The fine-tuning of algo strategies

Michael Richter, an executive director and Christophe White-Thomson, head of business development for trading analytics in EMEA at S&P Global Market Intelligence discuss how volatile market conditions impact algo usage.

Has usage of algos changed during the current bout of volatility? Are they more or less popular?



Michael Richter (MR): We've seen a general shift, with the buyside increasingly utilising high touch services from the sellside in search of natural liquidity when the volatility is at its highest, and there isn't as much liquidity,

minimising the market impact and footprint they are having while executing.

In the recent periods of volatility, we have noticed a trend where algos are still heavily being used for the low ADV (average daily volume traded) demand cashflow trades, while the usage of participation algos such as POV (percentage of volume) and VWAP (volume-weighted average price) strategies fall away. I think that makes perfect sense. So in terms of popularity, I don't think by any stretch they have become less popular, I just think traders are getting smarter in the way they interact with them.

Are there stark contrasts in performance in different strategies across changing market conditions?

MR: In short, yes there are. With participation

algos, particularly VWAP's with static volume curves, we have seen a significant impact across the board on the performance of these strategies when there are unexpected liquidity patterns. We have also noted that with so much liquidity moving to the close these particular strategies have been suffering for some time.

As mentioned, traders are becoming smarter with strategy selection, where we are seeing an increase in implementation shortfall algos (i.e. "Get me done around these levels with minimal market impact"). Liquidity seeking algo performances across the board are particularly strong, especially where there is an emphasis on dark liquidity.

As well as traders optimising strategy selection, the sellside has had to 'tweak' and 'enhance' their algorithmic suites, factoring in elements of Al (artificial intelligence).

A notable example is around the very popular market-on-close strategy (MOC). If we track their historical performance this is the strategy that has shown the most improvement. Of course this is only in instances when the order outsizes liquidity available at the auction. Banks are much better in building an understanding on when these orders should begin, and trading into the close is generally very well executed, leaving the balance for the auction to get executed on the closing print. The changing market conditions haven't affected performances.

Has current market volatility impacted strategy selection?

MR: On the whole yes, although there are circumstances where there has been no impact. We have a number of clients who run long term funds and intraday volatility isn't really a concern for them. So, we do still see over the day strategies being used and in highly volatile conditions the results, as you would expect, are a mixed bag.

We have noticed that there seems to be a trend in algorithms and strategies whereby they have been skewed to back-load a lot more to take advantage of the volume that comes into play, more significantly than ever, later in the day. We have metrics within our TCA (transaction cost analysis) suite of benchmarks called the VWET (volume weighted execution time), which show how an order is implemented into the market. A higher VWET indicates a more backloaded execution. For particular strategies that have historically seen VWETs at around 55% for a certain type of algorithm, we are now seeing that shift to 65%. This would be the result of the trader and the sellside working together to configure certain strategies to provide the best possible outcomes in adverse and volatile market conditions.

There has also been a noticeable shift to a focus on getting the order done as soon as possible around a given price level. The trend here is due to an increase in implementation shortfall algos being used, as well as liquidity seeking algos. The time the orders are taking to be executed has reduced on average by 50%. This would be a knock-on effect of the current volatile market conditions.

From a buyside perspective, do a handful of providers and a small pool of strategies dominate the trading landscape?

Christophe White-Thomson (CWT): Yes, very much so. The sellside providers tend to be tiered and, on the whole, you do see a lot of the buyside utilising the same names and similar strategies.

There are so many variants in terms of

strategies available now as technology improves but they do just seem to be variants around a core theme, where performances aren't actually significantly different. The major factors that really drive algo selection are around ease of use, reduced market impact and cost.

On that basis it's no surprise the usage is predominantly focused around a few key providers and the key themes of usage are, as mentioned earlier, around liquidity capture within dark venues.

In general, has there been a stand-out strategy or method of optimising execution through a particular algo?



CWT: In general yes. We have seen a large focus on liquidity seeking and implementation shortfall strategies.

However, it does vary with the type of firm that we are dealing with. Often, we have seen long

only funds focusing on strategies which keep market impact low and reduce costs, which have tended to focus around implementation shortfall-based logic. We have seen hedge funds frequently utilising strategies which are slightly more aggressive and favour conditions when shorting securities.

What plans do you have to help address the current market challenges?

MR: We are planning to launch quarterly reports that the buyside can subscribe to, that will show algo usage across the industry, as well as the most utilised strategies, and algo performance in different market conditions.

It will be anonymised and aggregated data from our peer data that we store in our internal peer database. We believe this will be the first time that the industry can access such an in-depth insight into what the themes are, and in particular, algo performances.