BIDS TRADING

# When There Isn't a Natural: Solving the Last Mile Problem of Principal Liquidity

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The gold standard in any well-designed market is putting together natural buyers and sellers. The problem is that naturals don't often exist. This paper will review one estimate of how often natural block liquidity is available. We will then look at alternative options to trading a natural block and provide data around some common misconceptions about non-natural liquidity.

## How often is there a natural?

BIDS has used innovation, service, and integrity to become the leading off-exchange venue for block trading[1] in the US. Over the last 18 years we have worked relentlessly to solve connectivity and workflow issues for both the buy-side and broker communities. In the US, we now have direct connections to 438 asset managers and liquidity from 41 broker dealers. The bulk of the flow from our brokers is repacked client flow (agency). Through Q3 2024, our monthly market share has varied between 16 and 20 percent of all block trading done on an ATS. This is not a commercial for BIDS, but rather background for our analysis. The scale that BIDS operates at allows us to more correctly infer what the overall market for natural block liquidity looks like.

Even at the scale at which BIDS operates, we have observed that our GUI based buy-side users only get invited (matched) on one in three of their parent[2] orders. Given that we are connected directly or indirectly to most of the existing market, the low rate of matches suggests this isn't a connectivity or breadth issue specific to our venue. It is our view that the limited amount of natural block liquidity is more so a characteristic of the overall market.

## What can be done in the absence of a natural?

In the absence of a block natural, investors are presented with a few options. None are perfect and they all have a place depending on the underlying goals and objectives of an investor. They are also not mutually exclusive. Investors can and will use combinations of the following approaches.

One option is for an investor to wait patiently for liquidity to arrive. The obvious downside to this approach is that prices may move away from the price the investor observed when they made the decision to trade (opportunity cost). This approach is particularly harmful in cases where the investor has expected alpha.

Another alternative is to "work" the order. In this case, the order is broken into smaller (child) orders and executed in the market. This approach has the downside of potentially moving the market away from the investor's price (market impact).

A third approach is to interact with a market participant(s) trading principally for their own account. Institutions have generally been averse to this option for several reasons. There is a perception that interacting with a market participant trading against the investor may harm the investor's performance. This harm can come from information leakage, i.e. prices moving away from the investor's order when the full quantity has not been completed. This harm can also take the form of adverse selection, i.e. prices moving against the investor's order after the full quantity has been executed. Principal trading may also be structurally expensive in that losses incurred by the contra firm can harm a larger relationship.

[1] Source: January through August 2024 - OTC Transparency data is provided via http://www.finra.org/industry/OTC-Transparency and is copyrighted by FINRA 2024. A block is defined as 10,000+ shares.

[2] A parent order is the largest order from a firm with a unique side, symbol, and day combination.

## Can we improve outcomes when asset managers interact with principal liquidity?

As many of the issues affecting natural-to-natural trading also impact natural-to-principal trading, we recognized an opportunity to solve workflow and design problems related to asset managers' trading with principal contras. Our main thesis is that the principal community has a role to play in providing liquidity, but there is a last mile problem in delivering this liquidity to the buy-side.

Problems of connectivity and information leakage affect the principal community just as they do asset managers. Newer, primarily technology enabled principal trading firms often have the additional issue of not having established customer relationships and connectivity. Even traditional banks and broker dealers may not want to incur the time and expense of delivering their principal liquidity to the buy-side desktop. Further, in cases where delivery mechanisms are available, legacy systems may be difficult to adapt.

BIDS believes we can solve these problems by using our connectivity to connect counterparties in ways that make sense for both sides. To accomplish this, we developed two approaches that let users select which, if either, workflow works for them. Many users have enabled both approaches.

APPROACH 1

### Anonymous/All to All

Leveraging the core functionality of our ATS's main order book, we began offering sponsored users (buy-side) the option to trade with contras acting in a principal capacity. This solution offered a variety of benefits to both asset managers and firms trading in a principal capacity including, allowing both sides to remain anonymous; asset managers to continue paying their brokers when interacting with new sources of flow; and traditional and more recent entrants into the principal trading space to get closer to an important source of flow. Most importantly, it removed onboarding frictions for both sides. This last point is key. Paperwork and connectivity can take years and be costly for all involved. BIDS has allowed firms trading principally to have broad rollouts of their liquidity quickly with no development costs.

APPROACH 2

### Bilateral/Disclosed

BIDS also leveraged our integration to asset manager blotters to offer a bilateral and disclosed option for buy-side users who want to trade against principal contras. This feature, called Actionable IOI (AIOI), solves for information leakage by letting brokers use conditional orders to send IOIs to the subset of their clients with a contra side order in BIDS. This approach requires the broker to have an existing relationship with the account but comes with the added benefit that the broker earns a commission for providing liquidity. The disclosure element of this feature offers the potential to grow trades beyond what was executed in BIDS, i.e. by leveraging high touch channels.

## What does our data[3] tell us about buy-side interaction with principal liquidity?

### 1. Principal liquidity fills gaps when natural liquidity is not available.

Most of the liquidity in the BIDS ecosystem is related to the overall market as defined by the total traded volume on the consolidated tape. This is true for BIDS total traded volume, BIDS block traded volume and trading in BIDS by the buy-side. As shown in the table below, all three have positive correlations with the consolidate tape. Even changes in buy-side parent order volume track activity in the overall market. This is not surprising given that macro events can affect both BIDS users and participants in the broader market. In many cases, they are the same actors.

Interestingly, there is a negative relationship between changes in buy-side parent order volume and the percentage of buy-side trading that is done with principal contras. In a term used often in software development, this is working as designed. When there is less natural liquidity, principal contras are stepping in to fill the gap.

| Relationship | Correlation |
|---|---|
| Chg. Consolidated Volume Vs. Chg. In BIDS Traded Volume | 0.33 |
| Chg. Consolidated Volume Vs. Chg. In BIDS Block Traded Volume | 0.23 |
| Chg. Consolidated Volume Vs. Chg. In BIDS Buy-side Traded Volume | 0.20 |
| Chg. Consolidated Volume Vs. Chg. In Buy-side Parent Order Volume | 0.16 |
| Chg. Buy-side Parent Order Volume Vs. % of Buy-side Trading vs. Principal Contras | -0.10 |

[3] All data referenced in items 1-5 comes from trading in the BIDS ATS during the period from January 1, 2024 through September 30, 2024

### 2. Electronic principal liquidity is more than small HFT.

Most GUI-based users have a minimum volume set to 5,000 shares or greater, and most of our buy-side users trade via our GUI (BIDS Trader). To reflect the typical experience of the buy-side community, we looked at buy-side trading in lots greater than 5,000. In this category, the average size of a fill against an agency contra was 21,391 shares. In the same category, the average trade size against a principal contra was 18,969 shares. This marginal difference shows that principal contras can and do come in block form.

| Contra Capacity | Average Trade Size |
|---|---|
| Agency | 21,391 |
| Principal | 18,969 |

### 3. Sponsored users (buy-side) don't get adversely selected when trading larger size.

Looking at the same category of trades (buy-side fills of 5,000 shares or greater), we observed that buy-side users have a positive return from trade to close of 5.6 basis points when trading against an agency contra. When trading with principal contras, the return to close increases to 14.1 basis points.

The buy-side can and do have a positive return experience when trading larger size against principal contras. It should be noted that the average spread at the time of these trades was 18 basis points. This would suggest that both sides are interacting at reasonable prices and finding valuable liquidity in more challenging names.

| Contra Capacity | Average Spread (BP) | Average Return to Close (BP) |
|---|---|---|
| Agency | 19 | 5.61 |
| Principal | 18 | 14.14 |

### 4. Workflow designs that connect directly to blotters have superior response rates to displayed messages.

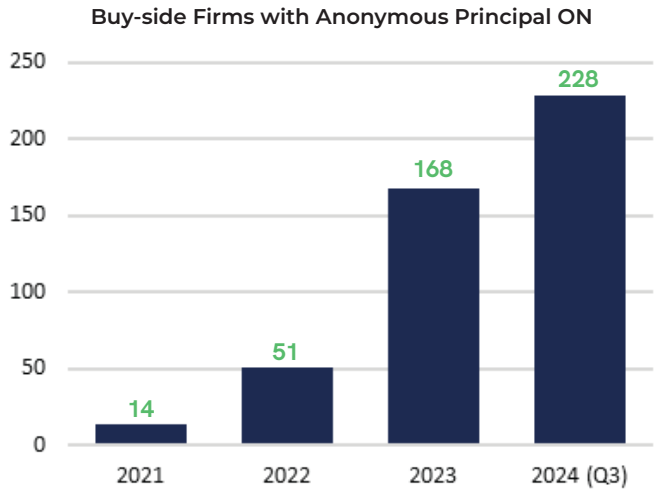
In the period studied, 37% of symbol matches presented to asset managers as AIOIs resulted in a firm-up (i.e. the BT user attempted to trade on the message). We are not aware of another IOI system that offers such a high rate of converting the messages that are shown to users to orders and trades. Having good connectivity helps to reduce unnecessary message traffic and eliminates leakage. We also believe having good workflow drives liquidity distribution in ways that more passive messaging systems can't.

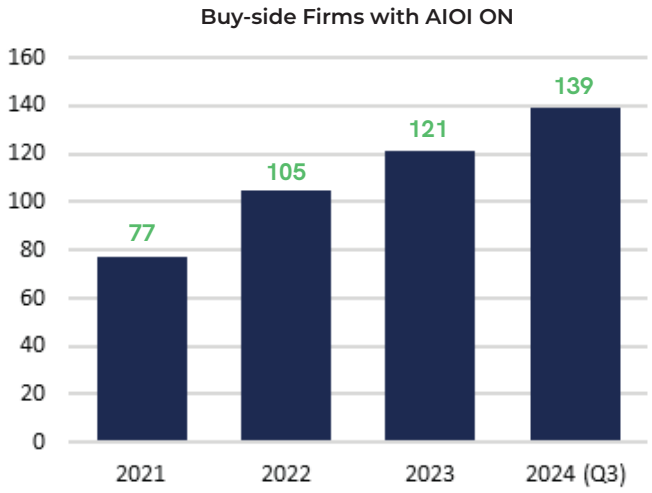
Firm-up rates between BIDS Trader users and principal contras on the anonymous book were even better. When looking at our primary order book, we look at pure firm-up rates, which may include multiple fades in the same symbol. Even under this more conservative methodology, BT users firm-up 55% of invites against principal contras. We believe the higher firm-up rate on the anonymous order book is due to a couple of key factors. Some clients prefer anonymity so the non-disclosed design of this workflow may be a factor that leads to a higher firm-up rate. The anonymous book also allows commission flexibility as any sponsoring broker can be chosen to clear the trade. This flexibility may be another factor driving the higher firm up rate on the anonymous book. Regardless of the reason for the higher firm-up rate, providers of anonymous principal liquidity can be assured that the messages their orders generate are highly likely to result in trades.

### 5. Buy-side adoption of principal trading solutions is strong.

Asset managers are sophisticated and demanding. We do our best to create solutions that we think will add value, but we have always taken the view that our system should be customizable and that users should control how they use us. Users tell us by their adoption what solutions make sense.

In this spirit, all our principal solutions are exclusively opt-in. Even with a conservative approach to the principal feature rollout, the community has embraced both options for trading with principal liquidity (see charts below). We view this as proof that the buy-side community is eager for solutions in this space.




## Conclusion

Good products and good technology offer thoughtful solutions to real problems. Even in the most liquid equity market in the world, an investor will often have difficulty finding another investor who is willing to take the other side of their trade. This is a problem for investors looking to implement their portfolio decisions.

We believe that principal liquidity can be a useful source of liquidity when a natural is not present and BIDS has an important role to play in delivering this liquidity to the buy-side. BIDS was founded as a utility, and we still bring this approach to creating solutions. We believe that users shouldn't have to solve the same problem individually - and at great cost in time and dollars - when a common solution can be easily leveraged by multiple market participants. The BIDS team is dedicated to continually refining these ideas, and we welcome any thoughts and suggestions on ways to enhance asset managers' interaction with principal liquidity.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