

Market Transparency Report

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

January 2022

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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

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio				
Agency	22	16.0%	0.2				
CD	15	-10.8%	-0.1				
Corp	31	20.8%	0.1				
Municipal	24	25.9%	0.0				
Treasury	14	28.4%	0.4				

Monthly Change Table for January 2022

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



Yield Matrix

Average	Yield, % for January	2022							Average Yield, %
					TTM			Median	8
Market			1	3	5	10	20	Maturity (Years)	
MSRB Muni			0.7	0.9	1.1	1.4	1.7	8	6-
TRACE Corp			0.9	1.8	2.8	3.5	3.7	3	MSRB Muni
TRACE Agen	су		0.5	1.2	1.5	1.9	2.4	4	
CD			0.5	1.1	1.7	2.0	1.9	1	TRACE Corp
Treasury			0.7	1.2	1.6	1.8	2.1	0	TRACE Agen
Asset Cla	SS								2
Market	Category (Filtered)	Rating Key	1	3	5	10	20	Median Maturity	
warket	category (Filtered)	Natilig Key	T	5	5	10	20	(Years)	
		AA	0.8	1.4	1.7			7	0
		A	0.6	1.4	1.9	2.6	3.4	2	0 5 10 15 20
	Financial	BBB	1.0	1.9	2.3	3.3	3.6	3	
TRACE		HY	2.1	3.3	3.6	5.8		5	Time to Maturity
TRACE – Corp		AAA		0.9	1.3	2.0	2.7	8	F 7
corp		AA	0.5	1.4	1.8	2.1	2.9	6	5
	Non-Financial	A	0.7	1.8	1.9	2.4	3.5	2	
		BBB	1.5	1.8	2.3	3.6	3.9	4	4
		HY	2.7	4.1	9.1	5.3	4.4	5	
								Median	
			1	3	5	10	20	Maturity (Years)	3- 문 닷 Treasury
		AAA	0.6	0.9	1.0	1.3	1.6	6	2
		AA	0.6	0.9	1.1	1.4	1.7	7	2
	GO	A	0.7	1.0	1.1	1.3	1.7	6	
		BBB	0.9	1.2	1.5	1.8	2.1	8	1-
MSRB		HY		1.4	1.9	2.1	1.7	18	
Muni		AAA	0.6	0.9	1.0	1.3	1.6	7	
		AA	0.7	0.9	1.1	1.4	1.6	9	0
	Revenue	A	0.7	1.0	1.1	1.4	1.7	11	0 5 10 15 20
		BBB	1.0	1.3	1.5	1.8	1.8	12	
		HY	1.9	3.4	3.1	4.3	2.6	13	Time to Maturity

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 0.40-1.50 -, 0.40 Median Yield Median Yield Median Yield 0.30-1.00 0.20 Median Yield, % 0.50 0.10 0.00 0.00 0.00 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-21 Feb-21 200 200 100 150 150 Daily Trades Index Daily Trades Index Index Change 100 100 50 **Daily Trades** 50 50 0 0 0 Jan-22 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Feb-21 Mar-21 Apr-21 May-21 Jun-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21 Jan-22 2.00 2.00 15.00 -Buy/Sell Ratio Buy/Sell Ratio 00 **Buy/Sell Ratio** 10.00 -**Buy/Sell Ratio** 5.00 0.00 0.00 0.00 Jan-22 Feb-21 May-21 Jun-21 Sep-21 Dec-21 Feb-21 May-21 Aug-21 Sep-21 Oct-21 Dec-21 May-21 Jun-21 Jan-22 Mar-21 Apr-21 Jul-21 Aug-21 Oct-21 Nov-21 Jan-22 Mar-21 Apr-21 Jun-21 Jul-21 Nov-21 Feb-21 Mar-21 Apr-21 Jul-21 Aug-21 Sep-21 Oct-21 Nov-21 Dec-21

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

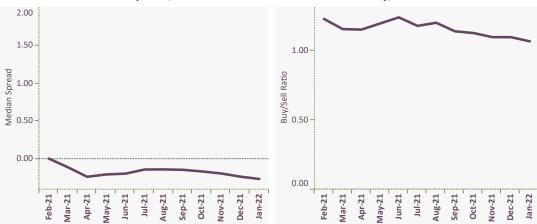
-Based on odd-lot customer transactions (<100M) reported in TRACE.

-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 <u>Most Active</u> Issuers

January 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	JPM	JP MORGAN CHASE	Α	694	3.2%	15,940	0.9	312	0.8	1.5	2.0	2.2	3.3
2	BAC	BANK OF AMERICA	А	290	3.0%	14,734	1.3	288	0.7	1.8	2.2	2.9	3.6
3	GS	GOLDMAN SACHS	А	948	2.8%	13,981	1.0	269	0.8	1.8	2.2	3.2	4.0
4	С	CITIGROUP	BBB	551	2.3%	11,299	0.9	238	0.8	2.0	2.3	3.0	3.4
5	WFC	WELLS FARGO	А	144	1.7%	8,427	1.0	161	0.7	1.6	2.2	1.3	3.5
6	MS	MORGAN STANLEY	А	752	1.6%	7,781	0.7	168	1.0	1.7	2.2	2.6	3.3
7	ORCL	ORACLE CORP	BBB	35	1.5%	7,281	1.7	146	0.7	1.8	2.4	3.1	4.0
8	т	AT&T	BBB	116	1.4%	6,781	0.8	137	0.7	1.6	2.1	2.9	3.6
9	VZ	VERIZON	BBB	148	1.3%	6,458	1.0	123		1.4	2.1	2.7	3.3
10	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	92	1.3%	6,443	1.1	133	1.3	1.7	2.4	3.1	4.0
11	AAPL	APPLE INC	AA	56	1.2%	5,930	1.0	124	0.7	1.3	1.8	2.2	3.1
12	ARCC	ARES CAP CORP	BBB	10	1.1%	5,474	1.8	41	1.2	2.4	2.9	3.7	
13	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	BBB	260	1.1%	5,414	1.1	103	0.8	1.9	2.4	3.7	3.4
14	CMCS	COMCAST	А	55	1.0%	4,763	0.8	89	0.5	1.5	1.9	2.5	3.2
15	CVS	CVS CAREMARK CORP	BBB	43	0.9%	4,388	0.8	85	0.7	1.6	2.1	2.6	3.4
16	BK	BANK NEW YORK INC MEDIUM TERM SR NTS BOO	А	42	0.8%	3,689	1.3	71	0.5	1.5	1.8	2.4	
17	BRK	BERKSHIRE HATHAWAY	А	141	0.7%	3,675	0.7	88	0.6	1.5	1.9	2.5	3.3
18	DUK	DUKE ENERGY	BBB	121	0.7%	3,474	0.8	67	0.5	1.7	2.1	2.6	3.3
19	BA	BOEING CO	BBB	56	0.7%	3,349	1.5	79	1.2	1.9	2.4	3.1	3.9
20	ABBV	ABBVIE INC	BBB	29	0.7%	3,292	1.0	74	0.8	1.7	2.1	2.6	3.4

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 <u>Highest</u> Buy/Sell Ratio

January 2022

Index	Ticker	Company	Rating Key (Med)	lssues 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	ATVI	Null	BBB	5	0.6%	3,061	2,782	279	10.0	33			1.9	2.5	
2	MUR	MURPHY OIL CORP	BB	9	0.4%	1,840	1,484	356	4.2	29		3.3	4.5	4.0	6.4
3	SIVB	SVB FINL GROUP	BBB	9	0.3%	1,428	1,148	280	4.1	36		1.8	2.0	2.7	
4	DE	DEERE JOHN CAP CORP MEDIUM TERM NTS-BOOK	А	61	0.6%	3,020	2,140	880	2.4	61	0.5	1.3	1.9	2.3	2.9
5	DISH	DISH DBS CORP	В	11	0.3%	1,356	952	404	2.4	26	2.8	4.8	6.2		
6	EIX	EDISON MISSION	BBB	50	0.4%	1,792	1,247	545	2.3	37	1.0	1.9	2.9	2.6	3.8
7	ALLY	ALLY FINANCIAL	BBB	32	0.4%	2,164	1,493	671	2.2	37	1.3	2.4	2.0	3.6	
8	FCX	FREEPORT-MCMORAN COPPER & GOLD INC	BBB	14	0.3%	1,456	1,002	454	2.2	28	1.3	2.0	1.7	3.2	4.0
9	MO	ALTRIA GROUP INC	BBB	24	0.4%	1,947	1,263	684	1.9	50	0.5	1.5	2.1	3.2	4.4
10	тм	ΤΟΥΟΤΑ	А	70	0.6%	2,751	1,768	983	1.8	48	0.6	1.4	1.9	2.4	
11	TEVA	TEVA PHARMACEUTICAL FIN CO B V	BB	9	0.3%	1,273	814	459	1.8	28	2.7	4.4	4.5		5.2
12	ARCC	ARES CAP CORP	BBB	10	1.1%	5,474	3,492	1,982	1.8	41	1.2	2.4	2.9	3.7	
13	ORCL	ORACLE CORP	BBB	35	1.5%	7,281	4,584	2,697	1.7	146	0.7	1.8	2.4	3.1	4.0
14	PTRB	PETROBRAS	BB	21	0.2%	1,220	762	458	1.7	38		2.5	4.3	4.8	6.2
15	BMO	BANK MONTREAL MEDIUM TERM SR NTS BOOK EN	А	121	0.3%	1,694	1,047	647	1.6	38	0.6	1.4	2.0	3.1	
16	BA	BOEING CO	BBB	56	0.7%	3,349	2,028	1,321	1.5	79	1.2	1.9	2.4	3.1	3.9
17	PEMX	PETROLEOS MEXICANOS	BB	48	0.4%	2,101	1,243	858	1.5	67	2.4	4.0	5.3	6.6	7.7
18	CI	CIGNA CORP	BBB	39	0.3%	1,527	900	627	1.4	35	1.0	1.9	2.0	2.7	3.4
19	URI	UNITED RENTALS NORTH AMER INC	BB	8	0.2%	1,201	709	492	1.4	18			2.1	3.7	
20	DELL	DELL	BBB	23	0.4%	2,100	1,231	869	1.4	42	1.0	1.9	2.5	2.9	4.3

Source: TRACE and Tradeweb Direct

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

-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

January 2022

Index	Ticker	Company	Rating Key (Med)	lssues 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	HBC	HSBC	BBB	324	0.3%	1,567	330	1,237	0.27	33	1.2	2.1	2.6	4.2	3.2
2	BCS	BARCLAYS	N/R	522	0.3%	1,388	389	999	0.39	29	2.3	2.1	2.4	2.4	3.7
3	QCOM	QUALCOMM	А	13	0.3%	1,316	403	913	0.44	24	0.8	1.5	2.0	2.4	3.1
4	KMI	KINDER MORGAN ENERGY PARTNERS L P	BBB	58	0.4%	2,084	786	1,298	0.61	42	0.8	1.7	2.4	3.3	4.2
5	RY	ROYAL BANK OF CANADA	А	190	0.4%	2,071	783	1,288	0.61	44	0.9	1.8	2.0	2.7	
6	ENB	ENBRIDGE INC	BBB	31	0.2%	1,201	464	737	0.63	21	0.9	1.7	2.3	2.8	3.8
7	RDS	SHELL	AA	24	0.4%	1,747	679	1,068	0.64	32		1.5	1.8	2.4	3.2
8	EDP	ENTERPRISE PRODS OPER LLC	BBB	35	0.3%	1,621	641	980	0.65	34	1.1	1.8	2.1	2.6	3.9
9	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	BBB	39	0.5%	2,210	905	1,305	0.69	50			1.8	2.6	3.6
10	BP	BP	А	40	0.5%	2,582	1,091	1,491	0.73	56	1.0	1.6	2.1	2.6	3.4
11	MS	MORGAN STANLEY	А	752	1.6%	7,781	3,277	4,504	0.73	168	1.0	1.8	2.3	2.8	3.3
12	BRK	BERKSHIRE HATHAWAY	А	141	0.7%	3,675	1,564	2,111	0.74	88	0.8	1.5	1.8	2.6	3.4
13	CHTR	CCO HOLDINGS LLC	BBB	42	0.2%	1,215	520	695	0.75	36	1.1	2.0		3.5	4.3
14	DUK	DUKE ENERGY	BBB	121	0.7%	3,474	1,505	1,969	0.76	67	0.5	1.6	2.1	2.7	3.4
15	MET	METLIFE	А	18	0.3%	1,354	586	768	0.76	27		1.4		2.4	3.2
16	SPG	SIMON PPTY GROUP L P	А	23	0.3%	1,239	536	703	0.76	26	1.2	1.7	2.2	2.6	3.5
17	ANTM	Null	А	26	0.3%	1,523	662	861	0.77	31	0.8	1.6	2.1	2.6	3.4
18	CMCS	COMCAST	А	55	1.0%	4,763	2,066	2,697	0.77	89	0.9	1.6	1.9	2.5	3.3
19	FISV	FISERV INC	BBB	10	0.3%	1,248	542	706	0.77	24	0.9	1.7	2.2	2.8	
20	EXC	EXELON GENERATION CO LLC	BBB	73	0.3%	1,316	583	733	0.80	32	1.1	1.8	2.0	2.7	4.4

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 <u>Bought</u> Issues

January 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	ARCC	ARES CAP CORP	Mar-24	BBB	4.625	3,223	98	3,321	14			116.8	115.0
2	ATVI	Null	Sep-50	BBB	2.500	2,708	165	2,873	30	3.1	3.1	88.4	88.1
3	BAC	BANK OF AMERICA	Jun-29	А	2.087	1,693	71	1,764	13			96.6	96.6
4	BAC	BANK OF AMERICA	Aug-50	BBB	4.375	1,210	46	1,256	36			101.0	99.7
5	LEN	LENNAR CORP	Apr-24	BBB	4.500	800	34	834	6	1.5	1.7	106.0	105.5
6	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Aug-50	BBB	3.533	794	748	1,542	29	3.6	3.6	99.0	98.3
7	WFC	WELLS FARGO	Feb-25	А	3.000	761	300	1,061	12	1.5	1.9	104.4	103.3
8	ALLY	ALLY FINANCIAL	Nov-25	BBB	5.750	710	62	772	7	2.4	2.7	112.1	110.9
9	MUR	MURPHY OIL CORP	Dec-27	BB	5.875	662	97	759	11	4.5	5.2	104.0	102.3
10	CPE	CALLON PETE CO DEL	Oct-24	С	6.125	626	31	657	7	4.5	5.7	101.1	100.3
11	ORCL	ORACLE CORP	Nov-27	BBB	3.250	579	297	876	12	2.6	2.6	103.1	103.2
12	DE	DEERE JOHN CAP CORP MEDIUM TERM NTS-BOOK	Mar-27	А	1.750	564	26	590	11	1.9	1.9	99.4	99.5
13	ВК	BANK NEW YORK INC MEDIUM TERM SR NTS BOO	Dec-49	BBB	4.700	561	97	658	16			107.5	106.6
14	MUR	MURPHY OIL CORP	Aug-24	BB	6.875	557	44	601	7	3.3	3.9	102.1	101.7
15	FCX	FREEPORT-MCMORAN COPPER & GOLD INC	Aug-30	BBB	4.625	551	62	613	8	3.2	3.5	106.9	105.9
16	TPC	TUTOR PERINI CORP	May-25	N/R	6.875	445	18	463	13			100.9	99.8
17	GM	GENERAL MOTORS FINANCIAL COMPANY INC	Apr-24	BBB	3.950	443	49	492	5	1.5	1.7	105.0	104.6
18	SIVB	SVB FINL GROUP	Null	BBB	4.250	442	64	506	11			101.3	100.1
19	WFC	WELLS FARGO	Jun-26	BBB	4.100	440	251	691	8	2.2	2.3	107.8	107.5
20	VZ	VERIZON	Nov-24	BBB	3.500	436	331	767	9	1.3	1.4	105.4	105.2

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).



Corporate Bonds: Top 20 Most <u>Sold</u> Issues

January 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	ARCC	ARES CAP CORP	Feb-22	BBB	3.750	2	1,718	1,720	16			111.6	112.9
2	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Aug-50	BBB	3.533	794	748	1,542	29	3.6	3.6	99.0	98.3
3	LEN	LENNAR CORP	Nov-22	BBB	4.750	39	664	703	8	0.7	0.8	102.3	102.3
4	CVS	CVS CAREMARK CORP	Mar-28	BBB	4.300	233	595	828	11	2.4	2.5	110.1	109.9
5	BRCM	BROADCOM CORP	Jan-27	BBB	3.875	139	592	731	13	2.5	2.5	106.3	106.1
6	BDX	BECTON DICKINSON & CO	Dec-24	BBB	3.734	53	586	639	5	1.5	1.7	105.8	105.3
7	HBC	HSBC	Mar-22	А	4.000	17	508	525	5	0.3	0.3	100.7	100.8
8	GM	GENERAL MOTORS FINANCIAL COMPANY INC	Apr-22	BBB	3.450	42	506	548	6	1.7	0.1	100.2	100.2
9	QCOM	QUALCOMM	May-22	А	3.000	38	500	538	6	0.3	0.4	100.8	101.0
10	JPM	JP MORGAN CHASE	Aug-50	BBB	3.534	100	471	571	11	3.5	3.5	100.4	100.0
11	CMCS	COMCAST	Oct-28	А	4.150	262	469	731	12	2.2	2.3	111.7	110.8
12	DUK	DUKE ENERGY	Aug-22	BBB	3.050	24	457	481	4	0.7	0.5	100.7	100.9
13	APLS	Null	Sep-26	N/R	3.500	8	398	406	2			141.2	141.3
14	HTGC	HERCULES TECHNOLOGY GROWTH CAP INC	Feb-22	N/R	4.375	6	389	395	8			106.2	103.3
15	BAC	BANK OF AMERICA	Jan-23	А	3.300	141	376	517	9	0.6	0.7	102.6	102.5
16	TREE	Null	Jun-22	N/R	0.625	9	371	380	1	0.6	3.3	100.0	99.0
17	KMI	KINDER MORGAN ENERGY PARTNERS L P	Mar-22	BBB	4.150	7	369	376	2	0.3	0.6	100.5	100.5
18	ENB	ENBRIDGE INC	Oct-23	BBB	4.000	12	364	376	3	1.1	1.2	104.2	104.1
19	AAPL	APPLE INC	May-23	AA	2.400	186	352	538	11	0.8	0.9	102.0	101.9
20	VZ	VERIZON	Mar-27	BBB	4.125	130	348	478	10	2.2	2.3	109.3	108.9

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, AA, 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 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 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 <u>not rated</u> by the other agency are included.)



Disclosures

This report represents certain customer trades in securities that have been reported by dealers to FINRA's Trade Reporting and Compliance Engine ("TRACE"), and the Municipal Securities Rulemaking Board ("MSRB"). The report does not necessarily reflect all transactions that were effected on dates noted. There is the possibility of errors or delays in the trade submission process. Prices for transactions vary with market conditions and can be affected by trade size and other factors. The information provided has been obtained from sources deemed to be reliable, however Tradeweb Direct does not guarantee the accuracy of the information contained in this report.

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