

Contact Us

Anushree Laturkar

Executive Director
Instinet, LLC
309 West 49th Street, 6th Floor
New York, NY 10019
Anushree.Laturkar@Instinet.com
+1 212 310-7227

Takeshi Ito

Vice President
Instinet, LLC
309 West 49th Street, 6th Floor
New York, NY 10019
Takeshi.Ito@Instinet.com
+1 212 310-7166

David Firmin

Executive Director
Instinet, LLC
309 West 49th Street, 6th Floor
New York, NY 10019
David.Firmin@Instinet.com
+1 212 310-7183

Americas

Electronic Trading Services
Instinet, LLC
309 West 49th Street, 6th Floor
New York, NY 10019
Informed.Trading@Instinet.com
+1 866 446-7846

Europe

Electronic Trading
Instinet Europe Limited
1 Angel Lane
London EC4R 3AB
Informed.Trading@Instinet.com
+44 207 154-7444

Asia-Pacific

Product Sales and Trading
Instinet
Two International Finance Centre
Hong Kong
Informed.Trading@Instinet.com
+852 2585-0500

Informed Trading – May 2017

Market Structure Trends – Americas Q1 2017

As part of Instinet's Trading Commentary publications, we're introducing this new series to provide periodic updates on market structure changes and trends in the Americas that inform Instinet's execution services. This includes factors such as intraday liquidity profiles, market impact cost trends, auction and continuous volume variation, market concentration as well as volume, volatility and bid/ask spread.

Introduction: Market Microstructure Matters

In recent years, American equity markets have continued to evolve in response to a number of factors. Regulations, technological developments and efforts at improvement of execution quality have led to significant changes in equity market microstructure. Instinet continues to focus on the analysis of trends in microstructure in order to improve our trading solutions.

The quarterly Americas Market Structure Summary issues seek to provide periodic updates on topics such as market concentration, intraday trading profiles, liquidity trends and auction volume participation.

Highlights from this quarter include:

- **United States:**
 - Volumes were stable this quarter marked by select higher volume days driven largely by broader macro events
 - Volatility has consistently declined in the U.S. for large cap securities, but small cap volatility has stayed stable at ~30%
 - Trading costs, however, were stable through the quarter due to volume and volatility effects offsetting each other



Market Structure Trends Americas Q1 2017

- **Canada:**

- The most concentrated in the Americas region, with just 10% of the highest market cap stocks accounting for over 90% of the traded value in the market
- Auction volumes for large caps have seen a marked increase, especially in the close, with average close volumes crossing 10% of the daily volume

- **Brazil:**

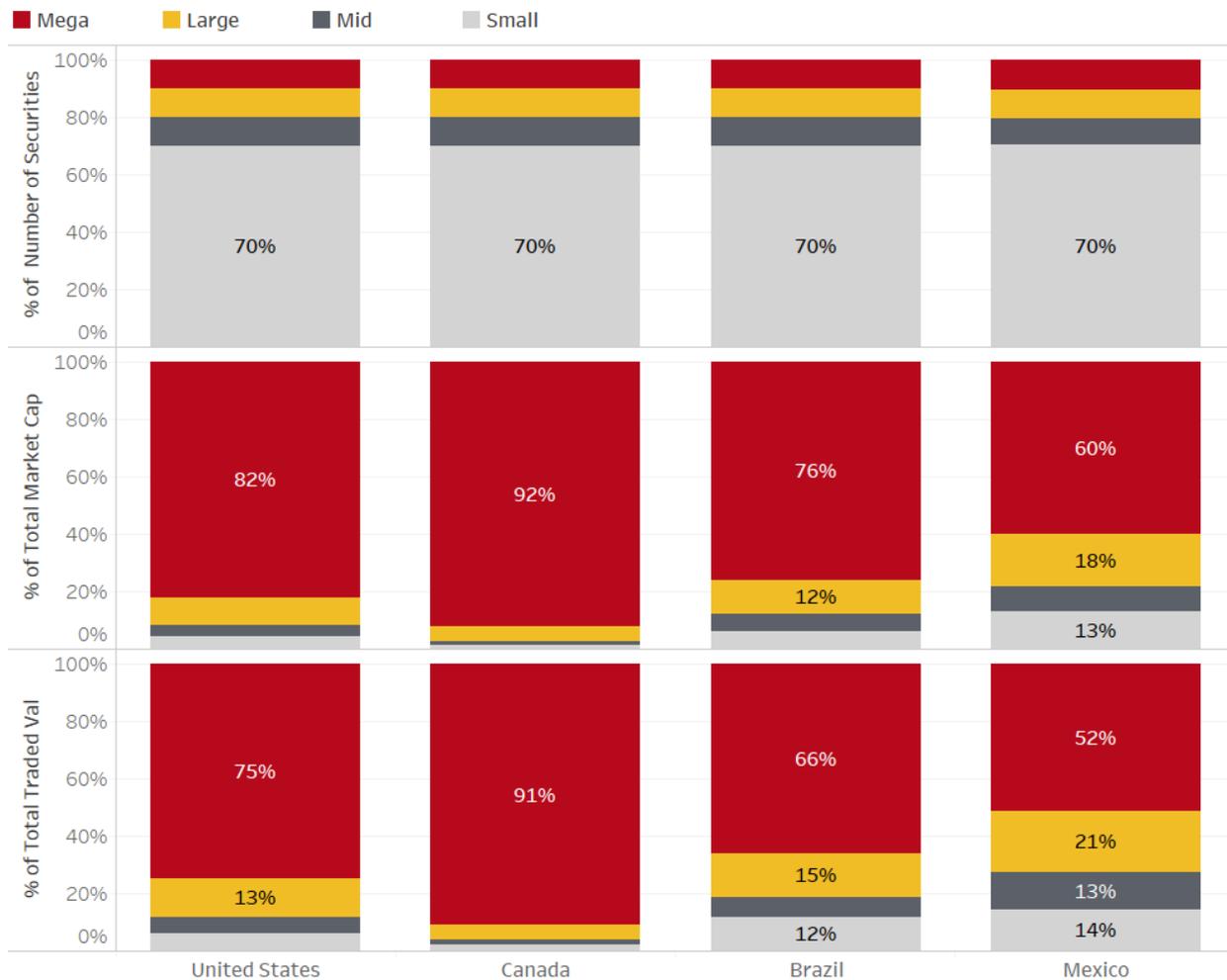
- Trading activity increased overall this quarter, marred by a decline in the last week of the month
- The last hour of trading was distinct from the rest of the region in that despite much higher traded volume, bid/ask spreads during this period were significantly higher as well

- **Mexico:**

- The most diversified market in the Americas region, with large caps accounting for only 52% of market traded volume
- The close auction accounted for a substantial proportion of volume for Large Caps (14%), but an insignificant amount for Small Caps (1.9%)



I. Trade Concentration



The charts show the percentage of total securities, of total market capitalization and of total average daily value traded across market capitalization categories for the United States, Canada, Mexico and Brazil. Please see Glossary for more details

Source: Instinet

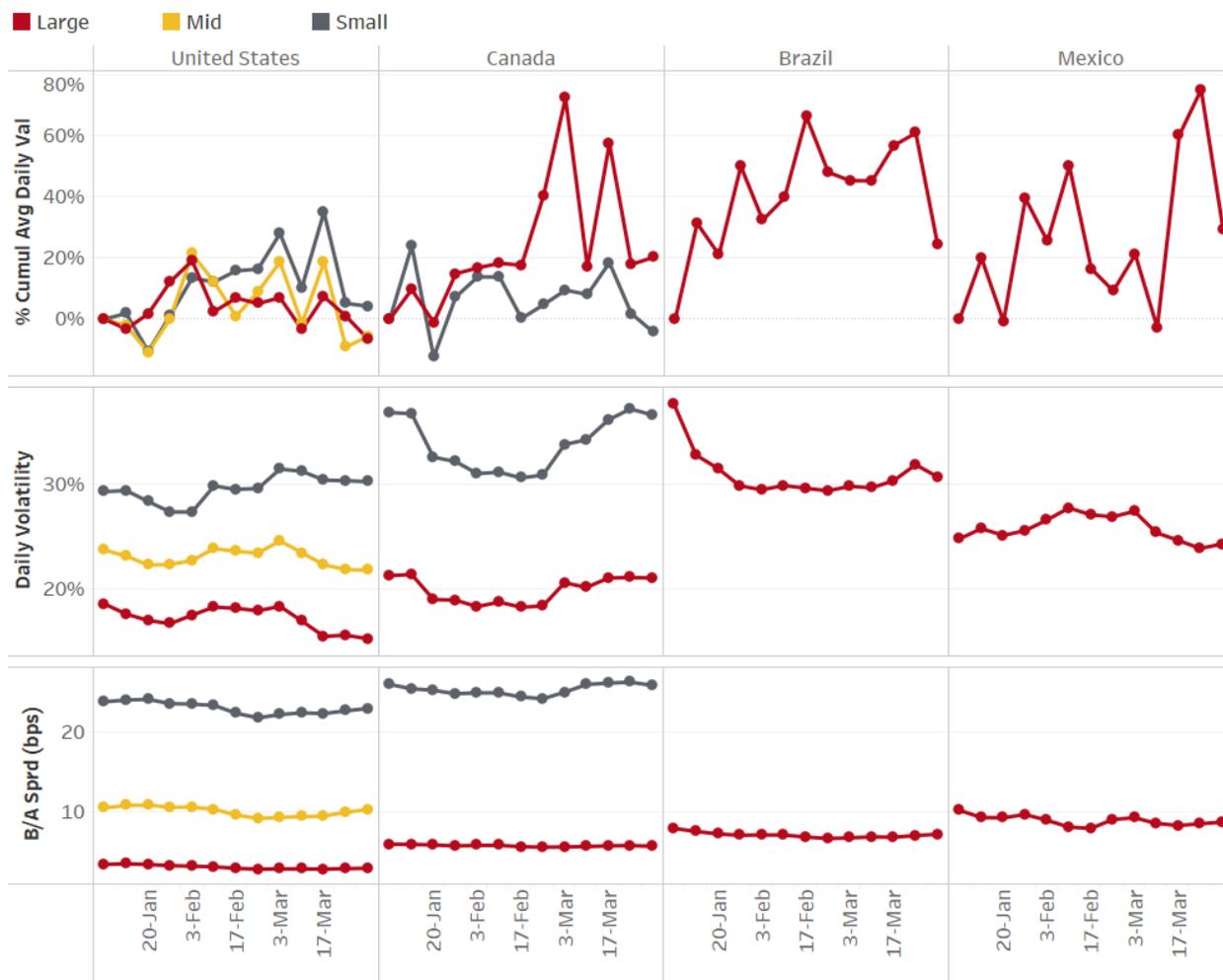
Across the region, Canada was the most concentrated market in terms of trading activity and market cap. Over 91% of the market cap and traded value in Canada was concentrated in the mega cap group. On the other hand, Mexico had the greatest diversity of trading activity, with only 52% of traded value attributable to the 10% of securities with the highest market cap.

This distribution of available volume directly affects trading costs, thus making small caps in Canada particularly expensive to trade, even when compared to Mexico and Brazil securities (as highlighted in Section III).



Market Structure Trends Americas Q1 2017

II. Liquidity Trends: Daily Value Traded, Volatility, Bid/Ask Spread



The charts above show the 5-day average daily value, 30-day volatility and average quoted spread per week during the quarter.

Source: Instinet

Average daily value traded and volatility varied significantly through the quarter, with U.S.-related events amplifying volume fluctuations across the region without a consistent directional trend. Volatility, however, generally declined across the board.

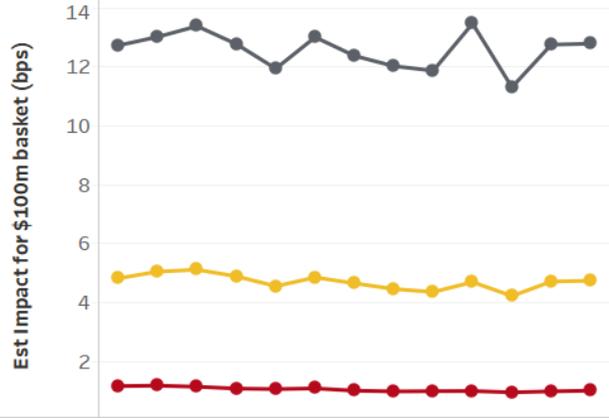
Bid/ask spreads in the United States and Canada declined slightly over the quarter. It is interesting to observe that large cap stocks in Brazil and Mexico have quoted bid/ask spread values broadly similar to those of mid-cap stocks in the United States.



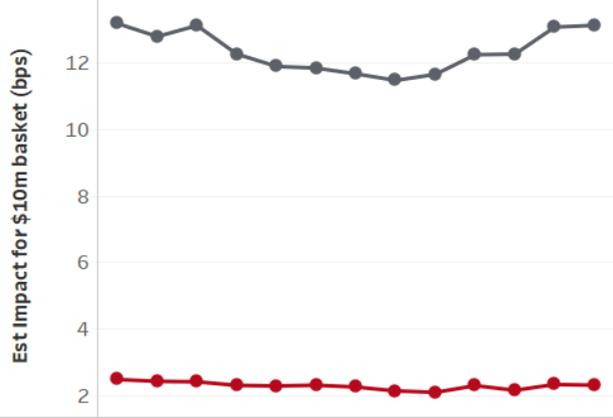
III. METRIC Estimated Impact Costs

■ Large ■ Mid ■ Small

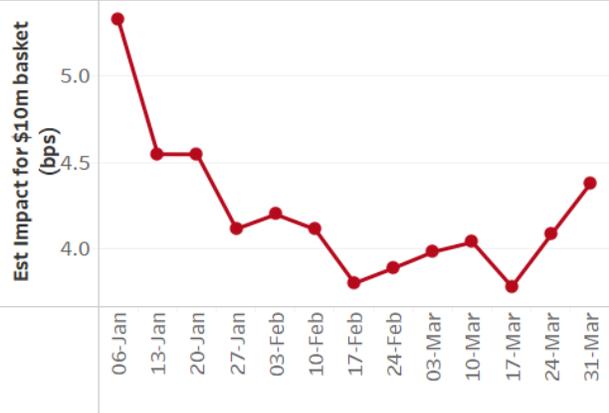
United States: \$100m



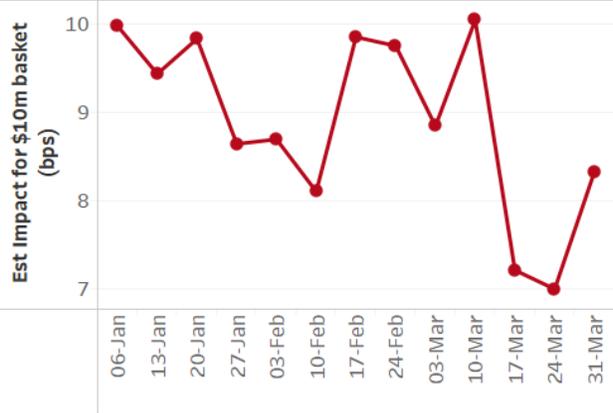
Canada: \$10m



Brazil: \$10m



Mexico: \$10m



This chart indicates the estimated cost of trading an index basket of a specified size using a 1-day VWAP trading style, estimated using Instinet's METRIC model.

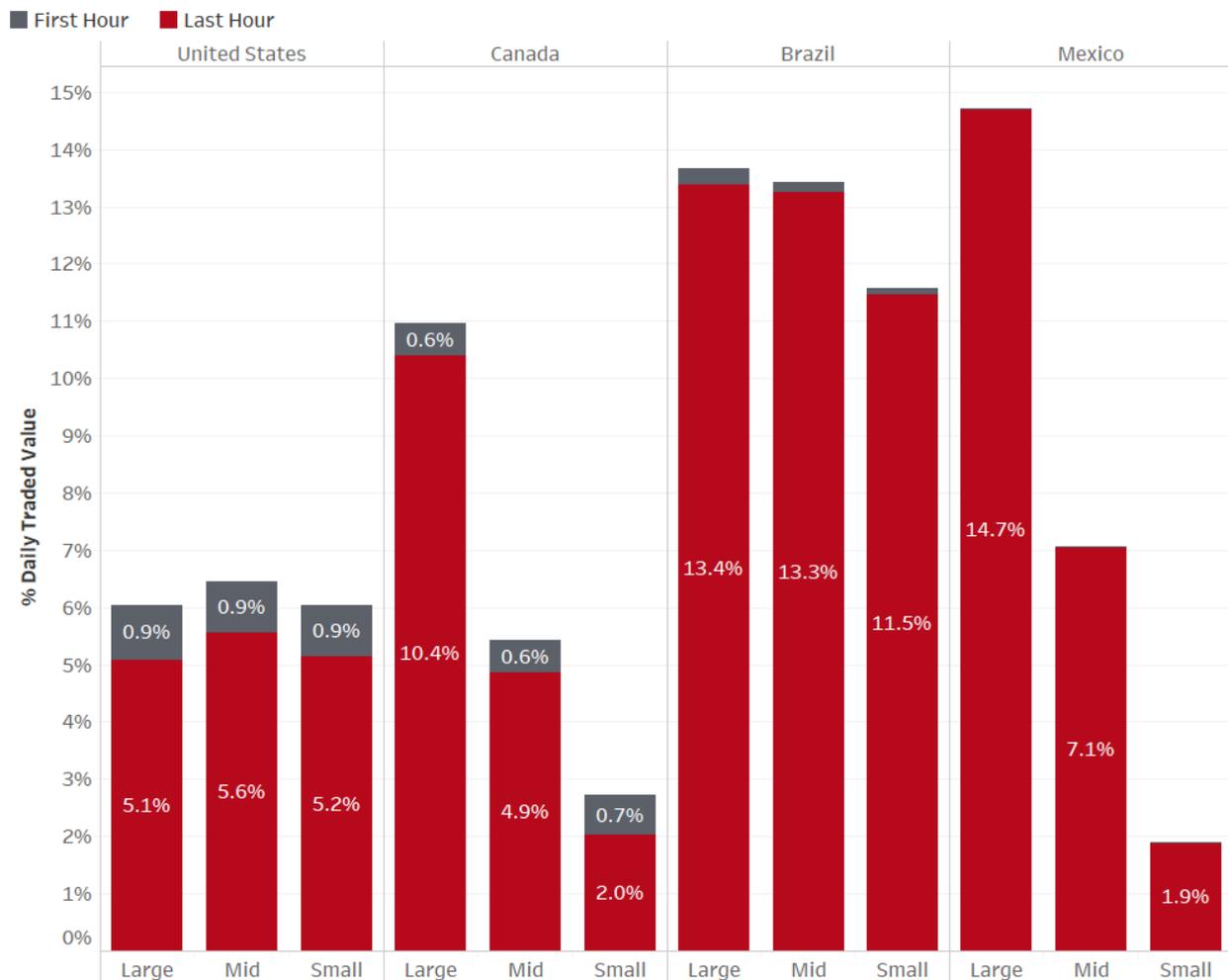
Source: Instinet

As expected, U.S. execution costs were the lowest across categories. Large cap costs showed a slight decline due to decreasing volatility. However, trading costs in smaller cap stocks were primarily influenced by fluctuations in volume, as shown in Exhibit II on page 4.

Although volatility in Mexican markets is lower than Brazil, and bid/ask spread numbers are comparable across both markets, the trading costs in Brazil are around half those seen in Mexico. We believe this is largely attributable to larger available trading volume. Both markets saw a general decline in trading costs over the quarter. However, Mexico saw a much larger variation in February and March, in line with changes in traded volume.



IV. Auction Participation



This chart displays the auction volumes as a percentage of daily traded volume, aggregated by country and market capitalization group. Please see Glossary for more details.

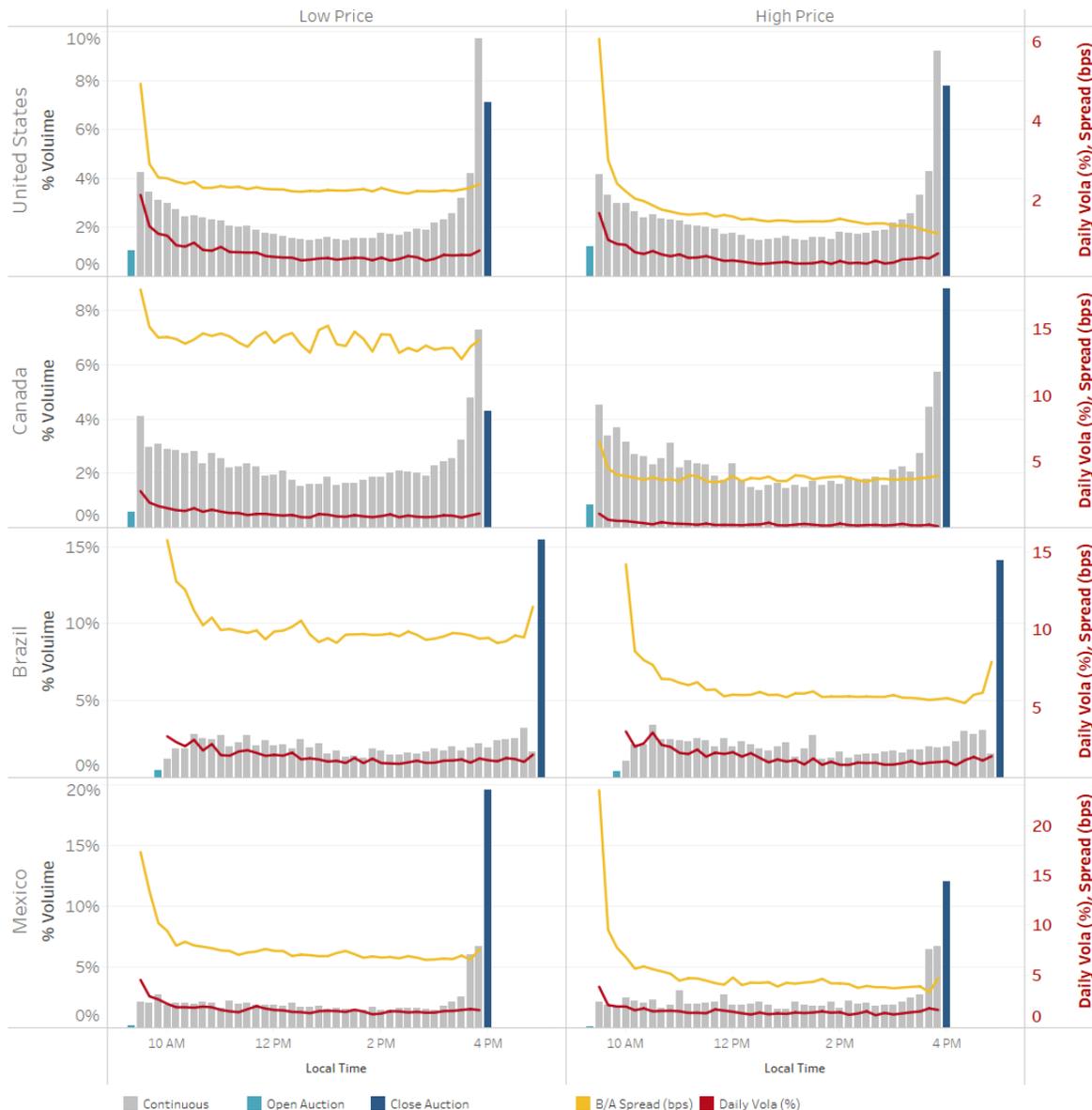
Source: Instinet

In terms of auction participation, there is considerable variation between the developed and emerging markets. Across all countries, the close auction clearly dominates in terms of traded volume. However, this proportion is much higher outside the U.S. (upwards of 10% vs. ~5% for large cap).

An interesting pattern exists in markets outside the United States: as market cap reduces, participation in the closing auction declines dramatically. This effect may be attributable the relatively lower passive investor interest in and the use of portfolio/liquidity optimization techniques to reduce exposure to these categories.



V. Intraday Profiles: Volume, Volatility, Spread



This chart displays continuous volume in ten-minute buckets compared to daily traded volume, bid/ask spread versus mid-price and volatility based on five-minute price returns scaled to a daily basis. These are aggregated by country and price groups. Please see Glossary for more details.

Source: Instinet

We compare the intraday profile variations by price band across countries. Comparing liquidity profiles by price group, high-priced stocks had higher close volumes in the U.S. and Canada. This effect, however, was reversed in Brazil and Mexico.

Bid/ask spreads on higher-priced stocks showed a much wider variation across the trading day. On the other hand, spreads on lower-priced stocks were more stable, constrained due to their tick size.



Glossary

Trade Concentration:

The charts show the percentage of total securities, of total market capitalization and of total average daily value traded across market capitalization categories for the United States, Canada, Mexico and Brazil. Market capitalization categories are defined by the proportion of total number of traded securities in the country, with the 10% highest market capitalization securities in the “Mega” category, the subsequent 10% in the “Large” category, the subsequent 10% in the “Mid” cap category and the remaining 70% classified in the “Small” category.

Liquidity Trends: Daily Value Traded, Volatility, Bid/Ask Spread

The charts below show the average daily value, 30-day volatility and average quoted spread per week. Average daily value is calculated across the prior five trading days on a weekly basis. The chart represents the cumulative change in average daily traded compared to the first week of the quarter. Volatility is calculated weekly as the 30-day close-to-close volatility. These values are aggregated across market capitalization categories and countries using index weights to calculate averages. We use the following indices to represent large, mid and small cap categories per country:

Country	Market Cap Category	Index
US	Large Cap	S&P 500
US	Mid Cap	S&P Midcap 400
US	Small Cap	S&P Smallcap 600
Canada	Large Cap	S&P/TSX Composite Index
Canada	Small Cap	S&P/TSX SmallCap Index
Mexico	Large Cap	Mexican Bolsa IPC Index
Brazil	Large Cap	Ibovespa Brasil Index

Liquidity Trends: METRIC Estimated Impact Costs for \$100m basket

This chart indicates the estimated cost of trading a basket composed of the constituents of an index of a pre-specified size, using an open-to-close VWAP trading style over one day, computed using Instinet’s METRIC model. This cost includes the market impact and spread cost. The primary inputs into this model include available volume, bid/ask spread and volatility. We use the following basket sizes to compute estimated impact costs.



Market Structure Trends Americas Q1 2017

Country	Market Cap Category	Basket Size
US	Large Cap	USD 100 million
US	Mid Cap	USD 100 million
US	Small Cap	USD 100 million
Canada	Large Cap	USD 10 million
Canada	Small Cap	USD 10 million
Mexico	Large Cap	USD 10 million
Brazil	Large Cap	USD 10 million

METRIC, the **Model-Estimated TRade Impact Cost** model, provides a quantitative approach to estimate the execution costs and associate risks given the pre-trade inputs. This model was developed from a combination of empirical studies and theoretical derivation. It is adaptive to trading strategy and is intraday and multi-day aware. It is available via Instinet's analytics tools including TradeSpex and Indigo, and can also be delivered as cost curve data files or as automated execution cost reports as needed.

Auction Participation:

This chart displays the auction volumes as a percentage of daily traded volume, aggregated by country and liquidity group. The aggregation is performed using an average weighted by the daily traded value over the past 20 days. The "Large" category collectively accounts for 50% of the country's traded value, while the "Mid" and "Small" categories each account for the subsequent 25%.

Intraday Profiles: Volume, Volatility, Spread

This chart shows a breakdown of intraday volume, volatility and effective spread profiles during the continuous trading session, by country and stock price. These charts do not include open and close data. We use the following indices to represent the securities in each country:

Country	Index
US	S&P 500
Canada	S&P/TSX Composite Index
Mexico	Mexican Bolsa IPC Index
Brazil	Ibovespa Brasil Index



Market Structure Trends Americas Q1 2017

We use the median price of the index constituents to determine the “high price” and “low price” categories. Aggregations within groups are weighted by average daily traded value. Volume profiles are displayed as percentage volume in ten-minute buckets. Volatility is based on five-minute price returns and expressed in daily percentage point terms. Bid/ask spread is shown as a ratio to the mid-price in basis points.



Notices: The information, tools and material presented in this communication have been prepared or distributed by individual Sales Trading personnel of Instinet, LLC, member SIPC ("Instinet" or the "Firm"), based on observations of various market and trading data, short-term market factors or current market trends, including, but not limited to, trading volumes, oversold/undersold indicators and other technical information, market color, published news stories and research prepared by Instinet affiliates. It is not a research report. It does not constitute an offer or solicitation with respect to the purchase or sale of any security. Any views expressed are those of the individual sender, except where the message states otherwise and the sender is authorized to state them to be the views of any such entity. Any views expressed may differ from, or be inconsistent with the views of other sales and trading personnel or the long-term views of research analysts employed by Instinet's affiliates. This communication is provided on an "as is" basis and is approved for distribution to institutional clients only. This communication contains material that is owned by Instinet or its licensors, and may not, in whole or in part, be (i) copied, photocopied or duplicated in any form, by any means, or (ii) redistributed, posted, published, excerpted, or quoted without Instinet's prior written consent. Affiliates of Instinet may receive this communication simultaneously with Instinet clients. Please access the following link for important information and instructions: http://instinet.com/docs/legal/le_salestrading.html.

Approved for distribution: in Australia by Instinet Australia Pty Limited (ACN: 131 253 686 AFSL No: 327834), which is regulated by the Australian Securities & Investments Commission; in Canada by Instinet Canada Limited member IIROC/CIPF; in Europe by Instinet Europe Limited, which is authorized and regulated by the Financial Conduct Authority; in Hong Kong by Instinet Pacific Limited, which is authorized and regulated by the Securities and Futures Commission of Hong Kong; in Singapore by Instinet Singapore Services Private Limited, which is regulated by the Monetary Authority of Singapore, a trading member of The Singapore Exchange Securities Trading Private Limited and a clearing member of The Central Depository (Pte) Limited; and in the US by Instinet, LLC, member SIPC.

©2017, Instinet Incorporated and its subsidiaries. All rights reserved. INSTINET is a registered trademark in the United States and other countries throughout the world.

You have received this material because you are an institutional investor that has expressed interest in receiving market commentary provided by Instinet, LLC. If you have received this in error, please alert sender to be immediately removed from the distribution.

