

Market Transparency Report

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

June 2024

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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 June 2024

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	-6	-16.0%	-1.6
CD	5	7.3%	-0.5
Corp	-11	3.8%	-0.2
Municipal	-3	10.4%	0.0
Treasury	-2	-11.0%	-1.4

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



Yield Matrix

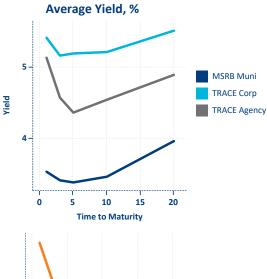
Average Yield, % for June 2024

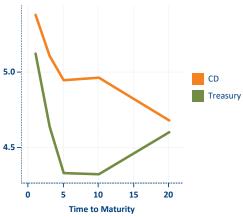
			TTM			Median
Market	1	3	5	10	20	Maturity (Years)
MSRB Muni	3.5	3.4	3.4	3.5	4.0	8
TRACE Corp	5.4	5.2	5.2	5.2	5.5	3
TRACE Agency	5.1	4.6	4.4	4.6	4.9	4
CD	5.4	5.1	4.9	5.0	4.7	1
Treasury	5.1	4.6	4.3	4.3	4.6	0

Asset Class

Market	Category (Filtered)	Rating Key	1	3	5	10	20	Median Maturity (Years)
		AA	5.2	4.9	4.8		5.3	4
	Financial	Α	5.2	4.9	4.8	5.0	5.3	3
	Financiai	BBB	5.4	5.4	5.7	5.3	6.2	3
TRACE -		HY	6.9	7.3	7.7	8.7		3
Corp		AAA			4.4		4.6	15
Согр		AA		4.7	4.4	4.9	4.9	7
	Non-Financial	Α	5.0	4.9	4.7	5.0	5.3	4
		BBB	5.5	5.2	5.1	5.3	6.4	5
		HY	8.1	6.5	17.2			(Years) 4 3 3 3 15 7 4
								Median

			1	3	5	10	20	Median Maturity (Years)
		AAA	3.5	3.3	3.3	3.4	3.9	6
		AA	3.5	3.4	3.4	3.5	3.9	7
	GO	Α	3.7	3.6	3.5	3.6	4.1	6
		BBB	4.4	3.9	4.1	4.1	4.5	8
MSRB		HY	5.1	5.8	6.1	6.1	6.1	10
Muni		AAA	3.5	3.3	3.3	3.3	3.9	8
		AA	3.5	3.4	3.4	3.4	3.9	8
	Revenue	A	3.7	3.6	3.6	3.7	4.1	9
		BBB	4.4	4.3	4.2	4.4	4.8	11
		HY	5.4	6.0	6.4	7.7	5.8	14





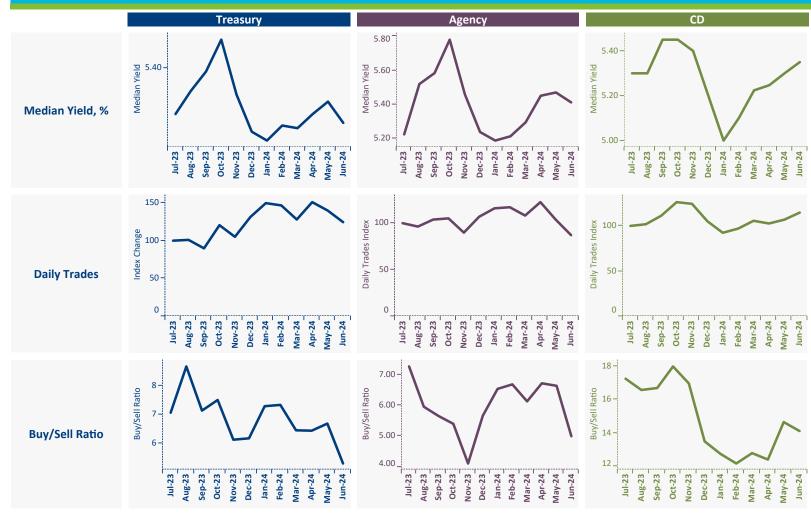
WA Yield = "Weighted Average Yield"

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

June 2024

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	BAC	BANK OF AMERICA	BBB	561	3.0%	28,531	0.7	441	5.6	5.1	5.4	5.7	5.3
2	JPM	JP MORGAN CHASE	Α	1,140	2.6%	24,889	1.6	437	5.3	5.1	5.0	5.5	5.6
3	С	CITIGROUP	BBB	847	2.4%	22,708	1.4	413	5.5	5.3	5.2	5.5	5.5
4	GS	GOLDMAN SACHS	Α	1,345	2.3%	22,121	1.3	370	5.5	5.2	5.1	5.2	5.4
5	ORCL	ORACLE CORP	BBB	38	2.2%	21,186	1.4	199	5.4	5.1	5.1	5.3	5.7
6	WFC	WELLS FARGO	Α	220	1.8%	17,190	1.3	267	5.5	5.2	5.1	5.5	5.8
7	MS	MORGAN STANLEY	Α	1,556	1.7%	16,060	1.3	291	5.4	5.1	5.3	5.3	5.4
8	CVS	CVS CAREMARK CORP	BBB	51	1.3%	12,160	1.8	168	5.5	5.2	5.2	5.5	6.0
9	DUK	DUKE ENERGY	BBB	133	1.2%	11,445	3.2	148	5.3	5.2	5.1	5.3	5.7
10	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	87	1.2%	10,932	1.7	214	5.7	5.4	5.4	5.5	6.1
11	VZ	VERIZON	BBB	156	1.1%	9,988	1.3	135	5.5	5.0	5.0	5.2	5.5
12	ABBV	ABBVIE INC	Α	27	1.0%	9,581	2.2	119	5.5	5.0	4.8	5.0	5.3
13	AAPL	APPLE INC	AA	50	1.0%	9,176	1.7	142	5.1	4.6	4.6	4.6	5.1
14	Т	AT&T	BBB	99	1.0%	9,172	1.2	132	5.5	5.1	5.1	5.3	5.7
15	CMCS	COMCAST	Α	67	1.0%	9,109	1.4	132	5.2	4.9	4.9	5.1	5.5
16	MCD	MCDONALDS	BBB	32	1.0%	9,016	4.2	86	5.3	5.0	4.9	5.1	5.5
17	NEE	FPL GROUP CAP INC	BBB	74	0.9%	8,543	2.8	153	5.5	5.1	5.1	5.2	5.3
18	BRK	BERKSHIRE HATHAWAY	Α	149	0.8%	7,729	1.9	164	5.3	5.0	5.0	5.4	5.4
19	ВА	BOEING CO	BBB	51	0.8%	7,627	2.5	133	6.0	5.8	5.9	6.1	6.4
20	UNH	UNITEDHEALTH	Α	61	0.8%	7,565	1.7	135	5.1	4.8	4.8	5.0	5.3

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

June 2024

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	VTR	VENTAS REALTY LP	BBB	15	0.5%	4,468	4,292	176	24.4	28	5.7	1.5	5.3	5.6	6.0
2	CMS	CMS ENERGY CORP	BBB	31	0.3%	2,528	2,293	235	9.8	23	5.7	3.8	4.9	5.1	5.5
3	MCD	MCDONALDS	BBB	32	1.0%	9,016	7,297	1,719	4.2	86	5.3	5.0	4.9	5.1	5.5
4	AEP	AMERICAN ELEC PWR CO INC	BBB	81	0.5%	4,618	3,686	932	4.0	95	5.5	5.2	5.2	5.5	5.9
5	DUK	DUKE ENERGY	BBB	133	1.2%	11,445	8,742	2,703	3.2	148	5.3	5.2	5.1	5.3	5.7
6	NEE	FPL GROUP CAP INC	BBB	74	0.9%	8,543	6,314	2,229	2.8	153	5.5	5.1	5.1	5.2	5.3
7	PSX	PHILLIPS 66	BBB	26	0.3%	2,359	1,728	631	2.7	48	5.5	5.2	5.1	5.4	5.6
8	BA	BOEING CO	BBB	51	0.8%	7,627	5,432	2,195	2.5	133	6.0	5.8	5.9	6.1	6.4
9	INTC	INTEL CORP	Α	39	0.7%	6,438	4,512	1,926	2.3	128	5.3	4.9	5.0	5.2	5.5
10	TM	тоуота	Α	79	0.6%	5,379	3,746	1,633	2.3	114	5.3	5.0	4.9	5.1	
11	DWDP	Null	BBB	8	0.2%	2,263	1,569	694	2.3	18	5.3		4.7	5.2	5.0
12	MET	METLIFE	Α	21	0.3%	3,150	2,180	970	2.3	49	5.5		4.9	5.2	5.5
13	TMO	THERMO FISHER SCIENTIFIC INC	Α	16	0.3%	3,290	2,273	1,017	2.2	50		5.0	4.8	5.0	5.3
14	PM	PHILIP MORRIS INTL INC	Α	33	0.6%	5,922	4,079	1,843	2.2	102	5.3	5.0	5.1	5.3	5.7
15	ABBV	ABBVIE INC	A	27	1.0%	9,581	6,556	3,025	2.2	119	5.5	5.0	4.8	5.0	5.3
16	HPQ	HEWLETT PACKARD	BBB	19	0.5%	4,382	2,995	1,387	2.2	55	5.5	5.1	5.0	5.3	5.7
17	ВХ	APRIA HEALTHCARE GROUP INC	BBB	37	0.3%	3,181	2,167	1,014	2.1	64	6.0	6.0	5.4	5.6	4.5
18	NOC	NORTHROP GRUMMAN CORP	BBB	22	0.4%	3,521	2,398	1,123	2.1	40	5.6	5.0	5.0	5.1	5.4
19	DE	DEERE JOHN CAP CORP MEDIUM TERM NTS-BOOK	Α	71	0.6%	6,029	4,091	1,938	2.1	125	5.2	4.9	4.8	5.0	5.1
20	QCOM	QUALCOMM	Α	13	0.2%	2,258	1,528	730	2.1	30	5.3	4.8	4.7	4.8	5.3

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

June 2024

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	PXD	Pioneer Natural Res Expl Inc	AA	6	0.5%	4,347	135	4,212	0.03	45		5.1			
2	EDP	ENTERPRISE PRODS OPER LLC	Α	35	0.8%	7,207	1,789	5,418	0.33	65	5.8	5.0	4.9	5.1	5.5
3	DXCM	Null	N/R	2	0.7%	6,281	2,115	4,166	0.51	27	0.8	0.9			
4	BAC	BANK OF AMERICA	BBB	561	3.0%	28,531	11,321	17,210	0.66	441	5.9	5.3	5.9	5.6	5.4
5	EIX	EDISON MISSION	BBB	62	0.6%	5,901	2,627	3,274	0.80	89	5.7	5.3	5.3	5.4	5.8
6	RDS	SHELL	AA	23	0.3%	2,554	1,183	1,371	0.86	39	5.4	5.1	4.9	5.1	5.4
7	TMUS	T-MOBILE USA INC	BBB	40	0.6%	6,118	2,878	3,240	0.89	107	5.9	5.2	5.2	5.3	5.5
8	BTI	BAT INTERNATIONAL FINANCE PLC	BBB	36	0.3%	3,131	1,482	1,649	0.90	71	5.8	5.3	5.4	5.7	6.4
9	DELL	DELL	BBB	25	0.3%	2,639	1,311	1,328	0.99	62	5.7	5.4	5.2	5.4	5.9
10	нмс	AMERICAN HONDA FIN CORP MED TERM NTS BOO	Α	40	0.3%	2,550	1,346	1,204	1.12	52	5.5	5.0	4.9	5.2	
11	AMT	AMERICAN TOWER CORP NEW	BBB	33	0.3%	2,702	1,439	1,263	1.14	47	5.8	5.3	5.3	5.5	
12	BNS	BANK NOVA SCOTIA B C	Α	168	0.5%	4,327	2,343	1,984	1.18	72	5.8	5.3	5.1	5.4	
13	Т	AT&T	BBB	99	1.0%	9,172	4,994	4,178	1.20	132	6.1	5.1	5.1	5.3	5.7
14	ANTM	Null	Α	31	0.3%	3,259	1,782	1,477	1.21	47	5.8	5.0	5.1	5.2	5.6
15	MRK	MERCK & CO INC NEW	Α	30	0.2%	2,205	1,211	994	1.22	36	5.6	4.7	4.7	4.9	5.3
16	STT	STATE STR CORP	Α	30	0.3%	2,670	1,474	1,196	1.23	51	5.4	5.1	4.8		
17	MS	MORGAN STANLEY	Α	1,556	1.7%	16,060	8,933	7,127	1.25	291	5.5	5.2	5.8	5.1	5.4
18	VZ	VERIZON	BBB	156	1.1%	9,988	5,578	4,410	1.26	135	5.7	5.1	5.1	5.3	5.5
19	HCA	HCA INC	ВВВ	33	0.4%	3,680	2,068	1,612	1.28	71	5.9	5.5	5.3	5.5	5.9
20	F	FORD	BBB	155	0.5%	4,576	2,590	1,986	1.30	94	6.1	5.6	5.8	6.1	6.4

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

June 2024

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	ORCL	ORACLE CORP	Nov-27	BBB	3.250	8,149	339	8,488	34	5.1	5.1	94.4	94.3
2	DUK	DUKE ENERGY	Apr-26	BBB	4.125	4,110	64	4,174	20	3.7	4.1	100.7	100.0
3	VTR	VENTAS REALTY LP	Jun-26	BBB	3.750	4,079	14	4,093	19	1.5	1.9	104.3	103.5
4	MCD	MCDONALDS	May-34	BBB	5.200	3,752	41	3,793	19	5.0	5.1	101.2	100.9
5	CVS	CVS CAREMARK CORP	Mar-28	BBB	4.300	2,333	1,185	3,518	27	5.2	5.3	96.9	96.8
6	DXCM	Null	May-28	N/R	0.375	2,074	23	2,097	13	0.8	0.9	98.3	97.9
7	CMS	CMS ENERGY CORP	May-28	BBB	3.375	2,068	3	2,071	12	3.8	4.2	98.6	97.0
8	AAPL	APPLE INC	Nov-27	AA	3.000	1,652	460	2,112	10	4.6	4.6	94.9	94.9
9	ABBV	ABBVIE INC	Mar-31	Α	4.950	1,650	268	1,918	16	5.0	4.9	100.0	100.2
10	CMCS	COMCAST	Oct-28	Α	4.150	1,621	847	2,468	19	4.9	4.9	97.1	97.1
11	HPQ	HEWLETT PACKARD	Oct-25	BBB	4.900	1,571	541	2,112	14	5.5	5.5	99.3	99.2
12	ВР	BP	Sep-27	Α	3.279	1,530	504	2,034	11	5.0	5.0	94.9	94.9
13	LOW	LOWES COS INC	Apr-26	BBB	2.500	1,496	404	1,900	10	5.3	5.3	95.3	95.2
14	UTX	UNITED TECHNOLOGIES CORP	Aug-25	BBB	3.950	1,486	535	2,021	10	5.4	5.5	98.4	98.3
15	DWDP	Null	Nov-28	BBB	4.725	1,473	433	1,906	11	4.7	4.8	100.0	99.9
16	JPM	JP MORGAN CHASE	Oct-29	Α	6.087	1,413	112	1,525	13			103.7	103.5
17	С	CITIGROUP	Nov-89	ВВ	7.125	1,264	115	1,379	38			100.5	100.1
18	ВА	BOEING CO	May-30	BBB	5.150	1,124	211	1,335	14	5.9	5.9	96.3	96.1
19	тмо	THERMO FISHER SCIENTIFIC INC	Oct-31	A	2.000	1,124	265	1,389	8	4.9	4.9	82.2	82.2
20	PFE	PFIZER	Mar-29	А	3.450	1,120	350	1,470	11	4.7	4.7	94.9	94.8

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).

Corporate Bonds: Top 20 Most Sold Issues

June 2024

Inde	x 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	BAC	BANK OF AMERICA	Null	BBB	6.100	240	8,698	8,938	25	6.1	6.1	100.1	100.0
2	DXCM	Null	Nov-25	N/R	0.250	41	4,143	4,184	14	0.4	0.8	101.3	100.5
3	PXD	Pioneer Natural Res Expl Inc	May-25	AA	0.250	6	4,085	4,091	40			290.9	290.9
4	EDP	ENTERPRISE PRODS OPER LLC	Feb-25	Α	3.750	212	3,977	4,189	18	5.5	5.8	98.8	98.6
5	ORCL	ORACLE CORP	May-25	BBB	2.950	152	3,961	4,113	22	5.6	5.8	97.6	97.4
6	EIX	EDISON MISSION	Nov-24	BBB	3.550	218	2,086	2,304	11	6.0	6.1	99.0	99.0
7	CVS	CVS CAREMARK CORP	Mar-28	BBB	4.300	2,333	1,185	3,518	27	5.2	5.3	96.9	96.8
8	ORCL	ORACLE CORP	Mar-31	BBB	2.875	237	1,148	1,385	11	5.2	5.2	86.9	87.0
9	TMUS	T-MOBILE USA INC	Feb-28	BBB	4.750	191	1,115	1,306	8	5.1	5.2	98.9	98.6
10	KYND	Null	Feb-34	BBB	6.350	98	946	1,044	13	6.0	6.0	102.7	102.4
11	CMCS	COMCAST	Oct-28	Α	4.150	1,621	847	2,468	19	4.9	4.9	97.1	97.1
12	BNS	BANK NOVA SCOTIA B C	Dec-24	Α	5.250	55	731	786	5	5.4	5.8	99.9	99.7
13	Т	AT&T	Mar-29	BBB	4.350	813	654	1,467	15	5.0	5.0	97.2	97.1
14	DTE	DTE ENERGY CO	Nov-24	BBB	4.220	86	636	722	6	5.7	6.0	99.5	99.4
15	GS	GOLDMAN SACHS	Mar-30	A	3.800	612	615	1,227	13	5.1	5.1	93.7	93.5
16	VZ	VERIZON	Mar-27	BBB	4.125	527	597	1,124	12	5.0	5.1	97.7	97.6
17	WFC	WELLS FARGO	Mar-28	A	3.526	95	585	680	8			95.4	95.4
18	HPQ	HEWLETT PACKARD	Oct-25	BBB	4.900	1,571	541	2,112	14	5.5	5.5	99.3	99.2
19	UTX	UNITED TECHNOLOGIES CORP	Aug-25	BBB	3.950	1,486	535	2,021	10	5.4	5.5	98.4	98.3
20	CI	CIGNA CORP	Oct-28	BBB	4.375	904	511	1,415	12	5.1	5.1	97.3	97.2

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.)



Disclosures

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