

Unveiling the Hidden Cost of Retail Bond Buying & Selling

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 U.S. Issued Investment Grade Corporate Bond Index](#), and high-yield corporate bonds tracked by the [S&P U.S. Issued 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 investors compare the cost of buying individual bonds to the cost of investing in bond alternatives, such as mutual funds and exchange-traded funds (ETFs).

Year-to-date as of June 2016, the average implied transaction cost of buying an individual municipal bond of investment-grade quality was 1.11% for retail investors. The average implied transaction cost for high-yield municipal bonds was 1.93%. Investment-grade corporate bond transaction costs were lower, at 1.01%, and high-yield corporate bonds had an implied transaction cost of 1.74%.

Some Trade Data as Illustrations Only

On April 11, 2016, an investment-grade municipal bond with CUSIP #650009ZB2 was purchased from a retail bond holder at a price of USD 110.85. On that same day, a similar retail size position in this bond was sold to an individual at a price of USD 116.70 (a difference of USD 5.85).

Also on April 11, 2016, an investment-grade corporate bond with CUSIP #68268NAL7 was purchased from a retail bond holder at a price of USD 95.98. On that same day, a similar retail size position in this bond was sold to an individual at a price of USD 100.94 (a difference of USD 4.96).

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 111. If the bond had a face value of USD 50,000, the implied transaction cost would be USD 555. If an investor were to buy a corporate bond of similar size, that cost would be USD 505.** With yields remaining low, these costs could be significant causes of erosion in actual returns (see

Exhibits 1 and 2). These costs could be even more of an erosion of actual returns if the buyer sells the bond prior to maturity.

Exhibit 1: 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*	1.11	1.01	1.93	1.74

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2016. 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 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. *2016 data is the average for the year as of June 30, 2016.

Exhibit 2: 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*	0.42	0.59	0.67	1.15

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2016. 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 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. *2016 data is the average for the year as of June 30, 2016.

Quality as a Factor in Transaction Costs: A Deeper Dive

Using the [S&P U.S. Issued Investment Grade Corporate Bond Index](#) and the [S&P U.S. Issued High Yield Corporate Bond Index](#), we can delineate among ratings bands (see Exhibit 3). In this case, the lowest of Moody's, S&P Global Ratings, and Fitch are used.

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Exhibit 3: Average Costs According to Ratings Bands

INDEX CONSTITUENTS	2015 AVERAGE RETAIL TRADE COST (%)	2016 YTD AVERAGE RETAIL TRADE COST (%)	2015 AVERAGE DEALER-TO-DEALER TRADE COST (%)	2016 YTD AVERAGE DEALER-TO-DEALER TRADE COST (%)
S&P U.S. Issued AAA Investment Grade Corporate Bond Index	0.80	0.91	0.34	0.42
S&P U.S. Issued AA Investment Grade Corporate Bond Index	0.69	0.85	0.42	0.49
S&P U.S. Issued A Investment Grade Corporate Bond Index	0.66	0.75	0.42	0.50
S&P U.S. Issued BBB Investment Grade Corporate Bond Index	1.02	1.22	0.53	0.64
S&P U.S. Issued BB High Yield Corporate Bond Index	1.58	1.65	0.78	0.92
S&P U.S. Issued B High Yield Corporate Bond Index	1.62	1.80	0.97	1.19
S&P U.S. Issued CCC & Lower High Yield Corporate Bond Index	1.92	1.94	1.34	1.66
S&P U.S. Distressed High Yield Corporate Bond Index	2.05	2.04	1.71	1.78

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2016. Table is provided for illustrative purposes.

Duration Is Also a Factor Driving Transaction Costs

Exhibit 4 shows the costs of transactions of investment-grade, tax-exempt municipal bonds by specific maturities. All the bonds in the municipal series are non-callable, fixed-rate, tax-exempt, investment-grade bonds.

Exhibit 4: Average Costs According to Maturity

INDEX CONSTITUENTS	2015 AVERAGE RETAIL TRADE COST (%)	2016 YTD AVERAGE RETAIL TRADE COST (%)	2015 AVERAGE DEALER-TO-DEALER TRADE COST (%)	2016 YTD AVERAGE DEALER-TO-DEALER TRADE COST (%)
S&P AMT-Free Municipal Series 2018 Index	0.45	0.37	0.30	0.25
S&P AMT-Free Municipal Series 2019 Index	0.48	0.38	0.30	0.26
S&P AMT-Free Municipal Series 2020 Index	0.52	0.47	0.36	0.28
S&P AMT-Free Municipal Series 2021 Index	0.55	0.53	0.41	0.33
S&P AMT-Free Municipal Series 2022 Index	0.57	0.53	0.38	0.34
S&P AMT-Free Municipal Series 2023 Index	0.64	0.53	0.47	0.35
S&P AMT-Free Municipal Series 2024 Index	0.60	0.64	0.38	0.38
S&P 12-22 Year National AMT-Free Municipal Bond Index	1.68	1.60	0.52	0.45

Source: S&P Dow Jones Indices LLC. Data as of June 30, 2016. Table is provided for illustrative purposes.

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; the S&P Municipal Bond Series constituents are used to identify bonds maturing in specific years; the [S&P U.S. Issued Investment Grade Corporate Bond Index](#) constituents are used to identify fixed-rate, investment-grade corporate bonds; and the [S&P U.S. Issued High Yield Corporate Bond Index](#) constituents are used to identify fixed-rate, high-yield bonds.
- 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 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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