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Submitted electronically
Brent J. Fields, Secretary
Securities and Exchange Commission
100 F. Street NE
Washington, D.C. 20549-1090

Re: Tick Size Pilot Plan, File No. 4-657

Dear Mr. Fields:

Vanguard[1] appreciates the opportunity to comment on the proposed pilot program developed by the exchanges and FINRA at the direction of the Commission to widen the quoting and trading increments for certain small capitalization stocks ("Tick Size Pilot Program"). As discussed in more detail below, fundamentally, Vanguard does not support efforts to increase the minimum quoting or trading increments for small cap stocks. The purported benefits of increasing tick sizes are, at best, tenuous and do not outweigh the undisputed increased costs to long-term investors. Vanguard believes there are other, more impactful, regulatory initiatives that can improve market quality for small-cap stocks that should take priority over the Tick Size Pilot Program. Additionally, Vanguard believes the Tick Size Pilot Program is unnecessarily complex. If some form of the pilot must move forward, we believe it should be simplified and narrowly tailored to those small cap stocks with materially different liquidity profiles. A complex tick size pilot limits the resources available to focus on more important improvements to our equity markets.

Equity Market Structure Reform

Before discussing the Tick Size Pilot Program, it is important to recognize the significant improvements that have occurred and will continue to occur as regulators and industry participants focus on enhancing today's equity market structure. Individual investors who access the equity markets through asset managers like Vanguard have, without question, benefited from the market structure improvements that have been made over the last twenty years. More recent regulatory initiatives such as the Limit-Up/Limit Down rules and the Consolidated Audit Trail are some of the latest examples of focused and deliberate rulemaking designed to continuously improve our equity market structure for investors. We commend the Commission in this regard and support the path towards further equity market structure improvements articulated by Chair

[1] The Vanguard Group, Inc. ("Vanguard"), headquartered in Valley Forge, Pennsylvania, is one of the world's largest investment management companies. Vanguard manages more than $2.9 trillion in U.S. mutual fund and ETF assets, including more than $422 billion in ETF assets, across 158 funds for clients saving for retirement and education. Vanguard's Equity Investment Group manages approximately $1.9 trillion across 97 index and active equity funds and ETFs in the U.S.

White on June 5, 2014. We believe the Commission has put the appropriate issues on the agenda and look forward to working with the Commission on these issues.

From Vanguard's perspective, the most important issues associated with enhancing the equity markets are:

- Evaluating potential changes to Reg NMS designed to improve the incentives to publicly display trading interest, including pilots to test a broad "Trade-At" rule and the elimination of the "maker/taker" pricing models of the exchanges;

- Developing short and long term solutions to minimize the latency of market information provided through public data feeds as compared to proprietary feeds; and

- Continuing industry-wide efforts to improve the resiliency of technology and infrastructure to avoid single points of failure.

Vanguard believes regulatory and industry focus on these issues will have the most meaningful impact on improving our equity market structure and enhancing investor confidence.

Stand Alone Trade-At Pilot and Maker/Taker Reform

As noted, Vanguard supports a stand-alone Trade-At pilot. While piloting a Trade-At regime under Reg NMS has gained an increasing amount of support across the industry over the last few years, Vanguard has been a proponent of a Trade-At rule for quite some time.[2] Vanguard believes Reg NMS has succeeded in its goal of facilitating competition among market centers as evidenced by the success of off-exchange trading venues. That being said, an equally, if not more important goal of an efficient and quality market is a structure which promotes the public competition of orders. Vanguard believes it is time to re-evaluate the existing rules to determine whether the appropriate incentives exist to publicly display trading interest. Publicly displayed liquidity is the foundation of a transparent and efficient market and rules that encourage the public competition of orders facilitate meaningful price discovery, increase liquidity, reduce spreads, and lower transaction costs. Rather than embed the concept of a Trade-At rule in a Tick Size Pilot Program designed to assess whether increased tick sizes "would enhance market quality" of small-cap stocks, Vanguard believes a Trade-At rule should be tested independently. Our rationale for a separate Trade-At pilot and the ways in which such a rule could improve overall market quality follow.

We believe the current rules do not provide the appropriate incentives to publicly display trading interest. First, the current "Trade Through" protections of Reg NMS generally prohibit trading at prices *outside* the national best bid/offer and do not reward those participants who publicly display trading interest. Any market participant can execute trades at the publicly displayed prices regardless of whether the market participant is also publicly displaying that

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[2] See April 21, 2010 comment letter of George U. Sauter, The Vanguard Group, Inc., in response to SEC Concept Release on Equity Market Structure available at http://www.sec.gov/comments/s7-02-10/s70210-122.pdf.

price. Those market participants who choose to publicly display their trading interest receive no priority at their displayed price and essentially set the pricing points at which other market participants are permitted to trade. Therefore, the current rule provides little incentive to publicly display orders and, thereby, deepen or tighten the public quote.

Second, and perhaps due to the lack of incentives to publicly display liquidity otherwise existing under the current rules, the exchanges have continued to compete for order flow through maker/taker pricing models. Under these pricing models, limit orders at an exchange that offer (make) liquidity receive rebates when the orders execute and incoming orders that execute against (take) the resting limit orders are charged access fees. While the liquidity rebates were developed to promote the important goal of encouraging publicly displayed orders, as the different exchanges have implemented different pricing points, the structure has enabled a trading practice known as "rebate arbitraging" which is really just trading focused on profiting from these rebates. These different models have also contributed to the proliferation of order types catering to trading activity focused on the fee/rebate structures. More importantly, as the amount of fees and rebates differ across exchanges, it creates the appearance of a potential conflict in which brokers posting liquidity may appear to be motivated to send an order to the exchange that offers the highest rebate while brokers routing market orders taking liquidity may appear to be motivated to send their orders to the exchange that charges the lowest fee. While firms have a best execution obligation to ensure their routing decisions are based on the best interests of their client, we think there is an appearance of a conflict which is not necessary. The models have become unnecessarily complex and the decision to submit orders to the public markets should not be driven by the desire to capture a rebate or avoid a fee.

Vanguard believes the current Trade-Through rule and maker/taker pricing models do not provide the appropriate incentives to publicly display liquidity. We believe it is time to revisit Reg NMS through a well-designed pilot of a Trade-At rule to determine whether such a regime would better promote public price discovery. Today, a market center can execute an order at the best publicly displayed price without actually contributing to the public price discovery process. Generally speaking, those that publicly display their interest should be first in line for any execution at that price across the markets. A Trade-At rule would encourage market participants to contribute to the public price discovery process by requiring a market participant that is not displaying the best price in the market to: 1) execute the order with a price improvement; or 2) route the order to the market participant displaying the best price. A Trade-At rule would at least require traders to consider publicly displaying their interest, which they currently have little reason to do.

A well designed pilot of a Trade-At rule under Reg NMS *must* include the elimination of or significant changes to the maker/taker pricing models of the exchanges. Market participants should not be forced to route orders to an exchange displaying a quoted price when the actual execution would include additional embedded fees. In fact, we believe efforts to lower the amount of access fees and reduce the ability to engage in "rebate arbitraging" should proceed even without a corresponding Trade-At pilot.

Vanguard provides this background to articulate its strong support for a well-designed pilot of a Trade-At rule and the elimination of the current maker/taker pricing models and, more importantly, to set the context for the below comments around the Tick Size Pilot Program. As discussed in more detail below, despite Vanguard's support of a market wide Trade-At pilot, we do not support the inclusion of Trade-At concepts in the Tick Size Pilot Program.

Should the Commission approve the Tick Size Pilot Program?

Vanguard does not believe the Commission should move forward with the Tick Size Pilot Program at this time. Vanguard commends the Commission for inviting comments not just on the specifics of the proposed plan, but on more fundamental questions such as "whether there are other market structure initiatives that the Commission should consider to address concerns about the market structure for small capitalization stocks in addition to, or instead of, the proposed Tick Size Pilot Program."

Over the past few years, proponents of increased tick sizes have spent significant time and effort attempting to create a causal connection between declining IPO numbers and the decrease in tick sizes permitted (but not required) through decimalization. These proponents further argue that increasing tick sizes will reverse that trend. Vanguard does not believe the data supports a causal connection between decimalization and any decline in the rate of IPO growth, or, more importantly, that increasing tick sizes will have the effect of increasing IPO growth.

First, Vanguard does not believe that the data supports the conclusion that decimalization was a direct cause of decreased IPO numbers since 2001. There have been a host of changes to the markets since 2001 which may have contributed to the decline in IPOs since 2001, including the increased costs associated with compliance with the Sarbanes-Oxley Act of 2002 and the Global Analyst Research Settlement of 2003. Vanguard believes it is impossible to attribute declining IPO numbers to decimalization when so many other factors may have had a more direct connection to decisions to take companies public. Tellingly, as noted by the Commission in the proposal, recent data suggests IPOs have rebounded since the financial crisis with no changes to the minimum tick sizes.[3] The purported benefit of increased tick sizes leading to IPO growth is questionable at best.

Second, while the purported benefits of the Tick Size Pilot Program are questionable, the costs are real and significant. Putting aside implementation costs, any program that increases the minimum quoting or trading increments will necessarily result in increased transaction costs to long-term investors. Vanguard offers a variety of mutual funds and exchange traded funds that provide ordinary investors with exposure to small-cap stocks. As of September 2014, Vanguard funds owned roughly $182 billion in stocks having a market capitalization of less than $5 billion. Artificially widening the prices to trade will not change this fact, but only increase the prices at which transactions will occur. Vanguard's investment in small-cap stocks will not increase as a result of increased tick sizes and no amount of increased research from market makers will change this result. However, our costs to trade these stocks will increase. As a firm representing the interests of long-term investors, we are against this unnecessary cost.

With this background, Vanguard does not believe the Tick Size Pilot Program passes the most basic cost-benefit analysis. We believe the Commission should not approve the Tick Size

[3] See SEC Release No. 34-73511, File No. 4-657 (Nov. 7, 2014) at footnote 32.

Pilot Program – at least not now. The Commission has articulated a clear agenda of market structure topics that are ripe for review. The resources of the regulators and industry participants should be allocated to those issues which could have the greatest impact on the markets. As discussed, we believe a broad pilot eliminating the maker-taker models of the exchanges across all stocks coupled with a Trade-At rule would be a more impactful initiative to benefit market quality. If, after completing this exercise, additional concerns exist with respect to small-cap stocks, the Commission could reconsider a Tick Size Pilot Program. Right now, there are more impactful ways in which to improve market quality for small-cap stocks.

Are there additional details of the Tick Size Pilot Program that should be changed?

If the Commission decides to move forward with some version of the Tick Size Pilot Program, Vanguard believes the proposed plan should be simplified. As discussed above, Vanguard does not generally support the pilot and struggles to find any benefit of increasing tick sizes. Therefore, if a pilot proceeds, Vanguard believes the scope of the pilot should be limited to minimize unnecessary costs. To simplify the pilot and limit the unintended consequences, Vanguard supports two fundamental changes to the current proposal: 1) elimination of the "Trade-At" test group; and 2) reduction of the market capitalization threshold in the definition of "pilot securities" from $5 billion to $500 million.

Eliminate Trade-At Test Group

First, while Vanguard clearly supports an effort to conduct a well-designed Trade-At pilot across the equity markets, we are against including the concept in the Tick Size Pilot Program. The Trade-At portion of the Tick Size Pilot Program will be the most costly aspect of implementing the Tick Size Pilot Program as it will involve the most fundamental changes to market participants' existing order protection compliance systems. We also believe the Trade-At component of the Tick Size Program does not address all of the issues which need to be addressed in a more complete piloting of a Trade-At regime. For example, the Trade-At component of the Tick Size Pilot Program does not include any elimination of the maker/taker pricing models of the exchanges. As stated above, piloting of a Trade-At structure must include corresponding improvements to the maker/taker pricing models as market participants should not be forced to route orders to an exchange at a particular price if the price does not include the imbedded additional costs of take fees. Because of the limitations of the Trade-At component articulated in the Tick Size Pilot Program, the results will not provide any value towards analyzing the impact of a Trade-At rule across the markets. Similarly, because of the numerous variables in the Tick Size Pilot Program and the unique aspects of trading in small-cap stocks, we are concerned that any negative consequences of the Tick Size Pilot Program would be unfairly attributed to the Trade-At rule. In short, inclusion of a limited Trade-At rule to the Tick Size Pilot Program raises costs and will not provide any meaningful analysis of the benefits of a Trade-At regime.

Reduce Market Capitalization Thresholds

Second, Vanguard believes the securities included in the Tick Size Pilot Program should be reconsidered. One of the thresholds for a stock's inclusion in the Tick Size Pilot Program is a market capitalization of $5 billion or less. Vanguard believes this is an overbroad definition of "small-cap" and includes stocks which are already highly liquid. As cited in the Tick Size Pilot Program proposing release, a recent analysis prepared for the Division of Trading and Markets concluded that "stocks with capitalizations below $100 million exhibited the least liquidity and mid-cap stocks with capitalizations between $2 billion and $5 billion exhibited the greatest liquidity."[4] Recent data also suggests that, as proposed, the Tick Size Pilot Program would include "a number of companies in the S&P 500" and raise trading costs in a number of stocks which do not have liquidity concerns.[5] Vanguard does not believe there are any liquidity concerns with most of the stocks that would currently be subject to the Tick Size Pilot Program. As a major investor and participant in the equity markets, Vanguard knows that trading small-cap stocks is more difficult and costly than trading larger stocks. This is due to the fact that small cap stocks have fewer shares available to trade. In that light, any liquidity analysis of small cap stocks must take into consideration the number of shares outstanding. When properly analyzed by comparing the turnover of stocks to the number of shares outstanding, the evidence suggest that only those securities at the lowest market capitalization levels demonstrate a materially different liquidity profile.[6] Therefore, Vanguard supports narrowly tailoring the pilot to those securities which have materially different liquidity profiles than most stocks. At the very least, the current market capitalization threshold of the Tick Size Pilot Program should be lowered to at least $500 million.

Conclusion

We commend the Commission for its careful and deliberate approach to analyzing the potential impacts of increasing quoting and trading increments in small-cap stocks. However, when appropriately analyzed, the undisputed costs of the Tick Size Pilot Program outweigh any theoretical benefit. At the very least, if a version of the Tick Size Pilot Program is approved, it should be significantly simplified as set forth above.

Market structure reform is an important issue and we believe the Commission is prepared to address more impactful areas for improvement. We hope that resources are allocated to more meaningful initiatives, which we believe will result in improvements to the quality of the equity markets across all stocks, including small-cap stocks. After these more meaningful initiatives have concluded, a Tick Size Pilot Program could be reconsidered.

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[4] Id.

[5] "Who Gets the Short End of the 'Tick?,'" Phil Mackintosh, KCG Market Microstructure July 2014 (available at https://www.kcg.com/uploads/documents/KCG_Tick_Size_Analysis_Final.pdf). See also "Today's Spreads Make More Sense Than Nickels," Phil Mackintosh, KCG Market Microstructure August 2014 (available at https://www.kcg.com/uploads/documents/Todays_Spreads_Make_More_Sense_Than_Nickels.pdf).

[6] See id.

Please do not hesitate to contact me or John Bisordi, Senior Counsel, at [redacted] if you have any questions or require additional information.

Sincerely,

/s/ Tim Buckley

Mortimer J. Buckley
Managing Director and Chief Investment Officer
The Vanguard Group, Inc.

cc: The Honorable Mary Jo White
The Honorable Luis A. Aguilar
The Honorable Daniel M. Gallagher
The Honorable Kara M. Stein
The Honorable Michael S. Piwowar
Stephen Luparello, Director, Division of Trading and Markets