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## **Dancing With Myself**

### How internalized flow can impact other parties

#### **HIGHLIGHTS**

- Internalization levels continue higher in Canada
- Despite increased internalization, Canada share of interlisted volumes declines. We will argue that it is time for industry and regulators to come together and form a strategy around segmentation and internalization designed to improve the quality and perception of Canadian equity markets.
- Omega outages raise questions about fair access
- Real-time data fees continue to rise
- A deeper look at anonymous trading in Canada

The second quarter, in Canadian equity trading, can best be described as quiet, both in terms of market activity and market structure changes. While the last several quarters have witnessed the introduction of new market proposals, this past quarter was more of a waiting game as regulators weigh the proposals still before them. That said, even a slower quarter in Canadian market structure is reasonable busy by international standards.

### **Increased broker internalization**

The biggest story in Canadian equity trading continues to be the rise of broker internalization of retail flows. The level of dealer trading that is same dealer on both sides, matching on market, has grown significantly over the past few quarters. This past quarter saw the top 5 internalizing firms match themselves on the board over 6.5 million times, on TSX-listed issues alone. The percentage of orders matched by same dealer has risen by over 10% in the past six months alone. The recent uptick in such activity has led us to field an increasing number of inquiries around the subject. As such, we are going to spend a few paragraphs outlining what we are seeing in the market, and sharing our thoughts on how such activities may be affecting the quality of the Canadian market overall.

We must be very clear that our careful analysis of the data shows no evidence of anyone breaking the rules. Instead, we find a growing number of dealers using a variety of mechanisms to better increase the odds of trading with themselves in the market. These mechanisms range from simply routing orders in a more dynamically informed manner to venues where the dealer is already resting orders, to sophisticated use of exchange market-making program benefits, aggressively quoting names the firm is most active in, all the way to behaviors that appear to anticipate slightly larger orders about to cross the spread and join the bid or offer to capture that spread. In each case the order exposure rules, as well as any rules around systematic internalization, appear to be adhered to.

This may lead readers to pose the rather obvious question: If no rules are being broken, why do we care? We would argue, that depending on the manner in which the internalization is being achieved, it can be either positive or negative for the marketplace. By way of example, a firm that significantly increases the size and scope of quotes its market-making arm places in the market, in a manner that is accessible to all marketplace participants, is adding liquidity to the entire process. Even if that firm is doing so only on the most liquid names, it would be difficult to suggest it is doing harm relative to other, non-internalizing market makers. On the other hand, firms that are using market-maker mechanisms, or other such devices, to internalize flow without assuming the risk of trading with other participants may well be impeding the ability of other investors to capture the spread. This potential harm explains both the frustration with and the catalyst for all the various exchange market-making features that have recently been approved or are awaiting such approval.

Beyond the potential harm to natural investors, who actively assume the risk of posting orders in lit and dark markets and thus inform price discovery, such internalization can potentially harm the participants being internalized. If, for example, the flow being internalized is routed in a manner designed to avoid being price-improved by dark orders, to better ensure the internalizing firm a fill on the proprietary book, then the active internalized order is harmed as well. Ironically, after years of publishing on the public tape which orders were being routed with the bypass marker, and thus not interacting with better priced dark liquidity, such markers were made non-public earlier this year. This change has made it dramatically more difficult for retail clients to determine if their order was routed in a manner that allows for price improvement. Further, to the extent that retail orders are being delayed while the internalizing firm positions itself in the lit book, the retail client bears the risk of an adverse quote move during that delay,



without the benefit of price improvement one would gain in US-style wholesale mechanisms.

While flows from such internalization shift from one market to another, we see continued competition among the trading venues to create both the mechanisms and fee structures that are most attractive to internalizers. While competition is generally very positive, competition for a single type of flow can—and we would argue has done—incited markets to design structures that are attractive to such flow at the expense of others. The real issue with the current system, in our minds, is the lack of clarity around what will be deemed acceptable. We have had conversations with executives at several Canadian trading venues who have admitted they are unclear what proposals will be approved. Several venues have suggested to us that this uncertainty has led them to be more aggressive in their asks to defend against the possibility of another venue's being more accommodating to the internalizers. The lack of clarity also makes it difficult for market participants to strategize around their own businesses, as they are less sure of what the competitive landscape it likely to look like. While we always appreciate the incredibly difficult task put to market regulators, we strongly urge them to make public the criteria around internalization that will facilitate more informed discourse and will allow for objective analysis of the proposed roadmap versus historical Canadian equity trading structures.

Loyal readers may recall our analysis in the last quarterly update of the old Alpha IntraSpread mechanism, which was shut down post the 2012 dark rules, versus current and proposed mechanisms. We demonstrated how the IntraSpread mechanism—of which we were not fans—was objectively superior to mechanisms now on offer. Having a well defined set of rules around internalization would allow for more such analysis and would foster better debate. Canadian regulators have historically been very wary of internalizing, as evidenced by IROC's study of internalization in the IntraSpread vehicle. It is both surprising and disappointing that regulators and other senior members of our market have not been more vocal, given the obvious and dramatic rise of internalization in our markets.

While exchanges, dealers and regulators slowly work toward some equilibrium, the buy side needs to understand how such internalization is affecting orders you route to different brokers. Some of the brokers that are aggressively internalizing flow attempt to use this as marketing fodder for their services, so clients need to understand whether they are internalizing in a manner that makes their own flow more accessible to other clients or are routing in a way to capture the juiciest flow themselves. Ultimately, TCA results on a suitably large sample should highlight which dealers are achieving the best results, but it can be instructive to understand how such results are being affected. It is important to understand whether internalizing flow occurs in a manner that benefits the prop book to the detriment of other clients. Additionally, understanding if flow is being routed in a manner that makes larger institutional flow more apparent, and thus gameable, should also be of great interest. Not surprisingly, clients are increasingly asking not just about how their own flow is routed, but also how other sets of flow are routed, to understand how they might interact with such flow or what signals may be given out to the street. To the extent that clients are trading under a broker's number, as opposed to using the anonymous broker code, such requests are perfectly acceptable, in our opinion.

This highlights one interesting portion of the internalization discussion. Currently the broker preferencing mechanism, used by most Canadian lit venues, does not automatically internalize same-dealer flow where one or both sides are trading under the anonymous code. As we wrote last quarter—and will discuss at greater length below—the use of anonymous (or Broker 1) has grown significantly in



recent months, leaving us to conclude that greater than 50% of the institutional volume matched on market is now marked as anonymous. As use of broker preferencing increases, a renewed industrywide discussion of the preferencing matching priority, with its current limitation, is likely to play out.

We believe that regulators and practitioners need to come together and determine what limitations, if any, we want to place on broker internalization. A key driver of recent segmentation and internalization devices has been a clearly stated desire to keep trading flow on interlisted names within Canada. Despite this we continue to lose share to the US market at an alarming rate (see chart below). **Given the increased levels of internalization and intermediation in the Canadian market, we should be gaining interlisted volume share, not losing.** This is alarming.

Not that many years ago, the regulators instituted dark liquidity rules to protect price discovery and limit internalization mechanisms. We are currently heading toward far greater levels of internalization than we had at that time, and in a manner where other participants cannot easily participate in the trade, and end users receive little if any benefit without an industrywide strategy or accepted endpoint. Without a clear goal, it is extremely difficult for anyone to appreciate whether a given proposal will bring us closer to our vision and to determine which proposals should be approved. In recent years, the industry has held successful events to discuss dark trading and separately keeping flow within Canada. We believe that such an event to discuss segmentation, speed bumps and internalization would greatly help all market stakeholders better understand the problem and appreciate the merits of many potential solutions and strategies.

We would encourage all participants trading the Canadian market to consider the impact that increased internalization is having on your own trading results and the changes in behavior that may be required. We are always happy to discuss, debate and consult on such matters.

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### Canadian Share of Volume in US/Canadian Interlisted Names



Source: ITG Canada

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(Note that the outlier result in August 2016 resulted largely from a single name, which typically trades more in the US, experiencing very high volumes as a result of news. The trend, rather than single monthly results, is the key point.)

#### Omega issues

On June 19, Omega experienced technical issues that led to a sudden shutdown of the trading engine in a manner that left several market participants unable to get “outs” on resting orders on the Omega book. Such one-off issues happen to all technology vendors, but the handling of this issue caused some concern for firms that rest significant flow on the Omega venues (Omega and Lynx). Unfortunately for Omega and the street, market data issues arose a few days later and lasted more than a week, leaving some market participants with unreliable data from the Omega markets. As a result of the persistent problems and concerns lingering from the June 19 outage, many industry participants significantly curtailed their activity on the venues. Omega market share was cut in half for the first week of July and remains ~20% below pre-June 19 levels.

Omega’s problems lend themselves to a larger discussion of marketplace outages and technology advancements in general. From late June to early July, some participants had different access to Omega’s real-time market data. This leads to a potential issue of fair access: Some participants had access to a liquidity pool, while others were unable to access it in a reasonable manner. We have seen similar issues in the past.

In the early part of this century, the TSX had issues resulting in only some brokers being able to trade Nortel, while others were shut out from trading the name directly. Not surprisingly, this problem occurred when Nortel was experiencing a major price move (down) and was the most active name trading in Canada.

A few years later, in 2009, the TSX experienced issues with one of its two major data feeds, leaving some dealers unable to access real-time data. At the time, the TSX used TL2 and TBF feeds, and most dealers’ technology used one of the two feeds, but were unable to switch feeds to circumvent the data feed problems. After this event, the TSX hosted a meeting with senior executives from many of the major Bay Street dealers to discuss how such issues would be handled in the

future. No final solution was committed to paper, but the TSX did suggest it would consider shutting down if one major feed failed, rather than continue to trade when its own technology issues kept a large portion of the street from accessing the market efficiently.

The recent Omega issue highlights the need for the industry to have a protocol for handling outages that affect only a portion of dealers. If a venue is out to all, then everyone can easily move trading to other venues and carry on. (OK, if it is the primary market, this may be more difficult, particularly as it affects opening and closing auctions, but at least all participants are on a level playing field.) But what do we do when a venue's problems affect only some participants? Does it make a difference if the venue is protected or not? Do we treat lit and dark venues differently? Do we treat the primary market differently from others? These questions need to be addressed and settled. In general, we believe that a venue that is inaccessible to some participants, due to either its own technical issues or issues with one of its vendors, should be turned off for all participants until it is up and running properly. That said, depending on how many participants are affected, we appreciate that an exemption may need to be made for the primary market to ensure a relatively smooth closing auction. While such outages don't happen often, we urge the regulators and marketplaces to come together to form guidance before the next such occurrence.

It is worth noting that Omega's outages were the result of a large technology upgrade it undertook. Canada has had far more than its fair share of such upgrades in the past few years. In just the past three years, the street has had to accommodate new technology from TMX (four separate rollouts of the Quantum XA trading engine), Aequitas (its initial rollout), Omega (upgrade to new engine), CSE (upgrade to new engine) and Nasdaq (migration to Nasdaq technology from Chi-X technology). The last three have taken place in just the past 12 months. On top of this are numerous data feed upgrades, speed bumps, system changes and the introduction of new order types and markers. Each introduction or upgrade comes at significant cost to the street. Dealers must mobilize costly resources to accommodate the technology changes, often at the expense of more quickly introducing improved tools to their own clients.

Such upgrades are frustrating in the best of times, when marketplace technology is meaningfully improved. Frustration becomes exasperation when the "upgrade" is done to introduce market making or speed bump mechanisms that are unwanted by the majority of participants underwriting the cost and risk. On top of the recent migrations, the TMX Group is openly contemplating a migration of the equity and derivative trading engines sometime in 2018 to realize the benefits of running a single trading platform. The plethora of trading engine changes, which typically cost member participants significantly more, in aggregate, than the marketplace itself, suggests we may need to reconsider how such changes are ultimately paid for. Exchanges that force clients to make expensive technology and resource spends should be required to make the street whole, though either demonstrably better market quality or reductions in access or data fees. Shifting the burden of changes to the trading venues would ultimately force them to make more responsible decisions.

#### **Data fees**

This brings us to the continuing saga of Canadian real-time market data fees. As of August 1, Nasdaq increased its fees for level 1 and 2 quotes across both its Canadian lit venues by 64%. This increase was approved by Canadian regulators, and it recognizes the dramatic increase in market share that Nasdaq has earned since it last set price. We have two distinct yet related issues here, both of which are with Canadian data fees in general, not Nasdaq specifically.



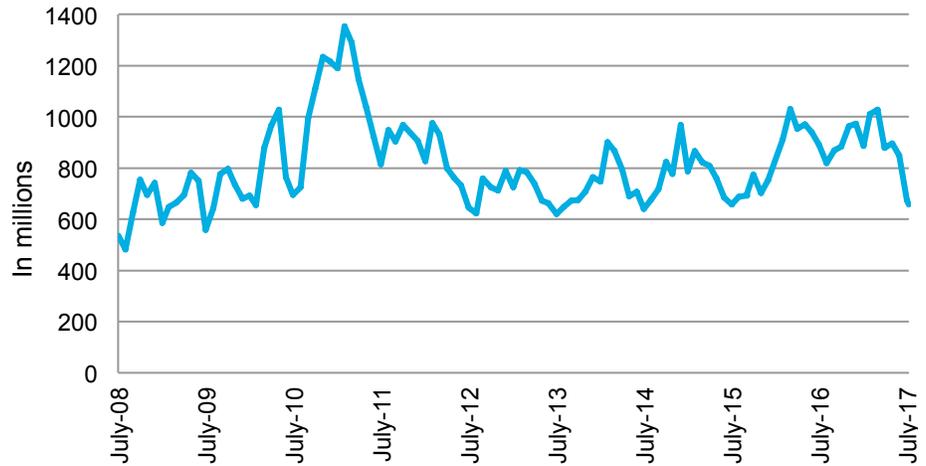
First, while Nasdaq has been allowed to increase its data fees to reflect growing market share, we have not seen corresponding decreases in data fees from other venues. TMX Alpha has announced fee reductions that will take effect in October, but other venues that appear to charge fees that are out of line with their contribution have not announced any such decrease. We are led to believe that multiple venues are fighting regulators on forced fee reductions. It is unacceptable that venues are allowed to increase fees quickly, while those that need to decrease fees drag their feet and continue to overcharge. We would argue for more transparency from regulators around price setting, so that industry participants can appreciate which venues are setting fees at relatively fair levels and which venues are exacting unfair rents.

Of far greater concern is the overall level of Canadian data fees. In 2011, the IIAC commissioned an independent report that clearly demonstrated that Canadian data fees were out of line with global peers. Since then, Canadian fees have increased significantly, despite decreases in the cost of technologies needed to create and store such products. While the unique intricacies of each market's data products make it nearly impossible to produce a perfect comparison in pricing, we believe that most consumers pay more for Canadian real-time data than they would for similar US market data. As the US market is 10-15 times larger than the Canadian market (depending on whether you measure by volume or value traded), the cost of Canadian data is clearly at unacceptable levels. The Ontario Securities Commission has long promised an independent review of Canadian fees versus global peers. We urge the regulators to press on with this study as quickly as possible. High fees act as yet another disincentive for international investors to participate in our market. We should be doing everything we can to make Canada the most attractive market possible for investors, rather than allowing commercial entities to exact oversized rents that harm the robustness of Canadian capital markets as a whole.

#### **Market stats of note**

Overall Canadian volumes have been light, but not below historically low levels. As discussed last quarter, swap unwind activity in late March and April created an impression of market liquidity that was clearly overstated. Since the end of April this activity has largely ceased, creating a volume drop-off that is more dramatic than the drop in achievable liquidity.

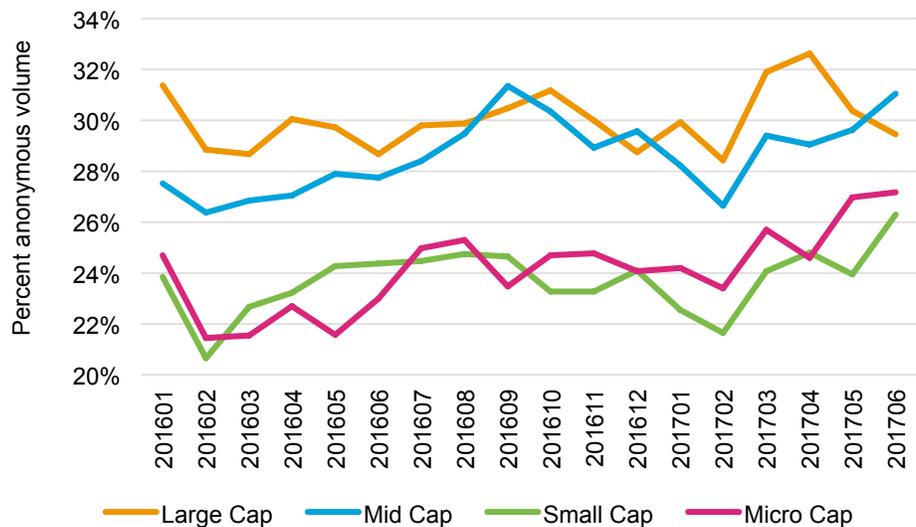
### Total Canadian Trading Volume



Source: ITG Canada

Last quarter we discussed the growing nature of anonymous volume in the Canadian market. This quarter we decided to dissect that stat, to better understand where the anonymous code is being used and to help clients better determine which orders are best suited for anonymous trading.

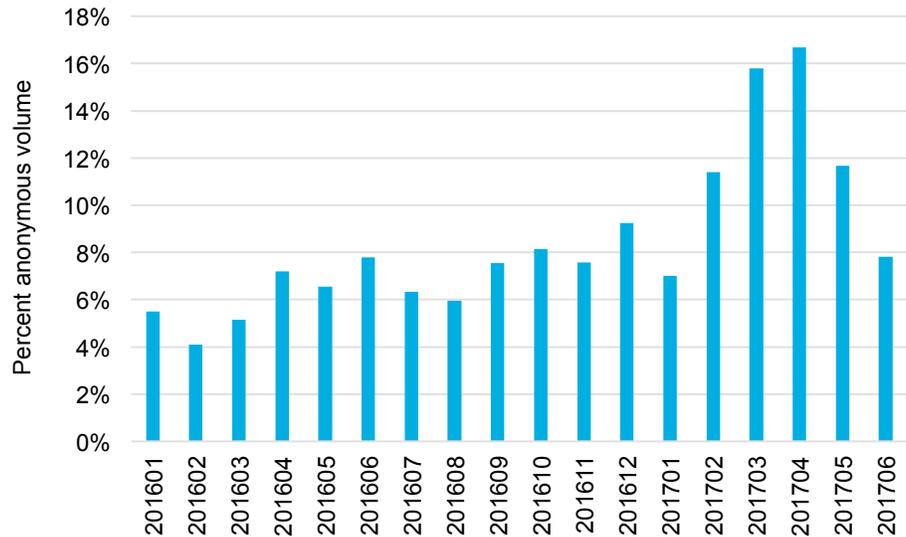
### Anonymous Market Share by Market Cap



Source: ITG Canada

Not surprisingly, large-cap stocks have higher levels of anonymous trading than do low-cap stocks. This is likely driven by the greater participation of institutional flow in such names. Institutional traders are far more likely to trade under the anonymous code than are retail brokers.

### Percent of Block Volume Marked Anonymous

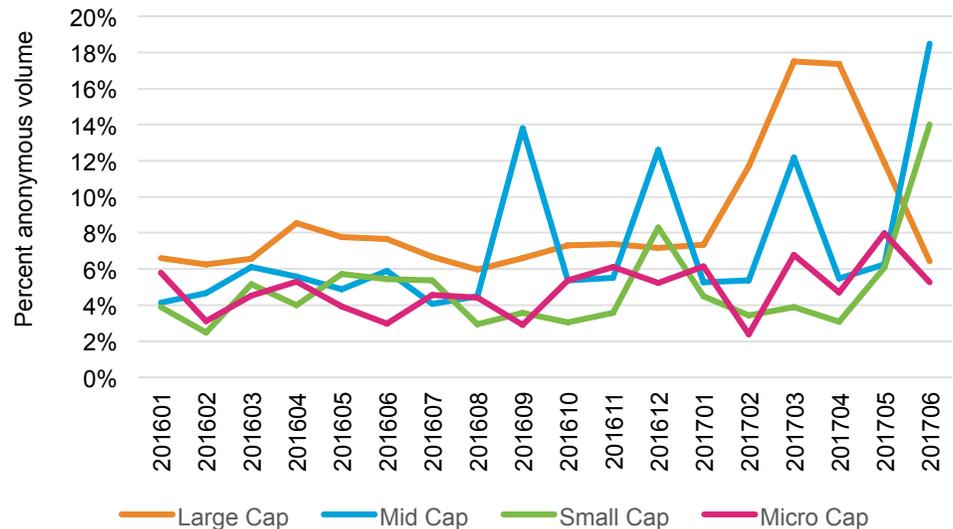


Source: ITG Canada

In general, ~8% of blocks are marked anonymous. This number spiked during the aforementioned swap unwinding in March and April.

Interestingly, if we break this out by market cap we see a very distinct recent uptick in small and mid cap blocks being marked anonymous.

### Percent of Block Volume Marked Anonymous by Market Cap



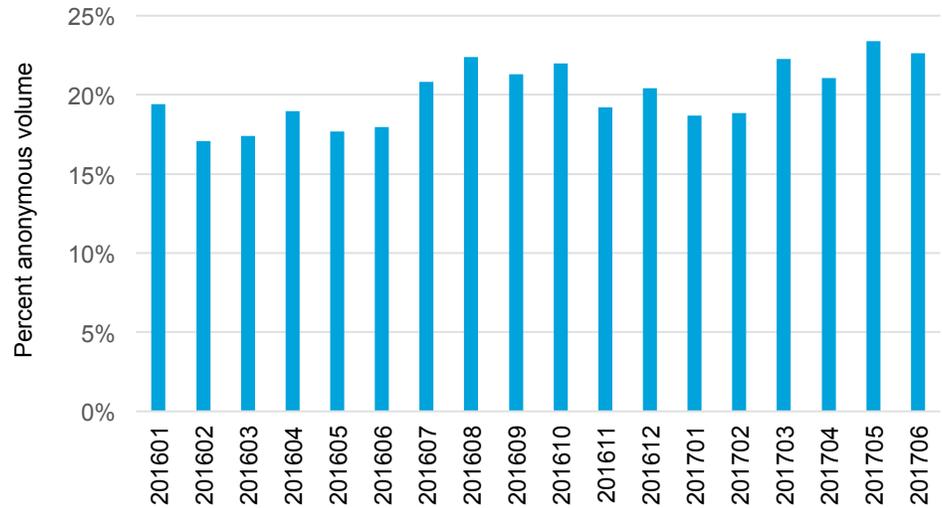
Source: ITG Canada

Again we see a significant uptick in large-cap blocks traded as anonymous during the swap unwind period. This number then reverts to historic levels as unwind activity dissipates.

Finally, we look at the level of anonymous usage for ETFs.

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### ETF Volume Marked Anonymous



Source: ITG Canada

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Not surprisingly, ETFs' usage of anonymous is significantly below the overall 30% level. This is best explained by the high levels of retail use of ETF products relative to single stocks, and the nature of ETF price discovery where information leakage around order intent is less impactful than on single stocks.

We cede the final words of this quarter's update to internalization thought leader Billy Idol:

*If I had the chance  
I'd ask the world to dance  
And I'll be dancing with myself*



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