

Bond trading market structure and the buy side by Elizabeth Callaghan



The driving force behind the transformation of trading market structure in fixed income is the buy side. The catalyst for the buy side is the combination of regulation, including Basel III and MiFID II and the shifting role of buy-side traders. The onerous regulatory environment, with its capital

requirements and MiFID II preparations, has created a terrain of less capital commitment from the sell side, a withdrawal of sell-side firms from certain business areas and overall lower available liquidity in the markets.

Against this regulatory background, the buy side is adapting. The buy side is now in the lead, triggering technological innovation in the attempt to solve or mitigate liquidity challenges. This is viewed in two ways: first, in buy-side execution where the buy side can be seen as price makers on innovative incumbent trading venues, as partners in a buy-side/sell-side consortium (creating electronic trading standards) or providers of liquidity through scraping technology for anonymous (no market impact) trading. Second, the buy-side trader role is changing to one of portfolio advisory. Quite often, a buy-side trader can be found proactively advising his or her portfolio managers regarding liquidity matters, ranging anywhere from selection of trading venues to derivative hedging to the shaping of portfolio components based on market intelligence. Basically, the buy side has migrated from a traditionally passive role to a forceful market participant in fixed income trading.

More than ever, the focus today is on the agility necessary to access bond liquidity across multiple counterparties and trading platforms, while using a variety of protocols. Current buy-side trading strategies are now more advanced and really a case of "horses for courses". What may be the right course for one trade, may not be the right course for another. The protocols and platforms that are being used by buy-side traders are dependent on the characteristics or the "conditions" of the trade. Examples of some of these trade conditions follow:

- *Time sensitive illiquid*: requires strategies or protocols that involve some form of bilateral negotiation such as voice OTC, OTC market making or RFQs.
- *Time sensitive liquid:* requires multilateral low-touch protocols such as all-to all (fixed time, *ad hoc* or continuous) auctions with no concern about market impact as information leakage is not important.
- Non-time sensitive illiquid: requires protocols that are a combination of multilateral and bilateral, with an anonymous twist. The order can sit and wait for the other side or at the very least the best price. The order interacts anonymously with other participants but there is an electronic negotiation phase before execution. There is no market impact as there is zero chance of information leakage.
- Non-time sensitive liquid: requires trading multilateral protocols that are low-touch, such as Central Limit Order Book (CLOB) or Smart Order Routing (SOR) technology to multiple CLOBs. These strategies will have more in common with equity instruments than most fixed income



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instruments. The key element to point out is that equities are more about electronic trading (speed) whereas fixed income is more about the "automation" of trading or optimisation.

Besides buy-side behavioural changes, it is important to look at the link between liquidity and technology. Often it is heard from regulators that there is no evidence that liquidity has deteriorated, whereas market structure technology development says that the evidence is to the contrary. After all, why spend all the time, money and effort to develop solutions to problems that do not exist? The buy side, which is facing the lion's share of liquidity challenges today, is actively shaping protocols and working with trading venues and IT firms to tailor-make functionality. The idea is that this electronic innovation can assist with sourcing, aggregating, crossing, routing or optimising whatever little liquidity there is out there.

The buy side is investing in or sponsoring new services and solutions in order to carry out its advisory trading roles and responsibilities. The technology is widespread: everything from software algos like "fuzzy matching" to outsourced trading. Many of these new services and solutions are not hindered by the fragmented IT legacy of many of the large incumbents. They are more responsive to solving or mitigating liquidity challenges in fixed income markets. The key software and platform developments triggered by the buy side are as follows:

"Fuzzy matching": Software which can identify a bond that matches closely the characteristics of the bond which the buy side or sell side is trying to source. This technology is the best proof yet that there is a liquidity problem. Buy-side traders and portfolio managers are giving up on accessing certain bonds and trying for ones that *nearly match* the wanted criteria.

Information Networks (INs): sourcing and aggregating liquidity: IN firms provide an aggregation layer, offering the trader two key sets of functionality: (i) a global view of

liquidity and (ii) a choice of trading protocols and execution mechanisms from which to select. The trader uses this layer to obtain an accurate, timely view of available liquidity across markets. INs use a high degree of technology embedded in the buy side and sell side's internal systems.

Execution Management System (EMS): Execution Management Systems (EMSs) are software applications used by institutional traders (traditionally on the sell side but now the buy side) designed to display market data and provide seamless access to trading destinations for the purpose of executing trades. Often they contain brokerprovided and independent algorithms, global market data and technology that is able to help predict certain market conditions. One of the important features of an EMS is that it can manage orders across multiple trading destinations such as MTFs, broker-dealers, crossing networks and electronic information networks. EMSs also connect the front office to the back office (through Order Management Systems), achieving efficiencies, cost reduction and risk mitigation.

Liquidity scorecards: The buy side is already working with this to an extent today. In the future, it will become more commonplace and standardised. The likelihood is that rating agencies *might* take this up in order to truly standardise liquidity ratings. However today, this functionality is built in to some trading venues and data providers.

Consortium-owned networks between buy side and sell side: Collaborative efforts between the buy side and sell side where market participants are coming together in the attempt to create liquidity in the bond markets. The hope is to enable greater transparency of trading interests across the marketplace between buyers and sellers of bonds. The relationship is made up of banks and asset managers. Across the network, directly connected buy sides access pre-trade indications from participating sell sides. The buy side can receive pre-trade indications from multiple banks in a standard format using a single connection (ie FIX protocol).

Niche trading: The buy side is routing trades to banks that are developing electronic specialised expertise and are becoming known for trading and making markets in certain asset classes or regions: eg LATAM or automotive.



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Inter-dealer broker (IDB) hybrid voice/electronic: IDBs are reinventing themselves and actively building solutions that are interacting with buy-side inventory, either by direct FIX API connectivity or existing Order Management System infrastructure. They are offering a variety of trading protocols eg CLOBs or auction-based, volume matching tools that enable buy and sell-sides to trade anonymously at a predetermined or dynamic mid-price, across multiple liquidity pools with integrated back office, technology and infrastructure.

Multi-asset trading: As banks and buy sides review their bottom lines more, it has become obvious that some IT and skill-sets can be shared. It is too expensive to have totally separate infrastructure carrying out trades that would ultimately benefit from sharing of knowledge between asset classes. Multi-asset desks can provide high touch and low touch trading based on the needs of the trade, *regardless of instrument*.

Buy-side price-makers: The buy side is starting to place firm prices on Central Limit Order Books (CLOBs) and other agency-only trading venues. However, the buy side is not placing firm prices in large sizes. Hedge funds *may* step in (providing it suits their trading strategies) and provide larger sized bond pricing, bolstering available liquidity as price making is more conducive to a hedge fund's business model than an asset manager's. Traditional asset managers will not step in as market makers.

Internal fund crossing portal: A workflow efficiency tool enabling the buy side to execute internal fund crosses at an independently determined mid-price, creating "internalised liquidity".

All-to-all: This is the true definition of "multilateral trading" (connecting dealers, investors and other market participants on a centralised all-to all platform). All-to-all brings together pre- and post-trade information from a number of market data sources and electronic platforms and routes transactions through one all-to-all platform, creating a buy-side/sell-side firm liquid marketplace. (Today, this is suitable for small sizes that are liquid).

Central Limit Order Books (CLOBs): CLOBs are an example of all-to-all but with built-in electronic limits. CLOBs are popular in small sizes and liquid trades. This is due to the fact that neither the buy side nor the sell side wants to leave a large/illiquid price available to be traded against. It is thought that CLOBs may end up assisting price discovery as a "reference price" (even though the average trade size will be small) for anonymous trading platforms.

Anonymous trading platforms (multilateral): Anonymity is attractive to market participants who want to complete large transactions without drawing attention to their trades, since such attention could impact market prices. These trading venues are anonymous and/or semi-lit and can be buy side to buy side or buy side to sell side. Price formation is in the dark (non-transparent) as the anonymity protects participants. The success risk for these trading venues or platforms is that a trading venue can match a buyer and a seller in the dark but they need to have an idea of a midprice (comparison "reference price") to trade successfully. Most believe there will be somewhere between 6% and 10% of all bond trades carried out on these platforms.

"Super trading desks" or "outsourced trading": A few large regional buy sides are creating centralised super-desks offering efficiency and lower operational risks. These out-sourced trading desks are accessing more easily sell-side market making capabilities (balance sheet) and global reach. An outsourced trading provider will be able to evidence best execution to regulators and trade report to the public for its clients in a scalable manner. The ability to measure best execution and broker performance as well as buy-side trader performance will be offered through transaction cost analysis (TCA). Further benefits are regulatory process control through management of transparency thresholds under MiFID II and "reg-tech" costs.

No one knows where the reinvention of the buy side will take fixed income market structure development in the future. However, this is one to watch as the buy sides are adjusting their behaviour with each other as well as with sell-side broker-dealers due to the twin tidal forces of regulatory pressures and low liquidity environment. Increasingly, the buy side is becoming more shrewd and knowledgeable not only in the use of technology but also by expanding business practices into price making (not to be confused with market making), providing target prices at which it is willing to trade. This is the start for a buy-side seismic shift away from passive patterns of behaviour of the past towards a more proactive one of the future.

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