

- The removal of the market-maker exception under Reg SHO whereby option market-makers were excepted from the requirement to borrow shares they sold short, has required these players to enter the market for borrowing stocks, the cost and availability of which is a determining factor in their ability to provide liquidity back to other financial products.

In adopting Rule 204T, the SEC sought to address longstanding issues with fails to deliver securities by settlement date. It had previously sought to address large and protracted fails to deliver by applying the penalties of Reg SHO to a relatively small number of "threshold securities." In adopting Rule 204T, the SEC drew on a number of concepts from existing Reg SHO, but applied them to all securities in a dramatically compressed time frame. As a result, practical issues have arisen that can be addressed by modifying the operation of the Rule where doing so would preserve the purposes and benefits of the Rule.

In particular, Rule 204T can be modified to improve its functioning and to benefit the stock lending market through three main changes. The first change would be to recognize a stock borrow transaction in an automated, CCP-backed Loan Market as pre-fail credit. The second change would be to acknowledge this type of stock borrow transaction as an arrangement to borrow. And the third change would be to provide for this type of stock borrow transaction as a remedy for a fail under the Rule. These changes are discussed in greater detail below.

1. Pre-Fail Credit

The FAQs for the Rule make clear that "pre-fail credit" in the form of a stock purchase transaction applies to the calculation of whether a participant in a clearing agency has failed for purposes of the Rule on settlement date, even though the transaction will not have settled in time to prevent the fail. However, the Rule does not recognize verifiable transactions to borrow securities effected in a market that has procedures in place that produce a strong likelihood of settlement as satisfying the pre-fail credit requirements; rather, borrowed securities are expected to reduce or prevent the fail itself. Thus, even if the securities necessary to avoid a fail were borrowed before the opening of trading on T+4 in a market with reliable settlements, but received moments after the opening of trading on T+4, the participant would have violated the Rule and be subject to its penalties.

The Commission can make the Rule more workable, while also encouraging the use of automated stock lending systems backed by a CCP, by giving pre-fail credit to a Qualified Borrow for same day delivery that is effected in a centralized Loan Market that has strong protections against failing on the stock loan transaction, an automated audit trail, and the backing of a central counterparty, and that has not failed. In particular, the Commission could provide that a Qualified Borrow will qualify for pre-fail credit if it has

[50] Amendments to Regulation SHO, SEC Release No. 34-58773 (Oct. 14, 2008) and 73 FR 61706 (Oct. 17, 2008).
(12) "sellers sometimes ...avoid borrowing costs associated with short sales, especially when the costs of borrowing stock are high"; (11) "concerned about sudden and unexplained declines in the prices of equities generally"...

been executed before the opening of trading on the day following settlement date ("T+4") but has not yet settled.

2. "Arranging to Borrow"

Once a broker-dealer enters the "penalty box" after failing to settle in a security without remedying the fail before the opening of trading on T+4, the broker-dealer must borrow or arrange to borrow the security before effecting a new short sale trade. The Commission can achieve its objective of ensuring the broker-dealer will not fail again on its trades, while encouraging a stronger stock loan system, by confirming in the adopting release for the Rule that a broker-dealer engaging in a Qualified Borrow would satisfy the Rule's definition of "arranging to borrow" before a short sale.

3. Remedying a Fail

Long Sales. The Rule provides that fails resulting from long sales and fails resulting from market-maker transactions must be closed out by the purchase of securities no later than T+6. However, the Rule does not allow borrowing of securities to meet this requirement. The Commission was not explicit as to why a borrow transaction was not an acceptable means of satisfying this close-out requirement even though a borrow transaction would be settled days before a stock purchase transaction.

Borrow transactions may not have been included due to the uncertainty that the borrow would be completed, or to increase the penalty value of failing to settle on T+3. The former purpose can be addressed by permitting stock borrows in a system with a high probability of completion to satisfy the requirement. The latter purpose can be addressed by taking enforcement action on the violation directly, rather than causing delay in closing out the fail by only recognizing a stock purchase rather than a stock borrow transaction that settles more quickly. Thus, the Commission can achieve its objective of ensuring the borrow is completed, while encouraging a stronger market structure, by recognizing a Qualified Borrow as satisfying the close out of the long sale fail.

Penalty Box. Once in the "penalty box" after failing, broker-dealers must continue to pre-borrow for short sales until they have purchased securities sufficient to cover the fail and that securities trade has cleared. The Commission can achieve its objective of imposing a penalty and cleaning up the fail, while encouraging a stronger stock loan market, by providing in the Rule that the broker-dealer can escape from the penalty box not only by purchasing and settling securities of like kind and quantity as the fail, but alternatively by engaging in and settling a Qualified Borrow of like kind and quantity sufficient to clean up the fail. In this case, the borrowed stock would have to be received before the Rule's restrictions would be lifted.

In sum, the Commission can further the purposes of the Rule while fostering new sources of stock loan liquidity for market participants by revising the Rule to take into account stock borrow transactions effected in a central Loan Market that has strong protections against failing on the stock loan transaction, an automated audit trail, and the backing of a CCP. By encouraging the development of efficient, reliable markets for stock loan, the Commission will ultimately decrease the number of fails in the market and help achieve the purposes of the Rule.

Reg SHO

Rule 203(A), Loan Market as locate facility

The reliable nature of liquidity present in a central Loan Market, combined with the Loan Market's ability to manage an open order book of supply, demand and the transactional link between counterparties could allow for the broader broker-dealer community and their underlying customers to satisfy locate requirements under Reg SHO through an auditable, documented process. Moreover, a central Loan Market could easily be modified to provide a venue for locates where electronic requests for locates could be submitted to the Loan Market, and set off against available inventory.

In important ways, this facility could be employed to bridge the current challenge of marking inventory that has been made available to locating parties on Trade Date (T+0). To make the locate requirements effective, locates should not be provided repeatedly based on the same underlying inventory. However, there is no efficient way to track and decrement the available inventory in the existing OTC stock loan market. A central Loan Market overcomes this problem, as it overcomes other problems inherent in a decentralized OTC market.

Rule 204T, proposed alternatives for potential pre-borrow facilitation

The industry has debated the relative merits of a pre-borrow requirement prior to the short sale, which could conceivably take a variety of different forms. Arguments for a requirement appear to hinge on the benefits of ensuring that each share sold short has clearly been paired with a corresponding share available to be delivered to satisfy the stock borrow, and the retarding effect of naturally occurring equilibrium between securities lending supply and demand that would occur in the event of market volatility. Arguments against the requirement point out that borrowing certain stocks, particularly general collateral stocks, may in fact lead to increased borrow costs overall, reduced securities lending liquidity and the potential for "hording" certain securities as they become harder to borrow.

Without commenting on the substance of either view, the role of a Loan Market, as with any organized market mechanism, is ultimately to implement and enforce uniformity and standardization in the transaction process. Should any of the various pre-borrow proposals be implemented as part of the regulatory process, a Loan Market would serve to put those rules into practice, and serve as an instrument for participants to document and facilitate their compliance, similar to its use for locates discussed previously. Further, a publicly accessible Loan Market would provide equal access to borrowable securities to all participants in their efforts to comply with such a rule, were it to become required. In the absence of a pre-borrow requirement, the Loan Market, through preventative operational steps it can take to increase the reliability of settlement and the auditable nature of Loan Market transaction history, should positively address some of the concerns held by proponents of the pre-borrow requirement.

Reg NMS

The National Market System was updated by Reg NMS in 2007. Updates to the original principles around organized U.S. markets, while perhaps not having direct applicability to the securities lending market, can help to establish clear guidance and direction in defining some of the governing features of markets generally and a framework within which to consider a modernized stock loan market structure.

Rule 611, "Order Protection Rule"

Public investors saw dramatic improvements following the introduction of order handling rules that required customer limit orders to be displayed in a public market as a means of ensuring best execution.

Providing borrowers and lenders similar access to displayed liquidity, under certain conditions, could lead to an improved overall liquidity pool while providing retail and institutional borrowers or lenders the best prevailing market price. The Order Protection Rule encouraged the display of electronic quotes in public markets, to gain the benefit of price protection. A Loan Market may enable similarly positive results to occur where the concept may not otherwise even be imaginable.

Rule 610, "Access Rule"

One obstacle to strengthening public quotes and best execution of stock borrow orders is the lack of standard practices regarding quotes and attendant fees. The Commission could remedy this problem by standardizing quote conventions for stock loan markets, by either making these quotes net of fees or by specifying the maximum fee that can be added to the published quote.

Rule 603, "Distribution and Display Rules governing Market Data"

The experience of the equity and options markets has been that volume increases dramatically, while efficient liquidity providers are rewarded. The structure of a Loan Market being similar to other familiar market structures across the capital markets, this dynamic would be expected to repeat itself to the benefit of public investors.

Capital Treatment

A recognized Loan Market will bring signal benefits to the securities lending industry. Broker-dealer participants in a Loan Market should be encouraged in their participation by the positive effect of improved risk management through the margining conventions of the CCP, in addition to the resulting capital efficiencies from CCP credit exposure and vital investor protections afforded under segregated accounting rules. A summary of these benefits can be found in Appendix C.

Importantly, margin conventions also create opportunities to improve customer protections such as cross margining with other markets and products, which reduces risk and encourages liquidity provision in the cross-margined markets and products

Concepts for Further Consideration

Interconnectedness of central Loan Market to equity cash and derivatives markets

The "front office" to "back office" divide between underlying cash markets and the securities lending market creates unnecessary costs and distorts trading, both in limiting valuable trading opportunities and allowing abusive naked short selling. Lending and borrowing costs directly affect trading decisions and liquidity provision in related cash and derivative markets. Direct connectivity between a central Loan Market and equity cash and derivative markets can provide for more efficient market operations, increased liquidity and better informed investors.

CONCLUSION

To paraphrase a familiar call to action, "We have already moved."[51]

Transformative innovation is historically adopted during dramatic changes in the traditional economic, technical or regulatory contexts of industry. In the case of securities lending, that time is before us, as the virtues of capital efficiencies and elevated risk management have dovetailed with regulatory imperatives, transparency initiatives and demands on technology in such a way that everyone – lenders, dealers and borrowers – stand to benefit. This is truly a unique time and opportunity for beneficial changes to be brought to our markets.

The implementation of Rule 204T, primarily designed to address failures to deliver securities by settlement date, represents an important first step in curbing abuses in the securities lending market. It has, in fact, succeeded in reducing the overall level of fails in equity securities and the potential for abusive naked short selling in these securities.

Yet, true short sale reform will require substantive structural changes in stock lending aimed at imposing a disciplined regulatory and supervisory regime. The Quadriserv Proposal would accomplish this critical objective through the adoption of an exchange-based, Loan Market utilizing a highly rated CCP which – while new to securities lending – has proven its value across nearly every other area of the capital markets. The improvements would be clear: a market architecture through which regulations can be imposed and enforced, transparency, and greatly enhanced efficiencies, among others.

About Quadriserv, Inc.

In January 2009, following nearly a three-year technology development and regulatory approval process, and in partnership with both The Options Clearing Corporation ("OCC")[52] and the Depository Trust Company ("DTC")[53], Automated Equity Finance Markets, Inc. (as "AQS", a central Loan Market) processed the first centrally matched, cleared and settled securities lending transaction. This milestone represented what many consider to be a seminal achievement on the path to structural reform, modernization and the organization of this increasingly important financial market segment.

The following series of developmental milestones have led to the implementation of the AQS marketplace for stock loan:

1. **SEC rule change approvals**: OCC and DTC each filed rule changes[54] required to support a centralized Loan Market, and those rules were approved on January 22 and 23, 2009, respectively
2. **FINRA approval**: AQS was approved by The Financial Industry Regulatory Authority ("FINRA") as a broker-dealer, effective December 22, 2008
3. **SEC registration filings**: AQS registered with the Securities Exchange Commission ("SEC") as an Alternative Trading System ("ATS"), effective January 29, 2009

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[51] Archipelago Comments: Regulation NMS Release No. 34-49325 (Sept. 24, 2004)

[52] The OCC, founded in 1973, is the world's largest derivatives clearing organization, and was the first clearinghouse to receive a 'AAA' credit rating from Standard & Poor's Corporation

[53] The Depository Trust & Clearing Company provides clearance, settlement and information services for equities, corporate and municipal bonds, government and mortgage-backed securities, money market instruments and over-the-counter derivatives; the Depository Trust & Clearing Company processes the cash and securities movements for all securities loans processed through AQS

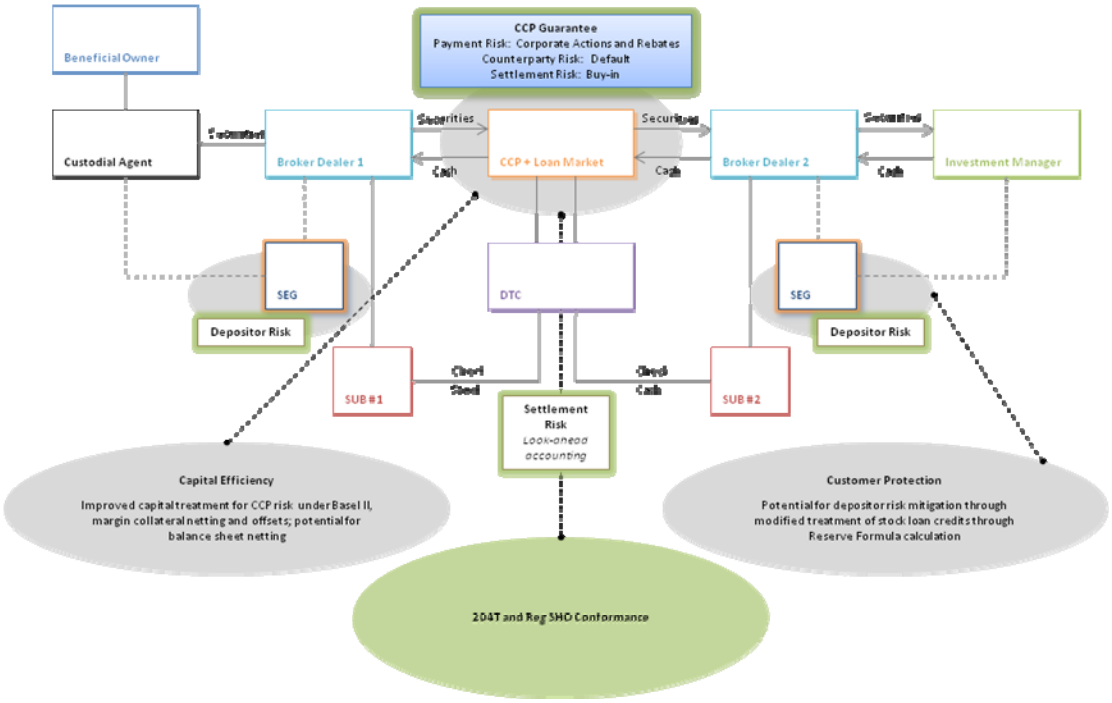
[54] "Self-Regulatory Organizations; The Depository Trust Company; Notice of Filing and Order Granting Accelerated Approval of a Proposed Rule Change to Provide The Options Clearing Corporation with Settlement Services for Stock Loan Transactions Entered Into Under the Market Loan Program" SEC Release No. 34-59298 (January 26, 2009)

4. **OCC Membership**: AQS and OCC entered into an Agreement for Clearing and Settlement Services and was subsequently approved as a Participant Exchange of the Options Clearing Corporation on December 22, 2008, becoming the eleventh registered participant exchange in OCC's history
5. **Collaborative development**: Quadriserv, through its subsidiary AQS, has worked diligently in collaboration with lenders, broker-dealers, borrowers, global exchange market centers and technology vendors both as shareholders and users to establish a consortium of liquidity providers and to facilitate adoption of the AQS marketplace
6. **Membership, policies and procedures**: Cooperatively, with market participants, established operating policies, procedures and rulebooks that govern access and use of AQS
7. **Infrastructure and technology development**: Completed development, testing and implementation of trading, risk management and middle office clearance and processing systems
8. **Clearing integration**: Completed integration effort to establish clearing link with OCC
9. **Settlement integration**: Completed integration effort to establish settlement link between AQS, OCC, DTC and Loanet, a key industry vendor of books and records processing systems to the broader broker-dealer community
10. **Industry input on market operations**: Established process to incorporate industry input into market operations through representation of borrowers, lenders, intermediaries and vendors on Quality of Markets, Technology and Operations, Regulatory and Compliance and Innovation committees
11. **Launched live trading environment**: Executed the first ever centrally traded, cleared and settled securities loan transaction on January 30, 2009
12. **Expanded membership and initial trading volume**: Continued to grow the user base and transaction level ahead of a public launch forthcoming this quarter

Like many capital markets innovations, AQS was conceived as a private sector initiative to improve structural market deficiencies for the benefit of the investing public. What is unique and noteworthy is that AQS introduces a true exchange-based, CCP structure to the securities lending industry at precisely the moment in time when technology, regulation, risk and key market events have converged to create an opportunity where all industry participants stand to benefit.

Having set the foundation for a central Loan Market to evolve and grow, we have herein put forth a simple set of steps that will lead to a dramatic improvement in the quality and safety of securities markets for the investing public, and a more liquid, robust, capital efficient and operationally efficient market for industry participants.

Figure 10: A Modernized Market for Securities Lending



Quadriserv has completed the most difficult work required to implement this modernized market structure, the key elements of which include:

1. Innovation that reduces risk and increases opportunities for industry growth
2. A market structure that is exportable to other geographies and regulatory regimes struggling with similar challenges as to how best to organize securities lending and borrowing markets
3. The clear benefits of centralized credit through a CCP and the interconnected benefits of a transparent public market
4. The ability to facilitate connectivity between related financial markets, such as cash equities, equity options, equity derivatives and credit markets

These positive attributes are necessary to usher the securities lending market into the 21st century. We look forward to working with key stakeholders to speed their adoption, and to help ensure that the securities lending market is optimized to serve the investing public going forward.

APPENDIX

Appendix A: Example of Improved Settlement Reliability in a Regulated Loan Market

Appendix B: Comments in Support of OTC Trading Practice Reform

Appendix C: Detailed Analysis of Certain Proposed Capital Treatments

Appendix D: Factor Based Assignment Algorithm

APPENDIX A: IMPROVED SETTLEMENT RELIABILITY IN A REGULATED LOAN MARKET

One framework for establishing a more reliable trading environment could be viewed as a function of the three general operating principles below. Quadriserv's AQS Loan Market is held out here as an example of how the process can be implemented, although other approaches may also meet supervisory approval.

Validation

The participation of a Clearing Member ("CM") in the stock Loan Market requires dual-approval, first by OCC, and second by the AQS Loan Market.

From the CCP standpoint, OCC's guarantee is supported by its risk management process.[55] OCC's risk management program for stock loan is identical to the process used to support its guarantee related to the listed options markets. It follows a three-tiered system which includes (1) robust membership standards, (2) prudent margin levels and (3) an adequate clearing fund.

OCC monitors the ongoing creditworthiness of its Clearing Members by reviewing its Members' monthly filing of financial statements (i.e. FOCUS Reports or 1-FR Reports) as well as annual audited financial statements. Clearing Members' financial conditions are evaluated monthly in relation to predefined standards (referred to as its Watch Level Parameters) designed to identify negative trends in credit and/or profitability. This watch level system contains four levels of concern with increasingly rigorous protective measures prescribed should a Member firm's condition deteriorate from one level to another. The review of these standards is largely accomplished through a series of daily monitoring activities including financial statement analysis, portfolio stress testing and communications with Member firm, exchange and regulatory personnel. A summary of the types of analysis that is performed by OCC's surveillance staff is described below:

Financial

- Financial standards measure the adequacy of Member firms' capital, liquidity and profitability on both an absolute and trend basis. Capital measurements include a review of capital composition for compliance with debt-equity ratios and of net worth (exclusive of subordinated borrowings) for solvency, which is in addition to meeting the minimum net capital requirement totaling $2 million. Liquidity measurements include: a comparison of net capital with minimum and early warning requirements; an analysis of significant fluctuations in excess net capital; a review of the impact of scheduled capital withdrawals over the next six-month period upon net capital; and an analysis of significant fluctuations in non-allowable assets. Pre-tax losses are weighed against excess net capital on a one, two and three month cumulative basis.

Operational

- Operational standards address the effectiveness of a Clearing Member's back office in clearing transactions. Staff reviews the trend in operational deductions taken in the net capital computation to uncover undue delays in resolving short securities differences or aged fails to deliver. For Member firms clearing independent market-maker accounts, deductions are

[55] The Options Clearing Corporation By Laws. "Article XXI – Stock Loan/Hedge Program" pg. 184-189 (http://www.optionsclearing.com/publications/rules_bylaws_pdf/occ_bylaws.pdf)

monitored to ensure that the number and/or size of accounts cleared is not excessive. Finally, communication with regulatory personnel is maintained in order to uncover possession and control problems occurring at Member firms.

Experience and Competence

- Ongoing membership standards also provide for the monitoring of general business factors such as: involvement in a merger, acquisition or restructuring; being subject to higher surveillance by a regulatory body; receiving a qualified opinion from outside auditors documenting a material weakness in internal controls; or being continuously subject to higher operational, financial or position risk Watch Level criteria; or difficulties experienced in meeting intra-day margin calls.

Position

- Position standards evaluate each firm's uncollateralized portfolio exposure (which includes stock loan). OCC relates this exposure to various financial balances (primarily net capital) for capacity measurement purposes.

As part of the AQS validation process, all AQS Member firms are required to execute a subscription agreement prior to participating. The subscription agreement requires Members to make certain representations including, but not limited to their suitability to engage in securities lending and their status as a Member in good legal standing. Furthermore, through the terms set forth in the subscriber agreement, Members agree to abide by the operating policies and procedures of the Loan Market that are established to promote a fair and stable platform for securities lending transactions. These policies govern the Member's use of the AQS system and include AQS's right to suspend or expel a Member should a Member fail to comply with the stated policies and procedures of the marketplace.

Verification

Rate Verification

- Rates are set through a competitive bidding process after which a single clearing rate is established and instantaneously reported to all parties, including the lender, the borrower, the CM, the CCP, the settlement depository and the market data tape.

Trade Verification

- Upon being matched in the Loan Market, orders, rerates, recalls and returns are delivered to OCC, removing the need for multilateral contract comparisons and leading to a reduction in trade input errors.

Risk Verification

- All MTM obligations are collected and net settled by OCC daily; each CM is subject to the same margin collateral requirement, calculated according to the STANS risk-based margining model.

Payment Verification

- Corporate action and rebate payments are calculated and settled between the CM and OCC directly, accrue daily and are debited directly at month-end from the CM's account at OCC.

Delivery Verification

- Upon matching in the Loan Market, orders are delivered to OCC, who delivers two trade messages to DTC. DTC accepts delivery order and receive instructions from OCC, then employs "look-ahead" accounting to ensure the presence of shares in the lender's account and a corresponding credit in the borrower's account.

- The "look-ahead" process reduces transaction blockage for securities by identifying a receive transaction pending due to a net debit cap insufficiency and determines whether an offsetting delivery transaction pending because of a quantity deficiency in the same security would permit both transactions to be completed in compliance with DTC's risk management system controls. The processing system calculates the net effect of offsetting transactions in the accounts of the participants involved. If the net of the transactions results in positive risk management controls in all accounts, the transactions will be completed[56].

- Upon acknowledgement that shares and credit exist, OCC proactively pulls stock from the lender's DTC account to make delivery to the borrower. This differs from current convention in that OCC does not wait for the lender to make delivery of the shares, but rather instantly pulls available shares directly from the lender's DTC box. In the event that shares are not present in the account, rather than confirm the trade status to the lender and borrower, AQS notifies each party that the trade is in a pending state. Matched orders that do not enter a pending state are novated to the CCP, confirmed and settled instantaneously.

- If a matched order enters a pending state, AQS operations staff contacts the lender to inquire as to the whereabouts of the shares pending delivery. The lender must begin the process of working with the AQS operations staff to find shares and satisfy their matched order obligation.

- In the event that the lender does not have the shares available to lend, one of two things occur: 1) Loan Market operations staff may cancel the pending delivery at the market center and allow the borrower to resubmit the borrow order in the open market, or 2) the trade "drops" and the borrower is notified. In either case, the lender's inability to deliver shares will be recorded in a trading history profile and calculated into the assignment algorithm[57] as negative trading behavior, leading to a reduced likelihood that this lender is assigned new loans in the future, and increasing the likelihood that this lender will be assigned a return of an open loan. Should this negative behavior continue the lender will become subject to the surveillance process described below.

Surveillance

Surveillance is a key part of ensuring that AQS Members are complying with the terms of the subscription agreements as well as the policies and procedures set forth by the Loan Market. By leveraging the technology available in an automated, electronic Loan Market, audit, reporting and surveillance tools can be readily developed to fit the specific compliance needs. Through the use of assignment algorithms, AQS has the capability to monitor certain adverse behavior (i.e. fails, excessive rerates) by its Members and restrict activity on AQS accordingly. Additional monitoring and reporting tools can be created from the warehouse of data maintained by the marketplace to assist in identifying patterns and practices that could also adversely affect market participants. As a result, the Loan Market

[56] "Self-Regulatory Organizations; The Depository Trust Company; Order Granting of Proposed Rule Change to Expand DTC's Debit Cap Look-Ahead Processing". SEC Release No. 34-58944; File No. SR-DTC-2008-09 (November 13, 2008).
[57] See Appendix D, pg 40

has the ability to proactively identify detrimental behavior through surveillance to make informed decisions on whether a Member's participation in the Loan Market should be allowed to continue.

APPENDIX B: COMMENTS IN SUPPORT OF OTC TRADING PRACTICE REFORM

Timothy Geithner, Secretary of the Treasury
On regulation and central counterparty clearing…

"Market efficiency and price transparency should be improved in derivatives markets by requiring the clearing of standardized contracts through regulated CCPs as discussed earlier and by moving the standardized part of these markets onto regulated exchanges an regulated transparent electronic trade execution systems for OTC derivatives and by requiring development of a system for timely reporting of trades and prompt dissemination of prices and other trade information. Furthermore, regulated financial institutions should be encouraged to make greater use of regulated exchange-traded derivatives. Competition between appropriately regulated OTC derivatives markets and regulated exchanges will make both sets of markets more efficient and thereby better serve end-users of derivatives."

- Secretary Timothy Geithner, testimony to Congress, May 13, 2009[58]

From: REP. BARNEY FRANK HOLDS A HEARING ON OVERSIGHT OF THE FEDERAL GOVERNMENT'S INTERVENTION AT AIG - COMMITTEE HEARING, March 24 2009

Gary Gensler, Chairman, Commodity Futures Trading Commission
On Central Counterparty Clearing…

One of the lessons that emerged from this recent crisis was that institutions were not just "too big to fail," but rather too interconnected as well. By mandating the use of central clearinghouses, institutions would become much less interconnected, mitigating risk and increasing transparency. Throughout this entire financial crisis, trades that were carried out through regulated exchanges and clearinghouses continued to be cleared and settled.

Excerpted from his statement before the Senate Committee on Agriculture, Nutrition, and Forestry on June 4, 2009.

Sen. Christopher Dodd, Chairman of the Senate Banking Committee
On innovation and transparency…

"The bottom-up approach will create a new way of regulating Wall Street. For the securities markets, that means examining everything from the regulator broker-dealers in their sales practices to unregulated credit default swaps.

It means ensuring that the creators of financial products have as much skin in the game when they package these products as their consumers do when they buy them.

So that instead of passing on risk, everyone shares responsibility. And that means we need more transparency from public companies, credit rating agencies, municipalities and banks. We're going to send a very clear message that these modernization efforts, the era of don't ask -- in these modernization efforts, the era of "don't ask, don't tell" on Wall Street and elsewhere is over.

For decades, vitality, innovation and creativity have been a source of genius of our system, and I want to see that come back.

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[58] Geithner, Timothy F. Letter to Senator Harry Reid, Washington, D.C. (May 13, 2009).

It's time we recognize transparency and responsibility, are every bit as paramount that whether we are homebuyers, city managers, entrepreneurs, we can only make responsible decisions if we have the accurate and proper information."

From: SEN. CHRISTOPHER J. DODD HOLDS A HEARING ON ENHANCING INVESTOR PROTECTION AND THE REGULATION OF SECURITIES MARKETS - COMMITTEE HEARING, MARCH 10, 2009

Mary Schapiro, Chairman Securities and Exchange Commission

On regulating the OTC derivatives market

There is widespread agreement that OTC derivatives, particularly credit default swaps, may have contributed greatly to the financial mess we're cleaning up today. Unfortunately, the lack of clear regulatory authority over this vast market has hindered the ability of regulators to fully understand how this market functions or to ensure that basic standards of fairness are followed.

There is agreement now that this needs to change.

Today, current federal statutes significantly restrict the ability of financial regulators to obtain reporting or record-keeping in the OTC derivatives market. Yet these are the very types of tools that any regulator would need to identify suspicious trading patterns or better understand systemic risks.

In addition, central clearing for credit default swaps and other OTC derivatives would bring to this market much-needed transparency. Such transparency will enable regulators to better monitor transactions that are effected through the use of a central counterparty. Importantly, central clearing would also mitigate the systemic risks created by OTC derivatives.

From: **Speech by SEC Chairman: Statement at Treasury Department Press Briefing on OTC Derivatives, May 13, 2009**

APPENDIX C: DETAILED ANALYSIS OF PROPOSED CAPITAL TREATMENT

Customer Protection

The introduction of The Options Clearing Corporation as a CCP for stock loan positions effected through AQS provides the basis for more favorable treatment of these positions under the SEC's financial responsibility rules and accounting standards. This treatment will allow more efficient use of capital by stock Loan Market participants. The areas where changes in these requirements are appropriate are summarized below.

Rule 15(c)3-1 Stock Loan Related Net Capital Charges:

A broker-dealer should not be charged a deduction to net capital for excess margin required at the CCP.

Under Rule 15(c)3-1(c)(2)(iv)(B), firms are required to take a deduction from net capital equal to the greater of (1) the amount of collateral held by any one lending broker-dealer that exceeds l05% of the current market value of the securities borrowed from that lending broker-dealer; (2) the amount of excess collateral held by any one lending broker-dealer to the extent the excess collateral is greater than 20% of the borrowing broker-dealer's excess net capital (the amount of net capital above the minimum amount required); or (3) the total amount of excess collateral held by all lending broker-dealers in aggregate that exceeds 300% of the borrowing broker-dealer's excess net capital.

The intent behind these capital charges is to effectively protect the borrowing broker-dealer from being financially impaired if losses result from providing excess collateral to a lending counterparty. Each of these scenarios highlight a situation where the lending counterparty is holding assets (i.e. cash) from the borrowing broker-dealer exceeding the value of the asset exchanged by the lender (i.e. securities).

Under OCC's guarantee, both lenders' and borrowers' collateral are fully protected. This is achieved by (1) initial collateral set at current market value, (2) in most instances, the borrowing Clearing Member is required to post 102% of the current market value, which in turn OCC margins the lender and credits the borrower, (3) on a daily basis OCC marks-to-market these transactions keeping them properly collateralized by both parties (neither the borrower nor the lender maintain "excess collateral" for purposes of OCC's margin policies). In addition, OCC holds margin from both the lender and the borrower with regards to price risk, further supporting its ability to fulfill the its obligations in the event a Member is in default.

Article XXI Section (2) (a) of OCC's By-laws expressly state that:

"Commencing at the time at which the Corporation accepts a Stock Loan as described in Rule 2202, the role of the Corporation in respect of the Stock Loan shall be that of *a principal, and the Corporation shall have the position of borrower to the Lending Clearing Member and lender to the Borrowing Clearing Member*. Without limiting the generality of the foregoing: (i) the rights of the two Clearing Members that are parties to a Stock Loan to receive mark-to-market payments, and their obligations to make mark-to-market payments, shall be as against the Corporation, and not as against each other; and (ii) in the event of a termination of a Stock Loan in accordance with the Rules, the right of the Lending Clearing Member to receive the Loaned Stock and the obligation of the Lending Clearing Member to pay the settlement price shall be as against the Corporation, and the obligation of the Borrowing Clearing Member to deliver the Loaned Stock and the right of the Borrowing Clearing Member to receive the settlement price shall be as against the Corporation."

Because OCC, as CCP, acts as principal to stock loan transactions, it should be appropriate for participants in OCC's stock loan program to treat OCC as the counterparty to all active program transactions. Furthermore, because of OCC's risk controls relating to the stock loan transactions it guarantees, it is improbable that any lender or borrower would be in an excess collateral position with OCC, except for the margin associated with market risk deposited with the clearinghouse. As a result, the SEC should recognize that the stock loan net capital deductions should not apply to transactions maintained and guaranteed in OCC's stock loan programs.

Rule 15(c)3-3 Reserve Computation:

Broker-dealers should be allowed to include the OCC margin debit in the reserve formula and provide segregated customer account protection to underlying clients.

OCC's purpose in providing a CCP and guarantor function for stock loan transactions is to reduce systemic risk while being able to recognize inter-market hedges.

Securities are often borrowed to facilitate a short sale in conjunction with options transactions. For example, a customer may sell a put and short the stock (which is borrowed by the clearing firm) or sell a call and buy the stock where the stock is lent to finance the stock purchase. As a result there are margin benefits associated with Clearing Members being able to carry stock loan transactions with its customers' options positions as the daily mark-to-market would serve as a hedge. OCC's rules permit Clearing Members to carry stock loan transactions in the customers' account; however there has been no clear distinction whether or not activity carried in the customer's account, in conjunction with customers' options, should be limited to customer related stock loan positions.

OCC is typically on the forefront in identifying inter-market hedges (i.e. cross margins) as these inter-market hedges provide opportunities to increase liquidity while also serving to reduce systemic risk. Stock loan transactions combined with options is reflective of this concept. The mark-to-market process associated with a stock loan position serves to reduce systemic risk as it mitigates the risk associated with the complementary options strategy, which results in lower margin posted by the Member. However, in cases where the stock loan increases risk, relative to the options strategy, OCC would effectively hold more margin from the Member, thus reducing liquidity.

A centralized, anonymous Loan Market could introduce matched stock loan transactions backed by Clearing Members to OCC as the CCP. Much of this activity is expected to be facilitated on behalf of prime brokerage accounts (lenders being primarily custodial banks and borrowers primarily hedge funds). In this market, the Clearing Member will function in a similar capacity as they do in the options market, that of guarantor for its clients. Customer securities would pass through the broker-dealer and margin could be charged against the customer (as margin will be imposed by OCC against the Clearing Member).

As a result, broker-dealers have raised the issue as to whether or not these stock loan transactions should be carried in the customer account and whether or not OCC's margin requirement associated with the stock loan positions could be considered as a debit in the reserve formula under Rule 15(c)3-3, in the same manner as options margin at OCC is considered a debit. Customers are interested in obtaining protection under Rule 15(c)3-3 for the securities delivered to the broker-dealer as well as the margin assets being kept with the Clearing Member.

Providing Clearing Members with the opportunity to reduce its customers' margin requirements at OCC through the use of stock loan reduces systemic risk and increases the Member's liquidity. However, this treatment should be restricted to stock loan transactions carried in the customers' account (i.e. not allowing for the maintenance of loan or borrow of proprietary securities) that originate from a customer.

These transactions would include the loan of customer long securities positions, the borrow of securities used to facilitate a customer short sale and the clearance of stock loan or borrow transactions initiated directly by the customer and cleared on behalf of a customer by the Clearing Member.

Lastly, if these conditions are maintained, broker-dealers should be allowed to include the margin requirement computed by OCC on behalf of a customers' account as a debit in the Rule 15(c)3-3 reserve formula and PAIB computations to its full extent, regardless if that debit is based on options or stock loan positions.

In either scenario the assets held for the benefit of the Clearing Member's customers would remain in control of the reserve account at OCC leaving customers equally protected. Under the presumption that only customer related transactions are carried in the Clearing Members' account and under no circumstances would there be a comingling of proprietary transactions, it is OCC's opinion that the carrying of stock loan positions in the customer range be provided for and that the margin requirement computed by OCC in relationship to that account be considered as a debit in the reserve formula to the full extent of the amount.

Capital Efficiency

A valuable byproduct of the reduced risk profile of a central Loan Market is improved capital efficiency for its Members.

Broker-Dealer Net Capital Calculation:

Broker-dealers may net margin collateral and positions at the CCP.

Under Rule 15c3-1, a broker-dealer must reduce its net capital by the market value of stock loaned in excess of the value of any collateral received. In the case of borrowing securities, broker-dealers are required to deduct from their net worth the amount of excess collateral held by the lending broker-dealer. However, firms may calculate deductions to capital on a counterparty-by-counterparty basis and apply netting rules where a legal right of set-off exists. The potential value of this netting arrangement increases as the number of offsetting securities lending transactions with a single counterparty increases. Quadriserv believes the greatest potential for netting occurs against a CCP and thus CCP markets provide the opportunity to reduce any haircuts to net capital that might be incurred OTC.

Bank Capital Reserve Requirements:

Financial institutions using Basel II capital adequacy standards should apply a 0% EAD risk-weight for securities lending transactions cleared against a qualified central counterparty.

For banking institutions, capital reserve requirements are calculated according to the Basel II – Risk-Based Capital Standards: Advanced Capital Adequacy Framework. Under this framework, institutions calculate the Loss Given Default ("LGD") as the percentage of the Exposure at Default ("EAD") that will not be recovered. Financial institutions may attribute an EAD of zero to derivatives and repo-style transactions that are cleared by a qualifying CCP:

a) Derivative contracts that are publicly traded on an exchange that requires the daily receipt and payment of cash-variation
b) Derivative contracts and repo-style transactions that are outstanding with a qualifying CCP (but not for those transactions that a qualifying CCP has rejected)

c) Credit risk exposures to a qualifying CCP in the form of clearing deposits and posted collateral that arise from transactions described in b)

The term *repo-style transaction* includes securities lending and borrowing transactions, provided that transactions are marked-to-market daily, subject to daily margin maintenance requirements, and represented by liquid securities. A centrally cleared securities lending transaction would by definition satisfy these requirements. The requirements of a *qualifying central counterparty* are any counterparty that satisfies the following conditions:

a) Facilitates trades between counterparties in one or more financial markets by either guaranteeing trades or novating contracts
b) Requires all participants in its arrangements to be fully collateralized on a daily basis
c) The financial institution demonstrates to the satisfaction of its federal bank regulator is in sound financial condition and is subject to effective oversight by a national supervisory authority

These requirements are the standard operating tenets of a CCP business model and OCC should satisfy these conditions. As a result, OCC cleared securities lending transactions would receive an EAD of zero and thereby reduce the capital reserve requirements for firms operating under the Basel II regime.

Accounting Treatment:

Broker-dealers should receive right of offset eligibility when accounting on their balance sheet for securities loans held against a CCP.

FASB Interpretation No. 39, *Offsetting of Amounts Related to Certain Contracts an interpretation of APB Opinion No. 10 and FASB Statement No. 105,* ("FIN 39") defines *right of setoff* and specifies what conditions must be met to have that right. There have been two exceptions provided to instruments that do not meet all of the conditions as noted in FIN 39, namely repurchase agreements through FASB Interpretation No.41 ("FIN 41) and derivative transactions under paragraph 10 of FIN 39.

Quadriserv believes that a similar exception to FIN 39 should be provided for securities lending transactions executed in a central Loan Market and therefore consideration of updated accounting treatment is warranted at this time.

For a complete analysis of the proposed accounting treatment please contact Quadriserv directly at +1 (212) 905-5225.

APPENDIX D: FACTOR BASED ASSIGNMENT ALGORITHM

The allocation of scarce resources in OTC markets is based on both qualitative and quantitative factors that go beyond the mere intersection of supply and demand. Considerations such as transaction history, amount of related business and other elements of *quid pro quo* are critical inputs in the decision making process. The application of these factors serve to maximize the profits of the market participants while at the same time performing a self-policing function that reward better counterparties with more transactions. Often times, however, the expression of these behavioral factors manifest themselves in artificial price and allocation mechanisms. These mechanisms stem from a market structure where price and priority exist in a cloud of unrelated, yet dependent relationship-based elements.

The AQS Loan Market has implemented many of the virtuous elements of the self-policing nature of OTC trading markets into a Factor Based Assignment Algorithm. A description of the algorithm and its operation is below.

How it works

The Factor-Based Assignment Algorithm operates in all AQS markets and assigns executions, recalls, returns and rerates. The algorithm is designed such that high-performing Members are rewarded with a greater probability in the assignment of positive events (execution); conversely, low-performing Members have a higher probability of receiving negative events (recall, return, rerates). The algorithm consists of a ranking mechanism that populates an unsorted list of assignees at a frequency corresponding to their weighted performance on the factors listed in *Table 1 (below)*. A selection is made from the list and the event is assigned to the selected Member.

Factor Description and Weighting

The factors that determine the relative ranking of Members are measures of stability, liquidity, and order integrity.

Table 1: Factors included in the Factor Based Assignment Algorithm

Priority	***Factor***	***Definition***	***Weighting***[59]
1	Rate	The rebate rate on the transaction	-
2	Time	The timestamp for the entry of the order	-
3	Stability	Duration of Member-terminated and open loans for similar collateral type, same market	25%
	Liquidity	• Borrows: Weighted average of general collateral balances borrowed as a percentage of a Member's gross notional business	25%
		• Loans: Weighted average of special	

[59] This weighting is subject to change based on the input of the AQS Quality of Markets committee members, who are responsible for providing guidance on issues relating to efficiency, transaction handling, and the various assignment algorithms of the AQS marketplace. For more information on the Quality of Markets Committee visit: http://www.tradeaqs.com/aqsmarketplace/documents/QualMktCommittee.pdf.

	Integrity	balances lent as a percentage of a Member's gross notional business • Percentage of executed orders as a percentage of a Member's gross notional orders • Percentage of term loans unilaterally terminated prior to expiration • Percentage of requests outside the bounds of normal market activity • Number of failed transactions at DTC • Frequency and duration of pending intra-day deliveries at DTC	50%

Population of the List

The list is populated with the eligible universe of assignees at a frequency relative to the Member's individual factor levels in comparison with the *eligible universe.*

For positive events, a higher factor level translates into more entries in the list (relative to lower factor levels) and conversely, poor behavior translates into fewer entries in the list. For negative events, the relationship is inverted (i.e. higher factor levels have fewer entries in the list).

Selection Process

Rate always wins.[60] If multiple Members are tied at the same rate, the System breaks the tie by choosing the order with the earliest timestamp. In the case where multiple Members have the same timestamp, the System makes a selection from a list of potential assignees. The algorithm begins from the top of the list and selects the first Member on the list, removes the Member from the selected position, and moves it to the bottom of the list, and then repeats from the top until the total number of shares have been assigned to the event.

Frequency of calculation

The ranking scheme is calculated on a daily basis at the end of each day and includes the most recent 90-days of System activity. The calculations are done via a moving 90-day window, thereby giving precedence to recent behavioral activity.

Transparency of results

A scatter diagram illustrating the relative ranking of a Member vs. their anonymous peer group will be displayed on a daily basis, password protected and individualized to each Member on their AQS website.

[60] Price priority is preserved in all Quadriserv AQS markets. Therefore, the algorithm only proceeds if there are multiple eligible recipients at the same rate where a tie-break is resolved via an assignment algorithm.