Trumid: Revolutionizing U.S. Corporate Bond Trading?[1]

Background

Corporate Bond Trading

When a company wants to issue a new bond, primary dealers underwrite the offering, marketing the bond to institutional investors. Once issued, corporate bonds trade on secondary markets. Unlike equities and government bonds, most of which are now traded electronically, corporate bonds do not trade electronically or on an exchange. Eighty percent of U.S. investment grade corporate bond trading and almost ninety percent of high yield bond trading occurs "over-the counter" between bond dealers trading on behalf of their clients.[2] Dealers "make the market," matching institutional buyers and sellers, and executing trades over the phone.

The U.S. corporate bond market is very large, with an estimated $8 trillion in outstanding bonds, and about $1 trillion in new bonds issued annually.[3] Compared to other markets of this size, the corporate bond market is more illiquid. Unlike stocks, each corporate bond issuer may have multiple series of bonds outstanding, with different maturities and interest rates. Bond portfolios do not turn over frequently; ninety percent of corporate bonds change hands less than five times per year.[4] $500,000 is the average lot size

[1] Draft by Kathleen Traynor DeRose. For use only in NYU Stern Foundations of FinTech 2017-2018. Not for distribution.

[2] https://www.economist.com/news/finance-and-economics/21721208-greater-automation-promises-more-liquidity-investors-digitisation-shakes-up

[3] https://www.treasury.gov/connect/blog/Pages/Examining-Corporate-Bond-Liquidity-and-Market-Structure.aspx

[4] Ibid.

in the corporate bond market.[5] This means volume in each bond is low, and bid-ask spreads are wide. According to the U.S. Treasury, based on executed trades, corporate bond bid-ask spreads have ranged from a high of 2% during the financial crisis to 0.50-1.00% today.[6] Bond exchange traded funds (ETFs) create more liquidity in the market but still require dealers to facilitate trades.

Buyers and sellers interested in trading reach out to dealers by phone or through a "request for quote" (RFQ) system which may or may not elicit a response. Buyers and sellers' only source of pre-trade information is from the dealer. (For this reason, some market participants like hedge fund Renaissance Technologies developed proprietary bond pricing databases.) Without a central trading book or a free flow of information, the market hinges on personal relationships among institutional traders.

Bond dealers have the exclusive right to set prices and to execute trades. To do so, they will often buy bonds in advance of a trade. This means holding inventory and assuming price risk, for which they may also earn a profit. Dealers trade as either principals or agents, and may offer different prices to different buyers and sellers.

After the trade, dealers post information about the completed transaction to the Trade Reporting and Compliance Engine (TRACE) administered by the Financial Industry Regulatory Authority, (FINRA), the self-regulatory organization (SRO) that licenses broker-dealers. Services like Bloomberg, the largest "market intelligence" platform for bonds, provides this information and other bond statistics to market participants.

All-to-all Platforms

New "all-to-all" trading platforms emerged in Europe and in the U.S. after the financial crisis limited dealers' ability to deploy capital against trades, and new regulations forced dealers to report bond trades in greater detail.[7] "All-to-all" markets allow asset managers and dealers to trade directly. Asset managers already account for nearly 40% of the volume on the all-to-all

[5] http://www.thirdway.org/report/the-bond-market-how-it-works-or-how-it-doesnt

[6] For a market this large, these are large spreads. Also, they do not reflect trades that might have been forgone due to high spreads. https://www.treasury.gov/connect/blog/Pages/Examining-Corporate-Bond-Liquidity-and-Market-Structure.aspx

[7] MiFID-2, 2018

exchanges.[8] Tradeweb, which launched in 1998 as a government bond trader, began to trade European corporate bonds in 2012. MarketAxess, the leading U.S. all-to-all platform, (MarketAxess "Open Trading"), started trading U.S. corporate bonds in 2012 and now accounts for 34% of all trading volume in investment grades and 16% of all trading volume in high yields. Bloomberg launched an all-to-all market in 2015.

Early evidence suggests that all-to-all platforms reduce execution costs for market participants. For high-grade bonds, MarketAxess claims the spread on their network averages 3.2 basis points per trade, about half the spread paid on traditional platforms, from which MarketAxess collects 0.2 basis points. MarketAxess concentrates on "odd lot" smaller trades, (trade sizes less than $400,000), rather than large institutional trades, and provides a workflow solution for these previously difficult to trade lots.

All-to-all platforms are also inspiring new automated matchmaking and algorithmic trading tools, and the creation of new corporate bond derivatives. In addition to the trading platforms, startups like *Algomi* provide desktop trade analytics software for corporate bond traders, helping them to find trading partners and suggesting alternative trades.

Trumid

Trumid launched its all-to-all platform in 2014 to create an electronic secondary market, initially for high yield bonds and later for corporate bonds. Trumid positions itself as the platform for larger, institutional trades (trade sizes over $2,000,000), where "best execution" is important.

Former specialized corporate bond bankers and traders from Goldman Sachs, Credit Suisse, Blackrock and other firms founded Trumid to "bring trading efficiency and market intelligence to credit professionals."

After a few shifts in its technology leadership and product strategy, Trumid now has 400 participating institutions. According to the company, 88% are "active" and 55% have executed a trade.[9] A year after the launch of its refreshed platform, the company hit a milestone, reporting that in the prior twelve months, participants traded $10 billion of corporate bond volume on

[8] Ibid.

[9] https://www.trumid.com/files/Trumid_Market_Center_Overview.pdf

the Trumid platform. After acquiring rival *Electronifie* in 2017, which brought additional asset managers and broker dealers to the platform, Trumid appears to have captured additional market share.

Trumid charges a markup or markdown on each side of a trade, but no subscription fees. For price-based bonds, this mark is $1/16^{th}$ of a point. For example, if the Trumid "price" is 80, the buyer will pay 80.0625 and the seller will pay 79.9375. For spread-based bonds, the spread is a function of the maturity of the reference benchmark, and the average spread is around 0.40 basis points. Occasionally Trumid will also facilitate liquidity by allowing certain bonds, like new issues, to trade for free.

After initially relying on external developers, Trumid decided to develop its own software in 2016, continuously enhancing its platform and products. Trumid sees its scalable, flexible architecture and UX/UI of its GUI as key differentiators in the institutional arena. Trumid also operates a data science arm called "Trumid Labs" to develop uses for the trading data it collects.

After its initial $36 million Series A funding from Shumway Capital, Peter Thiel, George Soros and others, Trumid raised an estimated $28 million in Series B and C rounds in 2017. Deutsche Borse recently bought a minority stake in Trumid, investing $10 million to facilitate Trumid's entry into European bond markets. In total, Trumid has raised $82.2 million, and has an undisclosed valuation.[10]

As President Mike Sobel reflected on 2017 so far, he must have been pleased with Trumid's progress. But he knew that the all-to-all corporate bond trading business would ultimately have two or three competitors, not ten. Though most trading still happened the old fashioned way, Trumid had tough rivals like MarketAxess, which had 85% share of the trades in corporate bonds that did trade electronically. What products and services would allow Trumid to grow the fastest, and to become one of the dominant corporate bond platforms globally?

Trumid's Products

Trumid's marquee product is "Market Center," its all-to-all "electronic trading network and intelligence platform" which provides pre-trade

[10] Source for funding information: Pitchbook. Estimated valuation $350-750 million.

analytics, algorithmic trading tools, and electronically enables buyers and sellers to connect and execute trades, via its partner clearing house State Street. Trumid offers specialty tools and proprietary indicators like "Bond Stream," which automatically streams and organizes a customized data feed from the TRACE system and also enables direct trading via an automated widget, "Fair Value Model Price" (FVMP)[11] a statistical model which estimates a fair value for corporate bonds, and "Likelihood to Trade Score" (LTS), a machine learning model which re-ranks users' watch lists based on estimates of potential liquidity and therefore the probability that a trade will occur. Based on FVMP, in 2017, Trumid also launched a continuous pricing service for bonds.

[11] https://www.trumid.com/labs.html for Trumid FVMP white paper

Screen shots of “Market Center”

How It Works

Follow what you are interested in—bonds, sectors, tickers, or tags—and never miss an opportunity to engage live liquidity in your bonds. Your “Watch List” of bonds is dynamically sorted so the bonds with the highest likelihood to trade are always at the top.

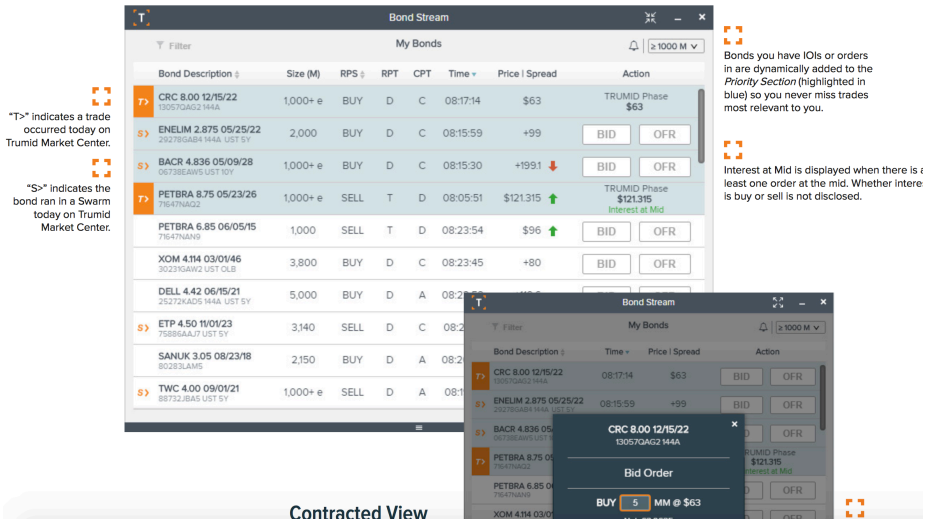
The Trumid Market Center uses IOI-based protocols to capture the widest range of axes across our large and diverse network of your peers. There are multiple ways to input your axes and they can be submitted 24/7.

A match is only beginning. Trumid Labs has developed a model to estimate a fair bid-offer range across ~22,000 bonds in the marketplace—we call them “Trigger Bands.” When you find opposing interest within the Trigger Band, a trading session begins. Aggregating interest around firm and anonymous liquidity helps to ensure best execution.

Our lit and dark protocols work to find the most efficient trading opportunities by giving you exclusive timeframe to negotiate with opposing interest. If the exclusive time window elapses without a trade, all “Watchers” of the bond are shown the firm two-way liquidity.

Screen shots of “Bond Stream”

Expanded View



Contracted View

U.S. Bond Markets
Average Daily Trading Volume
USD Billions

	Municipal	Treasury	Agency MBS	Non-Agency MBS	ABS	Corporate Debt	Federal Agency Securities
2017							
Jan	11.4	537.4	229.8	3.0	2.1	35.8	5.3
Feb	10.8	548.7	202.4	2.7	1.5	35.4	4.4
Mar	11.2	534.3	207.8	2.7	1.6	36.1	3.8
Apr	10.7	495.3	195.7	2.3	1.9	28.8	4.5
May	10.7	530.4	185.1	2.7	1.5	31.7	3.4
Jun	10.4	505.4	209.9	2.6	1.3	29.4	3.8
Jul	9.5	455.0	200.5	3.6	1.4	28.4	4.2
Aug	9.5	460.9	199.8	2.3	1.2	26.3	4.0
Sep	9.0	506.6	223.2	2.2	1.2	31.5	4.1
Oct	10.0	490.3	222.5	2.9	1.2	31.6	3.9
Nov	10.7	510.7	223.6	2.6	1.5	30.8	4.4
Dec	15.6	483.1	209.4	2.6	1.1	22.7	4.1
YTD '16	11.0	519.1	209.6	2.9	1.3	29.6	5.4
YTD '17	10.8	505.2	209.1	2.7	1.5	30.7	4.1
% Change	-2.1%	-2.7%	-0.2%	-7.6%	9.6%	3.9%	-22.7%

Source:

Contact
Research research@sifma.org
All data are subject to revision.

The Securities Industry and Financial Markets Association (SIFMA) brings together the shared interests of hundreds of securities firms, banks and asset managers. SIFMA's mission is to support a strong financial industry, investor opportunity, capital formation, job creation and economic growth, while building trust and confidence in the financial markets. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association (GFMA). For more information, visit www.sifma.org.