

Market Transparency Report

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

June 2022

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 June 2022

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	43	18.2%	0.7
CD	35	13.5%	1.9
Corp	14	9.8%	0.1
Municipal	-7	-7.8%	0.1
Treasury	73	37.6%	2.0

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

Yield Matrix

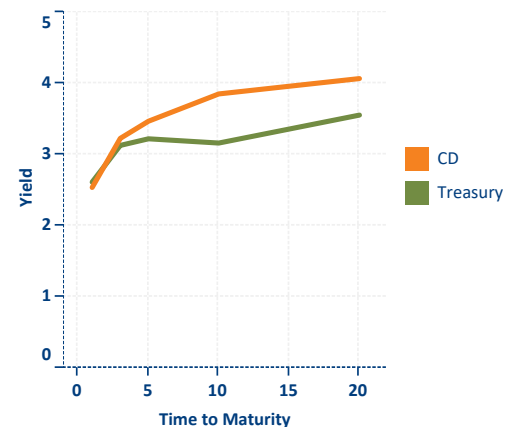
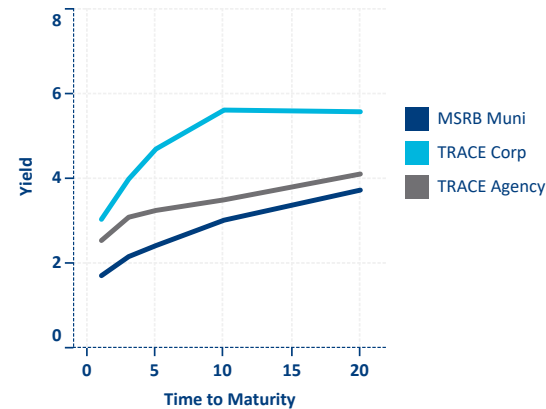
Average Yield, % for June 2022

Market	TTM					Median Maturity (Years)
	1	3	5	10	20	
MSRB Muni	1.7	2.2	2.4	3.0	3.7	10
TRACE Corp	3.1	4.0	4.7	5.6	5.6	3
TRACE Agency	2.6	3.1	3.3	3.5	4.1	2
CD	2.5	3.2	3.5	3.9	4.1	1
Treasury	2.6	3.1	3.2	3.2	3.6	0

Asset Class

Market	Category (Filtered)	Rating Key	1	3	5	10	20	Median Maturity (Years)	
TRACE Corp	Financial	AA	2.4	3.8	4.2			4	
		A	2.7	3.6	4.0	4.4	5.0	2	
		BBB	3.2	4.1	4.4	5.2	5.9	3	
		HY	5.7	6.0	7.2	9.5		2	
	Non-Financial	AAA	2.2				4.1		17
		AA	3.1	3.2	3.3	4.0	4.3		3
		A	2.4	3.6	3.9	4.2	4.9		4
		BBB	3.4	4.2	4.6	5.1	6.2		2
		HY	5.5	6.5	12.6	10.3	7.1		6
MSRB Muni	GO	AAA	1.6	2.1	2.3	2.9	3.5		7
		AA	1.7	2.1	2.4	3.0	3.7		9
		A	1.8	2.2	2.6	3.2	3.6		7
		BBB	2.5	3.0	3.4	4.0	4.1		9
	Revenue	HY	5.4	4.6		4.1	5.1		20
		AAA	1.7	2.1	2.4	2.9	3.5		8
		AA	1.7	2.2	2.4	3.0	3.7		11
		A	1.8	2.3	2.6	3.2	3.8		16
		BBB	2.3	3.1	3.3	3.9	4.1		15
		HY	3.9	5.4	4.7	4.4	5.2		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.

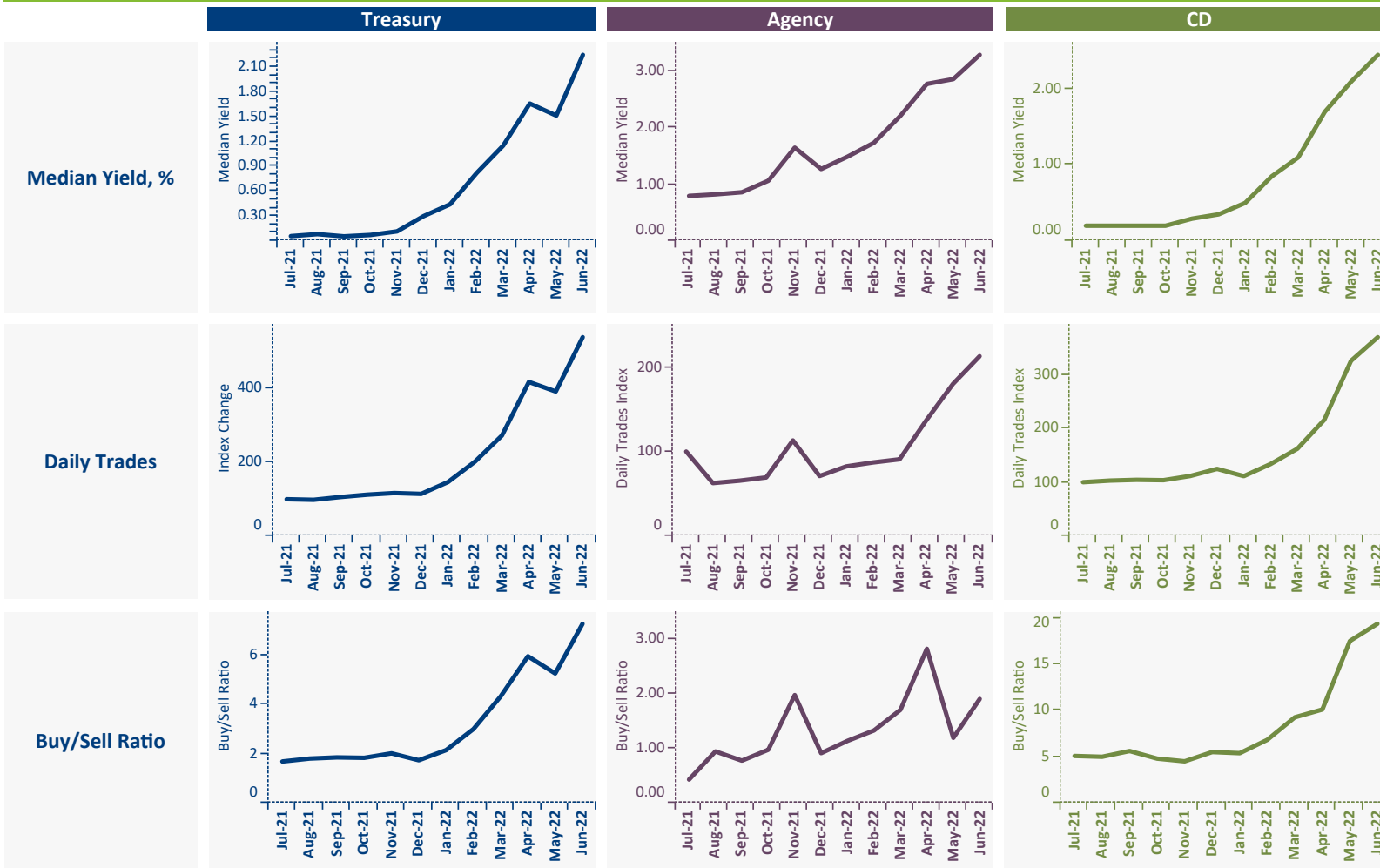
-The weights are based on transaction size.

-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

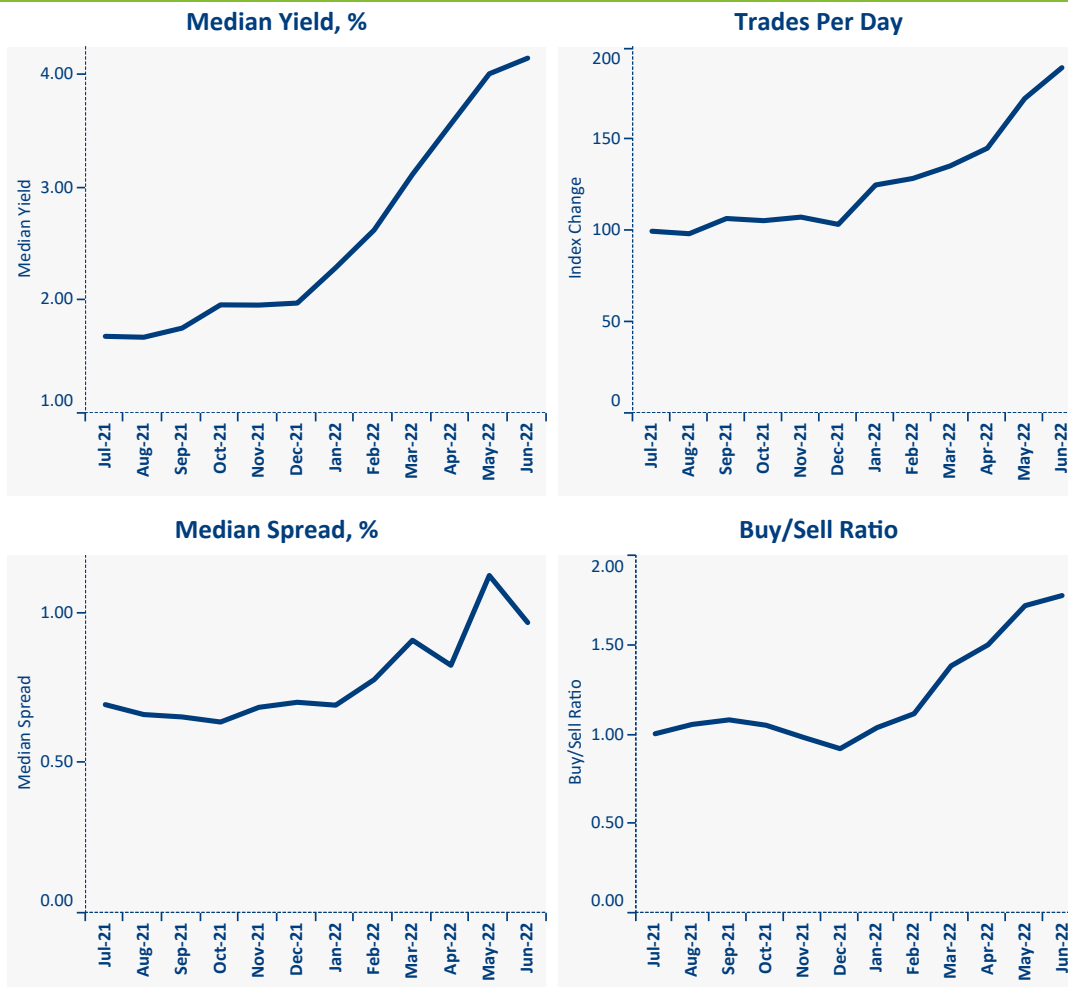
-Treasury and CD are based on transactions on the Tradeweb Direct Platform. Median yields are based on all customer buy transactions.

-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

June 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	GS	GOLDMAN SACHS	A	927	3.2%	24,788	1.8	400	2.8	4.3	4.5	4.9	5.2
2	JPM	JP MORGAN CHASE	A	706	3.2%	24,743	1.3	428	2.9	3.8	4.3	4.6	5.1
3	C	CITIGROUP	BBB	631	2.8%	21,948	1.5	372	3.0	4.1	4.6	5.3	5.3
4	BAC	BANK OF AMERICA	BBB	307	2.4%	18,804	1.8	396	2.4	4.1	4.4	4.8	5.1
5	MS	MORGAN STANLEY	A	1,047	2.2%	16,798	1.7	293	3.0	4.1	4.5	4.8	5.0
6	WFC	WELLS FARGO	A	129	1.8%	13,919	1.2	210	3.3	4.1	4.5	5.0	5.4
7	BA	BOEING CO	BBB	54	1.4%	10,991	5.6	211	3.4	5.0	5.5	5.5	6.2
8	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	80	1.4%	10,898	2.5	225	3.6	4.6	5.3	5.6	6.3
9	AAPL	APPLE INC	AA	50	1.4%	10,854	1.7	184	2.5	3.4	3.7	3.9	4.4
10	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	BBB	37	1.4%	10,766	4.5	82		4.2	4.2	4.4	5.2
11	VZ	VERIZON	BBB	137	1.4%	10,696	1.0	144		3.6	4.2	4.6	4.9
12	ORCL	ORACLE CORP	BBB	34	1.2%	9,270	2.1	173	3.2	4.2	4.9	5.3	5.9
13	DIS	DISNEY WALT CO NEW MEDIUM TERM NTS BOOK	A	67	1.1%	8,355	3.5	103	2.0	3.4	4.3	4.4	4.7
14	CMCS	COMCAST	A	57	1.0%	8,143	0.8	112		3.8	4.1	4.4	4.8
15	AXP	AMERICAN EXPRESS	A	29	1.0%	7,926	2.8	126	2.5	3.6	4.2		4.7
16	CVS	CVS CAREMARK CORP	BBB	41	1.0%	7,732	1.2	120	3.3	3.9	4.5	4.7	5.2
17	T	AT&T	BBB	97	1.0%	7,466	1.1	107	2.8	4.2	4.2	4.7	5.3
18	BRK	BERKSHIRE HATHAWAY	AA	146	0.9%	7,327	1.8	148	2.6	3.5	4.2	4.3	4.9
19	DUK	DUKE ENERGY	BBB	116	0.8%	6,524	1.8	94	3.1	3.7	4.2	4.8	5.2
20	COF	CAPITAL ONE FINL CORP	BBB	29	0.8%	6,467	2.3	107	3.0	4.2	4.7		

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 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	ICE	IntercontinentalExchange Group Inc	A	17	0.6%	4,652	4,214	438	9.6	46	2.7	3.5	4.2	4.5	5.0
2	BA	BOEING CO	BBB	54	1.4%	10,991	9,334	1,657	5.6	211	3.4	5.0	5.5	5.5	6.2
3	MA	Null	A	14	0.3%	2,469	2,036	433	4.7	25		3.4	3.3	4.1	4.5
4	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	BBB	37	1.4%	10,766	8,821	1,945	4.5	82		4.2	4.2	4.4	5.2
5	EIX	EDISON MISSION	A	52	0.5%	3,669	3,006	663	4.5	72	3.2	4.2	4.9	4.9	5.4
6	AMT	AMERICAN TOWER CORP NEW	BBB	30	0.7%	5,086	4,108	978	4.2	89	3.1	4.1	4.8	4.9	
7	ALLY	ALLY FINANCIAL	BBB	39	0.6%	4,361	3,464	897	3.9	80	4.0	4.9	5.5	6.3	
8	GD	GENERAL DYNAMICS CORP	A	17	0.3%	2,569	2,040	529	3.9	29	2.3	3.5	4.0	4.1	4.6
9	AMGN	AMGEN INC	BBB	32	0.8%	6,170	4,882	1,288	3.8	57	3.0	3.8	4.2	4.1	5.0
10	NFLX	NETFLIX INC	BBB	9	0.2%	1,718	1,352	366	3.7	37		5.0	5.4		
11	LOW	LOWES COS INC	BBB	36	0.8%	5,891	4,621	1,270	3.6	66	3.1	3.9	4.3	4.6	5.2
12	PM	PHILIP MORRIS INTL INC	A	25	0.3%	2,145	1,667	478	3.5	41	3.0	3.8	4.3	4.8	5.5
13	DIS	DISNEY WALT CO NEW MEDIUM TERM NTS BOOK	A	67	1.1%	8,355	6,491	1,864	3.5	103	2.0	3.4	4.3	4.4	4.7
14	MO	ALTRIA GROUP INC	BBB	24	0.4%	3,015	2,313	702	3.3	66	3.5	4.5	4.6	5.5	6.2
15	HPQ	HEWLETT PACKARD	BBB	21	0.7%	5,193	3,972	1,221	3.3	80	3.1	4.3	4.5	5.5	6.0
16	LUV	SOUTHWEST AIRLS CO	BBB	10	0.2%	1,823	1,388	435	3.2	35	3.0	4.3	4.7	4.6	
17	AEP	AMERICAN ELEC PWR CO INC	BBB	67	0.3%	2,082	1,583	499	3.2	38	3.3	4.0	4.1	4.5	5.3
18	CS	CREDIT SUISSE	A	244	0.2%	1,746	1,312	434	3.0	27	3.3	3.9	5.0	5.3	5.7
19	BMJ	BRISTOL MYERS SQUIBB CO	A	45	0.5%	3,867	2,876	991	2.9	64	3.0	3.3	3.8	4.1	4.5
20	CAT	CATERPILLAR	A	62	0.4%	3,281	2,440	841	2.9	51	2.4	3.4	3.7	4.0	4.4

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

June 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%	3,198	1,177	2,021	0.58	39	3.1	3.8	3.9	4.3	4.8
2	CMCS	COMCAST	A	57	1.0%	8,143	3,544	4,599	0.77	112		3.9	4.2	4.4	4.8
3	V	VIVENDI	AA	13	0.3%	2,478	1,090	1,388	0.79	33	2.4	3.7	3.8	3.9	4.5
4	VZ	VERIZON	BBB	137	1.4%	10,696	5,230	5,466	0.96	144		3.3	4.2	4.6	5.0
5	EDP	ENTERPRISE PRODS OPER LLC	BBB	33	0.5%	3,583	1,774	1,809	0.98	44	3.2	4.3	4.0	4.8	5.6
6	HD	HOME DEPOT	A	33	0.4%	3,237	1,616	1,621	1.00	51	2.8	3.6	3.7	4.1	4.7
7	BK	BANK NEW YORK INC MEDIUM TERM SR NTS BOO	A	46	0.5%	4,107	2,082	2,025	1.03	68	3.1	3.9	4.2	4.5	
8	APC	ANADARKO PETE CORP	BB	68	0.2%	1,760	925	835	1.11	45	4.6	5.5	6.1	6.1	6.1
9	PEP	PEPSICO	A	32	0.3%	1,958	1,039	919	1.13	34	2.9	3.4	3.6	4.0	4.3
10	T	AT&T	BBB	97	1.0%	7,466	3,979	3,487	1.14	107		4.3	4.5	4.7	5.3
11	CVS	CVS CAREMARK CORP	BBB	41	1.0%	7,732	4,150	3,582	1.16	120	3.1	4.0	4.5	4.8	5.3
12	USB	U S BANCORP MEDIUM TERM NTS- BOOK ENTRY	A	24	0.7%	5,193	2,816	2,377	1.18	68	3.0	3.8	4.1	4.5	
13	WFC	WELLS FARGO	A	129	1.8%	13,919	7,556	6,363	1.19	210	3.4	4.0	4.6	5.3	5.4
14	BP	BP	A	38	0.6%	5,068	2,792	2,276	1.23	66	3.1	3.9	4.3	4.5	4.9
15	TMUS	T-MOBILE USA INC	BB	30	0.3%	2,245	1,244	1,001	1.24	51	4.7	4.8	4.8	5.1	5.2
16	MSFT	MICROSOFT CORP	AAA	32	0.5%	4,196	2,385	1,811	1.32	69	2.9	3.3	3.5		4.3
17	JPM	JP MORGAN CHASE	A	706	3.2%	24,743	14,131	10,612	1.33	428	3.2	4.0	4.4	5.0	5.2
18	PFE	PFIZER	A	46	0.4%	3,365	1,928	1,437	1.34	60	3.1	3.6	3.8	4.1	4.6
19	XOM	XTO ENERGY INC	AA	24	0.3%	2,650	1,517	1,133	1.34	44	2.9	3.7	3.8	4.1	4.7
20	ETP	ENERGY TRANSFER PARTNERS L P	BBB	33	0.3%	2,374	1,381	993	1.39	48	4.0	4.7	5.2	5.0	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 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	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	Apr-28	BBB	4.000	6,889	391	7,280	32	4.2	4.4	98.9	98.0
2	DIS	DISNEY WALT CO NEW MEDIUM TERM NTS BOOK	Jan-28	A	2.200	4,128	219	4,347	28	4.3	4.3	89.7	89.9
3	ICE	IntercontinentalExchange Group Inc	May-25	A	3.650	3,573	156	3,729	25	3.5	4.0	100.3	99.0
4	LOW	LOWES COS INC	Apr-26	BBB	2.500	2,730	302	3,032	18	3.9	4.2	95.1	94.0
5	AMGN	AMGEN INC	Feb-32	BBB	3.350	2,671	148	2,819	12	4.1	4.5	94.1	91.3
6	BA	BOEING CO	May-25	BBB	4.875	1,826	109	1,935	39	5.0	5.1	99.7	99.5
7	BA	BOEING CO	May-23	BBB	4.508	1,807	168	1,975	40	3.5	4.0	100.8	100.4
8	MA	Null	Mar-27	A	3.300	1,760	102	1,862	12	3.3	3.9	100.0	97.5
9	AXP	AMERICAN EXPRESS	Dec-22	A	2.650	1,753	494	2,247	24	2.5	2.8	100.1	100.0
10	TD	TORONTO DOMINION BK SR MEDIUM TERM BK NT	Jan-23	A	0.250	1,692	558	2,250	12	2.0	2.8	99.0	98.6
11	BA	BOEING CO	May-27	BBB	5.040	1,604	63	1,667	25	5.5	5.5	97.9	97.9
12	HMC	AMERICAN HONDA FIN CORP MED TERM NTS BOO	Sep-23	A	0.650	1,559	393	1,952	14	3.2	3.4	97.0	96.9
13	GS	GOLDMAN SACHS	Feb-26	A	3.750	1,417	560	1,977	18	4.2	4.4	98.6	97.9
14	GD	GENERAL DYNAMICS CORP	May-23	A	3.375	1,377	110	1,487	9	2.3	3.1	100.9	100.2
15	BAC	BANK OF AMERICA	Aug-24	BBB	4.200	1,358	220	1,578	33	4.0	4.1	100.4	100.2
16	CAT	CATERPILLAR	Sep-23	A	0.450	1,329	91	1,420	12	2.4	3.1	97.6	96.9
17	GS	GOLDMAN SACHS	Apr-25	A	3.500	1,307	138	1,445	24	4.3	4.3	97.9	98.0
18	TFC	Null	Oct-24	A	2.850	1,299	633	1,932	15	3.4	3.9	98.7	97.8
19	BMY	BRISTOL MYERS SQUIBB CO	Jul-24	A	2.900	1,289	255	1,544	19	3.3	3.5	99.2	98.8
20	WFC	WELLS FARGO	Jul-27	BBB	4.300	1,270	450	1,720	19	4.6	4.7	98.8	98.4

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 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	1,145	1,645	2,790	23	4.6	4.6	98.7	98.6
2	CMCS	COMCAST	Oct-28	A	4.150	641	1,229	1,870	17	4.3	4.3	99.4	99.1
3	VZ	VERIZON	Mar-27	BBB	4.125	614	1,084	1,698	19	4.2	4.2	99.7	99.6
4	WFC	WELLS FARGO	May-28	A	3.584	195	956	1,151	6			94.7	94.4
5	SO	GEORGIA POWER CO	Jul-23	BBB	2.950	997	947	1,944	13	3.1	3.5	99.8	99.4
6	GS	GOLDMAN SACHS	Mar-30	A	3.800	674	934	1,608	15	4.9	5.0	93.1	92.5
7	C	CITIGROUP	Jan-28	BBB	3.887	205	904	1,109	5			96.1	95.7
8	VZ	VERIZON	Nov-24	BBB	3.500	301	895	1,196	12	3.5	3.1	100.0	100.8
9	C	CITIGROUP	Oct-23	BBB	3.875	982	887	1,869	9	3.2	3.3	100.9	100.8
10	JPM	JP MORGAN CHASE	Dec-29	A	4.452	289	868	1,157	6			97.5	97.3
11	RDS	SHELL	Sep-26	AA	2.500	189	868	1,057	4	3.8	3.9	94.8	94.5
12	AMZN	AMAZON COM INC	Jun-30	AA	1.500	437	819	1,256	6	4.0	4.1	83.0	82.7
13	EOG	EOG RES INC	Mar-23	A	2.625	71	779	850	3	2.6	3.1	100.0	99.7
14	MS	MORGAN STANLEY	Jul-28	A	3.591	175	776	951	3			94.4	94.5
15	CMCS	COMCAST	Apr-24	A	3.700	295	733	1,028	12	3.4	3.6	100.4	100.2
16	USB	U S BANCORP MEDIUM TERM NTS- BOOK ENTRY	Sep-24	A	3.600	1,140	696	1,836	17	3.8	3.8	99.7	99.5
17	V	VIVENDI	Dec-22	AA	2.800	116	694	810	6	1.7	2.4	100.4	100.1
18	AAPL	APPLE INC	May-23	AA	2.400	458	639	1,097	18	2.7	3.0	99.8	99.5
19	TFC	Null	Oct-24	A	2.850	1,299	633	1,932	15	3.4	3.9	98.7	97.8
20	T	AT&T	Dec-33	BBB	2.550	408	632	1,040	6	4.7	4.7	80.9	80.9

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: $0.5 \leq TTM \leq 1.5$
 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 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

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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