



April 23, 2010

**VIA EMAIL AND
FEDERAL EXPRESS**

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

Re: File Number S7-02-10

Dear Ms. Murphy:

NYSE Euronext, on behalf of the New York Stock Exchange LLC (“NYSE”), NYSE Amex LLC (“NYSE Amex”), and NYSE Arca Inc. (“NYSE Arca”), appreciates the opportunity to comment on the Securities and Exchange Commission’s concept release on equity market structure (Release No. 61358; File No. S7-02-10) (the “Concept Release”). NYSE Euronext supports the Commission’s commitment to undertake a comprehensive evaluation of equity market performance and market structure regulations, and welcomes the Commission’s thoughtful consideration of these important issues.

I. Background

NYSE Euronext believes the Commission’s equity market structure review is particularly appropriate and timely in light of the significant changes in the operation and structure of the U.S. equity markets. As a global operator of financial markets, and the operator of three registered U.S. national securities exchanges, NYSE Euronext has witnessed the evolution of the equity markets first hand. Recent years have brought technological advances and substantial innovation to U.S. equity markets, altering the competitive landscape.

NYSE Euronext has embraced the evolving market structure and has been at the leading edge of many developments that have transformed the markets. Though we have a long and proud history in the equity markets, we are not content to stand still. We have continued to build on our legacy by making significant investments in technology, enhancing our exchange operations, developing new services, and maintaining robust market surveillance.

For example, in late 2008, NYSE rolled out its next generation market model (the “New Market Model”), which was designed to provide listed companies and their investors, as well as the trading community, with lower price volatility, smaller spreads between best bid and offer,



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 2 of 24

greater opportunities for price improvement, more active participation by a broader range of market professionals, and deeper liquidity.¹ The model includes three key market participants: (i) Designated Market Makers (“DMMs”), which replace Specialists, add over 164 million shares of liquidity daily, and set the National Best Bid and Offer (“NBBO”) 44 percent of the time as of March 2010; (ii) Trading Floor Brokers, with new algorithms and other cutting-edge tools; and (iii) Supplemental Liquidity Providers, which are upstairs, electronic, high-volume members incented to add liquidity. The New Market Model provides market participants with additional abilities to post liquidity on exchange systems and increases the speed of execution through technological enhancements and a reduction in message traffic between exchange systems and their DMMs.

A similar market model also has been implemented at NYSE Amex.² Since December 2008, NYSE Amex has utilized the new model and NYSE trading systems to modernize and improve the operations of the exchange. NYSE Amex now holds the largest share and sets the NBBO more often than any other exchange in its listed issues. In March 2010, NYSE Amex DMMs matched the NBBO 63 percent of the time and achieved a participation rate of 22 percent, in these mostly less liquid issues.

NYSE Euronext also has pursued several initiatives designed to improve execution quality and provide greater access to liquidity for our customers. For example, in January 2009, we launched the New York Block Exchange (“NYBX”) through a joint venture with BIDS Holdings, L.P., a consortium of 12 broker-dealers. NYBX is open to all NYSE members and accessible through BIDS Trading. It operates as a facility of the NYSE and is intended to respond to customer needs by creating a highly liquid, anonymous marketplace for block trading that brings large orders into contact with active traders, algorithms and retail order flow. In January 2009, we also launched NYSE MatchPoint, a portfolio-based, electronic equity trading facility that matches aggregated orders at pre-determined times with prices that are derived from primary markets.

¹ On March 17, 2010, NYSE filed proposed rule changes with the Commission to extend the operation of its New Market Model pilot until the earlier of Commission approval to make such pilot permanent or September 30, 2010. See Securities Exchange Act Release No. 61724 (March 17, 2010), 75 FR 14221 (March 24, 2010) (SR-NYSE 2010-25).

² As with the NYSE, on March 17, 2010, NYSE Amex filed proposed rule changes with the Commission to extend the operation of its New Market Model pilot. See Securities Exchange Act Release No. 61725 (March 17, 2010), 75 FR 14223 (March 24, 2010) (SR-NYSEAmex 2010-28).



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 3 of 24

In addition, NYSE Euronext has developed leading market data products that have brought significant benefit to today's highly automated markets. For example, our OpenBook® and ArcaBook® products provide low latency, depth-of-book data to market participants. We also have developed data products that increase transparency around the opening and closing auctions, as well as products that provide retail investors with real-time market data.

The U.S. equity markets are dynamic and will continue to evolve. NYSE Euronext believes the Commission's equity market structure rules must evolve along with the markets. Regulation that is unable to adapt to changing market conditions or too broadly applied can stifle innovation, leave regulatory gaps, and harm market quality. The Commission's ongoing review of equity market structure regulations and its consideration of measures to improve market oversight are vital steps toward ensuring that our markets remain fair, transparent, and efficient, and that they continue to serve the interests of the American investing public.

To keep up with changes in technology and new market practices, certain regulatory changes are clearly warranted. However, NYSE Euronext believes any regulatory initiatives undertaken by the Commission in response to the Concept Release should be developed in a manner that anticipates further advances and gives market participants and the Commission the ability to adapt to and embrace continuing innovation in the U.S. markets.

The Concept Release requests comment on an expansive and complex topic and contains a multitude of specific questions concerning equity market regulations and specific trading practices and technologies. In this letter, NYSE Euronext addresses several key equity market structure issues and provides responses to several specific requests for comment. In particular, we will discuss several specific suggestions for the Commission to consider, including recommendations for the Commission to:

- Address regulatory disparities between exchanges and alternative trading systems (“ATSS”).
- Update market structure regulations to address the impact of market dispersion and the expansion of off-exchange trading.
- Review market quality metrics, including Amending Rules 605 and 606 to increase the transparency of order execution and routing practices, especially around non-displayed orders and ATS activity.



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 4 of 24

- Make efforts to gather additional information concerning the nature and extent of high frequency trading.
- Consider changes in trade and quote increments, and consider marketplace requirements related to the internalization of orders
- Modify the market data revenue formula to more heavily weight the value of displayed liquidity.
- Maintain the current proprietary market data feeds alongside CTA and UTP with more transparent market data feed latency measurement.

NYSE Euronext looks forward to providing further comments on these and other issues as the Commission continues its equity market structure review and considers specific policy initiatives and rulemakings.

II. Regulatory Disparities Between Exchanges and Alternative Trading Systems

Registered exchanges, like NYSE, NYSE Arca, and NYSE Amex, serve a fundamental role in the national market system by providing listing venues for companies seeking to raise capital and transparent trading venues for investors and market participants wishing to engage in trading activity. In light of the central functions they perform, exchanges operate under a broad range of market structure rules and regulations designed to protect investors, facilitate capital formation, and meet the basic objectives of the national market system, including fair competition, price transparency, efficient execution, and order interaction. We believe effective market oversight is vital to ensure investors and other market participants maintain confidence in the markets.

We also support fair and robust competition in the equity markets and among market centers. Healthy competition among diverse trading venues can promote innovation, improve market efficiency, and benefit investors through improved trade execution, lower costs, and more targeted services. However, as the markets transform and participants take on new roles, market oversight must adjust to ensure market structure goals are achieved.

The public interest is best served when consistent regulatory standards are applied to market participants engaging in similar activity or serving similar functions. We believe the Commission's market structure review is a critical step toward ensuring that equity market rules keep pace with the markets. In particular, NYSE Euronext supports the Commission's commitment to consider measures to address the regulatory disparities between registered



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 5 of 24

securities exchanges and ATs, which now perform many similar functions and interact with the same diverse set of marketplace participants such as retail investors and high-frequency traders.³ Market centers that perform similar functions, as exchanges and many ATs currently do, should be regulated in similar fashions.

As detailed in the Concept Release, the equity markets have changed quickly and dramatically over the last five years. In 2005, NYSE traded approximately 79 percent of the volume in NYSE-listed securities. In March 2010, NYSE traded 22.8 percent of the volume of NYSE-listed securities, with 37.4 percent of the volume in NYSE-listed securities trading off-exchange, whether through ATs (including both electronic communications networks (“ECNs”) and dark pools) or broker-dealer internalization. Additionally, in only one year, the trading volume in national market system (“NMS”) stocks by national securities exchanges decreased from 69.3 percent of the total trading volume in March 2009 to 61.6 percent in March 2010 across 10 exchanges. Dark pools, ATs, and other forms of internalization have grown rapidly, and now are estimated to represent approximately 30 percent of the total share volume in NMS stocks across a fragmented market of over 50 venues. Direct Edge share has remained flat over this period of time at approximately 10 percent. These statistics clearly show that a significant amount of trading in listed securities has shifted from registered exchanges, which are highly regulated and provide a transparent trading environment, to other non-Exchange market centers, which are subject to significantly less regulation and generally do not display their trading interest.

These shifts in the marketplace are partially due to the significant regulatory disparity among entities providing effectively identical services. The regulatory barriers to establish and operate an ATs are low compared to the lengthy registration process involved in becoming a national securities exchange and the significant ongoing regulatory obligations imposed on registered exchanges. Though they often perform similar or identical functions, registered exchanges and ATs are subject to different levels of regulatory scrutiny. For example:

³ We recognize the Commission’s previously proposed rules to prohibit flash orders and to modify requirements concerning non-public trading interest. We have already submitted specific comments concerning each of these proposals. See, respectively, letter from NYSE Euronext to Elizabeth M. Murphy, Secretary, U.S. Securities and Exchange Commission, dated November 23, 2009 (available at <http://www.sec.gov/comments/s7-21-09/s72109-90.pdf>); letter from NYSE Euronext to Elizabeth M. Murphy, Secretary, U.S. Securities and Exchange Commission, dated February 22, 2010 (available at <http://www.sec.gov/comments/s7-27-09/s72709-63.pdf>). Our comments today in response to the Concept Release should be considered together with these prior comments.



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 6 of 24

- *SEC Filings.* Registered exchanges are required to make public rule filings concerning various changes to their businesses. The regulatory process often includes a substantive review and takes considerable time and effort to complete. The current rules also require exchanges to make public disclosures regarding business strategies and fee structures. In addition, innovations involving services, even those only tangentially related to exchange operations, may be considered “exchange facilities” and thereby subject to the requirements of the rule filing process. For example, NYBX and NYSE MatchPoint, two of our recent initiatives described above, must operate as facilities of the NYSE and comply with the rule filing requirements. In contrast, ATs are required to make only limited notice filings on Form ATS twenty days prior to implementing any material changes. This regulatory inequality allows ATs to innovate quickly without Commission approval, while exchanges must undergo a rigorous and lengthy regulatory review process to initiate change. The lack of regulatory scrutiny of ATs also can lead to the proliferation of unfair trading practices such as the flash order structure and actionable indications of interest privately transmitted by dark pools or other trading venues to only select market participants.
- *Fair Access.* Registered exchanges are required to have membership rules and procedures specifically designed to ensure access to exchange facilities is granted in a fair and impartial manner. The fair access requirements applicable to ATs are far narrower. ATs must comply with general fair access requirements only if a five percent trading volume threshold is exceeded, and certain exceptions apply. NYSE Euronext believes comparable fair access requirements should be applicable to all venues that display customer orders.
- *Market Surveillance.* Under the current market structure, registered exchanges have self-regulatory responsibilities and must either maintain an extensive regulatory organization to conduct market surveillance or enter into a regulatory services agreement with another self-regulatory organization, either of which can involve significant time and resources. Non-exchange trading venues are not subject to the same rules and are free from any self-regulatory requirements. Effective market surveillance is critical for the protection of investors and the efficient operation of the markets. NYSE Euronext estimates that it will spend nearly \$80 million for U.S. equity market surveillance and enforcement costs in 2010, only partly offset by an estimated \$35 million in related regulatory revenues. Our exchanges accounted for a 25.6 percent share of U.S. equity trading in March 2010. NYSE Euronext believes all market centers should share the same responsibilities and contribute to the cost of market surveillance based on their respective market shares. In addition, NYSE Euronext believes consideration should be given to the establishment of



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 7 of 24

one self-regulatory organization with responsibility for surveillance across the entire marketplace.

- *Business Combinations.* Exchanges are subject to extensive restrictions on business combinations and business relationships that do not apply to ATSS. For example, exchanges are precluded from entering into business relationships, combinations, or joint ventures with member firms without being subjected to Commission approval through the rule filing process (considered under general standards, which change from time to time without notice) and potentially onerous restrictions (based on perceived conflicts of interest). Exchanges are thus unable to achieve optimal intra-corporate synergies on the same terms as ATSS.

In addition, executives of publicly-traded companies are becoming increasingly disappointed with the lack of transparency resulting from the current market structure. In a May 2009 Opinion Research Corporation survey of 284 executives from NYSE-listed companies, 52 percent of executives indicated they were dissatisfied with the transparency of trading in their company's stock and only 17 percent indicated they were satisfied. In addition, 69 percent of executives indicated there is inadequate regulatory oversight of non-exchange trading venues, including dark pools.

NYSE Euronext believes the requirements of Regulation ATS no longer reflect the realities of today's market structure. The lighter regulatory oversight for ATSS puts transparent, regulated markets at a competitive disadvantage, to the potential detriment of investors. To ensure market structure regulations continue to protect investors and promote fair competition, price transparency, efficient execution and order interaction, NYSE Euronext believes it is essential to establish a framework with consistent regulatory requirements for entities engaging in similar activity. More specifically, now that ATSS represent a significant share of trading volume in NMS stocks, NYSE Euronext believes the Commission should address the regulatory disparity between registered exchanges and ATSS that engage in trading activities analogous to traditional exchange trading.

III. The Price Discovery Process

NYSE Euronext believes that competition has been a positive factor for the marketplace, and having diverse market models has led to many beneficial market structure developments for investors. We additionally believe that internalization has resulted in positive trading experiences for retail investors. At the same time, NYSE Euronext supports the Commission's effort to examine the growth of off-exchange trading and its impact on market quality, price



Ms. Elizabeth M. Murphy
 Securities and Exchange Commission

Page 8 of 24

discovery, and investor protection. Off-exchange trading centers, including ATSS, dark pools, and broker-dealers that internalize executions, now account for a substantial percentage of the share volume in NMS stocks. As detailed in Figure 6 of the Concept Release, such off-exchange trading is estimated to account for more than 36 percent of share volume in NMS stocks as of September 2009, and has continued to grow significantly since then.

The growth of off-exchange trading has increased considerably during the past two years. Recent statistics from the FINRA Trade Reporting Facilities (the “TRF”) highlight the remarkable expansion of off-exchange trading since 2008. For example, in NYSE-listed securities, the market share of off-exchange trading reported through the TRF rose to 37 percent in March 2010, up from 25 percent in January 2009 and 21 percent in January 2008. In Nasdaq-listed securities, the market share of off-exchange trading reported through the TRF rose to 42 percent in March 2010, up from 30 percent in January 2009 and 28 percent in January 2008. Off-exchange trading in securities listed on other registered exchanges has followed a similar trend.⁴ The growth of off-exchange trading over the past year has occurred on non-displayed markets and does not appear to be directly attributable to market share growth at any particular ECN that displays quotes, such as Direct Edge.⁵ As highlighted in the chart below, in March 2010, the market share of off-exchange trading reported through the TRF, but excluding trading activity at Direct Edge, rose between 7 and 9 percent across all tapes when compared to the reported shares a year earlier.

	FINRA TRF		Direct Edge ECN		TRF excl. Direct Edge		
	<u>Mar-09</u>	<u>Mar-10</u>	<u>Mar-09</u>	<u>Mar-10</u>	<u>Mar-09</u>	<u>Mar-10</u>	<u>Y/Y Chg</u>
Tape A	30.3%	37.4%	10.0%	10.0%	20.3%	27.4%	7.1%
Tape B	29.7%	34.7%	12.2%	10.2%	17.5%	24.5%	7.0%
Tape C	33.3%	42.3%	10.7%	10.8%	22.6%	31.5%	8.9%
Amex-listed	44.0%	52.6%	NA	NA	NA	NA	NA

⁴ In NYSE Arca-listed securities, the share of off-exchange trading reported through the TRF rose to 34 percent in March 2010, up from 25 percent in January 2009 and 22 percent in January 2008. In NYSE Amex-listed securities, the share of off-exchange trading reported through the TRF rose to 53 percent in March 2010, up from 45 percent in January 2009 and 29 percent in January 2008. As a further example, the share of off-exchange trading reported through the TRF for Citigroup (one of the most active stocks in the market) rose to 42 percent in March 2010, up from 30 percent in January 2009 and 28 percent in January 2008.

⁵ On March 12, 2010, the Commission approved Direct Edge’s applications for national securities exchange registration. Securities Exchange Act Release No. 61689 (March 12, 2010), 75 FR 13151 (March 18, 2010).



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 9 of 24

Notably, this expansion of off-exchange trading has occurred notwithstanding substantial improvements in the efficiency of registered exchange operations. For example, NYSE Amex execution quality has increased significantly since its acquisition by NYSE Euronext, but off-exchange trading in NYSE Amex-listed securities is still growing.⁶ Since December 2008, when NYSE Amex began trading on NYSE systems, the average quoted spread of NYSE Amex listed securities narrowed from 544 basis points to 249 basis points (excluding exchange traded funds). In addition, NYSE Amex now quotes for larger size than any other exchange in its listed stocks and is at the best price 68.1 percent of the time, compared to 61.3 percent in December 2008. Despite these market quality improvements, NYSE Amex market share has declined while off-exchange trading has grown to 53 percent in March 2010 from 44 percent in March 2009.

As off-exchange market share has increased, concerns about its impact on liquidity and the quality of price discovery have been raised. For example, in “Off-Exchange Trading and Market Quality in a Fragmented Market Structure,” Professor Daniel Weaver from Rutgers Business School found empirical evidence that higher off-exchange trading is associated with a reduction in market quality, in particular wider spreads and increased price impact and volatility from less available exchange depth.⁷

As trading volume has shifted to new trading centers that operate with less transparency and fewer regulatory requirements, more and more market information is outside of public view and excluded from the price discovery process. With incomplete public information concerning the full extent of market activity, combined with ever-increasing complexity regarding routing practices and, in many cases, limited transparency, it can be difficult to assess whether a customer is getting best order execution. Additional disclosures regarding order handling practices, and more principles-based guidance regarding best execution, could help in this regard.

Undisplayed liquidity has played a role in equity market structure, in one form or another, for many years. It can serve an important function for investors seeking to trade large blocks of securities. However, with the development of new market centers and trading practices, undisplayed trading now accounts for a substantial amount of trading volume. As noted in Figure 6 of the Concept Release, as of September 2009, it is estimated that one quarter of the share volume in NMS stocks was executed in undisplayed trading centers. When information

⁶ As described in footnote 5, the off-exchange trading for NYSE Amex-listed securities rose to over 50 percent in March 2010.

⁷ Professor Weaver has submitted his study to the Commission separately in response to the Concept Release.



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 10 of 24

concerning trading interest is excluded from the public quote stream, the quality of the price discovery process can be affected.

Accurate price discovery also depends on order interaction among a diverse set of market participants, including short-term, long-term, retail, and institutional investors. Interaction between orders of short-term investors and long-term investors is becoming more limited under the current market structure as short-term investors execute on exchanges and long-term investors increasingly execute orders off-exchange. Dark pools and other off-exchange trading venues are attracting a significant volume of advantageous marketable order flow away from displayed markets and exchanges, thus increasing the “toxicity” of order flow on Exchanges. Small marketable order flow is valuable because it generally comes from longer-term investors who are less sensitive to short-term price movements. The continued fracturing of liquidity has the potential to further limit order interaction, decrease liquidity, increase short-term volatility, and compromise the quality of the price discovery process.

Off-exchange trading through ATs and broker-dealer internalization now plays a large role in the U.S. equity markets. NYSE Euronext supports the Commission’s effort to assess the current market environment and update market structure regulations to address the impacts of market dispersion and the expansion of off-exchange trading. We recognize the value of undisplayed liquidity, particularly for those market participants seeking to trade in large size, and we do not oppose all forms of undisplayed liquidity utilized in the current market structure. Nevertheless, NYSE Euronext believes market structure regulation must provide protection to displayed liquidity, consistent with the goals of Regulation NMS, and supports the Commission’s consideration of regulatory changes to maintain such protection.

A. Trade-At Rule

The Commission also requested specific comment on whether it should attempt to address any negative affects of undisplayed liquidity through adoption of a trade-at rule, which would prohibit a trading center from executing a trade at the price of the NBBO unless that price was displayed by the trading center at the time the incoming order was received, and require either significant price improvement or routing intermarket sweep orders (“ISOs”) to the full displayed size of the NBBO. Adopting a trade-at rule could encourage transparency by providing greater incentives for participants to display quotations at aggressive prices and in greater sizes. As a result, such a rule could reduce the level of undisplayed liquidity and direct a larger amount of trading volume to displayed trading centers.



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 11 of 24

As a means for encouraging displayed liquidity, adoption of a full trade-at rule would be a very strong step. Accordingly, we believe the Commission should consider whether there are lesser means to achieve the same objectives. As an alternative, the Commission could consider adopting specific requirements on broker-dealers who internalize orders. For example, the Commission could consider a new requirement prohibiting broker-dealers from internalizing orders unless they have a pre-existing quote in the market at the same price and size and/or they price improve by a minimum price increment.⁸

B. Depth-of-Book Protection

In addition, the Commission requested comment on whether it should consider adopting a depth-of-book component to the order protection rule. Providing trade-through protection to displayed depth-of-book quotations could encourage greater display of trading interest and enhance market efficiency and transparency. However, there may be potential practical or financial impediments to implementing such additional trade-through protection. Accordingly, while we believe the Commission should consider expanding Rule 611 to provide trade-through protection to a trading center's displayed "depth-of-book" quotations; NYSE Euronext would support the creation of a pilot program to explore the benefits of this change and better determine its practicality and effectiveness.

IV. Market Quality Metrics - Potential Amendments to Rules 605 and 606

Relevant and accurate market metrics are required for the Commission to determine whether market performance is appropriately aligned with market structure goals. While the Commission has utilized a wide variety of metrics for assessing market quality over the years, we support the Commission's effort to reassess the relevance of current market performance metrics and to explore whether additional measures would shed more light on the operation of the markets.

NYSE Euronext believes the Commission should review the requirements of Rules 605 and 606 and makes amendments necessary to ensure that comprehensive and useful information concerning order execution quality and routing practices is made available to investors. When

⁸ Several studies have found improved market quality with a decrease in internalization. See Toronto Stock Exchange Special Committee Report, *Market Fragmentation: Responding to the Challenge* (1997) (the study found that when the Toronto Stock Exchange allowed internalization only when accompanied by price improvement, market quality improved); see also Norris L. Larrimore & Albert J. Murphy, *Internalization and Market Quality: An Empirical Investigation*, 32 *Journal of Financial Research* 337-63 (2009) (the study found that a similar Deutsche Boerse rule also led to improved market quality as internalization decreased).



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 12 of 24

Rules 605 and 606 were originally adopted in 2000, they provided valuable execution quality statistics to investors. However, as detailed in the Concept Release, the U.S. equity market structure has changed substantially and, as a result, we believe these rules have become outdated. As investors and traders obtain access to more complex order types and new execution venues, the datasets available pursuant to these rules provide information for only a small subset of today's executions. Large amounts of liquidity and trading are unaccounted for in any publicly available statistical compendium. For example, Rule 605 reports do not capture information concerning reserve orders or dark orders and Rule 606 reports do not capture information concerning large block transactions. Moreover, Rule 606 reports provide limited information to the marketplace because the reported routing venue is often just the first step among several routing decisions.

An update of Rules 605 and 606 is necessary to capture relevant information concerning the full range of order execution and routing practices in use today. Better public data concerning order execution and routing quality will enhance competition, improve market efficiency, and provide investors with the information necessary to operate within the current complex market structure. For these reasons, NYSE Euronext believes the Commission should amend Rules 605 and 606 to increase the transparency of order execution and order routing practices, in particular to provide more information related to non-displayed orders and ATS activity. Specific recommendations for amendments to Rules 605 and 606 are set forth in Appendix I attached hereto.

Another area that deserves discussion is the market opening process. NYSE Euronext believes that a fair and transparent open is critical to the price discovery process and the protection of retail investors' orders. In our view, the NYSE open auction provides a superior opportunity for the fair and transparent execution of opening orders. Following is a brief discussion of some of the metrics we consider in evaluating our opening process.

The NYSE open acts as a bridge between pre-opening trading activity, which offers inefficient price discovery, to continuous regular hours trading. To track the quality of the opening process, we examine the median differential between the NYSE opening price on a trade and the consolidated VWAP during the following ten minutes of trading. During February 2010, the median differential between the NYSE opening price and the consolidated VWAP during the following ten minutes of trading measured \$0.0142, which compares favorably with the full-day average five minute trading range of more than \$0.06. The NYSE opening process also compares favorably to the opening processes of other exchanges. For example, during March 2010, for NYSE-listed stocks traded on both NYSE and Nasdaq, the NYSE opening process resulted in a median differential between the opening price and the next ten minutes of trading of \$0.0200, which is 63 percent lower than the \$0.0553 median differential for the Nasdaq opening



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 13 of 24

process. These figures indicate that the NYSE opening process provides an effective mechanism for price discovery.

The NYSE continues to facilitate improvement in its open auction process and has recently made several adjustments to its opening auction. In addition to disseminating the side (buy or sell) of the liquidity imbalance and the paired quantity beginning at 8:30 a.m., the NYSE also has begun distributing (as of March 1, 2010) a continuous book clearing price, or more specifically an indicative opening price, for every security. The frequency of the imbalance distribution starts out at every 5 minutes beginning at 8:30 a.m. and decreases to every 15 seconds beginning at 9:20 a.m. The continuous book clearing price (the indicative opening price) begins dissemination at 9:28 a.m. and is updated every 15 seconds until the stock opens or until 9:35 a.m.

V. High Frequency Trading

NYSE Euronext generally supports high frequency trading and believes that, on the whole, it has brought significant benefits to the markets. As the Commission notes in the Concept Release, however, there is not a uniform definition of high frequency trading. Various firms engage in high frequency trading, including some firms that have evolved from more traditional market making models. Although high frequency traders generally operate by entering orders on a highly automated and high-volume basis based upon proprietary algorithms, the strategies and tools employed can vary substantially.

As a result, policy discussions regarding high frequency trading have often become muddled by confusion as to which trading practices constitute high frequency trading. NYSE Euronext supports the Commission's effort to distinguish among the various trading practices now utilized. To develop an appropriate regulatory approach to high frequency trading and its impact on market structure, it is essential to separate trading practices that undermine market quality and investor interests from those that provide market benefits.

We believe high frequency traders provide substantial liquidity to the market, which is a positive development that improves market quality and should be encouraged. For example, high frequency traders represent a significant portion of trading volume on the NYSE and other U.S. market centers. NYSE Euronext estimated half of NYSE Group volume in 2009 was from high frequency traders.⁹ In particular, NYSE Euronext believes the liquidity provided by high frequency traders employing passive market making strategies improves market quality. In our

⁹ NYSE Euronext's Investor Day Presentation on March 3, 2010



Ms. Elizabeth M. Murphy
 Securities and Exchange Commission

Page 14 of 24

view, absent the liquidity provided by high frequency trading, the volatility in the equity markets would be much greater.

In addition, we believe high frequency trading contributes to the narrowing of spreads. Our research has found that stocks with greater high frequency trading tend to have tighter quoted spreads, while other stocks have similar or wider spreads. We found that through December 2009, Nasdaq and NYSE stocks with substantial high frequency activity registered a 2 to 26 basis point reduction in spreads compared to pre-Regulation NMS. However, lower volume issues saw little change in spreads, and in some cases wider spreads. Retail investors and all market participants ultimately benefit from the presence of high frequency traders through tighter spreads, lower volatility, and greater liquidity.

Change in Quoted Spread from April 2007 - December 2009 versus 2002-2006
Change in Percent

VIX	All NYSE	NYSE 100	All Nasdaq	Nasdaq 100	All NYSE	NYSE 100	All Nasdaq	Nasdaq 100
<15%	-11.64	-2.83	-35.47	-6.39	-32.2%	-34.6%	-26.8%	-31.7%
15-25%	6.38	-2.17	25.89	-13.82	12.7%	-18.2%	14.1%	-42.8%
25-35%	6.13	-8.94	-5.50	-26.00	9.3%	-42.8%	-2.3%	-56.4%
35-45%	41.72	-10.53	77.74	-17.10	51.1%	-35.9%	27.8%	-34.8%

High frequency traders are able to trade at higher speeds and in greater volume than many other investors because they invest in technology systems and trading algorithms. But differences in speed and volume have always existed in the equities markets, and are harmful to investors only if they are operating with informational advantages, or are manipulating the market in some manner. However, as markets have evolved over time, methods for fraud, manipulation, and other misconduct have evolved as well. NYSE Euronext believes that if highly automated, high-volume trading is employed in a manner that harms market quality and the interests of investors, such conduct should be appropriately addressed by the Commission and other regulators. We support the Commission's effort to reveal and define manipulative trading practices and we encourage the Commission to remind market participants that fraudulent and manipulative conduct is unlawful, whether perpetrated through traditional market mechanisms or sophisticated proprietary trading algorithms. However, we believe efforts to develop new regulatory responses to any perceived problems created by high frequency trading should be narrowly crafted to address only those specific trading practices that present harm to the markets and for which remedies are now unavailable. The Commission currently has authority to address fraudulent and manipulative trading practices, and we encourage the Commission to employ its existing authority before undertaking new regulatory initiatives.



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 15 of 24

To increase transparency, NYSE Euronext supports efforts to gather additional information concerning the nature and extent of high frequency trading. Tracking and measuring high frequency trading could provide a deeper understanding of the current range of trading practices and their impacts on the market. We note, however, that the establishment of any specific tracking and reporting regime would require a clear definition of the covered trading practices. In our view, any initiative to track and report high frequency trading should be carefully developed to ensure that new requirements do not impact liquidity and erode the current benefits of high frequency trading. Moreover, we believe information collected to track and measure high frequency trading should be made available only to the Commission for appropriate regulatory purposes.¹⁰

VI. Additional Market Structure Issues

A. Co-Location

NYSE Euronext supports the continued practice of co-location offered on a level playing field for all investors. We encourage the Commission to develop effective mechanisms for monitoring the practice, including among ATSS and third party vendors.

We believe it would be impractical for the Commission to prohibit co-location altogether by preventing third parties from obtaining space close to an exchange data center and then subletting it to trading firms. This system could result in an extremely tilted playing field with parties outside the regulatory reach of the Commission or the exchanges scrambling for real estate with proximity to market centers. It is important for the Commission to ensure that all entities offering exchange co-location develop fair allocation methodologies that treat similarly situated participants equitably and at reasonable fees filed with the Commission. These entities include exchanges and third parties, which sometimes act as independent vendors and sometimes act in collaboration with an exchange.¹¹ NYSE Euronext, which owns its own co-location space, is subject to the fair access requirements of the Securities Exchange Act of 1934. Third party data center operators, however, acting on their own or on behalf of market centers, are under no obligation to ensure fair access. As a result, not all markets are regulated equally, which creates

¹⁰ We acknowledge the Commission's recent proposal to create a large trader reporting system to identify and obtain information from market participants engaged in substantial trading activities, including high-frequency traders, and we look forward to providing comments regarding that specific proposal under separate cover. See Securities Exchange Act Release No. 61908 (April 14, 2010).

¹¹ In fact, today, all exchanges currently engage in co-location, but most provide the service through a third party, which creates concerns about whether marketplaces are competing on the same level playing field.



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 16 of 24

competitive disadvantages among marketplaces offering co-location and creates an opportunity for market participants to engage in regulatory arbitrage.

Thus, we are concerned about the competitive implications for the industry, especially with respect to the way regulation would be structured. To level the playing field, NYSE Euronext would support the proposition that third parties acting on behalf of an exchange or in collaboration with an exchange – for example, under rebate or revenue sharing arrangements – should be deemed facilities of that exchange and thereby subject to the same regulatory requirements regarding fair and equitable allocation as exchanges.

Co-location provides operational, not informational advantages. Operational differentials are a natural result of a competitive, free market, where market participants can choose to compete by spending resources on technological innovations available to all. Informational advantages, however, distort price discovery and create unfair advantages when certain market participants have prior access to information that others do not have, as in the case of flash orders. With co-location, information is made available at the same time to all market participants and the difference with respect to receipt of the information lies in the operational capacity of a trading firm's systems.¹² Co-location does not allow a participant to see orders before they hit the marketplace, as flash orders do.

The cost of co-location is not a barrier to access to the service. When viewed in the context of other trading infrastructure costs, the cost of co-location is low, with server space typically priced less than \$5,000 per month per cabinet. Much larger costs include those for labor, trading strategy development, and telecommunications networks. We think the barrier, if any, with respect to co-location is actual physical space, which can be a scarce resource. That is why NYSE Euronext advocates fair and equitable allocation of co-location, as noted above. Scarcity of co-location in the exchange industry is one reason NYSE Euronext is building a new data center to fully accommodate anticipated industry demand.

Co-location does not disproportionately impact retail investors in a negative way. Today, retail investors typically enter the market through an intermediary instead of directly touching market centers. By using this infrastructure, they often indirectly get the same advantage of co-location as high frequency traders without directly bearing the full costs of the infrastructure (including any costs relating to co-location).

¹² For example, NYSE Euronext has designed its systems to ensure that everyone gets its market feeds within the Data Center for their co-located servers at the same time to ensure there are no informational advantages from particular proximity within the Data Center.



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 17 of 24

As evidenced by our current market model, we support the concept of obligations to the market in exchange for privileges. However, we have concerns about subjecting market participants who obtain co-location services to affirmative or negative obligations with respect to their trading activities. Application of obligation requirements to all co-location participants would be unnecessary and impractical, especially because only certain proprietary firms would be in a position to control their activity to meet such requirements (for example, firms with institutional agency algorithmic order flow would have no means to ensure obligations were met). It would be difficult to adequately define the scope of obligation requirements for co-location participants, and we are concerned that any such obligations could be inequitably applied.

B. ETF Issues

The Commission requested comment on exchange-traded funds (“ETFs”) and the impact of ETF trading. Generally speaking, NYSE Euronext believes the growth of ETF trading has positively impacted the equity markets and benefitted investors.¹³

As of February 2010, there were 807 registered ETFs and 140 registered exchange-traded products (“ETPs”) listed in the United States, with combined assets of \$763 billion.¹⁴ In 2009, the consolidated average daily volume for U.S.-listed ETPs was over 1.5 billion shares per day and the consolidated dollar average notional turnover was \$64.71 billion. This represented 32.51 percent of the consolidated dollar turnover for U.S. equity markets in 2009.¹⁵

ETFs have been widely accepted in large part because their structures are built upon principles of diversification, efficiency, and transparency. The investment objective of ETFs is to provide investment results that correspond generally to the price and yield performance of the underlying asset. While ETFs can have a wide array of differing underlying components, two features remain constant; creation/redemptions and derivative pricing. The net asset value (“NAV”) per share of an ETF is based upon the combined value of the underlying components, divided by the number of shares outstanding. The initial issuance price is based on the per-share NAV, less fees

¹³ We note the Commission’s recently announced review of the use of derivatives by mutual funds, ETFs, and other investment companies. At the appropriate time, we look forward to providing comments specific to the issues implicated in that review.

¹⁴ See Blackrock, *ETF Landscape: A Review of the Exchange Traded Funds (ETFs) and Exchange Traded Products (ETPs) Industry*, p. 32 (February 2010), available at http://www.blackrockinternational.com/content/groups/internationalsite/documents/literature/etfl_industryreview_feb10.pdf.

¹⁵ See Arcavision.com.



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 18 of 24

and expenses of the issuer. While the secondary market price of an ETF is set by the market and dependent upon supply and demand, similar to any other equity security, the arbitrage opportunities created by the transparent creation/redemption process keep the ETF share price in line with the NAV, thereby minimizing premiums and discounts.

The liquidity and volatility of the underlying assets impacts the cost of quoting and hedging an ETF, which in turn is reflected in the bid/ask spread. As assets under management increase, there is a more diverse universe of market participants, including firms that incorporate futures and options trading strategies. This increase in liquidity supplied by a diversified pool of market participants further reduces the ETF's bid/ask spread.¹⁶ In addition, several academic studies have analyzed the impact of ETF trading on the underlying portfolio holdings and have found that the issuance of ETFs has had a positive impact on the liquidity of the underlying components, which highlights the benefits of ETF arbitrage on the equities market.¹⁷

C. Market Structure Performance for Less-Active Securities and Low and High Priced Stocks

NYSE Euronext acknowledges the importance of taking a broad overall assessment of the current performance of the U.S. equity markets and appreciates the Commission's particular focus on the interests of long-term investors and businesses seeking to raise capital. As noted in

¹⁶ An example is the iShares Emerging Markets Index Fund (NYSE Arca: EEM). In 2004, with assets under management of roughly \$3.9 billion, EEM's average bid/ask spread was twelve basis points. By 2009, EEM's assets under management had grown to roughly \$39.3b, while the spread narrowed to four basis points. See Bloomberg and Arcvision.com. The complexities of hedging an international ETF generally cause the natural cost of quoting and perfectly hedging to be greater, but, in this instance, the entry of other market participants tightened spreads.

¹⁷ For example, one study analyzed the effects of the introduction of the PowerShares QQQ, formerly known as the Nasdaq 100 Index Tracking Stock (Nasdaq: QQQQ), and concluded, "A decomposition of relative and absolute quoted spreads finds that while spreads decline following the introduction of the QQQ, the reduction in spreads is more pronounced for component stocks with lower weights in the QQQ composition. The analysis also shows that the component stocks experience a significant decline in systematic risk while the control sample experiences no such decline." See Nivine Richie & Jeff Madura, Impact Of The QQQ On Liquidity And Risk Of The Underlying Stocks, 47 Quarterly Review of Economics and Finance 411-21 (2007). Another study provided an in-depth analysis of the market liquidity of the SPDR Dow Jones Industrial Average ETF, formerly known as the DIAMONDS Trust, (NYSE Arca: DIA) and the stocks that constitute the Dow Jones Industrial Average around the launch of the ETF, and found that the individual stock liquidity measures improved. See Shantaram P. Hedge & John McDermott, The Market Liquidity Of DIAMONDS, Q's And Their Underlying Stocks, 28 Journal of Banking and Finance 1043-67 (2004).



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 19 of 24

the Concept Release, this topic presents a number of difficult issues and is of critical importance as the Commission considers potential regulatory initiatives to improve market function. We believe market performance issues deserve further study and encourage the Commission in its current effort.

As the Commission recognized in the Concept Release, small company stocks can trade differently than large company stocks. One area of concern is how market structure could impact stocks with small market capitalization. In particular, we have observed the lack of liquidity at the NBBO as well as the significant amount and continued rise in off-exchange trading in less-liquid securities. We believe that this lack of liquidity may be hampered by a too-narrow minimum \$0.01 tick size. For example, in March 2010, off-exchange trading accounted for 52 percent of trading in less-liquid Amex-listed securities, while the largest exchange accounted for only 14 percent share despite improving market quality statistics. The Commission should consider wider trading and quoting increments for exchanges and ATSS in low-capitalization stocks. A \$0.01 minimum tick size for low-capitalization stocks creates a disincentive to provide liquidity at the best price, resulting in smaller quoted sizes. Additionally, we have observed that many low-priced stocks generally have wider spreads, on a percentage basis, and trade to a greater extent in off-exchange market centers in smaller increments than stocks trading at higher prices. This includes less-liquid and more liquid securities. Most notably, off-exchange trading was 48 percent of the volume of Citigroup stock, which is priced under \$5 per share and accounted for 13 percent of Tape A volume in March 2010. No single exchange accounted for more than 13 percent share in Citigroup stock in March 2010. CTS data for March 11 through March 31, 2010 shows that 16% of TRF reported volume in Citibank executed at less than full-penny increments, trading without the involvement of limit orders posted on public markets. Only 5% of the volume received a price at 0.50 cents from a full cent, which represents 1/2 the minimum tick size improvement. The lack of price improvement available in dark pools means that these orders are executing at the NBBO, while publicly posted orders at the best price do not receive the opportunity for execution.

Due to the penny per share quoting requirement, low-priced securities are subject to spreads that are larger on a percentage basis than those for securities with large market capitalization. The average spread for stocks priced between \$1 and \$10 is now 28 bps, compared to 8 bps for stocks priced between \$10 and \$20. In addition, many non-Exchange market centers have implemented mechanisms to encourage trading within the NMS quote requirements, which incentivizes traders to utilize dark market centers to gain priority and find liquidity before turning to displayed markets. This allows dark venues to conduct price discovery in these securities in sub-pennies, executing at what may be nominal improvements. We do not believe this behavior is beneficial for the overall marketplace.



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 20 of 24

Accordingly, NYSE Euronext believes the Commission should either explore changing the trading and quoting increments in certain securities, or provide that securities should trade and quote in the same increments (with consideration for exemptions such as standard mid-point pricing offerings). It is not clear there is a one-size fits all solution exists and any change should be limited to a pilot program to examine the effects before full market implementation. One construct could be for the Commission to explore reducing the minimum price increment to \$0.005 in some active, low-priced securities trading in the range of \$1 to \$10. This will create more efficient quoting, which should allow liquidity to naturally meet in the displayed market, since it would reduce the cost of reaching across the spread to complete a trade.

The Commission should also consider wider trading and quoting increments for exchanges and ATs in very high-priced securities. A \$0.01 minimum tick size for high priced stocks creates a disincentive to provide liquidity at the best price, resulting in smaller quoted sizes when compared to similar stocks trading at lower price points.

We do not believe changing trading and quoting increments represents a broad fix to market structure issues. In our view, lowering quoting increments for active low-priced issues could reduce spreads, but could also reduce displayed sizes at the NBBO, which could encourage off-exchange trading. We further recognize that narrowing the minimum quoting increment could have a deleterious impact on exchange, ATS and SIP capacities. We note that sub-penny quoting by exchanges currently exists in low-priced stocks under \$1 and off-exchange trading accounted for 49 percent of trading, which still raises concerns about the significant amount of liquidity in less-liquid securities that is not participating in the public price discovery function. Combining narrower spreads with a price improvement requirement could further encourage more transparent trading and quoting.

D. Trading Center Data Feeds

The collection and distribution of consolidated market data serves as part of the foundation of our national market system, providing the public with critical market information regarding the prices and volume of NMS stocks. The consolidated market data system facilitates competition among market participants and ensures the functioning of an integrated, truly national market structure. In light of its important function, NYSE Euronext supports the Commission's effort to ensure that the consolidated market data feed is as comprehensive and reliable as possible.

As noted in the Concept Release, exchanges and other market centers also provide individual market data feeds directly to customers. Trading center data feeds include a variety of market



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 21 of 24

information as well as the same information that is contained in the consolidated data. In our view, proprietary trading center data feeds serve a useful function in today's equity market structure that is complementary to the consolidated data feeds and consistent with the Commission's market structure goals.

Proprietary data feeds allow an exchange to append information that relates specifically to its own market place, something that CTA cannot accommodate. For example, our market data products provide enhanced information about executions, such as how many buyers/sellers comprised the trade, latencies between systems, and sub-millisecond time stamps. These feeds provide data that is useful to investors to efficiently and fairly trade with greater speed. Investors utilizing trading center data feeds are more likely to be able to properly evaluate current prices. In fact, to gain operational efficiency, some market participants have made the decision to subscribe to direct exchange feeds and perform their own quote aggregation rather than letting CTA or a third party perform that function. The benefits of these services are generally available to all market participants, and utilized not just by high frequency traders but also by exchanges, institutional investors, wholesalers acting on behalf of retail orders, and certain retail firms in disseminating their quotes.

The Commission requested comment on whether trading center data should be delayed to ensure that consolidated data reaches users first. The Commission also requested comment on whether a mandatory delay would seriously detract from the efficiency of trading and harm long-term investors and market quality. NYSE Euronext strongly opposes building latency into the dissemination of proprietary data feeds. We believe there is no compelling need to do so. In our view, restricting the ability to disseminate proprietary data feeds would be a highly arbitrary way to equalize operational advantages, along the lines of requiring all market participants to operate on the same hardware, or with the same networking equipment. Given the constant advancements in trading technology, we believe any short-term attempts to mandate equal timing of market data receipt would inevitably become obsolete. Instead, we believe the Commission should focus on steps to assure receipt of market data does not provide certain market participants with an unfair advantage over others.

Market centers are prohibited from transmitting their own data to anyone prior to reporting to the appropriate consolidated plan processor. In our view, this prohibition is sufficient to protect investors and the public, especially in light of the significant improvements that have been made to the speed of the consolidated data feeds over recent history - the average latency between consolidated data feeds and individual trading center data feeds is less than 10 milliseconds. We believe a mandatory delay for proprietary market data feeds would be ineffective and would not provide any demonstrable benefit to market participants. Moreover, in our view, requiring



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 22 of 24

latency for trading center data feeds may actually impede market efficiency and harm market quality. A latency requirement would be difficult to implement, particularly across multiple market centers operating with varying technology platforms, and could create new avenues for misuse of information or trading misconduct.

NYSE Euronext would support greater transparency surrounding the latency between consolidated data feeds and individual trading center data feeds. Additional reporting of latency statistics for market data and order execution would enhance public knowledge of the operation of the equity markets. Any new requirements concerning latency statistical reporting should be well-defined and standardized so market participants can make effective comparisons across markets.

The Commission also requested comment on whether it should require that additional information be included in the consolidated market data feeds. As noted in our February 22, 2010 comment letter concerning the Commission's non-public trading interest proposal, NYSE Euronext supports including ATS identity information in post-trade data feeds.¹⁸ We believe post-trade transparency is important because it allows market participants to assess overall supply and demand and reduces the gap among investors with differing degrees of access to information regarding where liquidity resides. In today's fragmented markets, knowing the execution quality of a particular trading venue can be an important component of post-trade transparency, as can reporting for large size transactions. Dark pools have a significant competitive advantage due to their lack of pre-trade and post-trade obligations. Additional transparency in this area will promote fair competition among competing market centers.

In addition, NYSE Euronext believes odd-lot orders and odd-lot transactions should be required to be reported in the consolidated trade data. As noted in the Concept Release, a fairly significant volume of trading may be attributable to odd-lot trading activity, perhaps as much as four percent of total trading volume. The incorporation of odd-lot quotes and transactions in the consolidated trade data will improve the accuracy and reliability of market data provided to the public and enhance the price discovery process. In addition, we believe the current exclusion of odd-lot transactions from data feed requirements creates an incentive for certain dark market centers to intentionally trade in odd-lots to avoid disclosure requirements. Any system capacity constraints that may have previously precluded inclusion of odd-lots no longer exist. Thus, we believe there is no logical reason to exclude odd-lot orders and transactions from the

¹⁸ See letter from NYSE Euronext to Elizabeth M. Murphy, Secretary, U.S. Securities and Exchange Commission, dated February 22, 2010.



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 23 of 24

consolidated market data and encourage the Commission to require such transactions to be reported.¹⁹

The Commission also requested comment on whether the plans for distributing market data revenue should be restructured. We suggest that the Commission consider revising the plans to provide additional weight towards quoting share, and less weight to trading share. The practical effect of this change would be to increase the reward for market participants that are willing to display their interest to investors, which in turn narrows spreads and adds liquidity. At the same time, this type of change to the distribution of market data revenue provides less reward for executions that take place outside of the published markets, thus providing less of a reward to those who simply use the markets as printing facilities. In addition, we suggest that the Commission further reward those trading and quoting in secondary and tertiary securities by increasing the reallocation of the market data value of each security towards less liquid securities, a process that is currently accomplished by the square root component of the current formula.

VII. Conclusion

We recognize and support the Commission's ongoing commitment to evaluate equity market performance and modernize market structure regulations. As a leader in developing and utilizing technological and other advancements that have transformed the markets in recent years, NYSE Euronext recognizes that the time has come for the Commission to make regulatory updates to reflect the significant changes in the markets. As the Commission continues its equity market structure review, we encourage the Commission to pursue regulatory initiatives that support continued innovation in the U.S. markets, while promoting fair, transparent, and efficient markets that serve the interests of investors. In particular, along with our other comments detailed above, NYSE Euronext recommends that the Commission eliminate the regulatory disparities between registered exchanges and ATSS, update market performance metrics to increase the transparency of order execution and routing practices, and address the impact of market dispersion and the expansion of off-exchange trading.

¹⁹ Except as detailed herein, we do not believe the Commission should require that any additional new information be disseminated in the consolidated trade data.



Ms. Elizabeth M. Murphy
Securities and Exchange Commission

Page 24 of 24

NYSE Euronext appreciates the opportunity to submit our views on these important matters and looks forward to providing further comments on these and other equity market issues as the Commission considers specific policy initiatives and rulemakings.

Very truly yours,

A handwritten signature in black ink, appearing to read "Janet McKissack". The signature is written in a cursive style with a large, looped initial "J".

cc: The Hon. Mary Schapiro, Chairman
The Hon. Luis Aguilar, Commissioner
The Hon. Kathleen Casey, Commissioner
The Hon. Troy Paredes, Commissioner
The Hon. Elisse Walter, Commissioner
Mr. Robert W. Cook, Director of Trading and Markets
Mr. James Brigagliano, Deputy Director of Trading and Markets
Mr. David S. Shillman, Associate Director of Trading and Markets

APPENDIX I

Recommendations for Revisions to Rules 605 and 606

Rule 605

Rule 605 requires market centers to publish monthly reports of statistics on their order execution quality. As the equity markets have evolved, investors and traders have obtained access to more complex order types and additional execution venues. As a result, the information currently made available pursuant to Rule 605 addresses only a small subset of executions. NYSE Euronext believes that the Commission should review the current requirements of Rule 605 and make amendments to ensure the rule captures relevant information concerning the full range of order execution practices in use today.

Our specific recommendations for Rule 605 revisions are set forth below:

1. There are too many limit order type exemptions from reporting. In particular, dark orders and reserve orders should be included in the statistics (as separate order types).
2. All venues should be required to report execution quality statistics, even if their orders are all dark. This includes most, if not all, ATSS and dark pools. Order types therefore would need to be divided into dark and light. Reserve orders would require a third category.
3. Although large orders are not particularly common, especially for some low priced and very high volume stocks, large orders should also be included. Additionally, because orders tend to be smaller now, we recommend the following order size categories:
 - a. 100 - 499
 - b. 500 - 999
 - c. 1,000 - 1,999
 - d. 2,000 - 4,999
 - e. 5,000 - 9,999
 - f. 10,000 - 24,999
 - g. Greater than 25,000
4. Orders with special handling should be included, but identified. Order types should be recognized for the following:
 - a. DNS
 - b. ISO
 - c. IOC
 - d. Other TTE

5. Indications of interest that may be included as quotes according to any new dark pool rules proposed by the Commission should be included as orders according to their relevant order type.
6. There should be as few exemptions from reporting as possible, focusing only on the following:
 - a. Mid-point crosses
 - b. Auctions
 - c. Pegged orders
7. The speed categories in the current rule are outdated in today's execution environment. Further clarification of time measurement and timing categories should be considered. Millisecond timing should be included, and average turnaround times should be reported to within 0.1 of a millisecond. CTA and UTP should be encouraged to move to microseconds, allowing for microsecond calculations.
8. The following new execution time categories are recommended (in addition to the current categories):
 - a. Less than 500 microseconds
 - b. 500 microseconds - 1 millisecond
 - c. 1 - 10 milliseconds
 - d. 10 - 100 milliseconds
 - e. 100 milliseconds to one second
 - f. Current time categories
9. Although we believe flickering quotes are problematic, if an execution or routing decision was made based on a flickering quote, that should be used as the basis for the NBBO.
10. If a broker-dealer decides to route orders to an internal matching system, another broker dealer, a dark pool, or the public markets, the Rule 605 statistics should be based on the time the broker's router receives the order. The statistics should show orders sent to an internal system as executed locally, while those routed out to other ATSS or exchanges should be shown as executed away. The time stamp should be based on when the order is initially received, as should the NBBO and Rule 605 statistics. Currently, some brokers show that they have 100 percent fill rates, which is misleading, as they are only reporting volumes they are able to internalize, while orders sent to exchanges are not included at all. Customers do not know the execution quality resultant from the broker's order handling.
11. Frequency distributions are needed for price improvement:
 - a. Less than \$0.01 (i.e., mid-point matches, etc.)
 - b. \$0.01 - \$0.02
 - c. \$0.02 - \$0.05
 - d. Greater than \$0.05

12. Price improvement should be tracked by category:
 - a. Mid-point match
 - b. Discretionary order
 - c. Dark order
 - d. Other

13. Statistics should be calculated for:
 - a. Orders that execute on the receiving platform
 - b. Orders routed out
 - c. Routed and not routed orders

14. Statistics to highlight quote exhaustion should be required.

15. Statistics that show very deep in-the-money marketable limits should be added to allow more direct comparison to exchanges that do not offer market orders.

16. Fill rates and time to execution or cancel should be provided for posted orders (including dark). This will allow customers to see what is truly involved when sending orders to dark pools, or sending dark orders to exchanges.

17. Although effective spreads do not make sense for posted orders, we think reporting of realized spreads would be useful, as it could help clients measure adverse selection when sending orders to various venues.

Rule 606

Rule 606 requires brokers and dealers to report quarterly information on the routing of non-directed customer orders to a particular venue in equities and options. Rule 606 statistics provide limited transparency around current order routing practices utilized in growing market segments, including those practices utilized by dark pools and broker-dealers that internalize orders. NYSE Euronext believes the Commission should review the current requirements of Rule 606 and make amendments to ensure the rule captures relevant information concerning the full range of order routing practices in use today.

Our specific recommendations for Rule 606 revisions are set forth below:

1. More detailed disclosure of ATS order routing statistics should be required to allow for better assessments of order routing decision making and to provide investors with sufficient information to make informed decisions about whether to seek access to dark pools.

2. Information on the percentage of shares executed in addition to the percentage of orders sent should be required to be reported. Current disclosure is based on where orders are first sent, which in many cases is internal, but there is no information on the final execution venue.

3. Block transactions should be reported.
4. Greater transparency should be provided around broker-dealer internal order routing practices and decisions. In particular, the percentage of volume routed and executed internally should be indicated, and the criteria used in order routing decisions should be identified.