IMPACT INNOVATION AWARD

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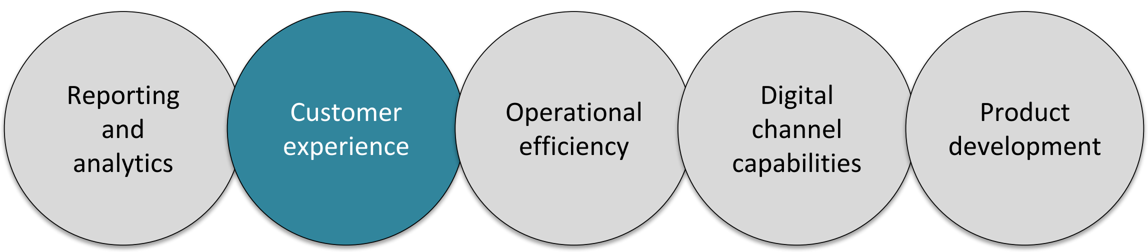
2020 Impact Innovation Award in Capital Markets: Tradeweb



TRADEWEB

Tradeweb is the recipient of the 2020 Capital Markets Innovation Award for customer experience. Launched in 1998 with the goal of executing institutional fixed income trades over the internet, the firm has become a leading, global operator of electronic marketplaces for rates, credit, equities, and money markets. Constantly looking to improve trading workflows, Tradeweb started with the idea of automating the process of picking up the phone to three different people to get a price. By making that simple process electronic, Tradeweb introduced the request for quote protocol, ushering in a new era of electronic trading. Today, the company continues to build technologies that improve the functioning of financial markets and provide liquidity tools to clients across global markets.

MARKET CHALLENGES AND NEED

While equity markets adapted long ago to the opportunities offered by electronification, bond markets have been much slower to take advantage of digital infrastructures and automation. Part of the reason for this is that bond markets have considerably more heterogeneity. While there are about 41,000 stocks in the world, there are millions of bonds, each with unique features and characteristics. However, things have begun to change as a growing number of market participants begin to realize the value that can be unlocked through modernizing their trading infrastructure.

Though the concept of moving large baskets of multiple bonds through a dealer in the corporate bond market has been around for some time now, this has often been a slow and cumbersome process. Too often market participants have been left with no option other than to assemble spreadsheets of bonds and prices, and then email them back and forth to liquidity providers. This painstaking process of iteration can take more than a day to complete, creating market inefficiencies and friction.

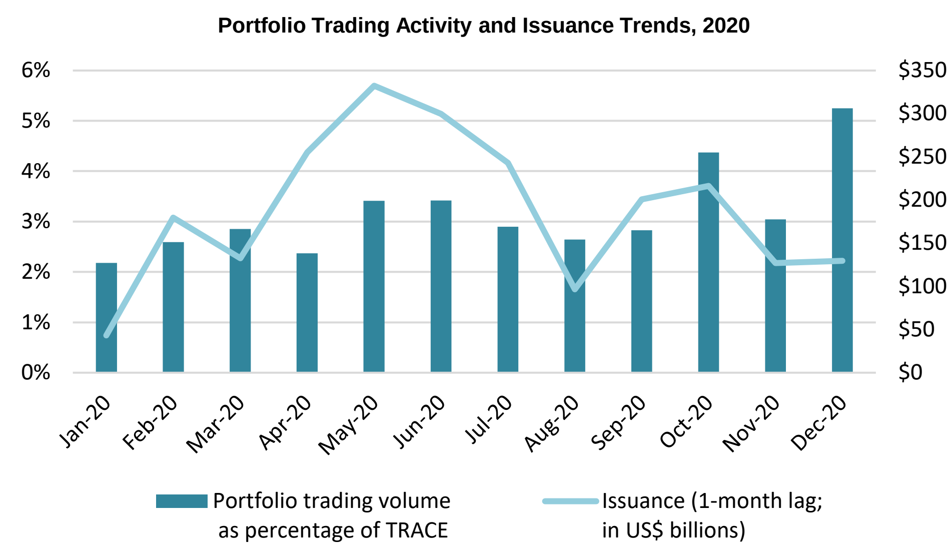
The growth of bond exchange traded funds (ETF) in recent years has been enabled through technological developments, and the rise of passive investing of technology has helped set the stage for the widespread adoption of portfolio trading. In October 2020, U.S. bond ETFs reached US$1 trillion in assets under management (AUM), having pulled in US$168 billion since the beginning of the year.[1] As a result, the create-redeem process in which baskets of cash bonds are exchanged for ETF shares is now a significant contributor to trading activity in the underlying cash credit market. Liquidity providers and algorithmic market-makers have supported the ETF ecosystem by providing pricing solutions aimed at the overall basket rather than the individual line items.

The market volatility of the past year has been an important reminder that liquidity loves flexibility, and that markets are better equipped to weather extreme uncertainty when participants have more options available to them. Electronic portfolio trading, as pioneered by Tradeweb, is an answer to these gaps in the market. The idea has been to integrate powerful

1. "U.S. Bond ETFs Hit $1 Trillion AUM," Blackrock, October 16, 2020, accessed March 2, 2021, https://www.ishares.com/us/insights/etf-trends/us-bond-etfs-1-trillion.

electronic tools with a common interface that offers functionalities such as Ai-pricing, real-time reference pricing, and seamless integration with liquidity providers to avoid friction and inefficiency. Analysis shows that portfolio trading's share of Trade Reporting and Compliance Engine (TRACE) trades is growing over time and that the surge in new issuance is creating more opportunities for portfolio trades (Figure 1).

Figure 1: Portfolio Trading Activity



Source: Tradeweb

INNOVATION: PORTFOLIO TRADING

Portfolio trading at Tradeweb allows institutions to package multiple bonds into a single basket and then negotiate a portfolio level price with liquidity providers, including banks and principal trading firms, before executing the trade in a single transaction. This process improves execution efficiency and allows for greater customization. The firm is a first-mover in its offering of a normalized layer that is more than an electronic protocol and that integrates with dealers and provides analytics. This particular combination of liquidity, participants, and pricing power has been harnessed by Tradeweb for the benefit of institutional investors as a new liquidity outlet. The development was introduced as an internal solution in January 2019 (Table A).

Table A: Initiative at a Glance

Category	Details
Financial institution	Tradeweb
Key vendor partner	N/A
Innovation	Portfolio trading

Category	Details
Implementation time	The base portfolio trading functionality was introduced in the U.S. in January of 2019 and expanded to include new functionality that allows institutional clients to submit a portfolio trade to multiple liquidity providers simultaneously in October of 2019. The portfolio trading offering was expanded to the European corporate credit market in November 2019.
Official launch date	January 2019
How it works	Electronic portfolio trading at Tradeweb allows institutions to package multiple bonds into a single all-or-nothing price and then to negotiate a portfolio level price with liquidity providers, including banks and principal trading firms. The portfolio trade is executed in a single transaction.
Key benefits	• It provides a novel way for the credit market to trade large slices of risk. • It allows customers to think in terms of risk rather than just individual securities. • It has the ability to create liquidity in less liquid securities, for example, the number of emerging market bonds sent via portfolio trading has been steadily rising. • Interest rate risk is compressed through seamless post-trade hedging on Tradeweb's U.S. Treasuries marketplace, reducing transaction costs. • The acceleration of automation in the past year has enabled more efficient pricing, allowing clients to focus less on price and more on scale and customization.
Future roadmap	Tradeweb plans to expand further with cross-asset class and cross-currency capabilities. There is significant interest in some of the emerging markets, with the company looking to establish itself in the Asian credit markets over the next few years.

Source: Tradeweb, Aite Group

TARGET MARKET

Originally, ETF firms sought portfolio trading as a means of facilitating the create and redeem process, but over time, the client base has expanded to the wider buy-side ecosystem to include traditional asset managers, hedge funds, and insurance firms. An increasingly large pool of participants that includes banks and dealers, as well as buy-side firms, is realizing value by using portfolio trading to source liquidity and move significant risk in a single, discreet transaction.

The benefits of this expansion in the end-client user base have been especially pronounced among those buy-side firms that work closely with dealer liquidity providers. However, Tradeweb is not solely focused on a single and narrow group of clients, and though some clients realize the value quicker than others, there is an emerging consensus that this is a tool that participants across the industry can utilize to move significant amounts of risk.

HOW IT WORKS

Portfolio trading at Tradeweb improves execution efficiency and diversifies trade profiles by allowing institutions to package multiple bonds into a single basket that is then priced at a single level. This portfolio price negotiation process occurs with liquidity providers such as banks and principal trading firms, and is then executed in a single transaction.

In addition to streamlining the credit trading process, portfolio trading at Tradeweb also integrates seamlessly with other key innovations launched by Tradeweb. Pricing and spread analytics are powered by Ai-Price, which delivers real-time reference pricing for more than 19,000 corporate bonds. Post-trade, portfolio trades benefit from net-spotting, which is a service that compresses interest rate risk through seamless hedging on Tradeweb's U.S. Treasury marketplace, providing clients with the opportunity to reduce their transaction costs.

Tradeweb has picked up on the following two long-term impacts on the marketplace in terms of customization of risk transfer and illiquid bonds:

- **Risk transfer:** Portfolio trades are exchanged on the basis of a single price for the basket, regardless of the basket size or the line items it includes. In that respect, a participant is deciding less on prices for each of the underlying holdings and considering more on the consolidated risk. A market more acclimatized for customization of risk transfer is an important development for investment grade and high-yield markets.
- **Illiquid securities:** As increasingly more participants exchange on the basis of risk and broaden their horizons on what they can trade, prices can be established for less liquid securities that might not have normally been executed in an all-to-all market. By establishing a more regular pattern of prices for certain illiquid securities, it becomes easier to understand where those securities may trade again. In time, it is feasible that portfolio trading may help to ameliorate price formation in thinly traded securities, expand the investible universe of corporate bond securities, and increase opportunities for investors and issuers alike.

SOLUTION DEVELOPMENT

Portfolio trading at Tradeweb began as a client-led initiative developed in concert with the firm's customers who have been looking for solutions to efficiently move considerable amounts of risk at speed. The concept of portfolio trading has been around for a number of years, especially for insurance customers, and market participants have historically executed bulk trades of several bonds manually over spreadsheets.

The discussions around electronic portfolio trading at Tradeweb first began in early 2018, and it took the firm four to six months to develop and then roll out its portfolio trading tools in January 2019. Since its initial implementation, the concept has begun to take on a life of its own over the past 18 months, as the process has become readily adopted by market participants. Tradeweb has used regular communication with clients to improve and fine-tune its tools.

Today, customers using portfolio trading can move upward of 750 line items in minutes with single trades' worth of potentially billions of dollars in value as Tradeweb seeks to improve efficiency, transparency, and accuracy in the corporate bond market. This represents a considerable improvement since the tool was launched, where participants could move only a maximum of 100 or so line items; this process would typically take a few hours.

KEY QUANTITATIVE AND QUALITATIVE RESULTS

The growing volume of portfolio trading demonstrates its increasing importance for institutional investors. In the foreword to its Q4 2020 quarterly report, the International Capital Market Association acknowledged that portfolio trading had seen an increase in its adoption by clients to "ensure appropriate risk transfer and certainty of execution."[2] The COVID-19 pandemic proved to be something of a turning point for portfolio trading, whereby traders continued to use the protocol during a period of heightened volatility and amid widespread migration to remote working arrangements:

- Tradeweb has facilitated US$37.9 billion in global portfolio trades so far in 2021 and US$227.3 billion since the service was launched in early 2019.
- Compared to the US$43 billion in trades facilitated in 2019, Tradeweb's portfolio trading protocol has seen a dramatic uptake throughout 2020 and into 2021.
- In further evidence of its growing adoption, more than US$57.6 billion was traded globally in Q4 2020, and more than 25% of Tradeweb's U.S. full electronic credit trading were portfolio trades.
- The largest trades have exceeded US$2 billion, and the firm even recorded a US$3.5 billion trade in November 2020.
- Portfolios now regularly exceed more than 100 bonds, with some cases even containing more than 750 individual line-items.
- Tradeweb has over 12 active dealers in Europe and 14 in the U.S., and is beginning to offer cross-currency functionality in Europe.

FUTURE ROADMAP

Looking ahead to the next few years, Tradeweb expects to see an increasing number of clients executing a higher proportion of their daily trading through portfolio trading. With talk of even a handful of clients potentially trading up to 50% of their overall trading via portfolio trading,

2. ICMA Quarterly Report Fourth Quarter 2020, October 8, 2020, accessed March 3, 2021, https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/Regulatory-Policy-Newsletter/Previous-versions/.

Tradeweb will be thinking about how to better incorporate their solutions into the overall investment process.

There is a strong sense from the firm that the next generation of portfolio trading at Tradeweb will enable more cross-asset class and cross-currency functionality. There is a particular focus on Asia, with significant attention on opportunities in the Asian credit markets for Tradeweb.

The next generation of portfolio trading is intended to allow a client to trade a portfolio to an index. The client chooses to trade to a reference index plus/minus pricing and then execute at a certain point in time. In the next few years, Tradeweb expects portfolio trading to continue to grow among its client base and become a standard and integral part of trading workflows in financial markets.

AITE GROUP’S TAKE

While bond markets have famously resisted automation and electronification, Tradeweb’s portfolio trading protocol shows that things are beginning to change. As fixed income market participants increasingly look for more sophisticated means of accessing greater liquidity and managing risk, Tradeweb’s portfolio trading tools reflect the possibilities that the electronification of markets provide. By pricing the whole package of a variety of fixed income securities at a single level, investors are able to find liquidity for securities that would otherwise remain relatively untouched and forgotten. The extraordinary growth that Tradeweb has recorded in its portfolio trading tools demonstrates the appetite in the industry for the increased certainty of trading and the customization opportunities that Tradeweb offers.

Tradeweb is receiving this award for customer experience. While there are still technological efficiencies to be made, new markets to penetrate, and further asset class capability to bring onboard, there is no doubt that customers have hugely valued the unique opportunities to manage risk through Tradeweb’s portfolio trading tools. With the fallout from the COVID-19 pandemic having introduced significant volatility into global financial markets for the past year, portfolio trading has offered customers relative ease of use and untapped liquidity.

As the sophistication of bond markets grows, so does the market competition. Unsurprisingly, portfolio trading is fast becoming a way for firms to differentiate themselves from their competitors. The digitization of the industry looks set only to increase, with the of rise of passive investing showing no sign of slowing and the COVID-19 pandemic having spurred a significant shift to automation and electronification throughout the whole economy. In this context, Tradeweb’s portfolio trading solutions are ideally suited to take on the challenges and opportunities of the evolving landscape of contemporary global fixed income markets.

AITE GROUP IMPACT INNOVATION AWARDS

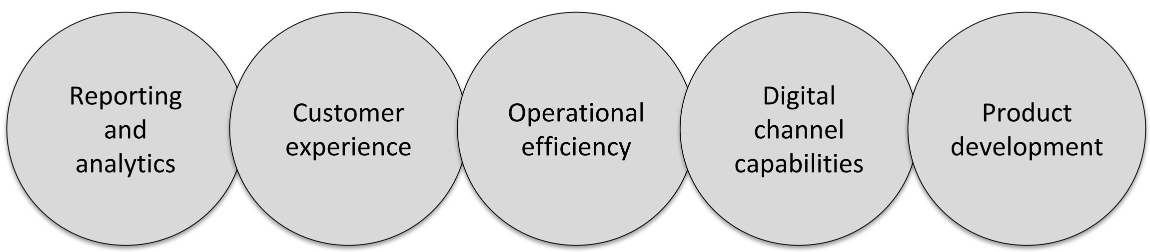
Customer needs and expectations continue to evolve, and financial institutions must strive to stay one step ahead. Their capabilities and the breadth of their product portfolios must go beyond what has traditionally been offered to address new market challenges and capture new opportunities. Aite Group's Impact Innovation Awards are designed to recognize and celebrate innovation achieved by financial institutions leveraging technology to surpass the status quo. Award recipients are leading the industry by identifying and implementing new products, capabilities, and/or levels of automation and effectiveness that are bringing our industry one step closer to next-generation banking. They are the financial institutions, regardless of size, that others will follow.

QUALIFICATION AND EVALUATION METHODOLOGY

Aite Group solicited nominations for its 2020 Impact Innovation Awards in Capital Markets from September to November 2020. All nominated initiatives were required to be in production within financial institutions.

Aite Group analysts reviewed all nominations and narrowed the field to the top three to four submissions in each of the following five categories (Figure 2).

Figure 2: Impact Innovation Award Categories



Source: Aite Group

A panel of external judges representing leading financial institutions, industry thought leaders, and consultants or implementers along with Aite Group analysts determined the winners. Each nomination was evaluated based on eight attributes (Figure 3).

Figure 3: Impact Innovation Award Evaluation Criteria

Level of innovation and competitive advantage	Ability to meet market needs	Impact on customer experience	Impact on customer operational efficiency
Level of new revenue opportunity	Impact on customer retention/new customer attraction	Level of scalability across customer base	Future roadmap

Source: Aite Group

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