



DARK POOLS

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Heart of darkness

As dark pool trading grows, algorithmic strategies are evolving – which could be bad news for some venues

Words: Dan Barnes

Dark pools make older algorithmic trading strategies less advantageous, offering a new solution to an old problem – how to trade large volumes of securities without showing your hand to the market. And so algorithmic trading is changing to develop new methods that supersede earlier ideas. But the knock-on effect could be that some venues relying on the previously generated volumes may well find they are drying up.

Just as MiFID has allowed new multilateral trading facilities to launch with a view to absorbing the current growth in trading levels, there is a distinct possibility that these volumes will decline. This is not purely the effect of the equity bear market born of the credit crisis; the growth in dark pool trading venues is creating new routes and avenues for buy side and sell side firms to explore. The problem they tackle for financial institutions is the very same challenge that black box systems were originally designed to crack.

Alasdair Haynes, international chief executive of specialised agency brokerage and technology firm ITG, says that one of the main drivers behind algorithmic trading initially was that it would save on the bottom line. "The driver behind algorithmic trading or rules-based trading was to split orders up and reduce trading costs. The most effective way to reduce transaction costs was to do the trade straight away without anyone knowing about it."

The systems were used to break down block trades without revealing the trading organisation's strategy and reduce market impact. This technique was orchestrated through sophisticated algorithmic models so the trades would appear to be irregular, identified as carried out by humans and therefore the strategy could not be analysed, which would allow competitors to front-run orders.

Algorithms such as volume weighted average price and trade weighted average price are still in use, but a new development in the marketplace has reduced the need for them: As Haynes explains, the need to execute quickly means that the anonymous trading opportunities that dark pools offer give a significant advantage to an organisation. "The dark pool is always, even above the algorithm, going to be the preferred route – if you have a huge order and you can trade it at the mid-point and nobody know about it, that's got to beat breaking it up and displaying it to the market in small slices," he says.

New order

Traders still require execution speed, and need to take advantage of opportunities rapidly – in some cases more rapidly than a human trader could, and so there is still a market (that

has almost become an arms race) for funds and banks to take the black boxes. With jobs being lost across the proprietary trading and hedge fund businesses, automating tasks is also increasingly necessary if firms are to retain their levels of service and delivery. At complex event processing specialist Progress Apama, Giles Nelson, chief technology officer, says that there has been no drop in the desire to deliver on efficiency. "The systems allow human traders to stop doing the simple jobs, and concentrate on the complex stuff. Algorithmic trading allows them to execute more efficiently and cover more of the market, reduce screen real estate and simplify their lives to a point," he says. "These downturns are often the time when the need for

innovation are productivity is increased. People now have two jobs where before they had one and they need tools to help them do it."

Within trading firms, algorithms are now being used in an inversion of their first incarnation. Mark Palmer, chief executive of another CEP specialist, StreamBase, says

that the majority of companies (he puts it at around 60%) are now using them to realise a different concept: conflation – taking smaller trades and grouping them together internally. "People use the term when they are considering smart order routing in particular," says Palmer. "Conflation is the opposite of slicing and dicing; it is the gathering up of positions that you want to take, order flow from clients and so on, then building it up into block orders that that you can then put to a dark pool."

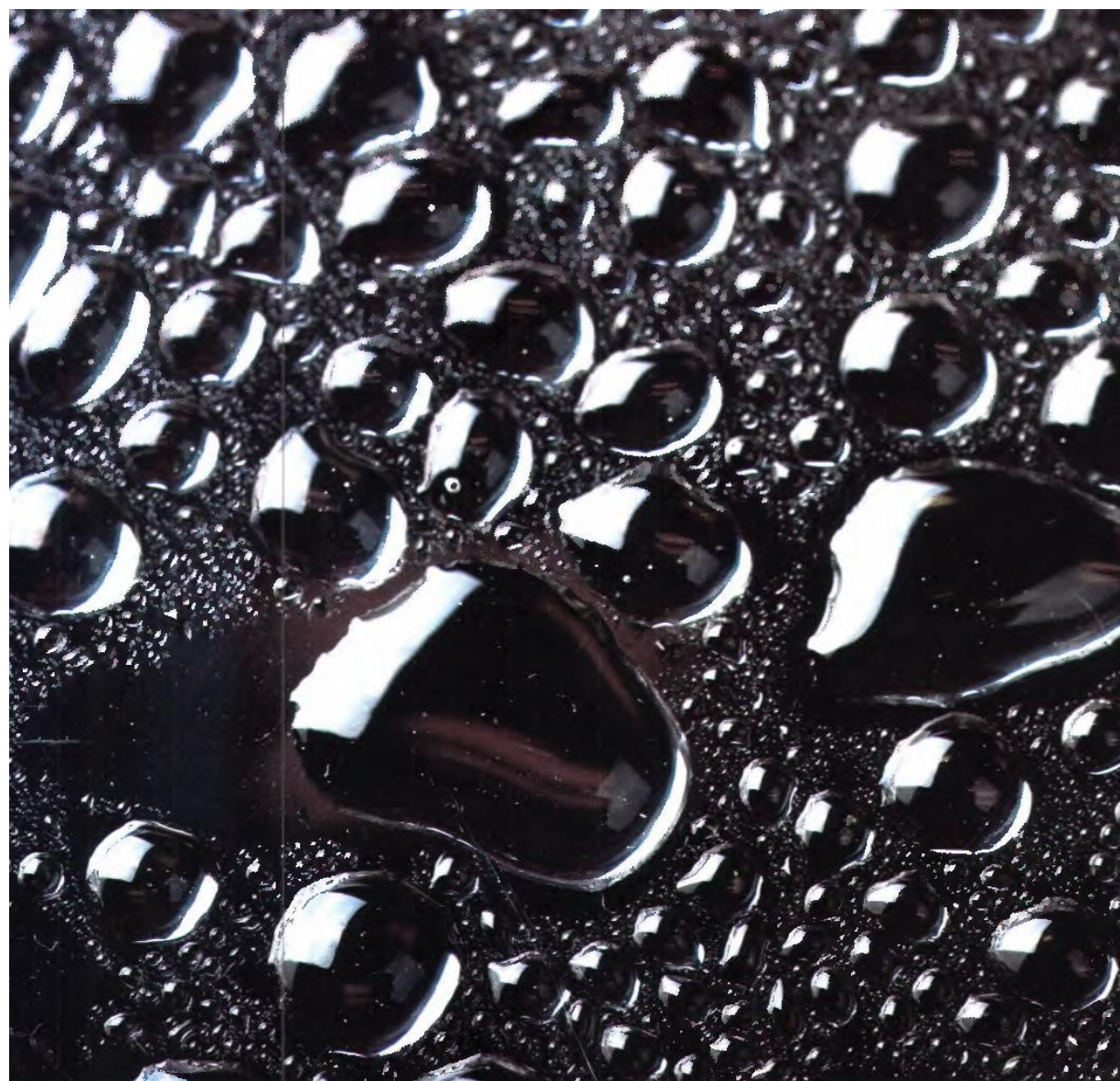
Palmer says that order flows are splitting into three at the moment: "Some trades are still getting apportioned algorithmically – maybe it's not a particularly valuable trade and you can push it through an electronic exchange, the second type is the conflation of orders which are then sent through a dark pool, and the third set go through the human traders," he says.

The knock-on effect of conflation is likely to be a change in the high volumes of trades that have driven the markets so far. Nelson says that the changes in strategy will be one cause of this, "If you look at the exchanges over the last five years, the amount of trading has steadily increased. The total volume has gone up and the size of trades has gone down. Part of that has been the cause of algorithmic trading and part of that has been the effect of algorithmic trading." It has allowed the smaller trades to be executed more efficiently, while it has also assisted with the huge increase in market data volumes. For this reason Nelson notes that the changing market conditions will probably cause a plateau or a slowing of the growth.

Haynes is more certain: "Volumes of trades will fall. Whenever you've seen any form of market volatility, in the

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following period markets get smaller and smaller. I think appetite for risk declines – not the requirement to trade. The principle trading houses of the investment banks, who in the past have always made prices, will not make prices because the risks are too great; they have losses elsewhere and do not have the leverage to do that as they are under capital constriction.”

Where the technologies will thrive, he says, will instead be in areas such as agency trading that do not require such leverage. These players still require choice and the technologies on offer give them that choice “They want access to all the dark pools and they want it done in a smart way,” says Haynes. “Rather than going to one pool, order flow comes from algorithms that lead into a number of dark pools, because people do not know which pool will have the liquidity at any point in time.”

The smart route ahead

The key word is smart. Brokers themselves operate the algorithms and while they have access to all of the pools, it is the decision making that requires split-second evaluation of options using levels of data that a human couldn't process. “This is where the algorithm lies, ‘Should I be in this pool?’ What's the

probability of execution? How long should I be in this pool for? Should I be in the bid? Should I be above or below the bid? Is it price taking or forming?’ This is where you can become smart,” says Haynes? Deciding how you place and display your order is crucial, particularly where some venues are relatively transparent and the decision you make could affect your trade.

Consultancy Net2S has released research that suggests the market still has a long way to go before the effect that smart order routing will have on the marketplace can be determined. Bradley Wood, principal consultant and co-author of the report says: “Our research finds that the basic expectations of MiFID such as client classification and trade transparency have been satisfied. However there is still a huge challenge for businesses to meet best execution. Essentially people need to buy best execution to achieve it, but the solutions still fall short. Market data aggregation and smart order routing still need time to meet the needs of the market.”

With trading volumes predicted to drop by many in the longer term and smarter trading being the order of the day, algorithmic trading will remain a crucial part of the game. But the changes in its use combined with market conditions mean that ‘clear’ venues will suffer over the coming year. **BT**