

## **Is Fixed Income ready to hit Algo Street?**

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*Fixed income has been long regarded as the Cinderella of algorithmic trading – while equities and then FX would enjoy the ball, fixed income would be left behind. However, while we may still be a long way from a glass slipper scenario, there are now glimmerings of real activity and serious intent from both the buy and sellside.*

Algorithmic trading and direct market access technologies are now being used with great efficiency and growing popularity in the equities market. However, the fixed income market, whether looked at from a US or European perspective, is a different matter.

Many in the sector question whether the fixed income market will even make it into mainstream electronic trading, and remain dubious as to whether algorithmic trading will ever have a chance.

There are major difficulties in trading fixed income through algorithms that are inherent to that asset class. Lack of pricing visibility, liquidity, and real time data outside of the primary fixed income markets, such as US Treasury and increasingly, corporate data, are the key issues.

### *Mixed picture*

Some on the buy side certainly fall in with this scenario. For example, asset manager Ashburton is not involved in algorithmic trading. "We still have quite a traditional approach to fixed income, using agency brokers to interact with the market," says Peter Lucas, global investment strategist at Ashburton. "We're not of a size that would cause disruption in the market. Nine times out of ten we'll stick to government debt for the liquidity so we can get in and out of the market as quickly as possible."

Lucas says that the main reason Ashburton does not use algorithms is down to the cost of implementing algorithmic trading. He explains that for a company of Ashburton's size, which manages around £1 billion with fixed income making up to half of that at any one time, there is no cost benefit in installing algorithmic trading, compared to the needs of a far larger company.

However, a rather different picture emerges from asset manager Henderson. While the firm does not use algorithmic trading in fixed income at present, this will soon change. Henderson is putting on a beauty parade to find a best fit solution for its fixed income processes and order management system. According to Andrew Munro, head of fixed income dealing at Henderson, it will use its first fixed income algorithms in bond futures, beginning with the simple 'iceberg' algorithms that it has been using in equities for years.

The reason Henderson is moving into fixed income algorithms now is because the business' internal IT systems are ready to take the technology on board. Munro remarks: "IT across our systems is reaching a stage where we feel we can cope with algorithms. Algorithms are becoming easier to use and will allow us to maintain some anonymity and speed; sometimes speed to market is of the essence." This is only the first move, Munro says: "I imagine as our basic knowledge of the algorithms improves, we will go ever more complex with them."

### *Platform activity*

Some providers of fixed income electronic trading platforms already see algorithmic trading as very much an established part of bond trading and a natural evolution from advancements in the e-trading space. However, the level of activity very much depends on the segment of fixed income under consideration.

Fixed income algorithmic trading is huge in some asset classes, according to David Rutter, deputy CEO at ICAP Electronic Broking, and CEO at Brokertec. He says the area is a substantial part of his business with regard to government bonds and futures bonds, but far less so in corporate bonds.

"Algorithmic trading [in fixed income] is in the high 20% to lower 30% of our business, although it has flat lined a little bit here, following a really quick take off a couple of years ago," says Rutter. He explains that the slump in interest, while partly to do with market saturation, is also down to the fact that today's technology has been broken down to allow traders to dip their toes in the water of fixed income algorithmic trading, rather take the plunge with a full black box or more sophisticated grey box system. Specifically, more firms are using execution software to create efficiencies for traders that used to use the keypad.

Says Rutter: "While 30% is a big number, what we're seeing recently are very basic grey box systems designed to help the trader do their job; these grey boxes can be very simple, allowing a trader to see cash bonds and futures side by side so they can trade both of those, or they can be a design that's driven by creating increased efficiencies for the trader."

### *Who's asking?*

Demand is particularly high for algorithmic trading in fixed income from hedge funds, notes Andrew Hausman, global head of fixed income for the sales and trading division at Reuters.

As these traders are very experienced in algorithms generally they are asking for algorithms in fixed income, but the crux of the matter lies with fixed income's suitability to trade in a request for quote as opposed to order book market.

Hausman explains: "It has more to do with transparency and liquidity, rather than market demand. If those factors were there, algorithmic trading would be used. The question is, is the price going to be there when you need it? I see the growth of this market as an evolution rather than a revolution, making liquid pools of liquidity more broadly available beyond the dealer market." Hausman says that at the liquid end of the curve, this could be a very big market. However, he adds that for the rest of fixed income, algorithmic trading will not have much effect as pools of liquidity simply are not deep enough.

### *Sticky patches*

Liquidity is holding back algorithmic trading on the credit and corporate bond side of the market. Iain Baillie, head of Europe at MarketAxess, which sees little in the way of algorithmic trading, states. "Clearly there were very high profile trades that took place a couple of years ago. But the corporate bond market is relatively unsophisticated in algorithmic trading areas at the moment."

Ballie continues: "The corporate bond market is a vast universe of relatively small issues, so liquidity tends to be very diverse. What you need are really, really concentrated areas of liquidity, like the US government market, which the corporate bond market is the exact opposite of."

However, Andy Nybo, senior consultant with TABB Group, says this method of trading is on its way for fixed income: "I would not characterise fixed income algo trading as pie in the sky; instead I would view it as a work in progress. The problem remains one of market structure and the complicated nature of fixed income securities. Fixed income securities represent a diverse set of instruments with varying structural characteristics that do not lend themselves to automated trading."

Nybo continues: "As an over the counter market, voice trading remains the dominant source of liquidity [in fixed income], in contrast to other securities markets where electronic trading is the norm. With the exception of US Treasuries, the lack of electronic liquidity is a large impediment to algorithmic trading."

#### *No vital signs and no need*

Some commentators are less optimistic in their predictions about algo for fixed income. Not only do they report no activity, but they see the vital ingredients for such activity as largely absent. Without a combination of high liquidity, a means of electronic execution and high level of market transparency, they can find little cause for optimism.

Then, even if these ingredients were to be available, there is of course still the question of demand. "Equally, fixed income managers for the most part have very low turnover strategies that do not encourage the development of algo trading," says Randy L. Grossman, research manager at Global Capital Markets for Financial Insights. "I don't think there will be much of a story here for some time to come."

On the issue of fixed income algorithmic trading, the first thing that Eric Goldberg, CEO at Portware, states is: "I don't think it exists!" He explains what he means: "I don't believe it exists now, except in futures, and I find it difficult to believe it will ever truly exist as some people imagine it will. Most securities are rather illiquid, and many may never be liquid at all. The two requirements for algorithmic trading are electronic, streaming prices and tradable quotes. None of these requirements are currently met by fixed income. For the liquid bonds, it will exist some time soon, but it will always be for only a limited set of securities."

There is also the question of education – as yet the traders who might use algorithmic trading haven't yet had it (and its benefits) explained to them. That might change as algorithmic products start to arrive and traders are shown their advantages – this process certainly had a substantial impact in equities.

Nevertheless, the culture of the fixed income trader is also a major impediment to the advancement of algorithmic trading. The fixed income dealer has typically spent his/her entire career sitting on the telephone establishing relationships with people; that will change and be harder to maintain if that dealer moves into electronic, and then algorithmic, trading. Overcoming that cultural obstacle will not be easy, but it will have to be done before algorithmic trading can gain wide acceptance in fixed income.

#### *Where to begin*

Some businesses, such as Reuters, are pushing the traditionally phone-based fixed income trader towards e-trading through basic request for quote and name disclosed auto-execution, and also through trading APIs. Hausman states: "While an equities trader may not class an RFQ API as algorithmic trading, the introduction of this API starts to take you in that direction. It's too soon to say where we're headed and what the market will say to that, but it does signal a change from what has been a very manual process."

Paul Saltzman COO at eSpeed agrees that e-trading can be the start of moving this market towards algorithmic trading: "The growth of moving voice trading to e-trading opens up asset classes to the electronic space. As that happens the market becomes more susceptible to electronic trading generally, which is the perfect environment for algorithmic trading."

#### *Multi asset kick start?*

The growth of algorithmic trading in fixed income will be aided by cross asset class trading, Saltzman continues: "As more asset classes are traded electronically, the opportunity for cross asset arbitrage will increase."

However, multi asset algo isn't much further forward than fixed income algo, with many trading platforms only experiencing the very beginnings of activity. Where there is demand, it is still mostly what might be termed "multi instrument" rather than "multi asset" – cash versus futures, or Bunds versus Treasuries. That said, there are some early signs of FX versus fixed income activity.

The growth of cross asset trading in fixed income would be of great benefit at Henderson, Munro says, and would definitely push the business further into trading the asset class through algorithms. He comments: "If cross asset trading grew, our currency risk would be immediately neutralised in an area where speed is of the essence. It would spur growth in fixed income algo trading for us."

However, Munro says: "A lot of this is about getting the algorithms first; there are a lot of moving parts under each fixed income trade that need to be pulled together. It's far more complex for our IT guys to get the trade right, versus equities which is very vanilla in comparison."

While cross asset trading will increase the desire to do algorithmic fixed income trades, it will not necessarily be possible, Hausman states. He notes the Catch 22 that just because someone wants to do a particular fixed income trade, does not mean to say there will be the liquidity available to do it, and the argument for and against algorithmic trading in fixed income circles again.

"Cross asset trading is on the rise, and it will trigger the need to do more trades, but in most fixed income examples you cannot use algorithmic trading," Hausman remarks. "There may not be a method whereby an algorithm could help me do a deal as the transparency and liquidity isn't there, so I'd have to go for a request for quote order."

"As some of these markets open to a broader array of participants we are seeing significant growth," says Rutter. "I think algorithmic and black box trading for the most part raises the turnover and velocity of trading and the depth of the market, which in some ways makes it more interesting for the broader universe of traders."

They will then start to say 'we want more tools to trade', therefore more algorithms will come into play."