April 21, 2010

Submitted electronically
Elizabeth M. Murphy, Secretary
Securities and Exchange Commission
100 F Street, NE
Washington, D.C. 20549-1090

RE: Concept Release on Equity Market Structure
File Number S7-02-10

Dear Ms. Murphy:

Vanguard appreciates the opportunity to respond to the concept release by the Securities and Exchange Commission ("Commission") on equity market structure. First and foremost, Vanguard commends the Commission for its deliberate and broad-based analysis of today's market structure.

The recent financial crisis has caused terms like "dark pools" and "high frequency trading" to become part of everyday political discussion. Accordingly, some have called for immediate action to regulate and restrict certain aspects of our equity markets. In many cases, these "solutions," often couched as efforts to "penalize Wall Street," are not based on empirical data and do not take into consideration down-stream consequences to the markets at large and the collateral impacts to long-term investors. The Commission, however, through the concept release, has taken a more focused and deliberate approach to examining today's market structure. By starting broadly and gathering empirical data and public comment, the Commission is taking an important first step to implementing any regulatory changes to today's market structure.

This comment letter will discuss Vanguard's perspectives on the performance of the equity markets and address those issues that Vanguard believes the Commission should analyze further as it seeks to improve today's equity market structure. Vanguard's comments are based on our mission of doing what we believe is in the best

---

1 The Vanguard Group, Inc. ("Vanguard") offers more than 160 U.S. mutual funds with total assets of approximately $1.4 trillion. We serve approximately 23 million shareholder accounts.

2 Vanguard also supports the Commission's recent efforts to ensure appropriate pre-trade controls are in place at firms that provide customers with direct market access.

3 While this comment letter focuses on issues associated with today's equity markets, Vanguard believes it is important that the Commission perform a similar analysis of today's fixed income market structure.
interest of Vanguard fund shareholders, who comprise millions of individual and institutional investors, including families, retirees, employee benefit plans, and others. Additionally, Vanguard's comments are based on our core beliefs that investment plans should focus on long-term financial goals and that minimizing the costs of investing is vital for long-term investment success.

1. Recent Market Structure Performance and "High Frequency Trading"

Various regulatory initiatives over the past fifteen years, most notably Regulation NMS, have led to the proliferation of trading venues to more than forty (40) at last count. While the resulting market structure may not be the optimal structure if one had started from scratch, Vanguard and its investors have benefited from the competition that today's market structure facilitates. Over the past fifteen years, the competition among trading venues and significant technological advancements have greatly reduced transaction costs for all investors across our markets. Although Vanguard does not engage in "high frequency trading" and does not operate a "dark pool," we believe much of the public concern over "high frequency trading" is misplaced and believes such activity, appropriately examined, contributes to a more efficient market that benefits all investors.

As the number of trading venues increases, discrepancies in prices across those venues will naturally result. The price discrepancies across multiple markets create an opportunity for nimble traders to make a small arbitrage profit by scouring the markets for these discrepancies and eliminating them. As the number of trading venues expands, the number of such arbitrage opportunities increases. So, it is not surprising that we have seen a tremendous increase in trading volume over the past decade, and that the activity is increasingly dominated by "high frequency traders." While Vanguard does not engage in this type of trading, we recognize that such trading has a positive impact on the markets at large, including longer term investors. Such arbitrage trading enables investors to get a fair price across market centers. Vanguard believes that the market structure changes facilitated by the Commission's various regulatory initiatives and the "knitting" together of the marketplace by "high frequency trading," have led to a significant decline in transaction costs for long-term investors over the past ten years through increased liquidity and tighter bid-ask spreads.

Various groups have attempted to quantify the reduction in transaction costs over the last ten to fifteen years. The Commission will continue to receive this data throughout the comment period. While the data universally demonstrate a significant reduction in transaction costs over the last ten to fifteen years, the precise percentages vary (estimates have ranged from a reduction of 35% to more than 60%). Vanguard estimates are in this range, and we conservatively estimate that transaction costs have declined 50 bps, or 100 bps round trip. This reduction in transaction costs provides a substantial benefit to investors in the form of higher net returns. For example, if an average actively managed equity mutual fund with a 100% turnover ratio would currently provide an annual return of 9%, the same fund would have returned 8% per year without the reduction in transaction costs over the past decade. Today's investor with a 30 year time horizon would see a $10,000 investment in such a fund grow to approximately
$132,000 in 30 years, compared to approximately $100,000 with the hypothetical return of 8% associated with the higher transaction costs. This roughly 25% decrease in the end value of the investment demonstrates the impact of reduced transaction costs on long-term investors. Thus, any analysis of “high frequency trading” must recognize the corresponding benefits that long-term investors have experienced through tighter spreads and increased liquidity.

The Commission has recognized that there are a wide variety of trading strategies that can be encompassed in a general reference to “high frequency trading.” Vanguard believes a vast majority of “high frequency trading” adds value to the marketplace for the reasons set forth above. While certain strategies identified by the Commission (“order anticipation” and “momentum ignition”) may not add value to the marketplace, we believe they may already be illegal and should be dealt with through the enforcement process. To the extent variations on these strategies are permissible, the Commission should carefully quantify the extent to which such activity is actually taking place and determine whether it has a deleterious impact. Vanguard believes that a vast majority of “high frequency trading” is legitimate and adds value to the marketplace through increased liquidity, tighter bid-ask spreads, and a better linked national market system where investors can execute at the same or similar prices regardless of trading venue. The Commission should only take action to address an actual problem that is identified and quantified. The unintended consequences of broad-based restrictions on all forms of “high frequency trading” could be wider spreads and less liquidity in the markets resulting in a significant increase in transaction costs for all investors.

2. Limit Orders and Issues Warranting Further Analysis

While Vanguard believes today’s equity market structure is better for long-term investors than ever before, the Commission’s release identifies some issues that warrant further analysis. These issues are based on the same principles that Vanguard and others articulated in 2004 and 2005 when the Commission contemplated Regulation NMS.

Vanguard believes price, speed and certainty of execution are all factors that contribute to the quality of executions. A perfectly liquid market provides all of these elements. Therefore, Vanguard believes any analysis of market structure must focus on the goal of maximizing liquidity. From a regulatory perspective, Vanguard believes this goal is furthered by creating rules and regulations that entice all market participants to place displayed limit orders.

Displayed limit orders are the building blocks of transparent price discovery. Today, traders are not encouraged to display their limit orders. A market structure designed to create incentives to display limit orders (or at the very least not disadvantage them) will lower transaction costs for all investors. Competition among limit orders creates narrower spreads and additional depth of book, both of which contribute to a reduction in transaction costs for all investors.

Initially, Vanguard believes that concepts such as “depth of book” protection and a “trade-at” rule warrant additional consideration. Both concepts, in theory, encourage
the display of limit orders. Vanguard believes that the technological advancements and increased interconnectedness of our market centers over the last five years justify analyzing proposals that may have been “too costly to implement” only a few years ago.

A. Depth-of-Book Protection

Vanguard supports a trade-through rule that provides “depth-of-book” protection because protecting quotations at multiple price levels encourages the display of limit orders, which, for the reasons set forth above, benefits all investors. By only protecting “top-of-book” prices, limit orders that are not at the “top-of-book” are disadvantaged. A limit order might not be executed even though it is at a superior price. Similarly, market orders interacting with limit orders are disadvantaged in that they pay a price that may not be the best price available in the displayed markets.

If it is recognized that a trade-through rule benefits investors, there is no reason that such benefits do not extend to “depth-of-book” protection. Instead, only if there are additional costs or unintended consequences of a “depth-of-book” rule that outweigh such benefits does limiting the rule to protection at the “top-of-book” make sense. As stated in the Commission’s release, the idea of providing trade-through protection to the displayed “depth-of-book” prices of a trading center has been raised before. The Commission sought comment on a “voluntary depth alternative” during its consideration of Regulation NMS. In 2005, the Commission concluded that the costs of “depth-of-book” protection outweighed the benefits at that time. Vanguard believes the Commission should revisit the purported costs and consequences of “depth-of-book” protection. In 2005, those that did not support the “voluntary depth alternative” argued that such a rule would: 1) create a government utility of a central limit order book (“CLOB”); 2) unduly restrict competition among markets; and 3) be significantly more costly to implement than a “top-of-book” rule.

Vanguard suspects that many of the purported reasons for not implementing a “depth-of-book” rule may not be as strong as they were in 2005. First, even though Vanguard prefers a marketplace that integrates into a centralized book, Vanguard does not agree with the argument that “depth-of-book” protection would stifle competition among market centers. Market centers already compete on services, prices and functionalities that have nothing to do with the requirements of a rule with “depth-of-book” protection. Second, Vanguard believes the costs and hurdles of implementing “depth-of-book” protection are presumably not as burdensome as in 2005.

---

4 In 2005, Vanguard supported the “depth-of-book” protection of price, and also the protection of time priority, which is still a preference, although not addressed in this comment letter.

5 In 2005, the Commission shared Vanguard’s position. In the release adopting Regulation NMS, when discussing commentators’ views of “voluntary depth alternative,” the Commission rejected the argument that such a proposal would have created a CLOB that would have prevented competition among markets. See Securities Exchange Act Release No. 51808 (June 9, 2005) at p. 131.
B. “Trade-At” Rule

Vanguard believes the Commission should consider the costs and benefits of a “trade-at” rule in which a trading center that was not displaying the NBBO price at the time a marketable order was received could either: 1) execute the order with significant price improvement (such as the minimum allowable quoting increment (generally one cent)); or 2) route ISOs to full displayed size of NBBO quotations and then execute the balance of the order at the NBBO price.”

Such a rule would clearly provide an incentive to display limit orders which, as discussed above, Vanguard believes is in the best interests of all investors. Vanguard recognizes that there may be costs and unintended consequences associated with implementing such a rule which is why Vanguard recommends that the Commission consider additional information.

Some market participants will likely argue that such a rule would place an undue burden on competition among market participants, especially on those that provide various forms of dark liquidity. Vanguard appreciates this concern and believes that dark liquidity plays a legitimate role in today’s markets. For example, Vanguard believes large block crossing networks that match large institutional clients at prices between the NBBO play a valuable role in today’s markets. By requesting that a “trade-at” rule be considered, Vanguard is not advocating for the elimination of all forms of dark liquidity. Even with a “trade-at” rule, Vanguard believes that many forms of dark liquidity will continue to compete for order flow by offering competitive services and prices.

Currently, displayed limit orders provide traders with a free option against which they can execute their orders (even though the traders do not contribute to the price discovery process themselves and for which the displayed order receives no compensation). A “trade-at” rule may be one way to strike an appropriate balance between the goal of promoting public price transparency and a trading center’s interest in not displaying certain orders. We also recognize that access fees currently imposed by exchanges would need to be considered as the Commission explores a “trade-at” rule. Nevertheless, Vanguard believes exploring the benefits of a “trade-at” rule is appropriate at this time.
In conclusion, Vanguard appreciates the Commission’s deliberate and thoughtful analysis of today’s market structure. Please do not hesitate to contact me or John Bisordi, Senior Counsel at (610) 669-2624 if you have any questions or require additional information.

Sincerely,

/s/ Gus Sauter

George U. Sauter
Managing Director and Chief Investment Officer
The Vanguard Group, Inc.

cc: The Honorable Mary L. Schapiro
    The Honorable Kathleen L. Casey
    The Honorable Elisse B. Walter
    The Honorable Luis A. Aguilar
    The Honorable Troy A. Paredes

    Robert W. Cook, Director
    Division of Trading and Markets
    U.S. Securities and Exchange Commission