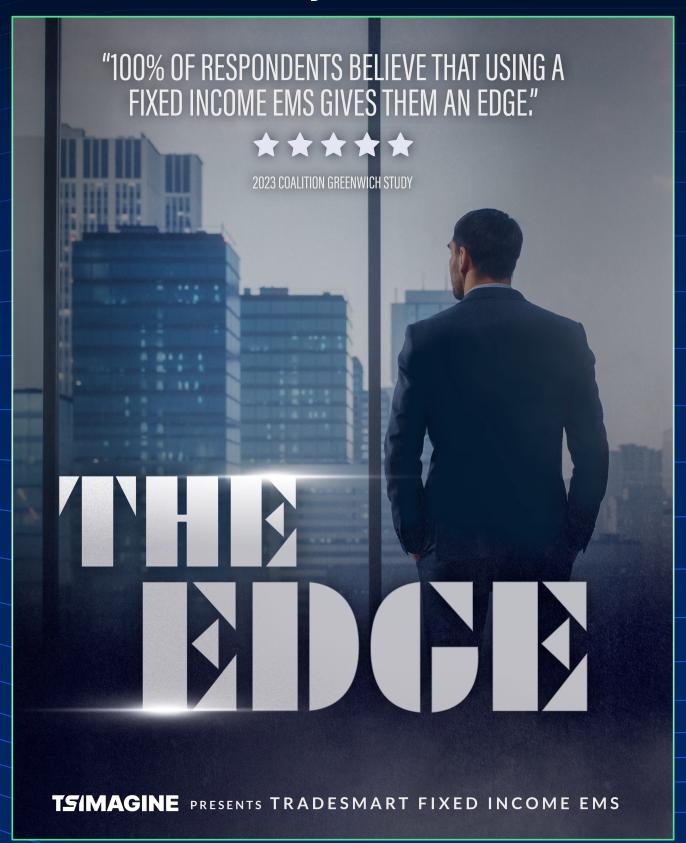
Fixed Income EMS Buyer's Guide



TSIMAGINE"

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We have reached a tipping point for fixed income trading

Look at the world around you. It may seem like an immovable, implacable place. It is not. With the slightest push — in just the right place — it can be tipped.

Malcolm Gladwell

At TS Imagine, we are fortunate to witness the evolution of fixed income electronic trading each day. During the past 12 months, over 500 traders at 45 buy-side firms traded \$500 billion of electronic bonds on our platform, TradeSmart Fixed Income EMS.

In a June 2023 report by Coalition Greenwich, 100% of respondents said that trading with an EMS gives them an edge. While this is a powerful statistic, the adoption rate remains below 40%. As former traders ourselves, we feel that it is important to educate fixed income market participants about the meaningful impact technology can have on an individual trader's performance and productivity, as well as their company's bottom line.

In the pages that follow, we will address some discussion points from our many conversations with the population of fixed income traders using or considering using an EMS.

We hope that this information provides readers clarity regarding the advantages and questions to ask when making the long overdue transition to EMS technology.



Rob Flatley Founder & Chief Executive Officer



Spencer Lee
Chief Markets Office &
Head of Fixed Income

What is driving the migration to technology in bond markets?

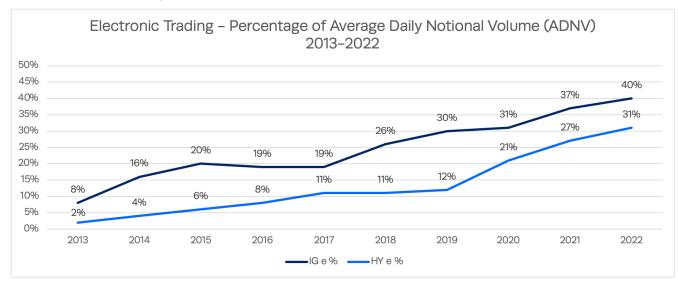
Volatility, volumes and complexity are causing bond traders to rethink their workflow

"The number of data-producing channels has become extensive during this time...

Traders need a new game plan to deal with today's data-rich environment."

Coalition Greenwich, "Fixed Income EMSs: The Time is Now" June 2023

Volumes have exploded



Source: Coalition Greenwich MarketView

TS Imagine has seen exponential month over month growth in electronic bond trading volumes since the beginning of 2023, with average notional volume doubling each month since December. The fixed income market has changed, and those who do not use technology to cope with the different and more difficult dynamics will lose out in the near term.

Traditional fixed income trading methods are too time consuming for today's markets, and time is money

"Legacy methods are "seeing" a smaller and smaller fragment of the overall market, limiting the liquidity picture and pre-trade transparency."

Coalition Greenwich, "Fixed Income EMSs: The Time is Now" June 2023

The average fixed income trader spends a month and a half of time each year doing work that can be handled within a matter of minutes using an EMS

30+ minutes	Validating best execution
1+ hour	Waiting for dealers to provide updated prices
1+ hour	Scraping multiple venues to source liquidity
2+ hours	Comparing Trade Reporting Compliance Engine (TRACE) versus runs

4.5 x 252

trading days per year

1,134

hours per year spent on outdated trading methods!

Imagine what you could be doing with all that extra time!



EMS technology takes the pain out of liquidity aggregation

"Buy-side traders need a broader view of the market and data to manage today's complexity... an EMS is needed to tie all of these sources of information together."

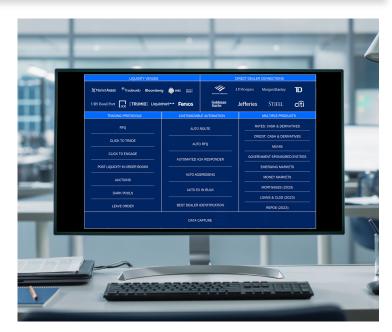
Coalition Greenwich, "Fixed Income EMSs: The Time is Now" June 2023

As electronic bond trading volumes increase, traders using accelerated price discovery are getting quicker, better prices through liquidity aggregation.

Liquidity aggregation brings the market landscape into one consolidated view, enabling traders to scan all available liquidity, making it easier to monitor the market for opportunities throughout the trading day.

By viewing all venues simultaneously, traders eliminate the pain of maintaining and monitoring multiple watch lists for each venue.





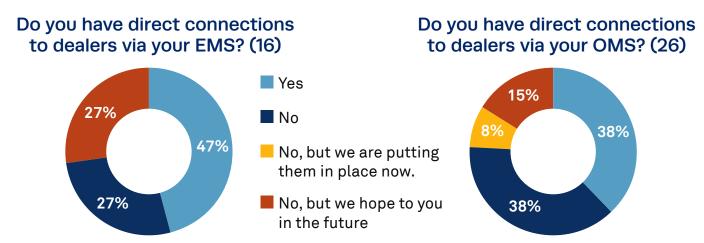
Trading without an EMS can be a pain!

Did you know that many bond traders now connect directly to the sell-side?

"The proliferation of trading venues, protocols, and more recently, direct dealer pricing streams have created a market that is more transparent and provides better access to liquidity. An EMS can simplify that landscape without losing the benefits, just as an iPhone does for the internet."

Coalition Greenwich, "Fixed Income EMSs: The Time is Now" June 2023

Direct Dealer Connections via Trading System



Note: Numbers in parentheses represent number of respondents. May not total 100% due to rounding. Source: Coalition Greenwich 2023 Fixed-Income EMS Study

The eight dealers on TradeSmart Fixed Income EMS account for more than 60% of the global credit market



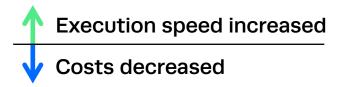
While stock traders adopted technology three decades ago, bond traders are poised to capitalize on a late mover advantage

An algorithmic rise, a proliferation of venues, and growing frustration with OMS technology. No, it's not 1999, it's the tipping point for fixed income electronification.

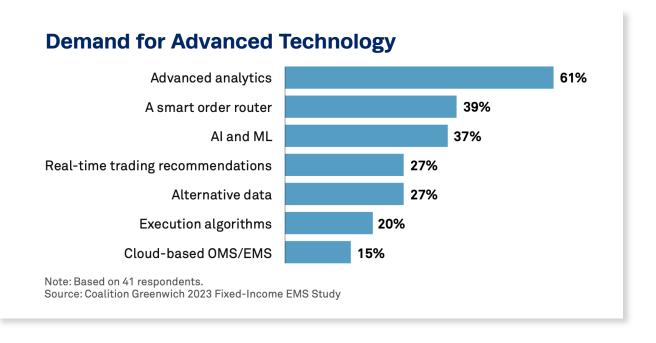
In equity markets electronic trading picked up in the late 1990s with the creation of Alternative Trading systems (ATSs) which introduced dark pools and algorithmic trading providers.

Advances in computing capabilities then went on to become fundamental drivers of developments in equity markets resulting in greater connectivity and speed, making markets more accessible for equity traders using EMSs.

The results were clear:



Fast forward to 2023, and fixed income traders who are beginning to trade on an EMS have access to very advanced tools which benefit from decades of fintech innovation. But still, only a small segment of bond traders are using EMSs, despite broad availability and clear cost savings.



Amid a more stringent regulatory regime, some bond traders are automating compliance to focus more on trading

"90% of traders agree using a fixed-income EMS helps their firm meet fiduciary duties by ensuring best execution."

Coalition Greenwich, "Fixed Income EMSs: The Time is Now" June 2023



Best execution requirements in fixed income markets have been subject to regulatory developments over time. While the specifics can vary across jurisdictions, here are some key milestones in the implementation of best execution requirements in fixed income markets:

United States:

2005: The U.S. Securities and Exchange Commission (SEC) introduced Rule 11Ac1-5 under the Securities Exchange Act of 1934, commonly known as the "Market Access Rule." It required broker-dealers to establish policies and procedures to achieve best execution for customer orders, including fixed income securities.

2018: The Financial Industry Regulatory Authority (FINRA) issued Regulatory Notice 18-08, extending best execution obligations to include fixed income securities traded over-the-counter (OTC). It provided guidance on factors that broker-dealers should consider when assessing best execution, such as price, cost, speed, and likelihood of execution.

European Union:

2007: The Markets in Financial Instruments Directive (MiFID) was implemented in the EU, establishing a regulatory framework for financial markets. MiFID introduced best execution obligations across various asset classes, including fixed income.

2018: The revised version of MiFID, known as MiFID II, came into effect. It expanded the scope of best execution requirements by imposing more stringent obligations on firms to demonstrate their efforts in achieving best execution. The requirements extended to both exchange-traded and OTC fixed income instruments.

United Kingdom:

2018: The UK Financial Conduct Authority (FCA) implemented MiFID II's requirements as part of its domestic regulations. Firms operating in the UK were required to comply with the best execution obligations outlined in MiFID II.

It's important to note that the specific implementation and requirements may differ across jurisdictions and can be subject to further updates and amendments. Market participants should consult the relevant regulatory authorities for the most up-to-date information and guidance on best execution in fixed income markets.

- ChatGPT

Wouldn't it be nice to automate compliance?
Our Liquidity Snapshot empowers busy fixed income traders to be fast,
efficient and, most importantly, compliant!

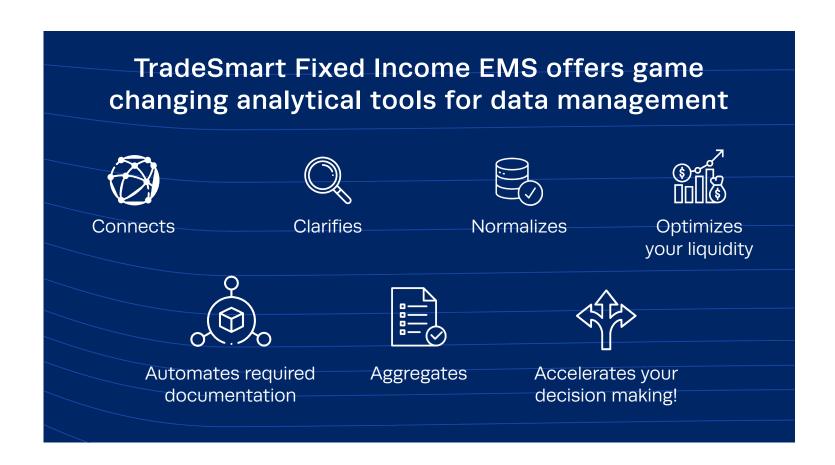


Some bond traders are using EMS technology to flip the proliferation of data from a burden to a competitive advantage

Each day, nearly half a million quotes are sent to traders by the top 10 dealers. This is just one example of the overwhelming amount of data available to traders each day. TS Imagine's most sophisticated clients are going further with advanced data streams.

"Buy-side traders need a broader view of the market and data to manage today's complexity....An EMS is needed to tie all of these sources of information together to be sure the right protocol is chosen for the current time and order."

Coalition Greenwich, "Fixed Income EMSs: The Time is Now" June 2023



Technology can have a major impact on your operational efficiency. Make your case with the 4 Ss!

Savings

The cumulative effect of smarter protocol selection, rapid identification of contra opportunities, and embedded automation tools produce verifiable savings in time and transaction costs.

Speed

Our Fixed Income EMS reduces the time it takes to fill orders with fast pre-trade data provision and automation tools. Users can generate alpha through rapid access to their preferred execution pathways and outmaneuver competitors with quick reactions to the changing market.

Scale

As volumes & trade counts continue to grow, our SaaS platform gives buy-side trading desks the ability to increase their throughput with tech-assisted efficiency gains.

Safety

Electronic trading preserves the integrity of the order in achieving best—ex, while maintaining transparency through reporting and audit trails, ensuring there are guardrails in place for safe trading throughout the order lifecycle.

There's been a lot of talk about the growth of direct dealer connections over the past few years. About 15 large dealers are actively streaming, although the top few are ahead of the rest in terms of technology, volume, and the breadth of products they quote (i.e., Bank of America, Citi, JPMorgan, Morgan Stanley, Goldman Sachs, and Jane Street). "Nevertheless, those buy–side firms willing and able to take in these feeds alongside liquidity from the trading venues via an EMS are seeing liquidity and pricing unique to them, and often liquidity not shared via traditional electronic channels."

Coalition Greenwich, "Fixed Income EMSs: The Time is Now" June 2023

Transaction Cost Rank by Protocol

#1 Direct Dealer Connectivity (DDC) 4 ECN (Order Book)

2 RFQ All-to-All LP 5 Standard RFQ

3 RFQ All-to-All LT 6 Voice Trading

The ranked preference of protocols for lowering T-Costs is driving the systematic implementation of order placement techniques



Contact us to learn more!

TSIMAGINE

Spencer Lee

Chief Markets Officer & Head of Fixed Income Spencer.Lee@tsimagine.com

Alexis Sainte Marie

Fixed Income Product Manager Alexis.SaintMarie@tstimagine.com

James Muench

Sales Director James.Muench@tstimagine.com