Equity Research & Strategy

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A Tale of Two Traders

BLOOMBERG TRADEBOOK® analyzes the behavior of US equity traders and global equity traders in response to extreme volatility

"It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair…." Charles Dickens, A Tale of Two Cities

Figure 1

The classic Dickens story of the differences between London and Paris during the French Revolution is a surprisingly accurate analogy for equity traders during the recent period of increased volatility.
Last fall, the major volatility indexes rose from 20 to approximately 80 (Figure 1). From August 2008 to December 2008, volatility was at historic highs. In 2009, volatility has lowered and now appears to have settled into a trading range of 35-50. So, while volatility normally traded at 15-30 in the past, many traders believe that the new normal range from this point forward will probably be between 35 and 50.

With stock prices experiencing large intraday movements, Bloomberg Tradebook's quantitative research group compared the trading behavior of US and global equities traders in response to the increases in volatility. Using analyses that started in September 2008, they found that ***traders of US stocks tended to shy away from VWAP-type algorithms and picked spots in the market. Global stock traders, however, went back to using time and volume-sliced algorithms.***

Global Equities

Prior to the volatility increases of late 2008, global equity traders tended to prefer volume participation strategies over VWAP/TWAP scheduled algorithms. Then, when volatility spiked, traders decreased their usage of both. However, in November 2008, as volatility once again exeeded 80, more traders started utilizing the VWAP algorithm (Figure 2).

There are several possible explanations:

- VWAP is a more widely used benchmark in the global equity markets. Other benchmarks (like arrival price) have not experienced the same level of success in the execution process.

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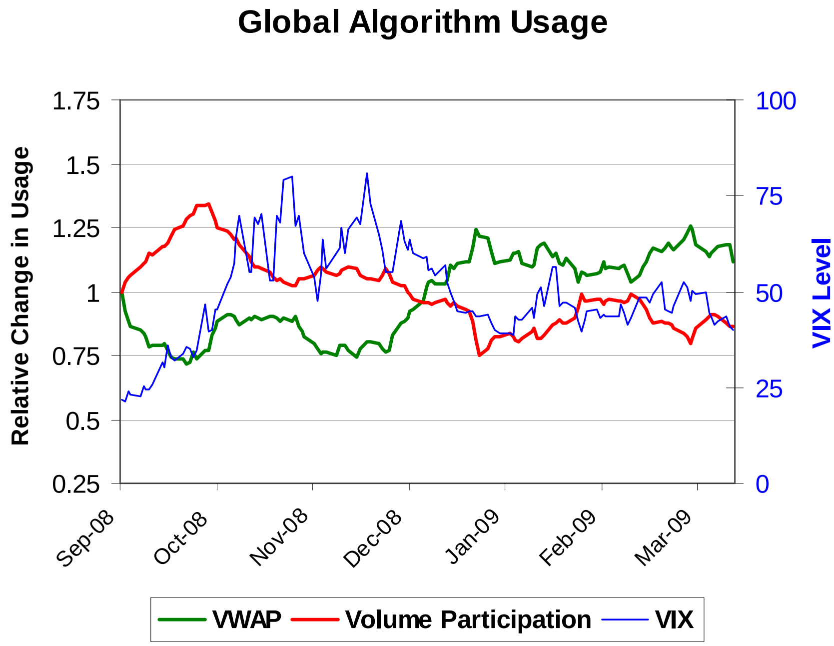

Figure 2

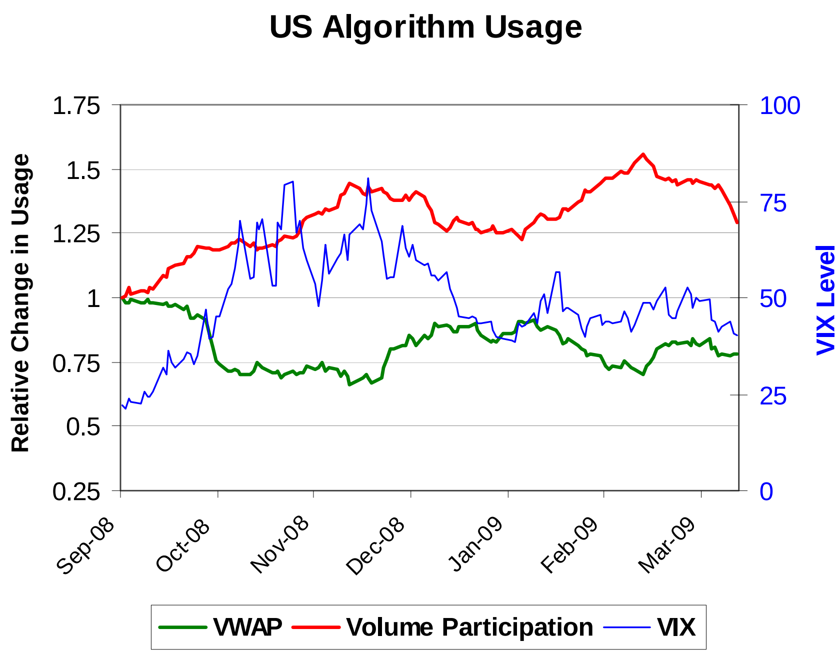

Figure 3

- During times of extreme volatility, it is difficult to pick spots in the market. Many traders are now much more risk averse and choose to spread their executions over the day.
- Many traders had an increased workload near the end of 2008 because of reduced headcounts or portfolio rebalancings that resulted from lower share prices. As a result, trading these positions became extremely difficult to manage, so traders returned to the VWAP algorithms.

And in January 2009, while volatility started to settle into its new range, VWAP usage continued to pick up, and participation strategies declined.

To help traders execute in volatile markets, Tradebook offers two types of VWAP algorithms: BWAP and DWAP.

- The BWAP algorithm is a straight scheduled algorithm that works to attain a VWAP benchmark by replicating trading based on the volume patterns of the past 50 days.
- The DWAP algorithm works to beat the VWAP benchmark by using statistical forecasting techniques to dynamically respond to intraday changes in volume patterns.

During the period of increased volatility, Tradebook's quantitative research group found that traders chose to rely more on the BWAP algorithm, even though DWAP continued to outperform BWAP in periods of high volatility.

US Equities
The US equity traders took an entirely different approach to execution during the volatile period (Figure 3).

During the increase in volatility in October 2008, US equities traders gravitated more toward participation strategies, tactical trading strategies, and DMA than

Figure 4

towards VWAP. They appeared, instead, to pick price points and sought to take greater control over orders rather than obtaining the VWAP. In fact, when looking at the usage of Tradebook's tactical strategies, usage of trader-driven algorithms (such as B-Smart[SM]) grew exponentially.

Tradebook Offers Solutions for Any Market Condition

Based on this research, Bloomberg Tradebook expects that, as volatility changes continue, US equities traders will probably continue to want greater control over their orders, and that traders will probably prefer DMA, tactical, and other high touch trading strategies over benchmark trading strategies.

Tradebook also sees an increase in the use of "scaling," where traders allow benchmark strategies to drive orders. (If the stock price moves to a certain level(s), though, the strategy is automatically modified.)

For example, in Figure 4, a trader wants to buy 500,000 shares of IBM. The market is generally stable, so he decides to start an execution with a Go-Along algorithm participating at 10%. With scaling, the trader has elected to pause the strategy if the stock moves above $88.50. And, if the stock falls below $87.65, the trader has decided to be more aggressive and participate at 25% of volume.

Bloomberg Tradebook enables traders to move seamlessly between algorithms, tactical strategies, and DMA when necessary. For example, assume that the trader is in the middle of executing his Go-Along strategy when a large offer appears. The trader can take the offer and automatically decrease the remaining balance of the benchmark algorithm order (Figure 5).

Figure 5

The Bloomberg Tradebook suite of products provides traders with the flexibility to choose the algorithm that is appropriate to their strategy, whether it is high touch, low touch, or a combination of the two. And, given today's volatile environment, traders need the ability to make a choice that fits their trading style.

(**BTMI <Go>** displays a complete list of Bloomberg Tradebook's global market and product offerings.)

Below is a list of Tradebook Benchmark Algorithms and tactical Strategies.

Tradebook Benchmark Algorithms	Design
DWAP	Executes seeking a VWAP benchmark forecasting algorithm that uses dynamic real-time market information and proprietary probing results.
BWAP	Executes seeking a VWAP benchmark forecasting algorithm that uses historic market information to schedule participation.
TWAP	Executes evenly over a time interval scheduled algorithm.
Go-Along	Executes using a target volume participation rate.
VIP	Executes using a target participation rate without catching up if volume is missed due to the price being above the set limit.
Arrival Price	Seeks average price benchmark of the mid-point of the bid/offer spread at the time order is entered, with real-time adaptation.
BlockCross + Dark (US Only)	Executes seeking to minimize impact and maximize size by trading only with BlockCross ATS and dark pools.

Tradebook US Equity Tactical Strategies	Design
Hide and Sweep	***Stealth*** strategy that sweeps market when your price is displayed out loud without posting.
Fire	Sweeps market when your price and size is displayed out loud while posting intelligently to seek to maximize exposure if the market is swept. You control it by adjusting its Aggressive level.
Hide and Fire	***Stealth*** strategy that sweeps market or nibbles at it when your price and size is there without posting. You control it by adjusting its Aggressive level.
B-Smart[SM]	Intelligently posts your order outloud in the most active venues using dynamic real-time market information and proprietary probing results, seeking to maximize your exposure market sweeping. You control it by adjusting its Aggressive level.
Hide and B-Smart[SM]	***Stealth version of B-Smart*** strategy that posts your order in the most active venues HIDDEN order books. All other features remain the same.

Tradebook Global Equity Tactical Strategies	Design
HIDE & SWEEP	***Stealth*** strategy that sweeps market when your price is displayed out loud without posting.
HIDE & FIRE	***Stealth*** strategy that sweeps the market or nibbles at it when your price & size is there without posting. You control it by adjusting its Aggressive level.
FIRE	Strategy that sweeps market or nibbles at it when your price & size is there. You control it by adjusting its Aggressive level.