Truing the Block:

A Framework for Re-architecting the Trader's Toolkit

Over the course of the last decade, block trading, particularly in thinly traded small and mid-cap equities, has lost its place of honor among institutional traders' trading strategies and styles. Dark pools attempted to represent that block liquidity could be sourced in these venues, however dark pools reduced the notion of a block to midpoint crosses, rather than the true size driven by investor intent. In addition, high frequency traders and other fast market mechanisms have reduced trade size to the point that even the notion of the block has effectively become meaningless.

As a result, this important tool, once considered essential to any buy side toolkit, is almost forgotten and relegated to the dustbin of financial services history. Institutions, once firmly grounded in patient trading, have been forced into fast market mechanisms that serve neither their interests nor the interests of end investors.

That said, conditions that have led to today's market environment are subject to change and current trends indicate that the benefits and opportunities for performance improvement (i.e., alpha generation) may soon be recaptured — albeit in the context of a redefined sense

of what constitutes a block. Three trends that point to such revitalization are: the recent scrutiny of HFTs; the pilot programs in and around maker-taker pricing; and the possibility of the expansion of the spread in small and mid cap instruments.

In this report, TABB Group analyzes the roots of the current situation and argues for a re-architecting of true block trading along the following lines:

- Recapturing opportunities presented by genuine block trading that are being left (or have been left) on the sidelines as market structure pivots to fast markets and volume weighted average price benchmarking, essentially an inertia strategy that ensures only that a trader will never do worse than the average market performance in a day.

- Acknowledging that regulatory relief is not the sole approach to structuring markets in the interest of investors.

- Establishing the fact that even though a significant population of market players operate at high speeds, for many, patience is still a virtue when the big picture involves a large position.

- Reassessing anachronistic and myopic views of transaction cost analysis.

- Moving to a new definition of what constitutes a block and incorporate that definition into trading strategies.

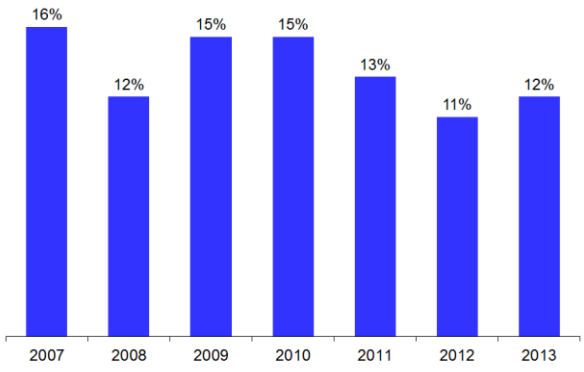
- Reviewing existing trading strategies to affirm that the most suitable transaction might not be the fastest or the "cheapest."

Introduction

Critical to the analysis of revitalizing block trading is a clear definition what constitutes a block in the first place. After talking with a number of institutional investors, TABB Group has determined that a block trade is, or should be, defined as a single trade consisting of 20% of the ADV in an instrument. While this definition may have been lost or diluted amid the mystification of so-called block trading in dark pools and would be completely meaningless in HFT trading, larger investors believe that 20% of ADV is a reasonable amount of volume that can be safely and effectively bought without incurring negative market impact on price.

While the definition of a block is important, what's even more important is the fact that demand for blocks has increased as the market has settled down since the financial crisis and equity correlations have declined to more historically normal levels. Institutional investors clearly want to rediscover block trading; TABB Group estimates that the percentage of institutional volume done as a block increased to 12% in 2013 from 11% in 2012 (see Exhibit 1).

Exhibit 1
Percentage of Institutional Share Volume Executed in a Block, 2007-2013



To capitalize on this demand, there has been a proliferation of new electronic block trading platform launches in the last year, including a new block crossing network, a flurry of actionable indication of interest (IOI) products and size-based conditional orders. Agency block trading brokers are also reporting growing volume and revenues. Notably, all these developments are happening in an environment of stagnant or declining volume.

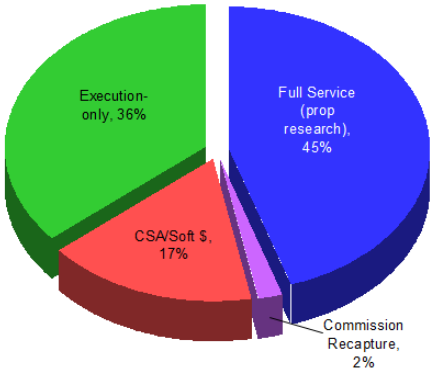
While there is growth and demand in trading blocks, this renewed interest can pass as quickly as a New Year's resolution. The ugly truth is that, even as fast markets can make execution more difficult, the capital markets/finance industry frequently looks to immediacy and short-term approaches to trading because many aspects (some would argue too many) of the business are calculated against the proximity to real-time. This construct emerges even, or, rather, especially, as methods of TCA, trader compensation and off-exchange regulations stand in the way of recapturing true block trading. Each of these separately and in combination has contributed to declines in block trading for different reasons.

Moving to a new definition of the block and incorporating it as part of a strategy

Departing from a standard is not easy. After all, there is safety in familiarity. But familiarity does not beget innovation and the possibility of better returns only comes through innovation. To wit: Some clients may be hesitant to pursue new means of measuring their

execution quality and those still clinging to old habits will reinforce this reluctance. But even though it might be difficult, industry-wide change is still possible. In 2009, for example, commission recapture dropped off significantly, making up only 2% of the commission budget after the buy side increasingly made known its belief that the practice was unfair and counter to best execution (see Exhibit 2). If significant portions of the market are incented to change, even a large-scale shift is possible.

Exhibit 2
What percentage of your commission budget is the following?



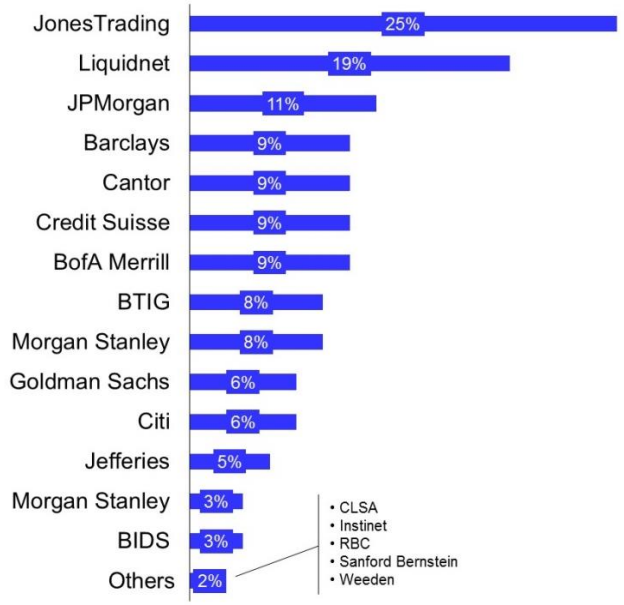
Source: TABB Group's US Equity Trading 2009

Best in Blocks

When asked by TABB Group what it considers to be the best agency block-trading broker, the buy side's selection shows that block-focused shops can be successful using very different approaches to seeking liquidity (see Exhibit 3).

The highest rated firm, JonesTrading, follows the traditional style of matching up clients using a very personal, high-touch, relationship-based method. On the other hand, the second-highest firm, Liquidnet, tackles block trading electronically, connecting trades on its automated crossing network. Essential to both of these strategies, however, is retaining the trust and anonymity on both sides of the trade.

Exhibit 3: Best in Class Agency Block Trading 2013



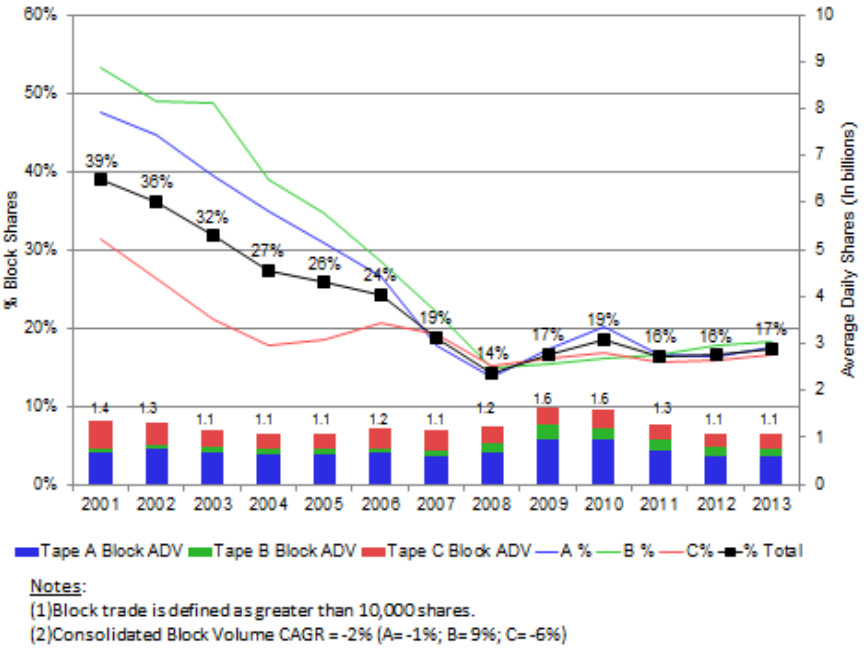
Source: TABB Group

The Anatomy of the Problem

The explanation behind the "need for speed" starts in the post-Reg NMS world. While that regulation forced blocks to go through the trading venue with the best top of book order price, it also increased fragmentation and automation. Electronic participants started using new tools like algorithms while more participants such as prop trading firms increased the speed of the markets. New types of trading approaches like dark pools and block crossing networks also emerged.

Fragmented liquidity increased the demand to tap into multiple liquidity pools, primarily with the use of algos. There was also an increase in stealthier trading practices as traders became more conscious and even paranoid about information leakage. Altogether, these changes dramatically lowered trade sizes and decreased block trading (see Exhibit 4). Speedier markets also increased the flickering of quotes, making it riskier for a block trader to be confident in a specific price at a single point in time.

Exhibit 4
Historic Block Trading Average Daily Volume and Percentage



Notes:
(1)Block trade is defined as greater than 10,000 shares.
(2)Consolidated Block Volume CAGR = -2% (A= -1%; B= 9%; C= -6%)

Source: TABB Group

One outcome of this increasingly automated market was the ability to better track trades and deliver a quantified evaluation of execution quality. Benchmarks like VWAP soon became standard operating procedure for evaluating a trade. Algos were created to trade based on VWAP principles and trades were thought to be successful if they beat VWAP. Despite the fact that many experts dispute whether VWAP is still the best method of evaluation, VWAP remains a common benchmark. The fact is that the sheer speed in which market structure changes occur reinforces clinging to these benchmarks as there is little

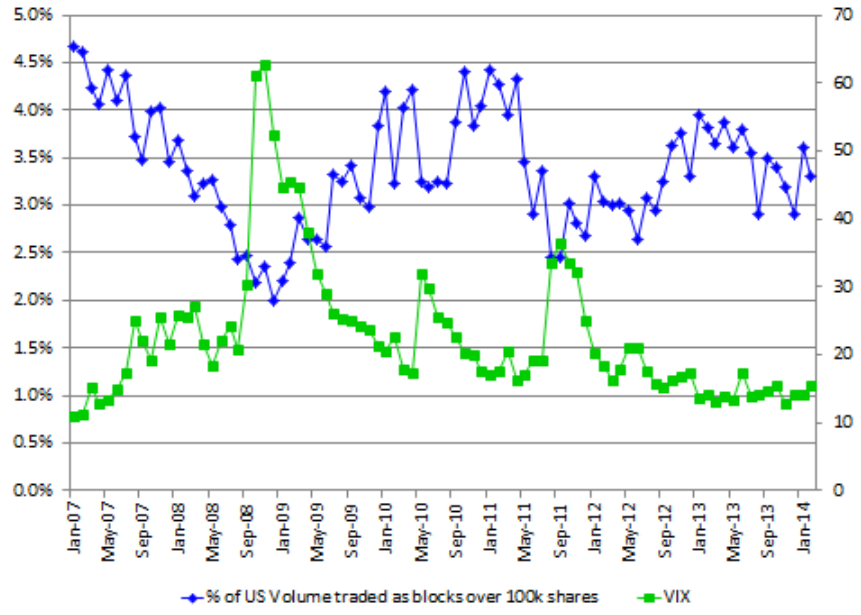
time or certainty to reflect on whether there is a better alternative.

With VWAP set as the unquestioned standard, there was a greater focus on measuring against realized market liquidity instead of the opportunity costs and risks associated with seeking out block liquidity.

> *To better demonstrate some of the implicit costs of TCA, consider two scenarios. One scenario is that you can get a trade done in five days using a block but have none done on Day 1. The other scenario is waiting 70 days to get it done by breaking it up. Most traders would clearly choose the first scenario but having none of the trade done on that first day or two might make them nervous, especially if/when they consider potential market movement. The opportunity cost is dependent on the chance of the market moving more than "x" percent on those following days.*

The 2008 financial crisis exacerbated these challenges. An increase in volatility made the fear of standing up at a single price point ever more dangerous and being risk averse became the status quo. The nadir of block trading as a percentage of U.S. volume followed the crisis but has since crept up slightly and fluctuated in relation to the rate of volatility. The recent low volatility has worked in favor of block trading, keeping it just under 4 percent (see Exhibit 5).

Exhibit 5
VIX vs. % Blocks Over 100,000 Shares



Source: TABB Group

Putting TCA in its Place

Measuring transaction costs entered the scene 40 years ago when pension plans and their investment consultants began interrogating the buy side about the execution prices from brokers. These queries were in response to the Employee Retirement Income Security Act (ERISA) of 1974, which flatly states that pension plans must keep their eyes on the till, especially when the money is in the hands of others. Just one year later — in 1975 — Abel/Noser opened its doors for business along with the Pandora's Box called transaction cost analysis.

The story of TCA and its role in trading is a classic example of unintended consequences meeting good intentions. TCA has gone from a decent way to put in checks and balances between asset managers and brokers to a pervasive and driving force behind all trading decisions. TCA is one — but not the only — measure of portfolio performance and trading effectiveness, and has led to a misappropriation of certain tools at the expense of others, such as blocks.

Three overarching problems with TCA have been identified:

- Implementation shortfall (one common method of TCA) was designed to measure the impact of trading costs on a portfolio, not the performance of the trader or trading process.

- One-size-fits-all benchmarks are being applied to all orders, regardless of the needs of the portfolio manager and the liquidity characteristics of the stock.

- Some benchmarks can be gamed, meaning that the trader applies a strategy that determines the value of the benchmark and thus makes it easier to match or beat.

The fact that these benchmarks have become so widely incorporated strengthens their staying power. No one wants to go through a re-training process, let alone one that involves a pension fund's board of trustees. But this cultural roadblock is no reason to retain benchmarks that are less than optimal. Technology today can better measure nuanced components like market timing, market impact and opportunity cost. To ignore these advancements is like keeping those old '80s sweaters in the hope that they'll once again be fashionably relevant. It's time to move on.

Reassessed views of TCA

In its infancy, TCA was an overwhelmingly positive development for the money management industry. But as the industry matured, the value of TCA in measuring the impact of trading on the performance of a portfolio began to morph into measuring traders. This transformation has led to a cascade of negative unintended consequences. After all, one cannot manage costs without measuring them. The two most dominant benchmarks, VWAP and implementation shortfall, are seemingly intuitive and aligned with today's market structure.

However, the use of these benchmarks can entice buy side traders to engage in sub-optimal behavior, given the overall needs and goals of a portfolio manager. As a result, the patience needed to construct and trade a block, with the block's attendant benefits, is eroded.

TCA critics tend to divide the problem into two areas:

- The broad application of a specific benchmark to all orders and names encourages traders to trade to the benchmark rather than do what is best for that order;

- The underweighting of opportunity costs and information leakage misrepresents the true cost of trading.

Both these issues are more critical with less liquid names, primarily small-cap stocks. Consider: If it would take weeks of trading 100% of average daily volume to complete an order, how useful is VWAP? Similarly, if a portfolio manager wants to take a significant position in a newly-issued small-cap name, is implementation shortfall the best measure of the trader's ability to secure that liquidity?

At the same time (unfortunately for the portfolio manager or institutional investor), the corresponding measures of the benefits and opportunities that accrue to blocks are not considered.

The difficulty in trading illiquid names becomes a vicious cycle as traders adjust their behavior to fit the benchmark, rather than what might be best for the order. Slicing and dicing the order across time, price and venue in accordance with a benchmark only helps achieve an average execution, which is not to be confused with best execution. In other words, trader performance should be a function of the ability to access liquidity, not just displayed liquidity.

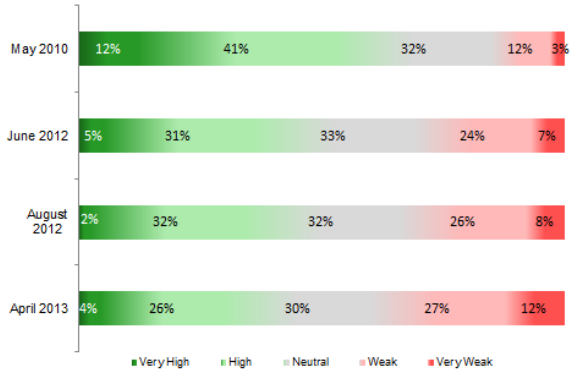
Re-architecting the Block

Many aspects of today's equity market are not ideal. According to a TABB Group survey conducted in April 2013, high confidence in market structure was at an all-time low of 30% and was surpassed for the first time in three years by weak confidence (see Exhibit 6). From trading glitches to scandals, confidence has taken hit after hit. As trust becomes increasingly rare, anonymity becomes more important.

> *The current preference for fast markets and VWAP is neither ideal nor sustainable for key segments of the institutional market.*

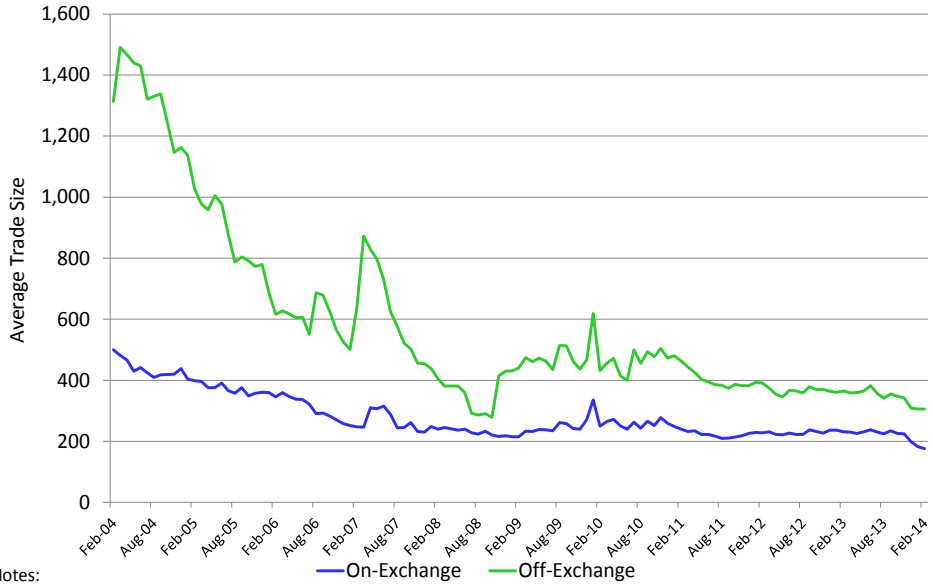
Combine this growing distrust with a faster market and it's easy to see a couple reasons why trade sizes have dropped significantly across both on-exchange and off-exchange trading (see Exhibit 7).

Exhibit 6
Market Structure Confidence, 2010 -2013



Source: TABB Group

Exhibit 7: Average Trade Size, On-Exchange vs. Off-Exchange



Notes:
1. Excludes odd lots.
2. ADF only traded on 13 of the 19 days in February 2014.

Unwinding the TCA trade

Considering the limitations of market liquidity in small cap stocks, agency brokers will play a key role in the resurgence of block trading. Patiently finding a natural counterparty to a block remains one of the best ways of ensuring execution quality but doing so requires

sustaining a high level of trust on all three sides of the trade. In addition, when compared with the shotgun approach to finding electronic liquidity, the agency block trading process, if done effectively, can limit information leakage. The result is a rare three-way win for the participants involved.

Regulatory relief and technology alone will not solve the problems

Since block trading dropped off in 2007, many valiant attempts have been made through innovative platforms and technological initiatives to revive it. However, none of them led to a full recovery. In fact, just last year, the New York Block Exchange, a joint venture between NYSE Euronext and BIDS Holdings LP, folded. After opening in 2009, NYBX closed its doors just four years later because it was unable to gain "enough volume to achieve critical mass" and furthermore did "not have strong support of customers." If there were truly an appetite in the market for block trading, that wouldn't have happened. This development leads us to believe that there is a larger element at work.

> *While significant populations of participants in the market operate at high speeds, patience is still a virtue.*

Faster markets have led to quicker transactions and can temporarily satisfy a trader but they do not do enough to fully satisfy the needs and goals of an institutional portfolio. Liquidity discovery is inherently cautious and thus a trader needs patience to reap the benefits of a block.

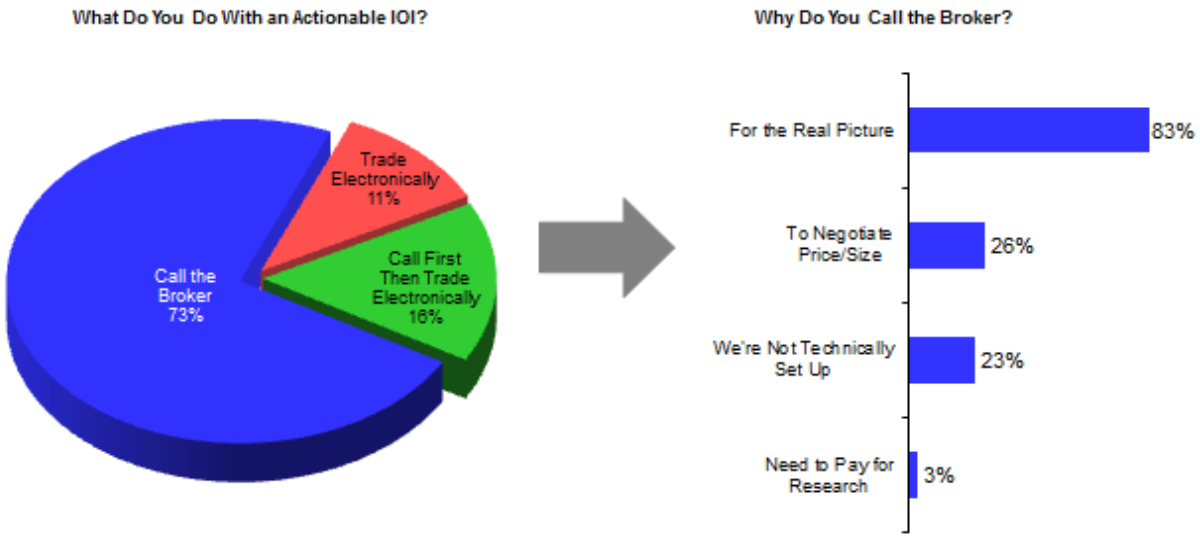
Block Trading: The True Alternative

Market participants have become dependent on certain benchmarks without considering whether they are the best ones to use. Some trades are best left to slicing and dicing and result in good returns. Other trades, especially ones that are time sensitive, require getting the transaction done in size.

A long-held observation posits that the way you measure someone influences their behavior. So the way to correct that behavior is to create a new measurement.

In TABB Group's annual Institutional Equities Trading report for 2014, we uncovered continued interest in block trading. Of 108 interviews with U.S. buy side firms, 72% responded to an actionable IOI with a phone call to a broker because they believed there was more value to the block than just the liquidity displayed (see Exhibit 8). So it's clear that traders are looking for color and the big picture behind a block and that reinforces the notion that fostering a relationship between the block broker and the block trader can result in more liquidity. No matter what the mechanism – voice or electronic – the underlying art of block trading is managing the delicate balance between retaining trust and gaining information. Handling these two components with finesse is key to establishing a productive relationship that will help revive block trading.

Exhibit 8
Usage of Actionable IOIs



Source: TABB Group

Market players of all stripes have to realize that just because a trade was done *faster* does not mean it was done *better*. This move to speed quickly became part of the market's culture after algorithmic trading took off. It will take a cultural shift to put the speed of a trade back into proper perspective. Along with this cultural change is the need to educate younger traders who have learned much about routing and speed but not necessarily about blocks and the concomitant value they can offer end investors. These younger traders may have little understanding about the mechanics and art of block trading and lack a natural comfort with it.

If the market can embrace these changes, both the practical and the cultural, it will be closer to a truer and greater amount of block trading. No one is saying changing the architecture of trader's current toolkit will be easy, or quick. Nothing that requires that kind of redesign to its framework could possibly be solved with an instant remedy. But if the market does not recognize these obstacles in reviving block trading, it will be nearly impossible to fully do so. Furthermore, a good architect knows that although he shapes his creations, they also shape us. Beyond functionality, the various tools we use for trading also affect our behavior. It is important to keep this in mind and ensure that we rule the tools instead of them ruling us.

About

TABB Group

TABB Group is a financial markets research and strategic advisory firm focused exclusively on capital markets. Founded in 2003 and based on the methodology of "first-person knowledge," TABB Group analyzes and quantifies the investing value chain from the fiduciary, investment manager, broker, exchange and custodian. Our goal is to help senior business leaders gain a truer understanding of financial markets issues and trends so they can grow their businesses. TABB Group members are regularly cited in the press and speak at industry conferences. For more information about TABB Group, go to www.tabbgroup.com.

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Larry is founder and CEO of TABB Group, the financial markets' research and strategic advisory firm focused exclusively on capital markets. TABB Group analyzes and quantifies the investing value chain from the fiduciary, investment manager, broker, exchange and custodian, helping senior business leaders gain a truer understanding of financial markets issues.

Larry has written extensively on the changing market structure, exchanges and regulatory issues and business continuity as well as new technology trends in high frequency trading, market data, risk management, order management, best execution, algorithmic trading, dark pools, multi- and cross-asset trading, liquidity management, FIX connectivity, custody and advances in emerging technologies.

Quoted extensively and in virtually all industry and general news publications, he has been cited in The Wall Street Journal, Financial Times, The New York Times, Associated Press, CNN, Bloomberg, CNBC, Reuters, Dow Jones News, Barron's, Forbes, Financial News, Wall Street & Technology, Securities Industry Monitor, Waters. He continues to be a featured speaker at major industry and business conferences throughout the US, Europe, Asia and Canada.

Valerie Bogard

Valerie joined TABB Group in October 2012. Valerie has co-authored several reports in the last year, including "Social Alpha: Channeling the Chatter," "Cross-Listing: The Tension of Cooperation," and "@falsenews @whinytraders: 140 characters moved the market. Big deal," about the hash crash. Previously, she contributed reporting to Newsweek, Working Mother magazine, and Above Live magazine. Bogard attended New York University, where she graduated with a Bachelor's in Journalism and Political Science.

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