

# Market Transparency Report

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

**March 2023**

[www.tradeweb.com](http://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 March 2023

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	11	-15.0%	-3.7
CD	35	45.8%	6.5
Corp	16	-7.0%	-0.7
Municipal	-4	-6.3%	-0.1
Treasury	-4	-1.2%	-2.0

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

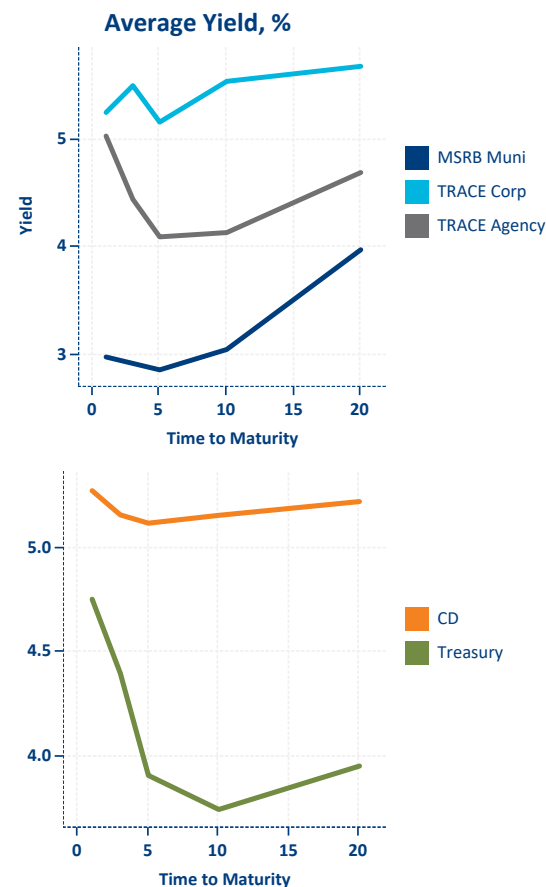
# Yield Matrix

## Average Yield, % for March 2023

Market	TTM					Median Maturity (Years)
	1	3	5	10	20	
MSRB Muni	3.0	2.9	2.9	3.1	4.0	9
TRACE Corp	5.3	5.5	5.2	5.6	5.7	3
TRACE Agency	5.0	4.5	4.1	4.1	4.7	1
CD	5.3	5.2	5.1	5.2	5.2	1
Treasury	4.8	4.4	3.9	3.7	4.0	0

## Asset Class

Market	Category (Filtered)	Rating Key	1	3	5	10	20	Median Maturity (Years)
TRACE Corp	Financial	AA	5.2	4.6	4.8	5.0		5
		A	5.1	4.9	4.7	4.8	5.3	2
		BBB	5.8	5.6	5.3	5.4	6.0	3
		HY	6.6	7.3	9.2	9.6		4
		AAA	2.2				4.5	18
	Non-Financial	AA	4.2	4.6	4.1	4.5	4.8	5
		A	4.1	4.5	4.5	4.5	5.6	5
		BBB	5.4	5.3	5.1	5.3	6.7	4
		HY		16.7	7.4	7.6	7.3	7
MSRB Muni	GO	AAA	2.8	2.8	2.7	2.9	3.7	6
		AA	2.9	2.9	2.8	3.0	3.9	8
		A	3.1	3.1	3.0	3.3	4.0	7
		BBB	3.7	3.7	3.8	4.0	4.6	10
		HY		4.8	4.8	5.3	5.3	12
	Revenue	AAA	2.9	2.8	2.7	2.9	3.8	8
		AA	3.0	2.9	2.8	3.0	3.9	10
		A	3.1	3.1	3.1	3.3	4.1	14
		BBB	3.9	4.0	3.9	4.2	4.9	19
		HY	4.4	7.3	7.7	6.3	6.1	25



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 transactions 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.

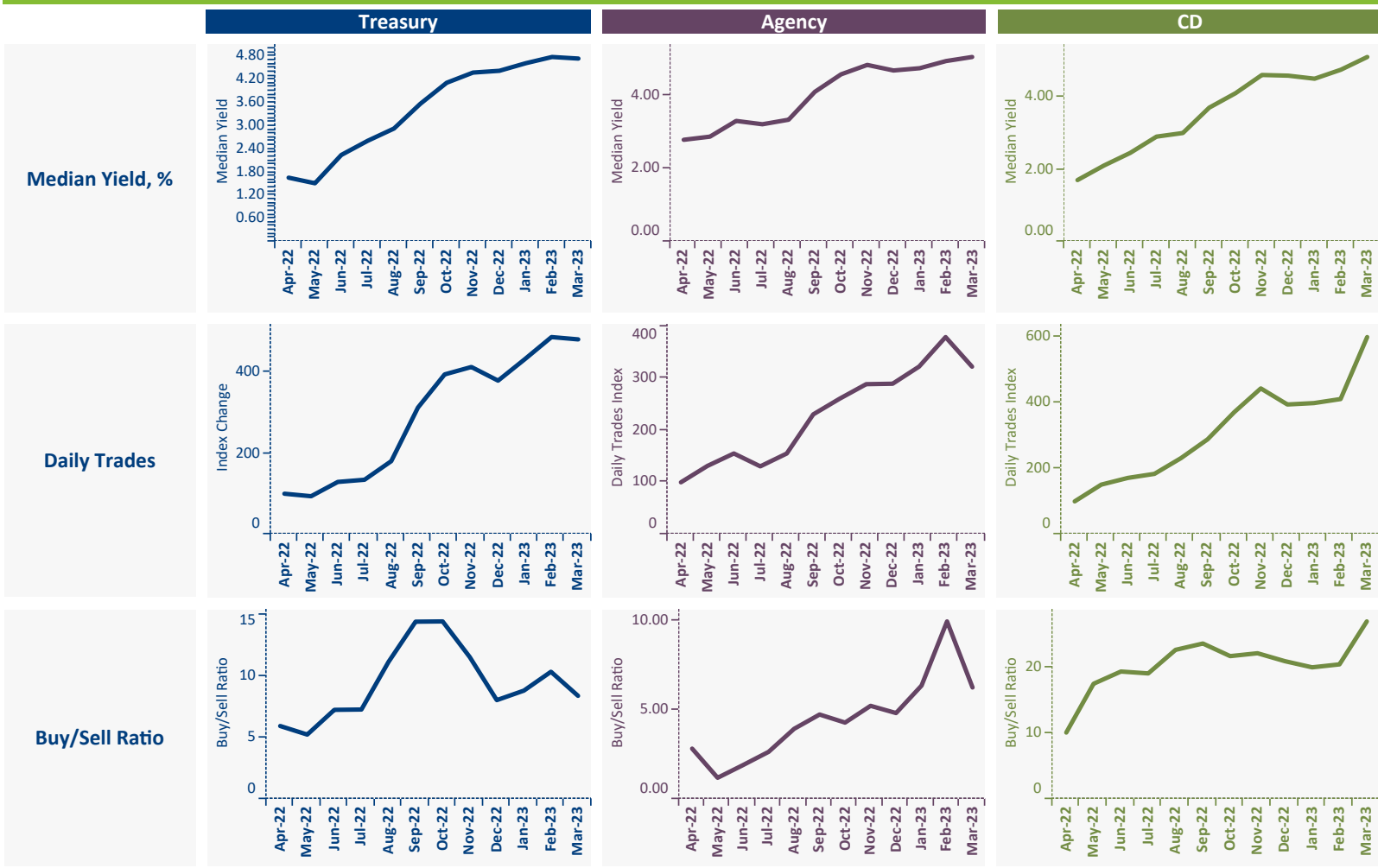
-The weights are based on transaction size.

-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.

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# Corporate Bonds: Odd-Lot Customer Transaction Trend Summary



Daily Trades: First month = 100

Source: TRACE and Tradeweb Direct

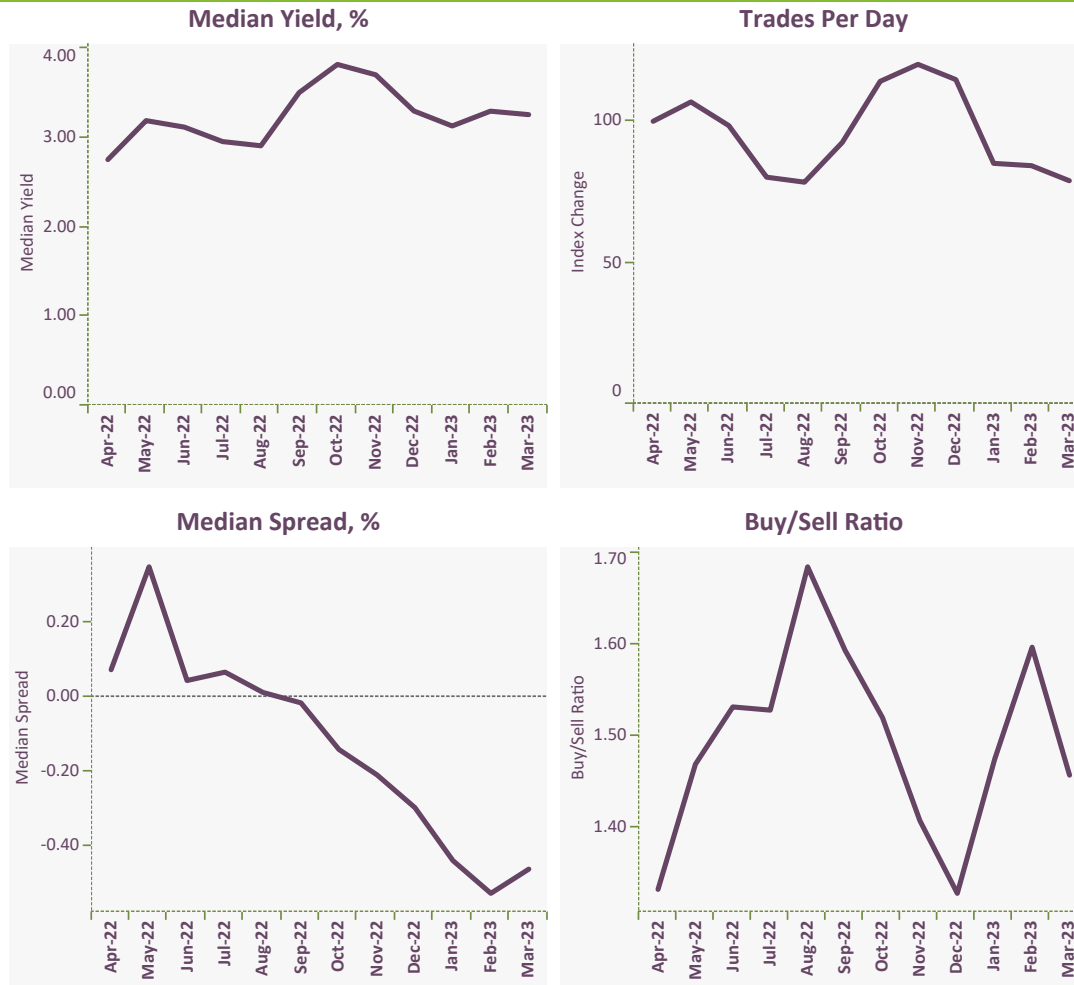
-Based on odd-lot customer transactions (<100M) reported in TRACE.

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

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# 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.

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## Corporate Bonds: Top 20 Most Active Issuers

March 2023

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	C	CITIGROUP	BBB	817	3.5%	32,198	2.5	493	5.3	5.3	5.4	5.6	5.5
2	GS	GOLDMAN SACHS	A	1,206	2.8%	25,657	1.5	425	5.4	5.3	5.2	5.2	5.5
3	JPM	JP MORGAN CHASE	A	946	2.7%	25,218	1.4	449	5.2	5.0	5.0	5.5	5.4
4	BAC	BANK OF AMERICA	A	422	2.4%	21,977	1.7	451	5.3	5.3	5.1	5.2	5.3
5	MS	MORGAN STANLEY	A	1,462	1.9%	18,014	1.7	288	5.1	5.1	5.2	5.2	5.3
6	CS	CREDIT SUISSE	N/R	1,033	1.8%	17,093	0.4	355	10.3	7.7	7.0	7.5	6.0
7	WFC	WELLS FARGO	A	159	1.7%	15,892	1.4	246	5.2	5.3	5.3	5.5	5.7
8	SIVB	SVB FINL GROUP	BB	11	1.7%	15,864	0.1	41		6.8	12.8	6.0	
9	VZ	VERIZON	BBB	132	1.5%	14,263	2.0	178	4.8	4.9	5.2	5.1	5.4
10	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	86	1.4%	12,932	2.2	261	5.5	5.6	5.6	6.2	6.7
11	AAPL	APPLE INC	AA	50	1.2%	11,442	1.8	194	4.8	4.4	4.3	4.3	4.7
12	T	AT&T	BBB	101	1.1%	10,242	1.6	154	5.2	5.0	5.1	5.3	5.6
13	ORCL	ORACLE CORP	BBB	40	1.1%	9,803	1.7	167	5.2	5.1	5.2	5.4	5.9
14	AMGN	AMGEN INC	BBB	43	1.0%	9,606	3.6	124	4.9	4.7	4.8	4.9	5.4
15	CMCS	COMCAST	A	61	1.0%	9,085	1.2	137	5.1	4.6	4.8	4.8	5.3
16	CVS	CVS CAREMARK CORP	BBB	44	0.9%	8,040	1.5	128	5.0	5.0	5.0	5.1	5.6
17	DUK	DUKE ENERGY	BBB	125	0.9%	8,006	2.3	124	5.1	5.1	4.9	5.2	5.4
18	COF	CAPITAL ONE FINL CORP	BBB	28	0.8%	7,610	2.1	117	6.0	6.1	5.7		
19	SCHW	SCHWAB CHARLES CORP NEW	A	35	0.8%	7,500	1.3	134	5.6	5.3	5.1	5.1	
20	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	BBB	225	0.8%	7,499	1.5	128	8.0	6.2	5.3	5.5	5.6

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

March 2023

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	HALO	Null	N/R	1	0.3%	2,481	2,466	15	164.4	8		4.5			
2	BMRN	BIOMARIN PHARMACEUTICAL INC	N/R	2	0.3%	2,522	2,466	56	44.0	9	0.2		0.5		
3	NRG	NRG ENERGY	N/R	9	0.6%	5,225	4,976	249	20.0	21		6.7	7.1		
4	DXCM	Null	N/R	2	0.3%	2,590	2,446	144	17.0	9					
5	SWK	STANLEY BLACK & DECKER INC	A	11	0.2%	2,081	1,902	179	10.6	49		5.2	5.4	5.3	5.6
6	DWDP	Null	BBB	9	0.4%	3,441	2,969	472	6.3	23		4.9	5.2		5.4
7	EQT	EQT CORP	N/R	13	0.4%	3,250	2,735	515	5.3	31	6.6	7.1	6.8		
8	EXPE	EXPEDIA INC DEL	BBB	7	0.4%	3,371	2,828	543	5.2	26		5.2	5.4	5.8	
9	AMGN	AMGEN INC	BBB	43	1.0%	9,606	7,502	2,104	3.6	124	4.9	4.7	4.8	4.9	5.4
10	TRP	TRANSCANADA PIPELINES LTD	BBB	32	0.2%	2,234	1,720	514	3.4	42	5.1	5.4	5.3	5.5	5.8
11	DE	DEERE JOHN CAP CORP MEDIUM TERM NTS-BOOK	A	63	0.6%	5,134	3,936	1,198	3.3	108	4.8	4.9	4.5	4.5	4.8
12	CE	CELANESE US HLDGS LLC	BBB	7	0.3%	2,370	1,806	564	3.2	48	5.9	5.8	6.1	6.3	
13	LNC	LINCOLN NATL CORP IND	BBB	17	0.2%	2,269	1,721	548	3.1	44	5.2	5.5	5.6	6.1	6.2
14	NEE	FPL GROUP CAP INC	BBB	63	0.6%	5,939	4,482	1,457	3.1	118	5.2	5.1	5.0	5.1	5.1
15	PM	PHILIP MORRIS INTL INC	A	31	0.4%	4,044	3,047	997	3.1	85	5.3	4.8	5.0	5.4	5.7
16	INTC	INTEL CORP	A	38	0.7%	6,671	5,022	1,649	3.1	141	4.7	4.7	4.8	5.0	5.5
17	TD	TORONTO DOMINION BK SR MEDIUM TERM BK NT	A	240	0.8%	6,995	5,145	1,850	2.8	114	5.3	5.2	5.3	5.0	
18	MO	ALTRIA GROUP INC	BBB	23	0.3%	2,706	1,978	728	2.7	60	5.5	4.9	5.5	5.7	6.4
19	C	CITIGROUP	BBB	817	3.5%	32,198	22,852	9,346	2.5	493	5.3	5.3	5.4	5.6	5.5
20	EIX	EDISON MISSION	A	57	0.4%	3,423	2,427	996	2.4	71	5.6	5.4	5.2	5.2	5.5

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

March 2023

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	SIVB	SVB FINL GROUP	BB	11	1.7%	15,864	850	15,014	0.06	41		23.6	17.5	10.7	
2	CS	CREDIT SUISSE	N/R	1,033	1.8%	17,093	4,775	12,318	0.39	355	13.0	10.3	7.2	7.5	9.4
3	QRTEA	Null	B	10	0.3%	2,792	1,143	1,649	0.69	25	23.7	25.7	21.2	16.0	16.6
4	CTL	CENTURYLINK	C	19	0.3%	2,862	1,220	1,642	0.74	35		15.1	20.3	15.1	20.4
5	RDS	SHELL	AA	24	0.3%	3,092	1,365	1,727	0.79	47	5.4	4.6	4.4	4.8	5.1
6	CVX	CHEVRON CORP NEW	AA	31	0.3%	2,578	1,169	1,409	0.83	55	5.2	4.6	4.5	5.1	5.2
7	EDP	ENTERPRISE PRODS OPER LLC	BBB	34	0.3%	3,233	1,570	1,663	0.94	43	5.5	5.0	4.9	5.3	5.7
8	SO	GEORGIA POWER CO	BBB	70	0.3%	3,132	1,680	1,452	1.16	55	5.7	5.1	5.0	5.1	5.8
9	CMCS	COMCAST	A	61	1.0%	9,085	4,941	4,144	1.19	137	5.3	4.7	4.7	4.8	5.2
10	ALLY	ALLY FINANCIAL	BBB	68	0.7%	6,136	3,367	2,769	1.22	104	9.3	8.4	7.0	7.9	
11	HMC	AMERICAN HONDA FIN CORP MED TERM NTS BOO	A	30	0.3%	2,552	1,419	1,133	1.25	44	5.4	4.8	4.8	4.6	
12	BP	BP	A	27	0.6%	5,584	3,116	2,468	1.26	73		4.6	4.7	4.8	5.1
13	BNS	BANK NOVA SCOTIA B C	A	168	0.5%	4,679	2,621	2,058	1.27	75	5.6	5.3	5.9	5.3	
14	SCHW	SCHWAB CHARLES CORP NEW	A	35	0.8%	7,500	4,257	3,243	1.31	134	6.3	5.5	5.3	5.3	
15	MRK	MERCK & CO INC NEW	A	26	0.3%	2,875	1,645	1,230	1.34	40	5.1	4.6	4.4	4.5	4.8
16	ABT	ABBOTT LABS	AA	13	0.2%	2,299	1,333	966	1.38	30	5.4	4.4	4.5		4.8
17	WFC	WELLS FARGO	A	159	1.7%	15,892	9,223	6,669	1.38	246	5.5	5.4	5.3	5.8	5.8
18	JPM	JP MORGAN CHASE	A	946	2.7%	25,218	14,747	10,471	1.41	449	5.4	5.2	5.2	5.9	5.4
19	AMZN	AMAZON COM INC	AA	36	0.8%	7,350	4,318	3,032	1.42	133	4.8	4.6	4.5	4.5	5.1
20	F	FORD	BB	139	0.4%	3,992	2,341	1,651	1.42	84	7.1	6.2	6.8	7.0	7.4

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

March 2023

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	C	CITIGROUP	Oct-28	BBB	3.520	8,119	326	8,445	46			92.2	92.5
2	NRG	NRG ENERGY	Jun-48	N/R	2.750	4,802	40	4,842	15	1.9	2.8	101.9	99.6
3	C	CITIGROUP	Null	BB	7.375	3,238	283	3,521	97			100.8	100.3
4	VZ	VERIZON	Mar-28	BBB	2.100	2,829	219	3,048	17	5.2	5.0	86.4	87.4
5	DWDP	Null	Nov-28	BBB	4.725	2,726	283	3,009	13	5.2	4.8	97.8	99.4
6	MS	MORGAN STANLEY	Jan-28	A	2.475	2,629	64	2,693	12			89.1	89.5
7	HALO	Null	Mar-27	N/R	0.250	2,466	15	2,481	8	4.5	4.8	84.9	84.0
8	BMRN	BIOMARIN PHARMACEUTICAL INC	May-27	N/R	1.250	2,455	17	2,472	8	0.5	0.9	103.0	101.6
9	DXCM	Null	Nov-25	N/R	0.250	2,445	143	2,588	9			106.5	105.1
10	EXPE	EXPEDIA INC DEL	Feb-26	BBB	0.000	2,347	191	2,538	10			89.0	87.1
11	EQT	EQT CORP	May-26	N/R	1.750	2,333	173	2,506	15			212.4	210.0
12	AMGN	AMGEN INC	Mar-28	BBB	5.150	1,769	89	1,858	15	4.8	4.8	101.5	101.5
13	CVS	CVS CAREMARK CORP	Mar-28	BBB	4.300	1,622	1,338	2,960	27	5.0	4.9	96.7	97.3
14	LOW	LOWES COS INC	Apr-26	BBB	2.500	1,611	527	2,138	10	5.0	5.0	92.9	93.0
15	AAPL	APPLE INC	Nov-27	AA	3.000	1,521	604	2,125	12	4.3	4.3	94.4	94.4
16	AMGN	AMGEN INC	Feb-27	BBB	2.200	1,515	557	2,072	10	4.7	4.9	91.1	90.3
17	GS	GOLDMAN SACHS	Mar-24	A	4.000	1,500	408	1,908	28	5.4	5.7	98.7	98.5
18	CMA	COMERICA BK DALLAS TEX	Jul-23	BBB	3.700	1,445	254	1,699	26	14.6	15.7	96.4	96.0
19	UTX	UNITED TECHNOLOGIES CORP	Aug-25	BBB	3.950	1,438	583	2,021	11	4.8	5.1	98.1	97.5
20	HPQ	HEWLETT PACKARD	Oct-25	BBB	4.900	1,426	705	2,131	16	5.2	5.3	99.4	99.0

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).

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## Corporate Bonds: Top 20 Most Sold Issues

March 2023

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	SIVB	SVB FINL GROUP	Null	BB	4.250	95	10,647	10,742	7			70.0	10.8
2	SCHW	SCHWAB CHARLES CORP NEW	Null	BBB	5.375	1,262	1,441	2,703	43			95.5	93.6
3	CVS	CVS CAREMARK CORP	Mar-28	BBB	4.300	1,622	1,338	2,960	27	5.0	4.9	96.7	97.3
4	SIVB	SVB FINL GROUP	Null	N/R	4.100	46	1,095	1,141	3			26.9	11.5
5	CMCS	COMCAST	Oct-28	A	4.150	1,113	1,079	2,192	19	4.8	4.7	97.0	97.5
6	SIVB	SVB FINL GROUP	Null	N/R	4.000	80	1,053	1,133	4			11.2	10.5
7	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Null	BBB	8.196	1,316	962	2,278	40	8.2	8.2	100.0	99.4
8	VZ	VERIZON	Mar-27	BBB	4.125	671	921	1,592	19	4.9	4.9	97.4	97.4
9	CVX	CHEVRON CORP NEW	May-25	AA	1.554	93	868	961	20	4.5	4.6	93.9	93.8
10	GS	GOLDMAN SACHS	Feb-25	BBB	3.750	95	839	934	13	6.1	6.7	95.8	94.9
11	CS	CREDIT SUISSE	Jul-32	A	7.125	442	786	1,228	16	7.5	7.4	97.5	97.9
12	ALLY	ALLY FINANCIAL	Aug-49	BB	4.700	241	759	1,000	15			68.0	63.6
13	WFC	WELLS FARGO	Jul-27	BBB	4.300	1,280	729	2,009	20	5.2	5.3	96.4	96.0
14	GS	GOLDMAN SACHS	Mar-30	A	3.800	572	714	1,286	11	5.2	5.2	91.8	91.7
15	HPQ	HEWLETT PACKARD	Oct-25	BBB	4.900	1,426	705	2,131	16	5.2	5.3	99.4	99.0
16	SIVB	SVB FINL GROUP	Oct-26	N/R	1.800	69	647	716	7	6.8	23.6	65.3	64.5
17	WFC	WELLS FARGO	May-28	A	3.584	280	630	910	6			93.0	93.8
18	C	CITIGROUP	Oct-23	BBB	3.875	395	621	1,016	8	5.1	5.4	99.3	99.1
19	GS	GOLDMAN SACHS	Feb-26	A	3.750	1,148	616	1,764	13	5.1	5.4	96.3	95.6
20	BAC	BANK OF AMERICA	Null	BBB	6.500	392	614	1,006	20	6.6	6.7	98.8	97.0

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).

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## Appendix

### Maturity

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

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

### Rating

Rating buckets (AAA, AA, A, BBB, HY) in yield matrix are based on aggregate 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 rated 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 one 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

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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