May 24, 2016

The Honorable Mary Jo White
Chair
U.S. Securities and Exchange Commission
100 F Street, NE
Washington, DC 20549

Re: Equity Market Structure Advisory Committee (File No. 265-29)

Dear Chair White:

On behalf of the Royal Bank of Canada (RBC), we appreciate this opportunity to comment on the April 19, 2016 “Framework for Potential Access Fee Pilot” (“Framework”) put forth by the Regulation NMS Subcommittee (“Subcommittee”) of the Equity Market Structure Advisory Committee (“EMSAC”). We applaud you for establishing the EMSAC and we are encouraged that you, your fellow Commissioners, and Securities and Exchange Commission (“SEC”) staff have taken an active interest in the EMSAC’s work. In addition, we commend the members of the EMSAC for their efforts to strengthen U.S. equity markets.

While U.S. equity markets remain among the strongest, most liquid, and most transparent in the world, there is no question that they also face significant challenges. You and others at the SEC and FINRA have spoken on numerous occasions about those challenges, which include opacity, fragmentation, instability, and conflicts of interest.¹ The body of research supporting these assessments is significant and growing, and includes work done by RBC on intraday volatility and exchange pricing.²

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1. SEC Chair Mary Jo White, Remarks on “Enhancing Our Equity Market Structure”, 5 June 2014. [https://www.sec.gov/News/Speech/Detail/Speech/1370542004312](https://www.sec.gov/News/Speech/Detail/Speech/1370542004312). (“When fees and payments are not passed through from brokers to customers, they can create conflicts of interest and raise serious questions about whether such conflicts can be effectively managed.”)

2. SEC Chair Mary Jo White, Statement to Equity Market Structure Advisory Committee Meeting, 15 May 2015. [https://www.sec.gov/news/statement/optimizing-our-equity-market-structure.html](https://www.sec.gov/news/statement/optimizing-our-equity-market-structure.html). (“Complexity can, for example, result in instability if the sophisticated order routing and trading systems necessary to deal with a complex structure do not operate as they are intended to operate. It can create a lack of transparency for investors about how their orders are handled and executed. It can lead to unfair outcomes if professional traders, using the fastest, most sophisticated tools, are able to exploit the complexity in ways that disadvantage investors. Complexity can also make the always-difficult task of regulators in effectively overseeing the markets and enforcing the rules even more difficult.”)

SEC Commissioner Kara M. Stein, Remarks before Trader Forum 2014 Equity Trading Summit, 8 February 2014. [https://www.sec.gov/News/Speech/Detail/Speech/1370540761194#](https://www.sec.gov/News/Speech/Detail/Speech/1370540761194#). (“[W]e should explore how the maker-taker pricing model impacts liquidity and execution quality. Does the current rebate system incentivize or penalize investors? I have heard from many investors, and even exchanges, who are worried about the incentives embedded in the current system, and if there are proposals to explore alternative approaches, we should consider them.”)
In light of these challenges, RBC has supported your call for a data-driven reform of our equity markets and believes that the Framework is a positive step toward such reform. If properly structured and implemented, the Framework can provide valuable data to the Commission to determine the extent to which the current practice of “maker-taker” pricing, whereby trading venues rely on fees and rebates, is contributing to opacity, fragmentation, instability, and conflicts of interest, and suggest potential reforms.

While we support the thrust of the pilot described by the Framework, we believe that it should also include the following features:

1. A “bucket” that prohibits payment of rebates. In the view of many market participants and others, including RBC, rebates – more than access fees –

Richard G. Ketchum, CEO, FINRA, Remarks on “Essential Elements of Sound Capital Market Structure”, Exchequer Club, 17 February 2016. https://www.finra.org/newsroom/speeches/021716-remarks-exchequer-club. (“[C]ompetition and regulatory changes have also led to a more complex, fragmented market. In today’s increasingly fragmented market, bad actors can consciously disperse their trading activity across markets, asset classes, and broker-dealers in an attempt to hide their footprints and avoid detection.”)

2. Peter Haslag, Olin Business School, Washington University, and Matthew C. Ringenberg, Olin Business School, Washington University, Paper on “The Causal Impact of Market Fragmentation on Liquidity”, 6 April 2015. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2591715. (“For small stocks, fragmentation causes increased bid-ask spreads, worse price efficiency, and more variability in liquidity. These effects are consistent with models in which exchange competition and fragmentation lead to negative network externalities which reduces liquidity. In particular, several models note that as trading fragments across exchanges, it becomes harder for individual traders to match with a counterparty on a given exchange, which further discourages trading thereby leading to reduced market quality (e.g., Pagano (1989b), Madhavan (1995), Madhavan (2000)).”)

Shawn M. O’Donoghue, Paper on “The Effect of Maker-Taker Fees on Investor Order Choice and Execution Quality in U.S. Stock Markets”, 23 January 2015. http://people.stern.nyu.edu/hasbrou/SternMicroMtg/SternMicroMtg2015/Papers/MakerTakerODonoghue.pdf. (“[M]aker-taker pricing has aggravated agency issues between brokers and their clients. Brokers are incentivized to direct non-marketable limit orders to the venue offering the highest rebate. However, this destination may not necessarily be the best for clients, if it offers a relatively slow execution speed, high non-execution probability, or a high probability of execution outside-the-quote. Maker-taker pricing has increased the cost to brokers of executing marketable orders in the exchanges; consequently, brokers will internalize uninformed marketable orders whenever possible. As a result, non-marketable limit orders that are sent to the exchange are more likely to execute when the price moves against them since the orders submitted there are disproportionately informed.”)

James J. Angel, Lawrence E. Harris, and Chester S. Spatt, Paper on “Equity Trading in the 21st Century”, 23 February 2010. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1584026. (“The make-or-take pricing model thus would appear to accomplish nothing besides reducing quoted spreads and thereby obfuscating true economic spreads, which are the net spreads inclusive of the access fees and liquidity rebates. The obfuscation makes it more difficult for traders to recognize the true costs of their trading.”)

Stephen Bain, Shary Mudassir, Jennifer Hadiaris, and Michael Liscombe, RBC Capital Markets, “The Impact of Intraday Volatility on Investor Costs”, May 2014. https://www.rbc.com/globalequity/file-863454.pdf. (“Our market structure has evolved into the most fragmented and complex it has ever been. There are several widespread practices that, while fitting within the legal parameters of today’s market structure, have created incentives for industry participants that are not aligned with investor interests.”)

RBC Capital Markets, “Complexity of Exchange Pricing and Corresponding Challenges to Transparency and Routing”, February 2016. https://www.rbc.com/globalequity/file-863455.pdf. (“[T]he proliferation of equity exchange pricing tiers contributes to a number of negative incentives and outcomes on these venues. These outcomes include reduced transparency, increased complexity and heightened conflicts of interest between brokers and clients with regard to routing of client orders. Additionally, pricing changes, which require technology adjustments by exchanges and trading firms, can elevate operational risks that could cause market ‘glitches’ and other risks to market stability.”)
Contribute disproportionately to conflicts of interest and other problems in U.S. equity markets. By removing the incentive to route orders to where rebates are highest, conflicts and other problems can be mitigated. A “no-rebate bucket”, properly structured and implemented, would allow the Commission to assess the impact of rebates. In addition, any pilot program should ensure that, in lieu of reduced fees and/or no rebates, trading venues do not substitute other inducements to route orders.

We appreciate that some – including you and Commissioner Piwowar – have asked if a “no-fee bucket” might be appropriate to include in a maker-taker pilot study. As we understand it, a no-fee bucket could be viewed as a de facto no-rebate bucket, since there would be no fee-generated revenues from which to provide rebates. To that extent, we think a no-fee bucket could be useful. However, we are concerned that a no-fee bucket might not provide accurate information about pricing. In fact, it might incentivize greater opacity in pricing. Trading on an Exchange or another trading venue incurs a cost. If Exchanges and other trading venues are not permitted to recoup that cost by charging a fee to access the Exchange or venue, then it is plausible that those venues might add other types of fees or mechanisms to recoup their costs. We are concerned that these other types of fees may not be transparent and may add hidden costs for investors and other market participants.

2. **Application across other platforms.** Any pilot program testing the effects of maker-taker pricing should be applied not only to Exchanges, as defined pursuant to the 1934 Securities Exchange Act, but to Alternative Trading Systems (ATSs), as well. If a pilot program were implemented solely on Exchanges, it could create an un-level playing field in relation to other trading venues. This scenario could result in unintended consequences and undermine the data-driven results the pilot is designed to achieve. In addition, we believe that the pilot program also should cover so-called “inverted Exchanges” as well as non-displayed orders on Exchanges. Having the pilot program implemented across the board will reduce the possibility of gaming and will provide a more accurate account in the testing of order flows.

3. **No “Trade-At” component.** RBC agrees with the Subcommittee’s Framework that a pilot program need not and should not include a “trade-at” component. Currently, the SEC’s tick-size pilot program contains a trade-at component, so adding a tick-size pilot to a maker-taker pilot would be duplicative and therefore is unwarranted. Further, adding a trade-at pilot to a maker-taker pilot could obscure the data showing the impact of maker-taker pricing, which is the principal purpose of the pilot described by the Framework.

Thank you again for the opportunity to comment on this important proposal. We would be pleased to answer any questions about the views expressed in this letter, and we
stand ready to assist the EMSAC and the Commission in their important work to strengthen U.S. equity markets.

Sincerely,

Richard Steiner
Electronic Trading Strategist

cc: Commissioner Kara M. Stein
Commissioner Michael S. Piwowar
Mr. Stephen Luparello, Director, Division of Trading and Markets
Mr. Brent Fields, Secretary