

Market Transparency Report

Monthly Guide to the U.S. Retail Fixed Income Markets

August 2022

www.tradeweb.com

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Overview

About the Market Transparency Report

The data and analysis contained in this monthly report are intended to provide transparency into the dynamics of the U.S. Fixed Income markets for retail investors. The report presents the important trends in the market, including trade volumes, most active issuers, yield/spread movements and buy/sell ratios. Retail trades are defined as odd-lot transactions under 100 bonds (i.e. less than \$100,000 par value). The retail market is much smaller than the institutional market on a par value basis, but it accounts for more than 2/3 of the trades that occur in the marketplace.

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Market Commentary

Monthly Change Table for August 2022

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	12	18.9%	1.3
CD	10	26.1%	3.6
Corp	1	1.0%	0.4
Municipal	-5	-2.1%	0.2
Treasury	32	34.1%	3.9

For monthly security trend data, see slides 5, 6 and 7



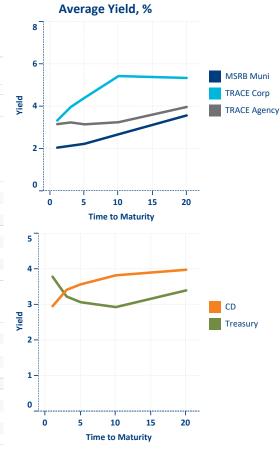
Yield Matrix

Average Yield, % for August 2022

			TTM			Median
Market	1	3	5	10	20	Maturity (Years)
MSRB Muni	2.1	2.2	2.2	2.7	3.6	11
TRACE Corp	3.3	4.0	4.4	5.4	5.4	3
TRACE Agency	3.2	3.3	3.2	3.3	4.0	1
CD	3.0	3.4	3.6	3.8	4.1	1
Treasury	3.1	3.2	3.1	2.9	3.4	1

Asset Class

Market	Category (Filtered)	Rating Key	1	3	5	10	20	Median Maturity (Years)
		AA	2.6	3.6	3.9			1
		A	3.2	3.6	3.7	4.1	4.8	1
	Financial	BBB	3.5	4.1	4.2	5.0	5.3	3
TDAGE		HY	5.0	5.8	7.2	8.2		3
TRACE -		AAA	2.3				4.1	7
Corp		AA	2.9	3.6	3.1	3.5	4.1	5
	Non-Financial	Α	2.7	3.6	3.6	3.8		4
		BBB	3.5	4.1	4.5	5.0	6.3	3
		HY	7.4	6.5	10.2	10.1	6.7	6
			1	3	5	10	20	Median Maturity (Years)
		AAA	1.9	2.0	2.1	2.5	3.3	8
		AA	2.0	2.1	2.2	2.7	3.5	9
	GO	A	2.1	2.2	2.4	2.7	3.6	8
		BBB	2.6	2.5	2.9	3.5	4.0	11
MCDD		HY	3.8	4.9		5.0	4.7	10
MSRB –	Non-Financial	AA				3.3		11
Muni –		AAA	2.1	2.1	2.2	2.6	3.3	9
		AA	2.1	2.1	2.2	2.7	3.5	11
	Revenue	A	2.1	2.3	2.4	2.9	3.7	17
		BBB	2.6	2.8	3.1	3.6	4.0	16
		HY	4.1	4.2	3.2	4.8	4.9	11



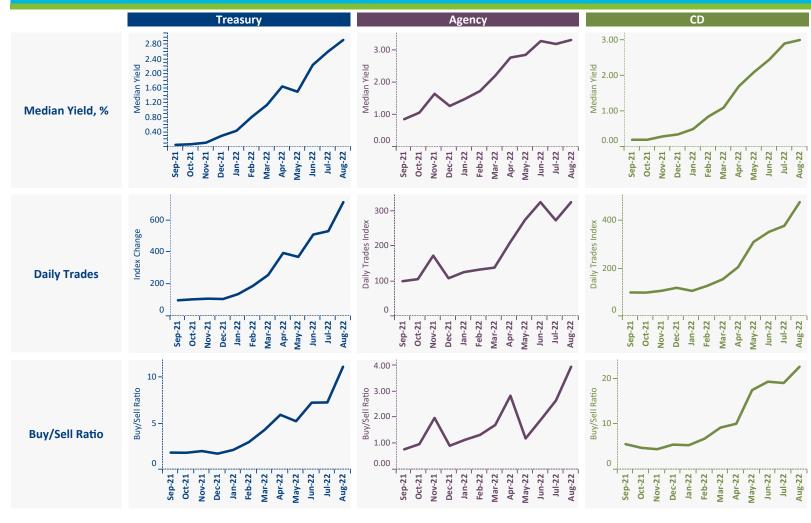
WA Yield = "Weighted Average Yield"

Source: TRACE, RTRS (MSRB's Real-time Transactional Reporting System) and Tradeweb Direct

- -The yields in each cell for Corporate/Agency/Municipal are the weighted average yield based on odd-lot customer buy transcations reported in TRACE/MSRB.
- -The yields in each cell for Treasury/CD are the weighted average yield based on buy transactions on the Tradeweb Direct Platform.
- -The weights are based on transaction size.
- -Yield summaries for Corporate and Agency exclude transactions in callable or floating-rate coupon bonds.
- -Yield summaries for Municipal exclude transactions in taxable bonds.
- -See appendix for the definition of maturity and rating buckets.



Treasury, Agency, CD Transaction Trend Summary



Daily Trades: First month = 100 Source: TRACE and Tradeweb Direct



⁻Treasury and CD are based on transactions on the Tradeweb Direct Platform. Median yields are based on all customer buy transactions.

⁻Agency is based on odd-lot customer transactions (<100M) reported in TRACE. Median yields are based on all odd-lot customer buy transactions.

Corporate Bonds: Odd-Lot Customer Transaction Trend Summary



Daily Trades: First month = 100 Source: TRACE and Tradeweb Direct



⁻Based on odd-lot customer transactions (<100M) reported in TRACE.

⁻Median yields and spreads are based on all odd-lot customer buy transactions...

Municipal Bonds: Odd-Lot Customer Transaction Trend Summary



Daily Trades: First month = 100

Source: RTRS (MSRB's Real-time Transaction Reporting System) and Tradeweb Direct



⁻Based on odd-lot customer transactions (<100M) reported in MSRB.

⁻Median yields and spreads are based on all odd-lot customer buy transactions.

⁻Spread for each transaction is calculated against the Treasury yield for the same maturity.

Corporate Bonds: Top 20 Most Active Issuers

August 2022

Index	Ticker	Company	Rating Key (Med)	Issues Traded	% of Total Trades	Trades	Buy/Sell Ratio	Dollar Vol. Traded (MM)	1Y Yield (Buy)	3Y Yield (Buy)	5Y Yield (Buy)	10Y Yield (Buy)	20Y Yield (Buy)
1	GS	GOLDMAN SACHS	A	956	3.0%	22,240	1.7	379	3.3	4.0	4.2	4.5	5.1
2	JPM	JP MORGAN CHASE	A	724	2.7%	20,387	1.6	380	3.2	3.7	4.1	4.6	4.8
3	BAC	BANK OF AMERICA	Α	329	2.6%	19,017	2.2	398	3.3	4.0	4.2	4.6	4.9
4	С	CITIGROUP	ВВВ	694	2.5%	18,542	1.9	336	3.3	4.0	4.4	4.8	5.1
5	MS	MORGAN STANLEY	A	730	2.0%	14,581	2.1	267	3.4	3.9	4.3	4.4	4.7
6	GM	GENERAL MOTORS FINANCIAL COMPANY INC	ВВВ	81	1.8%	13,311	2.7	265	3.8	4.4	4.9	5.5	6.2
7	WFC	WELLS FARGO	A	140	1.8%	13,228	1.9	224	3.7	4.0	4.1	4.7	5.0
8	AAPL	APPLE INC	AA	54	1.4%	10,316	1.8	177	3.1	3.3	3.3	3.6	4.2
9	VZ	VERIZON	BBB	147	1.3%	9,878	1.3	136		3.5	4.0	4.3	4.8
10	BA	BOEING CO	BBB	53	1.0%	7,756	4.8	162	3.8	4.4	4.6	5.0	5.8
11	ORCL	ORACLE CORP	ВВВ	34	1.0%	7,726	2.1	139	3.7	4.2	4.4	5.0	5.9
12	F	FORD	ВВ	125	1.0%	7,632	3.5	108	4.4	5.0	4.7	6.2	6.5
13	Т	AT&T	BBB	100	1.0%	7,548	1.0	116	2.4	4.0	4.1	4.4	5.1
14	COF	CAPITAL ONE FINL CORP	ВВВ	29	1.0%	7,403	3.7	126	3.6	4.0	4.3		
15	CMCS	COMCAST	A	58	1.0%	7,206	1.2	106		3.6	3.7	4.1	4.6
16	ANTM	Null	A	28	0.9%	6,561	6.7	66	3.4	3.7	4.1	4.3	4.7
17	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	BBB	237	0.9%	6,542	2.4	123	3.5	4.7	4.3	4.9	5.0
18	CVS	CVS CAREMARK CORP	BBB	42	0.8%	6,303	1.4	93	3.5	3.7	4.1	4.2	4.9
19	DUK	DUKE ENERGY	BBB	116	0.8%	5,792	2.3	91	3.6	3.9	4.0	4.4	4.9
20	AXP	AMERICAN EXPRESS	А	29	0.8%	5,763	3.1	123	3.4	4.0	3.9		4.5

Source: TRACE and Tradeweb Direct





⁻Based on odd-lot customer transactions (<100M) reported in TRACE.

⁻Issuer ratings are based on median rating of traded bonds from each issuer. Bond ratings are from Moody's and S&P.

Corporate Bonds: Top 20 Issuers with Highest Buy/Sell Ratio

August 2022

Index	Ticker	Company	Rating Key (Med)	Issues Traded	% of Total Trades	Trades	Trades (Buy)	Trades (Sell)	Buy/Sell Ratio	Dollar Vol. Traded (MM)	1Y Yield (Buy)	3Y Yield (Buy)	5Y Yield (Buy)	10Y Yield (Buy)	20Y Yield (Buy)
1	TYL	Null	N/R	1	0.3%	2,508	2,503	5	500.6	9					
2	HASI	Null	ВВ	2	0.3%	2,516	2,510	6	418.3	9					
3	EEFT	Null	BBB	1	0.3%	2,590	2,539	51	49.8	10					
4	CE	CELANESE US HLDGS LLC	BBB	8	0.5%	3,570	3,311	259	12.8	76		5.6	5.7	6.1	
5	LUV	SOUTHWEST AIRLS CO	BBB	9	0.4%	2,768	2,413	355	6.8	30	3.4	4.2	4.3	4.8	
6	ANTM	Null	Α	28	0.9%	6,561	5,703	858	6.7	66	3.4	3.7	4.1	4.3	4.7
7	PRU	PRUDENTIAL	BBB	47	0.6%	4,495	3,850	645	6.0	30		3.8	3.8	4.4	4.7
8	BA	BOEING CO	BBB	53	1.0%	7,756	6,416	1,340	4.8	162	3.8	4.4	4.6	5.0	5.8
9	вх	APRIA HEALTHCARE GROUP INC	BBB	33	0.3%	2,047	1,677	370	4.5	42	3.9	5.6	6.2	5.1	4.4
10	AEP	AMERICAN ELEC PWR CO INC	BBB	67	0.3%	1,901	1,553	348	4.5	35	3.8	4.1	4.2	4.5	5.1
11	ALLY	ALLY FINANCIAL	BBB	37	0.5%	3,896	3,169	727	4.4	78	3.8	4.7	4.9	6.0	
12	SAN	ABBEY NATL TREAS SVCS PLC	BBB	38	0.3%	2,118	1,719	399	4.3	53	3.8	4.6	4.8	5.9	
13	PM	PHILIP MORRIS INTL INC	А	24	0.3%	2,069	1,671	398	4.2	42	3.3	3.7	4.3	4.9	5.6
14	UTX	UNITED TECHNOLOGIES CORP	BBB	48	0.5%	3,547	2,850	697	4.1	47	3.5	3.7	3.9	4.1	4.6
15	BMY	BRISTOL MYERS SQUIBB CO	А	46	0.4%	2,890	2,285	605	3.8	52	2.9	3.4	3.3	3.8	4.6
16	COF	CAPITAL ONE FINL CORP	BBB	29	1.0%	7,403	5,839	1,564	3.7	126	3.6	4.0	4.3		
17	HCA	HCA INC	BBB	25	0.4%	2,755	2,154	601	3.6	57	4.0	4.6	4.7	5.1	5.8
18	RY	ROYAL BANK OF CANADA	А	189	0.7%	5,430	4,234	1,196	3.5	104	3.4	3.9	4.1	4.2	
19	F	FORD	ВВ	125	1.0%	7,632	5,932	1,700	3.5	108	4.4	5.0	4.7	6.2	6.5
20	МО	ALTRIA GROUP INC	BBB	24	0.4%	3,006	2,333	673	3.5	67	3.6	4.1	4.0	5.3	6.2

Source: TRACE and Tradeweb Direct



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⁻The top 20 issuers are selected among the top 100 most active issuers in odd-lot TRACE.

⁻Issuer ratings are based on median rating of traded bonds from each issuer. Bond ratings are from Moody's and S&P.

Corporate Bonds: Top 20 Issuers with Lowest Buy/Sell Ratio

August 2022

Index	Ticker	Company	Rating Key (Med)	Issues Traded	% of Total Trades	Trades	Trades (Buy)	Trades (Sell)	Buy/Sell Ratio	Dollar Vol. Traded (MM)	1Y Yield (Sell)	3Y Yield (Sell)	5Y Yield (Sell)	10Y Yield (Sell)	20Y Yield (Sell)
1	RDS	SHELL	AA	25	0.4%	2,640	1,231	1,409	0.87	39	3.4	3.6	3.4	3.9	4.6
2	Т	AT&T	BBB	100	1.0%	7,548	3,798	3,750	1.01	116	2.8	4.1	4.1	4.5	5.1
3	MET	METLIFE	Α	19	0.2%	1,800	963	837	1.15	28	3.6	3.6		4.1	4.7
4	CMCS	COMCAST	Α	58	1.0%	7,206	3,892	3,314	1.17	106		3.7	3.8	4.0	4.7
5	PFE	PFIZER	Α	45	0.5%	3,353	1,828	1,525	1.20	58	3.5	3.5	3.2	5.7	4.5
6	V	VIVENDI	AA	13	0.3%	2,060	1,129	931	1.21	32		3.6	3.3	3.5	4.3
7	HD	HOME DEPOT	Α	33	0.4%	2,736	1,521	1,215	1.25	48	3.5	3.4	3.4	3.7	4.5
8	VZ	VERIZON	BBB	147	1.3%	9,878	5,483	4,395	1.25	136		3.7	3.8	4.3	5.0
9	EDP	ENTERPRISE PRODS OPER LLC	BBB	33	0.4%	2,958	1,678	1,280	1.31	39	3.7	3.8	4.1	4.9	5.2
10	cvs	CVS CAREMARK CORP	BBB	42	0.8%	6,303	3,623	2,680	1.35	93	4.0	3.7	4.1	4.3	5.0
11	JPM	JP MORGAN CHASE	Α	724	2.7%	20,387	12,610	7,777	1.62	380	3.4	3.7	4.0	5.1	4.9
12	XOM	XTO ENERGY INC	AA	23	0.3%	2,265	1,412	853	1.66	37	3.3	3.4	3.4	3.7	4.4
13	ВК	BANK NEW YORK INC MEDIUM TERM SR NTS BOO	Α	49	0.5%	3,592	2,254	1,338	1.68	67	3.4	3.6	3.9	4.0	
14	PEP	PEPSICO	Α	33	0.3%	1,945	1,221	724	1.69	35	3.2	3.3	3.3	3.7	4.1
15	GS	GOLDMAN SACHS	Α	956	3.0%	22,240	14,020	8,220	1.71	379	4.0	4.1	4.3	4.7	5.3
16	WMT	WAL-MART	AA	32	0.3%	2,495	1,589	906	1.75	40	3.4	3.2	3.4	3.7	4.0
17	AAPL	APPLE INC	AA	54	1.4%	10,316	6,573	3,743	1.76	177	3.4	3.3	3.3	3.6	4.2
18	CTL	CENTURYLINK	В	23	0.3%	1,904	1,217	687	1.77	37	5.4	5.8	8.6	9.9	9.9
19	BRK	BERKSHIRE HATHAWAY	Α	144	0.8%	5,754	3,687	2,067	1.78	125	3.3	3.6	4.1	4.0	4.9
20	AMZN	AMAZON COM INC	AA	33	0.7%	5,324	3,423	1,901	1.80	87	3.4	3.3	3.4	3.6	4.1

Source: TRACE and Tradeweb Direct



⁻Based on odd-lot customer transactions (<100M) reported in TRACE.

⁻The top 20 issuers are selected among top 100 most active issuers in odd-lot TRACE.

⁻Issuer ratings are based on median rating of traded bonds from each user. Bond ratings are from Moody's and S&P.

Corporate Bonds: Top 20 Most Bought Issues

August 2022

Index	Ticker	Company	Maturity	Rating Key (Med)	Coupon	Trades (Buy)	Trades (Sell)	Trades	Dollar Vol. Traded (MM)	Yield (Buy)	Yield (Sell)	Price (Buy)	Price (Sell)
1	ANTM	Null	Dec-27	Α	3.650	4,360	223	4,583	31	4.1	3.7	98.0	99.6
2	PRU	PRUDENTIAL	Sep-62	BBB	5.950	3,073	116	3,189	4			25.4	25.3
3	F	FORD	Aug-62	ВВ	6.500	3,072	200	3,272	12			25.1	24.9
4	EEFT	Null	Mar-49	BBB	0.750	2,539	51	2,590	10	0.8	0.9	98.9	97.3
5	HASI	Null	Aug-23	ВВ	0.000	2,510	5	2,515	9			104.4	101.0
6	TYL	Null	Mar-26	N/R	0.250	2,503	5	2,508	9		0.4	101.6	103.0
7	PNC	PNC FDG CORP	Dec-49	BBB	6.200	1,765	70	1,835	47			100.6	99.6
8	ВА	BOEING CO	May-25	BBB	4.875	1,334	96	1,430	23	4.4	4.5	101.1	100.9
9	CVS	CVS CAREMARK CORP	Mar-28	BBB	4.300	1,304	1,167	2,471	19	4.1	4.1	101.0	100.7
10	BAC	BANK OF AMERICA	Aug-24	BBB	4.200	1,264	328	1,592	31	3.9	4.1	100.6	100.2
11	BAC	BANK OF AMERICA	Jan-25	BBB	4.000	1,223	110	1,333	33	4.1	4.2	99.9	99.6
12	CE	CELANESE US HLDGS LLC	Jul-24	BBB	5.900	1,223	73	1,296	29	5.3	5.3	101.1	101.0
13	TD	TORONTO DOMINION BK SR MEDIUM TERM BK NT	Jun-25	Α	3.766	1,179	21	1,200	9	3.9	4.1	99.6	99.1
14	USB	U S BANCORP MEDIUM TERM NTS- BOOK ENTRY	Sep-24	Α	3.600	1,179	274	1,453	12	3.3	3.4	100.6	100.4
15	LUV	SOUTHWEST AIRLS CO	May-25	BBB	1.250	1,178	102	1,280	4			129.1	127.7
16	NEE	FPL GROUP CAP INC	Mar-23	BBB	0.650	1,157	128	1,285	19	3.5	3.7	98.5	98.4
17	UTX	UNITED TECHNOLOGIES CORP	Aug-25	BBB	3.950	1,149	250	1,399	9	3.7	3.7	100.7	100.7
18	AAPL	APPLE INC	Nov-27	AA	3.000	1,147	230	1,377	9	3.3	3.3	98.6	98.4
19	WFC	WELLS FARGO	Jul-27	BBB	4.300	1,128	328	1,456	15	4.2	4.2	100.6	100.4
20	MRK	MERCK & CO INC NEW	Feb-25	Α	2.750	1,120	207	1,327	8	3.4	3.4	98.5	98.5

Source: TRACE and Tradeweb Direct



⁻Based on odd-lot customer transactions (<100M) reported in TRACE.

⁻Ratings (AAA, AA, A, BBB, BB, B, C) are based on aggregate ratings from Moody's and S&P (when available).

Corporate Bonds: Top 20 Most Sold Issues

August 2022

Index	Ticker	Company	Maturity	Rating Key (Med)	Coupon	Trades (Buy)	Trades (Sell)	Trades	Dollar Vol. Traded (MM)	Yield (Buy)	Yield (Sell)	Price (Buy)	Price (Sell)
1	CVS	CVS CAREMARK CORP	Mar-28	BBB	4.300	1,304	1,167	2,471	19	4.1	4.1	101.0	100.7
2	CMCS	COMCAST	Oct-28	Α	4.150	811	1,023	1,834	17	3.9	3.9	101.2	101.2
3	VZ	VERIZON	Mar-31	BBB	2.550	347	850	1,197	10	4.3	4.3	87.7	87.3
4	AAPL	APPLE INC	May-27	AA	3.200	120	848	968	15	3.3	3.3	99.7	99.7
5	GS	GOLDMAN SACHS	Apr-29	Α	3.814	41	811	852	8			96.0	94.1
6	VZ	VERIZON	Mar-27	BBB	4.125	522	767	1,289	12	3.8	3.8	101.5	101.3
7	Т	AT&T	Mar-24	BBB	0.900	146	738	884	17	3.6	3.7	95.8	95.7
8	GS	GOLDMAN SACHS	Mar-30	Α	3.800	700	731	1,431	14	4.5	4.5	95.7	95.4
9	GM	GENERAL MOTORS FINANCIAL COMPANY INC	Oct-28	BBB	5.000	266	651	917	11	5.0	5.2	99.8	99.2
10	TMO	THERMO FISHER SCIENTIFIC INC	Oct-31	Α	2.000	293	647	940	7	3.6	3.6	87.6	87.6
11	WFC	WELLS FARGO	May-28	Α	3.584	250	606	856	5			96.3	96.0
12	so	GEORGIA POWER CO	Jan-51	BBB	4.000	89	599	688	9			95.8	93.9
13	RDS	SHELL	Sep-26	AA	2.500	259	538	797	4	3.4	3.4	96.5	96.4
14	С	CITIGROUP	Jan-28	BBB	3.887	319	523	842	5			97.5	97.4
15	AMZN	AMAZON COM INC	Jun-30	AA	1.500	356	522	878	4	3.6	3.6	85.8	85.7
16	JPM	JP MORGAN CHASE	Dec-29	Α	4.452	345	520	865	6			99.2	99.1
17	PFE	PFIZER	Dec-26	Α	3.000	83	514	597	6	3.1	3.2	99.4	99.3
18	GM	GENERAL MOTORS FINANCIAL COMPANY INC	May-23	BBB	4.250	115	492	607	9	3.5	3.9	100.5	100.3
19	Т	AT&T	Dec-33	BBB	2.550	397	480	877	5	4.4	4.5	83.4	83.2
20	MS	MORGAN STANLEY	Jul-28	Α	3.591	279	442	721	4			96.3	96.1

Source: TRACE and Tradeweb Direct



⁻Based on odd-lot customer transactions (<100M) reported in TRACE.

⁻Ratings (AAA, AA, A, BBB, BB, B, C) are based on aggregate ratings from Moody's and S&P (when available).

Appendix

Maturity

We consider the following maturity ranges for maturity buckets. TTM is Time to Maturity in years.

1Y: 0.5 <= TTM <= 1.5 3Y: 2 <= TTM <= 4 5Y: 4 < TTM <= 6 10Y: 7.5 <= TTM <= 12.5 20Y: 15 <= TTM <=25

Rating

Rating buckets (AAA, AA, A, BBB, HY) in yield matrix are based on agggregate ratings from Moody's and S&P (when available).

For Corporate, we only consider transactions in bonds that are rated by both rating agencies.

- -Corporate AAA: Bonds rated AAA by both rating agencies.
- -Corporate AA: Bonds rated AA by both rating agencies.
- -Corporate A: Bonds rated A by both rating agencies.
- -Corporate BBB: Bonds rated BBB by both rating agencies.
- -Corporate High Yield: Bonds rated High Yield by both rating agencies.

(Transactions in corporate bonds that are rated as AA by one agency and as A by another agency are excluded.)

- -Municipal AAA: Bonds rates AAA by both rating agencies, or AAA by one agency and not rated by another agency.
- -Municipal AA: Bonds rated AA by both rating agencies, or AA by one agency and not rated by another agency.
- -Municipal A: Bonds rated A by both rating agencies, or A by ones agency and not rated by another agency.
- -Municipal BBB: Bonds rated High Yield by both rating agencies, or BBB by one agency and not rated by another agency.
- -Municipal High Yield: Bonds rated High Yield by both rating agencies, or High Yield by one agency and not rated by another agency.

(Transactions in municipal bonds that are rated as AA by one agency and as A by another agency are excluded.)

(Transactions in municipal bonds that are rated as AA by one agency and not rated by the other agency are included.)



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