



# **HEALTHY MARKETS**

## TRANSPARENCY & TRUST

### **Public Excerpts of 2016 ATS Risk Assessment**

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## **Acknowledgements**

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## **About Healthy Markets Association**

Healthy Markets is an investor-focused not-for-profit coalition working to educate market participants and promote data-driven reforms to market structure challenges. Our members, who range from a few billion to hundreds of billions of dollars in AUM, have come together behind one basic principle: Informed investors and policymakers are essential for healthy capital markets.

Healthy Markets can be found online at [healthymarkets.org](http://healthymarkets.org). Twitter: [@healthymkts](https://twitter.com/healthymkts)

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## Executive Summary

Alternative trading systems (ATSs) play a critical role in our modern financial markets.

For too long, there has been almost no publicly available information for most ATSs. Investors and routing brokers have been forced to blindly trust their ATSs. After more than a half-dozen high-profile enforcement cases involving some of the oldest, largest, and most respected dark pools, that trust is quickly becoming a thing of the past. Investors and routing brokers are now demanding details about how ATSs operate, their technology risks, who owns them, and dozens of other factors.

The 2016 ATS Risk Assessment is intended to provide Healthy Markets Members with answers to the key questions about the leading US equity ATSs, ranging from its conflicts of interest to average trade sizes. This Report examines the 18 largest ATSs, which comprise about 88% of US equity ATS trading.

We expect this Report will supplement firms' due diligence, trading, routing and review practices.<sup>1</sup> We looked at ATS websites, FAQs, Forms ATS, and we asked each ATS dozens of specific questions from our publicly available [ATS Questionnaire](#). We also looked on regulators' websites, such as FINRA's ATS data and BrokerCheck. In this way, our actions were not dissimilar from those which an investor or routing broker might perform (were it to have the time and resources) before interacting with an ATS for the first time.

The report builds upon our groundbreaking [ATS Transparency Index™](#), which provides a comprehensive overview of ATSs' disclosures in several key areas. That Index indicates whether an ATS provides meaningful disclosures in identified areas, but does not pass judgment on the substance of such disclosures. Thus, the Index simply tells investors and routing brokers whether they likely have critical information. This Risk Assessment goes further by examining practices and ATS functionality to determine areas of risk for investors.

The body of this 2016 ATS Risk Assessment contains three primary sections:

- ATS Risk Comparison;
- ATS Quantitative Comparison; and

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<sup>1</sup> Importantly, we do not recommend relying exclusively on this report when making venue routing decisions. Rather, the data and information provided in this Report should supplement information used by investors and brokers in their existing evaluations of venue risk and performance. As described more fully below, this report uses only information made available to Healthy Markets, such as information that is available on an ATS's website, in its regulatory filings, or provided in response to our questions. It does not necessarily reflect all information that the ATS may separately elect to share with its subscribers, regulators, or other parties.

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- Individual ATS Risk Assessments.

### ATS Risk Comparison

In this section, we provide qualitative comparisons of risks posed by 18 ATSs overall, as well as in each of the following four categories:

- Conflicts-of-Interest Risks;
- Information Leakage and Counterparty Risks;
- Technology Risks; and
- Enforcement Risk.

Each ATS is scored as presenting a low, medium or high risk for each individual section, as well as on an overall basis. As a result of our analysis, we determined that the disclosures (or lack thereof) reflect that 7 ATSs pose **LOW** overall risks to investors and routing brokers and 5 pose **MEDIUM** risks. The remaining 6 ATSs (none of which completed our Questionnaire) do not provide adequate information with which we could conduct any meaningful analysis. Accordingly, these firms were rated as providing **Insufficient Information (II)**.<sup>2</sup>

### ATS Quantitative Comparison

In this section, we examine the basic quantitative measures that are the most-frequently examined statistics for investors and routing brokers:

- ATS markets shares (both for ATSs and for the overall markets);
- average trade sizes;
- midpoint execution rates;
- trading by market cap; and
- block trading characteristics.

### Individual ATS Risk Assessments

In this section, we provide in-depth examinations into the disclosures and practices of each of the 18 studied ATSs, across the broad spectrum of identified issue areas. This section includes the ATS's specific disclosures and responses to our Questionnaire (if any). This section will help you get a better understanding of the exact risks posed by each ATS.

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<sup>2</sup> We recognize that these firms would all otherwise be scored as posing **HIGH** risks. While we have declined to score them as **HIGH** risk, in many cases, it is nevertheless likely that the ATS would have been rated as posing elevated risk levels, were it to have responded to the Questionnaire. We would thus urge caution when engaging with these ATSs.

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Lastly, this risk assessment is inherently subjective in nature, and is based upon our relative weights of interests and concerns for investors and routing brokers. We expect to refine our reporting as we gather more detailed data, and as investor priorities change. We envision this resource not just as a look backwards at what ATSs have done wrong, but also as a way for you to be better informed in your interactions with ATSs in the future.

We hope you find this 2016 ATS Risk Assessment helpful.

## **Methodology**

We approached this exercise similarly to how an investor or routing broker might approach evaluating a new ATS or an ATS it has not previously used. We simply collected and evaluated as much information as we could directly obtain from the 18 of the top volume ATSs.<sup>3</sup> For each ATS, we looked for Forms ATS, FAQs, and other public information, such as from their websites and regulators' websites. To supplement this information, we asked each ATS to respond to our *ATS Questionnaire*.<sup>4</sup>

Our overall methodology was to identify within each Risk Assessment category the handful of variables that we believe to be most critical for investors and routing brokers. Based on those variables, firms were given scores from our assessment of their disclosures or responses to our questions. Since our focus is on ATS users, where information was not available to us, we were forced to put the ATS in the highest risk category.

Conflicts of Interest risks were scored on four variables:

- whether the ATS operator or an affiliate trades in its own pool;
- if the ATS operator and/or an affiliate trades in its own pool, the nature of its trading;
- whether an ATS operator and/or affiliate trading in its own pool trades on an equal basis with participants; and

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<sup>3</sup> We examined Barclays LX, BIDS, Bloomberg Tradebook, Convergex, Credit Suisse Crossfinder, Deutsche Bank SuperX, Goldman Sachs SigmaX, IEX, ITG POSIT, JPMX, KCG Matchit, Level ATS, Liquidnet Negotiation, MLXN, Morgan Stanley MS POOL, PDQ ATS, State Street, and UBS ATS.

<sup>4</sup> We received responses to our ATS Questionnaire from Barclays LX, BIDS, Deutsche Bank SuperX, Goldman Sachs SigmaX, IEX, ITG POSIT, KCG Matchit, Liquidnet Negotiation, PDQ ATS and UBS ATS. Level and Bloomberg Tradebook permitted us the use of a response to a previous survey conducted by principals of Healthy Markets for an unrelated purpose. MLXN has informed us that it continues to work on the ATS Questionnaire, while we have no expectation of any responses from the remaining ATSs.

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- if an ATS-affiliated SOR prefers their ATS (where the SOR is not used specifically to access the ATS).

Information Leakage and Counterparty risks were scored on four variables:

- whether the ATS offers information-leaking IOIs and Conditional order types;
- whether the ATS offers client segmentation and opt-out functionality;
- the amount of natural-to-natural trading; and
- whether and to what degree the ATS offers minimum quantity order functionality.

Technology risks were scored on three variables:

- whether the ATS uses market data feeds,
- whether the ATS offers co-location; and
- whether the ATS has adequate disaster recovery capabilities and business continuity plans.

Enforcement risks were scored on two variables:

- whether there were any significant enforcement actions against an ATS operator and its affiliates that may potentially be ATS-related; and
- the average number of annual enforcement actions against an ATS-operator and its affiliates (for anything) over the past 10 years.

For each variable, scores were assigned based on each ATS's characteristics. The lower the score, the less risk posed to investors and routing brokers. A more detailed examination of this scoring process can be found below in the individual category sections.

These scores added up to a total possible category score. The relative total possible scores under each category reflect our weighting of that category's importance, as follows:

- Conflicts of Interest Risks - up to 9 points;
- Information Leakage and Counterparty Risks - up to 8 points;
- Technology Risks - up to 6 points; and
- Enforcement Risks - up to 3 points.

Each ATS was then given an Overall risk score by simply summing all of its individual risk categories. This led to a range of overall scores for ATSs between 4 and 26. Overall risk scores were then assigned the following thresholds:

- **LOW:** less than or equal to 11 points

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- MEDIUM: between 12 and 16 points
- HIGH/II: greater than 16 points

For the six firms that declined to respond to our Questionnaire, rather than simply classify them as all **HIGH** risk, we rated them as providing **Insufficient Information (II)**, unless we were able to otherwise obtain sufficient information with which to rate them. We recognize that this overall scoring methodology reflects our subjective assessments of risk values, and that investors or routing brokers may place different values on different risk areas, including areas that may not be covered by this Report.<sup>5</sup>

## ATS Risks Comparisons

### Overall Risks Assessment Comparison

We find that 7 of the 18 ATSs studied pose **LOW** Overall risk. Two ATSs, IEX and Liquidnet, really stand out as the only ATSs to pose **LOW** risks in each of the four identified categories. BIDS, Deutsche Bank, ITG, LevelL, and PDQ each posed **LOW** Overall risks, although each had at least one category of elevated risks.

Five firms, including Barclays, Bloomberg,<sup>6</sup> Goldman, KCG,<sup>7</sup> and UBS, were designated as posing **MEDIUM** Overall risks. These firms generally cooperated with our ATS Questionnaire and provided us with sufficient information such that we could meaningfully assess their risks.

Lastly, 6 ATSs declined to respond to our **ATS Questionnaire**, and because there is such limited public information with which to sufficiently rate them, we rated all six firms as Insufficient Information (II). If we had applied our Overall scoring methodology across these ATSs, each

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<sup>5</sup> For example, we view the existence of an enforcement case (represented by our Enforcement risk) to be the least critical component to our analysis, since regulatory actions are not, by themselves, typically damaging to investors or routing brokers. Rather, it is the conduct giving rise to the actions that may pose risks to investors. Nevertheless, we have included it in our assessment because (i) the announcement of a regulatory enforcement action may suggest deeper or ongoing cultural concerns with an ATS operator, and (ii) investors and routing brokers typically reassess their relationships with ATSs following a regulatory action. We do not consider this risk nearly as concerning as other areas, and thus gave it the lowest relative weighting in our overall scoring. Similarly, we find that Information Leakage and Counterparty Risks and Technology Risks are extremely difficult for firms to generally identify and evaluate. Put simply, there are lots of opportunities in these areas for risks to arise. Accordingly, we have weighted them more heavily.

<sup>6</sup> Immediately prior to releasing this Report, Bloomberg contacted us to engage more fully. As with any firm, we may revise its scores to reflect new information, as we become aware of new information and as may be appropriate.

<sup>7</sup> On May 30, 2016, KCG notified us that it is significantly revising its systems in the very near future. We anticipate revising its scoring to reflect those changes, as may be appropriate.

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would have been scored as posing **HIGH** Overall risks, based largely on inadequate public disclosures regarding conflicts of interests and information leakage and counterparty risks. Of this group, JPMX, MLXN, Morgan Stanley and State Street were found to have no meaningful, publicly available information. The two other Overall **II-rated** ATSs, Convergenx and Credit Suisse, provide some (albeit limited) public disclosure.

As shown in the tables below, the independent ATSs generally pose lower risks than most of the bulge bracket firms. This trend is largely shaped by heavy weighting of the conflicts of interest risks and information leakage and counterparty risks in our overall risk scoring. The first table shows the scores of all respondents to the ATS Questionnaire, while the second breaks out those who did not respond.

The table below is the 2016 ATS Comprehensive Risk Assessment Comparison.

2016 ATS Comprehensive Risk Assessment Comparison: Respondents					
ATS	Overall	Conflicts of Interest Risks	Information Leakage and Counterparty Risks	Technology Risks	Enforcement Actions Risks
Maximum Score	26	9	8	6	3
Barclays LX	MEDIUM	MEDIUM	LOW	MEDIUM	HIGH
BIDS	LOW	LOW	LOW	MEDIUM	LOW
Bloomberg Tradebook	MEDIUM	LOW	HIGH	MEDIUM	LOW
Deutsche Bank	LOW	MEDIUM	LOW	LOW	LOW
Goldman Sachs SigmaX	MEDIUM	MEDIUM	LOW	MEDIUM	MEDIUM
IEX	LOW	LOW	LOW	LOW	LOW
ITG	LOW	LOW	MEDIUM	HIGH	MEDIUM
KCG Matchit	MEDIUM	MEDIUM	MEDIUM	HIGH	LOW
Level ATS	LOW	LOW	LOW	HIGH	MEDIUM
Liquidnet Negotiation	LOW	LOW	LOW	LOW	LOW
PDQ ATS	LOW	LOW	LOW	HIGH	LOW
UBS ATS	MEDIUM	MEDIUM	MEDIUM	LOW	HIGH

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The table below shows the same information for ATSs that did not respond to our Questionnaire:

2016 ATS Comprehensive Risk Assessment Comparison: Non-Respondents					
ATS	Overall	Conflicts of Interest Risks	Information Leakage and Counterparty Risks	Technology Risks	Enforcement Actions Risks
Convergex	II	LOW	II	II	MEDIUM
Credit Suisse: Crossfinder	II	II	MEDIUM	MEDIUM	HIGH
JPMX	II	II	II	II	LOW
MLXN	II	II	II	II	LOW
Morgan Stanley	II	II	II	II	LOW
State Street	II	II	II	II	LOW

[Remaining Content Redacted--Content Available to Healthy Markets Members Only]

## Conclusion

In this Report, we have attempted to provide an exhaustive examination of each ATS and comparative risks across them. In general, ATSs that worked with us and provided greater transparency were judged to be lower risk than those that refused to provide any information. We must be conservative in this regard, and cannot make assumptions about ATSs without verification that their activities pose low risk. In this first annual ATS Risk Assessment, we were thrilled to have cooperation from 12 of the 18 ATSs. We hope that as the industry realizes the value of this exhaustive review, that cooperation will be more forthcoming in future versions.

That being said, it is quite evident, even amongst ATSs that participated fully, that there is significant variation out there. Some of the bulge-bracket brokers, for example, have colocated proprietary trading groups trading on unequal terms with other participants. Other ATSs may



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pose almost no conflicts of interest or information leakage risks--although they typically have much lower volumes. Investors and routing brokers may be well-advised to understand the characteristics of each venue with which they interact, and to affirmatively decide whether that venue is one in which they feel confident that the benefits of interaction outweigh the risks.

We hope that this Report will help you in your ongoing efforts to protect investors and promote more fair and efficient markets.

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## Contact Healthy Markets Association

If you are interested in learning more about Healthy Markets or this Report, please feel free to visit our website at <http://healthymarkets.org> or contact us at [info@healthymarkets.org](mailto:info@healthymarkets.org).