The Bank of Nova Scotia
Global Equity
Scotia Plaza
40 Temperance St, 4th Floor
Toronto, ON M5H 1Y4

December 4, 2023

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, Department of Justice and Public Safety, Prince Edward Island
Nova Scotia Securities Commission
Office of the Superintendent of Securities, Service NL
Northwest Territories Office of the Superintendent of Securities
Office of the Yukon Superintendent of Securities
Nunavut Securities Office
Canadian Investment Regulatory Organization

Via Email

Re: CSA/CIRO STAFF NOTICE 23-331: REQUEST FOR FEEDBACK ON DECEMBER 2022 SEC MARKET STRUCTURE PROPOSALS AND POTENTIAL IMPACT ON CANADIAN CAPITAL MARKETS

Scotiabank Global Banking and Markets appreciates the opportunity to contribute to the CSA Request for Comments regarding the December 2022 SEC Proposed Amendments and their impact on Canada. (the "Proposal").

General Remarks

We believe that any policy response to developments in the U.S. market should be considered and assessed with two primary criteria:

1. Maintaining the differentiated characteristics of Canadian capital markets, including the fundamental framework that encourages order flow into a multilateral negotiation.
2. Supporting the competitiveness of Canadian capital markets as a hub for capital formation and long-term investment.

We do not believe that Canada's equity market is fundamentally flawed. Canada does not need to make fundamental and wide-reaching changes to the framework for equities trading. However, if changes south of the border were to take place, Canada should respond in a manner which maintains

The Bank of Nova Scotia
Global Equity
Scotia Plaza
40 Temperance St, 4th Floor
Toronto, ON M5H 1Y4

Scotiabank
GLOBAL BANKING AND MARKETS

or enhances its international relevance. We therefore believe that the SEC Proposals may present an opportunity to adjust the framework in several key areas, touched on below.

We believe it would be premature for Canada to act in the areas under discussion prior to seeing clarity on the specific changes being enacted in the U.S. market. Further, given recent history of litigation activity related to policy changes, it would be appropriate to calibrate the Canadian response to maintain flexibility on timing and ensure that the Canadian market does not "jump the gun" on what may be a protracted implementation lead time for the U.S. market.

Variable Minimum Pricing Increments

Question 1*: If adopted as proposed by the SEC, please provide your views regarding whether Canada should harmonize with an amended SEC rule, including with respect to:*

a) the methodology used to calculate minimum pricing increments, including, source of data (which marketplaces and what entity should be responsible for calculation) and time periods during which the metrics are calculated,
b) securities to which any amended Canadian price increments would apply (e.g., inter-listed securities only or all or some classes of securities, exchange-traded funds and/or other exchange-traded securities),
c) treatment of situations where the use of an aligned methodology results in different trading increments between inter-listed securities traded in Canada and the U.S. (i.e., where the time-weighted average quoted spreads in Canada and the U.S. are different for the same security).

We believe that any misalignment between trading increments for interlisted stocks will lead to a migration of flow to the "tightest" market on average. While it is not yet known whether any interlisted stocks will be considered "tick-constrained" in the SEC analysis, we must consider the possibility that for certain stocks the trading increment would decrease in the U.S. market. This could trigger a migration of cross-border order flow, a trend which is difficult to reverse.

We note that cross-border routing appears to be a largely Canadian phenomenon. U.S. investors trading Canadian interlisted stocks in the U.S. market in many cases do not consider the Canadian market at all. The opposite is not true, as most Canadian dealers operate cross-border routers that consider FX-adjusted quotations from the U.S. market and route accordingly. Therefore, if the Canadian inside quotation is not competitive with the U.S. quotation for the same stock – regardless of size available – more flow will route southbound. We therefore do not believe that a tighter quotation in Canada will (in itselfo be enough incentive to meaningfully attract northbound flows, but a wider one in Canada will encourage southbound activity.

The Bank of Nova Scotia
Global Equity
Scotia Plaza
40 Temperance St, 4th Floor
Toronto, ON M5H 1Y4

Scotiabank
GLOBAL BANKING AND MARKETS

We advocate for simplicity in the trading increment methodology. For tick-constrained Canadian interlisted stocks, we suggest that Canada match the trading increment in the U.S. market for the same security, and on the same schedule. We do not believe it is necessary or appropriate to introduce a separate calculation methodology at this time.

Should such an approach be enacted, we recommend that 12 months after the first implementation of a narrower trading increment, a further review be conducted to consider the effects and potential next steps. It is difficult to provide a more precise recommendation at this time, as we believe the final form of the U.S. trading increment methodology is still uncertain.

Question 2: *If Canadian requirements as related to minimum pricing increments are not amended in response to an amended SEC rule as proposed:*

- *a) Would marketplace participants send less order flow to Canadian marketplaces in favor of U.S. trading venues?*
- *b) Does the difference in value between the Canadian and the American dollars matter in your analysis?*

Yes. As noted above, if Canadian quotations are structurally wider than quotations for the same security in the U.S. market, order flow – especially institutional order flow – will migrate southbound. The converse is not true, as we do not believe U.S. northbound agency routing is as commonplace and prevalent as Canadian southbound routing. In particular, we believe that a relative small portion of U.S. retail flow is routed for direct execution to Canada, and a significant portion is instead internalized in the U.S., with hedging flow (rather than originating natural flow) being sent to Canada.

Question 3: *Concerns have been raised in relation to:*

- *a) operational resiliency and systems readiness should the number of pricing increments be increased, especially where they would be periodically adjusted on a per-security basis, and*
- *b) increase in message traffic (i.e., electronic order and trade messages) that will result from an increase in the number of pricing increments.*

Please discuss whether you share these concerns.

We share these concerns. We believe that significant infrastructure enhancements will need be undertaken to support a variable trading increment, leading to a greater risk of malfunction, system failure, or general confusion.

We note that the tick size regime in Canada is fixed, and trading increments are entirely a function of trading price – for all stocks. A high-priced stock that crosses below \$0.50/share immediately trades at

The Bank of Nova Scotia
Global Equity
Scotia Plaza
40 Temperance St, 4th Floor
Toronto, ON M5H 1Y4

Scotiabank
GLOBAL BANKING AND MARKETS

half-cent trading increments. Most trading systems in Canada are built with this logic incorporated, and all such systems would require modification to adapt to a new regime.

This concern is not limited entirely to last-mile execution systems. All components of the trading ecosystem, including systems used for surveillance and monitoring, would require similar modifications. In the absence of such changes, we would expect a dramatic spike in the number of false-positive alerts for various UMIR violations, including trade-through or client-principal trading issues. Changes to such ancillary systems would be costly and would represent an added burden on the dealer community, which is likely to be passed on to clients through either costs or a reduced level of service.

We particularly share the concern that message traffic will increase significantly in the face of smaller trading increments. This phenomenon is already evidenced in certain high-priced securities, particularly ETFs, where the trading increment is relatively small in value terms and therefore prompts frequent repricing. In this context, we see smaller trading increments significantly increase message traffic while simultaneously leading to very small quoted sizes. The result is that investors trade off the optics of a "tighter spread" for significant uncertainty over the exact prices being quoted, and a much lower size available at any given price increment. We view this as a poor outcome for investors on average. In Canada's best execution framework, size and certainty are equally factors to best execution along side price. An inappropriately small trading increment would diminish both size and certainty in a manner which is not adequately compensated through better prices.

Question 4: *It has been suggested that any Canadian proposal to amend minimum pricing increments would introduce complexity in managing orders. Please provide your views in this regard, including as related to:*

- a) *complexities associated with the frequency at which minimum trading increments could change,*
- b) *the necessary lead-time between establishment and implementation of new minimum trading increments both initially and on an ongoing basis,*
- c) *challenges with management of existing orders entered on marketplaces at prices that have become invalid trading increments (may be particularly relevant for orders of retail investors that are entered with longer expiry dates (i.e., "GTC" orders)),*
- d) *investor education challenges associated with an amended approach to minimum pricing increments.*

We agree with these concerns. The Canadian marketplace is already complex, with significant upkeep required to maintain connectivity to various venues. This maintenance burden takes away from dealer resources which could otherwise be committed to improving client experience or reducing costs.

The Bank of Nova Scotia
Global Equity
Scotia Plaza
40 Temperance St, 4th Floor
Toronto, ON M5H 1Y4

Scotiabank
GLOBAL BANKING AND MARKETS

Investor education in this area is a significant challenge, particularly for the retail community. A reduction in trading increment size, which would inevitably lead to a reduction of quoted volume, will likely lead to further perceptions of illiquidity and frustrations among investors. These issues are also inextricably tied to ongoing challenges with retail access to consolidated market data, where indicative pre-trade quotations are currently lacking and which, in our view, has a negative effect on investor confidence in Canada.

Question 5: *As modifying trading increments in Canada would impact the determination of a "better price" under UMIR, please discuss whether Participants (as defined in UMIR 1.1) would still be providing meaningful price improvement in circumstances where a "better price" is required.*

We believe that the definition of "better price" for the purposes of UMIR is generally appropriate in that it is a function of trading increment size. However, if the SEC Proposals are fully adopted, this could lead to an outcome where the "better price" is satisfied at 1/10th of a cent per share. We believe that de-minimis price improvement that technically satisfied a trading increment size stands in the face of "meaningful" price improvement, especially if the smaller trading increment is also associated with significantly smaller accessible volume at each price increment.

At the time of the policy development process for Canada's dark trading regime, it was clear that a price improvement of 1/10th or 1/5th of the bid-ask spread was insufficient. This analysis took place without considering concurrent policy development in the U.S., as we are facing now. However, at that time the U.S. market did not require trade-at, and a large portion of U.S. trading, including for interlisted stocks, took place within the displayed bid-ask and established one-cent trading increment. This suggests that the numerical outcome – one-cent price improvement above $1 – remains appropriate for the purpose of what is "meaningful" price improvement.

In keeping with our view that revisions to the Canadian framework should maintain the essence of Canadian rules (which are not broken), we believe continuing the *numerical* conclusion of Canada's trade-at regime is appropriate. This means requiring meaningful price improvement for smaller orders, while allowing block-sized execution to trade alongside visible orders. Unfortunately, this is a contradiction: if the desired policy outcome is that a "better price" is one cent better, and a trading increment is less than one cent, then an improvement to the quote is no longer a "better price."

This leads us to conclude that the definition of "better price" would need to change – presumably to a one-cent threshold. Further, this would raise the question of whether some quotations are, which do not represent a "better price," are deserving of order protection.

We would suggest redefining the concept of "better price" to an absolute amount (per share), dependent on stock price and potentially order quantity. Based on the outcome of this redefinition, we suggest that any displayed orders which do not present a "better price" relative to round trading increments (i.e. cents) should lose order protection. This approach would greatly assist in limiting

The Bank of Nova Scotia
Global Equity
Scotia Plaza
40 Temperance St, 4th Floor
Toronto, ON M5H 1Y4

smart routers' efforts to chase small and fleeting quotes, and generally reduce the cost of increased fragmentation resulting from a reduction in tick sizes.

For stocks with exceptionally tight quotations (i.e. 1/10th cent wide) this combination of factors could lead to dark trading being driven entirely to the lit market – which in turn would foster price discovery and transparency. Loss of order protection for de-minimis lit quotations would also encourage the concentration of quoting activity at specific price points, and better price stability. We believe this is a positive outcome overall, but will certainly lead to unintended side effects.

Question 6: *Please provide any views on expected outcomes (positive and negative) associated with any changes to minimum trading increments, including as related to expected quoted volume at each price increment. Additionally, please provide your views on what metrics could be used to evaluate whether any new approach to minimum trading increments results in positive or negative outcomes.*

We believe that changes which reduce the minimum trading increment would lead to the following effects:

- Potential for more precise price discovery processes for a small number of tick-constrained stocks (positive).
- An opportunity for Canada to maintain competitiveness with the U.S. market, provided Canadian policy acts in lock step with the U.S. (neutral).
- Smaller trading increments will lead to a reduction in quoted size at each trading increment (negative). Overall liquidity, as a function of investor participation and willingness to turn over positions, is unlikely to improve.
- Smaller trading increments will increase in quote volatility, which will lead to a greater technology burden and systems load for the entirety of the industry (negative).
- Increased confusion within the investment community, as the trading increment regime is currently well understood, easily explained and unambiguous (negative).

Reduction in Access Fee Caps

Question 7: *Please discuss whether fee caps should also apply to "taker-maker" fee models and, if so, whether their fee caps should be different.*

Yes. The current arrangement, wherein fee caps are applied to make-take markets, but are looser on inverted markets, adds distortions to order routing. Trading fee economics lead to an outcome where

The Bank of Nova Scotia
Global Equity
Scotia Plaza
40 Temperance St, 4th Floor
Toronto, ON M5H 1Y4

Scotiabank
GLOBAL BANKING AND MARKETS

natural parties are unlikely to meet each other in the market, since most natural resting orders are found on markets which are expensive to access, while active flow seeks out lowest-cost execution.

Today, the spread between the highest cost to access, and the lowest, is nearly half a cent. Similarly, the cost of a passive fill between traditional and inverted markets is also nearly half a cent. In an environment where the trading increment becomes smaller, this would create an outcome where quotations on various markets are de-facto locked or crossed.

Consider a hypothetical situation where marketplace A is make-take (30/-25), and marketplace B is inverted (-25/30). If both the market on both A and B is 10.00-10.005, then

- All passive fills on A provide net economics of 10.0025
- All active fills on B provide net economics of 10.0025

Therefore, in this environment, 10.00-10.005 is a locked market across those two markets when all fees are considered.

Such an outcome would lead to an environment where quoting on A is a fool's errand because the cost of accessing this quotation is too high relative to the fee structures available elsewhere. The effect would be to create a disincentive to price discovery on traditional markets, which is the exact opposite effect of the original intent of marketplace rebates.

In our view, the degree of distortion permitted through rebates must be limited symmetrically for both traditional and inverted markets. This analysis should assume a bid-ask spread at the minimum trading increment, and distortions should be limited to a small percentage of this minimal bid-ask spread.

We note that changes to this regime may have significant consequences to the overall market, as inverted rebates are currently material to the retail execution community. It is unknown what equilibrium state will be achieved, since a reduction in maximum inverted rebate would also lead to a reduction in maximum posting fee – which could increase total inverted quoting activity and leave overall inverted rebate levels unchanged.

Question 8: *Generally, the exact fee or rebate for an order cannot be determined until after an execution occurs, as discounted fees or credits are determined by marketplaces at the end of the month, based on trading during the month of a Participant. To be able to calculate the full cost of a transaction at the time of execution, the SEC also proposes to require that all exchange fees and rebates be determinable at the time of execution. U.S. trading venues would be required to set such volume thresholds or tiers using volume achieved during a stated period prior to the assessment of the fee or rebate so that market participants are able to determine what fee or rebate level would be applicable to any submitted order at the time of execution.*

The Bank of Nova Scotia
Global Equity
Scotia Plaza
40 Temperance St, 4th Floor
Toronto, ON M5H 1Y4

Scotiabank
GLOBAL BANKING AND MARKETS

Please discuss whether we should take a similar approach in Canada.

We believe all execution fees should be known ahead of execution. Further, we believe the fee for each execution on all markets should be required to be communicated along with each fill on execution reports.

Question 9: If adopted as proposed by the SEC, please provide your views on a Canadian approach to fee caps, including with respect to:

a) harmonization with an amended SEC rule, including with respect to application to inter-listed and/or non-inter-listed securities,
b) methodology used, including with respect to:
    i) application to all securities, regardless of price,
    ii) consideration of a fee cap that reflects tick size, similar to the methodology proposed by the SEC, and
    iii) consideration of a percentage-based fee cap for securities priced under CAD1.00.

We believe that the current approach – harmonization for interlisted stocks, and a significant reduction on access fees for non-interlisted stocks – should be maintained if these proposals are adopted by the SEC.

Currently, access fees for traditional markets are capped at 30 mils for interlisted stocks (consistent with the Reg NMS limits), and 17 mils for non-interlisted stocks (56% of the Reg NMS limit). As we are advocating for trading increments to only be affected for interlisted stocks, we believe the current regime would remain appropriate for any stock where the trading increment has not been reduced through the SEC's assessment of tick-constraint.

For tick-constrained Canadian stocks (which in our recommendation would be solely Iinterlisted), we believe that the maximum access fee should be set concurrently with the parallel Reg NMS requirements.

If the decision is made to reduce tick sizes for Canadian non-interlisted stocks, we believe the maximum access fee should be capped at 50% of the Reg NMS requirement for the same trading increment.

Finally, we recommend that posting fees on inverted markets are limited to the maximum access fee for the same stock.

Enhancements off Transparency about Better Priced Orders Available in the Market

The Bank of Nova Scotia
Global Equity
Scotia Plaza
40 Temperance St, 4th Floor
Toronto, ON M5H 1Y4

Scotiabank
GLOBAL BANKING AND MARKETS

Question 10: Please discuss if you share our assessment and provide any additional considerations in this area.

We agree with Staff's assessment and do not believe that changes to odd-lot transparency are warranted at this time. Canadian issues related to odd-lot trading are a function of the Canadian concept of board lot size, rather than of odd-lot transparency.

Rather than addressing transparency through a "Rube Goldberg" approach, we suggest either considering a reduced board lot size regime for high priced stocks, or encouraging corporate issuers to split their shares (which de-facto decreases the effective board lot size for the security).

Regulation Best Execution

Question 11: *Please discuss if you share our assessment and provide any additional considerations in this area.*

We believe the Canadian framework for best execution should remain in place, and changes in this area in the U.S. market do not warrant a Canadian policy response.

Disclosure of Order Execution Information

Question 12: *Please discuss if you share our assessment and provide any additional considerations in this area.*

We agree with Staff's assessment.

Order Competition Rule

Question 13: *Please discuss if you share our assessment and provide any additional considerations in this area.*

We agree with Staff's assessment.

Conclusion

The above comments are presented based on our understanding of the current state of the SEC's policy proposals. The major driver of impact on Canada is a potential reduction in trading increment

The Bank of Nova Scotia
Global Equity
Scotia Plaza
40 Temperance St, 4th Floor
Toronto, ON M5H 1Y4

Scotiabank
GLOBAL BANKING AND MARKETS

size. However, it is difficult to assess the specifics without clarity on whether this aspect of the SEC Proposals will proceed as drafted or will be subject to significant amendment.

We caution that the details of a Canadian implementation require significant analysis of the final form of U.S. rules. Certain details may emerge which alter the calculus of an appropriate Canadian policy response. For instance, should the SEC propose to unilaterally alter tick sizes to a smaller increment, Canadian authorities may wish to consider a concurrent move for all securities, and not just interlisted ones.

For this reason, we encourage continued and in-depth dialogue between the CSA, CIRO and market participants on this topic.

We appreciate the opportunity to comment.

Respectfully,

Alex Perel, CFA
Managing Director
Scotiabank Global Banking and Markets
[redacted]

Nitin Mathur
Head of ScotiaRED Electronic Trading Desk
Scotiabank Global Banking and Markets
[redacted]