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Current Market Structure Issues in the U.S.
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CURRENT MARKET STRUCTURE ISSUES IN THE U.S. EQUITY MARKETS¹

I. **The Framework of the Equity Trading Markets.** The regulatory framework governing the U.S. equity markets was given its current shape by the SEC's adoption of Regulation ATS in December 1998 and Regulation NMS in June 2005. These regulations revised and codified a series of rules adopted by the SEC in the years surrounding the enactment of the Securities Act Amendments of 1975 (the "**1975 Amendments**"). The regulations also built on a structure of self-regulatory organization rules, including rules of the exchanges and the Financial Industry Regulatory Authority ("**FINRA**"), which was formed in 2007 through the merger of the National Association of Securities Dealers, Inc. ("**NASD**"), and the member regulation functions of the New York Stock Exchange ("**NYSE**").

II. **Regulation ATS.** The SEC adopted Regulation ATS and accompanying Rule 3b-16 to update the scheme of exchange regulation devised by Congress in 1934 in an era in which order interaction and price discovery functions were best fulfilled by trading on physical exchange floors. Exchange Act Release No. 40760 (December 8, 1998) (adopting Regulation ATS and Rule 3b-16) (the "**Regulation ATS Adopting Release**").

A. The Securities Exchange Act of 1934 (the "**Exchange Act**") codified the then prevalent system of exchanges operating as membership organizations that established trading rules and imposed broker-dealer capital, business conduct and fixed commission requirements as a condition of membership.

1. Section 3(a)(1) of the Exchange Act broadly defines the term exchange as "any organization, association, or group of persons, whether incorporated or unincorporated, which constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange as that term is generally understood, and includes the market place and the market facilities maintained by such exchange."

2. Section 5 of the Exchange Act requires exchanges to register with the SEC, and Section 6 requires a registered exchange to operate as a self-regulatory organization with rulemaking and disciplinary authority over its members.

3. Because of their self-regulatory role, exchanges are required pursuant to Section 6 and Section 19 (as revised in 1975) to act by formal rule, to not unreasonably discriminate in admitting new members, and to follow fair disciplinary procedures in actions against members. Exchanges are also required to provide members with fair representation in

¹ Prepared by: Gerard Citera, counsel, Robert L.D. Colby, counsel, and David L. Portilla, associate, at Davis Polk & Wardwell LLP.

the governance of the exchange and to equitably allocate reasonable dues, fees and other charges among its members.

B. The growing availability of widespread, inexpensive automation and electronic communication systems gave rise to electronic trading systems that challenged the dominance of the floor-based exchange trading model. As a result, beginning in the 1970s exchanges began automating some of their order delivery and execution systems, the NASD developed the Nasdaq electronic quotation system for over-the-counter stocks and brokers-dealers began developing electronic proprietary trading systems.

1. The proprietary trading systems operated by broker-dealers and others operated on a for-profit basis and sought to avoid being regulated as an exchange.

2. The SEC staff issued a series of no-action letters to proprietary trading systems. See, e.g., Letter from Richard G. Ketchum, Director, Division of Market Regulation, SEC, to Daniel Brooks, Cadwalader, Wickersham & Taft, Fed. Sec. L. Rep. CCH 78,997 1986 WL 67657 (SEC) (Sep. 8, 1986). In 1994 the SEC adopted a recordkeeping and reporting rule for these systems. Exchange Act Release No. 35124 (Dec 20, 1994).

C. In 1998, the SEC adopted Rule 3b-16 to define which automated trading systems were exchanges, and Regulation ATS to exempt certain automated trading systems from registration as an exchange, subject to conditions that applied the core elements of exchange regulation to exempted “alternative trading systems.” See the Regulation ATS Adopting Release.

1. Regulation ATS contains conditions that need to be satisfied to be exempt from the requirement to register as an exchange under Section 6 of the Exchange Act:

(a) **Broker-Dealer Status.** Rule 301(b)(1) of Regulation ATS requires that the ATS be registered as a broker-dealer under Section 15 of the Exchange Act or be operated by a registered broker-dealer.

(b) **No SRO Powers.** Rule 300(a) makes clear that an ATS cannot exercise self-regulatory powers, such as regulating its members’ or subscribers’ conduct when engaged in activities outside of that trading system.

(c) **Name.** Rule 301(b)(11) provides that an ATS cannot use the word “exchange,” “stock market” or similar terms in its name.

(d) **Dominance of the Market.** Also, the SEC can determine that a dominant alternative trading system should be

registered as an exchange. Rule 3a-1(b)(1) provides certain bright line thresholds in this regard: the rule provides that an exchange is not exempt under Rule 3a-1(a) if during three of the preceding four calendar quarters it had fifty percent or more of the average daily dollar trading volume in any security and five percent or more in any class of security, or forty percent or more of the average dollar trading volume in any class of securities and the SEC after notice has determined that the exemption is not appropriate.

2. The core exchange elements that are applicable to ATSs include:

(a) **SEC Registration and Reporting.** Rule 301(b) requires an ATS to register with the SEC using Form ATS and to undertake certain ongoing notice and reporting obligations (subsuming the 1994 recordkeeping and reporting requirements).

(b) **Order Display and Execution Access.** Rule 301(b)(3)(ii) provides that with respect to any NMS stock in which the ATS during at least four of the preceding six calendar months had an average daily trading volume of five percent or more of the aggregate average daily share volume, the ATS shall provide to a national security exchange or association the prices and sizes of the orders at the highest buy price and the lowest sell price for such NMS stock displayed to more than one person in the ATS (other than employees), for inclusion in the quotation data published by the exchange or association.

(1) With respect to any order displayed pursuant to Rule 301(b)(3)(ii), the ATS displaying the order shall provide to any broker-dealer that has access to the national securities exchange or association to which the ATS provides the prices and sizes of displayed orders the ability to effect a transaction with such orders that is equivalent to the ability of such broker-dealer to effect a transaction with other orders displayed on the exchange or by the association, and at the price of the highest priced buy order or the lowest priced sell order displayed for the lesser of the cumulative size of such priced orders entered therein at such price, or the size of the execution sought by such broker-dealer.

(2) See Section VIII for a discussion of the SEC's proposal likely to be released in November 2009.

(c) **Fair Access.** Rule 301(b)(5) requires an ATS to provide fair access to its system with respect to any security that the ATS had five percent or more of the average daily volume

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in that security for at least four of the six preceding calendar months.

(1) Rule 301(b)(5)(iii) contains an exception for passively priced alternative trading systems that match customers' orders for a security with other customer orders, provided that such customers' orders are not displayed to any person (other than employees), and such orders are executed at a price for such security disseminated by an effective transaction reporting plan, or derived from such prices.

(2) The fair access requirement is more expansive than the requirement that access is provided to a specific displayed quote, as access into a system would provide access to enter limit orders, view the depth of book in a given security and participate in any unique order features offered by the ATS.

(d) **Capacity, Integrity and Security of Automated Systems.** Rule 301(b)(6) requires the computer systems of an ATS to be periodically tested and reviewed for reliability and for the ATS to develop disaster recover plans, once the ATS reaches 20 percent of average daily trading volume.

D. Regulation ATS led to the development and registration of approximately 40 trading systems, most notably entities acting as Electronic Communication Networks ("**ECNs**"), which are ATSs that make their quotes available to the public.

III. **Regulation NMS.** The SEC adopted Regulation NMS in June 2005 to address a combination of issues arising under the national market system rules and plans that had been adopted pursuant to the 1975 Amendments. See Exchange Act Release No. 51808 (June 9, 2005) (the "**Regulation NMS Adopting Release**").

A. In particular, the development of electronic markets and the spread of automated executions and order routing created tensions with floor-based markets where much of the order execution process was still manual, and for the Intermarket Trading System (the "**ITS**"), which was an SRO-operated order routing system that linked the exchanges and the over-the-counter ("**OTC**") market in listed securities.

B. The SRO plan governing the ITS prohibited participant exchanges and OTC market makers from trading at prices inferior to the displayed quote of a participant market (i.e., "trading through" the quotes), unless the participant that traded-through the displayed quote routed a commitment to the participant market whose quote was traded-through and gave that participant at least 30 seconds to respond to the commitment. The ITS Plan also restricted its participants from displaying quotes that locked or crossed the quote of another participant.

C. As a result, no ITS participant could trade at a faster pace than the slowest ITS participant market, if this trading would result in trade-throughs or locking the quotes of the slower market.

D. In addition, the spread of trading of the same securities across many markets (“fragmentation”), and the internal execution of customer orders by market makers and trading systems without exposure of these orders to other traders (“internalization”) raised concerns that the pricing function of the market could be impaired, as customer limit orders displayed in one market were ignored while trades for other customers received worse execution.

E. The SEC in 2000, under pressure from Congress, required the SROs to move to decimal pricing of trading systems. See Exchange Act Release No. 42914 (June 8, 2000); Exchange Act Release No. 42685 (April 13, 2000); and Exchange Act Release No. 42360 (Jan. 28, 2000).

1. Decimalization resulted in quoting and trading equities in pennies, rather than eighths or sixteenths of a dollar, and in some cases involved trading in subpennies.

(a) Decimalization reduced quote spreads and improved retail execution prices, but also reduced displayed quotes and raised concerns regarding reduced liquidity.

(b) The impact of decimalization was particularly acute where trading in subpenny increments developed.

F. In response to these concerns and to catalyze change in exchange floor-based trading without risking inferior executions for customer orders, the SEC in June 2005 adopted Regulation NMS, which added several new rules and amended others. See the Regulation NMS Adopting Release.

G. Regulation NMS introduced four major rules: (1) the Order Protection Rule (Rule 611); (2) the Access Rule (Rule 610); (3) the Sub-Penny Rule (Rule 612); and (4) the Market Data Rules (Rules 600, 601 and 603)

1. **Order Protection Rule:** Rule 611(a)(1) requires a trading center to establish, maintain, and enforce written policies and procedures that are reasonably designed to prevent trade-throughs on that trading center of protected quotations in NMS stocks that do not fall within any of the exceptions described below.

(a) The purpose of this rule is to eliminate all trade-throughs that reasonably can be prevented, while also recognizing the inherent difficulties of eliminating trade-through transactions that, despite a trading center’s reasonable efforts, may occur.

(b) The order protection rule updated and replaced the ITS trade-through rule and extended to all trading in Nasdaq and exchange listed equities.

(c) The order protection rule requires policies and procedures and was not intended to make each trade-through a violation of the rule. Initial examinations by the SEC and SROs have focused on the adequacy of procedures.

2. Exceptions to Order Protection Rule:

(a) **Rule 611(b)(1)**: excepts a transaction if the trading center that was traded through was experiencing a failure, material delay, or malfunction of its systems or equipment when the trade through occurred.

(b) **Rule 611(b)(2)**: excepts transactions other than “regular way” contracts.

(c) **Rule 611(b)(3)**: excepts single-price opening, reopening or closing transactions.

(d) **Rule 611(b)(4)**: excepts transactions executed at a time when protected quotations were crossed.

(e) **Rule 611(b)(5)**: allows a trading center immediately to execute any order identified as an intermarket sweep order.

(f) **Rule 611(b)(6)**: allows a trading center to route intermarket sweep orders and thereby clear the way for immediate internal executions at the trading center, which enables traders to control the execution of their orders.

(g) **Rule 611(b)(7)**: excepts the execution of an order at a benchmark price that is not based, directly or indirectly, on the quoted price of an NMS stock at the time of execution and for which the material terms are not reasonably determinable at the time the commitment to execute the order is made (e.g., a VWAP order).

(h) **Rule 611(b)(8)**: sets forth an exception for a flickering quotation, where the order that trades through matches a price displayed by the trading center within one second prior to execution of the trade-through.

(i) **Rule 611(b)(9)**: excepts certain “underwater” stopped orders, where the price of the execution of the order is, for

a stopped buy order, lower than the national best bid at the time of execution or, for a stopped sell order, higher than the national best offer at the time of execution.

H. **Access Rule:** The SEC has stated that for the national market system to fulfill its statutory obligations, fair and efficient access to each of the individual markets that participate in the national market system is essential. This principle is a recurring issue as markets innovate and develop; in particular, it has been raised in the discussions concerning high frequency trading and dark pools.

1. **Rule 610(a)** prohibits an SRO from imposing unfairly discriminatory terms that prevent or inhibit any person from obtaining efficient access through a member of the SRO to the quotations in an NMS stock displayed by the SRO trading facility.

2. **Rule 610(b)(1)** requires any trading center that displays quotations in NMS stocks through an SRO display-only facility to provide a level and cost of access to such quotations that is substantially equivalent to the level and cost of access to quotations displayed by SRO trading facilities.

3. **Rule 610(c)** caps the fees that can be charged for access to protected quotations and manual quotations at the best bid and offer at three-tenths of a cent per share, a purely pragmatic amount that reflected market practice at the time. It also allows market makers, in addition to alternative trading systems, to charge these fees.

(a) The fees are not reflected in the displayed quote.

(b) The rule generally does not include fees not triggered by the execution of orders against protected quotations, such as periodic fees.

4. **Rule 610(d)** requires that each national securities exchange and national securities association establish, maintain and enforce written rules to preclude display of quotations that lock or cross any protected quotation in an NMS stock.

I. **Sub-Penny Rule:** Rule 612 provides that no market participant “shall display, rank, or accept from any person a bid or offer, an order, or an indication of interest in any NMS stock priced in an increment smaller than \$0.01 if that bid or offer, order or indication of interest is priced equal to or greater than \$1.00 per share.”

1. Rule 612 does not prohibit a sub-penny execution resulting from a midpoint or VWAP algorithm or from price improvement, so

long as the execution did not result from an impermissible sub-penny order or quotation.

J. **Market Data Rules:** The SEC adopted amendments to the joint industry plans for consolidated quote and transaction reporting. Under the plans, SROs operate market information networks, which collect market data from the networks' individual SRO participants and distribute such market data to broker-dealers and data vendors for a fee. The SEC adopted amendments to the plans with a goal of incorporating a broad based measure of the contribution of an SRO's quotes and trades to the consolidated data stream. The formula uses the following two-steps:

1. First, a network's distributable revenue is allocated among the many individual securities included in the network's data stream.
2. Second, the revenues that are allocated to an individual security are allocated among the SROs based on measures of the usefulness to investors of the SROs' trades and quotes in the security.

K. **Market Data Rules (cont'd):** Regulation NMS also includes rules regarding the dissemination of quotation and transaction data, and the distribution, consolidation and display of information regarding quotations for and transactions in NMS stocks.

1. Rule 601 requires members of an SRO to transmit their trades to the SRO, but also allows such members to distribute their own data independently, with or without fees.
2. Rule 603(a)(1) requires that any market information distributed by an exclusive processor, or by a broker or dealer that is the exclusive source of the information, be made available to vendors on terms that are fair and reasonable.
3. Rule 603(a)(2) requires that any SRO, broker, or dealer that distributes market information must do so on terms that are not unreasonably discriminatory.
4. Rule 603(b) requires SROs to continue to participate in joint SRO plans to consolidate and jointly disseminate quotation and transaction information for NMS stocks, but allows an SRO to distribute its data independently, with or without fees.
5. Rule 603(c) requires that the consolidated information on quotations and trades must be provided in an equivalent manner to any other information on quotations and trades provided by a data vendor or broker-dealer when used in a context in which a trading or order-routing decision could be implemented.

(a) Rule 603(c) applies to vendors who provide displays that facilitate order routing by broker-dealers, but not when market data is provided on a purely informational web site that does not offer any trading or order-routing capability.

L. Regulation NMS fundamentally changed the way that the market operates. Implementation of Regulation NMS entailed a cooperative effort by the regulators and the industry to resolve open issues and implement appropriate systemic changes. The trading systems at every firm and exchange had to be changed to accommodate the new trading rules. Repeated meetings, conferences and other forums were established for the industry and regulators to resolve open issues. The SEC issued a series of FAQs resolving many repeat questions. See Responses to Frequently Asked Questions Concerning Rule 611 and Rule 610 of Regulation NMS, <http://www.sec.gov/divisions/marketreg/nmsfaq610-11.htm> and Responses to Frequently Asked Questions Concerning Rule 612 of Regulation NMS, <http://www.sec.gov/divisions/marketreg/subpenny612faq.htm> Each of the exchanges and trading markets issued informational memos and held training sessions for members.

M. After a massive two-year effort, the NMS trading rules were effectively implemented in August 2007 without major market disruption. To date, the rules have worked effectively to regulate trading in the equity markets.

IV. **Short Sales Rules – Delivery Obligations.** During the financial crisis of the fall of 2008, the SEC imposed a series of emergency orders to rein in short selling in stocks of financial companies. See, e.g., Exchange Act Release No. 58166 (July 15, 2008) (order requiring locates for certain listed securities) and Exchange Act Release No. 58190 (July 18, 2008) (amending the July 15, 2008 emergency order to clarify that the July 15 order did not apply to bona fide market makers). The SEC also adopted on an emergency basis temporary interim final Rule 204T, designed to reduce fails to deliver equity securities, particularly those arising from short sales, and Rule 10a-3T, designed to provide the SEC with information regarding the short positions of all major market participants. See Exchange Act Release No. 58773 (Oct. 14, 2008) (adopting interim final temporary Rule 204T) and Exchange Act Release No. 58785 (Oct. 15, 2008) (adopting interim final temporary Rule 10a-3T). The SEC subsequently proposed an array of short sale restrictions based on price tests. See Exchange Act Release No. 59748 (April 10, 2009) (initial proposing release for price test restrictions) and Exchange Act Release No. 60509 (Aug. 17, 2009) (reopening the comment period and seeking comment on an additional proposed price test restriction). These rules have the potential to dramatically alter the manner of trading of equity securities.

A. On July 27, 2009, the SEC issued the adopting release for Rule 204, making permanent the firm delivery and close out requirements of Rule 204T. Exchange Act Release No. 60388 (July 27, 2009).

1. **Accelerated Close-Outs.** Ruler 204(a) provides that participants of registered clearing agencies must deliver equity securities to the clearing agency by the settlement date, or if a participant has a fail to

deliver position at the clearing agency relating to a short sale, the participant must immediately close out the position by either borrowing or purchasing the shares before the beginning of trading hours on the first settlement day after the settlement date. Fails relating to long sales or bona fide market making activity have two additional settlement days before they must be closed out.

2. **Pre-Borrow Penalty.** Rule 204(b) provides that if a participant fails to close out an open fail by the deadline, the participant and any broker-dealer from which it receives trades for clearance and settlement become subject to a penalty (the “**Pre-Borrow Penalty**”) requiring them to first borrow or enter into an arrangement to borrow the security before accepting any short sales orders or effecting short sales for its own account in the security. The Pre-Borrow Penalty remains in effect until the open fail is closed out by purchasing (not borrowing) the securities.

3. **Pre-Fail Credit.** Rule 204(e) provides that a broker-dealer can avoid the close-out requirement or Pre-Borrow Penalty by purchasing or borrowing enough shares to offset its fail, subject to certain conditions, including the amount and timing of the purchase (“**Pre-Fail Credit**”).

4. **Allocations and Certifications.** The temporary rule contained exceptions for broker-dealers and market makers who certify that they have not incurred fails in respect of the relevant securities, for market makers who demonstrate that they do not have open short positions at the time of additional short sales and for participants who “reasonably allocate” a portion of a fail to deliver position to another broker-dealer for whom it clears trades. These exceptions were adopted as Rule 204(d).

B. The SEC made the following adjustments from the temporary rule:

1. **Flexibility to Purchase or Borrow.** The final rule adds flexibility by allowing borrowing to close out long fails, market maker fails or for Pre-Fail Credit. In these cases the temporary rule only allowed purchases.

2. **Pre-Fail Credit Conditions Relaxed.** Unlike the temporary rule, which conditioned the availability of Pre-Fail Credit on the broker-dealer acquiring an amount of securities equal to the amount of the open short position in the security, the final rule provides that only the amount of the fail to deliver position at the registered clearing agency must be purchased or borrowed.

3. **Additional Securities Available for Extended Close-Out Period.** The final rule expands the category of securities that qualify for an extended close-out period from only Rule 144 securities to other securities that the seller is “deemed to own” and intends to deliver, such as

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securities not yet received after exercising an option or warrant. The final rule also reduces the close-out time frame for these securities from the 36th consecutive settlement day to the 35th calendar day following the settlement date.

4. Market Maker Exception From Pre-Borrow Penalty

Removed. The final rule removes the temporary rule's exception from the Pre-Borrow Penalty for market makers that do not have an open short position in the security. The SEC explained that the exception is unnecessary because a market maker, like any broker-dealer, can be relieved of the Pre-Borrow Penalty by certifying that it is not responsible for the fail.

C. Sham Close-Outs. The final rule also added a new subsection to reemphasize the SEC's concerns regarding attempts to evade the requirements of Rule 204 through sham close-outs. New Rule 204(f) specifies that the purchase or borrow of securities will not qualify as a close-out if the participant knows or has reason to know the securities will not actually be delivered in settlement.

1. Shortly after adoption of Rule 204, the SEC announced enforcement actions for sham close outs. Specifically, on August 5, 2009 the SEC alleged that "the traders and their firms improperly claimed that they were entitled to an exception to the locate requirement, and engaged in transactions that created the appearance that they were complying with the close-out requirement." See SEC Press Release 2009-179 (August 5, 2009).

D. Record Keeping and Compliance: The adopting release also reinforced the importance of good record keeping and compliance procedures, and indicates the SEC's intent to examine firms for compliance. In addition, because Rule 204 applies to all equity securities, it effectively supplants (but does not actually remove) the close-out requirements for "threshold" securities under Rule 203(b)(3) of Regulation SHO.

E. Trading Impact. While Rule 204 does not directly control the price or manner of trading, its delivery requirements effectively limit the scale and duration of naked short selling, because of the need to cover the short sales by T+4 to avoid the preborrow requirement.

V. Short Sale Rules – Compliance Issues. On August 28, 2009, the staff of the Division of Trading and Markets released updates to its Regulation SHO FAQs, providing guidance that is relevant to the compliance practices of broker-dealers and high frequency trading firms. Division of Market Regulation: Responses to Frequently Asked Questions Concerning Regulation SHO, available at <http://www.sec.gov/divisions/marketreg/mrfaqregsho1204.htm>.

A. Marking Multiple Orders "In Flight." Broker-dealers whose clients are high frequency traders are faced with the question of how to mark orders where

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the client enters multiple orders nearly simultaneously, and after execution of the first order, the client will be net short in the position. For example, a high frequency trader that is net long 1,000 shares may enter multiple orders nearly simultaneously to sell 1,000 shares, with the intent of cancelling all trades that remain outstanding after one trade is executed. The staff's new guidance, found in Question 2.5 of the Regulation SHO FAQs, states that the staff's view of Rule 201(g)(1) is that after the first long sale order is entered to sell 1,000 shares, "it is no longer reasonable to expect that delivery can be made by settlement date on additional orders to sell the same shares." Therefore, a broker-dealer must mark only one order long, and the additional orders must be marked short.

B. Marking an Order Where the Seller is Net Long for Only Part of the Order. The staff provided guidance in Question 2.4 of the Regulation SHO FAQs, stating that where a seller is net long a security but desires to enter an order to sell for more than its net long position, the sell order for the sale of the long shares must be marked long, and the sell order for the additional shares must be marked short. For example, if a seller is net long 500 shares, but wants to sell 600 shares, only 500 shares can be marked long. The excess 100 shares must be marked short. The staff intended to make clear that Rule 200(g)(1) requires mixed orders to be entered as two separate orders, and to correct divergent market practices (including marking mixed orders as short).

C. Relying on a Locate of a Foreign Broker-Dealer. The staff provided guidance in Question 4.6 of the Regulation SHO FAQs regarding reliance on a locate of a non-U.S. registered broker-dealer. Previously, there had been varying interpretations among market participants regarding whether Rule 203(b)(2)(i), which subject to certain exceptions allows a U.S. broker-dealer to rely on a locate of another U.S. broker-dealer, extended to non-U.S. registered broker-dealers from certain countries that have incorporated Regulation SHO's locate requirements into their local regulatory regime. The staff has put this question to rest, stating unequivocally that the Rule 203(b)(2)(i) "broker to broker" exception "applies only to transactions undertaken between broker-dealers registered in the U.S. pursuant to the requirements of Rule 15(a) of the Securities Exchange Act of 1934." U.S. broker-dealers, therefore, must treat non-U.S. registered broker-dealers in the same manner as a non-broker-dealer customer. Specifically, the U.S. broker-dealer must have a reasonable belief that the non-U.S. registered broker-dealer will have the securities available for delivery on the date delivery is due, and must document such information as provided by Regulation SHO.

VI. Short Sale Rules – Proposed Price Test Rules. In response to the widely held belief that the SEC's elimination in 2007 of the historic uptick short sale restriction, Rule 10a-1, unleashed waves of short selling abuse in the markets, and the political pressure placed on the SEC, the SEC determined to revisit the subject and consider an array of replacements for Rule 10a-1.

A. On April 10, 2009, the SEC released a set of proposals that would further restrict short sales. The release offered five possible restrictions. Exchange Act Release No. 59748 (April 10, 2009).

1. Two of the proposals are “price test proposals,” restraining the price at which short sales may be effected.

(a) One is a reincarnation of the traditional Rule 10a-1 Uptick Rule, except that the new rule would reference the consolidated prices from all markets rather than permitting each market to reference its own last sale price.

(b) The other is the Modified Uptick Rule, which would use the national best bid, instead of the last sale price, as the reference point for short sale restrictions. The Modified Uptick Rule employs a procedural approach in lieu of an outright ban, requiring trading centers to establish, maintain, and enforce written policies and procedures reasonably designed to prevent the execution or display of a short sale order at a prohibited price.

2. The remaining three proposals are “circuit breaker” proposals.

(a) The Circuit Breaker Halt rule would impose a temporary halt on the short selling of a particular security—and only that security—if its price declines by 10% or more from its prior day’s closing.

(b) The Circuit Breaker Uptick rule would operate similarly, except that instead of imposing a “halt” on the shorting of a particular security, the 10% decline would trigger the Uptick Rule, applicable only to that security.

(c) Finally, the Circuit Breaker Modified Uptick Rule would simply impose the Modified Uptick Rule as a result of the 10% decline.

B. On August 17, 2009, the SEC re-opened the comment period to the proposed amendments to Regulation SHO in order to consider an alternative approach to short selling price restrictions – the alternative uptick rule. Exchange Act Release No. 60509 (August 17, 2009).

1. The alternative uptick rule was proposed without rule text, making the SEC’s intentions regarding the proposal unclear.

2. The alternative uptick rule would allow short selling only at a price above the current national best bid. Therefore, under the proposed rule, short selling could occur only at a higher price than the current national

best bid, which in many cases is significantly more restrictive than the prior proposals.

(a) Because the alternative uptick rule would reference only the current national best bid in determining permissible short sales, it would not require sequencing of bids or last sale prices.

(b) The SEC sought comment on whether the alternative uptick rule should be a market-wide rule, meaning that it would apply to all stocks, all the time, or a circuit breaker.

(c) The SEC sought comment on a series of questions, including whether a policies and procedures approach or a straight prohibition should be used, and what exceptions are appropriate.

C. The exceptions to whichever rule is ultimately adopted will be extremely important; in particular, a key question will be whether the SEC decides to include a market maker exception for equity and derivatives market makers, and whether it includes an exception for short sales to hedge a position.

D. The SEC has received nearly 4,000 unique comment letters on the original release. Most of the letters are short letters by individuals supporting the reinstatement of the uptick rule, with the remainder being from investment banks, hedge funds, law firms or trade associations that support widely disparate positions on the proposal.

VII. **High Frequency Trading:** High frequency trading refers to automated trading through frequent orders driven by complex algorithms. Many firms that engage in high frequency trading seek to end the day with little or no exposure to the market. Speed of information flows and order flows is critical to high frequency trading firms. High frequency trading has been accelerating, and raising perceived issues of fairness. From a regulatory perspective, an array of issues arise in the context of high frequency trading, including: co-location and the risks of naked/sponsored access.

A. **Co-location:** Co-location refers to providing space for the servers of market participants in the same data center housing the matching engines of a trading center. High frequency trading systems can enter and cancel orders so quickly in response to quotations that the delay of a fraction of a second from transmission from a distant location could cause the market participant to miss the opportunity to trade. As a result, high frequency traders are engaged in an arms-race to obtain the lowest latency possible. Trading centers seek to maximize their trading volumes by offering high frequency traders the chance to colocate in their data centers in the hope of stealing their order flow from other more remote markets. Regulators will mostly be concerned with fair access principles, ensuring that all members have an equal and reasonable opportunity for access to the co-location facility.

B. **Naked/Sponsored Access:** Sponsored access is the practice of high frequency traders that are not themselves broker-dealers obtaining access to markets through a broker-dealer's trading identifier, and when this is done without pretrade risk-management systems reviewing the orders being transmitted to the markets, it is referred to as "naked" access.

1. The appeal of sponsored access is that it provides anonymity and for high frequency traders it saves microseconds.

2. Sponsored access raises a series of supervision, compliance and risk-management issues. The key problem is that the exchange member sponsoring the trader may not see or control the trader who they have connected to the exchange, and trader is not an exchange member subject to exchange regulation. Sponsored access raises the risk of overwhelming waves of unauthorized trades sweeping the market.

3. The NYSE and other SROs have taken the position that the sponsoring member is responsible for ensuring compliance with the regulations and should be liable for any failures. There have been a number of disciplinary cases imposing penalties on broker-dealers for these failures.

4. On January 22, 2009, Nasdaq filed a proposed rule to modify the requirements for members that provide sponsored access to Nasdaq's execution system. See Exchange Act Release No. 59275 (January 22, 2009). The proposed rule requires that sponsoring firms assume responsibility for their customers' trading activity and have effective financial and regulatory oversight of the sponsored customer. The rule also requires that sponsored access providers make available to Nasdaq all information necessary to provide effective exchange oversight. Nasdaq's proposal does not require the sponsored participant's trade to first pass through the sponsoring member's risk management system. Nasdaq has recently submitted an amended proposal, but this amendment has not been noticed for comment. SEC Chairman Schapiro, in October 2009, announced the SEC's intention to propose a rule regarding sponsored access, available at <http://www.sec.gov/news/speech/2009/spch102709mls.htm>.

VIII. **Dark Pools:** Beginning in the summer of 2009, the SEC began focusing on dark pools and whether regulatory reforms were needed. In a June 18, 2009 speech, SEC Chairman Mary Schapiro described dark pools as "automated trading systems that do not display quotes in the public quote stream." available at <http://www.sec.gov/news/speech/2009/spch061809mls-2.htm>. Chairman Schapiro indicated that she has directed the SEC staff to investigate regulatory actions that can be taken to increase the transparency of dark pools. Chairman Schapiro's June 18, 2009 speech and the speech by Jamie Brigagliano on May 20, 2009 raised five main issues regarding dark pools: hidden quoting, opaque transaction reporting, fragmentation, unfair access, and competitive

display. available at <http://www.sec.gov/news/speech/2009/spch052009jab.htm> (the “**May 20, 2009 Brigagliano Speech**”). The SEC has voted to issue proposals to address these concerns, but the proposals have not yet been released. Those concerns are described below, followed by a description of the proposals.

A. **Hidden Quoting:** The Regulation NMS construct is that quotes and customer limit orders of exchanges and over-the-counter market makers must be displayed in the public quotation stream (operated by CTA and Nasdaq) unless the orders and quotes are dark, i.e., displayed only to one other person. However, limit orders and quotes on an ATS can be displayed within the ATS system and to others without being displayed in the public quotation stream until the ATS executes more than 5% market share in the particular stock that is quoted.

1. **Indications of Interest:** The staff has long worried that indications of interests (“**IOIs**”) are used to circumvent the quoting requirements. The quote rule excepts IOIs from the general requirement that quotes be displayed to the public. See Rule 602. Although the rule does not define the term “indications of interest,” the staff believes that at a minimum, IOIs must be non-actionable. If an IOI explicitly or implicitly communicates enough information on which to base a response, and by its terms or by consistent practice the IOI can be executed against, it will be viewed as a quote, not an IOI.

2. **Quoting threshold:** Questions have also been raised whether the 5% threshold for inclusion of ATS quotes in the public quotation stream should be lowered.

(a) Exchanges have argued that just as their quotes must be made publicly available and included in the public quotation stream irrespective of volume levels, so ATS quotes should be included in the quote stream without a market share threshold.

(b) OTC market maker quotes in listed stocks must be made available at a 1% market share threshold.

B. **Opaque Transaction Reporting:** The SEC staff has stated that current ATS trade reporting practices make it difficult for the public to assess dark pool trading volume and evaluate which dark pools may have liquidity in particular stocks.

1. **Market Identifiers:** Currently, ATSS report their transactions to a Transaction Reporting Facility (“**TRF**”) operated by an exchange in conjunction with FINRA, or to FINRA’s own TRF (the Alternative Display Facility, or “**ADF**”). Each ATS trade is reported individually by the TRF to the consolidated transaction reporting systems and is publically disseminated by the CTA or Nasdaq with the identifier of the particular TRF.

(a) While many market participants know where the larger ATSs report their trades, some ATSs split their reports between TRFs, and TRFs commonly receive trade reports from multiple reporting entities. As a result, it is difficult to ascertain the trading volume of an ATS from its TRF transaction reports.

(b) Trading reporting is important to ATSs that principally trade blocks for institutions, which may not have completed a block transaction on the ATS when pieces of the block are reported. Trade reports from a block trading ATS may disclose that a block is being executed, moving the market in a way that impairs execution of the block.

2. **Reporting Conventions:** Many ATSs, including dark pools, make their trading volume statistics available on their websites, but these statistics are not standardized. ATS statistics often double-count buy and sell orders that are crossed as one trade, or include volume routed away from the ATS in the ATS's volume. Therefore, ATS reporting data requires substantial interpretation before the trading volumes of multiple ATS can be compared.

C. **Fragmentation:** The SEC and many market participants have raised concerns regarding market fragmentation for many years. The most recent fulsome discussion of fragmentation by the SEC was in a 2000 release noticing the NYSE's elimination of their off-board trading restrictions rule, Rule 390. Exchange Act Release No. 42450 (February 23, 2000). In the 2000 release, the SEC proposed the following potential options for addressing fragmentation:

1. Requiring greater disclosure by market centers and brokers concerning the quality of trade executions and order routing practices (implemented by adoption of the execution quality statistics rules, Rules 605 and 606 of Regulation NMS)

2. Restricting internalization and payment for order flow (indirectly addressed by trading in pennies);

3. Requiring exposure of market orders to price competition;

4. Adopting an intermarket prohibition against market makers trading ahead of previously displayed and accessible limit orders;

5. Providing intermarket time priority for limit orders or quotations that improve the NBBO; and

6. Establishing price/time priority for all displayed trading interest (partially implemented in Regulation NMS by providing for price priority for displayed quotes)

D. **Fragmentation (cont'd):** The staff recently expressed concern about growing fragmentation resulting in part from the growth of dark pools, and suggested that it may reconsider some form of time priority for displayed limit orders as discussed in the 2000 fragmentation release. The staff has distinguished between block crossing systems and small order systems, asking whether small order systems are more likely to impair the public price discovery function by diverting valuable marketable order flow away from the exchanges and ECNs that contribute to price discovery by publishing quotes in public quote stream. See the May 20, 2009 Brigagliano Speech.

1. Further, the SEC staff has expressed the concern that detracting from the incentive to display liquidity in the public markets could decrease that liquidity and in turn harm price discovery and worsen short-term volatility, which could decrease public confidence in the markets. See the May 20, 2009 Brigagliano Speech.

2. In 2008, Erik Sirri, the Director of the Division of Trading and Markets, stated that the concern of trading volume moving off of quoting venues was misplaced, as “most of the movement in trading volume has been within each of the two categories of quoting venues and dark venues; that is, volume has shifted among various quoting venues and among various dark venues, but has not shifted out of quoting venues into dark venues.” available at <http://www.sec.gov/news/speech/2008/spch020108ers.htm>.

E. **Unfair Access:** A fundamental premise of the national market system is that market participants should have the opportunity to participate in a market at least when it reaches a significant size. To that end, exchanges were required to provide fair access for broker-dealers to become members. Accordingly, Regulation ATS originally required ATSS to establish fair access procedures when they reached a 20% market share threshold. The SEC as part of the Regulation NMS adoption process reduced the threshold for application of the ATS fair access requirements from a 20% to a 5% market share. See Rule 301(b)(3)(iii).

1. The SEC staff has noted that widespread use of actionable order messages among a selected group of market participants could create the potential for significant private markets to develop that exclude public investors. See the May 20, 2009 Brigagliano Speech.

F. **Competitive Issues:** Regulation ATS exempted from exchange regulation those trading systems that were operated as broker-dealers, did not act as self-regulators, and did not hold themselves out as exchanges. In the place of exchange regulation, Regulation ATS applied the most fundamental exchange requirements to ATSS that crossed market share thresholds.

1. Registered exchanges, such as NYSE, have expressed the view that ATSS should be regulated in parity with exchanges, as the need to encourage ATS competition to exchange markets no longer exists.

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Most recently, on June 9, 2009, Thomas Callahan, Executive Vice President and Head of US Futures for NYSE Euronext, expressed this view in testimony before the House Financial Services Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises. In particular, Callahan asked the Subcommittee to encourage the SEC to revisit the regulatory regime for ATSS and to assure that ATSS are held to the same standards as organized exchanges. This view was repeated on October 20, 2009 by NYSE Euronext's CEO at a joint press conference with Senator Charles Schumer.

G. **SEC Proposals.** The SEC voted on October 21, 2009 to release three proposals intended to increase transparency and mitigate fragmentation. The text of the proposals has not yet been released. However, based on comments made at the SEC open meeting on October 21, the proposals are to: (1) require actionable indications of interest to be treated as quotes; (2) lower the trading volume threshold for displaying best-priced orders from 5% to 0.25%; and (3) require real-time disclosure of the identity of the ATS that executes a trade (as opposed to the generic "over-the-counter" designation). In each case, the SEC proposed an exception for block trades, defined as trades of \$200,000 or more that are communicated only to those who are reasonably believed to represent current contra-side trading interest of equally large size.

H. **Actionable IOIs.** Presently, the definition of "bid" or "offer" in Regulation NMS excludes "indications of interest." Rule 600(b)(8). The SEC seems to be ready to propose to amend this definition to include "actionable" indications of interest. Because the terms "bid" and "offer" are used in the definition of "order" in Regulation ATS, actionable indications of interest would be considered orders under Regulation ATS and therefore subject to the display requirements described below, subject to an exception for block trades. See Rule 300(3) (definition of "order").

1. The term "actionable indication of interest" would not be defined in the rule. Instead, the proposing release would provide guidance on the factors the SEC considers relevant to determining whether an indication of interest is actionable. These factors would include whether the indication of interest includes information regarding: (1) the security at issue; (2) the side of the order represented; (3) the price being offered; and (4) the size of the order. Essentially, the test is whether the IOI represents a firm quote.

2. The SEC's proposal would make explicit an interpretive position that was expressed over a decade ago in the Regulation ATS adopting release. It said: "The label put on an order – 'firm' or 'not firm' – is not dispositive. For example a system claiming it displays only 'indications of interest' that are not orders, may be covered by the new interpretation of 'exchange' if those indications are, in fact, firm in practice." In addition, the SEC cited this language in the proposal to eliminate flash orders (see below).

I. **Public Display of Quotes.** As noted above, Rule 301(b)(3)(ii) provides that with respect to any NMS stock in which the ATS during at least four of the preceding six calendar months had an average daily trading volume of five percent or more of the aggregate average daily share volume, the ATS shall provide to a national security exchange or association the prices and sizes of the orders at the highest buy price and the lowest sell price for such NMS stock displayed to more than one person in the ATS (other than employees), for inclusion in the quotation data published by the exchange or association. The ATS is also required to provide broker-dealers the ability to execute against the displayed quote equivalent to the ability to effect a transaction with other orders displayed on the exchange that displays the ATS's quote. The SEC proposal is to lower this 5 percent threshold to 0.25%. Dark pools that are truly dark, i.e. do not display quotes to more than one person, would not be required to publicly display quotes.

J. **Post-Trade Reporting.** The third proposal is to amend the joint-industry plans for disseminating consolidated trade data to require real-time disclosure of the identity of dark pools and other ATSs on the public reports of their executed trades. Today, dark pool and ATS activity is recorded generically as having occurred "over-the-counter."

K. **Block Trades.** In each case, the SEC's proposals provide an exception for block trades of over \$200,000. The SEC chose a definition of block trades based on a dollar value, rather than a number of shares, because in light of the recent market stresses it is evident that a large quantity of shares can trade at relatively low price.

IX. **Flash orders:** Recently, controversy has erupted over "flash orders," with critics claiming that flash orders provide an unfair advantage to those who see the flashed order to the exclusion of other investors, including retail investors, and proponents arguing that flash quotes are nothing more than the electronic version of practices that previously occurred throughout the equity markets. The controversy culminated in the SEC proposing to ban the use of "flash orders" on equities and options exchanges and large ATSs (see Section IX.F below).

A. The term "flash orders" essentially refers to a practice whereby a trading center will show participants of the trading center marketable orders of other participants for a few milliseconds, typically at the marketable quote price. Market participants with the requisite electronic connections can then execute the orders at the flash price or better. If the order is not immediately executed, it will be withdrawn without exposure to the entire market place.

B. "Flash orders" have crystallized the concern of many observers that a "two-tiered" market is emerging. These concerns include the exposure of the order only to particular market participants rather than the entire public market and the potential for certain participants to view the flash order and trade ahead of it in the market, resulting in worse execution prices for the customer order.

C. “Flash orders” also raise fragmentation concerns because they provide market participants the opportunity to selectively trade with a flashed order without the need to publish a quote, while not providing displayed quotes the chance to trade with the order.

D. The controversy most recently intensified following a July 24, 2009 front page story in the New York Times, which gave a voice to critics of high frequency trading and flash orders. Later that same day, Senator Charles Schumer sent a letter to the Chairman of the SEC, requesting that the SEC prohibit the use of flash orders and claiming that if the SEC did not act, he would introduce legislation banning the orders. In the following days, there were a series of follow-up articles and opinion pieces published. On August 4, 2009, the SEC Chairman Shapiro announced that the SEC would seek to ban flash orders through a notice and comment rulemaking. See <http://dealbook.blogs.nytimes.com/2009/08/04/sec-to-look-for-flash-trading-ban-schumer-says/>. On August 6, 2009, Nasdaq and BATS announced that they would voluntarily shut down their respective flash order systems on September 1, 2009. See Exchange Act Release No. 60569 (August 26, 2009) (notice of BATS rule change) and Exchange Act Release No. 60570 (August 28, 2009) (notice of Nasdaq rule change).

E. In addition, in May 2009, FINRA issued a regulatory notice to remind member firms of their obligation to provide accurate information “when disseminating, or using services to disseminate, indications of interest to the marketplace.” See FINRA Regulatory Notice 09-28.

F. **The SEC Proposal.** In order to ban the use of “flash orders,” the SEC has proposed amending the quote rule of Regulation NMS, requiring ATSS that have crossed the threshold for the public display of quotes to display flash orders, and deeming flash orders as orders that would violate Regulation NMS’s prohibition on lock or crossing orders. Significantly, the SEC states in the release that certain market mechanisms and order types, such as price improvement auctions and immediate or cancel orders, that bear some functional similarities to flash orders will not be affected by the proposal. Exchange Act Release No. 34-60684 (September 18, 2009).

1. **Amendment to the Quote Rule.** The SEC proposes to eliminate paragraph (a)(1)(i)(A) of Rule 602 of Regulation NMS, which today excludes from the requirement to display quotes “[a]ny bid or offer executed immediately after communication and any bid or offer communicated by a responsible broker or dealer other than an exchange market maker which is cancelled or withdrawn if not executed immediately after communication.” As a result, flash orders on an exchange would need to be included in the exchange’s public quote.

2. **Display Requirements for Flash Orders on ATSS.** Rule 301(b)(3)(ii) of Regulation ATS provides that if an ATS meets a 5% volume threshold in an exchange-traded stock, it must submit its quotes in

such stock to be included in the consolidated quote stream. The proposal would apply Rule 301(b)(3)(ii) to orders that either are immediately executed or withdrawn if not immediately executed, and that would otherwise be included in the quote stream under Rule 301(b). Therefore, an ATS would be required to send to the consolidated quote stream flash orders for stocks that the ATS is required to quote publicly.

3. **Proposed Interpretation of Locked or Crossed Market Requirements.** Rule 610(d) of Regulation NMS requires national securities exchanges and associations to establish, maintain and enforce rules to reasonably avoid displaying “locking” or “crossing” quotations. If the amendment to Rule 602 is adopted, the SEC would consider the display of quotations that either are immediately executed or withdrawn if not immediately executed to be the display of quotations that are subject to Rule 610(d). Therefore, orders with marketable prices could not be flashed without being a locking or crossing order subject to Rule 610(d). The SEC would also adopt an interpretation of the locked and crossed markets provisions of the Linkage Plan for options that would have a similar result in the case of flash orders for listed options.

X. **Issues in the Options Markets**

A. **Penny Pilots**

1. Options markets, unlike equities markets, did not move to trading in pennies during the switch to decimalization. Instead, options priced at or above \$3.00 traded in \$.10 quote increments, and options priced under \$3.00 traded in \$.05 quote increments.

2. Option exchanges have long argued that moving to quotations in pennies would overwhelm the capacity of the exchanges and firms to trade and process option orders. They also have argued that trading in pennies would reduce liquidity at the quoted price, as occurred in the equities market. However, some exchanges argued that penny trading would reduce spreads and improve retail executions.

3. Beginning in early 2007, at the insistence of the SEC, the six options exchanges began quoting certain options (generally those priced below \$3.00) in pennies on a pilot basis.

(a) Certain market participants have argued that \$1.00 is the right break point for quoting in pennies.

4. The most recent phase of the pilot, which covered 63 classes of option, expired on October 31, 2009, and each of the exchanges have filed proposals for the next phase of the pilot.

5. A July 17, 2009 Traders Magazine article reported that trading in pennies represents half of all volume, and could represent up to 85% during the next phase of the pilot.

B. Dollar Strikes

1. Most options classes offer series listed at \$2.50 or \$5.00 strike prices. The current dollar strike program allows ISE, NYSE Arca, NYSE Alternext and CBOE to select 55 stocks on which options series may be listed at \$1 price intervals, so long as the underlying stock price is less than \$50.00.

(a) Each exchange may list strike prices at \$1 intervals from \$3 to \$50, but no \$1 strike price may be listed that is greater than \$5 from the underlying stock's closing price in its primary market on the previous day. Each exchange also may list \$1.00 strikes on any other option class designated by another securities exchange that employs a similar program under their respective rules. The exchanges may not list long-term option series at \$1 strike price intervals for any class selected for the program. Each exchange is restricted from listing any series that would result in strike prices being \$0.50 apart. See Exchange Act Release No. 59587 (March 17, 2009).

(b) The SEC reasons that the program provides investors with added flexibility in the trading of equity options and furthers the public interest by allowing investors to establish equity options positions that are better tailored to meet their investment objectives, particularly given current market conditions.

C. Execution Quality Statistics for Options

1. The SEC did not apply its execution quality statistics rule, Rule 605 of Regulation NMS, to listed options, although its order routings Statistic Rule 606, does apply to listed options.

2. In July 2008, SIFMA issued recommendations for improving the quality of execution reports for options exchanges. The SEC would like to see brokers base routing decisions more on execution quality and less on the receipt of payment for order flow.

3. Under the SIFMA proposal, data would be uniform, making comparison easier.

4. Brokers do not seem convinced that the data will have a major impact on routing.

5. It remains to be seen whether the SEC will engage in rulemaking activity, or if the SEC is satisfied with the industry's efforts.

D. Maker-Taker Fees for Options

1. The equity market fee structure developed by ECNs of paying liquidity providers if their limit order is executed, and charging liquidity takers if they execute against displayed liquidity (so called "maker/taker fees"), has expanded in the options markets, where they raise similar issues as in the equity markets

(a) Rule 610(c) of Regulation NMS capped fees for taking liquidity at \$.003.

2. Options markets participants have railed against these fees, and one participant has petitioned the SEC to ban these fees.

3. In May 2008, Erik Sirri, Director of the SEC Division of Trading and Markets, in a speech expressed sympathy for restraining excessive taker fees, and said they should not exceed a cent a contract. He also said that "SEC staff will continue to monitor developments in changes to the fee structures, and corresponding changes in behavior, in the options markets, to gauge the impact and see if further action is warranted." available at <http://www.sec.gov/news/speech/2008/spch050208ers.htm>.

4. In July 2008, Citadel petitioned the SEC to institute a rulemaking proceeding to limit the fees that options exchanges may charge non-members to obtain access to quotations to \$.20 per contract. available at <http://www.sec.gov/rules/petitions/2008/petn4-562.pdf>.

E. Fragmentation and Internalization

1. Unlike equities, trades in standardized options can only be executed on an exchange. As a result, there is no active OTC trading in standardized options. Recently, several ATs have developed to trade options through matching orders and executing them on an exchange.

2. Unlike futures, standardized options are cleared by a single clearing agency, the Options Clearing Corporation, and are fungible across options exchanges. Thus, an options position purchased on one exchange can be offset and closed through purchase of the same options series on another exchange.

(a) Although options had been traded by multiple exchanges before 1977, after its Special Study of the Options Markets in 1978 the SEC determined not to permit multiple trading options on listed stocks. Instead, new options on listed stocks

were allocated to a single exchange pursuant to an Allocation Plan. Subsequently, the SEC allowed multiple trading on options on new products, including GNMA's, broad and narrow-based stock indices, Treasury securities, foreign currencies, and over-the-counter equities.

(b) In May 1989, the SEC reversed its policy and adopted Rule 19c-5, which prohibited options exchanges from having rules that limit their ability to list any stock options class because that options class is listed on another options exchange.

(c) Thus, from January 20, 1990, going forward, each exchange was permitted to list any equity option that was being listed for the first time, i.e., that had not been previously traded on any exchange. Multiple listing of equity options that were already being traded as of January 20, 1990 was phased in over a period of time ending in late 1994. Thus, by the end of 1994, each option exchange could list any equity option class.

(d) The SEC undertook these changes because it determined that competition among exchanges for options business would benefit investors by narrowing spreads.

(e) Following the adoption of Rule 19c-5, the four options exchanges adopted a joint plan to provide procedures for listing new equity options ("**Options Plan**"), which allowed each exchange to pre-announce its intention to list a new equity option class, established a twenty-four hour time frame for other exchanges to announce their intention to list the same option, and provided waiting periods before any exchange could start trading that option.

(f) In practice, however, competition in initial listed options did not develop, and many frequently traded equity options were traded only on one exchange. No exchange faced new competition on their options from another exchange, other than in the initial listing window, until the summer of 1999.

(g) Multiple trading did not start in earnest until the summer of 1999, as a result of two significant actions:

(1) In November 1998, the International Securities Exchange announced its intent to register as an options exchange and to engage in multiple trading of the most-actively traded options.

(2) In 1999, the Department of Justice and SEC initiated investigations of the options exchanges for

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conspiring to limit multiple trading in options, in violation of Rule 19c-5. These actions were settled in September, 2000, with a SEC censure of the four options exchanges, and a consent decree of the Justice Department.

(h) Beginning in August 1999, the then five options exchanges began trading options listed initially on another exchange, and soon almost all actively traded options became multiply trades.

3. The remaining actively traded options that are not multiple traded are options on indices subject to exclusive or preferential licensing arrangements. Because of licensing restrictions, these options are solely listed on one exchange. Some of these options are among the most actively traded options.

(a) In 2002, the ISE petitioned the SEC to amend Rule 19c-5 to prohibit an options exchange from being a party to exclusive or preferential licensing arrangements with respect to index option products and options overlying other instruments, including options on securities whose value is based on an index. See <http://www.sec.gov/rules/petitions/petn4-469.htm>. The SEC has not taken action on the petition.

(b) In September 2005, the SDNY held that two index providers, Standard & Poor's ("**S&P**") and Dow Jones, did not have a protectible property interest in options on the SPDR2 and options on DIAMONDS3 – ETFs based on their indices. The McGraw-Hill Companies, Inc., v. International Securities Exchange, Inc., and Dow Jones & Co., Inc., v. International Securities Exchange, Inc., consolidated as No. 05 Civ. 112 (HB), 2005 U.S. Dist. LEXIS 18674 (S.D.N.Y. Sept. 1, 2005).

4. Over the objections of commenters, the SEC originally adopted Rule 19c-5 without conditioning multiple trading on the development of an intermarket linkage like the ITS in the equity markets. However, as multiple trading developed, the SEC determined that the options exchanges would need to create systems to help ensure that customers receive best execution of their orders. Thus, the SEC issued an order requiring the exchanges to develop a linkage, and the exchanges

² The SPDR is an ETF based on the S&P 500 index.

³ The DIAMONDS is an ETF based on the Dow Jones Industrial Average index.

moved forward to implement that linkage. Exchange Act Release No. 42029, (October 19, 1999).

5. Multiple trading of options resulted in benefits for customers, as well as pressures on exchanges to provide opportunities to order entry firms to trade with their orders. Concerns about the responses to these internalization pressures grew. In 2004, the SEC published a concept release to discuss the issues raised by these internalization pressures, in which it described the consequences of multiple trading. Exchange Act Release No. 49175 (February 3, 2004).

(a) The SEC said that greater competition among options exchanges for order flow has manifested itself in many ways. Exchange transaction fees for customers have all but disappeared. Spreads are narrower. Markets have expanded and enhanced the services they offer and introduced innovations to improve their competitiveness. At the same time, inducements to order flow providers, including payment for order flow and internalization opportunities, have increased.

(b) In the release, the SEC sought comment on a range of potential responses to the internalization issues of options, but took no direct action to address the issues after the concept release was published.

6. Pressure on exchanges to accommodate internalization of orders by order entry firms or market makers who pay for order flow have continued. Although largely resisted by the SEC, these have resulted in a complicated web of rules allowing different degrees of interaction with customer orders.

F. **Decentralized Options Linkage Plan.** On July 30 2009, the SEC approved a revised options order protection and locked/crossed market plan for the options market. Exchange Act Release No. 60405 (July 30, 2009). Prior to the adoption of the revised plan, the options market was operating under the original options market linkage plan, which was adopted to minimize trade throughs and to avoid a locked or crossed market. See Exchange Act Release No. 43086 (July 28, 2000). The revised plan was adopted in response to growth in the volume of options traded and the move towards quoting in pennies. In addition, the revised plan replaces the original central linking mechanism with a decentralized structure. The revised plan also permits the use of intermarket sweep orders, which were not incorporated into the old plan. The revised plan in many ways tracks Regulation NMS.

1. **Trade Throughs.** The revised plan requires each participant to establish, maintain, and enforce written policies and procedures as approved by the SEC that are reasonably designed to prevent trade throughs in all options series overlying a security or group of

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securities which class is available for trading on two or more exchange that are participants in the plan. Each participant is required to conduct surveillance of its market on a regular basis to ascertain the effectiveness of the policies and procedures to prevent trade throughs.

(a) The plan provides a number of exceptions for certain transactions from the prohibition against trade throughs, and participants are required to establish, maintain and enforce written policies and procedures reasonably designed to assure compliance with the terms of the exception to the extent any exceptions is relied upon. Exceptions are included for: systems issues, trading rotations, crossed markets, intermarket sweep orders, quote flickering, non-firm quotes, complex trades, customer stopped orders, stopped orders and price improvement, and benchmark trades. These exceptions closely parallel the exceptions to the trade through prohibition in Regulation NMS.

2. **Locked and Crossed Markets.** The revised plan requires each participant to establish, maintain, and enforce written rules that require their members reasonably to avoid displaying locking or crossing quotes, and requires participants to have written rules that are reasonably designed to assure reconciliation of any lock or cross.

3. **Implementation.** The revised plan was implemented on August 31, 2009.

XI. **Institutional Best Execution.** Pursuant to common law fiduciary obligations, investment advisers have a duty to provide “best execution” to their clients. In satisfying its best execution obligation, an adviser must execute securities transactions for clients in such a manner that the clients' total cost or proceeds in each transaction is the most favorable under the circumstances. In assessing whether this standard is met, an adviser should consider the full range and quality of a broker's services, including, among other things, execution capability, commission rate, financial responsibility, responsiveness to the adviser, and the value of any research services provided. In other words, the analysis takes into account cost, as well as qualitative factors. See Exchange Act Release No. 23170 (April 23, 1986); see also *Newton v. Merrill, Lynch, Pierce, Fenner & Smith*, 135 F.3d 266 (3d Cir. 1998); and SEC Market 2000 Report, Study V, Best Execution (the “**Market 2000 Report**”).

A. **Policies and Procedures.** To satisfy the duty of best execution, investment advisers should implement policies and procedures designed to ensure best execution of client orders (as described above).

B. **Periodic Review.** The duty of best execution includes an obligation to periodically review performance in light of market and technology changes, and that the review should be comparative, i.e. a review of competing markets to ensure that the best markets are being used. See Sec Exchange Act Release No. 23170 (April 23, 1986); see also *Newton v. Merrill, Lynch, Pierce, Fenner & Smith*, 135 F.3d 266 (3d Cir. 1998).

1. In order to conduct the periodic review, a committee of senior personnel could be formed to undertake the task. The committee could be guided by written guidelines, with objective criteria that are applied consistently.

2. Many times third parties are engaged to analyze data and assist in the determination of whether best execution is being achieved.

3. It is prudent to document the entire review process, including the factors considered and guidelines that were applied.

C. **Client Disclosures.** Investment advisers should also review client disclosure to be certain that its policies and execution practices are consistent with Form ADV disclosures. Policies and procedures should be described accurately, and any potential conflicts should be fully disclosed.

D. **Soft Dollars and Other Conflicts.** It is important to consider whether other factors that could be conflicts are influencing execution decisions. These areas include soft dollars and client-directed brokerage issues.

1. **Soft Dollars.** Section 28(e) of the Exchange Act provides a safe harbor against fiduciary duty claims for advisers that use commissions paid for customer orders to obtain brokerage and research services. Specifically, Section 28(e) provides a person who exercises investment discretion over client accounts from claims of breach of fiduciary duty if that person causes client accounts to pay more than the lowest available commission rate, provided that the adviser determines in good faith that the commission charges are reasonable in relation to the brokerage and research services. There is a conflict between choosing a broker for its execution services and its provision of soft dollars. Therefore, this potential conflict should be considered and disclosed. See the Market 2000 Report.

2. **Client –Directed Brokerage.** Client-directed brokerage refers to the practice of a client directing commissions to a specified broker. The potential for a conflict arises because some advisers may feel pressure to use a broker to which significant commissions are otherwise directed, even if that broker is not best suited to handle a particular trade. Apparently clients may give brokers routine instructions to use the broker as consistent with best execution. See the Market 2000 Report.

GLOSSARY OF SELECTED MARKET STRUCTURE TERMS

ATS refers to an “alternative trading system” that acts as a venue for trading securities and is subject to regulation under Regulation NMS. Alternative trading systems are typically electronic trading systems involving multiple parties (although manual interdealer broker systems are also ATSS). ATSS are required to register with the SEC as broker-dealers and as an alternative trading systems, and are subject to requirements for quoting, fair access, systems reliability and information confidentiality at differing thresholds of market share. They also cannot call themselves exchanges.

Co-location refers to the practice of exchanges, ATSS or third parties providing space for the servers of market participants in the same data center housing the matching engines of the trading center. Co-location is favored by high frequency traders because it affords lower latency in the transmission of the order from the trader to the market center.

Dark Pools refers narrowly to ATSS that do not display bids and offers in the public quotation stream. More broadly, Dark Pools refers to sources of liquidity not reflected in public quotes, such as dark orders on exchanges and internalization of orders by a broker-dealer.

Decimalization refers to the transition from quoting stock prices in 1/16ths or 1/8ths of a dollar to quoting in pennies, or decimals. The transition to decimal pricing occurred in 2000.

Direct Market Access refers to the practice of a broker-dealer providing its client with the ability to route orders directly to a market using the broker-dealer’s market participant identifier, or MPID. Direct Market Access sometimes refers only to orders that are routed through a broker-dealer’s systems for credit and regulatory checks before routing on the market; in this context, orders that are not routed through the broker-dealer’s systems are referred to as sponsored access or naked access.

ECN refers to an “electronic communications network,” which is an ATS used in part by market makers that displays orders within its system. ECNs do not include dark crossing systems or over-the-counter market makers’ trading as principal with customers.

Exchange refers to a national securities exchange registered with the SEC. Examples include the New York Stock Exchange and Nasdaq. Exchanges are subject to greater regulatory oversight than ATSS.

Flash Orders refers to a practice whereby a trading center will for a few milliseconds show to subscribers customer buy orders priced at the national best offer, or customer sell orders priced at the national best bid. Subscribers with fast electronic connections can then execute the orders at the flash price. If the order is not immediately executed, it is withdrawn without exposure to the entire marketplace, or is routed to other exchanges. Flash orders are only tangentially related to high frequency trading.

High Frequency Trading refers to automated trading by complex algorithms that enter and often cancel orders frequently, often thousands of times a minute. Many firms that engage in high frequency trading seek to end the day with little or no exposure to the market. Various strategies are used, including statistical arbitrage, market making and event-based strategies. In general, the term is vague and probably has different meanings to different people.

Indication of Interest refers to an order that requires further agreement before it can be executed. There is significant debate as to the point at which an Indication of Interest, or IOI, should be treated as “actionable,” i.e. as a firm order, thereby requiring a facts and circumstances analysis in many cases.

Limit Order refers to an order to execute a transaction at a specified price. Marketable limit orders are buy limit orders at or above the national best offer to sell, and sell limit orders at or below the national best bid to buy. Non-marketable limit orders are buy limit orders below the national best offer, and sell limit orders above the national best bid.

Locked and Crossed Market refers to a national best bid to buy that is at the same price as the national best offer to sell (Locked Market) or at a higher price than the national best offer to sell (Crossed Market). Exchanges are required by Regulation NMS to have rules to deter and correct locked and crossed markets. Locked and crossed markets occur when a quote is temporarily inaccessible, or when the quotes have access fees that discourage hitting the quote.

Naked Access refers to direct market access where the non-broker-dealer connects directly to the market without first having its orders pass through the broker-dealer’s system, including its risk management controls.

Naked Short Sale refers to a short sale where the seller does not borrow or otherwise have available to deliver the shares that are sold short.

Sponsored Access usually is synonymous with **Naked Access**.

Spread refers to the difference in price between the national best bid to buy and the national best offer to sell.

Trade-through refers to transacting an order on one market center when a more advantageous price is available at another market center, i.e. “trading-through” the order. The order protection rule of Regulation NMS requires a trading center to establish, maintain, and enforce written policies and procedures that are reasonably designed to prevent trade-throughs, subject to numerous exceptions. Rule 611(a)(1).

Upstairs Market refers to the market for trades executed internally by a broker-dealer or over-the-counter with another broker-dealer rather than on an exchange. Dark Pools have been analogized to the “upstairs market” for block trading that was prominent in the era of stock exchange dominance.