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2015 Canadian Market Structure Forecast

2015 is shaping up to be a challenging year for those trying to capture liquidity in the Canadian equity markets. A sharp selloff in oil late in 2014 has largely emptied the pipeline of financing deals in the energy sector. This will challenge dealer profits, and almost certainly reduce the ability of all but the largest dealers to put up facilitation capital. At the same time continued evolution in the structure of our markets, in the form of new markets, new rules and significant changes to existing markets, will provide short to medium term advantages to the small number of proprietary and agency firms truly capable of understanding and adapting to such evolution. Changes to the TSX MOC facility, Alpha, MATCH Now™, and the Order Protection and Dark rules, along with the introduction of two trading books at Aeguitas in Q1, will force traders to once again spend more time on understanding market structure than they may prefer. If there is an underlying theme for 2015 it is the continued evolution and complication of market structure to the advantage of those that invest time and the disadvantage of those that do not.

Without further ado, we present out list of forecasts for 2015.

- 1) Frustrated regulators will shock the world by repealing the Canadian dark rules to prevent retail order flow from heading to U.S. markets
- 2) Changes to the Market On Close system will initially frustrate users, and significantly change the nature of index trading in Canada
- 3) Final Order Protection Rules will be announced. The proposal that markets must have a minimum market share to be protected will be dropped from the final rules.
- 4) Canada will be a taker on T+2 settlement timing
- 5) HFT share of equity markets will increase in 2015
- 6) Big Data initiatives will take hold at Canadian trading venues

7) Changes to the CRM rules, and UK commission rules will result in an explosion of CSA activity in the Canadian market

Before we delve into our predictions for 2015, let's take a very brief look back at our predictions for 2014, and see how they fared.

- 1) We predicted HFT volumes would increase dramatically due to changes in exchange technology. While not all of the technology changes we predicted were finalized in 2014, those that were brought clear increases to HFT participation in our markets. ITG's analysis indicates that order-to-trade ratios increased dramatically, fleeting orders (defined as passive orders lasting less than 1 millisecond before being cancelled) skyrocketed, and the market share of HFT friendly dealers increased as a step function during the various technology upgrades. We can safely say we were correct in forecasting 2014 would be a good year for HFT participants in the Canadian equity markets.
- 2) We predicted that new markets like Aequitas and IEX would force legacy markets to adjust their models. One need only look at the TMX's recent proposed changes to Alpha to see this forecast was spot on. While the proposal is very different from either IEX or Aequitas' offering, the "investor friendly" language, and "speedbump" comes straight from the IEX playbook. TMX's proposed private equity market is another clear example of borrowing ideas from the Aequitas group.
- 3) We predicted several provinces and territories would join the Cooperative Capital Markets Regulatory System (CCMR). While the forecast proved correct, with both Saskatchewan and New Brunswick joining original members British Columbia and Ontario in July, we must admit to being disappointed in the low number of provinces on board. Much work has been done by the four provinces over the past year to consolidate rules, in an attempt to put forth a single set of market regulations.
- 4) We forecast that the regulators would spend 2014 talking about the Order Protection Rules, but would exit the year without making any significant rule changes, or even proposals. We clearly missed with this projection as the CSA put forth a series of aggressive proposals in mid May. The proposals put forth were highly controversial, and the comment letters demonstrated a wide range of beliefs. To date the CSA has not come forth with final rules, and there is no clear view of what such rules will look like. We will discuss this one further in our 2015 forecast.

- 5) We projected that indexers would finally get needed changes to the TMX MOC in 2014. The TMX announced changes originally to be implemented in early December, but pushed those changes back to January 12th in order to avoid implementing a new system shortly before a major quarterly index rebalance. Despite the last minute timing shift, we are taking a full point on this prediction. We will discuss the changes further, along with how they will impact MOC trading in the 2015 forecasts.
- 6) We forecast that 2014 would finally see real moves towards the electronification of other asset classes. While this was true in other markets such as the US, where firms like ITG created a variety of electronic fixed income trading systems the Canadian market managed to stay the course for another year. Electronic markets will one day take hold in the Canadian fixed income and FX arenas, but we will be among the last to make such a move. The introduction of a new CEO at IIROC with a fixed income background can only help the cause. That said, we were clearly wrong to think 2014 would be the year.
- 7) We boldly predicted the Montreal Exchange would open a second trading venue and create fragmentation within its own trading vertical. Of all of our predictions this was the one we deserve the most criticism around. We weren't even close. Like predicting the Cleveland Browns would win the Superbowl, or ABBA would make a comeback as a Metal / Hip Hop hybrid act. A total miss.

By our own score, 4 bang on, 2 close but not quite, and one large egg on our face.:

The Southbound Flow Issue

Much has been written over the past few months about the apparent problem of Canadian retail brokers sending flow in interlisted names to the U.S. market. The proposed changes to the TMX's Alpha Exchange are predicated on the belief that Canadian dealers are routing institutional and retail flow to U.S. wholesalers at the expense of domestic public markets, and that such routing practices "represents a serious risk to the quality of vibrancy of Canada's capital markets as a whole...". We believe that the debate around the routing of interlisted flow to U.S. markets will continue to be the dominant topic in Canadian equity market structure conversations right through 2015.

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¹ http://www.osc.gov.on.ca/documents/en/Marketplaces/alpha-exchange_20141106_amd-request-for-comments.pdf

The regulators are in the unenviable position of trying to protect the robustness of the Canadian capital markets, while simultaneously avoiding protectionist policies and impeding the competitive forces that are needed to drive efficiencies into our marketplace. To date the regulators have taken a number of steps to mitigate the alleged problem.

The regulators started by reaffirming the definition of Foreign Operated Regulated Markets (FORM). Under UMIR 6.3 small orders traded on non-Canadian venues must be traded or printed on a recognized FORM. IIROC sent out guidance in early December clearly stating that U.S. dealer internalizers (the so called Wholesalers) are not FORMs, and as such sending flow to such dealers would violate UMIR rules. (If the flow is sent to a dealer-owned ATS, and trades against said dealer's prop book this is legal – but if sent directly to a non-ATS vehicle for internalization it is not). While this change requires fairly little work for the U.S. dealers to get around, the message is clear – Canadian regulators are serious about putting a stop to the practice of sending flow to the U.S. strictly for improved dealer economics.

In concert with this guidance the regulators have been relying on a heavy dosage of moral suasion. Canadian regulators have taken a fairly aggressive stance in pressing Canadian retail dealers for information about their routing practices, economics and future plans. While not saying that dealers are breaking the rules, and certainly not making any claims about clients being harmed, the regulators are again making it clear they don't like the practice of sending retail flow to U.S. markets.

Finally, the regulators are bringing back Dark Rule Anti Avoidance. Both IIROC and the CSA have made it clear there will be a rule proposal in January that is likely to look very similar to the dark rule anti avoidance proposal of 2012. Under this proposal small orders sent to the U.S. market could only trade in the dark if they achieved the same level of minimum price improvement required in Canada, versus the Canadian NBBO after FX conversions were applied. The rule in 2012 was not implemented as regulators became convinced the solution was far from perfect and would likely put Canadian dealers at a real disadvantage in earning non-domestic flow in Canadian listed names. That the regulators are planning to reintroduce a similar or even identical solution highlights just how concerned they are about flows heading to the U.S. market. That said, we believe this is a clever gambit by the regulators aimed at incenting Bay Street stake holders to come together and form a compromise that will appease retail dealers keen on controlling costs, exchanges concerned about the potential loss of flow to U.S. markets, and institutional investors attempting to gain access to retail flows to create and liquidate large positions. To date, the lack of cooperation and leadership on this issue has been disappointing. The regulators have now set the table for engaged conversations and compromise, with a very real threat hanging over everyone's head should they be unable to come forth with a better option.

Before we offer our own thoughts on possible solutions, we think it is best that everyone take a step back and consider some very key questions.

- 1) How real is the problem we are discussing? While we hear fear mongering from some of the lit venues, we have seen very little in way of real data that Canada is losing market share in interlisted names to the U.S. over the past several months the time frame we are lead to believe everyone is concerned about. Are we selling our house to get away from a ghost that doesn't actually exist, or is this a real issue? In the age of "big data" we believe those pushing for protectionist regulation should at the very least put forth some data to demonstrate the problem is real.
- 2) If the Canadian markets can't adequately compete, should we protect them? This is a very emotional question for many of our readers, as they rely on the Canadian Capital Markets for their livelihood. We are in the very same boat, and appreciate the knee jerk response that Canadian Capital Markets must be protected. But we should at least consider the notion that if the equity markets in Canada are unable to compete with U.S. markets, and entrepreneurs are still able to raise capital, and investors are still able to achieve their desired economic exposures, it might be for the best that we leave the survival of the Canadian markets to the whims of market forces. Realizing the extra costs associated with FX conversions, extraneous routing and reputational risk associated with sending such orders to the U.S., the Canadian markets have a serious advantage in winning this flow. If, despite these very real advantages, we are unable to keep these flows in Canada then perhaps it is best we allow them to be routed to the U.S.. A market that survives off of regulatory protectionism is not typically a very attractive market. This is the very reason the Canadian regulators are so keen to tinker with the Order Protection Rules – to end the frustration of the continued existence of uncompetitive markets sucking at the teat of regulatory protectionism.

We do appreciate those that argue that U.S. regulators – most notably FINRA – have removed exemptions in the last year that had allowed Canadian dealers equal access to northbound flow from U.S. broker dealers – and in so doing have created their own protectionist policies. That said, we do not believe that offsetting protectionist policies have ever resulted in anything more than inefficient pricing and suboptimal markets. We need to be the big boys and girls in this conversation and avoid the protectionist stance.

If, after considering the above questions, we come to the conclusion the problem is real and needs to be addressed then we need to find a solution that will result in the fewest, or most acceptable negative externalities. We offer up the following ideas to start what we believe will be a long, complicated and emotional discussion.

A. Get rid of the Dark Rules that were introduced in October 2012 (i.e. full or half tick price improvement on dark fills for small orders). The problem

of flow being sent to the U.S. markets resulted from the installation of dark rules in October 2012 that put Canadian markets at a disadvantage versus U.S. venues. The Canadian Dark Rules were an arbitrary act aimed at protecting our markets from some yet undefined harm that may, or may not occur when dark trading hits some mythical level of market share. Given the percentage of off-market trading currently is roughly half of what is was during the early part of this century, when nobody was concerned about it, we challenge the notion that such a threat to price discovery was ever truly on the horizon. Academic literature suggests that dark pools augment price discovery and liquidity, rather than harming it.² The issue of flow to the US is a direct result of our attempt to avoid a bogey man that may not exist. We need to seriously consider undoing this rule.

To this end, it will be interesting to see how successful MATCH Now is when it introduces low cost at-the-touch trading on larger orders for interlisted securities in the spring. If the at-the-touch ETF experiment is any guide, we believe MATCH Now will gain reasonable share in interlisted names, and offer a partial solution to the problem of high dealer costs

- B. Protectionist regulation. We can go the route of anti avoidance and force flow to stay within our borders. The issue with this solution is that we risk losing flow in Canadian names that originates from outside our borders. Should a Canadian dealer be at a demonstratable disadvantage to a U.S. dealer in executing orders on Barrick Gold or Blackberry, it is only reasonable to assume large asset managers will send such orders to trading desks in New York, Boston or San Francisco rather than Toronto, Montreal or Vancouver. Ironically the very protectionist regulation aimed at ensuring the continued robustness of the Canadian Capital Markets could well be their undoing.
- C. Cut trading fees at the existing Canadian venues to be more competitive with U.S. markets. Canadian flow heading south to trade for free is less likely to do so, at least for purely dealer economic reasons, if it can trade for close to free in Canada. As highlighted above, the added costs and risks of sending this flow to the U.S. are not desirable, and we believe dealers would be willing to keep the flow in Canada if "take fees" the fee charged, by markets, to the firm taking liquidity were reduced to single digit mills from the 25 35 mills now being charged by the biggest venues.
- D. Allow payment for order flow (PFOF) in the Canadian markets.

 Canadian regulators have long been against such mechanisms, as they

² http://www.itg.com/wp-content/uploads/2009/12/In_Domowitz_120810.pdf

believe such systems incent bad behavior and harm the ability of institutional clients to interact with retail order flow that is benefitting from the price discovery offered up by said institutional client. Ultimately we don't believe the Canadian regulators will walk down this path, and offer up their stated concerns around maker / taker (taker/maker) pricing mechanisms as proof of their dislike of PFOF type economics. We believe the institutional constituents in the markets would also, for the most part, be against such a move.

E. Expedite T+2. In order to find a solution that works we may need to wander off the beaten path into a patch of unexplored fungi and fauna. We propose the following half-baked idea to start the process. What if we expedited the move to T+2 settlement such that trades done in Canada settled a full day faster than U.S. markets. A retail dealer choosing to do their trades in the U.S. market would now encounter significantly more complexity in financing of trades, settlement of dividends and short sells. It would become uneconomic for dealers to underwrite the risk of such a logistically challenging process to save on exchange fees. To be fair this solution is largely unrealistic, as it would pose massive problems for institutional traders accessing both markets to achieve needed liquidity, and create opportunity for a new HFT financing trade that would further complicate and harm markets. But, we offer up the idea to start a new conversation where everything is back on the table. (More on T+2 settlement later on).

Having offered up a few solutions, each of which has serious flaws, we are left with our original task of forecasting what will actually happen. Firstly, we believe that the regulators creative tactic to force the industry to find a better solution will ultimately fail. The incentives of the dealers and marketplaces are currently so misaligned that they will be unable to agree on any proposal. The marketplaces don't currently view anti avoidance as a bad result, and thus will not budge very far on pricing while the dealers' need to control cost is increasing with the tumbling price of West Texas Intermediate Crude. The inevitable slowness in energy banking means cost cutting will be key in 2015, and dealers will not be willing to pay fees they deem unjust. This will force the regulators to ultimately come to a decision. We can safely rule out any solution that involves allowing payment for order flow, as it is counter to the core beliefs of most of the senior regulatory staff we regularly talk with. T+2 is a fun thought experiment, but fails for many logistical reasons. The capping of take fees at levels well below the current level would push the regulators into the position of aggressively regulating price, a position they have clearly stated they do not desire to be placed in. This leaves us with an anti-avoidance policy that places Canadian dealers at a real disadvantage to non-Canadian-domiciled dealers, a solution that will be untenable to many in the industry, including many on the IIROC board of directors, or a reversal on the 2 year old dark rules. Ultimately we believe the choice that is most likely to be successful, and the least

likely to result in legal challenges is the repeal of the dark rules. While many in the regulatory circles will not be happy to make this decision, the rule change has proved to have little to no positive impact on Canadian market quality³, and is believed by many to have caused the very problem they are trying to address. So we are forecasting that in 2015 the CSA and IIROC will repeal the Canadian dark liquidity rules. We suspect most of our readers, and industry practitioners will disagree with us on first reading this, but believe, after working through all currently available solutions, many will warm up to the possibility.

The Market On Close

The TSX Market on Close auction has been a target of criticism since before its inception in April of 2004. While the facility is a massive improvement over the Wild West system that preceded it, it continues to allow for post imbalance publication orders to amplify volatility unlike most mature markets around the globe. 2014 saw two of the worst index rebalances, from an efficient price discovery perspective, in recent years. The September quarterly rebalance, which took place the day after a too-close-to-call Scottish independence referendum, ended up with 13 issues in the S&P/TSX Composite Index not satisfying all market on close orders, even with stocks closing at levels 10% away from the last pre-close tick. This was followed by a December quarterly rebalance that included a couple of surprise S&P/TSX 60 Index additions, one of which perfectly highlights the failings of the existing system.

After the close on December 12th, S&P announced that Alimentation Couche-Tard Class B (ATD.b) shares would be added to the S&P/TSX 60 Index as of the close of trading on December 19th (along with a host of other changes). Shares in the Laval, Quebec-based convenience store giant had closed at a price of \$40.84 on the 12th. As is the case with surprise index additions in most markets, the price of ATD.b soared during the next week, based largely on estimates that Indexer demand from the stock would be around 12.3 million shares. At 3:40 pm, on the 19th, with ATD.b trading at \$45.79, the MOC imbalances were published, and as has long been the experience in Canada a large index buy resulted in a sell side imbalance – in this case 4.1 million shares to sell. At 4:00 pm, with the stock trading at \$47.20 it was announced ATD.b was going into extension meaning that the stock was going to close > 3% from the reference price (last tick or 10 minute vwap), and the close would be delayed on the name so contra flow could be entered to mute the volatility. However, even without a new imbalance being published the vast majority of traders in Canada realized the imbalance had almost certainly switched to the buy side, and the only way to mute volatility would be for further selling interest to be entered into the book. But the TSX closing system doesn't recognize the potential for an imbalance to flip – despite this happening more often than not on large index trades – and thus only allows the entry of orders during the extension that are contra to the original imbalance published. So

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 $^{^3}$ http://www.itg.com/2013/05/29/heart-of-darkness-a-data-driven-analysis-of-the-canadian-dark-rules/

with most of the street assuming that there was now a buyside imbalance on ATD.b, only buy orders could be entered on the name. Thus we all waited for 10 minutes in an act of complete futility, only to be proven correct and see a final clearing price of \$49.08. What makes this clearing price so troubling is that in the minutes to follow over 100,000 shares was sold, by a variety of brokers, at prices roughly a dollar below the closing price. And tens of thousands of more shares were offered in the book at similar levels without transacting. The closing mechanism is designed to achieve a price that represents the imbalance between buying and selling interests. That a stock would trade, in decent size, over 2% away from this price in the seconds after the closing print strongly evidences a flawed system.

That said, on January 12th the MOC system underwent a couple of major changes. Firstly, odd lot and mix lot orders are now allowed into the system. This reduces large headaches for sell side traders that have traditionally entered these orders as close to the close as possible and allow them to concentrate on the larger orders they are working into the close.

The second, and more important change, is the availability of Limit on close orders from 7:30 am until 3:40 pm. This allows MOC players to participate in the closing auction with the ability to protect themselves from price surprises.

The use of all day limit on close orders will likely create significant chaos around the first few major index rebalances, starting with the Dividend Aristocrat's trade on Jan 30th, and followed by the MSCI quarterly rebalance in February and the S&P / FTSE / et al rebalances on March 20th. We believe the changes will impact the market in the following manner:

- 1) LOC orders should greatly reduce the number of large moves in the facility. In September a record 13 names cleared at a price 10% away from the final continuous market tick, and did not satisfy all MOC orders. It is unlikely such an event could occur in the mechanism now that participants are able to place orders with ultimate limit prices. It is far more likely natural users of the facility will ladder their orders in a manner that will protect them from such price movements.
- 2) The contra side to a natural index event e.g. sellers of a name being added to, or upweighted in an index will use LOC orders to ladder their orders, and only a portion of these orders will be captured in the published imbalance. This will result in the single imbalance publication having less informational value, and greater risk to those that guarantee closing prices due to the reduced visibility around other's intent.
- 3) For at least the first few major rebalances, MOC guarantees or profit splits will be tougher for indexers to find, and will be priced less favourably than in the past as dealers grapple with the changing risk profile of the new system. There will be a cry to reverse the changes, or

make further changes as a result. Such growing pains are common, and were very evident during the initial roll out of the MOC in 2004. While we have a solid list of changes that should have been made to the system to improve on it – available upon request – we don't believe knee jerk changes should be made until the street has had a few opportunities to test the system out and understand how all users are accessing it.

- 4) Participation in the facility by fundamental accounts looking to trade against oversized indexer supply and demand should increase, as such accounts now have an easier manner in which to place such orders. This should further reduce the volatility of the Canadian close.
- 5) Algo developers will be able to build smarter MOC algorithms after watching a few larger events to understand the behaviours at play which should facilitate greater agency trading on the close.
- 6) We will ultimately see more indexers trading rebalance events on an agency basis, as they do in other markets, due to the price protection mechanisms now offered. Those firms that are best able to do the math and optimize their order placement strategies will benefit, as will their end investors.

In the end, while we feel the changes came up well short of what was required, we believe they are an improvement over the existing system. The new system should result in lower volatility, greater participation and greater price control for end investors. We do believe that in time the street will push for changes to imbalance flipping, including the ability to force LOC orders to more aggressive prices post publication, and changing the manner in which post imbalance publication LOC orders interact with the book, but these will take time given all the other work currently on the plate of the TMX technology group.

Final Order Protection Rules to be Released

As discussed above, the CSA released for comment several proposed changes to the order protection rules last May. The resulting comments demonstrated a very clear divide in the views of the buyside and dealer community versus those of the marketplaces. While the buyside and dealers were generally in favour of fee caps, data fee regulation, market places owning liability around their operations and a pilot study around exchange rebates (perhaps ex interlisted names), the marketplaces were generally against all of these notions. By far the most complex and controversial proposal was a minimum market share for a marketplace to be afforded order protection. The comment letters, in aggregate, highlighted the immense complexity of the issues at hand, the levels of frustration felt by those who believe they are forced to pay non-competitive rents and the potential unforeseen, or at least unintended consequences of changing the rules.

At the end of the day, the regulators are not going to allow the status quo system of markets surviving, and even getting fat off of unregulated fees paid by captive consumers while the dealer community shrinks at an

alarming rate. As is the case with many of the regulatory issues we face, there is no optimal solution, only varying levels of sub optimal ones. The CSA and IIROC are going to have to make tough decisions and come forward with such sub optimal reforms, knowing full well they will be heavily critized by one or more factions in doing so. We forecast that such a solution will look like the following:

- a) No minimum size for order protection. The arguments made around the inability of new markets to gain traction and offer real competition will carry the day and thwart the idea of a 5% minimum market share. But the regulators, concerned that Chi-X 3, Omega 3 or Aequitas 4 will impose undue burden on the street, will throw dealers some kind of a bone in the form of greater discretion to ignore small markets that they can demonstrate offer no value to their clients. Dealers typically don't like such rules, void as they often are in practical guidelines, and will only use these powers in the case of a market that is clearly offside in its costs and architecture.
- b) Data fee regulation will be finalized in 2015 and take effect in 2016. The Canadian regulators are tired of hearing how expensive Canadian data is versus its peers, and will take action to reduce the friction such fees impose on the markets. This will be a bloody battle, with marketplaces fighting back to protect lucrative bottom line dollars and margins. The final result will likely be fees that are still higher than most developed markets when normalized for volume or value traded but still substantially lower than current rates and a win for data consumers, and marketplace users as a whole.
- c) Marketplace trading fee caps will take effect by mid summer. The cap of active take fees in line with U.S. rates of 30 mills per share is the least controversial proposal and will be the first enacted. We are disappointed the TSX has not cut their rates to this limit without such regulation, and, to be fair, are disappointed that Aequitas is proposing fees above this limit for their classic lit book.
- d) The regulators will make a bold leap and introduce an exchange rebate pilot (maker / taker study) that WILL include interlisted names. Having determined that such a pilot would be of limited value without the inclusion of interlisted names, the CSA will push forward with what they believe is right for our markets despite almost certain criticism. We believe they will take great care, and will be well aware of the risk of losing flow to rebate subsidized quotes in the U.S. market, but ultimately the mandate to build efficient and fair markets will win the day. The study won't likely begin until early 2016, and regulators will put forth a real effort to get U.S. regulators on board. With all that is currently on the plates of FINRA and the SEC, we don't hold out much hope of the U.S. regulators conducting a study in concert with the Canadians.

Canada Will be a Follower on T+2 Timing

In October 2014 most European developed markets migrated from a T+3 settlement cycle to T+2 (Germany had been T+2 for some time). As one looks back at how things played out during the bank failures in 2008, and the increased street wide risk of a longer clearing cycle it is surprising that this change has taken so long. Even more surprising is the fact that North American markets allowed most of Europe to make this migration with little effort to keep pace. This has resulted in plenty of added complication for global funds trying to manage overnight cash balances, as a sell in North American markets now has a one day settlement lag, and thus cannot perfectly fund a purchase in Europe. As a result, North American markets are under considerable pressure to make a similar migration. The U.S. Depository Trust & Clearing Corporation (DTCC) has been consulting with industry and is expected to announce a timeline for such a migration, for U.S. markets, in April of this year. That timeline will likely take us into 2016. Sadly there does not appear to be any visible industry group considering this issue in Canada. Canadian dealers and settlement agencies need to get in front of this and ensure we are ready to match any timeline the U.S. market imposes on us.

A move to T+2 any later than the U.S. market would result in a massive financing headache for any firm attempting to access the liquidity on both markets when trading interlisted names, and result in a financing arbitrage strategy being introduced in these names. Given that the plates of most technology groups within the Canadian markets are already full in 2015 with the introduction of new markets, changes to existing markets, changes to the OPR and Dark Rules, changes to faciliatate CRM 2 reporting and added reporting requirements for Fixed Income trading imposed by regulators, it is important that we begin to flush out the development challenges that such a change might entail and start scheduling the necessary testing dates for later in the year before such dates are booked up.

We suspect that in the end Canadians will be making a mad dash to play catch up with whatever date the U.S. settles on, and may need to make short term exemptions for things like incorrect confirmation slips for retail clients (that seem to take an inordinate time to fix). While we don't see any real harm being done to the Canadian markets throughout this process, the lack of leadership on this issue is disappointing.

HFT Market Share Will Increase Again

As we noted in last year's forecast, the introduction of new technologies at various markets, no matter the intent, will almost always result in added opportunity for those most focused on market structure issues who possess the greatest ability to adapt to gain advantage. Typically this means a few HFT firms and at most a handful of dealers. The rest of the market is then left playing catch up trying to minimize the damage resulting from such complications. This is not to say that markets shouldn't evolve or add new technologies, but to suggest they need to be aware that such introduction

will, in the short term anyway, create greater opportunity for the most nimble intermediaries to gain both advantage and market share.

2015 sets up to see significant changes to the structure of our equity markets, from changes to the MOC facilitly, the introduction of Aequitas, changes to at-the-touch trading in MATCH Now, changes to the Alpha market structure and any resulting competitive changes introduced by competing markets. As such, we once again forecast that HFT market share will increase in Canada, much like it did in 2014, and the dispersion of performance among brokers will continue to grow. Those brokers best able to use some of the positive tools being offered up by markets should be able to decrease their market impact (assuming flatish volumes and volatility), while those that are unable to will likely see performance degradation.

That such changes are likely to happen during a year when financing deals look to be limited, and dealers are going to be challenged to subsidize losses on their facilitation desks could make the search for liquidity very frustrating for large investors.

Reading comment letters on both the Aequitas and Alpha proposals it is clear the market is becoming somewhat frustrated with the ever increasing complexity being thrust upon it. The challenge for markets is this: improve your offering in such a way that investors can capture natural or benign liquidity in a manner that is both easy to explain and use. Complication for the sake of complication, or worse, complication born from an unwillingness to figure out simpler solutions that achieve much the same goals will no longer be accepted silently by the street. Markets need to understand that each new complication facilitates new strategies that may not be in long term investors' best interests, and also that a market which proves confusing to industry professionals is likely to be a market ignored by the public.

We will continue to monitor metrics such as order-to-trade ratios, fleeting order percentages and the market share of those firms most closely associated with HFT activity for evidence of an HFT increase similar to what was experienced in 2014.

While we note that HFT is an ambiguous term at best, and a very large portion of HFT activity is actually beneficial to markets, we believe that the vast majority of marginal HFT activity that results from structural complexity tends to be more negative in nature, and not in the best interests of the investment community.

Our point is not to say that markets should not evolve, or new markets like Aequitas, who have clearly stated a plan to improve market quality, should not be introduced, but rather to remind market operators of the implications their new technologies introduce to liquidity seeking investors and advise them to keep it simple when possible.

Big Data Comes to the Canadian Markets

In November of 2014 Time Magazine published an article entitled "What is Uber Really Doing With Your Data?"4 that raised some interesting questions about how the technology / transportation firm is using client data in new and interesting ways. In particular the story highlights the use of a so called "God View" that allows Uber executives to track specific user movements. Uber is far from the first firm to face questions about what data is being captured and how it uses such data. Google, Facebook and even retailers like Loblaws have advanced programs that mine client data in an effort to increase revenues and ultimately profits. Some of the programs can offer up benefits to clients that should outweigh most privacy issue, whether perceived or real. Loblaws, for example, allows users of their app to turn on location monitoring tools in the cell phone that allow the company to track which areas of the store they spend the most time in, and send customized coupons for the products they are most likely to use. No need to send coupons for broccoli to someone that has never come within 10 feet of the produce section, or offer deals on pork ribs to a vegan that avoids the butcher section like the plaque. Other firms have been less transparent in what data they capture, and how they use it, leading many to harbor real concerns around their privacy and the safety of their personal identity.

The Global Exchange community has been aware for the last few years that "Big Data" would likely evolve from a cool buzzword into an actual tangible business practice in the near future. Major Exchanges like the TMX Group and LSE Group made good sized bets on index providers, and just this month Nasdaq announced the purchase of data firm Dorsey, Wright and Associates. The TMX Group went one step further last Fall, appointing a new CEO - Lou Eccleston - whose resume reads like a who's who of financial data firms, including Standard and Poors, Thompson Reuters and Bloomberg. As such, we believe the exchange will look to generate and grow revenue opportunities related to the repackaging and sale of all manner of data that traverses through their networks. (Admittedly this prediction is far from a bold one, as Mr. Eccleston's early comments to the media strongly imply this very strategy). As the TMX increases their ability to mine data and both sell the output and use it to better optimize its own operations, exchange clients will likely have very real questions about the data being captured, and the variety of ways it is being packaged up and used. While consumers can choose to avoid using those firms that are less than transparent in their data mining activities, this is not the case with a protected market. As such the TMX, (and other markets like Chi-X, Aequitas, MATCH Now or Pure) will need to be hyper sensitive to large investor concerns around data usage, and tend towards a level of transparency that may not be comfortable for a competitive public corporation.

Of greatest concern will be data sent to issuers that may highlight the ongoing trading intents of large investors. We have seen this in the past with concerns around the existing Daily Insider Trading report, and the proposed but ultimately scrapped daily short selling report. Issuers have a legitimate interest in better understanding the nature of the trading in their

⁴ http://time.com/3595025/uber-data/

stock, and exchanges are naturally keen to profit by satisfying this interest. However, the street needs to be comfortable that any such data is designed to be both useful to end users – issuers or other investors – without being punitive to the investors whose data is being repackaged.

To the extent that markets are better able to aid issuers and investors in spotting trends and ineffiencies, or use data to improve the design of their products we are fully supportive of the use of Big Data. Markets around the globe are almost certainly going to become more dependent on data analysis for both strategic direction and revenue growth. With this change intact they will face the same questions currently asked of dealers, retailers and your favourite websites in terms of how the data is captured, analysed and ultimately used. We suspect this will become a topic of much conversation in 2015.

Commission Sharing Agreement (CSA) Activity to Increase

With CSA activity trending up over the past few years, and, by ITG's estimates, up in the region of 40% in Canada last year, a number of global regulatory initiatives are likely to send CSA usage even higher. In the U.K. the Financial Conduct Authority (FCA) has banned the use of client commissions paving for corporate access and suggested they will move towards a complete unbundling of commissions and research payments. A December publication from European Securities and Markets Authority (ESMA) stops well short of full unbundling, but does propose that European market participants, as a part of the MIFID II initiative, will need to define the value of the research they are paying for and keep track of research dollars separately from execution related commissions. It is possible the FCA will push the bar higher than ESMA, although far from a certainty. Both sets of requirements will apply not just to asset managers domiciled in the U.K. and the rest of Europe, but also to firms managing money for investors domiciled in those regions. In Canada the Client Relationship Model Phase 2 (CRM2) amendments to NI 31-103 will force mutual funds and ETF providers to more transparently disclose both their management expense ratio and trade expense ratio. The net result of all of these rule changes should be a greater need for asset managers to determine the value of research they are consuming, and manage the payment for these products. This alone should be a catalyst for even great usage of CSA products in 2015 and beyond.

Additionally, as described above, the continued increasing complexity of our market structure will almost certainly result in greater dispersion of trading performance among various dealers. This dispersion will force less trading savy dealers to compete largely on access to new and secondary issues, as well as block trading capabilities. With 2015 shaping up to be a weak year in terms of financing, particularly in the energy sector, it will be difficult for dealers to attract flow based on the IPO calendar, forcing them to compete more heavily with trading acumen and facilitation capital. As trading results amongst dealers continue to diverge it becomes far more attractive for quantitatively engaged clients to use CSA products to allow for greater portions of their flow to be directed to those firms capable of achieving better results. Any lack in facilitation capital and deal flow will

most likely result in a move to more algorithmic DMA trading by the buyside.

While some on the buyside have legitimate concerns that a move to more concentrated dealer lists presents a risk to niche research providers that may be weaker on the execution side, the forces behind such a shift are real and unlikely to change direction anytime soon. We suspect such shifts will force some niche brokers to seriously consider partnering with stronger trading providers or move to a research only model. The research only model lacks a distribution outlet, and makes investment banking extremely challenging, making it the less attractive alternative.

While we don't expect the CSA or any Canadian regulators to copy European initiatives in the next year or two, we do believe the impact of European regulation alone will result in the majority of midsize to large Canadian asset managers having CSA programs in place, or at least on the drawing board by end of 2015.

Conclusion

In conclusion 2015 is setting up to be a challenging one from both a macro and structural perspective for those looking to find liquidity in the Canadian markets. The continued evolution of structure will require great attention, and for at least the short term will likely result in greater intermediation and frustration to many investors. We look forward to guiding clients over the course of the year, and many of the changes discussed above take place. Happy trading!!

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