

Dark Pools of Liquidity Summary and Impact Analysis

Background

Market and trade fragmentation complicates the extraction of the best execution value for investors. A Dark Pool is basically a closed crossing-network which isolates an order from the broad trading providing its participants with absolute anonymity. Tapping into Dark Pools via integrated trading networks can provide added liquidity and price improvement without leaking trading interests.

A number of market centers and major brokerage firms through various processing scenarios provide smart routing which enables larger blocks of trading and more efficient transactions. One example of Dark Pool usage comes from buy-side firms that are looking at Dark Pools as an alternate trading forum for executing large block orders while preserving anonymity without impacting the market. Orders can be routed to dark books to find hidden, reserve and discretionary liquidity which, in many cases, can provide price improvement and best execution.

Firms are accessing Dark Pools via individual point to point connections for avenues to each liquidity source or by means of Managed Network Partners for access to multiple pools from the same entity. The different solutions have positive and negative aspects of utilizing the respective method. Accessing multiple Dark Pools through point to point connections is a cumbersome undertaking from a network support / efficiency standpoint. This is due to multiple interfaces and connectivity configurations coupled with potentially unique support processes for each Dark Pool source. This has a tendency to be a resource struggle and overall initiative constraint during implementation as well as ongoing support of the production processes. Partnering with Managed Network providers that

essentially offer access to multiple Dark Pool sources of liquidity is a way to eliminate multiple connection points and support processes. Utilizing a Managed Network provider also allows for the use of a single interface therefore a more efficient experience. Although there's less to manage, there's also the real threat of a single point of failure for access to multiple sources of liquidity. Providers offer redundancy for sound business resumption, but the potential threat of an outage still looms.

In addition, trading algorithms are now being offered by firms to compliment their dark pool offerings. This provides for navigation to the potentially best priced and fullest range of liquidity sources for their clients.

Overview

Alternative Trading Systems (ATS), Electronic Communication Networks (ECN) and Executing Brokers (EB) all play a major role in support of drawing out Dark Pool Liquidity and enabling larger, more efficient trading blocks for institutional and other large scale investors. Firms are devising algorithms that poll Alternative Trading Systems. This type of "polling for Liquidity" is often referred to as a "Liquidity Ping", while an IOI (Indication of Interest) is understood to be sent by brokers or Dark Pools to buy side institutional clients. Investment firms usually route orders to dark pools to catch liquidity but then proceed to a market where quotes are published. Some users may leave block orders in dark pools awaiting offsetting flow but most use dark pools as an opportunity on the way to a published market. An order only placed in a dark pool has no protection when trades occur in a published market unless the entire or partial order are included in the order book at the exchange or ECN. Strategic dark pool routing can provide for more efficient and potentially more profitable trading with minimal impact to market prices without sacrificing anonymity.

Each provider must meet market and regulatory demands while differentiating their service offering in the marketplace. The various types of execution venues are illustrated as follows:

- Alternative Trading Systems (ATS)
 - An ATS is an entity or system that constitutes, maintains, or provides a market place or facilities for bringing together purchasers and sellers of securities with respect to functions commonly performed by a stock exchange. The entity must not set rules governing the conduct of subscribers other than the conduct of such subscribers' trading on such organization, association, person, group of persons, or system; or discipline subscribers other than by exclusion from trading.
 - There has been considerable growth in the number of firms offering an ATS solution, but the following providers are among the leaders in the industry.
 - BATS; Pipeline; POSIT; NYFIX; Liquidnet; NASDAQ Fix; Level; OES
 - The larger the pool of strategic liquidity partners, the more attractive the offering is for potential users of the platform.
 - Offerings should enable an option for anonymous order routing of transactions.
 - Providers typically collect commission related fees based upon each trade executed through their platform.
- Electronic Communication Networks (ECN)
 - An electronic system that attempts to eliminate the role of a third party in the execution of orders entered by an exchange market maker or an over-the-counter market maker, and permits such orders to be entirely or partly executed. Orders can be placed in an ECN by any registered broker dealer and in several by institutional or retail clients facilitated by a broker's system.
 - Over the last year, there has been significant consolidation among ECN platforms that were operating since the arrival of decimalization and the market pullback. The following ECNs are widely considered the market leaders in the industry:
 - ARCA, a subsidiary of NYSE and subsidiaries of NASDAQ in BRUT; INET; Super Montage (SUMO).

In addition, these players are in some cases newcomers to the ECN field or have been around but are privately owned (i.e. Bloomberg):

- Citi's Ontrade, Knight's Direct-Edge, Track Data's TrackECN, and the Bloomberg Tradebook, all of which exist independently from any exchange
- The major ECN platforms are subsidiaries of major markets, i.e. NYSE and NASDAQ.
- A leading ECN will accommodate a full compliment of order instructions, ranging from common order types such as Limit or Market orders to more complex Fill -or-Kill (FOK) or Immediate-or-Cancel (IOC) orders and etc.
- An ECN may charge an initial setup fee as well as on going transactional charges.
- Executing Broker (EB)
 - The broker or dealer that finalizes and processes an order on behalf of a client. Orders sent to executing brokers are assessed for appropriateness, and if the order is deemed practical, the executing broker will then carry out the order.
 - Broker Dealers who are market makers and/or specialists are integral to the stability, liquidity and transparency of the markets.
 - Providers must work with industry standard protocols such as FIX and be amenable to working with other commonly accepted protocols.
 - Each executing broker must connect to a comprehensive set of liquidity providers to remain competitive in the market place.

Market Trends

The ECN industry is active with consolidation and ever-evolving competition. In the past few years, the NASDAQ has acquired BRUT and INET, while the NYSE has purchased ARCA. These moves were made to neutralize competing venues and benefit from their more advanced technologies and trading methodologies. In late 2006, the NASDAQ integrated BRUT and INET into a single trading platform (consolidated book), thereby enhancing trading efficiency as a consolidated exchange. Today, ECNs are increasing their smart order routing capabilities to other ECNs and exchanges. Algorithms used in buy

and sell side crossing networks are even accessing liquidity from ECNs and other networks. These changes are in part due to the sweeping regulatory changes hitting ECNs by way of Reg NMS.

Correspondingly, ATSS are the blossoming trading destination in the impending Reg NMS environment. Internal crossing networks and then external crossing networks originally paved the way for this form of anonymous trading. Many broker/dealers then began combining their resources to create ATSS to curb order flow sent to the exchanges and ECNs. In response, exchanges and ECNs have even entertained their own ATS extensions.

Despite the obvious benefits of ATSS, like enhancing liquidity and anonymity, many worry that ATSS will bring back the fragmented markets of the first days of ECNs. Under Regulation ATSS's Fair Access Rule, augmented due to Reg NMS, any ATS that controls more than 5% of the average daily volume in a security over four of the preceding six months must provide open quotes to the market. The SEC granted an exemption on the 5% rule to Liquidnet since anonymous, one-to-one negotiations are the essence of their business, but other exemptions will not be easily obtained. To keep the curtain closed on their trading, some ATSS are passively monitoring the inflow of orders.

A major difficulty in the expansion of ATSS lies in the buy-side's ability to connect to these many limited liquidity sources. Some ATSS have tried to tackle the problem of fragmentation by linking together liquidity pools, but none have made significant enough strides to warrant attention. As markets continue to fragment and the number of execution venues increases, transaction cost analysis (TCA) is becoming a popular approach for making trading decisions. Firms are trying to tackle the issue of how to incorporate trading algorithms with TCA. The next generation of trading algorithms may also be employed to assess settlement costs, exchange fees, and other costs associated with each execution.

How Westwater Can Help

The ability to quickly and successfully connect to various execution venues and "Dark Pools" is crucial in competing in today's markets. When a firm decides to establish a connection to an execution venue there are many considerations that need to be planned. Firms will need to:

- 1) evaluate the venue extensively both from a business and a technology perspective to ensure that interests and expectations are aligned

- 2) create ongoing evaluative techniques and processes that will enable continuing effective use of their investment in such connections
- 3) incorporate compliance monitoring of the trading activity

Westwater has been connecting clients to some of the most popular execution venues such as BATS, Knight Trading, NYFIX, OES, Liquidnet, Arca, Goldman, BRUT, etc. The ability to execute a multi execution point project can be complex. An effective approach to successfully connecting to an execution point contains the following elements: evaluating, planning, developing, testing, and implementing. Westwater has a planning and deployment model that eases this process and includes: requirements gathering, establishing connectivity, certification, production preparation, and go-live support. Again, connecting to multiple execution points is just the first step; managing the effectiveness of a given connection pool requires constant vigilance.



About Westwater

Westwater is a management and technology consulting company that dedicates every resource we have to giving our clients an edge over their competition. We are extraordinary thinkers with deep insight into the financial services industry. We believe in the power of collaborative intelligence – marrying our experience and thinking with our clients' to develop the right strategy for their successful growth.

Whether we are helping to solve business issues or are creating innovative solutions to operational or technology challenges, we always aim to exceed expectations. Our goal is to enable our clients to turn strategy into business results quickly, helping them to become and remain industry leaders.

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