

The Inside Market

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How Do We Test Pricing Quality

For almost 100 years the Kelley Blue Book has been relied upon to provide an accurate valuation of cars. The origin of this invaluable source data is quite humble. In 1926, a used car dealer named Les Kelley started creating a list of used vehicles and the amount of money he was willing to pay for them. In corporate bond market terminology, this would be the equivalent of a standing list of bids. Eventually, the popularity of the list grew as other car dealers, and banks who provided auto loans, began to adopt Kelley's list as an accurate reflection of the current values of used cars. A business was born. However, the utility of this business skyrocketed over the decades as the scale and variety of cars expanded. Today, the company remains "an integral part of the car-buying process for both consumers and dealers, helping to facilitate all aspects of the transaction by providing detailed pricing information," according to KBB.com.



Kelley Blue Book
KBB.COM
The Trusted Resource

A fascinating story that could easily lead to a comparative segway into the benefits of price transparency in the corporate bond market, but no, not today. What's most interesting here is not the role that the Kelley Blue Book plays in the evolution of the car market, but specifically, **how did the Kelley Blue Book become accepted as the objective source of truth for car pricing.** In other words, when did the Kelley Blue Book become the reference point for car valuations?

Recently, The Desk published [an article about a \\$19 million SEC fine paid by Chatham Asset Management](#) for manipulating the NAVs of their client's portfolio through a trading scheme:

"The SEC's order also finds that Chatham and Melchiorre calculated the net asset values (NAVs), of their client funds' holdings using pricing data that was based, in part, on the trading prices of the securities. As a result, during the relevant period, the NAVs of Chatham's clients were higher than they would have been if the subject trades were removed from the market for the AMI bonds, which, in turn, resulted in higher fees being charged to the clients.

"As our order finds, Chatham's trading in AMI bonds had the effect of increasing the prices of those generally illiquid securities in a way that was disconnected from economic reality," said Sanjay Wadhwa, deputy director of the SEC's Division of Enforcement. "We remain vigilant in rooting out such misconduct in the marketplace, including in the fixed income sector, where investments can be less liquid."

This is not an isolated incident. The manipulation of corporate bond NAVs or inventory valuations (for dealers), has occurred many times. In fact, just last year, [the largest corporate bond dealer in the world was victim to a similar practices](#):

"JPMorgan Chase & Co.'s loss-making bets on European bonds and credit-default swaps have sparked queries from market participants disgruntled by what they saw as out-of-step prices and aggressive tactics and saw the bank scrutinize how its positions were valued.

*The bank has reviewed the valuations of some positions overseen by Gianfranco Canepa, former co-head of high-yield trading for Europe, the Middle East and Africa, according to people familiar with the matter. **Marking the value of those trades using prices closer to other banks' bids helped to push that book into a loss of \$70 million for the year from a profit.**"*

If a tier-1 corporate bond dealer can make a mistake of this magnitude, what does that mean for the market at large?

Regardless of your position on corporate bond pre-trade transparency, price manipulation is something that undermines the integrity of any market, and cannot be tolerated. Therefore, as an industry, **it is time we consider the development of a "Kelley Blue Book" for corporate bonds**. Unfortunately, starting this process is not as simple as distributing a list of bids for Model-Ts like Les Kelley in 1926.

My Type of Price

Market data is, in theory, an objective indicator, but the corporate bond market is notorious for having multiple classifications for pricing. Seeing a price for a bond is not enough information. In the corporate bond market, you must identify what “type” of price it is and then subjectively determine the reliability and accuracy of the data. If you are someone unfamiliar with the practices in the fixed income market, you are correct in thinking this is madness.

In May of 2021, ICMA tried to address this issue by releasing the [Industry Guide to Definitions and Best Practice for Bond Pricing Distribution](#) (IGDBPBD):

Cash bonds – corporates & sovereigns

	Run	Market-run	Axe	Streaming	Executable
Direction	Bid or offer/ Optional to publish/ Indicative (but should not change)	Bid <u>and</u> offer	Bid or offer	Bid or offer	Bid or offer
Price/Quote	Optional to publish/ Indicative state	Optional to publish/ Indicative state (but should show price)	Optional to publish/ Indicative state	Mandatory to publish/Indicative state	Mandatory to publish/Firm state
Size	Optional to publish/ Indicative state	Optional to publish/ Asymmetric or Identical/Indicative state	Mandatory to publish/Indicative state (but ideally firm)	Mandatory to publish/Firm state	Mandatory to publish/Firm state
Trade interest	Non-committal	Non-committal	Committed	Committed	Committed
Good until	N/A	N/A	Cancelled	Cancelled	Cancelled

The IGDBPBD is meant to address the reliability of a corporate bond price for trading. If a client sees a price that is classified as “executable” then they should expect to be able to buy or sell at that price. However, this process does not address the fundamental question that is needed to build a Kelley Blue Book for corporate bonds.

How Do We Know if the Price is Right (for representing market value)



The first step to developing a Kelley Blue Book for corporate bonds is to determine **which pricing data sources are reliable for representing market values**. For many, the instinct is to measure the reliability of a pricing source based on the adage that “*something is worth what someone is willing to pay for it.*” In other words, if a price is executable, or if the price comes from a tier-1 market maker, then, by default, it is an accurate

representation of the market. However, this viewpoint ignores the truth about corporate bond trading, execution is subjective. **What is executable for some is not necessarily executable for all**, which is problematic when considering a data source to create an objective reference point for valuations. Determining the quality of a corporate bond pricing data needs a different metric system.

A Suggested Approach to Measuring Corporate Bond Pricing Data

BondCliQ has been gathering and organizing institutional corporate bond quotations from dealers for the past 4 years. Recently, we were asked by a regulator to provide *“evidence (including any related studies or other resources) that proves the (BondCliQ) quotation data provides reliable indications of current market prices.”*

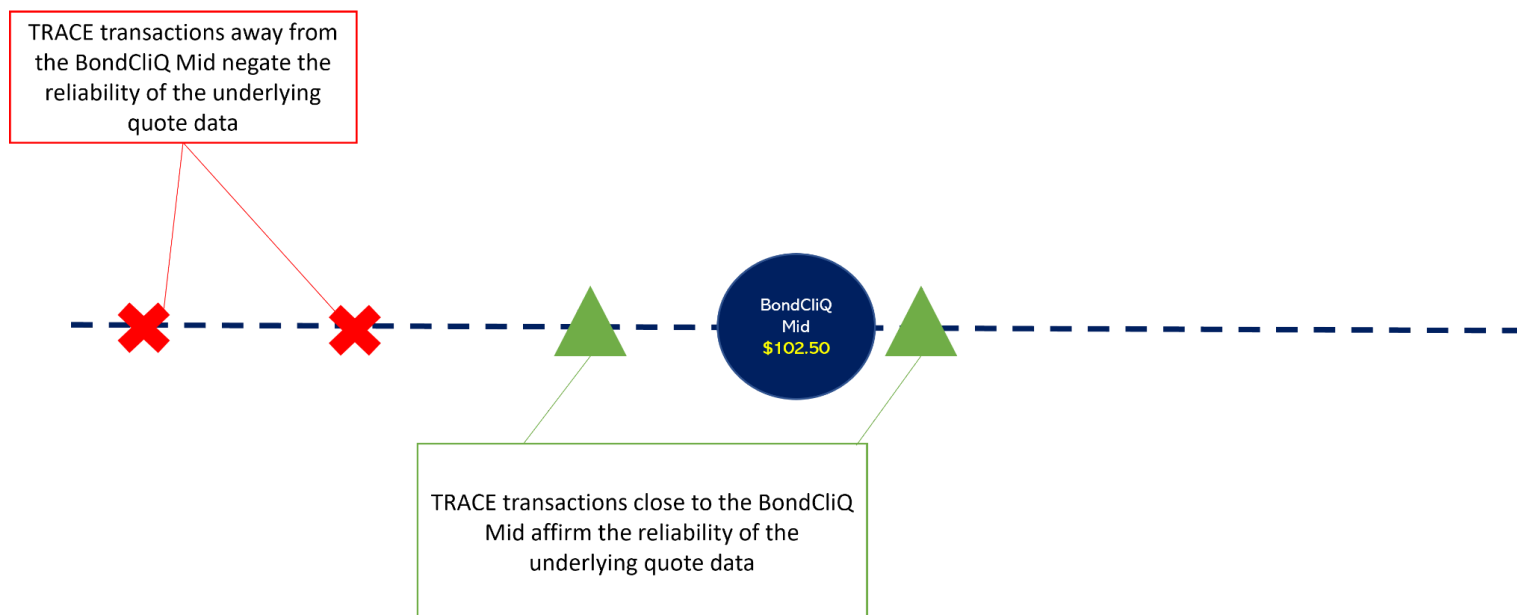
Currently, **there is no established standard for measuring corporate bond pricing data quality**, so this is a small question, but a big ask. The first step to answering this question is to create a methodology that produces objective results that test the reliability of corporate bond prices. Over the course of several weeks we met with several academics, senior representatives from regulators, and thought leaders from the buy-side and sell-side. Through these discussions, we created the following corporate bond price reliability test methodology:

Basic Overview of Corporate Bond Quote Data Testing Methodology

Similar to the original structure of NASDAQ in 1971, BondCliQ provides a repository of actual, unsolicited dealer quotations to buy and sell corporate bond securities. To demonstrate the reliability of the quotations on the BondCliQ system, BondCliQ leveraged a full calendar year of its quotation and trade data (January 31st, 2022 to January 31st, 2023) to do the following:

- Calculate a mid-point for individual bonds by averaging the best bid and best offer (“BondCliQ Mid”)
- Observe the proximity of transactions reported on TRACE (i.e., TRACE prints) to the BondCliQ Mid at the time of the trade
 - Transactions that occurred close to the BondCliQ Mid, affirmed the reliability of the underlying quotation data
 - Transactions that occurred away from the BondCliQ Mid, negated the reliability of the underlying quotation data

Visual example of basic testing methodology:



Additional Details on Corporate Bond Quote Testing Methodology

1. Benchmark - TRACE Transaction Data

As noted above, this analysis compares TRACE prints to the BondCliQ Mid at the time of trade. In general, smaller sized, retail transactions, have been observed as executing at outlier prices versus the current market price.¹ In performing the analysis, BondCliQ suggests a minimum transaction size requirement in order to eliminate the potential for these prices to skew the analysis.

Minimum TRACE transaction requirements:

- Investment grade transaction size minimum \geq \$1MM notional trade size
- High yield transaction size minimum \geq \$500k notional trade size

¹ L.Harris – [Transaction Costs, Trade Throughs, and Riskless Principal Trading in Corporate Bond Markets](#)

2. Testing Data Source - BondCliQ quotations

In general, the greater the number of independent dealers quoting, the greater the reliability of the BondCliQ Mid as an indicator of market value for a single bond. Additionally, the [SEC has made it clear that price determinations based on single dealer quotes are not encouraged](#), so we suggest the exclusion of bonds that do not have ≥ 3 dealers quoting in a 24 hour period.

Minimum quotation requirements

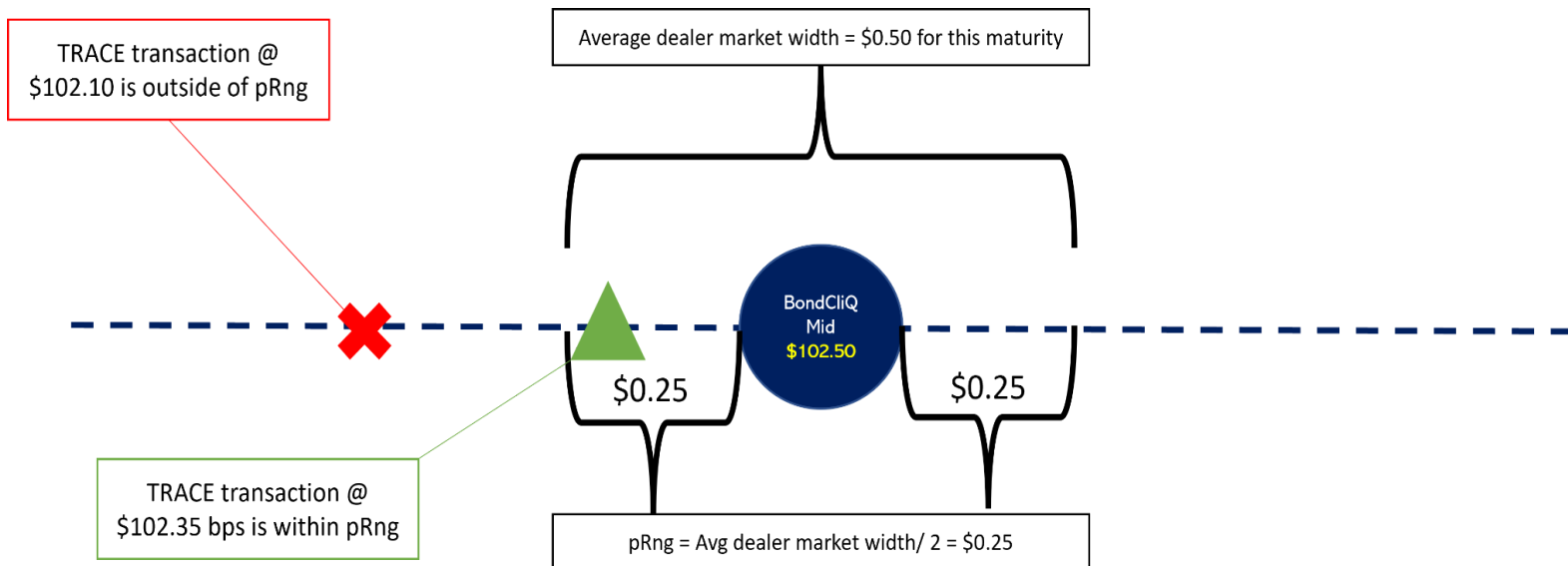
- Only bonds with ≥ 3 independent dealers quoting in the prior 24 hours were eligible

3. Measuring Value - Calculating Proximity Requirement

As noted in the Basic Overview, the proximity of TRACE transactions to the BondCliQ Mid at the time of the trade is used to demonstrate the reliability of the underlying quotations. To define a distance between a TRACE transaction and the BondCliQ Mid that affirms the reliability of the underlying quotation data, BondCliQ suggests the following:

- Use all quotation data from Jan 31st, 2022, to Jan 31st, 2023
 - Calculated the average width of a dealer market (distance between the bid and offer) by maturity bucket
 - ≤ 18 months
 - 18 months – 3 years
 - 3 years – 5 years
 - 5 years – 10 years
 - 10 years – 15 years
 - 15 years – 30 years
 - >15 for high yield markets
 - >30 years for investment grade markets
 - Divide each average width by 2 to determine a positive proximity range “pRng” for each maturity bucket
 - Apply a pRng to each side of the BondCliQ Mid
 - TRACE transactions that occur within the pRng affirmed the reliability of the underlying BondCliQ quotations
 - TRACE transactions that occur outside of the pRng negated the reliability of the underlying BondCliQ quotations

Visual example of the advanced testing methodology:



Test Results

We performed this test across all bonds that were traded between January 31st, 2022 to January 31st, 2023. BondCliQ is happy to share the results with interested parties privately (contact info@bondcliq.com and we will send the analysis). However, one final determination is still missing: What percentage of notional volume needs to trade within the pRng in order for the underlying pricing data to be deemed adequate for representing the market?

60%? 75%? What's your requirement?

Impact

Beyond preventing outright valuation fraud, it is important to consider the implications of establishing an objective reference point for valuing corporate bonds. The impact on asset-management alone would be material as buy-side institutions could improve their ability to measure transaction quality, prove best-execution, and calculate real-time NAVs (ETFs anyone?). Or, we can continue to debate if transparency is "good for the market" and wait for the next scandal.

-Chris White, BondCliQ - CEO