

# Liquidity of Interlisted Stocks in the Canadian Options Markets

The Canadian options market is smaller than that of the United States. While there are around 250 listed names in Canada with options, there are more than three thousand in the United States. Moreover, of the stocks in the S&P TSX 60 index, there are 42 options classes interlisted between the two markets. This means clients may choose which market to use to trade an interlisted option—Canada or the US. Although Canada is smaller, clients should know its options liquidity outperforms in the interlisted options, which should lead clients to consider Canada for interlisted trading before defaulting to the larger jurisdiction.

In this paper, we do a simple analysis of options liquidity in Canada for interlisted symbols and outline the benefits of using the Canadian options market as a first choice for interlisted. The paper also explores market-maker obligations and negotiations on spreads in the Montréal Exchange options market.

## Capitalizing on Canadian Markets

Canada has a well-regulated and transparent market, offering various trading products, including options on equities, indices, ETFs, and more. Montréal Exchange (MX), Canada's only marketplace for exchange-traded derivatives, has seen significant growth in options trading volume and open interest over the last few years. At the end of 2022, equity options saw a gain of 17.6% in year-to-date volumes and 5.8% in month-end open interest. Likewise, ETF options year-to-date volumes increased by 42.5%, and month-end open interest rose by 95.9%.

Given the stability and performance of the Canadian market, coupled with tighter bid-ask spreads for interlisted symbols, investors can benefit by using these options on the Canadian market instead of the options listed on American exchanges.

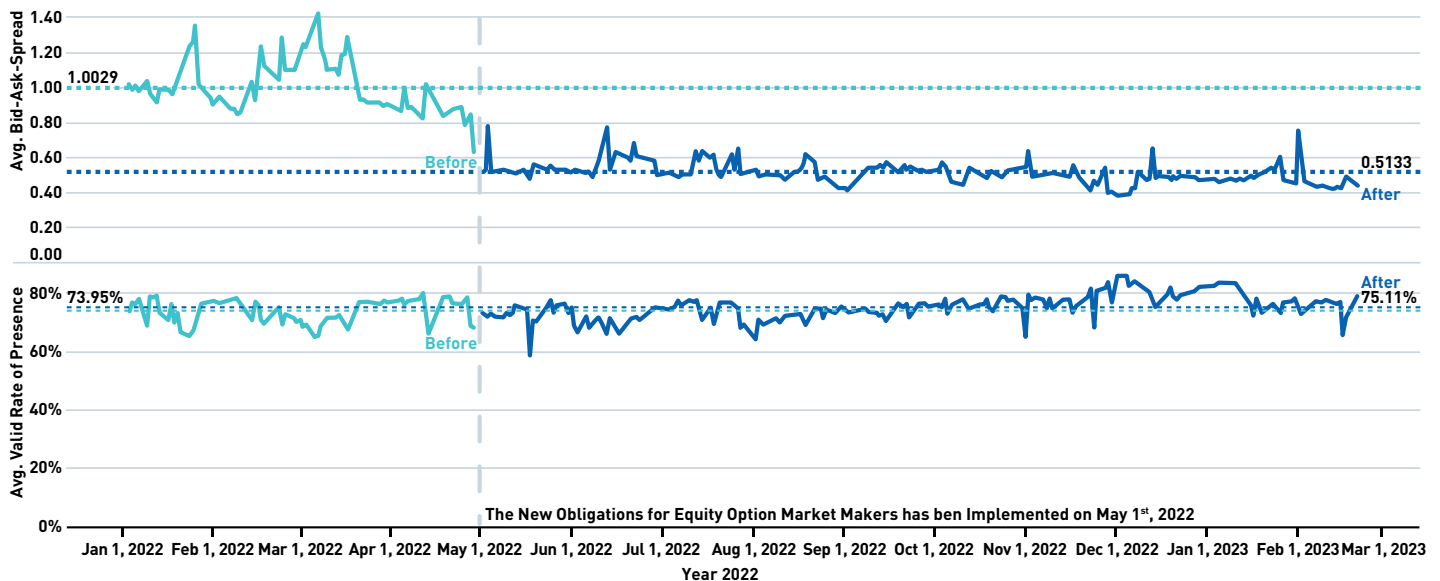
## Evaluating Liquidity for Interlisted Symbols

Market makers on MX are asked to maintain a fair and orderly market, which includes providing bid-ask quotations for the options contracts for which they are responsible. By doing so, market participants, including retail investors, have the potential to achieve better execution prices for their options trades, leading to improved overall trading outcomes.

Better on-screen markets are crucial for the growth of the equity and ETF options market. In 2022, the exchange imposed stricter obligations to market makers to tighten the displayed bid-ask spread on listed options. On average, bid-ask spreads got cut in half without affecting the presence rate.

FIGURE 1

## Spread and Rate of Presence - Change Over Time - Before and After



Still, given the relative size of the US markets, retail investors sometimes assume that Canadian options for interlisted symbols are less liquid in comparison to the same options listed on American exchanges. Below, based on a sample of 20 TSX60 interlisted symbols, we give an analysis showing the reverse, that liquidity is better in Canada. By trading options on interlisted stocks on MX, retail investors can benefit from tighter bid-ask spreads that lead to cost-efficient trading and hedging strategies.

## Methodology

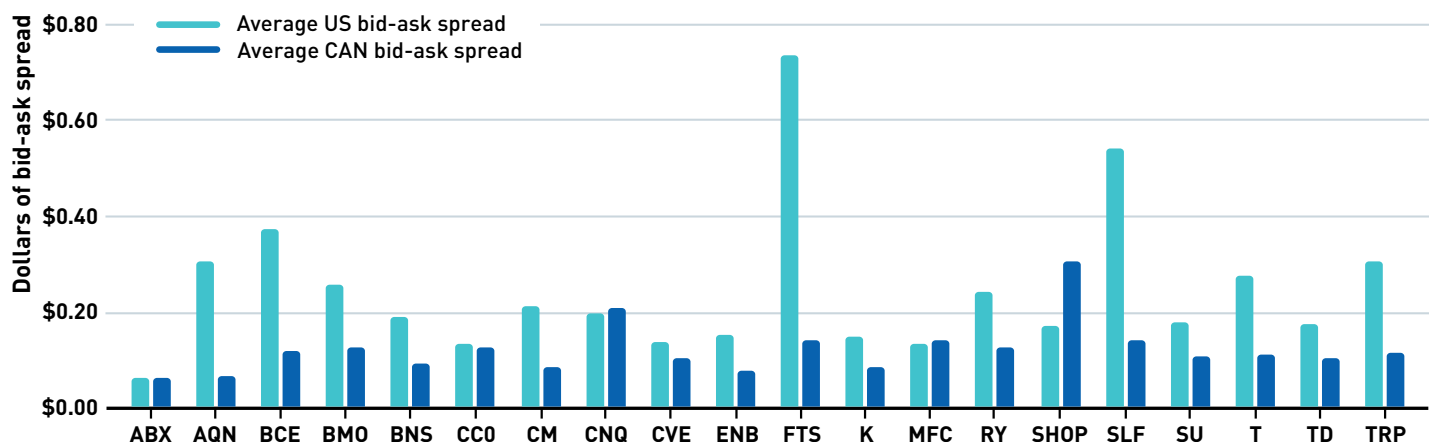
The MX research team collected data on the top 20 interlisted underlying equities by stock volume and sampled put and call options with out-of-the-money strikes. Other strikes were excluded for simplicity, and out-of-the-money strikes were chosen as they are the most popular and liquid due to their lower delta and higher leverage. Additionally, covered-call ETFs sell the first out-of-the-money call.

The Canadian data was sourced internally, while the US data was acquired from ORATS. Using this sample, the team compared MX bid-ask spreads with the national bid-ask spreads in the US, adjusting the currency to CAD at the day's FX rate. The analyzed data spans from August 1, 2022, to November 17, 2022.

## Understanding Bid-Ask Spread Variances

FIGURE 2

### Average bid-ask spread, top 20 interlisted MX symbols by stock volume



This graph shows the average bid-ask spreads for the options in our sample—the average of the first three out-of-the-money strikes for the top-20 interlisted underlying. Each column represents a symbol, with the average US bid-ask spread in blue and the average Canadian bid-ask spread in red. US bid-ask spreads have been adjusted from USD to CAD. The takeaway is that MX consistently posts lower spreads compared to the US market. In 80% of this sample, the US market exhibits much wider spreads than the Canadian market. Only two symbols, on average, see a bid-ask spread higher than \$0.20.

It is important to note that these are dollar bid-ask spreads and can be considered non-normalized. For instance, the Royal Bank of Canada (RY) has a stock price of \$139, while Cenovus Energy (CVE) has a stock price of \$25, which naturally results in higher spreads for RY.

## Exploring Strike Price Movements

**FIGURE 3**  
**Average bid-ask spread, top 20 interlisted MX symbols by stock volume**



This graph shows the average bid-ask spread over the top-20 MX interlisted symbols for the first out-of-the-money option, the second out-of-the-money option, and the third out-of-the-money option. The graph shows that US spreads widen for options that are further from the money, whereas the Canadian spreads remain constant.<sup>1</sup>

There is a difference of \$0.10 between the US and Canadian markets for the first out-of-the-money strike price. For the second out-of-the-money strike price, the difference is \$0.11. Surprisingly, the difference increases to \$0.17 for the third out-of-the-money strike price, while the Canadian average bid-ask spread is only \$0.11.

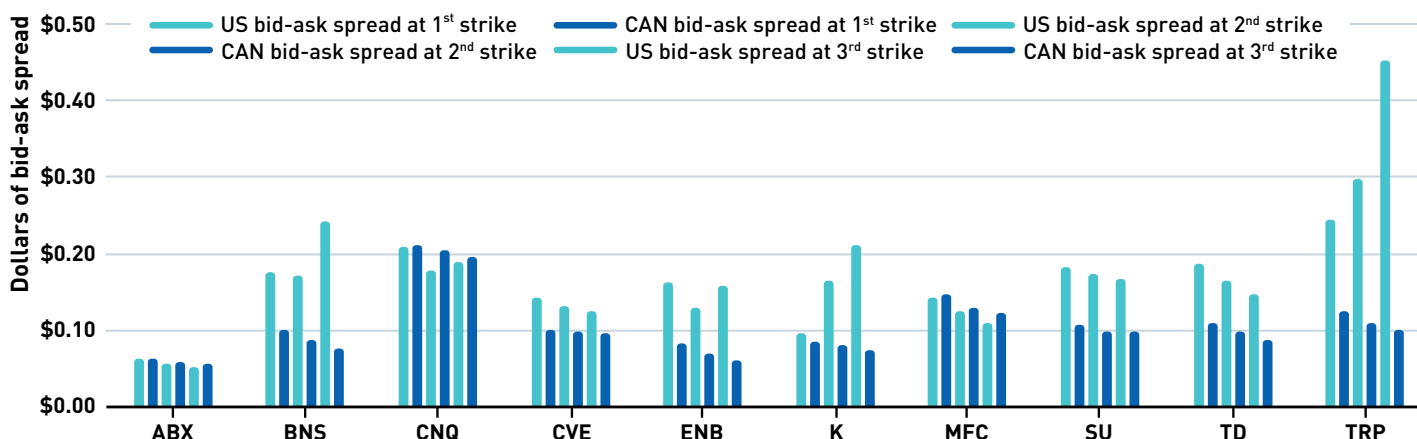
Based on these findings, we argue that Canada outperforms the United States in part because US market makers focus on the first strike price, effectively maintaining liquidity in only one option, whereas Canadian market makers are supporting a greater range of strikes.

<sup>1</sup> It's worth noting in this analysis that some symbols skew the US averages higher (e.g., FTS, SLF, etc.).

# Comparing Canadian and US Options

FIGURE 4

## Average bid-ask spread, top 10 interlisted MX symbols by stock volume



This graph now shows the top-10 interlisted MX symbols by volume, combining relevant data for a more in-depth examination. The y-axis of the graph represents the dollars of the bid-ask spread. Each column's leftmost column for each symbol and color signifies the bid-ask spread at the first strike, while the rightmost column represents the bid-ask spread at the third strike.

For the Canadian markets, as the strikes move further away from the stock price out of the money, the spreads tighten, creating a downward trend on the graph. The rationale behind this trend is that the premium decreases as the strikes move further away from the stock price. If the premium is low, a tighter spread is expected. However, in the US market, this is not the case; three out of the ten symbols have the third strike as their highest average bid-ask spread.

## Closing Perspectives

Based on our analysis, we argue that retail investors who are interested in the top-20 interlisted symbols should consider trading options on Montréal Exchange due to tighter bid-ask spreads and a stable market environment. Furthermore, the exchange's market-making program that enables market participants to negotiate tighter spreads appears to have succeeded in creating more efficient execution of trades and greater risk-management opportunities.

## Three Reasons Retail Investors Should Trade Interlisted Options in Canada

Retail investors interested in interlisted stocks should consider trading options in Canada for several reasons.



### TIGHTER BID-ASK SPREADS

Options on Canadian interlisted stocks generally have tighter bid-ask spreads, reducing transaction costs for investors and allowing them to achieve cost-efficiency in trading.



### MORE SUPPORTED CLASSES

Canadian market makers are on contract to support a number of strikes for interlisted stocks and support more than the first out-of-the-money.



### STABLE MARKET ENVIRONMENT

The Canadian market's stability and lower volatility make it an ideal destination for managing risk, diversifying portfolios and hedging against market fluctuations.

# For more information

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