

Electronic RFQ and Multi-Asset Trading: Improve Your Negotiation Skills

Prepared for:



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EXECUTIVE SUMMARY

Electronic RFQ and Multi-Asset Trading: Improve Your Negotiation Skills, commissioned by Investment Technology Group Inc. (ITG) and produced by Aite Group, examines the current state of the request-for-quote (RFQ) market, and potential efficiencies that may be gained from electrifying the RFQ process, as well as challenges and opportunities in the space overall.

Key takeaways from the study include the following:

- The trading of highly liquid investment products has benefitted from more than 15 years of technological innovation and regulatory reforms. It is now easier, cheaper, and faster to source liquidity, trade efficiently, and perform transaction cost analysis (TCA). Electronic trading of illiquid and bespoke products has lagged behind electronic trading of plain-vanilla equities. The market structure and the RFQ communications protocol that supports these products are therefore ripe for an integrated and technologically enabled workflow.
- The drivers encouraging the adoption of electronic RFQ include the increasing need to streamline procedures for the trading desk across multiple asset classes and direct calls from regulators and investors to perform and demonstrate best execution. Heightened compliance and regulatory risks are associated with manual and opaque trading workflows, and tolerance among compliance departments for disparate trade auditing solutions is decreasing.
- Electronic RFQ provides many benefits to all participants in the trade life cycle, such as improved price discovery, integration with current workflows, business intelligence, holistic TCA, straight-through processing (STP), operational efficiencies, and regulatory risk reduction.

INTRODUCTION

Over the last 15 years, the trend toward electronic trading in equities has accelerated rapidly. Driven by increased market fragmentation, technological advances, and regulation, equities traders have become cognizant of electronic trading's benefits for most types of direct market access (DMA) order flow. Fully featured order management systems (OMS), execution management systems (EMS), and pre- and post-trade TCA tools are no longer optional but required tools on the buy-side trader's desktop.

By and large, investors have been the benefactors of these improvements. The market, especially for highly liquid stocks, has never been faster or cheaper to trade than it is today. In fact, by most measurements, the U.S. equities market is the cheapest and most efficient in the world. This trend toward electronification has also expanded into other liquid instruments, such as listed options, futures, and foreign exchange, providing similar benefits to all major market participants.

Products that are not traded electronically, whether blocks of plain-vanilla equities or structured, illiquid, and bespoke products, still suffer from workflows that operate outside of that fully electronic and straight-through workflow. These products still trade through a loosely defined process called RFQ.

Since the global financial crisis, there has been a shift back to higher-touch trading as global regulators have pushed for and continue to encourage increased transparency in over-the-counter (OTC) trading. This has been a tailwind for electronic RFQ platforms and has helped to usher in a wave of technology enhancements for RFQ-traded instruments. These systems have thus far been very successful in dealer markets, such as FX and fixed income. This white paper explores the growing trend toward increased adoption of electronic RFQ platforms.

REQUEST FOR QUOTE DEFINED

RFQ is a negotiation or trading protocol whereby the buyer solicits quotes from multiple sellers (or sellers from multiple buyers) in a competitive process to find the best balance of price, speed, and risk. In practice, a nonelectronic RFQ workflow can be very inefficient. Things are relatively simple when working with one dealer, but it becomes more difficult for the buy-side when aggregating and managing bids from multiple brokers. The buy-side trader typically initiates a request and awaits bids from multiple sell-side counterparts. Traders cobble together hackneyed workflows consisting of phone calls, instant messages, and emailed spreadsheets. In all but a few specific asset classes, this remains the norm.

Dealers respond with prices in different formats and mechanisms that the trader has to collect together and normalize into something that can be compared. Once the buy-side trader decides who to trade with, the trader needs to get back on the phone or message service and inform the dealer. Hopefully, by the time the buy-side trader responds to the dealer, she or he has not moved the quote away from the proposed price. It is then up to the buy-side trader to transpose the details of that trade into the firm's OMS and send the dealer an electronic ticket for which the dealer will then send back an execution message at the previously agreed upon price.

Adding to the chore is the need for the buy-side trader to then message the other dealers who responded to the RFQ and notify them that their bids were not accepted and the order was traded away. At this point, the dealers typically want to know why they did not win the bid and how far they were from the winning price.

INDUSTRY TRANSITION FROM VOICE TO ELECTRONIC

The dated approach to RFQ is tedious, time-consuming, and error-prone. Recognizing this, several vendors and trading platforms have emerged since early 2000 to electrify and streamline the RFQ workflows. Some platforms have come to market with attempts to pivot an RFQ market into one with continuous trading, but these have achieved limited success. Platforms that model off-line workflows and bring them onto the screen and apply technology to streamline the process, however, have found strong success in the market.

The OTC markets operate the way they do with good reason, and the key to success when developing and attempting to deploy an RFQ platform within a particular trading community is to retain the way that community fundamentally operates. The platform should reflect the needs of its participants and not attempt to undermine the manner in which they trade. Tradeweb, for example, is considered a pioneer in multidealer RFQ with its electronic fixed income RFQ trading platform for government bonds, mortgages, and U.S. agencies. RFQ-hub, acquired by ITG in 2014, has been a pioneer in the equities and equities derivatives space.

Allianz Global Investors (AGI) sees firms changing the way they deal with derivatives as a potential outcome of the Markets in Financial Instruments Directive (MiFID) review and wants to stay ahead of the game. “RFQ-hub should help us with that,” says Eric Boess, global head of derivatives at AGI. “Bottom line: RFQ-hub is not a revolution to the way we trade derivatives but rather an evolution. Just like 10 years ago when FIX started to raise the efficiency bar in equities trading, RFQ has the potential to do something similar for parts of our business.”

Table A provides a sample list of vendors and platforms that have successfully launched RFQ-driven services.

Table A: Sample List of Electronic RFQ Systems/Markets

Market	Location	Type	Products offered	Model
Bloomberg SEF	Global	Market	CDS, commodities, FX-FXO/ nondeliverable forwards (NDF), interest rate swaps (IRS)	Dealer-to-client (D2C)
Bloomberg ETF RFQ	Global	System	Exchange-traded fund (ETF)	Client-to-client (C2C), D2C
Charles River RFQ	Global	System	Multi-asset	D2C
DelphX	Global	System	Fixed income	D2C
Deutsche Borse 360T	Global	Market	FX-FXO/NDF/nondeliverable swaps (NDS)	D2C
FXall	Global	Market	FX	D2C
FX Connect	Global	System	FX	D2C

Market	Location	Type	Products offered	Model
Liquidnet	Global	Market	Equities, ETF, options, fixed income	C2C
MarketAxess	Global	Market	Fixed income	Dealer-to-dealer (D2D), D2C, all-to-all (A2A)
MTS BondVision/ETF	Global	Market	Fixed income, ETF	D2C
ITG RFQ-hub	Global	System	ETFs, options, futures, equities	D2C
SwapEx	United States	Market	FX-NDF, IRS	D2C
Thomson Reuters SEF	Global	Market	FX-FXO/ NDF	D2C
trueEX	United States	Market	IRS	D2C
TradeWeb SEF	Global	Market	Credit default swaps (CDS), IRS	D2C
TradingScreen	Global	System	Multi-asset	D2C
Yieldbroker	Global	Market	Fixed income, IRS	D2C, D2D

Source: Aite Group

KEY MARKET DRIVERS FOR ADOPTION

There are a range of different drivers for the adoption of electronic platforms and systems within the RFQ universe, including (but not limited to) the rising popularity of multi-asset trading, requirements for best execution, the desire for STP and reduced operational risk, and numerous compliance-led programs of work.

MULTI-ASSET TRADING

The buy-side equities trading desk is expanding to support a truly multi-asset trading operation. This includes loans, structured products, OTC derivatives, and ETF products. Clients are seeking to have all of these assets available to trade on a single platform. Whether the trading responsibilities are centralized for the sake of efficiency, hedging, or asset-class expansion to find new sources of alpha, the desk is being asked to do more.

The tools, workflows, and level of automation around these products, however, lags far behind those of plain-vanilla equities, futures, and options. Traders have grown accustomed to an integrated and relatively seamless experience that maps an entire trading life cycle from pre-trade analytics, through electronic and algorithmic trading tools, to post-trade settlement and TCA. Head traders take pride in trading operations that efficiently take in portfolio managers' orders, quickly analyze and recommend how to trade, ship the orders out, monitor their execution, allocate and book the trades, and analyze trader performance, all while maintaining strict compliance, providing complete audit trails, and reducing costs.

Introducing bilaterally negotiated OTC products to an equities trading operation, with its dizzying array of nonstandard tools, such as phone, email, spreadsheets, and instant messenger, is like throwing sand into the gas tank of a high-performance automobile. Perhaps the desk can handle one or two trades of these types per day, but things begin to break down as the trading desk tries to scale up. Standardized workflows and operating models are the new norm. Phone, email, and instant messenger are the inefficient and error-prone analog to faster and more efficient electronic RFQ. For these trading desks to fully realize and deliver on the promise of multi-asset electronic trading, including that of illiquid and bilaterally negotiated products, the least common denominator should be end-to-end technological processing.

BEST EXECUTION/COMPETITIVE PRICING

The obligation to prove best execution and protect the investor poses interesting challenges across multiple asset classes in an increasingly fast, complex, and fragmented marketplace. The buy-side needs to be able to take all reasonable measures to execute orders on terms most favorable to the client. In 2007, Europe's MiFID I formalized the responsibility to evaluate best execution. MiFID II, which is due to be implemented in the next couple of years, will call for complex interpretation, employing a multifactor approach that takes into account competitive price discovery, costs, speed, likelihood of execution and settlement, size, and other considerations. In other jurisdictions, such as the United States, best execution is defined as best

price. Even in the simplest case, however, proving best execution is not so simple, especially for large, institutionally sized orders of illiquid products.

To demonstrate best execution, the trader must be able to perform and provide TCA. To perform this kind of analysis, benchmarks and the necessary data must be available for review. Voice trading and instant messaging do not afford any sort of substantive TCA. At best, traders can attempt to manually record competing quotes, but in reality, achieving and evidencing best execution is only possible if these communications are captured over an electronic RFQ facility.

In an RFQ platform, every interaction, including number of dealers queried, hit ratios, responsiveness, and current market, can be captured in an audit trail, and records can be analyzed to evaluate performance. Firms can apply time stamps to capture when the bid was received and demonstrate the trading decision was made with an eye toward best execution. An electronic RFQ platform ensures the trader is able to apply a framework for best execution when trading these products and be able to demonstrate it.

COMPLIANCE/REGULATION

Continuing changes in the regulatory landscape are also key drivers for adoption of RFQ platforms. Investors, regulators, and compliance officers are setting the bar higher than ever.

- **Transparency:** While the best-execution requirements of MiFID II have not yet landed on the shores of U.S. markets, a buy-side trading desk that adopts electronic RFQ is future-proofing its business.
- **Reporting:** Institutional investors are more risk-averse and taking more precautions when selecting a portfolio manager than ever before. Due diligence requests now inquire about the technologies and workflows utilized at the firm, and investors are looking for proof of best-of-breed solutions.

From a reporting standpoint, electronic RFQ is able to capture all trade details, including competing quotes, negotiation details, and arrival prices. Fund managers seeking metrics on execution performance should be able to view analytical reports that illustrate the details regarding the trade, and investors performing investment due diligence on how best execution is achieved and the tools used toward that end are assuaged.

- **Control:** By consolidating all OTC trading activity into one workflow, compliance managers are able to surveil and evaluate all trading across the entire fund and avoid complicated and lengthy trade life cycle reconstitutions across disparate communication mediums and trading platforms.
- **Audit trail:** Electronic RFQ's integration with data retention systems results in a complete and consolidated audit trail. With an electronic RFQ solution to capture the end-to-end workflow, compliance officers can easily review the interactions between the trader and brokers.

ELECTRONIC RFQ'S BENEFITS AND CHALLENGES

Clear benefits are associated with the adoption of electronic RFQ:

- **Improved price discovery:** Electronic RFQ provides vastly improved workflow for customers and dealers alike to participate in the price discovery process, addressing not only timeliness issues but also creating a more transparent and auditable interaction that provides the basis for numerous regulatory compliance initiatives, including best-execution obligations.
- **Supporting the existing trading behavior:** Electronic RFQ can be viewed as the less disruptive stepchild of electronic trading, with just enough enhanced automation to ensure that the familiar traditional workflow between the buy-side and sell-side trading desks remains in place to encourage increased trading activity.
- **Business intelligence:** Traders are constantly balancing the tradeoffs of finding liquidity: Where will I find liquidity for sensitive orders, and is there enough capacity where I do find it to execute and minimize information leakage? The bidirectional nature of electronic RFQ enables both sides of the trade to gauge which type of execution—principal or agency—is more appropriate under the circumstances. It enables the quantification of risk and allows both counterparties to determine if they want to engage in a risk transaction versus the opportunity cost of an agency trade. An RFQ platform provides two-way feedback to all parties involved in the transaction: the client and the winning dealer as well as the other competing dealers passed over.

From the buy-side's perspective, an RFQ platform enables the buy-side to measure and gauge counterparty effectiveness and the distribution across counterparties. They are empowered with the ability to provide constructive, data-driven feedback to their dealers as well as statistics like market depth, pricing consistency, responsiveness, spread size, and performance by sector or industry, or other trade pivot points.

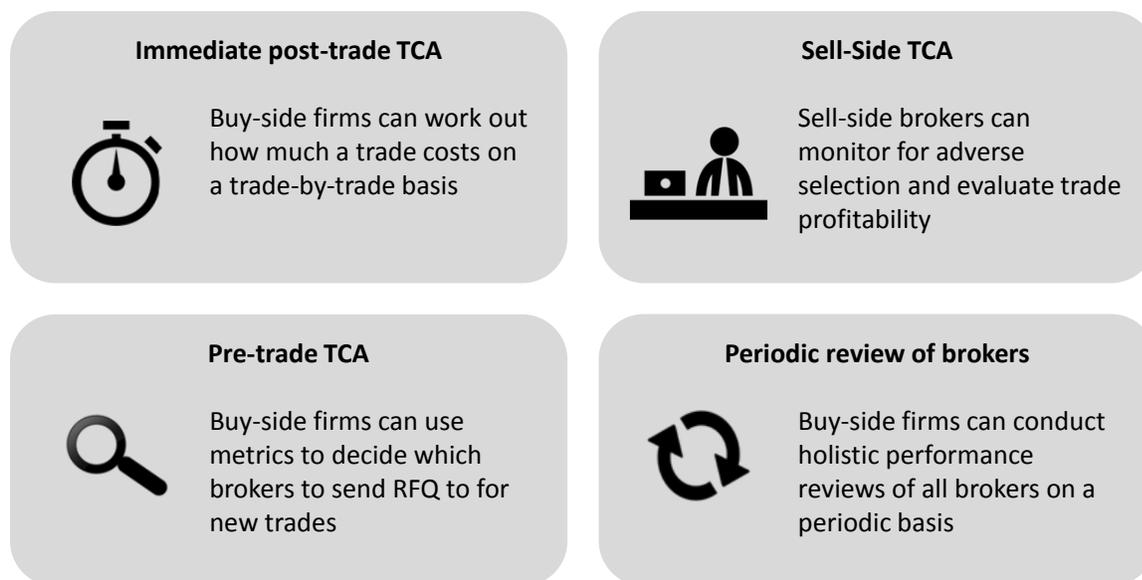
As such, the buy-side trading desk managers are better able to judge whether their dealers are pricing aggressively and performing adequately on their assigned trades. It is otherwise easy to assume one dealer is underperforming when he or she is assigned the hardest orders to trade. An electronic RFQ platform with integrated TCA allows dealers to be judged appropriately, and anecdotal feedback is replaced with apples-to-apples comparisons on trade performance.

From the sell-side's perspective, moving its business onto an electronic RFQ platform provides a treasure trove of data to evaluate client profitability. Also, by capturing and reporting on the data, sales traders are arming themselves with summarized or detailed historical data to prove their worth, in case clients' memories only extend as far back as the last trade.

- **TCA:** In the absence of an electronic RFQ workflow, it is difficult to determine the real costs of executing a trade through risk. Electronifying the trading of these products enables counterparties to not only prove best execution but also quantify the cost of risk through TCA. An electronic RFQ platform is able to place time stamps at every step

throughout the trade that simply cannot be captured when the transaction is done over the phone. The result is a TCA program that can overlay market data and transaction data that quantifies a risk's opportunity costs versus an agency trade and what was the trading alpha lost or gained by choosing a risk trade. Figure 1 tables the RFQ's transaction cost advantages.

Figure 1: RFQ's Transaction Cost Advantages



Source: Aite Group

- **STP:** An integrated straight-through RFQ workflow captures the trade request and applies the compliance rules, captures the negotiation and price discovery process, and facilitates the trading and post-trade allocations without double entry or rekeying into the buy-side trader's OMS. By offering an RFQ-integrated straight-through solution, manual errors are drastically reduced, and settlement issues are avoided.

Typically, this would involve the fund manager or trader configuring the new strategy or OTC instrument to be negotiated with as much detail as possible. If the RFQ platform is integrated with the OMS, the OMS compliance checks are applied to that instrument or deal, and the request is then sent to the chosen brokers electronically for pricing. Quotes are received, aggregated, compared, and captured into the system's data warehouses as part of the trade audit trail. The trader selects the quote and consummates the trade with the broker, and the broker sends back trade details electronically, similar to a standard Financial Information eXchange (FIX) Protocol order workflow. The positions are then booked electronically into the trader's OMS.

Because the entire trade life cycle and trade details are captured in the trader's OMS, the positions are easy to unwind or roll at expiration using the precise identifiers that the buy-side and sell-side have already established in their security master databases from the original point of RFQ or execution.

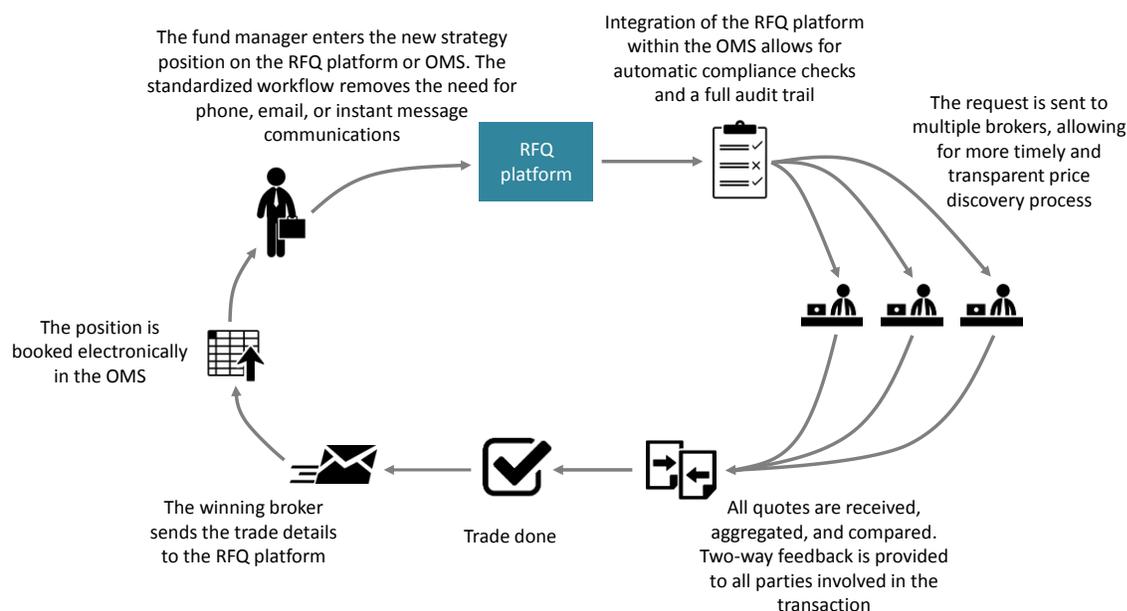
- **Creating operational efficiency and reducing risk:** Electronic RFQ provides clear advantages on the operational side, as the past practices of engaging in multiple bilateral phone-based negotiations are concentrated into a single interaction, and the electronic audit trail drastically reduces any risks traditionally associated with manual trading.

An RFQ platform should be integrated into a client's OMS and take advantage of connectivity standards, such as the FIX Protocol. Complicated structured products have many components to them, like their timing, conditions, and others, and that information should be stored in the system's security master database electronically. By doing so on a pre-trade basis, the trade avoids double entry and ensures all dealers receive the same information in the request. Compliance checks, data validations, and counterparty risk constraints can be applied in advance.

And when it comes time to unwind the trade or roll the deal forward, all of that information is keyed from the original deal ID created and stored in the system, and it can then be modified and relayed. Such a workflow is not that dissimilar from a "cancel/correction" applied to a FIX-encoded algorithmic order that prevents a trader from having to reconstruct the deal from scratch when making changes and risking an unintended change to a term or losing a detail in the shuffle. An error like this can result in two extremely similar offsetting trades sitting on the book until expiration, since the trader hasn't quite unrolled a deal he or she started with.

Sales traders and dealers on the sell-side also recognize the value of electronic RFQ and the workflow improvements it brings to their organizations. Instead of managing what are effectively RFQs of agency trades delivered to the desk in nonstandard emails and spreadsheets, electronic RFQ allows the sell-side to receive and quickly respond with quotes and focus, and prioritize their time on the more difficult, higher-margin opportunities.

Figure 2 illustrates the benefits of electronic RFQ throughout the trade life cycle.

Figure 2: Electronic RFQ Benefits the Entire Trade Life Cycle

Source: Aite Group

Despite its benefits, RFQ is not without its challenges and dissenters. Some concerns traditionally raised about RFQ, electronic or otherwise, follow:

- Sell-side sales trader resistance:** Sell-side traders might object to the shift to an electronic RFQ mechanism, as the automation may lead to a degradation in the relationship they maintain with their customers. The manual handling involved with a phone-, email-, or instant-message-based RFQ helps to reinforce the relationships between the salesperson and his or her client. These mediums provide opportunities to strengthen ties and learn, and keep up with the client's business to potentially better tailor or upsell more products. These opportunities can be lost when the RFQ moves off the phone and into the machine.

What many vendors report, however, is that once sales traders overcome that initial resistance and the workflow of electronic RFQ becomes integrated into their day to day, they become advocates.

- The "winner's curse":** Another often raised concern is the potential increased risk to the winning dealer born from information leakage. The fact that traders know there are multiple bidders in competition on the trade may result in dealers' reluctance to show their best price. This is because the competing dealers will know that the trade got executed but not with their bid, and the winning dealer's position will need to be traded and hedged in the marketplace. Those competing dealers will have relative certainty about when that hedge activity will occur, and that will impact price and, ultimately, directly impact the end investor.

But this concern applies in both workflows, manual RFQ and electronic RFQ. And traders report that the community of dealers participating in these RFQs is small and close-knit, and dealers who are suspected of trading ahead or revealing information about their clients' interests won't be around to do business for very long.

In fact, by electrifying the workflow and having a complete audit trail with activity time stamps overlaid with stock movements, it becomes easier for the buy-side to detect poor performance and inappropriate behavior. The situation is analogous to a closed-circuit television monitoring an ATM location and providing peace of mind to both the bank and the patron.

Dealers know that their participation in the electronic RFQ is being monitored much more closely and are therefore less likely to engage in poor conduct. And dealers should be content knowing they have the data and metrics to help them monitor for adverse selection. The sell-side is putting up capital to do risk trades, and by giving the traders an electronic medium whereby metrics can be generated, they are better able to determine when it is optimal to do so and inform their pricing.

- **The fee:** Some may carry concerns that dealers are going to bake the explicit costs of utilizing an electronic RFQ platform into the quote to trade, which will be borne by the investor.

This is really not the case, though. Firstly, with an electronic RFQ platform, it becomes much easier to extend the RFQ to multiple counterparties and have them compete for the trade, which will encourage tight spreads at scale. Secondly, at scale, electronic RFQ makes the dealers more efficient and brings down their operational cost, which should reduce implicit costs as expressed by tighter spreads.

CASE EXAMPLE: ETF RFQ

Key benefits of ETFs include transparency, low fees, exchange listing, and tax efficiency. Accordingly, ETFs have become an attractive investment vehicle for institutional investors to optimize their portfolios and utilize in a variety of new strategies. While ETFs have experienced rapid growth in assets under management, the trading volume on exchanges has not experienced a commensurate increase.

But one of ETFs' unique benefits is the ability to source liquidity in both the secondary on-exchange market and the primary market where ETFs are created (and redeemed) by dealers. When ETF dealers create shares of ETFs, they will typically buy the constituents of the ETF's basket of securities, convert the basket into shares of the ETF, and calculate a price for the trade based upon the implied net asset value (NAV) of the purchased basket. For institutional investors trading ETFs in block size, it is critical to be able to tap both sources of liquidity.

The marketplace to trade with ETF dealers is an off-exchange market, and typically institutions will request quotes from dealers when trading ETFs in block size (typically 50,000 shares or greater). Depending on the order's individual circumstances and the trader's preferences, the trader needs to be able to evaluate when to trade the ETF on the exchange or with the broker. This determination takes into account several market and ETF conditions, including the time of day, liquidity in the ETF and its underlying constituents, intraday volatility and relative price premiums, and discounts of the ETF relative to the constituents' implied NAV. The trader also may have different trade profiles depending on the immediacy of the trade and whether he or she is seeking a risk bid, closing NAV, volume-weighted average price, or agency execution. Most of the tools to aid with this evaluation are available to traders in the electronic OMS and EMS.

The securities lending market for ETFs is not dissimilar from the trading market. To source ETF liquidity in block size for shorting and obtain lending rates, traders work closely with ETF dealers who are able to create ETF shares for lending. This, too, is an OTC market whereby traders must call around to multiple potential counterparties to get a more accurate sense of the current market.

An electronic RFQ solution provides a perfect match for ETF traders. Electronic RFQ enables traders to quickly incorporate dealer-provided pricing into their models to determine where and how to optimally execute their ETF trade. An electronic RFQ platform can aggregate liquidity and actionable pricing from multiple ETF dealers, and provide an audit trail with a full record of interactions overlaid on relevant ETF benchmarks. Post-trade, electronic RFQ supports best-execution reporting and also enables an integrated, straight-through process that reduces errors and settlement issues.

The market for ETF trading via electronic RFQ platforms has evolved, and several leading vendors are providing technology platforms: Tradeweb, Bloomberg, ITG RFQ-hub, and LSE's MTS BondVision RFQ.

CONCLUSIONS

- Electronic RFQ affords the benefits of electronic trading and enables the client and dealer to continue to realize the benefits of high-touch, relationship-driven trading, directing commissions as necessary and getting all the benefits of the electronic workflow.
- Institutional investors are now asking their buy-side investment managers to show best-execution practices across any instrument they trade. To do that effectively in a TCA framework, traders must have electronic audit trails, referenceable prices, and time stamps, and be able to quantify the risk and costs on both sides of the trade. And that solution must be able to scale.
- As managers increasingly move to cross-asset strategies to find alpha and previously equities-only traders move to take on more responsibility for the trading of other asset classes, they will need electronic RFQ. If an execution price becomes an issue from a trade done over the phone, the trader will no longer be able to rely on a simple, “That’s the price I got from the dealer.” He or she will have to show what the market was at the time the trade was done and who else he or she went out to for a price. And the trader will need to pull this all together into a mosaic that can be provided on demand.
- Expect electronic RFQ to be rolled out to support asset classes and trading workflows, including securities lending, structured products, and swaps, and the solutions are likely to be integrated into most multi-asset OMS and EMS.

Geographically, electronic RFQ has already gained adoption across European markets and will continue to become more prevalent. In the United States, electronic RFQ is in the early stages but will continue to roll out as trading desks seek multi-asset solutions.

- Electronic RFQ will continue to gain traction over the coming months. If it’s not already, the buy-side will need to embrace electronic RFQ solutions because investors will demand it and competitors are already moving to it. Dealers will inevitably adopt electronic RFQ because the buy-side will tell them to do it.

ABOUT AITE GROUP

Aite Group is an independent research and advisory firm focused on business, technology, and regulatory issues and their impact on the financial services industry. With expertise in banking, payments, securities & investments, and insurance, Aite Group's analysts deliver comprehensive, actionable advice to key market participants in financial services. Headquartered in Boston with a presence in Chicago, New York, San Francisco, London, and Milan, Aite Group works with its clients as a partner, advisor, and catalyst, challenging their basic assumptions and ensuring they remain at the forefront of industry trends.

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