By Email

February 28, 2019

To:

British Columbia Securities Commission
Alberta Securities Commission
Financial and Consumer Affairs Authority of Saskatchewan
Manitoba Securities Commission
Ontario Securities Commission
Autorité des marchés financiers
Financial and Consumer Services Commission, New Brunswick
Superintendent of Securities, Government of Prince Edward Island
Nova Scotia Securities Commission
Office of the Superintendent of Securities, Service NL (Newfoundland and Labrador)
Superintendent of Securities, Northwest Territories
Superintendent of Securities, Yukon
Superintendent of Securities, Department of Justice, Government of Nunavut

Care of:

The Secretary
Ontario Securities Commission
20 Queen Street West
22nd Floor
Toronto, Ontario M5H 3S8
Fax: 416-593-2318
comments@osc.gov.on.ca

Me Anne-Marie Beaudoin
Corporate Secretary
Autorité des marchés financiers
800, rue du Square Victoria, 22e étage
C.P. 246, tour de la Bourse
Montréal (Québec) H4Z 1G3
Fax : 514-864-6381
Consultation-en-cours@lautorite.qc.ca

Dear Sirs/Mesdames:

Re: CSA Staff Notice and Request for Comment 23-323 Trading Fee Rebate Pilot Study (the "Pilot Study")

Thank you for the opportunity to comment on your proposed Pilot Study.

This initiative, if it proceeds as planned, will have a direct, and adverse, multi-year impact on many Canadian investors and companies. It will likely undermine the integrity of the Canadian capital markets and violate the principles of transparency by further increasing the more than $100mm in hidden transition costs already borne each month by Canadian investors.

The intent for the Pilot Study remains unclear. The main justifications cited in the United States for a similar undertaking do not meaningfully exist in Canada. Furthermore, the

tools and data to conduct a very accurate, precise and timely review of the implied issues already exist, involving no adverse impact on current market stakeholders.

It has never been more important, or more challenging, for Canada to attract and retain the capital required to build the next generation of enterprise and innovation. That requires less, rather than more, bureaucracy and red tape and it demands that our regulatory environment foster world-class standards of transparency and accountability. Not less.

To maintain an advantageous principles-based regulatory environment, we must not lose sight of the underlying first principles.

Your call for comments and its accompanying materials do not provide any substantive rationale for why this Pilot Study is being proposed. There are speculations and allusions to possible problems, but nothing truly tangible other than the fact that the Americans are doing something similar. As discussed in past comment letters, this rationalization remains insufficient. Instead, we should be learning from, not replicating, the mistakes of our southern neighbours.

Developing solutions for non-existent problems is an inappropriate use of the resources of the CSA and of all the impacted parties who will have to respond to this initiative. That is instead the domain of the ivory-towered academics (who would appear to have a heavy hand in this matter) and not something that would warrant turning real-world corporations, investors, participants, service vendors and marketplaces into experimental guinea-pigs.

As is so often the case in these matters, a basic review of first principles and an assessment of underlying stakeholder motivations would be in order.

To function properly, markets need liquidity. Providing liquidity entails certain risks. The provider must disclose their intentions for all others to see before they in turn decide their course of action. Maintaining a firm intention in the face of a dynamic market environment exposes the provider to adverse price movements and to the actions of others who have had the benefit of knowing the provider's intentions. To compensate, we have developed the concept of price/time priority (although the permitting of embedded, parasitic dark orders/markets continues to erode this critical element of the price discovery process) and, over time, global markets have developed various structural, pricing and execution advantages and incentives to reward market makers, given the integral role they play in making markets more efficient and effective.

Liquidity providers are not long-term investors. Their objective is to make money providing liquidity, not to make money on market direction. Ideally, they would like to buy a security for less than they sell it at and to flatten out their exposure as quickly as is possible to avoid any adverse price volatility.

For those in the business of providing liquidity, the calculations are fairly straightforward. On the upside, their goal is to capture the bid/ask spread and any related rebates available. Against that, they incur the costs of business (including taker fees, when required) and any losses resulting from intervening adverse market movements. Thus, the dominant players focus on building the best order entry and risk management tools available. As regulator-enforced minimum bid/ask spreads collapsed, most traditional liquidity providers have had to automate to survive. While collapsed bid/ask spreads were of huge benefit to investors, it necessitated a change in the traditional dealer business models. With shrinking margins they had to adapt or get out of the way. The introduction of multiple markets and the accompanying arrival of high-frequency traders and their advanced trading tools has been wonderful for investors and disastrous for dealers clinging to traditional models. Not surprisingly, the whole "rebate" debate has historically been framed in this context. Rebates offer further inducements for liquidity providers but represent increased costs (that are not easily offset) for dealers. This is a stated core underlying dynamic at play behind the Pilot Study.

To refresh, not all securities are the same. Some have high natural flow and so the risk of providing liquidity is significantly diminished. For many of these securities, the bid/ask spread is more than sufficient, hence the subsequent proliferation of "inverted" markets where providers pay to provide liquidity. By way of simple example, let us contrast two scenarios, the first involving a security of average liquidity that trades at the prescribed 1 cent minimum bid/ask spread and on which liquidity providers are offered a rebate of 2/10ths of a cent per share to post firm bids and offers. The second (inverted) scenario involves a very active security and, while the minimum bid/ask spread has been artificially propped up by regulatory decree at 1 cent, providers will be charged $1/10^{th}$ of a cent per share to post firm bids and offers. All things being equal (i.e., with no intervening volatility), the provider in the first scenario stands to make a total of 1.4 cents for every share successfully bought and then sold. In contrast, the provider in the second scenario is capable of making only $8/10^{th}$ of a cent for every successful match.

Liquidity providers only make money if their offerings are the best available and at the top of the book. It is free market principles that thus dictate which rebate regime is applicable for which securities at any given time. The more liquidity providers that are jostling to service investors, the deeper the liquidity available on any security at a given moment.

There is a third scenario, where volatility and/or lack of natural flow necessitates that market makers widen the bid/ask spread to remain in business. It is very reasonable to expect that banning rebates will, for these securities, result in wider spreads for both issuers and investors alike. Transition costs will increase, although dealers will not feel the pain. In fact, many may profit from the wider margins being re-introduced.

The regulator-imposed minimum bid/ask spread is the primary inconsistency in this analysis. For the many securities that can thrive in an inverted market environment, it is what holds investors back from achieving the lower transition costs that a reduced (or

non-existent) bid/ask spread would provide them. To put this in context, this forced spread contributes to the over $100 million a month in hidden transition costs currently faced by Canadian investors. Soon after the multiple market environment was launched, market forces unequivocally demonstrated that, for many securities, providers were willing to post bids and offers at the same price. They were making money on just the combined rebates of 4/10ths of a share (in scenario 1 above) as that more than compensated for the costs and potential losses. However ideal the prospect of having zero bid/ask transition costs was for investors, Canadian regulators last decade banned locked markets and have forced minimum bid/ask spreads upon the market – hence why we now have traditional and inverted markets. Technology has outpaced regulatory evolution. The irony, in the Canadian context, was that our regulators enforced required spreads *after*, not before, the technological evolution that had dispensed with their requirement.

I have digressed in part to illustrate the core underlying issues at play here as well as the pitfalls of embarking on regulation for regulation sake without *advance* recourse to empirical analysis. Lack (some might say fear) of basic empirical analysis has often plagued market structure policy development in Canada for quite a while and it might be time to halt that practice.

The proposed Pilot Study is an excellent case in point. Nowhere can one find a concrete and quantified description of the problems that are allegedly going to be solved. The words "maybe" and "may" are relied on quite heavily, but it is all speculation. In contrast, there are specific references to the fact that dealers often pay fees they cannot readily offset. The fact that the new providers are employing superior technology to provide a better service and are earning the margins (albeit reduced) that used to be the exclusive domain of the dealers has likely further added to the latter's current disgruntlement.

So, to solve an ill-defined and possibly non-existent problem, it is being proposed that we turn our national capital markets into a theoretical playground for some social scientists to conduct a real-world experiment involving banning liquidity provision rebates for some securities but not for others. They propose dividing senior Canadian securities into two groups – the haves and have nots (or to use their quaint euphemism, the treated and the non-treated). They intend to conduct a multi-year study of "the impacts of transaction fees and rebates on order routing behaviour, execution quality, and market quality". There may be conflicts, there may not. There may be benefits or adverse consequences, there may not. Who knows? Certainly not the proponents of this study. The only substantive excuse they have at this stage appears to be that the Americans are gearing up to do something similar. Particularly in today's environment, that is almost the antithesis of a compelling reason, national insecurities aside.

Why are the Americans threatening to pursue a similar initiative? There are a variety of unique factors at play in that country. They have a comparatively flawed set of market structure rules that have created what they believe are identifiable concerns. Unlike Canada, they do not have an order exposure rule. Dealers there can shop their client's

orders between trading venues and internalization schemes before exposing them to the markets proper. Unlike Canada, they do not have full depth of book order protection rules so dealers can cross better prices fairly easily if they wish. Unlike in Canada (save for limited exceptions), American markets do offer retroactive pricing discounts to those dealers who attain various volume thresholds in any given month. This is often cited as one of the biggest justifications for their proposed comparable study. Unlike their Canadian equivalents, US regulators are mired in bureaucratic stagnation such that they desperately want to be seen as "doing something" given that it is now over a decade since maker/takers models and high-frequency traders upended the traditional dominant dealers' margins and business models. None of this would justify why we should possibly follow them down a rabbit hole of their own making.

One thing is certain, there will be consequences. If not, then why embark on the project in the first place? This is not some sort of social engineering laboratory, this is the real world that we are discussing. It is very likely that companies, investors, markets and dealers will be impacted, many adversely. It seems very inappropriate (some might even say irresponsible) to consider conducting this experiment with so little justification and advance preparation.

It is fair to question if any meaningful data and outcomes will result. Markets are fluid and exogenous variables are almost a given (witness what your Academics note about the SEC direct market access review in 2011). Companies blossom and flounder and issue and buy-back securities quite frequently. There are many participants, each with different motivations and capabilities, that come together to create a functioning marketplace. It will be impossible to definitively determine all of the specific outcomes resulting from a selective ban on rebates. At best we will get, many years from now, a hedged set of generalizations and some suggested avenues for future investigation.

Those who secretly want to roll the clock back to higher margin days of yore will no doubt delight in seeing marketplaces falter or even collapse given the proposed regulatory shackles. Some may own the markets they think will be the winners or survivors. They probably will not mind seeing bid/ask spreads inevitably widen on securities where the rebates constituted a critical element of liquidity providers' cost benefit analysis. They most assuredly will rejoice if any of the next generation of competitors get brushed back from the plate or even run out of the country. But that will be just one, very narrow, stakeholder group. What of the investors and the companies whose securities will be adversely selected in this grand experiment? Should they have recourse against the architects of this ill-designed folly? Quite possibly, they should. Yet another reason that our regulators should not embark on this misadventure in the first place.

Instead, if the goal really is to understand the impact that rebates play in routing and execution decisions, then the definitive answers are readily available currently and could be analyzed with complete confidence in a matter of weeks, with no disruptive

influence on the markets. It will involve the dreaded basic empirical research that has so often eluded past market structure policy formation, but it should be done.

With very few, if any, exceptions, order entry decisions have largely been removed from human touch. Discrete algorithms within each order router determine how each market is approached and how orders are exposed and executed. There is specific logic employed and, for the most part, it is not frequently changed. Most dealers rely on third party router providers so there will not be that many routers to review. The customized choices each dealer faces and makes when reviewing their internal or third-party provider's router configurations are detailed and recorded for compliance purposes.

The CSA should assemble a team and require that all routing configurations and change logs from the last two years be handed over to them forthwith by all dealers handling retail client orders during that period. Frankly, given the issues alluded to in your materials, this review alone would probably provide all the answers you are hoping to unveil, with 100% accuracy in the results. As you already have access to all resulting order traffic and trading data via IIROC's data systems, it should be fairly simple to follow actual orders through the various order entry and then execution processes should you wish to go even further in the analysis. This will result in hard data and tangible results, and in a fraction of the time currently contemplated by the Pilot Study, with no undue, incremental damage inflicted on any stakeholder – save, perhaps, for certain dealers whose client order routing practices may not stand up so well to full review.

As a quick aside, if dealers were to pass on marketplace fees to their retail clients (as many already do for their institutional clients), then I suspect that much of the noise compelling you to action would dissipate, pressure to reduce or eliminate bid/ask spreads would mount and best execution and free market principles would be re-aligned. Something to seriously consider.

If our objective is to see, in real-time, the impact of a selective rebate ban, then let the Americans score an own goal and proceed without us. There will be no need for selecting matching control groups as we will have perfect symmetry between the two jurisdictions on the inter-listed securities and we could see first-hand the effects without causing any damage to our markets. I suspect that we will actually benefit as the American flail on their initiative. That is, if they even get past the current court challenges against their proposed pilot. If they try to pressure you into staying the course because they fear that unilateral action on their part would prove prejudicial to their interests, then they will have succeeded in reinforcing exactly why we should never have joined in this coordinated folly in the first place.

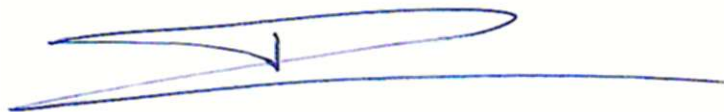
I will not spend time on any technical inconsistencies within the proposed study as I am sure others will do an adequate job of same and, as mentioned previously, I genuinely hope this initiative is aborted before meaningful damage ensues. However, there is one remaining item I wish to draw to your attention. There cannot, and should not, be

anything that is deemed the CBBO (Canadian Best Bid and Offer). If we have learned anything about the electrification and democratization of our markets, it is that there are no definitives involved. However an observer chooses to measure the markets (via a commercially consolidated feed, a smart order router, or through direct observation) the factors of speed and geographic location will render each observer's results to occasionally be slightly different from one another. That is fine. It is not something to be feared. All one can do is employ best efforts and act reasonably in one's efforts. The Americans made the mistake of constructing a legally binding NBBO and all that did was give rise to the inevitable arbitrage games that imposing a rigid framework on a fluid dynamic invariably entails. Again, please discourage your teams and academic associates from imitating that mistake. Our competitive advantage over the Americans has always been our principles, not rules, based approach to regulation. Please do not forsake that.

I apologize in advance if my words appear too harsh, but I truly continue to believe that Canada has the opportunity to create the best market structure in the world and that the only things holding us back are uninformed regulation, fear of empirical analysis and an insecurity to break free from American precedents.

Good luck on this one and I hope my comments help steer the ship back to a more productive course.

Thank you,



Ian Bandeen

Co-founder of the Canadian Securitization markets and past Global Head of Securitization and Structured Finance at BMO Nesbitt Burns
Co-founder and past Chair and CEO of CNSX Markets Inc, operator of the Canadian Securities Exchange
Co-founder and Chair Emeritus, National Angel Capital Organization