

# Market Transparency Report

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

July 2022

[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 July 2022

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	-9	-16.0%	0.7
CD	45	7.2%	-0.3
Corp	-8	-14.1%	0.0
Municipal	-16	-20.4%	0.0
Treasury	37	4.2%	0.0

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

# Yield Matrix

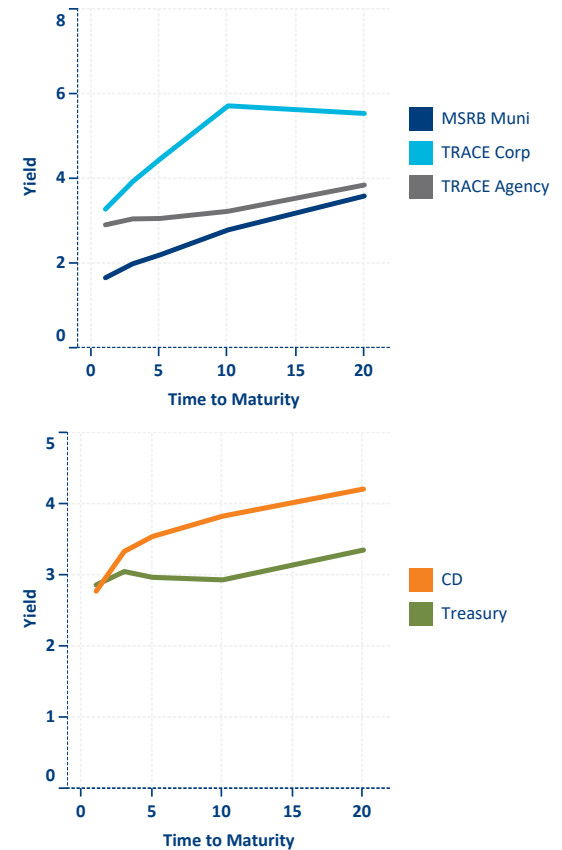
## Average Yield, % for July 2022

Market	TTM					Median Maturity (Years)
	1	3	5	10	20	
MSRB Muni	1.7	2.0	2.2	2.8	3.6	10
TRACE Corp	3.3	3.9	4.5	5.7	5.6	3
TRACE Agency	2.9	3.1	3.1	3.2	3.9	1
CD	2.8	3.3	3.5	3.8	4.2	1
Treasury	2.9	3.1	3.0	2.9	3.4	1

## Asset Class

Market	Category (Filtered)	Rating Key	1	3	5	10	20	Median Maturity (Years)
TRACE Corp	Financial	AA	2.6	3.5	4.0	4.3	4.9	3
		A	3.0	3.6	3.8	4.2	4.9	1
		BBB	3.4	4.1	4.3	5.1	5.4	3
		HY	11.8	6.7	7.3	9.4	9.4	1
	Non-Financial	AAA	2.3	3.9	3.9	3.9	3.9	7
		AA	2.8	3.2	3.4	3.7	4.0	2
		A	3.0	3.6	3.8	3.9	4.0	3
		BBB	3.5	4.3	4.8	5.0	6.3	3
HY	5.1	6.3	10.4	11.0	7.1	8		
MSRB Muni	GO	AAA	1.5	1.9	2.1	2.6	3.3	7
		AA	1.6	2.0	2.2	2.8	3.5	9
		A	1.8	2.1	2.3	2.8	3.4	8
		BBB	2.3	2.9	2.9	3.5	4.0	9
	Revenue	HY	3.0	4.2	4.6	4.9	4.9	16
		AAA	1.6	1.9	2.2	2.6	3.3	8
		AA	1.6	2.0	2.2	2.8	3.5	11
		A	1.8	2.2	2.4	3.0	3.8	18
		BBB	2.4	2.8	2.9	3.8	4.1	15
		HY	5.1	5.5	4.7	4.9	5.0	14

## Average Yield, %



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.

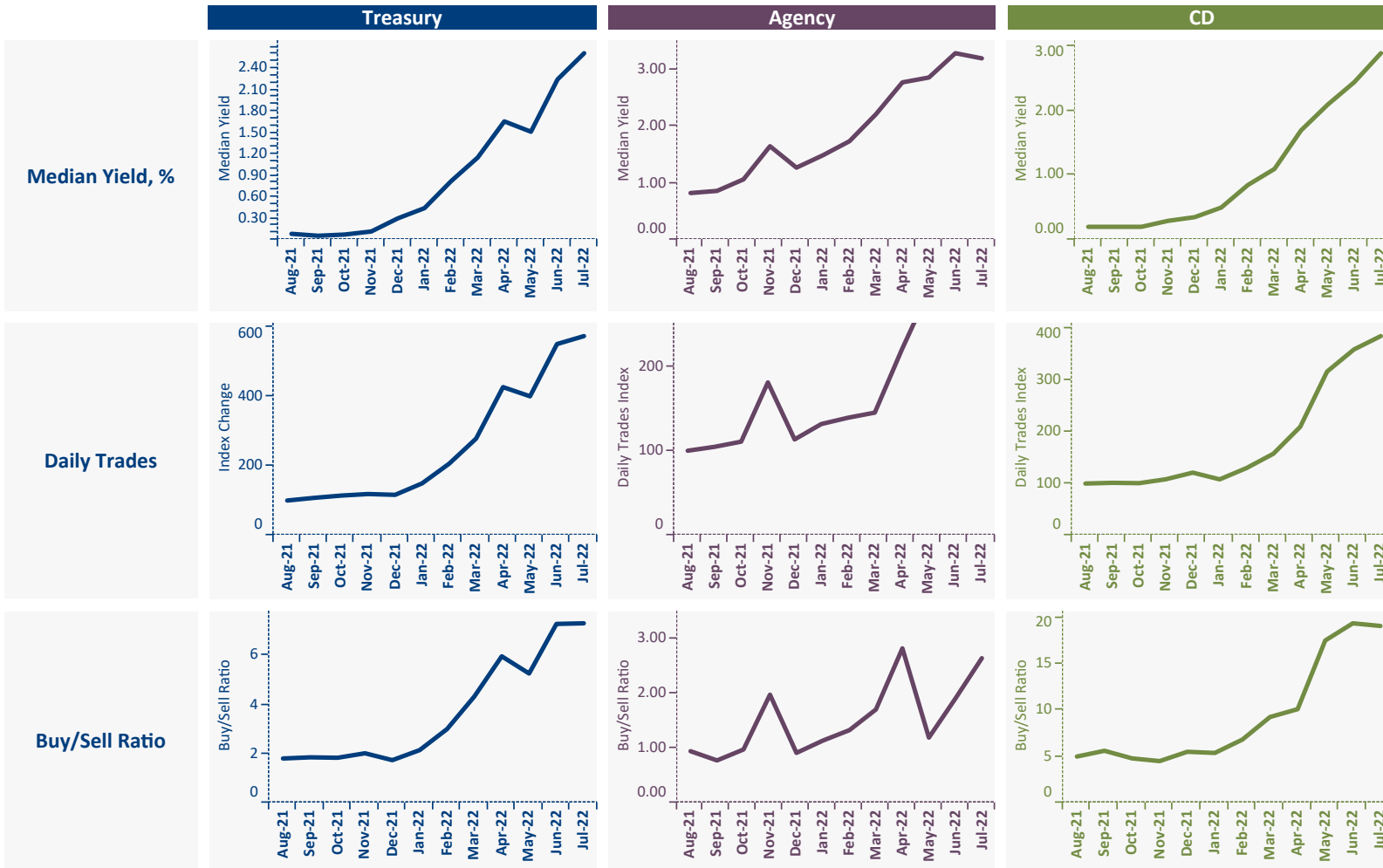
-The weights are based on transaction size.

-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

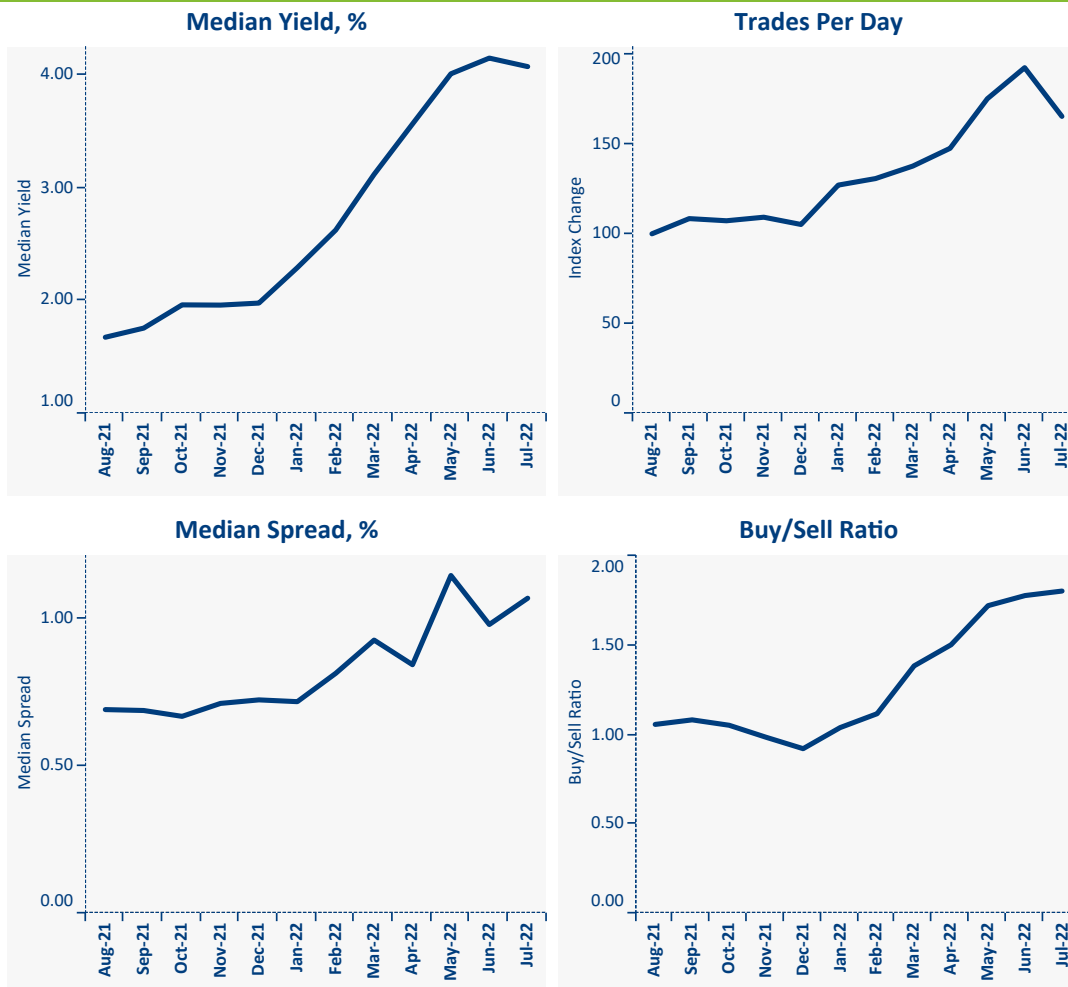
-Treasury and CD are based on transactions on the Tradeweb Direct Platform. Median yields are based on all customer buy transactions.

-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

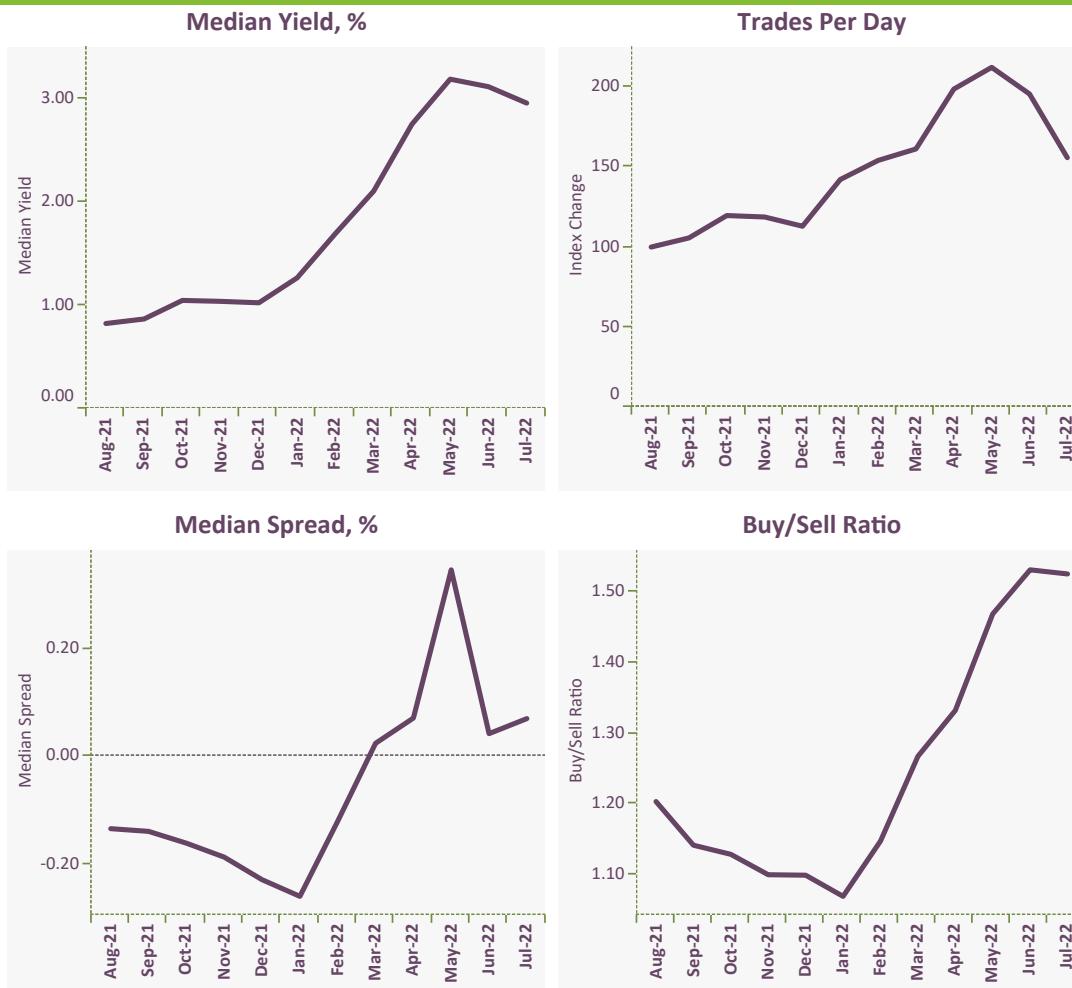
-Based on odd-lot customer transactions (<100M) reported in TRACE.

-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

July 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	A	646	3.2%	20,739	1.4	361	3.1	3.7	4.1	4.5	5.0
2	GS	GOLDMAN SACHS	A	882	3.1%	19,913	1.7	333	3.3	4.0	4.3	4.8	5.2
3	NOC	NORTHROP GRUMMAN CORP	BBB	17	2.8%	18,117	35.5	54	3.4	3.7	3.8	4.2	4.9
4	C	CITIGROUP	BBB	612	2.6%	16,809	1.6	295	3.3	4.0	4.4	5.1	5.2
5	BAC	BANK OF AMERICA	A	290	2.2%	14,074	1.6	307	3.0	3.9	4.3	4.7	5.0
6	MS	MORGAN STANLEY	A	668	2.0%	12,828	1.5	233	3.2	4.0	4.4	4.6	4.9
7	WFC	WELLS FARGO	A	134	1.8%	11,621	1.3	185	3.4	4.0	4.3	4.8	5.3
8	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	77	1.4%	9,123	3.1	191	3.8	4.6	5.1	5.5	6.3
9	VZ	VERIZON	BBB	126	1.4%	8,773	1.1	122		3.5	4.0	4.3	4.8
10	AAPL	APPLE INC	AA	50	1.3%	8,363	1.4	141	2.8	3.2	3.3	3.6	4.1
11	BA	BOEING CO	BBB	53	1.1%	7,093	4.5	146	3.7	4.8	5.0	5.4	6.1
12	CMCS	COMCAST	A	55	1.1%	6,978	0.9	96		3.6	3.8	4.1	4.6
13	ORCL	ORACLE CORP	BBB	34	1.0%	6,455	1.6	113	3.4	4.0	4.6	5.1	5.8
14	T	AT&T	BBB	97	1.0%	6,349	0.9	96	2.3	4.0	4.1	4.5	5.1
15	CVS	CVS CAREMARK CORP	BBB	41	1.0%	6,187	1.1	87	3.5	3.8	4.2	4.5	5.0
16	COF	CAPITAL ONE FINL CORP	BBB	29	1.0%	6,100	2.9	106	3.8	4.2	4.6		
17	BRK	BERKSHIRE HATHAWAY	AA	145	0.8%	5,225	1.3	105	2.6	3.4	3.9	4.0	4.8
18	AXP	AMERICAN EXPRESS	A	29	0.8%	4,975	1.0	78	3.1	3.5	3.9		4.7
19	DIS	DISNEY WALT CO NEW MEDIUM TERM NTS BOOK	A	68	0.8%	4,961	1.0	70	3.3	3.5	3.9	4.1	4.6
20	TGT	TARGET CORP	A	17	0.8%	4,903	7.5	30		3.2	3.3	3.9	4.3

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

July 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	NOC	NORTHROP GRUMMAN CORP	BBB	17	2.8%	18,117	17,620	497	35.5	54	3.4	3.7	3.8	4.2	4.9
2	CE	CELANESE US HLDGS LLC	BBB	8	0.3%	1,867	1,737	130	13.4	44		5.6	5.7	6.1	
3	FIS	FIDELITY NATL INFORMATION SVCS INC	BBB	14	0.3%	1,627	1,500	127	11.8	17	3.5	4.4	4.7	4.9	5.2
4	TGT	TARGET CORP	A	17	0.8%	4,903	4,324	579	7.5	30		3.2	3.3	3.9	4.3
5	BMO	BANK MONTREAL MEDIUM TERM SR NTS BOOK EN	A	122	0.7%	4,746	4,054	692	5.9	52	3.3	4.0	4.2	4.6	
6	QCOM	QUALCOMM	A	14	0.5%	3,225	2,746	479	5.7	24	2.6	3.3	3.5	3.8	4.4
7	ICE	IntercontinentalExchange Group Inc	A	15	0.4%	2,311	1,950	361	5.4	23		3.7	4.2	4.3	4.6
8	PM	PHILIP MORRIS INTL INC	A	25	0.3%	2,116	1,756	360	4.9	41	3.1	3.8	4.5	4.9	5.7
9	MO	ALTRIA GROUP INC	BBB	24	0.5%	3,350	2,779	571	4.9	71	3.6	4.5	4.6	5.7	6.5
10	BA	BOEING CO	BBB	53	1.1%	7,093	5,808	1,285	4.5	146	3.7	4.8	5.0	5.4	6.1
11	PCG	PACIFIC GAS & ELEC CO	BBB	47	0.3%	2,043	1,656	387	4.3	44	4.3	5.5	5.9	6.3	6.5
12	LUV	SOUTHWEST AIRLS CO	BBB	10	0.3%	1,881	1,519	362	4.2	33	3.5	4.2	4.6	5.0	
13	SAN	ABBAY NATL TREAS SVCS PLC	BBB	42	0.3%	1,815	1,445	370	3.9	43	3.2	4.7	4.9	5.8	
14	HCA	HCA INC	BBB	24	0.4%	2,608	2,047	561	3.7	52	3.8	5.1	5.2	5.6	6.1
15	NEE	FPL GROUP CAP INC	BBB	52	0.6%	3,878	3,043	835	3.6	45	3.2	3.7	4.2	4.4	4.5
16	ALLY	ALLY FINANCIAL	BBB	35	0.5%	3,124	2,439	685	3.6	60	4.1	4.6	5.4	6.2	
17	EIX	EDISON MISSION	A	49	0.4%	2,572	1,994	578	3.5	52	3.4	4.0	4.6	4.6	5.4
18	SLM	SLM CORP	B	86	0.3%	1,607	1,242	365	3.4	21	5.1	8.3	9.0	9.5	
19	CS	CREDIT SUISSE	A	206	0.2%	1,535	1,182	353	3.4	28	3.8	4.4	4.5	5.4	6.0
20	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	77	1.4%	9,123	6,916	2,207	3.1	191	3.8	4.6	5.1	5.5	6.3

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

July 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	24	0.4%	2,802	930	1,872	0.50	33	3.1	3.6	3.7	4.0	4.8
2	SBUX	STARBUCKS CORP	BBB	18	0.3%	1,854	748	1,106	0.68	26	3.3	3.7	4.1	4.4	5.1
3	HD	HOME DEPOT	A	33	0.4%	2,611	1,146	1,465	0.78	40	3.1	3.4	3.4	3.9	4.5
4	CMCS	COMCAST	A	55	1.1%	6,978	3,258	3,720	0.88	96		3.7	3.9	4.1	4.6
5	T	AT&T	BBB	97	1.0%	6,349	3,026	3,323	0.91	96	2.8	4.1	4.2	4.6	5.2
6	PEP	PEPSICO	A	36	0.3%	1,627	797	830	0.96	28	3.0	3.2	3.3	3.7	4.1
7	V	VIVENDI	AA	13	0.3%	1,757	859	898	0.96	28		3.5	3.5	3.7	4.1
8	EDP	ENTERPRISE PRODS OPER LLC	BBB	32	0.5%	2,928	1,438	1,490	0.97	34	3.5	4.0	4.2	4.6	5.5
9	AMZN	AMAZON COM INC	AA	34	0.7%	4,309	2,138	2,171	0.98	73	3.0	3.2	3.5	3.8	4.2
10	DIS	DISNEY WALT CO NEW MEDIUM TERM NTS BOOK	A	68	0.8%	4,961	2,451	2,510	0.98	70	3.8	3.7	3.9	4.1	4.6
11	AXP	AMERICAN EXPRESS	A	29	0.8%	4,975	2,525	2,450	1.03	78	3.2	3.6	3.9		5.2
12	KO	COCA COLA CO	A	29	0.2%	1,514	778	736	1.06	28	3.7	2.8	3.4	3.7	4.0
13	INTC	INTEL CORP	A	29	0.4%	2,278	1,175	1,103	1.07	39	3.3	3.4	3.5	4.0	4.6
14	CVS	CVS CAREMARK CORP	BBB	41	1.0%	6,187	3,231	2,956	1.09	87	3.8	3.8	4.3	4.5	5.1
15	TMUS	T-MOBILE USA INC	BBB	29	0.3%	1,927	1,012	915	1.11	44	4.8	4.5	4.6	4.8	5.0
16	VZ	VERIZON	BBB	126	1.4%	8,773	4,678	4,095	1.14	122		3.5	4.0	4.3	4.8
17	USB	U S BANCORP MEDIUM TERM NTS- BOOK ENTRY	A	25	0.5%	3,497	1,897	1,600	1.19	45	3.2	3.6	3.9	4.2	
18	BK	BANK NEW YORK INC MEDIUM TERM SR NTS BOO	A	49	0.6%	3,531	1,958	1,573	1.24	63	3.3	3.7	4.0	4.2	
19	WFC	WELLS FARGO	A	134	1.8%	11,621	6,538	5,083	1.29	185	3.6	3.9	4.3	5.4	5.3
20	BRK	BERKSHIRE HATHAWAY	AA	145	0.8%	5,225	2,964	2,261	1.31	105	3.1	3.5	4.3	4.0	4.8

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

July 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	NOC	NORTHROP GRUMMAN CORP	Jan-28	BBB	3.250	16,905	179	17,084	33	3.8	4.1	97.1	95.8
2	TGT	TARGET CORP	Jan-27	A	1.950	3,693	40	3,733	12	3.3	3.3	94.5	94.3
3	BMO	BANK MONTREAL MEDIUM TERM SR NTS BOOK EN	Mar-27	A	2.650	2,498	22	2,520	11	4.2	4.1	93.4	94.1
4	QCOM	QUALCOMM	May-32	A	1.650	2,275	53	2,328	4	3.8	3.8	82.7	82.4
5	RY	ROYAL BANK OF CANADA	Oct-23	A	0.500	1,492	214	1,706	17	2.9	3.2	97.0	96.7
6	ICE	IntercontinentalExchange Group Inc	May-25	A	3.650	1,290	151	1,441	6	3.7	3.7	100.0	99.8
7	SO	GEORGIA POWER CO	Jul-23	BBB	2.950	1,173	437	1,610	13	3.4	3.6	99.6	99.4
8	CE	CELANESE US HLDGS LLC	Jul-24	BBB	5.900	1,122	37	1,159	28	5.6	5.6	100.6	100.5
9	BA	BOEING CO	May-25	BBB	4.875	1,089	94	1,183	28	4.8	4.9	100.2	100.0
10	BA	BOEING CO	May-23	BBB	4.508	1,072	122	1,194	25	3.8	4.2	100.5	100.2
11	NEE	FPL GROUP CAP INC	Jun-25	BBB	4.450	1,069	24	1,093	6	3.7	3.9	102.2	101.4
12	FIS	FIDELITY NATL INFORMATION SVCS INC	Jul-25	BBB	4.500	1,025	17	1,042	5	4.4	4.2	100.3	100.9
13	JPM	JP MORGAN CHASE	Jan-23	A	3.200	1,019	110	1,129	11	3.1	3.1	100.1	100.1
14	AAPL	APPLE INC	Nov-27	AA	3.000	1,011	294	1,305	9	3.3	3.4	98.3	98.1
15	WFC	WELLS FARGO	Jul-27	BBB	4.300	917	282	1,199	14	4.3	4.4	99.8	99.4
16	COF	CAPITAL ONE FINL CORP	Jan-24	BBB	3.900	883	86	969	15	3.9	3.9	100.0	100.0
17	FITB	FIFTH THIRD BANCORP	Jan-24	BBB	3.650	880	213	1,093	15	3.7	3.9	99.9	99.7
18	BAC	BANK OF AMERICA	Jul-49	BBB	6.125	867	70	937	26			100.0	100.1
19	UTX	UNITED TECHNOLOGIES CORP	Aug-25	BBB	3.950	850	430	1,280	9	3.6	3.7	101.1	100.8
20	HPQ	HEWLETT PACKARD	Oct-25	BBB	4.900	842	386	1,228	10	4.2	4.2	102.1	101.9

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).

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## Corporate Bonds: Top 20 Most Sold Issues

July 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	817	1,484	2,301	15	4.3	4.3	100.0	99.8
2	CMCS	COMCAST	Oct-28	A	4.150	571	1,156	1,727	13	4.0	4.0	100.9	100.7
3	AXP	AMERICAN EXPRESS	Feb-24	A	3.400	299	1,128	1,427	11	3.4	3.6	100.0	99.7
4	DIS	DISNEY WALT CO NEW MEDIUM TERM NTS BOOK	Jan-26	A	1.750	120	1,109	1,229	7	3.6	3.7	93.9	93.6
5	VZ	VERIZON	Mar-27	BBB	4.125	747	1,040	1,787	18	4.0	4.0	100.6	100.4
6	GS	GOLDMAN SACHS	Mar-30	A	3.800	440	1,013	1,453	11	4.7	4.8	94.1	93.6
7	RDS	SHELL	Sep-26	AA	2.500	165	906	1,071	4	3.6	3.7	95.9	95.4
8	WFC	WELLS FARGO	May-28	A	3.584	111	858	969	5			95.3	95.2
9	AMZN	AMAZON COM INC	Jun-30	AA	1.500	272	807	1,079	5	3.7	3.8	85.0	84.5
10	JPM	JP MORGAN CHASE	Dec-29	A	4.452	281	768	1,049	6			98.6	98.0
11	C	CITIGROUP	Jan-28	BBB	3.887	203	764	967	5			96.8	96.6
12	MS	MORGAN STANLEY	Jul-28	A	3.591	154	705	859	4			95.6	95.3
13	T	AT&T	Dec-33	BBB	2.550	265	665	930	5	4.5	4.6	83.0	82.2
14	EDP	ENTERPRISE PRODS OPER LLC	Feb-42	BBB	5.700	320	476	796	3	5.3	5.5	105.2	102.4
15	TFC	Null	Jun-49	BBB	5.125	60	476	536	9	6.0	6.2	85.0	83.1
16	C	CITIGROUP	Oct-23	BBB	3.875	642	468	1,110	7	3.1	3.0	101.0	101.0
17	C	CITIGROUP	Jul-28	BBB	3.668	330	460	790	5			95.2	95.1
18	SBUX	STARBUCKS CORP	Oct-23	BBB	3.850	91	445	536	5	3.1	3.3	100.7	100.5
19	SO	GEORGIA POWER CO	Jul-23	BBB	2.950	1,173	437	1,610	13	3.4	3.6	99.6	99.4
20	UTX	UNITED TECHNOLOGIES CORP	Aug-25	BBB	3.950	850	430	1,280	9	3.6	3.7	101.1	100.8

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:  $0.5 \leq TTM \leq 1.5$   
 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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