



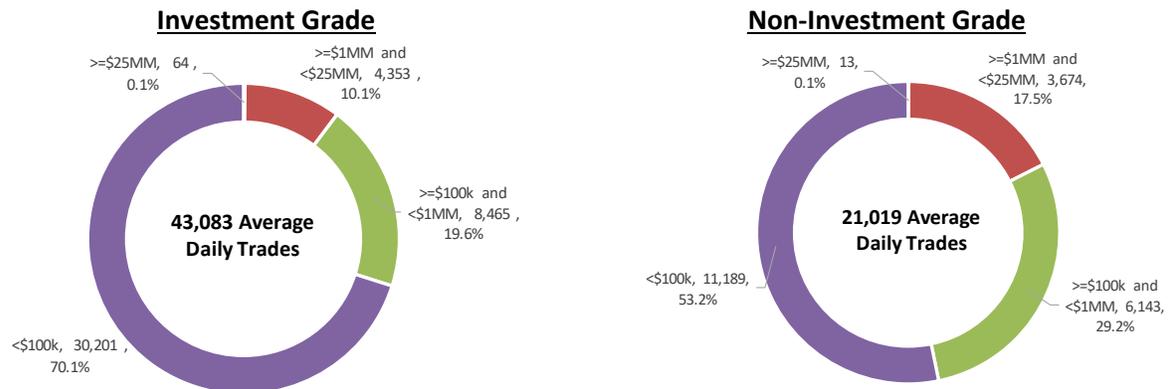
BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
 Submitted to the SEC’s Fixed Income Market Structure Advisory Committee (FIMSAC)
 July 16, 2018 Public Meeting

Executive Summary

Retail investors opting to invest in individual corporate bonds – in lieu of bond funds and ETFs – have access to a highly competitive and efficient marketplace. For each available bond, typically six to ten dealers provide live-and-executable quotes with bid-offer spreads often tighter or comparable to the institutional market. There are approximately 9,000 individual corporate bonds available to be traded on any given day. While trading activity may vary by bond, there is generally sufficient TRACE-reported trading activity in the 9,000 bonds for investors to gauge the quality of a potential bond investment’s pricing. Coupled with retail investors’ access to full depth-of-book quotes, company SEC financial filings, and third-party research, retail investors in individual corporate bonds have a high level of pre-trade transparency.

Since 70.1% and 53.2% of investment-grade and non-investment-grade corporate bond trades are under \$100,000 in face value, respectively, retail investors have access to more relevant pricing data points than institutional money managers as shown in Graphic 1:

Graphic 1: Number and Percentage of Daily Corporate Bond Trades by Trade Size – Q1 2018¹



Most retail investors buy between 5 to 25 bonds when they execute corporate bond trades. There are over 100 dealers who can provide liquidity for these trade sizes and, thus, ensure a competitive marketplace. Large buy-side firms, on the other hand, need to transact in much larger sizes, often \$5 million and up, which reduces the number of potential liquidity-providing counterparties and creates the trade-execution issues institutional firms have been trying to solve for years.

While the retail corporate bond market is robust and efficient, few retail investors are taking advantage of it. As shown in the below AAI (American Association of Individual Investors) June 2018

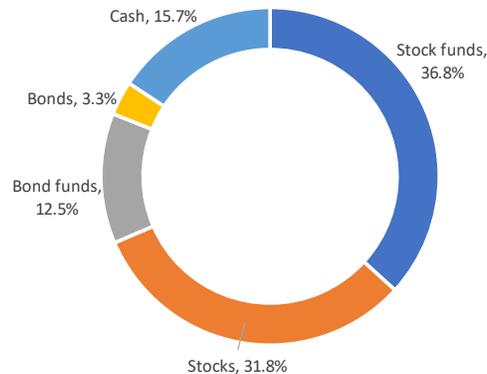
¹ Source: TRACE Fact Book Q1 2018 – Corporate Debt.



BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
Submitted to the SEC's Fixed Income Market Structure Advisory Committee (FIMSAC)
July 16, 2018 Public Meeting

Asset Allocation survey, US investors currently allocate nearly 4x greater amounts to bond funds than to individual bonds.

Graphic 2: AAI Asset Allocation Survey – June 2018



With smaller amounts to invest, retail corporate bond investors often have greater investment choice since they aren't limited to investing in the largest-sized bond issuances, as some larger funds may be. In addition, since investors in individual corporate bonds know the issuing company prior to investing, they can review quarterly and annual SEC filings for that issuer to assess the company's financial situation and the bond investment's risk-reward opportunity. Since many bond funds and ETFs regularly turn over their inventory – sometimes as often as 300% in a year² – it is difficult for investors in such funds to have a similar level of investment transparency as an investor in an individual corporate bond.

This paper will examine the state of pre-trade transparency for retail investors investing in individual corporate bonds by focusing on the following topics:

- 1) How the retail corporate bond market works
- 2) What tools retail investors can use when assessing individual corporate bond investments, as shown in our case study of the Bed Bath & Beyond 3.749% '24 bond
- 3) Recommendations to enhance pre-trade transparency for retail investors investing in individual corporate bonds

² For example, the \$78 billion MetWest Total Return Bond Fund had portfolio turnover of 291% for the year ended March 31, 2018. Please see Fact Sheet here https://www.tcw.com/-/media/Downloads/MetWest_Funds/Fact_Sheets/TRB_ffs.ashx



BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
Submitted to the SEC's Fixed Income Market Structure Advisory Committee (FIMSAC)
July 16, 2018 Public Meeting

About BondSavvy

We founded BondSavvy to empower investors to make successful investments in individual corporate bonds. During The Bondcast webcast series, BondSavvy makes approximately 25 CUSIP-level corporate bond investment recommendations each year, including if and when a previously recommended bond becomes a 'sell.' We also provide articles and videos that educate investors on how to invest in corporate bonds, including *The Crash Course on Corporate Bond Investing*, a first-of-its-kind video geared toward new corporate bond investors.

How the Retail Corporate Bond Market Works

Before discussing the quality of pre-trade transparency for retail investors investing in individual corporate bonds, it's important to understand how this marketplace works. Since this paper's focus is on pre-trade transparency, we will not cover every trade-execution detail but rather focus on a retail investor's access to a sufficient level of pre-trade information to assess potential investments.

Interestingly, as shown in Graphic 3 below, there is a significant overlap between liquidity providing dealers in the retail and institutional market. Other than trade size, a key difference between the retail and institutional corporate bond markets is that, while the institutional market uses a variety of trading protocols (Request for Quote, phone, all-to-all, etc.), the retail corporate bond market is substantially electronic with trades executed against live-and-executable quotes.

Below is a review of Graphic 3, which discusses how retail investors access corporate bond liquidity:

Area A

Liquidity-providing dealers send live-and-executable quotes into Retail Trading Systems such as Tradeweb direct, ICE Bondpoint, and TMC Bonds. The "bond inventory" provided by these dealers is split into two groups:

- **"Street Inventory"**: Quotes provided by dealers that may or may not have a captive financial advisor distribution network. In many cases, these dealers' primary business is market making and they generate revenue on the bid-offer spread. Since retail corporate bond trading is primarily electronic, dealers grow their business by providing competitive quotes for actively traded bonds.
- **"Internal Inventory"**: Retail brokerages that have large financial advisor networks often have a trading desk that provides liquidity for the clients of the financial advisors. When a financial advisor recommends a bond from his firm's own trading desk, that bond is said to be from the firm's "internal inventory." Note that, in many cases, this trading desk may also be a provider of Street inventory.



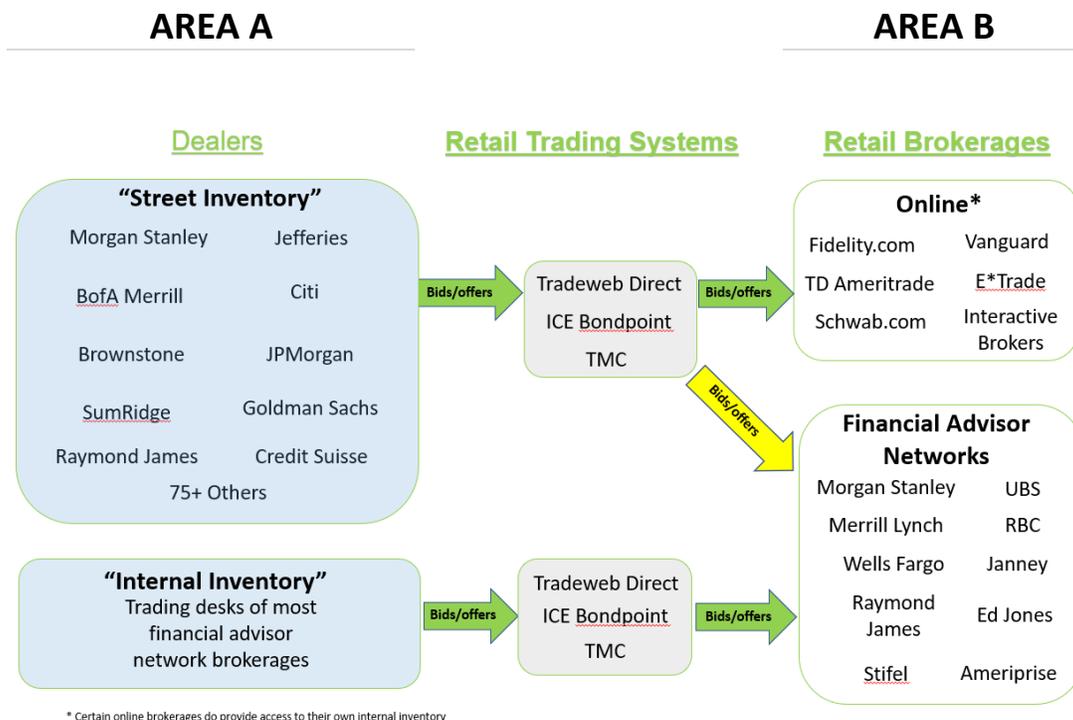
BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
 Submitted to the SEC’s Fixed Income Market Structure Advisory Committee (FIMSAC)
 July 16, 2018 Public Meeting

Area B

With the help of the Retail Trading Systems, retail brokerages ingest bid-and-offer quotes that are then shown to either self-directed investors or the firm’s financial advisors. Generally, the online brokerages listed below have an ‘open architecture’ model where substantially all Street inventory is shown to self-directed clients. Some firms are fully transparent with the quotes and show all offer-side *and* bid-side quotes, while others may only show offer-side quotes pre-trade. Some firms also enable the submission of limit orders that are inside the bid-offer spread. When these orders are submitted, they become part of the depth of book. For example, if the top-of-book bid-offer quotes were 95 / 96, an investor could enter a limit order to buy bonds at 95.5, and this would then be shown as a new quote that would narrow the bid-offer spread to 95.5 / 96.

Financial Advisor Network brokerage firms may or may not allow Street inventory to be shown to their clients, which is why we show a yellow arrow to these firms between Areas A & B. As discussed in the Area A commentary, many of these firms have their own trading desks and may only permit orders against that firm’s internal inventory. The level of Street inventory available to the clients of the Financial Advisor Network brokerages varies from firm to firm.

Graphic 3: Pre-Trade Price Discovery for Retail Corporate Bond Investors





BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
 Submitted to the SEC’s Fixed Income Market Structure Advisory Committee (FIMSAC)
 July 16, 2018 Public Meeting

Live-and-executable quotes

When clients of retail brokerages in Area B see a price, they expect to be able to execute a trade at that price. This is why the dealer quotes are “live-and-executable,” meaning the dealer will fill the order at that price 99%+ of the time. Dealers are expected to stand behind the quotes they provide, and the retail trading systems are generally on top of policing dealer behavior to ensure efficient execution of trades. In certain cases, the price of the bond may move as an investor moves through the trade process, in which case, the investor would need to confirm he still wants to move forward with the trade at the revised price.

Corporate Bond Depth of Book for Retail Investors

To illustrate how the inner workings of the retail corporate bond market benefit investors, we show below the full depth of book available on July 11, 2018 at 9:30am for two different corporate bonds: one investment grade (Apple 3.450% 2/9/45) and one non-investment-grade (Dish DBS Corp. 7.750% 7/1/26).

Graphic 4: Depth of Book Quotes for Apple 3.450% '45 Bonds³

Bids				Offers			
	YTM	Qty(Min)	Price		Price	Qty(Min)	YTM
1	3.99	250(10)	91.25	1	91.59	250(10)	3.97
2	4.00	500(2)	91.13	2	91.72	500(2)	3.96
3	4.00	125(2)	91.11	3	92.10	100(9)	3.93
4	4.01	200(2)	90.97	4	92.13	325(10)	3.93
5	4.01	100(9)	90.89	5	92.22	886(250)	3.92
6	4.03	140(10)	90.59	6	92.52	200(10)	3.91
7	4.03	300(15)	90.53	7	92.72	350(15)	3.89
8	4.04	1000(250)	90.42	8	92.83	1000(250)	3.89
9	4.05	325(10)	90.32				
10	4.08	50(50)	89.85				

³ As of July 11, 2018 at 9:30am ET as shown on Fidelity.com.



BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
Submitted to the SEC’s Fixed Income Market Structure Advisory Committee (FIMSAC)
July 16, 2018 Public Meeting

Graphic 5: Depth of Book Quotes for DISH DBS Corp. 7.750% '26 Bonds³

Bids			Offers				
	YTM	Qty(Min)	Price		Price	Qty(Min)	YTM
1	9.72	610(2)	89.25	1	89.75	200(15)	9.62
2	9.73	100(5)	89.19	2	89.78	400(20)	9.61
3	9.74	250(17)	89.13	3	89.79	250(17)	9.61
4	9.75	1000(250)	89.11	4	89.81	1000(250)	9.61
5	9.75	150(15)	89.08	5	89.84	100(15)	9.60
6	9.76	5(2)	89.05	6	89.90	118(20)	9.59
7	9.76	98(2)	89.05	7	90.00	150(5)	9.57
8	9.78	200(5)	88.94	8	90.18	6(6)	9.54
9	9.79	80(20)	88.90	9	90.20	55(5)	9.53
10	9.87	315(15)	88.51	10	90.26	28(2)	9.52
				11	91.62	25(5)	9.26
				12	93.00	10(5)	9.00

The depth of book tables show a highly competitive marketplace with narrow bid-offer spreads. As an example, the yield to maturity bid-offer spread for the Apple 3.450% '45 bond is only 2 basis points, which is inside the MarketAxess BASI (Bid-Ask-Spread Index) for round lots⁴, which stood at 3.8117 basis points on June 28, 2018. Of additional interest is that the minimum quantities (shown in parentheses in the blue boxes) are typically two to ten bonds. This means that investors looking to buy five bonds can often achieve similar – or even better – execution than large institutional investors.

Below is a snapshot of key data points from each depth of book table:

Graphic 6: Apple and DISH Depth of Book Summaries

	<u>Apple 3.450% '45</u>	<u>DISH DBS 7.750% '26</u>
Dollar Price Bid-Offer Spread (points)	0.34	0.50
YTM Bid-Offer Spread (bps)	2	10
<i>Bid Side</i>		
# Dealers Quoting	10	10
Total Liquidity	\$3.0MM	\$2.8MM
<i>Offer Side</i>		
# Dealers Quoting	8	12
Total Liquidity	\$3.6MM	\$2.3MM

⁴ “Round lots” are defined as trade sizes of \$1MM to \$5MM. More information is available at https://www.marketaxess.com/research/basi/basi_trade_size.php.



BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
Submitted to the SEC's Fixed Income Market Structure Advisory Committee (FIMSAC)
July 16, 2018 Public Meeting

Quality of Pre-Trade Transparency for Retail Investors in Individual Corporate Bonds

We view 'pre-trade transparency' as transparency related to (i) the level and frequency of an investment vehicle's financial disclosures *and* (ii) investors' ability to assess if they are receiving a fair and reasonable price for an investment. We believe the best way for the SEC's FIMSAC to understand the quality of pre-trade transparency for retail investors in individual corporate bonds is through a real-world investment example. The example we provide below shows the amount of information retail investors can access when investing in corporate bonds.

Since BondSavvy's first edition of The Bondcast on September 26, 2017, we have recommended bonds of a number of brick-and-mortar retailers, including certain bonds issued by Bed Bath & Beyond ("Bed Bath"). On May 2, 2018, we recommended purchases of two Bed Bath bonds: Bed Bath 3.749% '24 and Bed Bath 4.915% '34.

We had been carefully watching the performance of Bed Bath bonds, as we previously bought the Bed Bath 5.165% '44 bonds and, for quite some time, Bed Bath had the distinction of being among the highest-yielding investment-grade corporate bonds.

Information We Accessed To Evaluate the Bed Bath Investment

To simplify our Bed Bath case study, we will focus on the '24 series bonds we recommended May 2. The company reported earnings on April 11 for the 53-week period ending March 3, 2018. As shown in Graphic 7, the '24 bonds had been trading in a range between 96 and 106 since the bonds were issued on July 14, 2014. The bonds continued to trade in the mid-90s following the April 11 earnings release.

Then, on April 18, S&P downgraded the bonds to BBB-, the lowest investment-grade rating, which caused the bonds to fall 10 points down to the mid-80s.

Graphic 7: Bed Bath 3.749% '24 Price Performance Since Issuance⁵



⁵ Source: FINRA Market Data.



BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
Submitted to the SEC's Fixed Income Market Structure Advisory Committee (FIMSAC)
July 16, 2018 Public Meeting

Many investors immediately sell bonds upon a downgrade, which is exactly what happened with the Bed Bath '24 bonds. What most investors weren't paying attention to was that, in spite of its recent struggles, Bed Bath has (i) a limited amount of indebtedness relative to its earnings and (ii) high interest coverage (Earnings before Interest, Taxes, Depreciation & Amortization (EBITDA) divided by interest expense).

Below is a review of the publicly available information we evaluated when considering the Bed Bath '24 investment:

- 1) Bed Bath's April 11 earnings release and analyst call
- 2) S&P's April 18 downgrade note
- 3) Financial information and bond-trading data pertaining to Macy's, a good comp for Bed Bath
- 4) Bed Bath's Form 10-K filing on May 2
- 5) News stories pertaining to Bed Bath
- 6) Historical bond prices as shown in Graphic 7
- 7) Full depth of book quotes available on April 30
 - There were between six to eight dealers providing bid-offer quotes on the Bed Bath '24 bonds, and the top-of-book quote on April 30 at 12:00pm ET was 85.39 / 85.75
- 8) Trade by trade TRACE data reviewing 1,267 trades executed between April 17 and May 2 (see excerpt of data in Graphic 9)

Prior to assessing the pricing quality of the Bed Bath '24 bond, we needed to gain comfort that the company had the ability to pay off the '24 bonds at maturity. We know from Bed Bath's 10-K that it has three bonds outstanding:

- \$300MM in Bed Bath 3.749% '24
- \$300MM in Bed Bath 4.915% '34
- \$900MM in Bed Bath 5.165% '44

We like the '24 series bonds since they represent the company's first bond maturity and it is only \$300MM in size. As shown in the below table, Bed Bath had \$1.145 billion in fiscal-year 2017 (ending March 3, 2018) EBITDA and \$724MM of cash and short-term investments, strong numbers that support repayment of the '24 bonds.

In investment-grade corporate bonds, both Macy's and Bed Bath have had some of the highest-yielding bonds. Therefore, in Graphic 8, we compare Bed Bath's financial picture to that of Macy's and then evaluated how Macy's and Bed Bath's bonds traded relative to each other.

While Bed Bath's EBITDA has taken a big hit over the last year, much of this has been driven by its growth in digital revenue and the lower margins associated with that business. Bed Bath's overall revenue growth had been stronger than that of Macy's, and we believe a lot of this is driven by the focus on digital revenue at Bed Bath, which we viewed as a long-term positive. In addition, while both



BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
Submitted to the SEC's Fixed Income Market Structure Advisory Committee (FIMSAC)
July 16, 2018 Public Meeting

companies have reasonable leverage and high interest coverage ratios, Bed Bath is stronger for both metrics as shown in Graphic 8:

Graphic 8: Financial Comparison of Bed Bath to Macy's⁶

\$ in millions except per-unit amounts

	<u>Macy's</u>	<u>Bed Bath</u>
Revenue		
2017	\$24,837	\$12,349
2016	\$25,778	\$12,216
<i>YOY Growth</i>	-4%	1%
EBITDA		
2017	\$3,089	\$1,145
2016	\$2,950	\$1,494
<i>Growth</i>	5%	-23%
<i>Margin</i>	12%	9%
Comparable Sales (YOY)	(2.2)%	(1.3)%
Free Cash Flow	\$1,184	\$484
Interest Expense	\$321	\$66
Debt	5,883	1,492
Cash & Short-Term Investments	1,455	724
Leverage Ratio (Debt/EBITDA)	1.9x	1.3x
Interest Coverage (EBITDA/Int Exp)	9.6	17.4

After evaluating the financials of both companies, we examined how the bonds of Macy's and Bed Bath were trading. We compared a variety of bonds with different maturities, including Macy's 5.125% 1/15/42 bond to the Bed Bath 5.165% 8/1/44, where the Bed Bath bond's spread to Treasury was 128 basis points wider than that of the Macy's bond (3.20% for Macy's vs. 4.48% for Bed Bath). The Bed Bath '24 bond had a spread to Treasury of 3.68%, which was a premium to many non-investment-grade corporate bonds.

We review this Bed Bath '24 case study not just to show how we do our analysis, but to show the level of information available to retail corporate bond investors. It's why we believe pre-trade transparency for retail investors investing in individual corporate bonds is strong.

One Final Check Before Investing

As previously discussed, the top-of-book quote for the Bed Bath '24 bond was 85.39 / 85.75 on April 30 at 12:00pm ET. There had been significant trading activity in this bond, including 114 trades on April 30 and 186 trades on April 25, even though the bond has a relatively small \$300 million issuance

⁶ Source: Company SEC filings and earnings releases



BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
Submitted to the SEC’s Fixed Income Market Structure Advisory Committee (FIMSAC)
July 16, 2018 Public Meeting

size. To ensure the dealer quotes aligned with actual trades, we compared the dealer quotes to recent TRACE trades as shown below:

Graphic 9: Select TRACE Data for Bed Bath '24 Bonds – April 30, 2018

Execution		Description: BED BATH & BEYOND INC										Coupon Rate: 3.749		Maturity Date: 08/01/2024	
Date	Time	Settlement	Status	Quantity	Price	Yield	Remuneration	ATS	Modifier	2nd Modifier	Special	As-Of	Side	Reporting Party Type	Contra Party Type
4/30/2018	12:09:25	5/2/2018	T	5000	85.750	6.565							S	D	D
4/30/2018	12:05:43	5/2/2018	T	65000	86.866	6.325		M					S	D	C
4/30/2018	12:05:26	5/2/2018	T	65000	85.758	6.563		Y					S	D	T
4/30/2018	12:05:18	5/2/2018	T	65000	85.758	6.563		Y					S	T	D
4/30/2018	11:57:56	5/2/2018	T	25000	85.666	6.583		Y					S	D	D
4/30/2018	11:57:56	5/2/2018	T	25000	85.766	6.561		M					S	D	C
4/30/2018	11:57:56	5/2/2018	T	25000	85.666	6.583							S	D	D
4/30/2018	11:50:36	5/2/2018	T	6000	85.358	6.65		M					B	D	C
4/30/2018	11:36:51	5/2/2018	T	10000	85.758	6.563		Y					S	D	D
4/30/2018	11:36:51	5/2/2018	T	10000	85.758	6.563		N					S	D	C
4/30/2018	11:27:06	5/2/2018	T	5000	85.489	6.621		M					B	D	C
4/30/2018	11:26:55	5/2/2018	T	10000	85.489	6.621		M					B	D	C
4/30/2018	11:26:43	5/2/2018	T	10000	85.489	6.621		M					B	D	C
4/30/2018	11:25:05	5/2/2018	T	25000	86.135	6.482							S	D	D
4/30/2018	11:17:23	5/2/2018	T	30000	85.658	6.585		Y					S	D	D
4/30/2018	11:17:23	5/2/2018	T	30000	85.758	6.563		M					S	D	C
4/30/2018	11:17:23	5/2/2018	T	30000	85.658	6.585							S	D	D
4/30/2018	11:12:40	5/2/2018	T	20000	85.757	6.563		Y					S	D	D
4/30/2018	11:12:40	5/2/2018	T	20000	85.757	6.563							S	D	D
4/30/2018	11:12:40	5/2/2018	T	20000	85.757	6.563		N					S	D	C

When reviewing TRACE data, we focus on dealer-to-dealer trades, which we have boxed in green, as they would not include any customer mark-ups or mark-downs and would reflect the ‘true’ price of the bond. As shown above, the dealer-to-dealer trades were generally priced higher or very close to the quoted offer price we saw on Fidelity.com at 12:00pm ET on April 30, 2018. We therefore had final confirmation that we were buying the bonds at a compelling price.

Performance of the Bed Bath '24 Bond

With the high levels of pre-trade transparency in corporate bonds, we believe it is possible for retail investors to uncover corporate bond investments that can achieve strong returns. An example of this is the Bed Bath '24 bond, which has achieved strong performance relative to industry benchmarks as shown below:

Graphic 10: Comparison of Bed Bath '24 Total Return to Corporate Bond ETFs

Investment	April 30 Offer Price Post Mark-up ⁷	Statement Price On July 11 '18	Total Return Apr 30-July 11 '18
Bed Bath 3.749% '24	85.850	91.665	+7.63%
iShares LQD ⁸	N/A	N/A	+0.74%
iShares MLQD ⁹	N/A	N/A	+0.89%

⁷ Assumes \$1 per bond mark-up on the price quoted
⁸ LQD is the iShares iBoxx \$ Investment Grade Corporate Bond ETF
⁹ MLQD is the iShares 5-10 Year Investment Grade Corporate Bond ETF



BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
Submitted to the SEC's Fixed Income Market Structure Advisory Committee (FIMSAC)
July 16, 2018 Public Meeting

Pre-Trade Transparency Advantages over Bond Funds and ETFs

Today, in many respects, a retail investor investing in individual corporate bonds is investing in a more transparent investment than a bond fund or ETF for the following reasons:

- 1) Investors know the specific security in which they are investing and can evaluate that security's risk and potential return
- 2) Financial disclosures made by bond-issuing companies are generally more comprehensive and frequent than those made by bond funds and ETFs
- 3) Most bond funds are not pure-play corporate bond funds, which makes it difficult to understand exactly what you are investing in, especially since many of these funds are permitted to own equities and regularly turn over their bond inventories
- 4) Since individual bonds trade as a percentage of their face value, it is easier to understand the relative value of the bond and its potential upside. This is more difficult to do with bond funds, which don't trade relative to a par value and trade more like a stock. Individual corporate bonds all trade on the same scale.

Recommendations To Improve Pre-Trade Transparency in Corporate Bonds

While the above factors can work to the advantage of retail corporate bond investors, there are a number of ways market participants could help further improve pre-trade transparency for retail investors in individual corporate bonds. These include:

- 1) Enhance and more broadly distribute historical price graphs for corporate bond CUSIPs
- 2) Educate investors on the rationale of selling bonds prior to maturity
- 3) Modify the bond prices seen on client statements to better reflect the bond's market value
- 4) Further educate investors on the pros and cons of owning individual corporate bonds compared to bond funds and ETFs.

Following is a detailed review of these recommendations:

Recommendation 1

Enhance and more broadly distribute historical price graphs for corporate bond CUSIPs

Graphic 2 showed that, while investors in the AAll Asset Allocation Survey allocated nearly 4x more of their investments to bond funds compared to individual bonds, allocation to stocks (31.8%) was fairly even with that of stock funds (36.8%). This is cause for concern since there are key advantages of owning individual bonds over bond funds, such as receiving a fixed coupon and an investor's principal at maturity, and these advantages only relate to individual bonds – not individual stocks.



BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
 Submitted to the SEC's Fixed Income Market Structure Advisory Committee (FIMSAC)
 July 16, 2018 Public Meeting

Many investors believe owning individual corporate bonds is too difficult to understand and that it's an opaque market. We believe we can begin changing this perception by better equipping retail investors with tools to assess the value at which they are buying a security.

Prior to buying stocks, investors often look at historical stock price charts to gauge the price momentum of a stock and to see where they are buying the stock relative to its historical performance. Retail corporate bond investors, on the other hand, are presented with TRACE data in a table format that can be difficult to digest and quickly get a read on the performance of the bond as shown below:

Graphic 11: FINRA TRACE Historical Bond Prices for Bed Bath 3.749% '24

← → ↻ finra-markets.morningstar.com/BondCenter/BondTradeActivitySearchResult.jsp?ticker=C614513&startdate=07%2F09%2F2017&enddate=07%2F09%2F2018

Investors > Market Data > Bonds > Bond Trade Activity Search Result

Last Updated: 07/09/2018

Bond Trade Activity Search Results

From 07/09/2017 to 07/09/2018 GO Glossary of Terms

Issue: BBBY4144687		Description: BED BATH & BEYOND INC										Coupon Rate: 3.749		Maturity Date: 08/01/2024	
Date	Time	Settlement	Status	Quantity	Price	Yield	Remuneration	ATS	Modifier	2nd Modifier	Special	As-Of	Side	Reporting Party Type	Contra Party Type
7/9/2018	16:58:52	7/11/2018	T	12000	92.663	5.175									
7/9/2018	16:58:52	7/11/2018	T	12000	94.630	4.78		M							
7/9/2018	16:57:54	7/11/2018	T	5000	92.760	5.156		M							
7/9/2018	16:49:57	7/11/2018	T	5000	91.260	5.463		N							
7/9/2018	16:48:09	7/11/2018	T	5000	92.760	5.156		M							
7/9/2018	16:47:47	7/11/2018	T	5000	91.260	5.463		N							
7/9/2018	16:00:38	7/11/2018	T	40000	91.200	5.476									
7/9/2018	16:00:38	7/11/2018	T	40000	90.950	5.527		N							
7/9/2018	16:00:38	7/11/2018	T	40000	90.950	5.527									
7/9/2018	15:34:36	7/11/2018	T	50000	91.536	5.406		N							
7/9/2018	15:34:12	7/11/2018	T	50000	91.536	5.406									
7/9/2018	15:25:52	7/11/2018	T	20000	91.895	5.332									
7/9/2018	15:25:52	7/11/2018	T	20000	91.940	5.323									
7/9/2018	15:25:52	7/11/2018	T	20000	91.940	5.323		N							
7/9/2018	15:23:29	7/10/2018	T	5000	91.260	5.462		N							
7/9/2018	15:23:29	7/10/2018	T	5000	91.260	5.462									
7/9/2018	15:17:34	7/11/2018	T	10000	91.967	5.318		M							
7/9/2018	15:17:34	7/11/2018	T	10000	91.867	5.338									
7/9/2018	15:16:12	7/11/2018	T	5000	91.887	5.334									
7/9/2018	15:16:12	7/11/2018	T	5000	92.137	5.283		N							

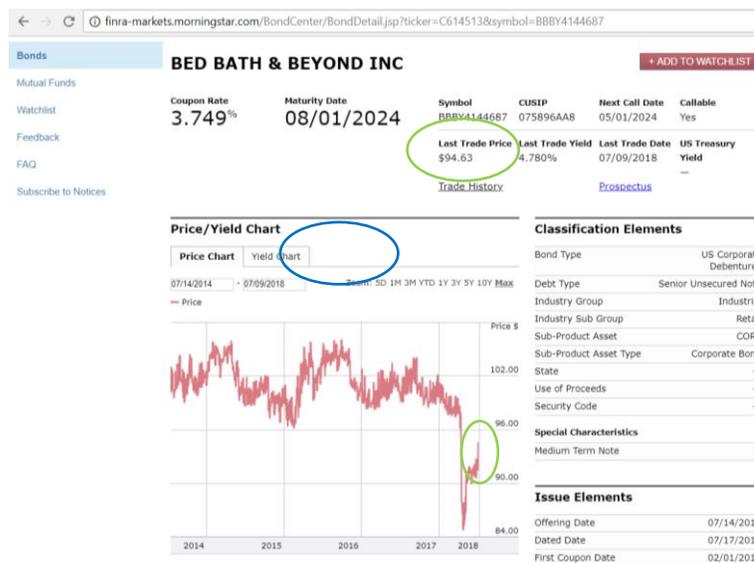
1 2 3 4 5 6 7 8 9 10 Next 1 of 328 GO

Rather than getting an immediate snapshot of a bond's long-term performance, investors must tediously page down to see all the different prices of the bond and decipher which type of trade it is: Dealer to Dealer, Customer Buy, or Customer Sell. This is a daunting task for experienced investors and keeps investors from being able to gain a more comprehensive understanding of a bond's pricing history.

While historical bond price charts are available on the FINRA market data site located at <http://finra-markets.morningstar.com/MarketData/Default.jsp>, only a select number of investors know where these charts are and the charts themselves have limitations. Graphic 12 shows a bond price chart for Bed Bath & Beyond 3.749% '24 bonds:

BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
Submitted to the SEC's Fixed Income Market Structure Advisory Committee (FIMSAC)
July 16, 2018 Public Meeting

Graphic 12: Bond Price Chart for Bed Bath 3.749% '24



We propose three key changes with respect to these historical pricing charts:

- Increase Usage of Price Charts:** Encourage brokerages to complement their table-formatted TRACE data with the FINRA historical price charts, as the charts are more user-friendly and make it easier to view trade history over a much longer time period.
- Have Chart Prices Reflect Dealer-to-Dealer Trades:** Make the prices depicted on the chart for each trading day to be that day's last dealer-to-dealer trade. Currently, the charts show the "Last Trade Price," as circled in green above. Often times, this price can be distorted as the result of a large markup on a bond. When this price is shown in the above chart, it looks like there is a spike in the price of the bond, when, in fact, it was the result of a two-point markup. As shown in Graphic 11, there were numerous trades before the 94.63 (boxed in green) trade that ranged between 91-92. Then, at 16:58:52, there were two 12-bond trades reported: 1) a dealer-to-dealer trade at 92.663 and 2) a dealer-to-customer trade at 94.63. In this case, a retail brokerage bought the bond from Street inventory for 92.663 and then sold the bond to its client at 94.63, a nearly two-point markup.

In light of all of this, the price shown in the chart should either be 92.663, or, alternatively, a volume-weighted average price of a day's final trades, depending on the volume of the bond.

- Add a Spread to Treasury Chart:** To provide further insight into what is driving pricing movements in corporate bonds, we recommend adding an additional chart tab where the blue circle is located in Graphic 12. In this tab, we recommend a chart showing the spread to the comparable Treasury ("credit spread"), so investors can see how a bond's credit



BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
 Submitted to the SEC’s Fixed Income Market Structure Advisory Committee (FIMSAC)
 July 16, 2018 Public Meeting

spread has changed over time. Institutional investors have access to these data, and retail corporate bond investors should be put on a level playing field.

Many investors believe that the only driver of bond prices is interest rates. This has kept many potential bond investors on the sidelines given their fear of ‘rising rates.’ Providing spread data not only helps investors see the positive or negative direction in which credit spreads have been trending but also enables investors to compare one bond’s credit spread to that of another.

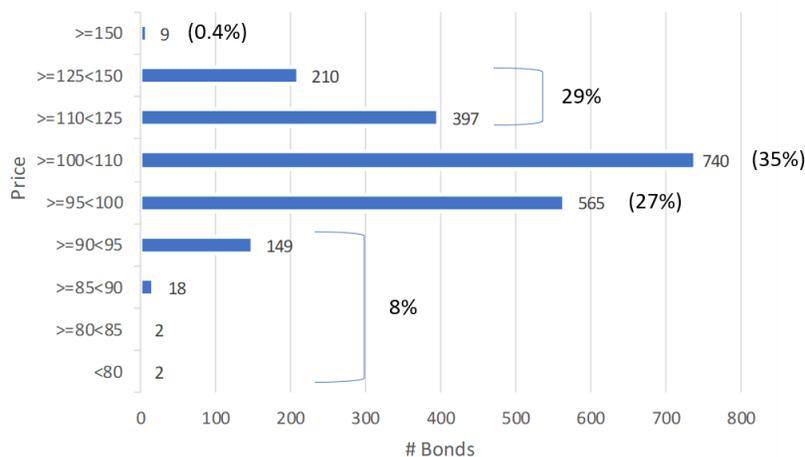
Recommendation 2

Educate Investors on the Rationale of Selling Bonds Prior to Maturity

A large portion of retail investors owning individual bonds creates a bond ladder and, typically, holds their bonds until maturity. We believe this negatively impacts market liquidity, investor choice, and investor returns.

Graphic 13 shows the range of investment-grade corporate bond prices from a recent online brokerage search. In this chart, we see the largest concentration of bonds is priced between par (100) and under 110. There is then a split of bonds priced at i) 110 or above and ii) below par:

Graphic 13: Range of Investment-Grade Corporate Bond Prices¹⁰



A key benefit to investing in individual corporate bonds is that all bonds trade on the same scale. They all have the same par value and investors can assess the value of one bond and readily compare it

¹⁰ Data from corporate bond search conducted on Fidelity.com on March 29, 2018 that included 2,092 bonds with yields to maturity of at least 4%.



BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
Submitted to the SEC's Fixed Income Market Structure Advisory Committee (FIMSAC)
July 16, 2018 Public Meeting

to another. This scale can also help inform investment decisions, as we see that bond prices cannot go up without an upward bound as stock prices can. In this chart, we see only 9 out of 2,092 bonds have prices at or above 150, an effective ceiling on corporate bond prices.

In light of this ceiling, we believe it is important for investors to consider selling bonds prior to maturity to the extent they believe little upside remains in a bond. For example, if an investor bought a bond due in 2024 at par and the price increased to 130 over the next two years, we believe the investor should consider selling that bond rather than waiting another four years to get par when the bond matures. If more retail investors considered this approach, there would be greater secondary market trading activity. This availability of additional bond inventory would help increase price competition, grow investor choice, and help shrink bid-offer spreads.

We therefore propose that: 1) Retail brokerage firms consider broaching the topic of clients selling bonds prior to maturity when deemed appropriate by the brokerage firm; and 2) That FINRA-led investor education programs pertaining to corporate bonds discuss this alternative to investors creating a traditional bond ladder.

Recommendation 3

Make Client Brokerage Statement Pricing More Reflective of Market Prices

Many bond investors become alarmed when they buy a bond for 98 and then, when they see the price of the bond on their brokerage account the following day, the bond has a price of 97 even though the actual price of the bond has not changed. The reason for this is that the brokerage statement shows the bond at the bid price (the price at which a bond can be sold) rather than the price at which a bond can be bought. This is a challenge for stock investors who may consider corporate bond investments but are used to bid-offer spreads of one penny. Such investors often have difficulty coming to grips with a reduction in the value of a security due solely to the bid-offer spread.

While we agree that the bid price of the bond should be shown in client statements, we believe that the price should better reflect the market value of the bond rather than an 'evaluated price,' which is more applicable to lightly traded bonds and for institutional trade sizes.

In many cases, the evaluated price is lower than the bid price at which a retail corporate bondholder could sell his bonds. This gives investors the impression that bid-offer spreads are wider than they actually are and, in many cases, understates the value of client portfolios. We believe this makes retail investors less likely to invest in – and regularly trade – individual corporate bonds.

We propose that: if there is a live-and-executable quote available to a retail brokerage client that can satisfy the quantity of bonds owned, that this price becomes the price reflected on the client statement. If such a quote is not available, then the status quo evaluated price should be used.



BondSavvy Comment Letter: Pre-Trade Transparency for Retail Investors in the U.S. Corporate Bond Market
Submitted to the SEC's Fixed Income Market Structure Advisory Committee (FIMSAC)
July 16, 2018 Public Meeting

Recommendation 4

Further Educate Investors and Advisors on the Pros and Cons of Individual Corporate Bonds

Placing retail investors into bond funds and ETFs rather than individual bonds is often more lucrative for the financial services industry. These products provide a significant recurring revenue stream. According to Morningstar's "US Fund Fee Study," the average 2017 management fees for active and passive taxable bond funds were 0.66% and 0.18%, respectively¹¹. If we assume the average taxable fund charges a 0.50% management fee and the average fee-based financial advisor charges 1.00%, this would result in an investor using a financial advisor to be paying 1.50% of taxable bond fund assets in fees. If we further assume a 4.5% annual rate of return on a taxable bond fund (after the 0.50% management fee), the brokerage and fund's share of the client return is 30%¹².

Given this large share of an investor's return going to someone other than the investor, it's important to understand whether this current market structure is in the best interest of retail investors. Even though only a small number of retail investors own individual corporate bonds, there is a robust and competitive market available to trade these securities. This marketplace can become even stronger if more retail investors become comfortable investing in individual corporate bonds.

We propose that: Retail brokerages make a bona fide effort to educate clients on the pros and cons of owning corporate bonds directly compared to through a bond fund or ETF.

Certain brokerages have hosted investor education webinars related to individual corporate bonds, and we applaud these efforts. Today, individual corporate bonds are a highly underrepresented retail investor asset class. We believe investors become empowered when they understand a wider variety of investment options and can decide which investment vehicles are best suited to their needs. With greater investment choice comes increased competition and innovation, all of which would be strong positives for the US corporate bond market.

¹¹ *US Fund Fee Study*, April 26, 2018.

¹² Calculated by taking 1.50% of 5.00%, which is the fund's assumed return before the 0.50% management fee.