April 28, 2010

VIA EMAIL AND FEDERAL EXPRESS

Ms. Elizabeth M. Murphy
Secretary
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

RE: Concept Release on Equity Market Structure
File No. S7-02-10

Dear Ms. Murphy:

Direct Edge Holdings, LLC ("Direct Edge") appreciates the opportunity to comment on the Securities and Exchange Commission's ("Commission") recent equity market structure concept release (the "Release"). This comprehensive, holistic effort is necessary to ensure that any resulting regulation will properly account for the interconnectedness of the equity markets. The comments received through this process should provide the Commission with a wealth of perspective from which to help craft a coordinated, comprehensive regulatory approach going forward and minimize unintended consequences.

The breadth and depth of the issues raised in the Release call for a fundamental re-evaluation of how to further the objectives of the national market system in the 21st century. While the nation's equities markets performed admirably during the recent financial crisis, and are operating at record levels of efficiency and transparency, room for improvement remains. Only by examining the market participants whose interests we wish to serve, defining clearly the characteristics of the market structure we seek to promote, and implementing market regulation that is both targeted and adaptable can American trading and capital markets build towards an even brighter future.

Our comments will begin with an executive summary of our beliefs and recommendations, followed by an explanation of the underlying principles that guide our beliefs and detailed remarks about the evidence and implementation issues related to our suggested course of action.

1 Direct Edge is currently the third-largest stock market operator for the trading of U.S. equity securities, behind only NYSE Euronext and NASDAQ OMX. Approved by the Commission in March of this year to operate two newly licensed exchanges, it anticipates launching its EDGA Exchange and EDGX Exchange beginning in July 2010. More information about Direct Edge is available at www.directedge.com.

1. **Executive Summary and Recommendations**

We offer the following guiding principles and recommendations to the Commission in connection with the Concept Release:

- **Pursue regulatory initiatives that maximize, not limit, synergies between the various market constituencies.** Investors (using both long- and short-term trading and investing strategies), intermediaries (both “execution only” and “full service,” “exchange,” and “ATS”) and issuers often have complementary, rather than competing, interests. Initiatives that try to promote one group or sub-group over another will do little to improve overall market performance. Greater gains are in efforts to recognize their similar interests and build policies that further them without trade-offs.

- **Focus on detecting and deterring undesired conduct, not the technology used to perpetrate it.** Automation has generally been a means to valuable improvements to market quality and investor capabilities, but like any technology, it can provide new means to effect prohibited conduct. Rather than engage in a lagging exercise of attempting to restrict the technology used for nefarious ends, regulators should invest in the tools and talent to detect such conduct and punish its perpetrators. Investment in greater market-wide surveillance capabilities within a framework that properly allocates its costs among all market participants is the appropriate path forward in this regard.

- **Within a framework that provides clear transparency as to how intermediaries handle orders and provide execution quality, allow market-based solutions to address the competing concerns of order transparency, price discovery and market impact on an investor-by-investor and trade-by-trade basis.** Investors and their chosen intermediaries are best equipped to decide how to execute their orders and how to bundle execution services with other products that meet their overall financial needs. Techniques such as the use of non-displayed order types and the use of non-exchange execution venues reflect these. While use of such practices ebb and flow over time, they have not approached levels that undermine overall market quality. To ensure this over time and allow investors to hold intermediaries accountable for the execution decisions, improvements to existing Rules 605 and 606 can be made to provide more detailed insight to investors.

- **Further expansion of the “trade through” rule could do more harm than good.** With the current protection of the orders at the national best bid and offer (“NBBO”) under the “trade through” rule, a baseline level of execution quality is provided to each individual order. Imposition of a broader “trade at” rule or providing “trade through” protection to orders priced outside the NBBO may unduly limit innovation and interfere with legitimate business models and economic competition while providing little, if any, incremental benefit.
• Require comprehensive transparency of the technology offerings that exchanges seek to provide directly, avoid the jurisdictional and logistical issues of seeking to impose regulations on third-party vendors of similar services, and reject any notion that advanced technological capabilities should be restricted or limited in the name of fairness. Exchange technology services such as co-location and proprietary market data products increase investor capabilities and improve outcomes. Restricting the availability of such products will not make markets fairer, only less effective. Exchanges should be free to decide when provision of such services is in their self and their member’s interest, and when they are not. Exchanges that willingly choose to offer such services directly should be required to: (i) disclose to all market participants all the services that are available; (ii) disclose to all market participants all the terms and conditions for use of the service, including but not limited to their price, the requirement to buy other products or services, and other conditions for usage; and (iii) seek SEC approval for same through the rule-making process applicable to exchange fees. Exchanges that choose not to do so should not be forced into these businesses. Any attempt to regulate third-party providers of similar telecommunications, networking or proximity services would be difficult to limit in scope or justify within the bounds of the Commission’s current authority.

• A review of the appropriate minimum price variation (MPV) and its standardization with related market structure regulation is necessary. The disparity between the acceptable MPV for acceptance of orders and the execution of trades, and the lack of synchronization between the MPV and the maximum access fee for securities below $1 per share, have produced market structure anomalies that warrant a re-examination of current policy surrounding MPV regulation. Changes in our capital markets and several years of experience since the implementation Reg NMS further suggest that the “one-size-fits-all” approach to establishing the MPV might be improved upon. A common MPV for market-wide trading and quoting, increasing the MPV for stocks trading below $1 per share and further experimentation with the MPV for stocks trading above $1 per share should be considered. Little evidence exists that investors equate sub-cent stock prices with fairer or better markets, suggesting that reduction in the use sub-pennies would neither be mourned nor missed.

• The current market structure approach may be under-serving low-volume stocks and low-capitalization companies, having a negative impact on capital formation. Like an unemployment rate that looks artificially low due to those who have given up looking for work, our current trading market structure may be under-serving our capital markets by not providing a sufficient environment for the securities of small companies that are not actively traded. The Commission should be flexible and facilitative of efforts by market participants to address the needs of this market segment, so as to foster development of vibrant capital markets for such companies.
We expect that any regulation that results from the Release will include: (i) a clear articulation of objectives and an assessment of the sufficiency of existing regulatory tools and regulations with respect to the achievement of those objectives; (ii) a sound, thorough, well reasoned, empirically based analysis respecting the need for rule-making; and (iii) a cost and benefit analysis that comprehensively examines the proposed regulation's cost efficiency in achieving those objectives. Such an analysis is necessary to both validate the imposition of regulation, as well as to perform future assessments as to whether the regulation had the intended effect. Direct Edge looks forward to offering its specific views on any proposed regulation that results from this process as it becomes available for public comment.

2. Assessing Overall Market Performance

The Commission properly notes that an assessment of overall market structure performance is an important component of any regulatory undertaking of this magnitude. To do this effectively, establishing a common understanding and a certain level of consensus is necessary regarding:

- The individuals or entities we wish markets to serve (i.e., perform well for);
- The characteristics of market quality we seek to promote; and
- The standards for measuring whether these objectives have been achieved

With this analytical framework established, a broad scope of market structure issues and potential policy responses can be reviewed with the benefit of a coordinated purpose and vision.

a. Whom Should We Care About?

Determining whether our equities markets are performing well cannot occur absent an examination of whom we want them to perform well. A natural consequence of the complexity of our financial system is a set of diverse market participants whose interests, at times, appear to conflict with one another. Upon analysis, however, the commonality of interest among these varied groups is clearly evident.

i. Investors

Direct Edge believes the interests of American investors should be first in the minds of the Commission and other regulators, and that this necessitates a broad understanding of investor strategies and tactics. The Release asks whether the interests of long-term investors should be distinguished from those of the short-term investors and emphasizes the Commission's greater duty is to the interests of long-term investors. We believe that attempts to view investors and their interests in such a polarizing fashion should be avoided. Investors cannot be easily classified in this manner and it is dangerous to attempt to categorize investors into two discrete, potentially opposing groups for the purposes of making policy determinations.

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3 See Concept Release, supra n.2, at 3603 (noting that “Assessing overall market structure performance should help provide context for particular concerns, as well as the nature of any regulatory response that may be appropriate.”).

4 Id.
There is a fundamental distinction between an investor and the strategy deployed by that investor. Investors often deploy complementary long- and short-term trading strategies to achieve their investing objectives and, after a ten-year period where broad financial indices are essentially flat, evidence exists that retail investors are increasingly complementing their investing strategies with short-term trading. An investor can choose to deploy long- and short-term strategies at different times and even simultaneously. These trends may be further accelerating by the increasingly sophisticated analytics and technology available to retail investors, the declining commission costs, and the impact of the recent financial crisis. The use of market structure regulation to promote “buy and hold” or any other investment strategy is questionable, and the Commission should avoid any appearance of modifying market structure to promote any one investment philosophy.

There is also an important delineation between an investor and an investment vehicle. Whether an individual chooses to manage his or her own money, place his or her trust in the hands of a professional advisor or mutual fund manager, or use passive products such as exchange traded funds, the goals are identical—buying a home, securing a stable retirement, providing a better life for their children. Technological advances and competitive forces have driven significant changes in the market for investment products, and these also should be distinct from any analysis of how our market structure is performing. Individual and collective investment both offer their advantages and costs. Our market structure always has, and should continue to strive to be, structured for both to be feasible alternatives.

Accordingly, while the interest of investors should be paramount, attempting to categorize every investor into one category and promoting certain investors over others is a task both impossible and undesirable. All investors have a vested interest in the quality of our trading and capital markets. The focus of market structure reform should be on recognizing the synergies among all market constituencies.

**ii. Intermediaries**

Many investors rely on intermediaries, such as brokers, dealers, exchanges or other non-exchange markets, to represent and facilitate their interests in the marketplace. For these investors, brokers represent investor interests to the market and are best suited to determine when and how to use the available trading tools and venues (including algorithmic trading, internalization or undisplayed order types and markets) to do so. Delegation of this responsibility by an investor to a broker is fundamental to the market’s operation. For this reason, brokers need to be accorded appropriate discretion in their representation of customers’ orders. Any regulation that might unnecessarily restrict this discretion would conflict with brokers’ duty to their customers.

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5 See generally letter from Christopher Nagy, Managing Director of Order Strategy and Co-Head of Government Relations, and John S. Markle, Deputy General Counsel, TD AMERITRADE, to Elizabeth M. Murphy, Secretary, Commission, dated April 21, 2010 (available at http://www.sec.gov/comments/s7-02-10/s70210-124.pdf).

6 It should also be noted that as investment vehicles such as ETFs have evolved, more collective investment vehicles are deploying short-term trading strategies.
The distinction between a “dealer” and a “trader” has been blurred by the evolution of our market and related technology. A dealer is a firm whose business model is built around providing executions (directly or indirectly) to investors seeking fulfillment of their investing/trading decisions. Dealers include: (i) “wholesaler” market makers and “full service” integrated brokerage firms providing execution services (along with other services) directly to retail brokers, other brokerage firms, institutional and issuer clients; (ii) automated, on-exchange market makers who provide solely execution services across multiple exchange platforms simultaneously; and (iii) firms that continue to align with only one market center, such as certain exchange floor brokers. The business model for dealers has evolved from nearly exclusively relying on the commitment of financial capital to the deployment of intellectual capital and technology to meet customer needs. Further, the declines in the costs of processing and networking technology have leveled the playing field for new entrants, and created an open-architecture system where firms can compete for providing execution services alone, or bundled with other services where that meets the overall needs of the relevant investor.

The changing nature of what it means to be a “dealer” should not lead to their classification as “traders” or somehow diminish their importance in our market structure. Traders are effectively investors themselves, seeking to generate profits in the market at-large without any attempt to provide a service to other investors other than as a counter-party to a particular trade. While dealers and traders use the same markets and similar technology, their roles are clearly different. Attempts to use terms like “high-frequency trading” to cover terms that span both “dealer” (such as automated market making) and “trader” (such as statistical arbitrage) activities can only lead to a misclassification of both roles within our market.

Technological efficiencies have enhanced our capabilities and made our markets integrated in a way that was not achievable ten or even five years ago. This has enabled intermediaries to better serve their customers’ specific trading-related demands. Intermediaries can be more customized in the solutions they offer, even if those solutions are not utilized by all market participants. While Congress dictated providing opportunities for different types of intermediation, it did not mandate that the Commission fashion market structure to preference one form of intermediary over another. Quite the opposite, it requires the promotion of competition among a variety of intermediaries.

iii. Issuers

Often lost in market structure debates are the interests of issuers. A healthy trading market is necessary for capital formation and thus, it is generally viewed that anything that makes the trading market healthier will promote capital formation. For example, even though Regulation NMS is largely viewed as a success for investors and intermediaries, little attention was paid to the potential consequences to issuers as a result of its adoption. There are disturbing signs that the current market structure is not comprehensively servicing the needs of issuers, and thus the economy. Consider the following chart:

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8 Id.
9 17 CFR §242 et. seq.
The U.S. listed markets — unlike other developed markets — have been in steady decline, with no rebound, since 1997. The number of listed companies from global exchanges indexed to 1997.

- Between 1991 and 2008, the number of U.S. exchange-listed companies is down by more than 22% and, since the peak in 1997, that number has declined 39%;
- The United States has averaged fewer than 166 IPOs per year since 2001, with only 54 in 2008 and 63 in 2009;
- Millions of jobs may have been lost because of the state of the IPO market.

While over the last ten years there has been an increase in diversity of choices for investors and innovation by intermediaries, the standardization of market structure has potentially impeded the capital formation efforts of small- and micro-cap companies. Such a “one-size-fits-all” approach needs to be reconsidered. While a market with tighter spreads and lower commissions may be considered a favorable trading environment for large-capitalization stocks with established channels for information distribution, such an environment does not support the kind of research, marketing, sales and capital commitment required to facilitate a healthy capital market for nascent public companies. With our capital markets discounting the value-added proposition that the “full-service” dealer brings to the issuer community, the Commission must recognize that this role cannot be entirely replaced by the “execution-only” business model that relies more on higher volumes to support thin operating margins.

10 David Weild and Edward Kim, Grant Thornton, A Wake Up Call For America 2 (November 2009) (the “Grant Thornton Study”).
11 Id. at 2.
13 Grant Thornton Study at 2.
Elements of our current market structure that potentially exacerbate the current difficult environment for small- and micro-cap companies include, but are not limited to: (i) a MPV that does not support the relevant return on resources invested to provide continue liquidity in these securities; (ii) sub-second liability for displayed quotations that may impose disproportionate levels of risk when compared to the return on investment for supporting trading in such stocks; and (iii) a listing standards regime that is significantly lower for companies effectively “grandfathered” in by listing prior to the financial crisis of 2008, but significantly more burdensome for new potential listings. These are just some of the elements that are missing from a market structure that must better accommodate the interests of smaller enterprises seeking to raise capital. In any new regulation crafted by the Commission, consideration should be given to the needs of all issuers and flexibility afforded to initiatives to improve the experience of smaller issuers in particular.

iv. Interaction Among These Groups

Direct Edge believes that the interests of investors, intermediaries and issuers can all be advanced simultaneously if market structure regulation is carefully crafted. This framework of relationships and dependencies should not be upset by a market structure that disproportionately favors one group or subset over another. The proper balance is one that can accommodate the interests of all market participants.

The Commission should also be mindful that the interaction among these three constituencies is driven by a variety of rationale, among which the desire for quality trading and execution services only plays a part. An institutional investor may chose to execute trades through a certain intermediary to pay for non-execution related services such as research. Retail investors may choose a particular brokerage firm because of its attractive margin lending rates, meaningful non-U.S. execution capabilities, or financial planning tools. Issuers may choose a private placement over an initial public offering because of compliance costs or a desire to keep their investor base narrower.

Simply put, as absorbing as these topics can be to those who live and breathe them every day, market structure does not exist in a vacuum. The ability of market structure regulation to effect change will be shaped and constrained by these externalities, and, if not considered, could create or exacerbate negative responses to new trading regulations.

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14 For example, many exchange-listed companies have fallen below NYSE and NASDAQ listings standards for average share price during the recent market downturn, with few related de-listings actually occurring. Question whether this dictates a re-evaluation of the appropriate standard for new listed companies as well.

15 Other initiatives include the need to review impacts of Sarbanes Oxley, pre-IPO financial reporting requirements, the separation of analyst and investment banking functions, private placement requirements, as well as the need to modernize penny stock disclosure rules.
b. **What Should We Care About?**

Without agreement on what core principles and objectives we are trying to advance, any market structure reform is likely to be haphazard, work at cross-purposes, and create unintended consequences. Moreover, there will be no roadmap for the next generation of market structure issues that will inevitably result from changes in technology, global competition and investor preference. Without consensus on how these objectives should be defined, they will simply be used as buzzwords to cast particular policy positions in a favorable light. Our progress towards furthering these objectives cannot be measured, further frustrating attempts to evaluate the efficacy of regulation and any necessary adjustments over time.

The objectives of our national market system were mandated by Congress in the 1975 amendments to the Securities Exchange Act of 1934 (the “Exchange Act”). These objectives are to ensure:

- economically efficient execution of securities transactions;
- fair competition among brokers and dealers and between markets;
- availability of quotation and transaction information;
- practicability of brokers executing investor orders in the best market; and
- opportunity for investor orders to be executed without the participation of a dealer. \(^{16}\)

In addition, the Commission’s stated mission includes the protection of investors and the facilitation of capital formation. \(^{17}\)

These objectives are fundamental to the cornerstones of market structure regulation. Sound regulation must either promote the achievement of or minimize the costs of regulation on: (i) liquidity, (ii) efficiency, (iii) transparency, and (iv) fairness.

\[i. \textbf{Liquidity}\]

Liquidity is the link between how our trading markets serve our capital markets, and how our capital markets serve the U.S. economy as a whole. A market structure that fosters liquidity promotes the free flow of capital between and among investors, intermediaries and issuers. For investors, a liquid market means that they can easily enter and exit the market upon making an investment decision and that the costs of trading are not so high as to discourage access to the market. For intermediaries, market structure must facilitate their provision of liquidity in a manner that meets their customers’ needs and facilitates their management of the risks associated therewith. Issuers require a liquid secondary market for a public equity offering of their stock to be a reasonable alternative to other forms of financing.


Liquidity has generally increased for investors in and issuers of large cap companies as measured by volume and quoted spreads. Liquidity has generally been stagnant for investors in and issuers of small- and micro-cap companies. Intermediaries have followed these trends—thriving in high-volume, large-capitalization securities names while at times struggling to provide the right level of service regarding less active, small-capitalization companies.

**ii. Efficiency**

An efficient marketplace is characterized by low transaction costs, both explicit and implicit, for all constituencies and it facilitates seamless communications between market participants. The ideal market structure promotes choice and flexibility to guide the devotion of resources towards the achievement of optimal outcomes.

Liquidity and efficiency are market characteristics that can easily be confused with one another due to their inter-related nature. When a market is efficient, it drives liquidity because the costs of executing upon an investment decision, intermediary transaction or issuer financing is small as a percentage of the profit opportunity or strategic advantage that the investor, intermediary or issuer believes to exist. When those costs are too high, a “tipping point” is reached, discouraging the activity and further driving liquidity out of the market place.

Evaluations of efficiency need to balance the efficiency of market structure for any one participant (does the market work well for me?) with its efficiency for all market participants collectively (does the market work well for everyone?). Direct Edge believes that the ideal market structure from an efficiency standpoint rewards those who devote the time and energy to with an optimal—and outperforming—outcome, while still producing results that are efficient for all market participants. Such a structure reinforces a fundamental premise on which American capitalism is based: by allowing people to seek the best results for themselves, it will drive better outcomes for society as a whole.

For this to occur, market structure needs to be, to a degree, customizable for individual participants. There is no one “right” way to execute a trade for all investors, or for all orders. Regulation that drives towards a monolithic market structure would be a very hollow form of efficiency. While such policies would simplify the process of trade execution, it would produce outcomes of poor quality in many instances.

To avoid allowing excessive individual customization diminish overall market efficiency, market structure needs to promote a certain level of integration. Certain market information—such as the NBBO and last sale information—needs to be consolidated and disseminated broadly. Certain market linkages need to be promoted or required. In several ways, the current “trade through” rule strikes the appropriate balance between customization and integration. Market participants can choose how best to execute their orders, so long as it is not at the expenses of someone publicly displaying their desire to trade at a better price. A third party’s quote does not, however, automatically restrict the ability of a market participant to execute a trade at the same price through other means. Under the current rule, the efficiency needs of both parties are respected, as they should be.
Whether markets continue to manage these efficiency needs successfully over time can only occur when our market structure performance is easy to analyze for market participants and regulators, and parties can be responsive to changing market conditions. This is the data produced by SEC Rules 605 and 606, and the process for exchange and alternative trading system rule changes become important. Only with meaningful information as to how markets are doing and pragmatic means to respond can markets preserve their efficiency over time.

When viewed this way, Direct Edge sees our markets as operating efficiently in many ways. For actively traded and large-cap stocks, there has been a proliferation of quality execution alternatives, backed by the integration afforded by the “trade through” rule. There is no longer market center dominance for any given security, for any kind of strategy or investor flow or for any issuer listing. Commissions and listing fees have both come down.

iii. Transparency

Direct Edge believes that regulation should focus on the transparency of the market as a whole, before focusing on the transparency of any one particular order. A truly transparent market means that accessible information permits the analysis of: (i) the choices available to market participants, as well as the potential benefits and trade-offs associated therewith; (ii) the comparative benefits to market participants associated with such choices and the basis to analyze the possible outcomes of such choices and their results; and (iii) market activity to permit regulators to enforce conduct rules and improve market quality over time.

Pre and post-trade order transparency are a part of this equation, but only a part. As noted by the Commission, from a pre-trade and post-trade perspective for NMS securities, transparency has been largely achieved. While non-displayed order types and execution venues will ebb and flow in popularity–driven by a host of trading related and macro-economic forces–over 70% of all trades continue to be executed on primarily displayed execution venues. Any overemphasis on the promotion of individual order transparency will likely lead the Commission to implicitly favor one group of investors, intermediaries and/or investment vehicles over others.

When examining the visibility levels of investor choices, outcomes and market activity, a framework exists on which to build a more transparent market. The reporting requirements of Rules 605 and 606 of the Regulation NMS were important first steps in broadening understanding regarding how intermediaries handle order flow and how they performed. The implementation of the Order Audit Trail System provides greater coordinated information to FINRA to surveil broker activity throughout the market. These existing regulations provide the template for further efforts to enhance transparency of our market as a whole, rather than fixating on how to promote display of any one order.

18 Concept Release at 3600 (“the public has ready access to a comprehensive, accurate and reliable source of information for the prices and volume of any NMS stocks at any time during the trading day.”).
19 17 CFR §242.605.
iv. **Fairness**

The Commission rightfully asks for assistance in determining “what standards [to] apply in assessing the fairness of equity markets.” Direct Edge believes that any notion of what makes for a fair market should be predicated on equality of accessibility, rather than of capability. Market participants have the ability to choose how to acquire and deploy resources in effecting their investing or intermediary strategies, and investors are free to choose the intermediaries that deploy the technology and intellectual capital best suited to their needs and the value they place on those needs. That market participants make different choices does not mean that these differences are the result of negative disparities. Rather, fair markets award better results to participants that make better choices, provided that participants with similar resources have access to the same choices.

Notwithstanding the inherent fairness of individual self-determination, ensuring a benchmark level of performance is appropriate in the interest of fairness. An atmosphere of investor confidence, which a perception of fairness promotes, inures to the benefit of all market participants and the American economy as a whole. It should be a reasonable expectation for every market participant that our market structure will provide them with a baseline level of quality. Market participants need to craft investment strategies and business models on a solid foundation, so regulatory changes should come only after well communicated, thoughtfully deliberated policy processes. Belief needs to exist that enforcement authorities will detect bad conduct and punish bad actors. It also means that market structure should enable outcomes, but not drive outcomes. When market structure regulation becomes the core of an investing or trading strategy, there are signs unfairness is creeping into our markets.

It is within this framework of liquidity, efficiency, transparency and fairness that we analyze some of the specific areas raised by the Release.

3. **Technology and High-Frequency Trading**
   
   a. **Technology Generally**

   Technology has been an unrelenting transformative force affecting how our markets operate over the past two decades. Improvements in computer processing and networking technology have made levels of productivity and product capability that were unthinkable a generation ago a reality. Direct Edge believes that the best regulatory response to these trends is to leverage these trends for greater regulatory insight into and oversight of our markets, without attempting to “turn back the clock” to less productive times or inhibit future advances. Investment in greater market-wide surveillance capabilities within a framework that properly allocates its costs among all market participants is the appropriate path forward in this regard.

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21 Concept Release, *supra* n.2, at 3604.
It is widely recognized that automated trading now accounts for a significant percentage of our markets' volume, and that technological change, coupled with the decimalization of securities markets in 2001, facilitated the reduction in quoted bid-ask spreads. Among other academic exercises in this vein, a recent, data-intensive study by Professors Hendershott, Jones and Menkveld concluded that algorithmic trading improves liquidity for large-cap stocks.

This trend toward increasing automation has turned a capital-dependent market into a technology-dependent one. It also magnifies the “downstream” effect one market participant’s activities can have on others, even those that are not trading counterparties. One market participant’s active quoting strategy or business model may be viewed by another participant inefficient, distortive “noise.” Legitimate quoting and trading activity can be interspersed with old-fashioned market manipulation through new-fangled technological means. These are new manifestations of old problems, but not an indictment of technology itself. Thus, Direct Edge would argue strongly against the imposition of artificial, liquidity-damaging restrictions on the benefits that automation brings to the market, whether they are restrictions on order generation, limits on order cancellation, or mandatory order durations.

Direct Edge believes a better approach to addressing how technology has transformed market behavior is further investment in and re-evaluation of our regulatory infrastructure. The Commission should consider empowering a single regulator to monitor all trading activity across registered exchanges and alternative trading systems. The costs for such regulation could be allocated broadly among all market participants based upon their contribution to the data generated, regardless of whether such activity results in actual trades. By improving market surveillance tools and exploring how best to allocate costs among market participants who drive the need, productive technological change can continue while negative manifestations can be quickly rooted out.

b. High-Frequency Trading and Strategies

Direct Edge believes that, on balance, the evolution of trading strategies and intermediary services now classified as “high-frequency trading” has brought material benefits to our nation’s equities markets. Any regulation having a primary aim of restricting this form of trading activity brings potentially diminishes the market quality as a whole. Appropriate public policy responses start with a careful understanding of how high-frequency trading has transformed certain pre-existing market roles, and other factors affecting market quality. From that, regulators can identify and target abusive conduct, as opposed to discriminating against one type of market liquidity over another. It is our view that, in a liquid and efficient market, the Commission should not be restricting liquidity types or labeling one liquidity type preferable to another, but rather should be focusing on conduct. Legitimate conduct should not suffer disparate regulatory treatment based on whether such a conduct is “high-frequency” or “low-frequency.”
As discussed earlier, automated market making strategies deployed by many firms today have replaced capital-dependent intermediary services. Their role in stabilizing short-term imbalances in the marketplace, however, is just as important as it was for traditional liquidity providers. Automated market makers provide investors with more flexibility respecting how they can acquire or dispose of their positions, bringing efficiencies to the market. Furthermore, the quotes generated by such strategies add transparency to the market, even if market participants sometimes lack the capacity to execute against them.

For many automated market makers—especially those that pursue an “execution only” business model—managing the fees assessed and rebates offered by exchanges and alternative trading systems is essential to ensuring an adequate rate of return. The availability of diverse, competing rate and rebate structures was an important aspect of market structure as the void in liquidity was created when decimalization came to the equities markets in April 2001. Without automated market makers responding with business models that could succeed in this environment, this market evolution would have been much more turbulent and expensive for investors. The evidentiary success of this transition is compelling: for large-cap equities, there has been approximately an eightfold increase in the displayed depth at and within six cents of the NBBO since the end of 2003. Moreover, continued flexibility for market center pricing has led to innovation and greater choice for all market participants. Direct Edge pioneered the first large-scale “no-rebate” trading environment on its EDGA platform, which many automated market makers and other firms find useful when seeking to liquidate positions.

Execution venue rebate structures that expose anomalies within Regulation NMS, rather than automated market makers, are what can take these trends to unproductive extremes. Certain recent rebate structure for sub-dollar stocks is an example of how liquidity incentives can bear an unreasonable relationship to the liquidity they are purporting to support. For example, until recently, NASDAQ BX offered a liquidity provision rebate of 0.25% of total value traded for sub-dollar stocks. This amounted to up to $0.25 per hundred shares for securities trading just below one dollar. Since the trading increment for such securities is hundredths of a penny, an intermediary or investor acting through an intermediary could target liquid sub-dollar securities trading close to $1.00 within the NBBO’s minimum price variation and only take on an economic risk of $0.01 per hundred shares (the difference between the bid and offer prices) and collect $0.24 per hundred shares in profit before factoring out nominal fixed costs. This is driven by an MPV that is reduced by a factor of one hundred when a security begins trading below $1 per share, while maximum access fees (and rebates) are reduced only pro-rata. As this threshold is crossed, market structure drives the creation of new rebate trading strategies, as opposed to being a factor in other, stand-alone trading strategies or business models.

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24 Equity Trading In The 21st Century at 15.
25 NASDAQ Equity Trader Alert 2010-5 (January 29, 2010). NASDAQ subsequently eliminated this rebate in two phases beginning on April 15, 2010, though it still offers sub-dollar rebates on its NASDAQ “Classic” platform. Direct Edge also offered rebates for trading in stocks below $1 on its EDGX platform, albeit at levels significantly lower than NASDAQ BX, from January 3, 2010 to April 2, 2010.
For this reason, Direct Edge announced our decision last month to effectively peg the rebate offered on sub-dollar stocks to the ratio of the Regulation NMS access fee limitation of 0.30% to the minimum price variation for stocks below one dollar. Using the above example, this means that the rebate can be no more than $0.00003 per hundred shares for taking an economic risk of $0.0001. As trading in sub-dollar securities has become an increasing component of overall trading volume, providing rebates to incentivize the provision of liquidity while confining such rebates to 30% of the MPV strikes the appropriate balance between competition and preservation of market quality. Most importantly, it discourages the provision of liquidity that is not driven by latent security demand, but rather by the receipt of an oversized rebate.

The issue of sub-dollar rebates not only highlights a gap in Regulation NMS that should be remedied, but underscores that forces other than the automation of the market-making function can drive market structure issues that warrant a regulatory response. Competition among execution venues, the discretion liquidity providers have regarding where they direct their order flow, and market structure quirks can all contribute to issues that, while affecting automated market makers, are not caused by their mere existence.

### ii. Arbitrage and Momentum-Based Strategies

Similarly, strategies that profit from market inefficiencies or anticipated directions in the market existed long before the advent of recent technological change, and such strategies permit real-time price discovery to become more reflective of actual pricing and thus, discipline the market. These strategies also contribute to an efficient market, as they enable investors and intermediaries to interact with the market in a manner that is customizable. Regulatory restrictions on automated strategies that profit from inefficiencies in the marketplace would prolong the instances of such inefficiencies as opposed to permitting market forces to self-correct for them.

Likewise, strategies and behaviors undertaken purely for the purposes of provoking the price movement of a security in the marketplace is not a new phenomenon and is generally prohibited pursuant to Section 10 of the Securities and Exchange Act of 1934. Such strategies are unlawful and disdainful regardless of whether it is engaged in as part of an automated strategy or by a trader entering manipulative trades or orders manually.

The Commission's concerns respecting the use of these strategies underscores the need for regulators to have better tools to surveil for improper conduct. As discussed earlier, we urge the Commission to continue to press for progress with respect to the development of a consolidated order audit trail, under the authority of a single market regulator, whose costs are properly allocated among all market participants.

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26 15 USC §78i.
4. Undisplayed Liquidity, Internalization & Customer Choice

Direct Edge does not believe that our market structure would be well served by regulations that limit market venue choices and attempt to force such executions back onto exchange facilities. There are many legitimate economic, execution quality, and public policy reasons why investors and their intermediaries seek an off-exchange execution, whether in a dark pool, through an institutional or wholesale market maker, or other means.

The benefits of greater execution flexibility apply not only to the institutional trader seeking to effect one block trade, but also to the efforts of intermediaries seeking to effect various strategies, such as volume and time weighted average pricing strategies, and to other intermediaries who are endeavoring to execute their investors’ order flow at minimal cost and market impact. While some have argued that the existence of undisplayed liquidity can impede price discovery in the marketplace, the existence of undisplayed liquidity can act as a counterbalance to algorithms that might, at times, create “noise” or distortive effects in the marketplace.

Orders executed through undisplayed order types or on off-exchange facilities should not be viewed as a net reduction from overall market liquidity, but rather liquidity seeking its most efficient form of execution. Such executions occur outside of exchange facilities for various legitimate reasons and will likely continue to do so, no matter the efforts to “force” trading onto exchanges. Regulatory restrictions will result in such flow being moved onto the brokers’ trading desks and cause the brokers to utilize other, less efficient methods to identify sources of liquidity. Alternatively, it will likely necessitate block size exemptions that will implicitly favor collective over individual investment, by taking choices away from smaller, self-directed investors. For such investors, mandated on-exchange display and execution of orders would eliminate the size improvement and other advantages off-exchange trading now bring, and substantially increase the market impact and related execution costs of order execution.

Access to undisplayed venues is not unfair to investors as most investors participate in and reap the benefits of undisplayed liquidity through their intermediaries. Restrictions placed on such venues will not eliminate off-exchange executions, nor alter the demand for them. Rather, it will just make such executions either more expensive or less accessible to certain categories of investors. Alternatively, it will cause them to turn to instruments and markets that do not constrain such executions, whether that is through derivatives transactions or by seeking greater exposure to foreign markets without such requirements.

The multitude of competitive options among these venues has pushed all execution venues to compete for flow with improved execution and price compression. Exchanges continue to play a critical role in providing pre-trade transparency and price discovery, which ensures overall market quality. If the level of overall market share among exchanges were to fall precipitously below historical norms, it would be appropriate to examine what further steps would be needed to preserve or transfer the role exchange liquidity and price discovery plays in our market. But with on-exchange liquidity consistently above 70%, we are simply not near such a point.
The Release expresses concern that undisplayed liquidity may be threatening the quality of public price discovery and that imposing a trade at or depth-of-book ("DOB") rule would drive liquidity back to the public markets. As discussed above, we believe that undisplayed venues provide choice and flexibility to the marketplace and that limiting such venues to the handling of large order sizes and internalization would detract from both the quantity and quality of the market liquidity, as well as favoring collective investing or individual investing. Furthermore, we view both the trade at and DOB proposals as potentially having more sweeping ramifications on the markets than Regulation NMS did.

a. Impact on Market Constituencies

Imposing a trade at rule or DOB rule without consideration of access fee charges could have the inequitable effect of forcing an investor to pay more than he or she otherwise would have paid for an execution on an exchange with a lesser fee. Therefore, any trade at or DOB rule would need to cap such access fees at nominal amounts. This low-level cap could eliminate a key aspect of current market center competition, dampening innovation.

"Trade at" would also likely distort competition among intermediaries by forcing the unbundling of execution and other financial services, having a negative impact on capital markets. Dealers who have traditionally provided liquidity coupled with value-added services, such as the creation, compilation and dissemination of valuable company and related securities information to the marketplace, would be further marginalized under such a market structure regime. They would execute less order flow in the names they cover and their ability to profit from illiquid names would be further constrained by access fee caps. Important distinctions exist between firms that solely provide liquidity to the market makers that act as "full service" firms by providing important value-added services, particularly with regards to securities that are not widely covered in the media, including mid-, small-, and micro-cap names. Evidence exists that low transaction costs in an "execution only" environment can actually increase the cost of capital for smaller capitalized issuers because such costs fund the provision of research, marketing and sales information, as well as capital commitment, by intermediaries.27 Simply put, materially impeding the business model for providing value-added services as part of the execution process will likely hurt the diversity of investor choices and restrict an issuer's ability to raise capital in the public markets for securities that are not as widely covered in the markets and by the media.

27 This has not been the expressed view of the Commission to date. See, e.g., Securities Exchange Act Release 51808, 70 FR 37496 (June 29, 2005) at 37499 ("...one of the most important goals of the equity markets is to minimize the transaction costs of long-term investors and thereby reduce the cost of capital for listed companies. These functions are inherently related because of the cost of capital of listed companies is influenced by the transaction costs of those who are willing to accept the risk of holding corporate equity for an extended period").
Regarding the impact on trading markets, as discussed above, any rule that limits the ability of market participants to trade off-exchange will reduce market liquidity as such order flow will be moved upstream in the trading process, where it does not need to be exposed. Intermediaries representing either their client’s or own order flow would work such orders on a more manual and less efficient basis. Smaller orders that have information leakage sensitivity will be delayed while sufficient liquidity is either accumulated or sourced for a natural cross. Investors under such a market structure would have less choice and flexibility with respect to how their orders were represented in the market and what other services were offered along with executions. Even value-added execution services such as oversized executions at the NBBO would be difficult to consistently provide.

Even on conceptual grounds, “trade at” and DOB protection rules appear to be solutions in search of problems in an effort to craft a better market. Requiring Investor A to abandon his or her preferred means of execution solely because Investor B was willing to trade at that price and Intermediary C was not quoting at that price at the time sacrifices one investor’s preferences to those of another without any compensation for same. Investors would not be promised the “fairness” of an execution if they set the NBBO in a security–only that they will be filled if no other market participant joins the NBBO and they have placed their order in an execution venue that charged no or a very low access fee. Simply put, a “trade at” or DOB protection rule is unlikely to improve the general market quality or investor outcomes by any measure.

Even should the Commission determine to move forward (which we would not recommend), both the trade at and DOB rules would have significant technology implications and implementation issues. For example, a “trade at” rule would require exchanges to potentially break with the principle of time-price priority on their own exchange by honor displayed quotations in other market centers before executing pre-existing, non-displayed orders in its own market. DOB protection would require investors, intermediaries and regulators to take in full depth of book data feeds in order to comply, constituting multiples of the data that all but the savvy intermediaries take in today, into a mandatory smart order routing process. There would be serious challenges managing how trading systems, on a market-wide basis, would interact in a multiple trading center and at multiple price levels, particularly in light of sub-millisecond trade adjustments to the books of such centers. From a compliance perspective, it is also unclear what source would be utilized to determine whether a trade through type violation occurred. If the Commission determines to implement such far-reaching rule, it should not do so until an impact study, engaging widespread industry input from those managing the technology and operations of market participants, is conducted and the inter-market processes affected thereby can be fully analyzed.

28 Supra Section III.
6. **Co-location**

In today’s marketplace, technological proficiency and superiority are core parts of the exchanges’, including Direct Edge’s, business models. Increasingly these efforts have focused largely on infrastructure and related “access services” whereby exchanges allow their customers to get closer to exchange systems and provide related support services and the facilities to do so. This enables market participants to become more responsive to quote movements and facilitate price discovery. The provision of such services creates efficiencies in the marketplace by providing greater choice and flexibility to market participants in their marketplace interactions and facilitates greater integration.

So long as co-location and trading center market data services are offered on non-discriminatory terms and can be used – either directly or indirectly – by all market participants, we believe that such arrangements do not raise fairness concerns. If all members have access to such services, to claim that their use is unfair to some brokers is equivalent to saying that it is unfair that market participants need to invest in technology to remain competitive. All market participants need not have the capability to directly use such services for their provision to be fair. There are a host of third-party vendors that can provide co-location hosting and infrastructure support for those firms that cannot do it themselves at competitive rates.

Market participants need to have visibility into the services offered by exchanges, their associated fees and costs, and latency statistics so as to better facilitate their own decisions respecting intermediaries. This visibility is also necessary to ensure that conflicts of interest do not develop between the exchanges’ roles as market centers and their provision of technology services. While progress has been made regarding the transparency of exchange co-location and related network offerings, anecdotal evidence still exists that material aspects of the space allocation process, tying arrangements and other pre-conditions for the access to proprietary networks and other capabilities, remain shrouded in relative mystery. Only complete transparency will remove the suspicion surrounding the mechanisms that intermediaries utilize to achieve greater trading efficiencies as part of their business strategies.

The provision of co-location or other market-related technology by third parties does not raise significant new issues warranting Commission action. Moreover, if a regulated exchange does not control the provision of such technologies or receive any revenue from the providers thereof, it is unclear how the Commission would be able to gain jurisdiction over such technology providers, are delineate where to draw the line of oversight. It would be unprecedented to require technology vendors, who serve but do not act as market intermediaries, to agree to become regulated purely for the purposes of providing technology services. With

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29 In particular, the introduction of new exchange data center facilities is a scenario ripe for this form of opacity. Market participants can be given vague or misleading answers about the availability of remaining space, or led to believe that premium connectivity to other exchange data centers is pre-conditioned on the purchase of a certain level of co-location space and other services. Extra care should be taken by the Commission to review exchange communications and sales practices in the unique situation of a new data center build-out.
respect to co-location, if the definition of an exchange facility is to be read broadly enough to include the data centers that provide such services, then arguably all communication providers, such as AT&T and Verizon, providing services to or from exchanges would also have to be considered facilities. Obviously, this would have no benefit to the marketplace and would be administratively burdensome. Such an environment could potentially remove choices and create a barrier of entry for a market intermediary that lacked the scale to provide such a service itself.

7. Re-Examining the MPV

The Release requests comment on whether the minimum price variation (the “MPV”) should be reduced for lower priced stocks. We would urge the Commission to conduct a broader review of the MPV and the role it plays within market structure. The disparity between the acceptable MPV for acceptance of orders and the execution of trades, and the lack of synchronization between the MPV and the maximum access fee for securities below $1 per share, have produced market structure anomalies that warrant a re-examination of current policy regarding MPV regulation. Direct Edge would recommend that the Commission only consider a experimental reduction in the MPV for certain securities as part of a larger reform that: (i) widened the MPV in certain stocks trading below $1.00 per share and in certain high-priced and less-liquid securities; (ii) correlated access fees to the new MPV levels; and (iii) synchronized the MPV for quoting and trading among all market participants.

In assessing the impact of further amending the MPV, we believe that the Commission should also consider the potential impact on capital formation. For small- and micro-cap securities, more needs to be done to ensure that the marketplace supports the requisite infrastructure to sustain capital formation. While a wider MPV for such securities would increase the exposure risk of short-term strategies due to increased liquidation costs, it would have the more important public benefit of encouraging longer term trading horizons for investment in such companies and discourage trading strategies that would increase the short-term volatility that small- and micro-cap companies have become increasingly concerned with.

We believe that a comprehensive review of the MPV with a goal of accommodating the needs of market participants adds flexibility to the marketplace by enhancing price discovery, where prudent, and facilitating capital formation, where necessary. While we believe that there may be merit to narrowing the MPV for relatively liquid securities, we think it imprudent to do so, except as part of such a comprehensive approach to address the disincentives and distortions that the current MPV structure may be creating for investors, issuers and intermediaries.

30 15 USC §78c (a)(2) (“The term “facility” when used with respect to an exchange includes its premises, tangible or intangible property whether on the premises or not, any right to the use of such premises or property or any service thereof for the purpose of effecting or reporting a transaction on an exchange (including, among other things, any system of communication to or from the exchange, by ticker or otherwise, maintained by or with the consent of the exchange), and any right of the exchange to the use of any property or service).

31 In a survey of venture backed companies conducted in 2009, increased volatility in the public markets was identified as their second greatest barrier to going public after the need to address compliance requirements relating to Sarbanes Oxley. National Venture Capital Association, NVCA 4-Pillar Plan To Restore Liquidity in the U.S. Venture Capital Industry, 24 (April 30, 2009) http://www.slideshare.net/NVCA/nvca-4pillar-plan-to-restore-liquidity-in-the-us-venture-capital-industry-1360905.
8. Conclusion

Direct Edge again thanks the Commission for this opportunity to comment on the Concept Release. We believe that market participants, no matter how diverse, desire the same market structure characteristics—a liquid, efficient, transparent and fair market that continues to make American equities markets the envy of the world. The challenge is that each investor, intermediary and issuer has a different vision of how best to utilize the market to achieve their own individual needs. The Commission's effort to balance two dynamic forces in our market structure is ambitious. Thankfully, the Commission has true partners among the investing, intermediary and issuer communities, as evidenced by the wealth of quality comments received so far. It would appear that the market will continue to respond with solutions that cause these concerns to offset themselves, and the re-generation and evolution begins anew.

As long as fairness concerns are addressed in terms of accessibility, a market structure that retains enough flexibility to address its various constituencies will better serve the interests of all its constituencies than a "one-size-fits-all" approach. This ability to accommodate a diverse array of constituencies has been fundamental to the economic success that has long been associated with our country.

Direct Edge is ready to be of service to the Commission as it weighs the issues presented by the Release and thanks the Commission in advance for the consideration of these comments.

Sincerely,

Eric Hess
General Counsel

cc: Hon. Mary Schapiro, Chairman
Hon. Luis A. Aguilar, Commissioner
Hon. Kathleen L. Casey, Commissioner
Hon. Troy A. Paredes, Commissioner
Hon. Elisse B. Walter, Commissioner
Robert W. Cook, Director, Division of Trading and Markets
James Brigagliano, Deputy Director, Division of Trading and Markets
David Shillman, Associate Director, Division of Trading and Markets
Dan Gray, Senior Special Counsel, Division of Trading and Markets