

22 December 2014

Brent J. Fields  
Secretary  
Securities and Exchange Commission  
100 F Street NW  
Washington, DC 20549

**Re: Proposed Tick Size Pilot Program (File 4-657)**

Dear Mr. Fields:

CFA Institute<sup>1</sup> appreciates the opportunity to comment on the proposal submitted by a group of self-regulatory organizations (“SROs”), the Proposed Tick Size Pilot Program (the “Plan”). The Plan seeks to implement a pilot program to modify tick sizes for small-capitalization companies whose shares are traded on the National Market System, pursuant to the Securities and Exchange Commission’s (the “Commission”) June 24, 2014 order (the “Order”).

CFA Institute represents the views of investment professionals before standard setters, regulatory authorities, and legislative bodies worldwide on issues that affect the practice of financial analysis and investment management, education and licensing requirements for investment professionals, and on issues that affect the efficiency, integrity and accountability of global financial markets.

**Executive Summary**

We are generally supportive of the Plan as a means of testing how its two primary elements – wider tick sizes and a trade-at rule to enhance the willingness of investors to post bids in the lit markets – will function within U.S. equity markets. We have doubts that either element will provide positive and definitive answers to the issue of liquidity in the market for small-capitalization stocks. Specifically, we are skeptical that wider trading increments for small cap stocks will enhance the liquidity of those securities or create incentives for private firms to seek access to public capital markets because bid-ask spreads already exceed the proposed tick sizes. We also have concerns that investment firms will be willing to incur the costs required to make the necessary changes to their algorithms to participate in the Plan for the short-term nature of the pilot. Finally, implementation of trade-at rules in Australia and Canada did not lead to better investor

---

<sup>1</sup> [need update] CFA Institute is a global, not-for-profit professional association of more than 119,700 investment analysts, advisers, portfolio managers, and other investment professionals in 147 countries, of whom nearly 112,400 hold the Chartered Financial Analyst® (CFA®) designation. The CFA Institute membership also includes 140 member societies in 61 countries and territories.

outcomes as expected, and we have doubts that the implementation of such a rule as part of the Plan will work, either. Nevertheless, we believe it is worth the effort, time and money to test these ideas in the real world, either to show that they can work or that they don't, as an important step in helping to improve the market for small-capitalization companies in the future.

## Discussion

### A. General:

The EY Global IPO Trends Report indicates that 2014 is on track to have the highest IPO activity in a decade in the US. The report also suggests that there is a strong indication that many others are likely to follow suit with IPOs in 2015.<sup>2</sup> We note that the results of the past year, and the pipeline of IPOs for 2015, have been achieved without any of the provisions herein proposed. We recognize, however, that the Commission was compelled by Congress to issue its Order and that the Plan is the product of the collective effort of the SROs to develop a workable system that meets the requirements of the Order.

We believe that the Plan as proposed is a thoughtful, reasonable approach to the objective of better understanding the implications of different quoting and trading increments on small capitalization stocks in the US. We also believe that the design of three test cohorts and a control group of stocks to be examined offers an appropriate balance of factors to be examined (quote increments of \$0.05, price improvement rules) while allowing for a large and diverse enough sample size in each cohort to facilitate meaningful conclusions.

At the same time, we recognize a number of difficulties that the Plan faces. For example, the views expressed by the Commission's Investment Advisory Committee ("IAC")<sup>3</sup> argued against wider tick sizes both because they rejected that small tick sizes were the problem inflicting small-capitalization stocks and due to the cost to investors who would pay the wider price intervals. We concur that investors may suffer harm over the course of the Plan's implementation, by virtue of the wider price increments than are currently enjoyed in the market and uncertain effects of the Plan. We nevertheless believe that the structure of the Plan minimizes the potential harm to diversified investors in small cap equities to the extent possible while affording the desired examination of how quoting and trading increments may affect market quality. The Plan's special consideration of retail trades offers some protection against unintended negative consequences for individual investors. Therefore, while we agree with the IAC's original recommendation rejecting the premise and need for such a

---

<sup>2</sup> [http://www.ey.com/Publication/vwLUAssets/ey-q4-14-global-ipo-trends-report/\\$FILE/ey-q4-14-global-ipo-trends-report.pdf](http://www.ey.com/Publication/vwLUAssets/ey-q4-14-global-ipo-trends-report/$FILE/ey-q4-14-global-ipo-trends-report.pdf)

<sup>3</sup> See, <http://www.sec.gov/spotlight/investor-advisory-committee-2012/investment-adviser-decimization-recommendation.pdf> for the IAC's full statement.

pilot, given the Commission' decision to proceed, we believe the Plan is reasonable under the circumstances.

Another potential complication is inclusion of a "trade-at" provision in one of the cohorts to be studied. We see this as a welcome addition from the perspective of what the Commission, the SROs and investors might learn from the test. Experiments with trade-at rules in other markets have not produced the kinds of benefits to investors and markets that were expected at their implementation. CFA Institute recently commissioned research examining the early experience of price-improvement rules in Canada and Australia<sup>4</sup> which offers support for the idea that such rules motivate more trading away from dark venues, but with uncertain effects on market quality. We anticipate that it will be challenging for the Commission to disentangle the effects of the "trade-at" rule in this limited pilot experiment.

The application of the trade-at provision to just one cohort within the Plan will add a further complication to the analysis of the Plan's results. In particular, to function in this cohort, market makers and other will need to re-write algorithms without any expectation of long-term return for their investments. These factors could limit the number of participants willing to participate in the test, thus potentially reducing the value of the results.

Finally, the one year duration of the Plan may not be sufficient to demonstrate conclusively that either the wider tick sizes or the trade-at rule offers appropriate incentives for broker-dealers to intensify research and distribution efforts focused on small cap stocks. The short duration may limit the willingness of market participants to take greater interest in these stocks and thus create more liquidity.

Despite these potential difficulties, we support the Plan as an exercise in data collection and testing ideas to boost investor and market-make interest in these stocks. We begin by supporting, at least among Test Groups 2 and 3 stocks, using protected bids and offers ("PBO") as the basis for price improvement rather than the national best bid or offer ("NBBO"). As stated in the Plan, the PBO standard protects a broader set of protected orders from executing against dark orders without meaningful price improvement, thus potentially encouraging more investors to post aggressive quotations. Moreover, the PBO standard is, as suggested by the SROs, the standard to which the markets are moving, and to go against that trend would further complicate the Plan.

#### **B. Proposed Selection Process:**

Securities in the pilot program are proposed to be selected based on satisfying the criteria of:

- (a) a market capitalization of less than \$5 billion at the end of the Measurement Period;

---

<sup>4</sup>See: <http://www.cfainstitute.org/ethics/Documents/Trade-at%20Rule%20Report.pdf>.

- (b) a closing price of at least \$2.00 on the last day of the Measurement Period;
- (c) a closing price of at least \$1.50 on every trading day during the Measurement Period;
- (d) a consolidated average daily volume during the Measurement Period of one million shares or less; and
- (e) a Measurement Period Volume-Weighted Average Price of at least \$2.00. We believe that these criteria serve the objectives of focusing the pilot study on the relevant small cap segment of the market, providing a universe of appropriate size to study, and excluding micro-cap stocks that may have unique dynamics associated with their trading and liquidity characteristics.

We also support exclusion of securities of firms that have recently concluded their initial public offering, given the lack of a basis of comparison for such securities. We also believe that exchange-traded products should be excluded from the Pilot, in recognition of their different shareholder base. If the resulting universe of securities eligible for participation in the Pilot is large enough, we endorse the Participants' proposal to include 400 securities per test group, in recognition of the potential for more robust analysis from a larger sample size.

We believe the Plan's proposed stratified random sampling process offers appropriate opportunity for the three cohorts to have comparable characteristics on the basis of price (measured by VWAP), market capitalization, and trading volume. We suggest that examining a retrospective period longer than the three-month Measurement Period (the last twelve months, for example) and comparing the characteristics of the stratified samples for both the Measurement Period and the longer period would be a useful check on whether any unique circumstances of the Measurement Period create any unintentional biases in the creation of the three study groups.

Finally, we believe that the proposed \$0.05 tick size increment is sufficient to demonstrate potential effects on market quality without imposing undue harm to investors from wider spreads than are available under the current market system. However, we note that the same characteristics that limit the potential harm to investors – that bid-ask spreads on many stocks likely to be included in the test are wider than the proposed five-cent increments proposed – also make it less likely that the wider tick sizes will succeed. Specifically, it is unlikely that a wider tick size will cause prices to coalesce around these nickel price points given that investors' views currently diverge so substantially as to value. Therefore, we do not support analysis of wider quote and/or trading increments, as we believe the potential harm to investors outweighs any incremental understanding of different potential effects of tick size magnitude.

### C. Control and Test Groups

Test Group 1 will be quoted at \$0.05 increments but allowed to trade at any price currently permitted. The Participants propose to exclude orders priced to execute at the mid-point and orders entered in retail liquidity programs from the requirement to quote at \$0.05 increments. We believe that the Participants' proposal may sacrifice insight on investor behavior and recommend that the initial proposal of \$0.05 quote increments for all securities in the group be retained.

Test Group 2 provides for both quoting and trading at \$0.05 increments, except for trades that (a) occur at the midpoint between the NBBO; (b) are retail investor orders, in which case nominal price improvement of at least \$0.005 would be required; or (c) negotiated trades such as VWAP, TWAP, and qualified contingent trades could continue at increments permissible under current market rules. The Commission indicated that these exceptions provided for continuation of categories of trades that are broadly beneficial to market participants. We agree with this approach and endorse maintaining these exclusions in Test Group 2.

Test Group 3 will be subject to the same quoting provisions as Test Group 2, but also will be subject to a trade-at rule intended to prevent price matching from a trading center that was not displaying the NBBO. Under the Plan, such a trading center could respond in the following ways:

1. Execute with \$0.05 of price improvement or at the midpoint of the NBBO;
2. Execute at the NBBO if the incoming marketable order is of block size; or
3. Route intermarket sweep orders to executive against the full displayed size of the protected quotations at the NBBO, and the remainder executed at the NBBO price.

These provisions are intended to test whether the ability of market participants to match displayed prices without quoting would negatively affect market makers' quoting practices. If that were found to be the case, it would be seen as undermining "one of the central purposes" of the Plan, namely to determine whether wider tick sizes positively affect market maker participation and pre-trade transparency.

As noted above, we support the Plan, in general, for the potential data that the Commission, the SROs and investors might find from the different test groups. Likewise, results uncovered in the research we commissioned to consider the outcomes of trade-at rules adopted in Canada and Australia lead us to be less optimistic about the outcomes of this test than for some others. Nevertheless, we remain open to the possibility that the differences in regulatory structures between both Canada and Australia and the United States may lead to results that we do not currently expect. We therefore support the Plan as a useful exercise.

We do object to Exception 3 for so-called Retail Investor Orders executed in Test Groups 2 and 3 with at least \$0.005 of price improvement, however. The purpose of

the price improvement is to ensure that participants not displaying orders cannot step in front of displayed limit orders without paying a higher price. The goal is to incentivize market participants to provide displayed liquidity. By permitting this exception, however, broker-deal internalizers are given an opportunity to take the other side of all of the incoming retail marketable orders with just \$0.005 price improvement, which may not be enough. For example, if a stock is trading with a 20 cent bid-ask spread, such minimal price improvement affords a 19 cent profit opportunity for the internalizer. This, we believe, will still encourage such activities by broker-dealers, and continue discouraging investors from displaying liquidity.

At the same time, broker-dealers control the routing process for most retail orders, and send those orders to an over-the-counter market maker who then chooses which such orders to interact with. It is highly likely that market makers engaged in this activity will route these orders to find their own quotes, if that opportunity presents itself.

Ultimately, we believe a more effective pilot would ban access fees and payment for order flow in a group of stocks to see whether such measures would improve market quality in those stocks. As constructed, we expect the Plan will show a need for more fundamental changes to the market structure to better incentivize market participants to provide liquidity to this segment of the market. This may include a combination of changes, including potentially eliminating the maker-taker — and taker-maker — exchange model of liquidity provision, or the development of a venture exchange system established specifically for the purpose of enhancing the ability of small-capitalization companies to access the public capital markets.

#### **D. Proposed Data**

We believe that the public release of the data is critically important to the success of this endeavor. Public release ensures accountability and peer review of the data by enabling independent researchers to look for unique and potentially valuable bits of information within the data. We are interested in the assessments of the Plan's results by the Participants, particularly in concert with the analyses of other researchers. The Participants' perspectives are valuable in that they will not advise continuation of an element of the Plan if it is not economically feasible for them. Likewise, the analyses of non-Participants could shed light on the effect of the tests on investor outcomes, which we believe is as valuable to the consideration of feasibility of the Plan's elements as the views of the Participants. If the cost of trading for any of the primary groups — Participants, market makers and investors — is too high, they will not trade in these markets, and policymakers will have to look for other ways to boost the market for small-capitalization stocks.

### **Conclusion**

We support the framework for the tick-size pilot suggested in the Plan, despite our misgivings about the utility of wider tick sizes, the potential harm to investors, and the

Re: Tick Size Pilot Program  
22 December 2014  
Page 7

improbability for positive outcomes in the liquidity of small-capitalization stocks. While we are skeptical about the prospect for robust results, we believe the exercise is worthwhile due to the information the Commission will glean from its application.

Should you have any questions about our positions, please do not hesitate to contact Kurt N. Schacht, CFA at [kurt.schacht@cfainstitute.org](mailto:kurt.schacht@cfainstitute.org) or 212.756.7728; or James C. Allen, CFA at [james.allen@cfainstitute.org](mailto:james.allen@cfainstitute.org) or 434.951.5558.

Sincerely,

/s/ Kurt N. Schacht

Kurt N. Schacht, CFA  
Managing Director, Standards  
and Financial Market Integrity  
CFA Institute

/s/ James C. Allen

James C. Allen, CFA  
Head, Capital Markets Policy - Americas  
CFA Institute