

S&P Dow Jones Indices

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Unveiling the Hidden Cost of Retail Bond Buying & Selling

- Smaller block trades, versus larger dealer block trades, have higher transaction costs, in relative terms to the face value of bonds trading as markups are applied on both the purchase and sale of bonds to and from individual market participants.
- Municipal bond retail investors incur higher markups and therefore have higher transaction costs than retail investors buying or selling corporate bonds.
- As a result of these markups, buying and selling retail-size bond lots is demonstrably less efficient than buying or selling shares of an exchange-traded fund (ETF) or a mutual fund, which can buy and sell bonds with larger block sizes and lower markups.
- In a low-yield environment, retail transaction costs can be a significant cause of erosion of potential returns.

WHAT'S THE CATCH?

Owning individual bonds has its risks and rewards. However, buying a bond entails an unseen transaction cost, which may not always be clear to retail investors. This transaction cost exists because bonds are not typically sold with a commission. Instead, a markup is built into the bond price.

This report offers a transparent look at these hidden transaction costs for U.S. municipal and corporate bonds. To determine these costs, we used the investment-grade bonds tracked by the [S&P National AMT-Free Municipal Bond Index](#), the S&P AMT-Free Municipal Series, high-yield municipal bonds tracked by the [S&P Municipal Bond High Yield Index](#), investment-grade corporate bonds tracked by the [S&P 500[®] Investment Grade Corporate Bond Index](#), and high-yield corporate bonds tracked by the [S&P 500 High Yield Corporate Bond Index](#), in conjunction with bond transaction data provided by the Municipal Securities Rulemaking Board (MSRB) and the Financial Industry Regulatory Authority (FINRA). Based on this data, we have determined the average implied transaction cost of municipal bonds since May 2011 and that of corporate bonds since July 2011. This information can help market participants compare the cost of buying individual bonds to the cost of investing in bond alternatives, such as mutual funds and ETFs.

For 2017, the average implied transaction cost of buying an individual municipal bond of investment-grade quality was 0.90% for retail investors. The average implied transaction cost for high-yield municipal bonds was 1.66%. Investment-grade corporate bond transaction costs were lower, at 0.64%, and high-yield corporate bonds had an implied transaction cost of 1.17%.

Some Trade Data as Illustrations Only

Some extreme examples of actual trades occurring on the same day illustrate the challenge for individual market participants with understanding the cost of trades.

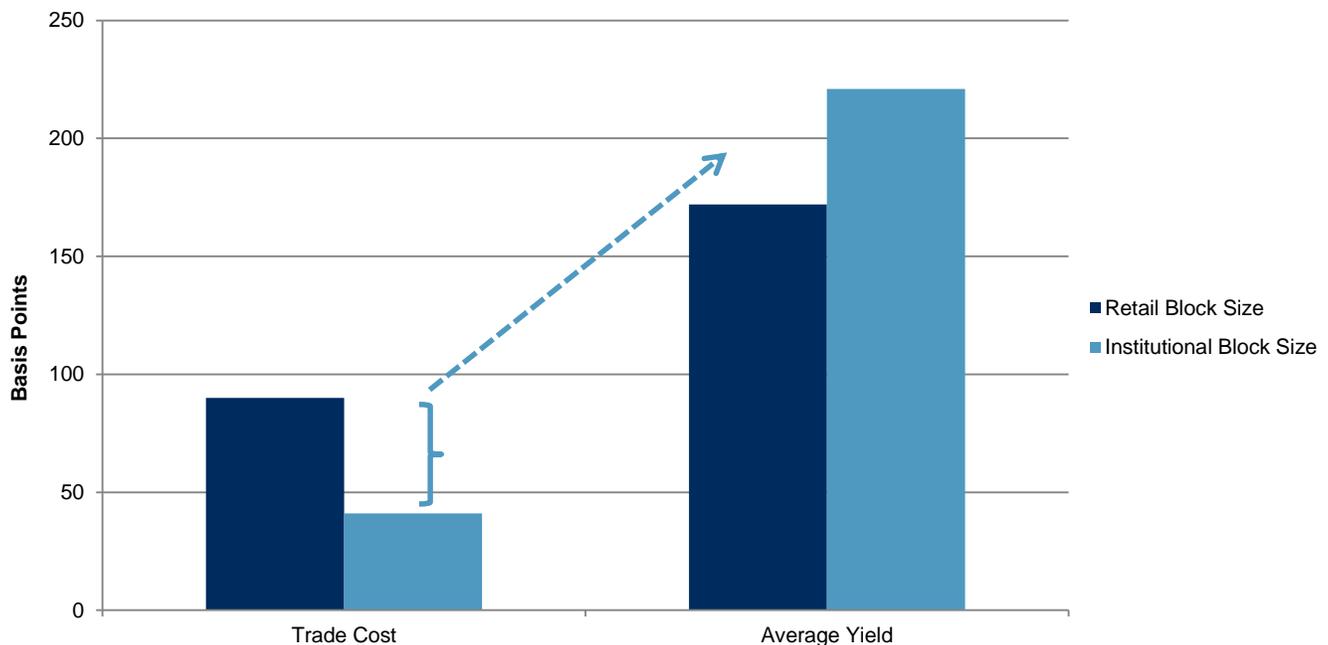
On Dec. 19, 2017, an investment-grade municipal bond with CUSIP #13063CQW3 was purchased from a retail bond holder at a price of USD 100.86. On that same day, a similar retail size position in this bond was sold to an individual at a price of USD 105.18 (a difference of USD 4.32).

Also on Dec. 19, 2017, an investment-grade corporate bond with CUSIP #14916RAD6 was purchased from a retail bond holder at a price of USD 93.48. On that same day, a similar retail size position in this bond was sold to an individual at a price of USD 99.46 (a difference of USD 5.98).

WHAT ARE THE IMPLICATIONS?

Individual bond transactions may not always be efficient when compared with buying or selling mutual funds or ETFs, for which there may be lower, or no, transaction costs. **If an investor were to buy a municipal bond with a face value of USD 10,000, the implied cost of that transaction would be USD 90. If the bond had a face value of USD 50,000, the implied transaction cost would be USD 450. If an investor were to buy a corporate bond of similar size, that cost would be USD 320.** With yields remaining low, these costs could be significant causes of erosion in actual returns (see Exhibits 2 and 3). These costs could be even more of an erosion of actual returns if the buyer sells the bond prior to maturity.

Exhibit 1: Illustration of Yield “Erosion” Due to Trade Costs



Source: S&P Dow Jones Indices LLC. Data as of December 2017. Chart is provided for illustrative purposes.

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Exhibit 2: Average Historical Bond Transaction Costs for Retail Trades With Face Value of USD 100,000 or Less

PERIOD	INVESTMENT-GRADE MUNICIPAL BONDS (%)	INVESTMENT-GRADE CORPORATE BONDS (%)	HIGH-YIELD MUNICIPAL BONDS (%)	HIGH-YIELD CORPORATE BONDS (%)
2011	2.08	1.44	2.47	2.38
2012	1.92	1.15	2.58	2.06
2013	1.71	0.91	2.50	1.74
2014	1.42	0.82	2.29	1.67
2015	1.21	0.87	2.07	1.64
2016	1.08	0.87	1.89	1.52
2017	0.90	0.64	1.66	1.17

Source: S&P Dow Jones Indices LLC. Data as of December 2017. Table is provided for illustrative purposes. Investment-grade municipal bonds are represented by constituents of the S&P National AMT-Free Municipal Bond Index and high-yield municipal bonds are represented by constituents of the S&P Municipal Bond High Yield Index. Prior to 2016, investment-grade corporate bonds are represented by the constituents of the S&P U.S. Issued Investment Grade Corporate Bond Index and high-yield corporate bonds are represented by the constituents of the S&P U.S. Issued High Yield Corporate Bond Index. For 2016 and 2017, investment-grade corporate bonds are represented by the S&P 500 Investment Grade Corporate Bond Index and high-yield bonds are represented by the S&P 500 High Yield Corporate Bond Index.

Exhibit 3: Average Historical Bond Transaction Costs of Dealer-to-Dealer Trades

PERIOD	INVESTMENT-GRADE MUNICIPAL BONDS (%)	INVESTMENT-GRADE CORPORATE BONDS (%)	HIGH-YIELD MUNICIPAL BONDS (%)	HIGH-YIELD CORPORATE BONDS (%)
2011	0.61	0.92	0.94	1.21
2012	0.61	0.68	0.91	0.99
2013	0.71	0.51	0.93	0.83
2014	0.51	0.44	0.92	0.80
2015	0.49	0.49	0.89	0.94
2016	0.44	0.59	0.66	1.15
2017	0.41	0.36	0.72	0.62

Source: S&P Dow Jones Indices LLC. Data as of December 2017. Table is provided for illustrative purposes. Investment-grade municipal bonds are represented by constituents of the S&P National AMT-Free Municipal Bond Index and high-yield municipal bonds are represented by constituents of the S&P Municipal Bond High Yield Index. Prior to 2016, investment-grade corporate bonds are represented by the constituents of the S&P U.S. Issued Investment Grade Corporate Bond Index, and high-yield corporate bonds are represented by the constituents of the S&P U.S. Issued High Yield Corporate Bond Index. For 2016 and 2017, investment-grade corporate bonds are represented by the S&P 500 Investment Grade Corporate Bond Index and high-yield bonds are represented by the S&P 500 High Yield Corporate Bond Index.

Exhibit 4: Number of Trades Used in the Retail Transaction Cost Calculations

PERIOD	INVESTMENT-GRADE MUNICIPAL BONDS	INVESTMENT-GRADE CORPORATE BONDS	HIGH-YIELD MUNICIPAL BONDS	HIGH-YIELD CORPORATE BONDS
2016	39,627	34,271	6,230	4,429
2017	38,993	36,601	4,958	4,492

Source: S&P Dow Jones Indices LLC. Data as of December 2017. Table is provided for illustrative purposes. Investment-grade municipal bonds are represented by constituents of the S&P National AMT-Free Municipal Bond Index, high-yield municipal bonds are represented by constituents of the S&P Municipal Bond High Yield Index, investment-grade corporate bonds are represented by the S&P 500 Investment Grade Corporate Bond Index, and high-yield bonds are represented by the S&P 500 High Yield Corporate Bond Index.

HOW IS THIS COST CALCULATED?

- Daily trade data provided by the MSRB and FINRA Trade Reporting and Compliance Engine (TRACE) is used to generate the transaction cost data.
- To measure retail transaction costs, S&P Dow Jones Indices calculates the monthly and yearly average difference between the price at which retail customers buy and sell the same bond in par amounts of USD 100,000 or less on the same trading day. To measure dealer transaction costs,

only dealer-to-dealer trades of the same bond during a single trading day are used. There is no trade par size minimum or maximum used for the dealer transaction cost calculations.

- There are many types of bonds, with varying term structures. Each may have different market dynamics, resulting in differing markups being applied. To help ensure consistency in the analysis of each segment of the market tracked in this report, trade data of bonds that are constituents of the index used to represent that market are used. The [S&P National AMT-Free Municipal Bond Index](#) constituents are used to identify investment-grade, tax-free, fixed-rate municipal bonds. The [S&P Municipal Bond High Yield Index](#) constituents are used to identify high-yield municipal bonds. Prior to 2016, the S&P U.S. Issued Investment Grade Corporate Bond Index constituents were used to identify fixed-rate, investment-grade corporate bonds and the S&P U.S. Issued High Yield Corporate Bond Index constituents were used to identify fixed-rate, high-yield bonds. Beginning in 2016, the [S&P 500 Investment Grade Corporate Bond Index](#) constituents have been used for investment-grade bond issues and the [S&P 500 High Yield Corporate Bond Index constituents](#) for high-yield bond issues.

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- To qualify for the retail trade analysis, a bond that is a constituent of the previously mentioned indices must have at least one retail customer buy transaction and one retail customer sell transaction on the same trading day. Only trades of USD 100,000 face value or less are included in the retail trade analysis.
- In the event that multiple buy or sell transactions are made to or from retail customers on the same day, the weighted average price by trade face value is used in the calculation of the transaction cost.

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