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April 29, 2010

Elizabeth M. Murphy
Secretary
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, D.C. 20549-0609

RE: CBOE Comments on File No. S7-02-10 (Concept Release on Equity Market Structure)

Dear Ms. Murphy:

The Chicago Board Options Exchange, Incorporated ("CBOE" or "Exchange") submits this comment letter in response to the Securities and Exchange Commission ("Commission" or "SEC") concept release on equity market structure ("Release"). The Release seeks comment on a broad array of topics within three general areas: Market Structure Performance, High Frequency Trading, and Undisplayed Liquidity. CBOE believes that, in general, the exchange markets have performed responsibly over the past decade, including during the recent financial industry crisis. Further, the various forms of high-frequency trading that have evolved in recent years have contributed substantial liquidity and greater efficiencies to the marketplace, and advancing message speeds and technological innovations in the trading markets should be embraced and not restricted. In addition, we believe that the Commission need look no further than the listed options market to glean meaningful improvements that can be made to the structure of the equities market, namely increased transparency and an environment where retail, institutional, and high frequency order-flow interact with greater frequency.

CBOE is uniquely positioned to comment on many of the issues raised in the Release. Because options pricing is formulaic and because there are typically hundreds of options series associated with a single stock, options quoting has for many years involved computer algorithms and high speed trading. Thus, we have, for some time, navigated the issues that are now gaining greater prominence in the equities market. Further, CBOE operates a stock trading facility, the CBOE Stock Exchange, LLC ("CBSX") that trades over 6,000 equity securities. We also note that, for better or for worse, business and regulatory initiatives that are implemented in the equities market often find their way into the options market. Therefore, we submit these comments as a provider of an equity trading platform, out of concern that regulatory initiatives in the equities market typically impact the options market, and as a marketplace with considerable experience with some of the issues raised in the Release. Below are CBOE's views on the three areas of focus in the Release. In some instances, we attempt to answer specific questions raised by the Commission in the Release. In those cases, the actual questions are provided in italics and are followed by CBOE's answer.

Market Structure Performance

Among the central responsibilities of an exchange are to provide transparency, price discovery, certainty of execution, and protections against counterparty risk through centralized trading and clearing. There is no question that in the midst of the recent financial crisis which involved credit failures, bank and brokerage meltdowns and extreme volatility, regulated exchanges provided liquid and orderly marketplaces -- without interruption. In stark contrast to other sectors of the industry, regulated exchanges delivered as promised without failures or closures or taxpayer rescues. This is a considerable achievement given the tremendous growth in securities trading over recent years.

As highlighted in the Release, equity trading volume has exploded over the past decade. Like the equities market, the options market has also witnessed a dramatic increase in volume. That increase translates into electronic message traffic levels that are significantly higher than ten years ago. Order turnaround times are measured in microseconds. We view this as a positive development.

In the Release, the Commission questions whether the increased reliance on technology and emphasis on message speeds is detrimental to "long-term investors" ("LTIs"). CBOE does not believe that LTIs are harmed by technological developments.

As a general matter, we agree with the Commission's assessment that short term trading (e.g., buying and selling positions in the same day, hour or minute) is not long term investing. We also agree that speed of execution and superior technology are of great importance to short term traders. However, we do not feel that LTIs are adversely impacted by the fact that short-term traders utilize advanced computer algorithms and demand increasingly faster message turnaround times. Just like in the options industry where a retail investor interested in selling a call to complement a stock holding is generally trading that call without sophisticated algorithms or the need for microsecond turnaround times while other traders in that series are keenly interested in message turnaround times and do use complicated trading algorithms, a LTI seeking to buy 300 shares of operating company XYZ is anticipating that the XYZ stock price will rise over time and should not care if short term traders are trading XYZ in rapid-fire fashion. The objectives of LTIs and short term traders are not in conflict. Short-term traders help establish competitive pricing and increased liquidity.

Comment is requested on the practicality of distinguishing the interests of long-term investors from those of short-term professional traders when asserting market structure issues.

The Commission should not develop a formal definition of long-term investors. We fail to see its use. The Commission does not need to formally define LTIs in order to protect LTIs. Establishing a bright line definition can be problematic. Years ago, CBOE established programs that were geared towards retail customers that conferred among other things execution priority, but today some of the most sophisticated short term trading firms fall into that "customer" category.

The Commission wishes to hear about any current regulations that may be harming, rather than improving, market quality.

CBOE realizes that Congress essentially mandated linkages between markets in furtherance of perceived national market system ideals, but the cascading effects of this requirement calls into question the value of its contribution. Requiring linkages has imposed considerable costs on exchanges and other industry participants, has helped artificially sustain weaker trading centers, and has fueled maker-taker pricing models. Those maker-taker pricing models, in turn, increase costs for LTIs (almost always takers of liquidity). Those increased costs lead to further regulations such as the equity market access fee cap. The equity access fee cap, in turn can provide a disincentive for marketplaces to innovate and differentiate themselves. We have observed that equity markets, to a large degree, simply default to a price at or near the mandated cap amount for taking liquidity.

How should the effect of broad economic forces be adjusted for in assessing the performance of market structure over the last ten years, five years, and the last year? For example, the CBOE Volatility Index reached record levels during 2008. To what extent are metrics of market structure performance correlated with the VIX or other analogous measures of volatility? Is the level of the VIX largely independent of market structure quality or are the levels of the VIX and market structure quality interdependent? Given that the VIX measures expected volatility over the next 30 days, how important is the VIX to long-term investors?

Volatility is a measure of risk. The CBOE Volatility Index (VIX) is based on the prices of S&P 500 Index (SPX) options which, in turn, reflect the cost of hedging the risk of an S&P 500 Index stock portfolio. When the market's perception of risk increases, which often occurs when stock prices fall sharply, option prices rise and, as a result, VIX rises. CBOE has observed a strong correlation between VIX levels and other metrics of market structure performance and liquidity. For example, when VIX reached record levels in 2008, quoted and effective spreads for both stocks and options were significantly greater than they are currently. Moreover, the quoted size (number of shares / contracts bid or offered) at each price point was significantly less in 2008 than it is today. Likewise, measures of variance based on actual stock price changes were much greater in late 2008 than they are today.

When VIX reached an intra-day high of 89.53 on October 24, 2008, comparable one and two-year measures of expected volatility were less than half that value, indicating the market's expectation that the current level of volatility was not sustainable. CBOE publishes on its website a "term structure" of expected volatility values based on SPX options expiring on various dates up to two to three years in the future (www.cboe.com/VIXTermStructure). CBOE believes that this information, combined with the VIX, can provide all investors with a more complete picture of the market's perception of risk over time. However, LTIs are not, or should not be, concerned about short term fluctuation unless they are engaged in hedging their portfolios where the VIX may reflect the cost of insurance.

Has the current market structure become so dispersed and complex that only the largest institutions can afford to deploy their own highly sophisticated trading tools? If so, are smaller institutions able to trade effectively? Some broker dealers offer sophisticated trading tools such as smart routing and algorithmic trading. How accessible are these trading tools to smaller institutions? Are the costs of paying for these tools so high that they are effectively inaccessible? To what extent is it important for market participants to be allowed to gain competitive advantages, such as by using more sophisticated trading tools?

Access to the securities markets is less costly today. This transformation has been largely due to greater automation in the capital markets including increased commoditization of trading technologies. Many of these technologies can be accessed as part of a broker-dealer's or technology provider's standard offering, or can be licensed. However, it is important to remember that the motivations behind each market participant are highly variable. One trader could be seeking an arbitrage opportunity that is immediately executable, while another could be looking for dislocated pricing amongst a basket of securities relative to their future projected growth in earnings. Each of these participants may be motivated to employ technology relative to the needs their strategy. In the end, they both may profit, but not to the detriment of LTIs. If a LTI seeks to employ high turnover trading strategies, then that LTI ceases being a LTI.

High-Frequency Trading

As we mentioned earlier in this letter, the CBOE trading community has for years included users who could be considered "high-frequency traders". While they may not have employed the exact trading strategies described in the Release, they generally have stressed the use of sophisticated computer algorithms and message speeds. The liquidity and efficiencies provided by these users has benefited our marketplace. Indeed, it can greatly benefit long term investors when high-frequency trading ("HFT") strategies result in the entry of bids and offers in the public markets. HFT behavior frequently produces large amounts of liquidity on "lit" exchanges, which can further reduce spreads on those exchanges.

How important are affirmative and negative obligations to market quality in today's market structure?

Perhaps these obligations are not as important as they once were for stocks. However CBOE believes that a higher quality of liquidity is provided by dedicated market makers. They maintain a constant presence in the market, they are compelled to offer liquidity during turbulent times, they are encouraged to provide quality customer service to brokers and issuers, and their quoting patterns generally help dampen volatile pricing swings. This observation does not mean that CBOE endorses requiring proprietary firms to be subject to affirmative and negative obligations.

Are liquidity rebates unfair to long-term investors because they necessarily will be paid primarily to proprietary firms engaging in passive market making strategies? Or do they generally benefit long term investors by promoting narrower spreads and more immediately accessible liquidity?

To the extent rebates promote narrower spreads and increased liquidity, they can be beneficial to LTIs. However, those benefits could be more meaningful if they were not accompanied with all the costs associated with mandatory linkages. Encouraging better priced quotes is desirable, but when a necessary consequence of encouraging those quotes is the creation of burdensome and undesirable fees that cannot be avoided, then the merits of liquidity rebates become much more questionable.

Does co-location benefit or harm long term investors and market quality? Are brokers able to use co-location on behalf of customers?

We do not believe that co-location practices harm LTIs and market quality. To the extent that co-location allows liquidity providers to provide more accurate and meaningful quotations to the Exchange, we feel that a benefit accrues to the marketplace. CBOE makes its co-location services available to all CBOE members, including brokerage firms. To the extent a LTI sought to co-locate at CBOE, we would question whether that participant was really a LTI. Successfully engaging in long-term investing (whether buying a stock or pursuing a stock-option strategy) does not require expensive hardware and close proximity to an exchange's servers.

Should the Commission restrict exchanges and other trading centers, such as ATSs, from offering co-location services?

Such a restriction would be pointless. An exchange can control access within its own walls, but it cannot restrict a trading firm from buying the building next door. Trading firms interested in HFT can establish advantages over one another in a multitude of ways. Placing limits on one of those ways would not have a meaningful impact. These firms compete with each other, and CBOE does not believe that this competition harms the marketplace. Therefore, we fail to see why it would be desirable to harness this competition. Even if it were desirable, it would be impossible to prevent some market participants from gaining an advantage over other like-minded participants. Smarter and more efficient users will always have an advantage -- in any line of business. Some brokerage firms have better websites than other brokerage firms, it would be silly to require all brokerage firms to use the same website for order entry even if some customers are adversely impacted by the fact that their brokers employ substandard websites.

Should 3rd party data centers be considered facilities of the exchange? Should the Commission require trading centers to obtain contractual commitments from 3rd parties to provide co-location services on terms consistent with the Exchange Act and SEC rules?

This is not advisable. Exchanges are aware of their statutory obligations. Requiring third parties to be considered facilities of an exchange will only discourage potentially interested service providers from doing business with exchanges. We do not view the Commission injecting itself into private contractual arrangements between exchanges and service providers as beneficial to investors.

Do the high speeds and enormous message traffic of automated trading systems threaten the integrity of trading center operations?

From CBOE's perspective, increased message traffic, while costly, has not compromised the integrity of trading center operations. Options message traffic easily exceeds traffic in the equities market, yet the dramatic increases have not had an adverse impact.

Undisplayed Liquidity

As discussed in the Release, considerable volume is transacted in the equities market in "the dark". A large portion of retail order-flow is executed off-exchange by OTC market makers and in dark pools. These dark venues contribute virtually nothing to the price discovery process and they reduce the chances for LTIs to trade with other LTIs (i.e., the interaction of investor orders – a stated objective of the national market system). Dark venues thrive off pricing in the displayed market but do not contribute toward the cost of market surveillance.

CBOE believes the options markets, where all transactions in listed options must be effected on an exchange and where only public customer to public customer crosses are allowed to trade without exposure to the marketplace, offer greater transparency and ability for LTIs to interact with other LTIs. Even though options exchanges are beginning to utilize order-types that involve undisplayed liquidity, that liquidity is still protected on the exchange. We believe the equities market would be enhanced if all trades were effected on a transparent and "lit" marketplace. Requiring trades to occur on an exchange has not diminished volume growth in the options markets. Certainly, greater transparency can only benefit LTIs engaging in price discovery.

If more individual investor orders were routed to public markets, would it promote quote competition in the public markets, lead to narrower spreads, and ultimately improve order execution quality for individual investors beyond current levels?

CBOE believes it would. As we pointed out earlier, the objectives of LTIs and short-term traders are not in conflict. Because they can co-exist and benefit from one another, the more all orders are able to interact together on transparent venues, the better for investor confidence and order execution quality.

Should the Commission consider a "trade-at" rule that would prohibit any trading center from executing a trade at the price of the NBBO unless the trading center was displaying that price at the time it received the incoming contra-side order? Should a "trade-at" rule apply to all types of trading centers or only to some of them?

With respect to national securities exchanges, the Commission should not institute a "trade-at" rule. As CBOE has stated in its November 18, 2009 comment letter on the Commission's proposed flash order ban, it is not appropriate to preclude an exchange from matching a price offered by a competitor and to essentially force an exchange to route business to a competitor (regardless of whether there is a cap on the fees of the competitor). Not allowing competitors to match each others prices (especially when those prices are constantly changing) does nothing to further fair competition among markets.

We understand why it might be appropriate to preclude dark venues from "trading-at" prices available on the displayed markets (since they add nothing to the public price discovery process), but any positive effect from a trade-at ban for dark venues would be negated unless those venues were also not allowed to trade in increments that are not allowed in the public markets.

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Exchange markets have performed reasonably well in recent years. CBOE supports maintaining, even increasing, transparency in the marketplace, and believes that long-term investors are better served when all orders are handled on transparent venues. We believe that, with such transparency, market forces would ensure that brokers obtain quality executions for their customers -- even without mandated linkage and order protection requirements. We appreciate the opportunity to comment on the Release. Please contact me at 312-786-7310, or Joanne Moffic-Silver at 312-786-7462 or Angelo Evangelou at 312-786-7464 if you would like to discuss our views further.

Sincerely,

Edward J Joyce

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cc: The Honorable Mary L. Schapiro, Chairman
The Honorable Luis A. Aguilar, Commissioner
The Honorable Kathleen L. Casey, Commissioner
The Honorable Troy A. Paredes, Commissioner
The Honorable Elisse B. Walter, Commissioner
Robert W. Cook, Division of Trading and Markets