# BondCliQ

# The Inside Market March 2020

# The Week That Changed the Corporate Bond Market

Over the years, there have been two camps on corporate bond market structure that hold very different opinions. One group has steadfastly promoted the idea that innovative solutions have improved corporate bond market trading conditions ("we don't believe there is a liquidity crisis whatsoever"). The other group has warned that the relative calm we've enjoyed in the market over the past decade, thanks to central bank intervention, has masked material structural issues that will have negative consequences on corporate bond market liquidity.

The week of 3/16 to 3/20 has exposed which group has been woefully mistaken.

### I Know What You Did Last Week

Horror movies are good clean fun because eventually, the credits roll, and you can return to a world where super-natural monsters aren't behind every door. Horror markets are longer lasting and far



more detrimental to your psyche. To be clear, a substantial downturn in market value is not what terrifies market participants because volatility creates opportunity. What causes real panic in any market is when trading conditions deteriorate to the point where trade execution is severely compromised. When this occurs, both buy-side and sell-side institutions face the same situation. It's a crowded room, and the exits are blocked. Now you's can't leave.

# Stand Clear of the Closing Doors

An examination of last week's corporate bond transaction data (TRACE) illustrated three clear trends that demonstrate a meaningful deterioration of corporate bond market trading conditions:

#### **Downward Trend in Trading Volume**

Since US corporate bond markets became volatile on 2/24, we have witnessed an increase in the average daily volumes. The week of 3/16 to 3/20 was still incredibly volatile, but volumes showed signs of retreating in both investment grade and high-yield markets. Meanwhile other financial markets have been experiencing record trading volumes in response to the heightened volatility.



#### Contraction

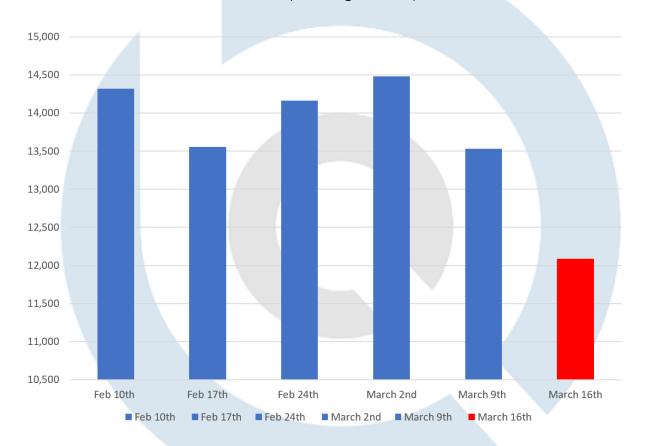
A topic that has received very little attention in the corporate bond liquidity discussion is CUSIP concentration. Looking at volume and bid/ask spreads do not tell the whole story on trading conditions because those metrics omit analysis on what is available to trade. Increasing volumes over a smaller universe of CUSIPs would produce signals that give a false sense of liquidity in the market:

In conclusion, the price-based liquidity measures—bid-ask spreads and price impact—are very low by historical standards, indicating ample liquidity in corporate bond markets. This is a remarkable finding, given that dealer ownership of corporate bonds has declined markedly as dealers have shifted from a "principal" to an "agency" model of trading. These findings suggest a shift in market structure, in which liquidity provision is not exclusively provided by dealers but also by other market participants, including hedge funds and high-frequency-trading firms.

(Has US Corporate Bond Market Liquidity Deteriorated? – Fed Blog, Liberty St Economics Oct 2015)

This is not a "remarkable finding" when you consider declining breath of trading as a factor.

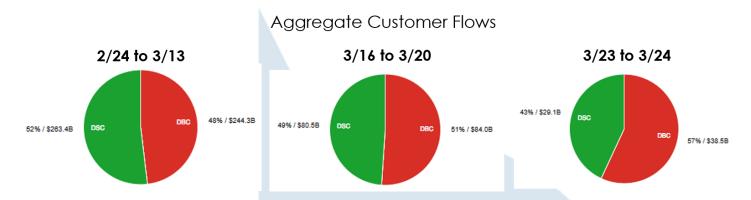
Looking at the total number of CUSIPs traded on a weekly basis, the week of March 16<sup>th</sup> was down ~14% or almost 2,000 CUSIPs from the weekly average of the previous five weeks:



It is not hard to imagine how CUSIP concentration has the potential to spiral. With a smaller universe of bonds trading in the market, there are less TRACE prints for CUSIPs that are not actively traded. The longer non-active bonds go without transaction data, the harder they are to trade, which exacerbates the concentration issue even further. To think, less than a year ago, there were loud voices in the market asking for a reduction in the dissemination of transaction data. Wow.

#### **Reversal of Customer Flows**

An interesting phenomenon that <u>we covered in a previous research note</u> was how customer flows have remained positive in the face of COVID-19 pressure. From 2/24 to 3/13, buy-side institutions were net buyers of corporate debt with a net purchase volume of \$19.1B during the period. Positive customer flows were observed in every sector. In contrast, the week of 3/16 to 3/20 had negative customer flows with net sales volume of \$3.6B. Positive customer flows were only observed in 3 out of 10 sectors. This reversal has gained momentum going into this week, with \$9.4B net sales imbalance from the 23<sup>rd</sup> to the 24<sup>th</sup> with every single sector showing negative customer flows.



This combination of lower volumes, less CUSIPs trading and negative customer flows raise an important question: What is happening with all the new ideas that were promoted as solutions to US corporate bond trading problems?

## Are We There Yet?

There have been many exciting articles and announcements about transformative innovation in the corporate bond market. Let's see how some concepts are holding up post 2/24:

#### Algorithmic Corporate Bond Trading

For several years, algorithmic trading has been touted as the future for the corporate bond market, with dealers gaining more and more confidence in the capabilities of automated decision making:

At first the "Goldman Sachs Algorithm" only handled trades below \$500,000, but today anything below \$2m "doesn't get touched by a human", according to Justin Gmelich, a senior executive at the investment bank. "In four-five years I wouldn't be surprised if we have a lower trader headcount, and have more staff on the algorithmic side," he adds.

(Bond Trading Technology Finally Disrupts a \$50tn Market – FT May 2018)



Several sources in the market have stated that "all the algos have been turned off," which is an ominous sign for their reliability during times of persistent volatility. This is not the case in other markets that have leveraged algorithmic trading techniques for years (ex: FX, Equities, TSYs, Futures, Options). The common denominator for consistency of algo trading is the quality of data used to maintain the pricing engine. In the corporate bond market, there is a dearth of high-quality pricing data to begin with. During times of high

volatility, accurate information in the corporate bond market becomes scarce. **Without improving** the pricing inputs for corporate bond trading algos, they will forever be subject to service disruptions.

#### **Platforms Providing Liquidity**

Most of the dialogue on corporate bond market structure is provided by people that have a solution to sell, current company included. Therefore, it is no surprise that a narrative that electronic trading platforms provide liquidity has been gaining momentum over the years:

In the absence of large dealer participation, New York-based MarketAxess has sought to plug the liquidity gap with its proprietary electronic trading platform, providing investors and broker dealers with streamlined access to an array of fixed-income products, Dave Simons talks to Rick McVey, MarketAxess chief executive, about the opportunities and challenges of the segment.

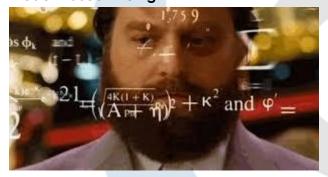
(MarketAxess Plugs the Liquidity Gap - MarketAxess September 2014)

The act of providing liquidity means that you are in the business of facilitating opportunities for those who seek to transact, so in a sense, yes, MarketAxess and other trading platforms could be considered liquidity providers. However, when you claim that your platform is going to "plug the liquidity gap" because dealers have stepped away from the market, you are implying that the electronic system itself acts as a risk-taking counterparty to facilitate transactions. This is extremely misleading and sets irrational expectations on what problems e-trading platforms really solve (hint: efficiency of trading).

It is dealers that are the engine of liquidity in the corporate bond market, regardless of whether the transactions occur by phone, electronic trading platform or smoke signals. If dealers back away from the market, liquidity is removed from all venues, including trading platforms. If electronic trading providers want to deliver a resilient liquidity solution, it requires consistent dealer participation.

Improving access to pre-trade data for dealers is a proven technique that fosters dependable market making activity for both voice and electronic execution.

#### **Model-Based Pricing**



The absence of high-quality pricing data in the corporate bond market has created an environment where numerous model-based pricing solutions have taken hold. These solutions determine the true value of a bond by, "leveraging the relationships between bonds; based on factors such as liquidity, maturity, time since issuance, amongst other things." While this process for determining the value of a bond may sound more like art than science, model-based pricing is the only game in town for calculating best-execution,

transaction costs and most importantly, portfolio valuations. Just before the COVID-19 crisis, a new model-based pricing product had claimed a breakthrough in accuracy:

The pricing engine's algorithm consumes more than 200 features and produces an unbiased, two-sided market for 95% of the tradable universe which is updated every 15 to 60 seconds, depending on the liquidity of the instrument. "The predicted prices of CP+ track traded levels very closely, and we aim for zero average difference between the two," said Krein. "A real-time accurate pre-trade reference price for corporate bonds has not been available before."

(Second Revolution in Electronic Bond Trading – Traders Magazine, February 2020)

While it would be great to believe that science can solve the mystery of accurate corporate bond prices, today, all model-based solutions float on an ocean of poor-quality information, so accuracy and reliability of bond portfolio valuations can be compromised. Post-COVID-19, this flaw became abundantly clear for bond funds and ETFs:

Carnegie Fonder, which shuttered a number of funds on Friday, required additional time to reach out to banks in order to determine prices. In an announcement to clients it wrote, "[We] decided to suspend trading in funds that invest in corporate bonds. As a consequence of the substantial turbulence in the market, there was a risk that the valuations (NAV) could be incorrect. It is our duty to ensure that valuations of the funds' holdings are correct. During Saturday we reviewed all our portfolios and all their holdings."

(Bond Pricing Battle Shutters Nordic Funds – The Desk, March 2020)

The first thing is that I took some comfort seeing that the trading was going on below net asset value (NAV)—BND was trading at a discount, I thought. For example, BND closed at \$80.33 on March 12, 2020, while Morningstar shows a NAV of \$85.61. That difference is huge. Unfortunately, Ben Johnson, Morningstar director of global ETF research, burst that bubble for me. He told me the NAV is based on stale prices for the bonds in the portfolio; thus, it is a bit like clocking the Olympic 100m dash with a stopwatch that only counts in 10-second increments.

(Why High Quality Bond ETFs Failed Us – ETF.com, March 2020)

There is approximately ~\$10tn in outstanding US corporate bond debt. COVID-19 has exposed the fragility of the model-based pricing valuation process. This is not due to a lack of effort or technique on the part of model-based price providers. Like algorithmic corporate bond trading, **high-performing**, accurate model-based pricing solutions require consistent high-quality pricing data as an input.

## **Imagine**

The innovation effort in the corporate bond market has not been in vain. There has been remarkable progress in electronic trading, algo strategies and model-based pricing. However, these solutions float on a sea of poor-quality pricing data that ultimately impairs their effectiveness when they are most needed. Imagine if the US corporate bond market had the same architecture as other modernized markets: a functioning, centralized pricing platform that improved the quality, access and reliability of price data.



At BondCliQ, we are singularly focused on improving transparency for market makers to produce the missing architecture for corporate bond market modernization: high-quality, centralized pricing data. Our approach is based on 50 years of financial market structure history. This past Friday, we had the privilege to present the details of our initiative at The Future of Market Technology Symposium hosted by Autonomous Research (Click <a href="here">here</a> for video presentation of 'Transparency and Market Liquidity'). As adoption of BondCliQ grows, imagine the positive impact the resulting data will have on dealer performance, electronic trading, algorithmic strategies and model-based pricing solutions. Now imagine what those improvements would mean for corporate bond market liquidity.