

Market Transparency Report

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

May 2024

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 May 2024

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	2	-15.4%	-0.1
CD	5	4.1%	2.2
Corp	-7	-5.6%	-0.1
Municipal	3	-1.2%	0.0
Treasury	1	-7.4%	0.2

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

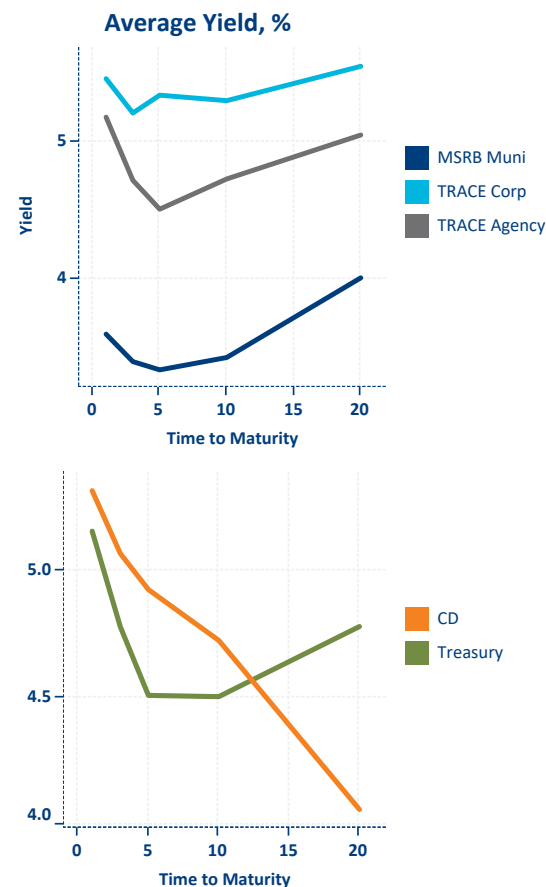
Yield Matrix

Average Yield, % for May 2024

Market	TTM					Median Maturity (Years)
	1	3	5	10	20	
MSRB Muni	3.6	3.4	3.3	3.4	4.0	8
TRACE Corp	5.5	5.2	5.3	5.3	5.6	3
TRACE Agency	5.2	4.7	4.5	4.7	5.1	4
CD	5.3	5.1	4.9	4.7	4.1	1
Treasury	5.2	4.8	4.5	4.5	4.8	0

Asset Class

Market	Category (Filtered)	Rating Key	1	3	5	10	20	Median Maturity (Years)
TRACE Corp	Financial	AA	5.2	4.9	5.1		5.4	5
		A	5.3	5.0	4.9	5.1	5.4	4
		BBB	5.5	5.4	5.8	5.5	6.3	3
		HY	6.9	7.1	8.0	8.5		4
	Non-Financial	AAA			4.5		4.8	15
		AA		4.8	4.7	4.4	5.1	14
		A	4.9	4.9	4.8	5.1	5.5	4
		BBB	5.5	5.3	5.2	5.4	6.3	4
		HY	8.1	6.9	15.4			4
MSRB Muni	GO	AAA	3.5	3.3	3.2	3.3	3.9	6
		AA	3.6	3.4	3.3	3.4	3.9	7
		A	3.7	3.5	3.4	3.7	4.2	5
		BBB	4.3	4.1	4.1	4.2	4.5	10
	Revenue	HY	8.1	4.3	6.1	7.4	5.2	8
		AAA	3.5	3.3	3.3	3.3	4.0	8
		AA	3.6	3.4	3.3	3.4	4.0	8
		A	3.8	3.6	3.5	3.6	4.1	10
		BBB	4.4	4.3	4.2	4.4	4.8	11
		HY	22.6	7.0	8.3	6.2	5.5	22



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.

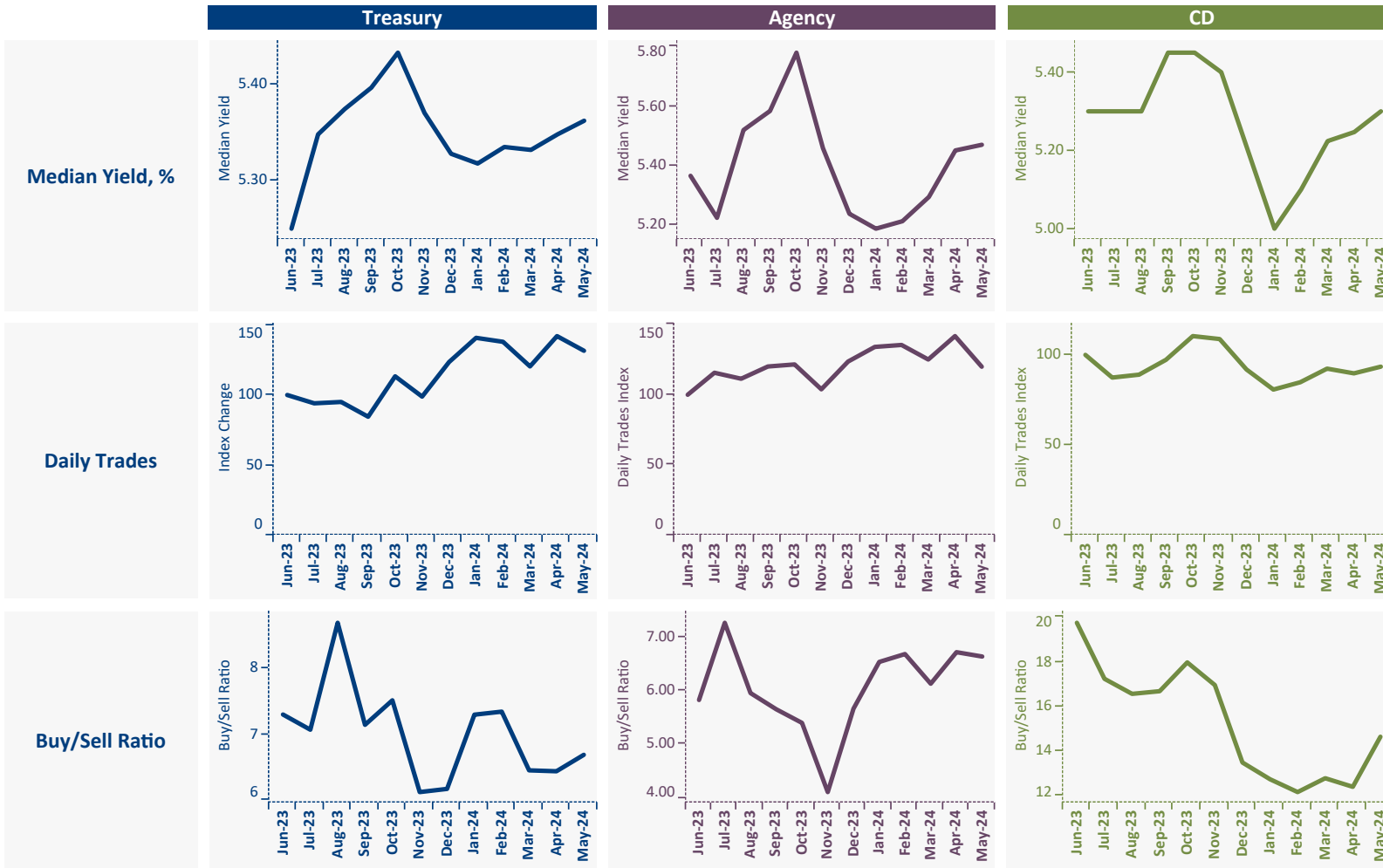
-The weights are based on transaction size.

-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

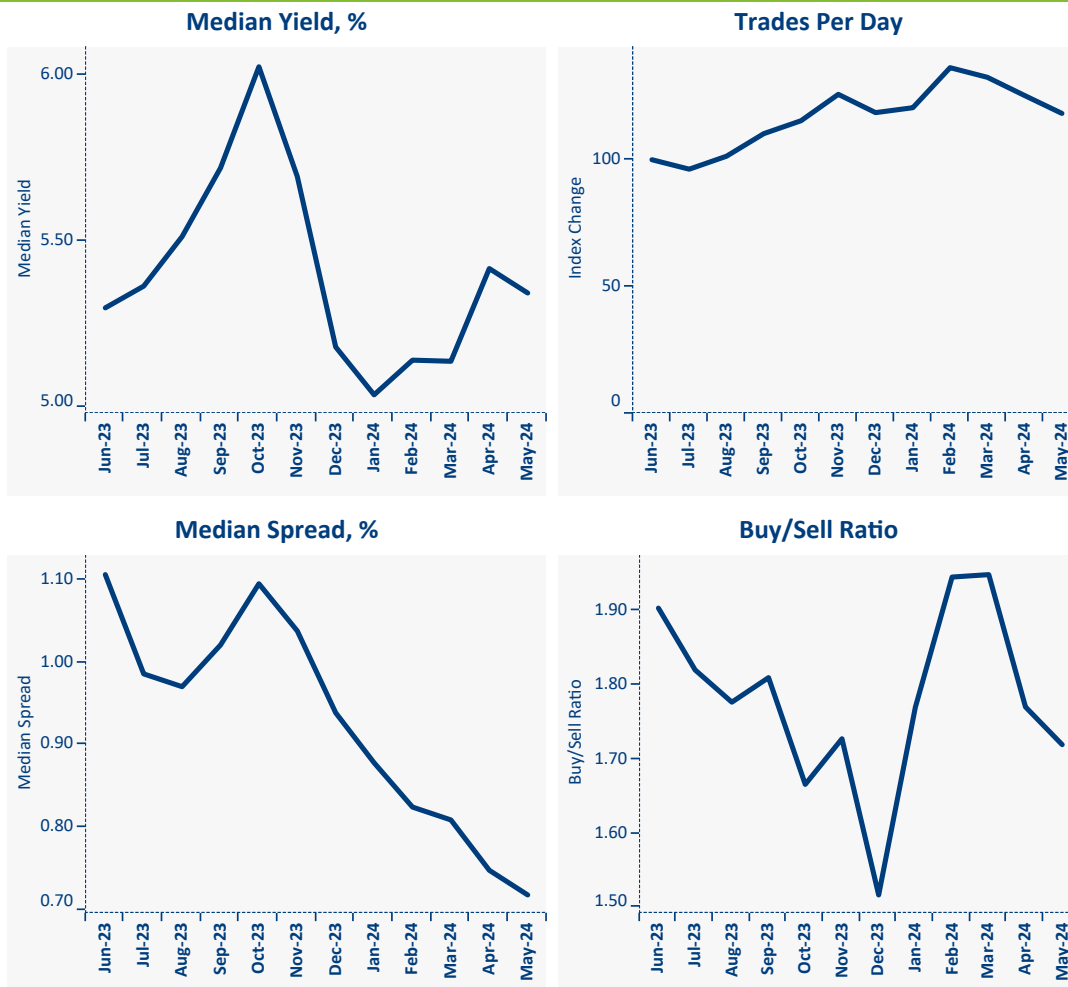
-Treasury and CD are based on transactions on the Tradeweb Direct Platform. Median yields are based on all customer buy transactions.

-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

May 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	JPM	JP MORGAN CHASE	A	1,175	3.3%	34,244	2.2	574	5.3	5.2	5.1	5.7	5.4
2	TFC	Null	BBB	39	3.2%	33,613	9.8	165	5.5	5.2	5.6		
3	GS	GOLDMAN SACHS	A	1,410	2.6%	27,245	1.5	479	5.6	5.3	5.2	5.4	5.5
4	C	CITIGROUP	BBB	877	2.5%	26,089	1.6	475	5.5	5.3	5.3	5.6	5.7
5	BAC	BANK OF AMERICA	A	506	2.2%	23,112	1.6	490	5.6	5.3	5.5	5.7	5.4
6	WFC	WELLS FARGO	A	234	1.9%	19,788	1.6	305	5.5	5.3	5.2	5.7	5.8
7	MS	MORGAN STANLEY	A	1,214	1.6%	16,778	1.1	303	5.4	5.2	5.5	5.2	5.5
8	CVS	CVS CAREMARK CORP	BBB	50	1.4%	15,234	1.9	224	5.7	5.3	5.4	5.6	6.1
9	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	94	1.1%	11,543	1.7	231	5.7	5.4	5.5	5.9	6.3
10	VZ	VERIZON	BBB	153	1.1%	11,124	1.4	147	5.5	5.1	5.1	5.3	5.6
11	AAPL	APPLE INC	AA	52	1.0%	11,013	1.9	175	5.1	4.7	4.7	4.7	5.2
12	INTC	INTEL CORP	A	41	1.0%	10,874	1.1	175	5.4	5.0	5.1	5.3	5.6
13	CMCS	COMCAST	A	68	1.0%	10,861	1.6	158	5.3	5.0	5.0	5.3	5.6
14	DUK	DUKE ENERGY	BBB	135	1.0%	10,619	2.5	163	5.4	5.3	5.1	5.4	5.8
15	T	AT&T	BBB	101	1.0%	10,351	1.3	144	5.6	5.2	5.2	5.4	5.8
16	ORCL	ORACLE CORP	BBB	38	1.0%	10,212	1.5	179	5.6	5.2	5.2	5.5	5.9
17	BRK	BERKSHIRE HATHAWAY	A	149	1.0%	10,017	2.5	210	5.4	5.1	5.1	5.5	5.5
18	UNH	UNITEDHEALTH	A	62	0.9%	9,486	2.2	175	5.3	5.0	5.0	5.2	5.4
19	ABBV	ABBVIE INC	A	27	0.8%	8,739	1.7	127	5.4	5.1	5.0	5.2	5.4
20	AMGN	AMGEN INC	BBB	42	0.8%	8,731	2.3	127	5.5	5.2	5.1	5.2	5.7

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

May 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	BKNG	Null	A	5	0.3%	3,599	3,319	280	11.9	36	5.4	5.0	5.1		
2	TFC	Null	BBB	39	3.2%	33,613	30,489	3,124	9.8	165	5.5	5.2	5.6		
3	AEP	AMERICAN ELEC PWR CO INC	BBB	79	0.4%	4,386	3,488	898	3.9	88	5.6	5.3	5.3	5.7	6.0
4	TMO	THERMO FISHER SCIENTIFIC INC	A	16	0.6%	6,741	5,231	1,510	3.5	82		5.0	5.0	5.1	5.4
5	AVGO	Null	BBB	20	0.3%	3,391	2,566	825	3.1	53	5.4	5.2	5.2	5.4	
6	MAR	MARRIOTT INTL INC NEW	BBB	23	0.3%	3,465	2,538	927	2.7	66	5.6	5.3	5.2	5.5	
7	NEE	FPL GROUP CAP INC	BBB	75	0.8%	8,633	6,230	2,403	2.6	150	5.6	5.2	5.2	5.2	5.5
8	EIX	EDISON MISSION	A	61	0.5%	5,396	3,857	1,539	2.5	94	5.8	5.2	5.4	5.7	5.9
9	DUK	DUKE ENERGY	BBB	135	1.0%	10,619	7,572	3,047	2.5	163	5.4	5.3	5.1	5.4	5.8
10	BRK	BERKSHIRE HATHAWAY	A	149	1.0%	10,017	7,135	2,882	2.5	210	5.4	5.1	5.1	5.5	5.5
11	CI	CIGNA CORP	BBB	37	0.5%	5,160	3,670	1,490	2.5	81	5.4	5.1	5.2	5.5	5.8
12	NOC	NORTHROP GRUMMAN CORP	BBB	21	0.4%	3,745	2,646	1,099	2.4	43	5.6	5.1	5.1	5.2	5.6
13	TM	TOYOTA	A	82	0.6%	6,214	4,381	1,833	2.4	140	5.3	5.0	5.0	5.2	5.8
14	MCD	MCDONALDS	BBB	32	0.6%	5,970	4,188	1,782	2.4	78	5.4	5.0	5.0	5.2	5.6
15	DE	DEERE JOHN CAP CORP MEDIUM TERM NTS-BOOK	A	67	0.6%	6,634	4,646	1,988	2.3	141	5.2	4.9	4.9	5.1	5.3
16	BA	BOEING CO	BBB	52	0.8%	8,023	5,609	2,414	2.3	154	5.9	5.9	5.9	6.1	6.4
17	BMJ	BRISTOL MYERS SQUIBB CO	A	48	0.5%	5,287	3,680	1,607	2.3	111	5.2	5.0	5.0	5.3	5.5
18	JNJ	JOHNSON & JOHNSON	AAA	28	0.3%	2,874	2,000	874	2.3	58	5.1	4.7	4.7	4.7	5.1
19	PM	PHILIP MORRIS INTL INC	A	33	0.5%	5,687	3,961	1,726	2.3	105	5.3	5.1	5.2	5.4	5.8
20	AMGN	AMGEN INC	BBB	42	0.8%	8,731	6,046	2,685	2.3	127	5.5	5.2	5.1	5.2	5.7

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

May 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	NRG	NRG ENERGY	N/R	9	0.2%	2,620	176	2,444	0.07	27		6.3			
2	GOOG	GOOGLE INC	AA	7	0.4%	4,355	785	3,570	0.22	47	5.0	5.1			5.1
3	DOW	DOW CHEM CO	BBB	111	0.3%	2,897	1,034	1,863	0.56	39	5.9	6.0	5.2	5.4	5.9
4	CHTR	CCO HOLDINGS LLC	BBB	47	0.3%	2,919	1,187	1,732	0.69	53	5.9	5.8	6.1	6.8	7.2
5	MRK	MERCK & CO INC NEW	A	30	0.4%	3,870	1,662	2,208	0.75	54	5.6	4.9	4.9	5.0	5.4
6	BTI	BAT INTERNATIONAL FINANCE PLC	BBB	36	0.3%	3,540	1,672	1,868	0.90	79	5.7	5.4	5.5	5.8	6.5
7	RDS	SHELL	AA	23	0.3%	3,011	1,423	1,588	0.90	41	5.4	5.1	4.9	5.2	5.5
8	DELL	DELL	BBB	25	0.3%	3,360	1,609	1,751	0.92	75	5.7	5.5	5.3	5.6	6.0
9	MS	MORGAN STANLEY	A	1,214	1.6%	16,778	8,736	8,042	1.09	303	5.6	5.3	5.9	5.3	5.5
10	INTC	INTEL CORP	A	41	1.0%	10,874	5,780	5,094	1.13	175	5.4	5.1	5.1	5.3	5.7
11	EDP	ENTERPRISE PRODS OPER LLC	A	35	0.4%	4,390	2,367	2,023	1.17	59	5.7	5.1	5.1	5.3	5.7
12	HMC	AMERICAN HONDA FIN CORP MED TERM NTS BOO	A	40	0.3%	3,123	1,684	1,439	1.17	64	5.5	5.1	5.1	5.3	
13	STT	STATE STR CORP	A	32	0.3%	2,774	1,526	1,248	1.22	56	5.5	5.2	4.9		
14	APC	ANADARKO PETE CORP	BBB	66	0.3%	2,631	1,466	1,165	1.26	56	5.9	5.7	5.5	5.9	6.3
15	AMT	AMERICAN TOWER CORP NEW	BBB	34	0.3%	3,306	1,877	1,429	1.31	56	5.8	5.4	5.4	5.6	
16	T	AT&T	BBB	101	1.0%	10,351	5,864	4,487	1.31	144	6.3	5.2	5.2	5.5	5.8
17	TMUS	T-MOBILE USA INC	BBB	41	0.5%	5,694	3,235	2,459	1.32	111	5.8	5.3	5.3	5.4	5.6
18	FISV	FISERV INC	BBB	15	0.3%	3,561	2,030	1,531	1.33	48	5.8	5.3	5.3	5.5	
19	BMO	BANK MONTREAL MEDIUM TERM SR NTS BOOK EN	A	314	0.4%	3,688	2,112	1,576	1.34	74	5.6	5.3	5.2	6.0	
20	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	BBB	209	0.4%	4,196	2,399	1,797	1.34	74	6.2	5.7	5.5	5.6	5.6

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

May 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	TFC	Null	Jun-34	BBB	5.867	25,966	194	26,160	42			100.3	100.1
2	JPM	JP MORGAN CHASE	Jun-34	A	5.350	3,834	98	3,932	22			99.3	99.1
3	TMO	THERMO FISHER SCIENTIFIC INC	Oct-31	A	2.000	3,647	248	3,895	27	5.1	5.1	81.1	81.1
4	BKNG	Null	Jun-26	A	3.600	3,129	91	3,220	30	5.0	5.2	97.3	97.0
5	JPM	JP MORGAN CHASE	Null	BBB	6.875	2,945	268	3,213	53			104.4	103.8
6	CVS	CVS CAREMARK CORP	Mar-28	BBB	4.300	2,241	1,423	3,664	29	5.3	5.4	96.5	96.3
7	CVS	CVS CAREMARK CORP	Jun-29	BBB	5.400	2,241	53	2,294	30	5.4	5.4	99.9	100.2
8	DUK	DUKE ENERGY	Apr-26	BBB	4.125	2,101	56	2,157	14	4.2	4.2	99.9	99.9
9	CMCS	COMCAST	Oct-28	A	4.150	1,876	1,113	2,989	22	5.0	5.0	96.7	96.6
10	AAPL	APPLE INC	Nov-27	AA	3.000	1,745	512	2,257	11	4.7	4.7	94.6	94.5
11	HPQ	HEWLETT PACKARD	Oct-25	BBB	4.900	1,693	645	2,338	15	5.5	5.6	99.2	99.1
12	UTX	UNITED TECHNOLOGIES CORP	Aug-25	BBB	3.950	1,643	604	2,247	14	5.4	5.4	98.3	98.2
13	LOW	LOWES COS INC	Apr-26	BBB	2.500	1,618	504	2,122	11	5.2	5.2	95.1	95.1
14	DWDP	Null	Nov-28	BBB	4.725	1,539	462	2,001	12	4.9	4.9	99.3	99.1
15	BP	BP	Sep-27	A	3.279	1,531	516	2,047	9	5.0	5.1	94.7	94.5
16	AMGN	AMGEN INC	Mar-28	BBB	5.150	1,456	166	1,622	23	5.2	5.2	99.9	99.8
17	GS	GOLDMAN SACHS	Null	BB	7.500	1,314	199	1,513	51			103.5	102.6
18	ABBV	ABBVIE INC	Nov-28	A	4.250	1,174	438	1,612	13	4.9	5.0	97.3	97.2
19	CI	CIGNA CORP	Oct-28	BBB	4.375	1,162	420	1,582	14	5.2	5.2	96.8	96.6
20	PFE	PFIZER	Mar-29	A	3.450	1,141	369	1,510	10	4.8	4.9	94.1	93.9

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

May 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	GOOG	GOOGLE INC	Aug-26	AA	1.998	104	3,152	3,256	28	4.9	5.1	93.9	93.5
2	INTC	INTEL CORP	Aug-31	A	2.000	143	2,988	3,131	22	5.2	5.4	80.7	79.8
3	NRG	NRG ENERGY	Jun-48	N/R	2.750	11	2,127	2,138	20			202.9	189.0
4	MRK	MERCK & CO INC NEW	Feb-25	A	2.750	699	1,535	2,234	18	5.3	5.6	98.2	98.1
5	DOW	DOW CHEM CO	Nov-30	BBB	2.100	32	1,484	1,516	6	5.1	5.4	83.6	82.1
6	CVS	CVS CAREMARK CORP	Mar-28	BBB	4.300	2,241	1,423	3,664	29	5.3	5.4	96.5	96.3
7	CVS	CVS CAREMARK CORP	Jan-29	BBB	5.000	671	1,141	1,812	20	5.3	5.4	98.8	98.5
8	CMCS	COMCAST	Oct-28	A	4.150	1,876	1,113	2,989	22	5.0	5.0	96.7	96.6
9	LOW	LOWES COS INC	Jul-33	BBB	5.150	217	1,055	1,272	9	5.2	5.2	99.3	99.9
10	VZ	VERIZON	Mar-27	BBB	4.125	613	792	1,405	13	5.1	5.1	97.5	97.4
11	GS	GOLDMAN SACHS	Mar-30	A	3.800	805	743	1,548	14	5.2	5.2	92.9	92.8
12	CHTR	CCO HOLDINGS LLC	Jul-25	BBB	4.908	74	680	754	7	5.8	5.9	99.0	98.9
13	HPQ	HEWLETT PACKARD	Oct-25	BBB	4.900	1,693	645	2,338	15	5.5	5.6	99.2	99.1
14	WFC	WELLS FARGO	May-28	A	3.584	425	635	1,060	8			94.9	94.9
15	UTX	UNITED TECHNOLOGIES CORP	Aug-25	BBB	3.950	1,643	604	2,247	14	5.4	5.4	98.3	98.2
16	MS	MORGAN STANLEY	Oct-33	A	6.342	175	603	778	7			105.6	105.7
17	T	AT&T	Mar-29	BBB	4.350	868	576	1,444	13	5.1	5.2	96.7	96.5
18	T	AT&T	Dec-33	BBB	2.550	477	576	1,053	8	5.4	5.4	78.9	78.8
19	C	CITIGROUP	Jul-28	BBB	3.668	269	576	845	9			95.0	94.9
20	AMZN	AMAZON COM INC	Jun-30	AA	1.500	544	533	1,077	6	4.8	4.8	82.8	82.8

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

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