



© Digital Vision

Measure for measure

Buy-side traders continue to question the real value of ‘black box’ automated trading strategies, how their efficacy can be measured and, most importantly, whose measurements are reliable.

Lucinda Kay

In May 2006, according to the initial findings of an EDHEC Risk Advisory survey on best execution sponsored by Citigroup (see ‘Storm warning over MiFID’, page 77), 78% of buy-side firms in Europe had access to rules-based trading systems, a 20% advance on 2004 figures. Following the substantial growth in this area it seems clear that if algorithms are to become more than a tool for enhancing productivity, it is imperative that there is a means by which the buy-side will be able differentiate between the multiple broker algorithms on offer and assess their efficacy in improving execution results.

Brokers now supply not only algorithms covering a wide range of benchmarks, but a suite of trade analysis

tools to help the buy-side determine the success of the strategies which have been deployed. With such services on offer, why is it that many members of the buy-side community remain reluctant to trade on a large scale through broker algorithms, despite evidence that they contribute positively to overall execution performance, at the very least freeing up the trader’s time to focus on more exacting transactions.

“There is an information gap,” purports John Wightkin, CFA, managing director and co-founder of the Quantitative Services Group (QSG), which accounts for the relatively slow take-up in some quarters of the market. “There is a real need in the marketplace for people to better

understand how algorithms are working,” he says. QSG recently launched an Algorithmic Trading Verification® (ATV) service which acts “almost like an audit”, assessing the efficacy of broker algorithms. Robert Kay, managing director of GSCS Itero, who have recently launched a similar product, reiterates these sentiments: “As algorithmic trading has moved on from providing fairly basic strategies to more complex algorithms, one of the issues it continues to have to address is that of credibility in the minds of clients. In other words, do algorithms actually do what they say they will do, and do they do it reliably? Ultimately a buy-side trader has to be confident that he will be able to explain the execution price achieved to both portfolio managers and compliance officers as representing best execution.”

One of the perceived problems in today’s algorithmic trading market is that the buy-side is unable to effectively differentiate between the multiple algorithms offered by different brokers, all of which are designed to meet a particular benchmark (VWAP, Implementation Shortfall,



“People have been waiting for firms to pull out the right data. That data is resident within an OMS and the trick is simply to extract it on a vendor by vendor, client by client, strategy by strategy basis.”

*Ian Domowitz,
CEO, ITG
Solutions
Network*

Arrival Price and so forth). According to Kay, even the most basic algorithms operate in subtly different ways, and as a result are likely to produce somewhat different results, whether in terms of the average performance or the volatility of performance against a particular benchmark. Wightkin concurs: “While on the surface it looks like they’re the same, when you get down to the detail you begin to see that there are some wide differences – there is actually a wide variability in the footprint these series executions leave on a stock.”

Independent verification is designed to benefit the buy-side and the sell-side, the former by offering assurance that the algorithms they employ are effective and the latter by

providing a means by which brokers can differentiate their algorithmic offering. “On the sell-side, the ability to break through the marketing noise and say, ‘we have had an independent, objective firm scrutinise and review our algorithms. They have said that they are doing what they are supposed to be doing, and what’s more, they are doing it really well’ is potentially an enormous advantage for any broker looking to sell their algorithms in an ever more competitive market place,” says Wightkin.

“An independent analysis process can help the sell-side demonstrate the differences in their algorithms,” says Kay. “As a result, the buy-side can decide which algorithms provided by which sell-side firms are most suitable to the particular trades they want to undertake,” he adds.

Measuring up

One question the buy-side must ask in order to assess the merits of independent verification is ‘where do independent providers of TCA source their data – do they have the resources to provide as detailed an analysis as brokers themselves are able to?’ “It’s the

TCA

usual issue for transaction cost analysis: what data you get in really dictates on what value you can provide going out,” says Ian Domowitz, CEO of ITG’s ‘Solutions Network’, a new subsidiary which will combine the services of Plexus (formerly owned by JPMorgan), Macgregor OMS and ITG’s own algorithmic offerings. ITG will potentially be in possession of the largest comparative database of transactions in the world when it combines its newly acquired Plexus database with ITG’s own TCA database, providing a platform for comparative assessments of broker algorithms.

But what of smaller firms providing independent TCA? The strategy at GSCS will be to “look at a relatively small number of completed transactions in extremely fine detail” and ascertain “not just what the average performance is likely to be, but more importantly what the standard deviation – the maximum and minimum performance – is likely to be,” says Kay. Wightkin explains how QSG are able to delve into detailed tick-data and assess the quality of executions run through algorithms, thereby providing the



“With more information comes wider adoption – more people will be willing to dip their toes into algorithmic trading.”

John Wightkin, CFA, managing director, Quantitative Services Group

buy-side with a guarantee that the algorithms they are employing are working efficiently and effectively.

“Sometimes brokers don’t even go down to this level,” says Wightkin, “first, because they are not being asked to by clients and secondly, it can be too revealing.”

“It is all about performance relative to the benchmark that the algorithm is orientated towards; that’s where we believe we can provide added value,” says ITG’s Domowitz.

“Everybody’s got their own bells and whistles, but there’s a lot of overlap in terms of strategies and benchmarks,” he notes.

“Algorithmic trading is moving to the point where hype behind enhancement of the product will no longer be sufficient for buy-side decision making.

They’re going to need comparative performance figures.” Domowitz expects to see strong demand for ITG’s new Solutions Network. “People have been waiting for firms to pull out the right data. That data is resident within an OMS and the trick is simply to extract it on a vendor by vendor, client by client, strategy by strategy basis,” he says.

Independent indifference

Buy-side demand for a further layer of analysis on top of their existing TCA tools is somewhat lukewarm. This certainly seems to be the case in Europe, where the sue of algorithms amongst buy-side firms is yet to reach a ‘critical mass’, observes Paul Squires, head of central dealing at AXA Investment Management. “Only when rules based trading strategies are employed on a scale similar to that seen in the US can post-trade independent verification tools realistically be of great use,” he says.

At present, in Europe, buy-side traders seem content to rely upon the existing crop of TCA tools, whether developed internally or offered by their algorithmic strategy provider. “We are comfortable with

the controls we currently have in place when evaluating trading performance,” says Dean Scorey, head trader at Schroder Investment Management – a firm that uses algorithms extensively and evaluates its strategies using internally developed performance analytics tools. “Our traders are very familiar with the inner working of the algorithms they use,” he says. In general, he finds the post-trade analysis tools offered by brokers to be “good and reliable.” It is a similar story at AXA. “All of our executions are analysed, both internally and by an external TCA provider, against a number of benchmarks,” explains Squires. This is supplemented with enhanced analysis of the execution of algorithms, he says, which relies upon the TCA tools offered by the algorithmic strategy provider.

However, in terms of TCA in general, Mark Harding at Invesco Perpetual says he would welcome independent assessment, “if only on the grounds that the analytical methodology would be consistent, allowing meaningful comparison.” This would parallel trends in measuring manager performance,



“You have got to build a bridge between those people who are generating these algorithms and users, who will need confidence to trade through them.”

Robert Kay, managing director, GSCS Itero

where internal valuations by managers have steadily been replaced by independent assessment to provide standardisation and effective comparison. As algorithmic trading becomes more common across the globe, the market for independent verification tools and comparative performance figures will become increasingly important. “A tool that assists in determining if and when to use an algorithm may be useful,” concedes Scorey, “especially, as not all stocks or markets are suitable to algorithmic trading.”

Although independent verification may not be turning the heads of traders who already use algorithms and are comfortable with their performance, a role remains for independent TCA in the wider market. “We’re adding transparency

to the process,” argues QSG’s Wightkin, “...and with more information comes wider adoption – more people will be willing to dip their toes into algorithmic trading.” With issues of credibility and trust at the forefront of a trader’s mind, the opportunity to benefit from an independent assessment of a particular broker’s algorithmic offering can only be a welcome one. “You have got to build a bridge between those people who are generating these algorithms and users, who will need confidence to trade through them,” says GSCS’ Kay. By instilling confidence in a product, independent providers hope to encourage greater adoption of algorithmic strategies.

A study conducted by Randy Grossman, research manager at Financial Insights places the provision of TCA as a key driver in the growth of algorithmic trading – a conclusion Domowitz of ITG accepts: “It will certainly drive further competition in this area and as a result it will drive performance improvement as measurement always does,” he adds. “Once you see it, you want to improve upon it.” ■