

SPECIAL REPORT

**Electronic Trading in Fixed Income and Derivatives:
15 Years of Innovation**

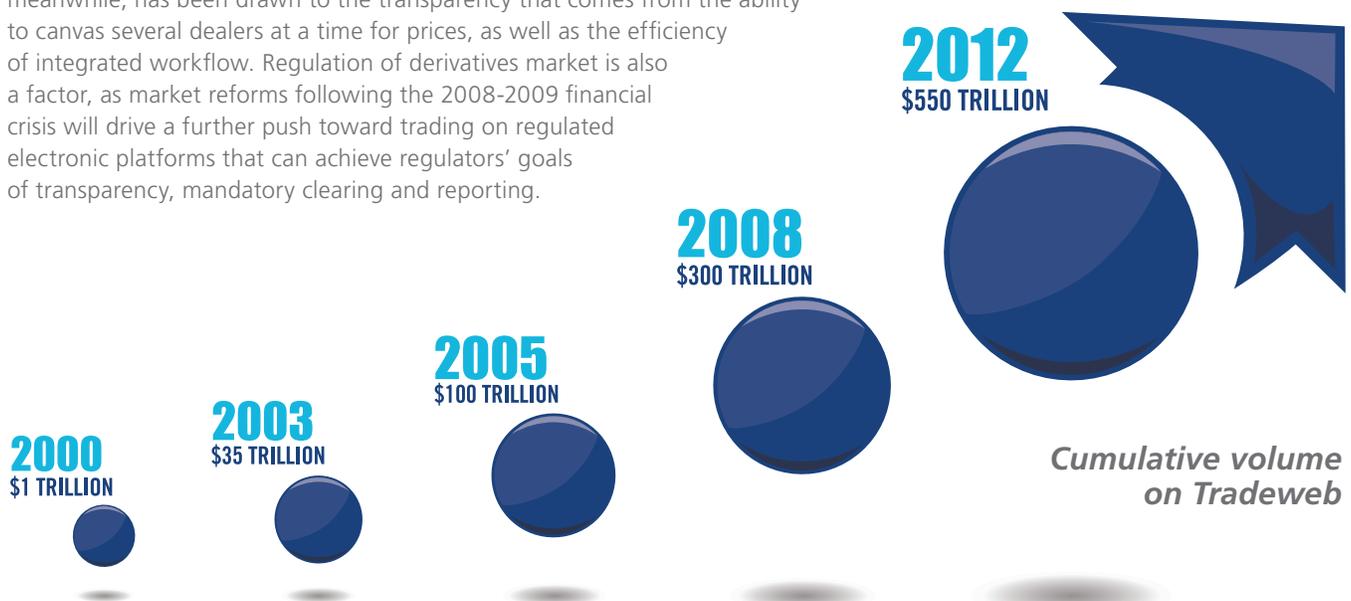
Technology Has Transformed Fixed Income and Derivatives Trading. With a Growing Push for Efficiency and Looming Regulation, There's More to Come

It is hard for many of us to imagine a world without the Internet. But in the mid-1990s, when fixed income e-trading was in its infancy, Google, eBay and Amazon were just business plans. Apple's share price was languishing below \$10, and less than 1% of the world's population had Internet access. At the time, buy-side traders got by with flickering green screens flashing indicative prices that often bore little relation to the actual price at which a trade could get done.

Today, more than a third of the world's population has access to the Internet and it has become the backbone of global commerce and information. So it's not surprising that electronic trading in the fixed income markets is no longer a backstory, but rather the center of the conversation about the future of over-the-counter trading.

While it was initially used as a tool for odd-lots or housekeeping exercises, electronic bond trading has achieved critical mass in many key fixed income sectors after just 15 years. One-to-one telephone conversations have been increasingly overshadowed by digital communities in which participants can gain access to, and engage with, thousands of potential buyers and sellers. These rapid strides toward market "democratization" have not always been comfortable for an industry that places a premium on individual relationships, but the efficiency and transparency afforded by electronic trading have nonetheless enticed both buy- and sell-side traders to conduct their business online.

There are many catalysts behind the growth of fixed income e-trading. For example, banks are under increasing capital constraints, which is limiting their ability to make markets. Electronic marketplaces have helped by enabling the trading floor to focus on higher-value client opportunities while leaving much of the flow or agency trading to be handled by technology. The buy side, meanwhile, has been drawn to the transparency that comes from the ability to canvas several dealers at a time for prices, as well as the efficiency of integrated workflow. Regulation of derivatives market is also a factor, as market reforms following the 2008-2009 financial crisis will drive a further push toward trading on regulated electronic platforms that can achieve regulators' goals of transparency, mandatory clearing and reporting.



While the merits of e-trading are widely understood, the rules of engagement in the bond markets remain sensitive. OTC markets live and breathe, and have unique characteristics that are essential for their well-being. For example, trades are often large and potentially market-moving, and excessive transparency can hinder the ability to do business. To be sustainable, innovations in the marketplace have to take these characteristics of the OTC markets into account. A case in point is the multi-dealer request-for-quote protocol – pioneered by Tradeweb for U.S. Treasuries in 1998 – which provides institutional investors the ability to place dealers in competition while providing a high degree of workflow efficiency and supporting best execution. This preserves the essence of the client-dealer relationship, while modernizing the actual mechanics of the process.

Regardless of market sensitivities or the role of global regulation, electronic trading and low-touch processing of trades are already a part of the fabric of the fixed income markets – in the same way email and text messaging are woven into people’s personal lives. Tradeweb has been at the forefront of many of these developments. But while we remain proud of our legacy as a pioneer and innovator, it is the broad range of market participants that deserve the credit for these and many other successes. These guardians of the OTC markets hold the keys to the future of the industry – a future that will undoubtedly be electronic.

The Early Days

The first few years of fixed income electronic trading can be compared to the early California gold rush. Coming in an era when everything from books to dog food to dating introductions were being hawked online, the years leading into the turn of the 20th century were prime time for entrepreneurs looking to apply new technology to the financial markets. Taking advantage of readily available venture capital and sky-high aspirations to strike it rich by bringing bond trading online, 100 or more of these companies quickly came into being. Most failed because they didn’t have the deep expertise in trading, technology and relationships to attract client volume and get them off the ground.

Tradeweb was a different story, starting with a mission to solve a clear problem rather than strike immediate paydirt. In the mid-1990s, many of the large banks, such as Deutsche Bank and Credit Suisse First Boston, looked to attract clients to their proprietary sites. With the dealers’ ample resources, the websites were well-constructed and provided access to a range of services, including analytics, research, pricing and trading. The challenge clients faced was simple: They didn’t want to be captive to one dealer for their bond trading, and logging on to multiple sites was cumbersome. With a multiple dealer-to-client platform that preserved the structure of the market, Tradeweb made their lives easier by aggregating dealer liquidity. We started with U.S. Treasuries, among the most liquid businesses at the dealers.

The support for Tradeweb initially came from four banks – Credit Suisse First Boston, Goldman Sachs, Lehman Brothers, and Salomon Brothers. By the time Tradeweb was sold to The Thomson Corporation in 2004, there were eight bank investors. Now Thomson Reuters owns a majority stake, with a minority stake owned by banks.

In those first few months of 1998, the primary concern of Tradeweb’s small staff was to get clients on the platform. While building any new marketplace is always difficult, in the late 1990s the challenge was compounded by the need to develop confidence in the Internet as a secure means for executing trades. Getting people to buy dog food online was one thing, but getting institutional investors to channel billions of dollars in trades over the Internet was something entirely different. A core group of early adopters, including some of the largest global asset managers, provided enough support that within two years the future of the business seemed secure. More importantly, Tradeweb had demonstrated by the early 2000s that there is a clear and demonstrable benefit to electronic bond trading.

The Benefits of Electronic Trading

Electronic trading provides benefits to the fixed income community in three main areas: price transparency, operational efficiency and real-time access to liquidity.

Price transparency

Before electronic trading, end-users could only access pricing directly from a dealer by telephone, with little way of knowing whether this was a good quote. The alternative – calling multiple dealers – took too long in fast-moving markets. E-trading solved this problem by aggregating dealer pricing to create real-time indicative market levels. This provides clients with pre-trade transparency, a powerful tool to help ensure they are receiving competitive market levels. Post-trade transparency, which involves reporting completed transactions, is also a valuable tool for investors and regulators that need to monitor the financial markets. However, too swift a disclosure of trades could give away an investor's strategy or reduce liquidity by impacting the liquidity provider's ability to hedge risk. As a result, execution platforms such as Tradeweb have a responsibility to establish protocols that protect participants from a premature release of information that can inhibit their ability to contribute to healthy and liquid markets.

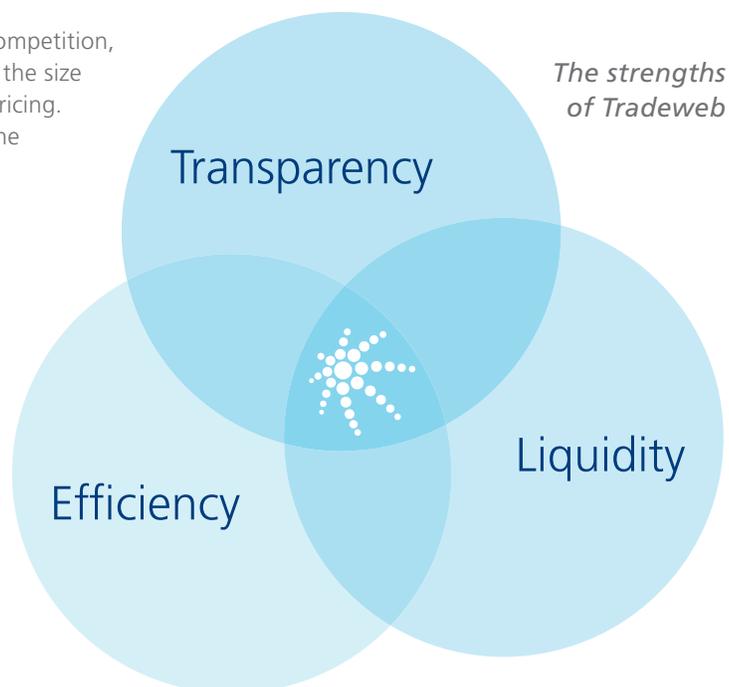
Operational efficiency

Electronic markets have evolved fixed income from a series of manual steps to a streamlined digital workflow that spans the front office to the back office. The transition has not only saved the industry hundreds of millions of dollars but created a new world of opportunity for more informed and efficient trading. In addition, it has allowed development of better risk controls, the result of greater integration of the information being communicated as trades are processed. It now seems remarkable that scraps of paper were the standard means of conveying trade details on large trading floors less than a decade ago.

The increased operational efficiency that an integrated workflow brings has also allowed for greater industry partnership, such as the array of order management systems that are now integrated with trading platforms such as Tradeweb.

Access to liquidity

Electronic trading enables institutions to place dealers in competition, allowing them to find the securities they are looking for in the size they want and, naturally, to obtain the most competitive pricing. As a multi-dealer-to-client platform, Tradeweb preserves the role of dealers as market makers, but makes it easier for investors to access multiple dealers at once. For even the largest asset managers, who have always enjoyed immediate access to dealer desks, e-trading improves the experience by allowing them to receive multiple quotes to be sure they're getting the best price. For smaller asset managers, who might historically have had trouble getting the attention of liquidity providers, e-trading has truly leveled the playing field.



Derivatives Take Center Stage Amid Regulatory Overhaul

For the past five years, over-the-counter derivatives have been under the glare of the regulators' spotlights. People who hadn't paid attention to derivatives before 2008 were suddenly hearing about them daily, amid front-page media reports and political finger-pointing. Critics, both in the private and public sectors, placed blame on these financial instruments as a key factor in the financial crisis. Derivatives were painted as a new bogeyman, regardless of the reality that they have played a remarkably valuable role as hedging instruments for thousands of governments, corporations, banks and institutional investors.

Key elements of the 2010 Dodd-Frank Act are still being finalized and phased in, and in 2013 a number of new rules are being implemented requiring mandatory central clearing and trading of most over-the-counter derivatives over regulated platforms known as swap execution facilities (SEFs). Similar legislation is under review in Europe as part of the Markets in Financial Instruments Directive (MiFID II) and European Markets Infrastructure Regulation (EMIR) efforts, as well as in various jurisdictions in Asia.

The emergence of new rules for derivatives trading represents one of the most significant turning points in market structure since the advent of electronic trading itself, and could be a significant catalyst for moving even more trading onto electronic platforms in the years to come. The reason is that regulators' main goals – increased transparency in trading, risk reduction through central clearing, and readily accessible reporting of executed trades – lend themselves ideally to the advances that electronic trading has brought to the markets.

In a format and structure that has served as a model for many aspects of SEFs, Tradeweb has been providing electronic trading of interest rate swaps and credit default swap (CDS) indices since 2005. The basic idea – that institutional investors can place dealers in competition for the best price – firmly supports the transparency goals that regulators are trying to achieve. Meanwhile, processing trades electronically also enables a seamless shift to supporting other regulatory goals, including swift delivery of trade information to any major clearinghouse and to reporting facilities known in the U.S. as swaps data repositories (SDRs) and in Europe as trade repositories (TRs).

The move towards greater regulation: Tradeweb milestones



With the new rules for derivatives trading looming, a vigorous debate has also developed around the role of futures as an alternative to swaps. Futures are not as customizable as interest rate swaps, and futures trading is not subject to the same rules as swaps trading. Despite some of the rash proclamations that have been aired by some commentators in the media, it's not likely that there will be a winner-take-all battle between swaps futures and OTC swaps. Indeed, investors will choose instruments based on how products fit their needs, and the broad and diverse marketplace can support multiple venues as long as final rules provide a level playing field for similar products.

Maintaining The OTC Model

Because fixed income markets are primarily over-the-counter, almost all trading is done on a bilateral trader-to-trader basis, whether on the telephone or electronically. While the introduction of futures may add some new and beneficial products to the mix, OTC trading will likely remain the preferred method of doing business for sovereign debt, corporate credit, structured products and many types of derivatives.

In the U.S., beyond ongoing financial reform, the OTC model for cash markets remains the standard, supported by the significant improvements in transparency brought about by electronic platforms such as Tradeweb over the past 15 years.

European fixed income markets are also maintaining an OTC structure even as cash bond markets are seeing the effects of regulation, with MiFID II likely to encompass a broad range of pre-trade price transparency requirements. These rules are coming at a point when the role of bond markets has never been greater, due to the critical need for European governments and companies to have consistent and streamlined access to investment capital.

While concerns about transparency requirements exist across the industry, the issue is nuanced. Electronic trading plays a valuable role in providing institutional clients with access to indicative market pricing on Tradeweb and other platforms. The fear is that regulators in Europe, and potentially the U.S., will make information on trades available too quickly, hampering the ability for market makers to hedge positions. This could encourage dealers to shy away from making markets, further impacting overall liquidity levels which are already declining under the weight of the economic downturn and stringent Basel III bank capital rules.

Regardless of the regulatory outcome, the efficiency provided by electronic markets is likely to be attractive enough to continue encouraging participants to move their business online. Europe, in particular, has been the leader in this long-term behavioral shift, but the U.S. will catch up over time.

The Future

Not only do the benefits of e-trading remain indisputable, but advances in technology, shifts in demographics, and increased emphasis on global regulation all point to the increased role of these marketplaces in the future. Technology no longer plays a supporting role in our lives; we are dependent on it.

In the 15 years since Tradeweb introduced the request-for-quote protocol for U.S. Treasury securities, well over half a quadrillion dollars has been traded by institutional end-users on Tradeweb. In 2012 alone, more was traded on Tradeweb's electronic platforms than the world's combined gross domestic product (GDP).

While these volumes are staggering, it is more important that electronic markets continue to evolve in a way that benefits the individual asset classes and end-users they are designed for. The OTC markets are not homogenous. Buyers and sellers engage in different ways, through the use of RFQ, lists of inventory, or by using a central limit order book. The strength of the OTC markets has always been their ability to adapt to meet the needs of participants. It is in the interests of electronic market providers to ensure they play the same role, continually adapting to the external influences that will always remain a part of this living, breathing community.

For more information:

Americas

+1 800 541 2268
help@tradeweb.com

Europe

+44 (0) 20 7776 3200
europe.clientservices@tradeweb.com

Asia

Tokyo
+81 (0)3 6441 1020
asia.clientservices@tradeweb.com

Hong Kong

+852 3762 3430
asia.clientservices@tradeweb.com

Singapore

+65 6417 4532
asia.clientservices@tradeweb.com

www.tradeweb.com

