

Market Transparency Report

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

April 2021

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 April 2021

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	0	-7.4%	0.0
CD	0	-14.0%	-0.4
Corp	-16	-12.8%	0.0
Municipal	-10	-10.0%	0.0
Treasury	4	-16.1%	-0.3

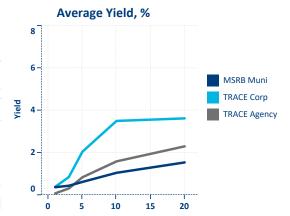
For monthly security trend data, see slides 5, 6 and 7



Yield Matrix

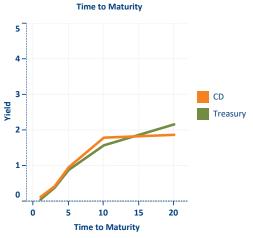
Average Yield, % for April 2021

			TTM			Median Maturity
Market	1	3	5	10	20	(Years)
MSRB Muni	0.4	0.5	0.6	1.1	1.6	9
TRACE Corp	0.4	0.9	2.1	3.5	3.6	4
TRACE Agency	0.1	0.3	0.9	1.6	2.3	5
CD	0.1	0.4	1.0	1.8	1.9	1
Treasury	0.1	0.4	0.9	1.6	2.2	1



Asset Class

8.6	C-+(F: +)	Datina Vari	4	2	-	10	20	Median
Market	Category (Filtered)	Rating Key	1	3	5	10	20	Maturity (Years)
		AA	0.2	0.3	1.1	2.3		1
	Financial	Α	0.2	0.5	1.2	2.2	3.3	3
	Financial	BBB	0.5	1.0	1.7	2.6	3.6	4
TRACE -		HY	1.4	1.9	5.6	6.4	4.3	6
Corp		AAA		0.0		1.6	2.7	20
согр		AA	0.1	0.2	0.8	2.0	2.8	9
	Non-Financial	Α	0.2	0.5	1.0	2.2	3.2	4
		BBB	0.5	1.1	1.9	3.2	3.7	7
		HY	0.9	3.2	6.1	5.4	4.7	6
								Median
			1	3	5	10	20	Maturity (Years)
		AAA	0.3	0.3	0.5	0.9	1.3	7
		AA	0.3	0.4	0.6	1.0	1.6	8
	GO	A	0.4	0.5	0.7	1.1	1.4	6
		BBB	0.7	1.0	1.3	1.8	2.1	8
MSRB		HY	2.4	2.2		2.8	1.3	19
Muni		AAA	0.3	0.4	0.5	0.9	1.4	8
		AA	0.3	0.4	0.6	1.0	1.4	9
	Revenue	A	0.4	0.6	0.7	1.1	1.4	11
		BBB	0.8	1.1	1.2	1.8	1.8	14
		HY	4.0	4.0	4.1	4.3	3.7	10



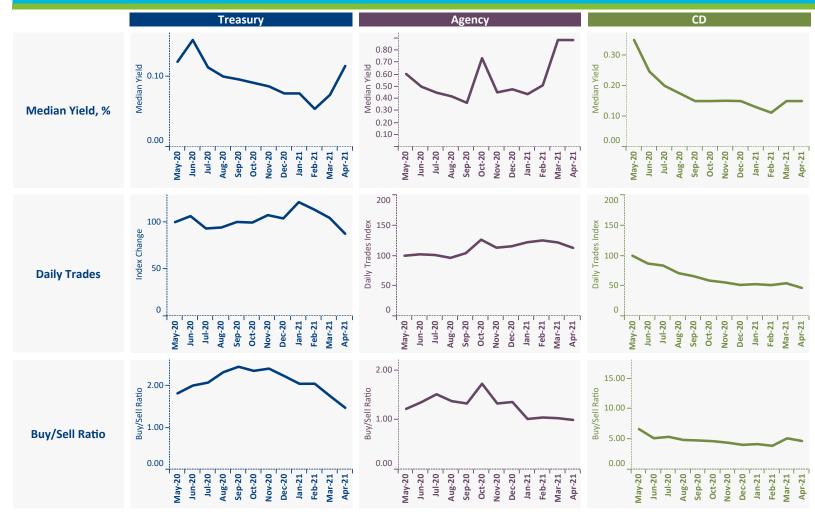
WA Yield = "Weighted Average Yield"

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

April 2021

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	С	CITIGROUP	BBB	520	2.9%	13,716	0.9	269	0.3	1.0	1.5	2.6	3.1
2	JPM	JP MORGAN CHASE	Α	773	2.8%	13,555	1.1	303	0.3	0.8	1.4	2.1	3.0
3	GS	GOLDMAN SACHS	Α	932	2.7%	12,990	1.1	269	0.3	0.9	1.5	2.5	3.7
4	BAC	BANK OF AMERICA	Α	312	2.3%	10,871	1.0	227	0.2	1.0	1.4	2.7	3.4
5	MS	MORGAN STANLEY	Α	807	1.7%	8,175	0.8	180	0.3	0.7	1.3	2.6	3.2
6	WFC	WELLS FARGO	A	197	1.6%	7,518	1.1	160	0.3	0.8	1.5	2.2	3.6
7	VZ	VERIZON	BBB	137	1.5%	7,373	1.0	148	0.3	0.8	1.4	2.4	3.1
8	Т	AT&T	BBB	114	1.5%	7,237	1.2	140	0.3	0.7	1.4	2.6	3.6
9	ORCL	ORACLE CORP	A	37	1.4%	6,759	1.7	133	0.3	0.9	1.4	2.5	3.4
10	AAPL	APPLE INC	AA	54	1.4%	6,458	1.1	129	0.2	0.4	1.0	2.0	2.9
11	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	BBB	281	1.3%	6,439	1.1	145	0.5	1.0	1.7	3.1	3.5
12	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	94	1.3%	6,171	1.5	133	0.5	1.0	1.6	2.7	4.0
13	CMCS	COMCAST	Α	61	1.1%	5,334	1.2	108	0.4	0.5	1.0	2.2	3.0
14	SCHW	SCHWAB CHARLES CORP NEW	BBB	31	1.0%	4,708	3.9	105	0.2	0.5	1.1	2.1	
15	CVS	CVS CAREMARK CORP	BBB	48	0.9%	4,517	0.9	94	0.3	0.8	1.4	2.4	3.2
16	BRK	BERKSHIRE HATHAWAY	Α	150	0.9%	4,459	0.8	104	0.2	0.4	1.8	2.3	3.1
17	ВА	BOEING CO	BBB	59	0.8%	3,794	3.0	94	0.5	0.9	2.0	2.8	3.8
18	F	FORD	ВВ	212	0.8%	3,706	1.2	86	1.4	2.4	3.0	4.0	4.6
19	MSFT	MICROSOFT CORP	AAA	34	0.6%	3,087	0.7	58	0.2	0.2	1.1		2.6
20	Х	UNITED STS STL CORP NEW	С	4	0.6%	3,079	0.3	49			5.4	5.8	6.6

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

April 2021

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	ALLY	ALLY FINANCIAL	ВВ	38	0.6%	2,812	2,474	338	7.3	69	0.5	1.0	2.3	3.4	
2	EIX	EDISON MISSION	BBB	43	0.5%	2,295	1,830	465	3.9	52	0.8	0.5	1.2	2.5	3.5
3	SCHW	SCHWAB CHARLES CORP NEW	BBB	31	1.0%	4,708	3,746	962	3.9	105	0.2	0.5	1.1	2.1	
4	GT	GOODYEAR TIRE & RUBBER	В	7	0.3%	1,334	1,005	329	3.1	36		5.0	2.2	5.0	
5	MAR	MARRIOTT INTL INC NEW	BBB	23	0.4%	1,879	1,414	465	3.0	33	0.7	1.2	1.7	2.9	
6	BA	BOEING CO	BBB	59	0.8%	3,794	2,833	961	3.0	94	0.5	0.9	2.0	2.8	3.8
7	PSEC	PROSPECT CAP CORP INTERNOTES BOOK ENTRY	BBB	138	0.3%	1,487	1,104	383	2.9	30	2.2	3.3	3.5	4.4	4.2
8	MO	ALTRIA GROUP INC	BBB	25	0.4%	2,106	1,513	593	2.6	53	0.4	0.8	1.4	2.7	4.1
9	MUR	MURPHY OIL CORP	ВВ	9	0.3%	1,272	907	365	2.5	30		2.4	4.5	6.0	6.8
10	GEO	GEO GROUP INC	В	3	0.4%	1,980	1,399	581	2.4	21		10.0	13.8		
11	DAL	DELTA AIR LINES INC DEL	ВВ	16	0.4%	1,897	1,330	567	2.4	39	1.3	2.4	3.2	3.7	
12	SLM	SLM CORP	В	126	0.3%	1,253	851	402	2.1	29	1.9	3.9	4.7	6.8	7.0
13	CXW	CORRECTIONS CORP AMER NEW	ВВ	4	0.3%	1,408	922	486	1.9	27	0.9	3.9	7.4		
14	JWN	NORDSTROM INC	BBB	8	0.3%	1,232	807	425	1.9	27	0.6		3.3	4.0	5.0
15	URI	UNITED RENTALS NORTH AMER INC	ВВ	8	0.2%	1,146	739	407	1.8	21			1.2	3.6	
16	PEMX	PETROLEOS MEXICANOS	BBB	44	0.6%	2,901	1,850	1,051	1.8	95	1.6	3.2	5.1	6.2	7.2
17	BTI	BAT INTERNATIONAL FINANCE PLC	BBB	30	0.4%	1,838	1,169	669	1.8	45	0.4	1.0	1.8	3.0	4.3
18	ORCL	ORACLE CORP	Α	37	1.4%	6,759	4,290	2,469	1.7	133	0.3	0.9	1.4	2.5	3.4
19	TEVA	TEVA PHARMACEUTICAL FIN CO B V	ВВ	11	0.3%	1,565	977	588	1.7	39	1.6	2.8	3.9		
20	ко	COCA COLA CO	Α	35	0.4%	1,875	1,162	713	1.6	39	0.3	0.6	1.0	2.0	2.8

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

April 2021

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	Х	UNITED STS STL CORP NEW	С	4	0.6%	3,079	759	2,320	0.33	49			5.6	6.0	6.7
2	HBC	HSBC	N/R	422	0.3%	1,272	320	952	0.34	45	0.4	1.1	2.1	3.4	3.6
3	PEP	PEPSICO	Α	40	0.4%	1,786	688	1,098	0.63	37	0.2	0.4	1.1	2.0	2.9
4	BCS	BARCLAYS	N/R	558	0.4%	1,684	666	1,018	0.65	39	1.8	1.7	1.9	2.5	3.6
5	PNC	PNC FDG CORP	Α	27	0.3%	1,376	556	820	0.68	27	0.2	0.6	1.3	2.1	
6	COF	CAPITAL ONE FINL CORP	BBB	25	0.5%	2,252	930	1,322	0.70	45	0.4	1.0	1.7		
7	MSFT	MICROSOFT CORP	AAA	34	0.6%	3,087	1,299	1,788	0.73	58	0.3	0.3	1.1		2.8
8	TGT	TARGET CORP	Α	16	0.2%	1,100	474	626	0.76	20	0.3	0.5	1.0	1.9	2.7
9	MS	MORGAN STANLEY	Α	807	1.7%	8,175	3,615	4,560	0.79	180	0.4	0.8	1.5	2.8	3.2
10	BNS	BANK NOVA SCOTIA B C	Α	138	0.3%	1,431	638	793	0.80	34	0.3	0.6	1.3		
11	HD	HOME DEPOT	Α	29	0.5%	2,543	1,136	1,407	0.81	46	0.2	0.3	1.2	2.0	3.0
12	EDP	ENTERPRISE PRODS OPER LLC	BBB	35	0.3%	1,563	711	852	0.83	34	0.4	1.0	1.7	2.3	3.6
13	BRK	BERKSHIRE HATHAWAY	Α	150	0.9%	4,459	2,039	2,420	0.84	104	0.5	0.6	1.2	2.3	3.2
14	RY	ROYAL BANK OF CANADA	Α	204	0.3%	1,470	670	800	0.84	40	0.3	0.6	1.2	2.6	
15	AXP	AMERICAN EXPRESS	BBB	25	0.6%	2,659	1,222	1,437	0.85	53	0.3	0.6	1.1		3.2
16	ВК	BANK NEW YORK INC MEDIUM TERM SR NTS BOO	Α	37	0.5%	2,553	1,171	1,382	0.85	52	0.3	0.5	1.2	2.1	
17	FISV	FISERV INC	BBB	11	0.2%	1,140	528	612	0.86	20	0.4	0.8	1.4	2.3	
18	CVS	CVS CAREMARK CORP	BBB	48	0.9%	4,517	2,120	2,397	0.88	94	0.4	0.8	1.3	2.4	3.4
19	LUK	JEFFERIES GROUP INC NEW	BBB	65	0.2%	1,140	535	605	0.88	27		0.8	2.0	2.8	4.2
20	NEE	FPL GROUP CAP INC	BBB	53	0.3%	1,350	630	720	0.88	30	0.4	0.7	1.0	2.3	2.9

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

April 2021

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	ALLY	ALLY FINANCIAL	Aug-50	ВВ	4.700	2,144	33	2,177	53			102.4	102.0
2	SCHW	SCHWAB CHARLES CORP NEW	Null	BBB	4.000	1,787	83	1,870	45			100.5	100.0
3	С	CITIGROUP	Null	ВВ	5.950	943	85	1,028	10	5.6	5.6	106.3	105.7
4	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Jan-70	BBB	3.514	921	593	1,514	37	3.6	3.7	96.7	95.6
5	RRC	RANGE RES CORP	May-25	В	4.875	730	58	788	9	4.8	5.0	100.2	99.6
6	CMCS	COMCAST	Aug-25	Α	3.375	678	85	763	15	1.0	1.0	109.5	109.5
7	GEO	GEO GROUP INC	Apr-23	В	5.125	674	276	950	10	9.8	10.0	91.9	91.5
8	HAS	HASBRO INC	Nov-29	BBB	3.900	661	50	711	6	2.7	2.7	109.0	108.8
9	ILMN	ILLUMINA INC	Aug-23	BBB	0.000	643	47	690	5			123.0	121.4
10	BA	BOEING CO	Feb-26	BBB	2.196	625	63	688	14	2.1	2.1	100.2	100.1
11	EIX	EDISON MISSION	Null	ВВ	5.375	622	57	679	20			104.9	103.9
12	MAR	MARRIOTT INTL INC NEW	May-25	BBB	5.750	603	25	628	6	1.7	1.7	115.3	115.3
13	PSEC	PROSPECT CAP CORP INTERNOTES BOOK ENTRY	Jan-26	BBB	3.706	597	65	662	14	3.5	3.5	101.0	100.7
14	SCHW	SCHWAB CHARLES CORP NEW	Null	BBB	4.000	556	74	630	13			103.5	103.2
15	MS	MORGAN STANLEY	Jul-25	A	4.000	515	152	667	11	1.2	1.2	111.7	111.4
16	CXW	CORRECTIONS CORP AMER NEW	Apr-26	ВВ	8.250	510	12	522	9	7.4	8.0	103.4	101.9
17	T	AT&T	Feb-28	BBB	1.650	499	164	663	9	2.0	2.1	97.6	97.4
18	SCHW	SCHWAB CHARLES CORP NEW	Null	BBB	5.375	490	127	617	14			112.1	111.8
19	DAL	DELTA AIR LINES INC DEL	Jan-26	ВВ	7.375	488	114	602	10	3.2	3.4	117.9	117.0
20	UNH	UNITEDHEALTH	Mar-22	Α	2.875	477	26	503	2	0.2	0.3	101.7	101.7

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

April 2021

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	Х	UNITED STS STL CORP NEW	Mar-26	С	6.250	366	1,935	2,301	31	5.5	5.6	101.4	101.1
2	С	CITIGROUP	Aug-50	ВВ	4.672	135	1,465	1,600	16	4.7	4.7	100.4	100.3
3	VZ	VERIZON	Mar-30	BBB	3.150	149	866	1,015	16	2.4	2.4	106.1	105.7
4	ILMN	ILLUMINA INC	Jun-21	BBB	0.500	34	632	666	4			158.9	157.5
5	HTZGQ	Null	Oct-22	N/R	6.250	132	624	756	20			99.1	98.9
6	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Jan-70	BBB	3.514	921	593	1,514	37	3.6	3.7	96.7	95.6
7	CVS	CVS CAREMARK CORP	Mar-28	BBB	4.300	326	557	883	15	2.0	2.1	114.1	114.0
8	С	CITIGROUP	Sep-27	BBB	4.450	147	556	703	12	2.2	2.3	113.3	113.1
9	KSS	KOHLS CORP	Jul-45	BBB	5.550	22	497	519	18	4.3	4.3	117.8	118.6
10	HD	HOME DEPOT	Apr-30	Α	2.700	112	468	580	7	2.0	2.0	105.2	105.9
11	AAPL	APPLE INC	May-23	AA	2.400	184	398	582	11	0.2	0.3	104.4	104.3
12	WMT	WAL-MART	Apr-24	AA	3.300	74	361	435	6	0.4	0.4	108.0	107.8
13	С	CITIGROUP	Jul-28	BBB	3.668	164	350	514	6			109.8	109.7
14	CMCS	COMCAST	Oct-28	Α	4.150	202	350	552	11	1.9	1.9	115.1	115.0
15	VZ	VERIZON	Nov-24	BBB	3.500	341	343	684	7	0.8	0.8	108.7	108.6
16	BRK	BERKSHIRE HATHAWAY	Jul-25	BBB	3.950	30	341	371	4	1.1	1.2	111.3	110.5
17	VZ	VERIZON	Mar-27	BBB	4.125	118	335	453	11	1.7	1.7	113.8	113.7
18	ORCL	ORACLE CORP	Nov-27	Α	3.250	374	315	689	7	1.9	1.9	108.2	108.1
19	BAC	BANK OF AMERICA	Jan-23	Α	3.300	209	308	517	9	0.4	0.4	105.1	105.0
20	AAPL	APPLE INC	Feb-26	AA	3.250	343	303	646	7	1.0	1.0	110.0	109.8

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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