

Market Transparency Report

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

December 2024

www.tradeweb.com

1177 Avenue of the Americas
New York, NY 10036
212.852.1234

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 December 2024

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	3	-20.8%	1.8
CD	-5	-6.4%	0.6
Corp	2	-10.3%	-0.3
Municipal	-1	5.8%	0.0
Treasury	-14	4.8%	0.1

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

Yield Matrix

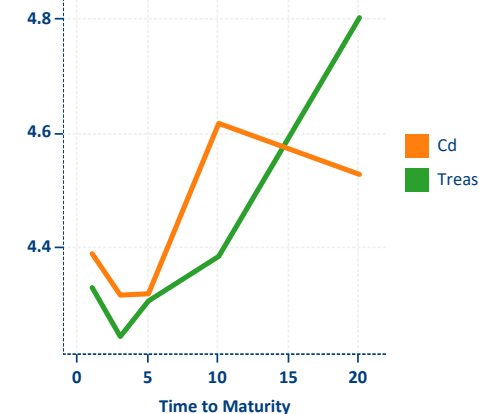
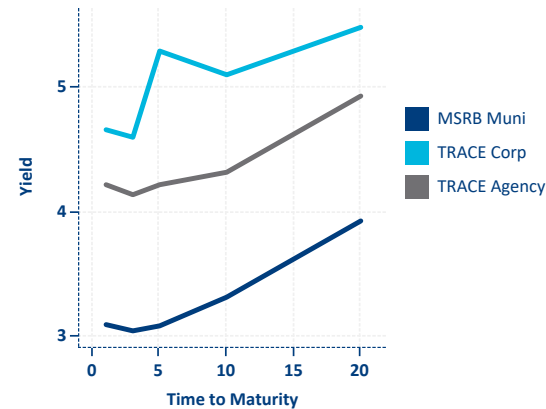
Average Yield, % for December 2024

Market	TTM					Median Maturity (Years)
	1	3	5	10	20	
MSRB Muni	3.1	3.1	3.1	3.3	3.9	9
TRACE Corp	4.7	4.6	5.3	5.1	5.5	3
TRACE Agency	4.2	4.1	4.2	4.3	4.9	5
Cd	4.4	4.3	4.3	4.6	4.5	1
Treas	4.3	4.2	4.3	4.4	4.8	1

Asset Class

Market	Category (Filtered)	Rating Key	TTM					Median Maturity (Years)	
			1	3	5	10	20		
TRACE Corp	Financial	AA	4.5	4.5	4.6			4	
		A	4.4	4.5	4.6	5.0	5.3	3	
		BBB	4.6	4.8	4.9	5.3	6.1	2	
		HY	5.9	6.9	8.3	7.3		3	
	Non-Financial	AAA			4.1	2.5	4.5	15	
		AA	4.5	4.0	4.3	4.6	5.0	13	
		A	4.3	4.4	4.5	4.8	5.2	3	
		BBB	4.7	4.7	4.8	5.3	6.2	5	
		HY	6.6	5.8	16.6			1	
MSRB Muni	GO	AAA	3.0	3.0	3.0	3.2	3.8	7	
		AA	3.1	3.0	3.1	3.3	3.9	8	
		A	3.2	3.2	3.3	3.5	4.0	6	
		BBB	3.5	3.6	4.0	4.2	4.5	9	
	Revenue	HY		5.9	5.5	5.2	5.1	11	
		AAA	3.0	3.0	3.0	3.1	3.8	9	
		AA	3.1	3.0	3.1	3.3	3.9	9	
		A	3.2	3.2	3.3	3.5	4.1	11	
		BBB	3.9	3.8	4.0	4.3	4.6	13	
		HY	6.0	6.5	8.9	7.8	5.4	13	

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.

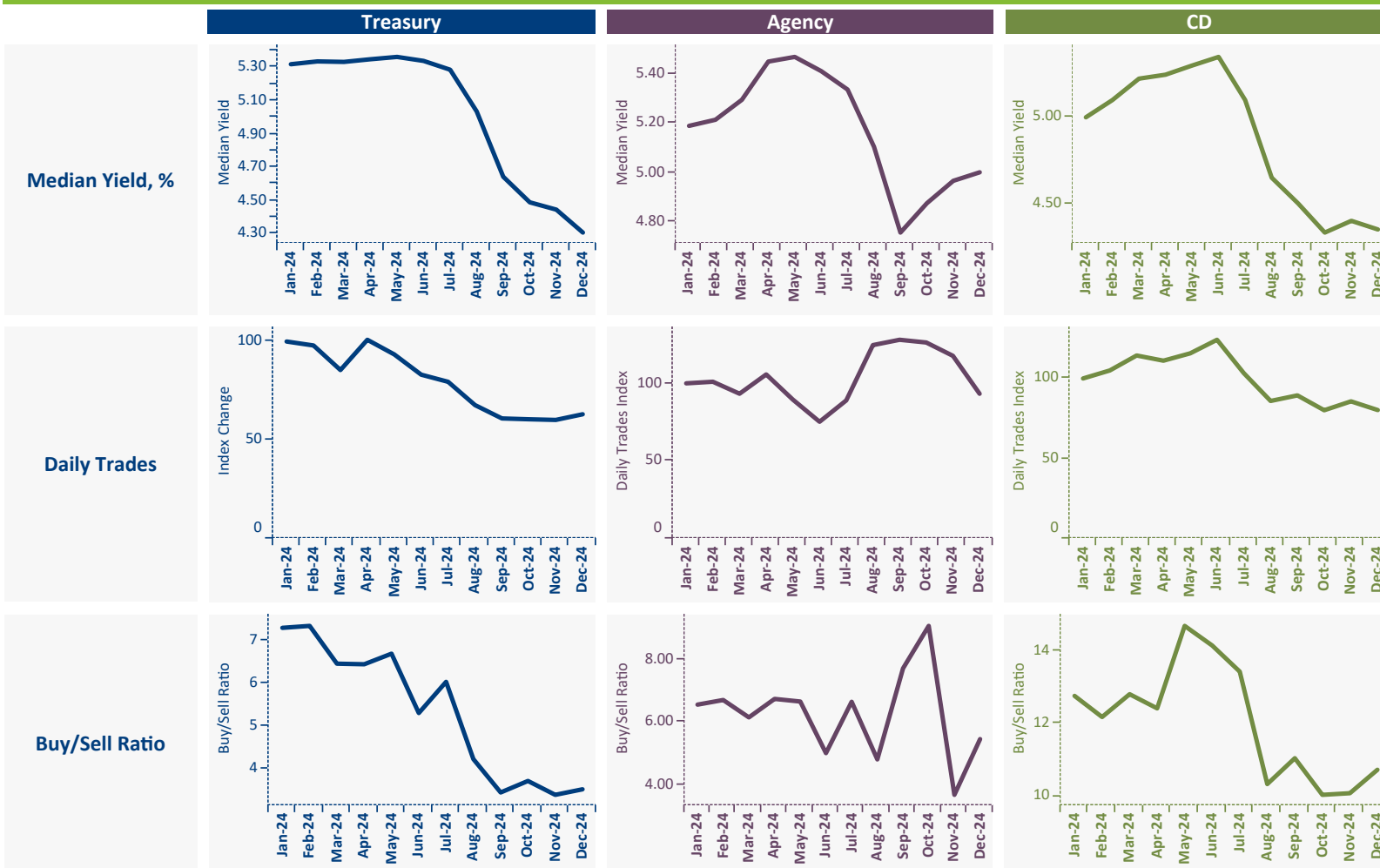
-The weights are based on transaction size.

-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

December 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	1,306	2.7%	28,168	1.4	485	4.4	4.5	4.7	5.2	5.4
2	C	CITIGROUP	BBB	881	2.4%	25,884	1.3	458	4.7	4.8	4.9	5.3	5.5
3	GS	GOLDMAN SACHS	A	1,316	2.4%	24,964	1.1	419	4.6	4.7	5.1	4.9	5.4
4	BAC	BANK OF AMERICA	A	573	2.1%	21,838	1.2	476	4.6	4.7	5.0	5.1	5.4
5	WFC	WELLS FARGO	A	256	1.9%	20,579	1.2	313	4.7	4.7	4.8	5.2	5.7
6	MS	MORGAN STANLEY	A	1,444	1.7%	17,832	1.0	329	4.6	4.6	4.9	5.1	5.2
7	UNH	UNITEDHEALTH	A	67	1.4%	14,923	1.3	219	4.4	4.5	4.9	5.1	5.5
8	CVS	CVS CAREMARK CORP	BBB	49	1.3%	13,661	1.4	199	4.9	5.0	5.1	5.6	6.2
9	T	AT&T	BBB	107	1.2%	13,002	0.8	171	4.7	4.6	4.8	5.1	5.6
10	CMCS	COMCAST	A	66	1.2%	12,305	1.1	187	4.4	4.6	4.7	5.0	5.6
11	AAPL	APPLE INC	AA	49	1.1%	11,506	1.5	174	4.1	4.2	4.4	4.5	5.1
12	VZ	VERIZON	BBB	175	1.0%	11,096	0.9	173	4.5	4.5	4.8	5.1	5.5
13	TMUS	T-MOBILE USA INC	BBB	41	1.0%	10,842	2.9	128	4.6	4.8	4.8	5.1	5.5
14	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	84	1.0%	10,825	1.4	222	4.8	4.8	5.0	5.5	6.1
15	ABBV	ABBVIE INC	A	26	1.0%	10,630	1.4	145	4.5	4.6	4.7	5.0	5.4
16	ORCL	ORACLE CORP	BBB	40	1.0%	10,507	1.3	181	4.6	4.6	4.8	5.1	5.6
17	DUK	DUKE ENERGY	BBB	133	0.8%	8,889	1.5	160	4.5	4.6	4.8	5.1	5.6
18	BP	BP	A	36	0.8%	8,599	1.7	125	4.4	4.5	4.7	5.1	5.4
19	PFE	PFIZER	A	48	0.8%	8,515	1.8	126	4.5	4.5	4.6	5.0	5.4
20	PNC	PNC FDG CORP	A	35	0.8%	8,425	1.7	120	4.6	4.7	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

December 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	PSX	PHILLIPS 66	BBB	28	0.4%	4,440	3,340	1,100	3.0	64	4.7	4.6	4.9	5.3	5.9
2	TMUS	T-MOBILE USA INC	BBB	41	1.0%	10,842	8,027	2,815	2.9	128	4.6	4.8	4.8	5.1	5.5
3	AEP	AMERICAN ELEC PWR CO INC	BBB	81	0.4%	3,730	2,677	1,053	2.5	80	4.7	4.7	4.9	5.3	5.7
4	DWDP	Null	BBB	8	0.3%	2,995	2,121	874	2.4	26	4.7	4.6	4.6	5.0	5.2
5	FISV	FISERV INC	BBB	16	0.4%	4,718	3,280	1,438	2.3	57	4.8	4.6	4.9	5.2	5.5
6	MET	METLIFE	A	23	0.4%	3,771	2,623	1,148	2.3	56	4.4	4.6	4.6	4.9	5.4
7	HPQ	HEWLETT PACKARD	BBB	22	0.5%	5,573	3,754	1,819	2.1	78	4.7	4.7	4.9	5.2	5.7
8	SBUX	STARBUCKS CORP	BBB	20	0.3%	3,341	2,246	1,095	2.1	47	4.5	4.6	4.8	5.1	5.6
9	NOC	NORTHROP GRUMMAN CORP	BBB	22	0.4%	4,221	2,833	1,388	2.0	47	4.5	4.8	4.7	4.9	5.3
10	HON	HONEYWELL INTL INC	A	24	0.3%	3,130	2,094	1,036	2.0	66	4.4	4.5	4.5	4.9	5.3
11	TMO	THERMO FISHER SCIENTIFIC INC	A	15	0.3%	3,335	2,214	1,121	2.0	44		4.4	4.6	4.8	5.4
12	JNJ	JOHNSON & JOHNSON	AAA	28	0.3%	2,946	1,950	996	2.0	65	4.3	4.3	4.3	4.7	5.0
13	WMI	WASTE MGMT INC DEL	A	26	0.3%	3,544	2,334	1,210	1.9	75	4.4	4.5	4.6	4.9	5.2
14	LUK	JEFFERIES GROUP INC NEW	BBB	141	0.2%	2,495	1,624	871	1.9	53	4.6	4.8	5.2	5.5	6.1
15	MO	ALTRIA GROUP INC	BBB	22	0.3%	3,585	2,326	1,259	1.9	76	4.7	4.8	4.9	5.3	5.9
16	TM	TOYOTA	A	79	0.6%	6,182	4,014	2,168	1.9	134	4.4	4.5	4.6	4.9	
17	KMI	KINDER MORGAN ENERGY PARTNERS L P	BBB	56	0.4%	4,736	3,058	1,678	1.8	78	4.8	4.8	4.9	5.3	5.8
18	ABT	ABBOTT LABS	AA	13	0.2%	2,464	1,588	876	1.8	29	4.4	4.3	4.3	4.9	5.2
19	RBC	Null	A	119	0.2%	2,416	1,550	866	1.8	38		4.6	4.7	5.1	
20	PFE	PFIZER	A	48	0.8%	8,515	5,426	3,089	1.8	126	4.5	4.5	4.6	5.0	5.4

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

December 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	RDS	SHELL	AA	32	0.3%	3,393	1,220	2,173	0.56	44	4.5	4.5	4.6	4.9	5.5
2	CHTR	CCO HOLDINGS LLC	BBB	45	0.2%	2,416	1,029	1,387	0.74	53	5.3		5.4	6.1	6.7
3	T	AT&T	BBB	107	1.2%	13,002	5,822	7,180	0.81	171	4.7	4.7	4.8	5.1	5.6
4	BTI	BAT INTERNATIONAL FINANCE PLC	BBB	35	0.3%	2,996	1,354	1,642	0.82	70	5.0	4.8	5.0	5.4	6.1
5	EDP	ENTERPRISE PRODS OPER LLC	A	37	0.5%	5,574	2,507	3,067	0.82	81	4.6	4.6	4.7	5.1	5.6
6	VZ	VERIZON	BBB	175	1.0%	11,096	5,134	5,962	0.86	173	4.7	4.6	4.8	5.2	5.7
7	COF	CAPITAL ONE FINL CORP	BBB	28	0.8%	8,047	3,914	4,133	0.95	103	5.0	4.9			
8	AXP	AMERICAN EXPRESS	A	37	0.8%	8,159	4,099	4,060	1.01	124	4.7	4.6	4.5		5.3
9	MS	MORGAN STANLEY	A	1,444	1.7%	17,832	8,947	8,885	1.01	329	4.8	4.7	5.3	5.5	5.4
10	EXC	EXELON GENERATION CO LLC	BBB	95	0.3%	2,779	1,403	1,376	1.02	60	4.8	4.7	4.9	5.2	5.5
11	GS	GOLDMAN SACHS	A	1,316	2.4%	24,964	12,886	12,078	1.07	419	4.8	4.8	4.9	5.2	5.5
12	AMZN	AMAZON COM INC	AA	31	0.8%	8,246	4,273	3,973	1.08	136	4.5	4.4	4.5	4.6	5.1
13	CMCS	COMCAST	A	66	1.2%	12,305	6,390	5,915	1.08	187	4.6	4.7	4.7	5.1	5.5
14	MAR	MARRIOTT INTL INC NEW	BBB	25	0.2%	2,450	1,286	1,164	1.10	49	4.8	4.8	4.9	5.2	
15	DELL	DELL	BBB	24	0.3%	2,991	1,584	1,407	1.13	66	4.9	4.8	4.9	5.3	5.7
16	PSEC	PROSPECT CAP CORP INTERNOTES BOOK ENTRY	BB	202	0.2%	2,497	1,328	1,169	1.14	37	7.0	7.8	8.4	8.2	8.2
17	AMT	AMERICAN TOWER CORP NEW	BBB	35	0.3%	3,358	1,814	1,544	1.17	61	5.0	4.8	4.9	5.2	5.4
18	DIS	DISNEY WALT CO NEW MEDIUM TERM NTS BOOK	A	65	0.5%	5,261	2,861	2,400	1.19	83	4.6	4.5	4.6	4.9	5.4
19	PEP	PEPSICO	A	46	0.3%	3,060	1,670	1,390	1.20	57	4.5	4.4	4.6	4.7	5.3
20	WFC	WELLS FARGO	A	256	1.9%	20,579	11,260	9,319	1.21	313	4.7	4.8	4.8	5.5	5.7

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.

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Corporate Bonds: Top 20 Most Bought Issues

December 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	TMUS	T-MOBILE USA INC	Apr-26	BBB	2.625	4,793	117	4,910	12	4.6	4.7	97.4	97.4
2	CVS	CVS CAREMARK CORP	Mar-28	BBB	4.300	2,175	2,072	4,247	33	5.0	5.1	97.9	97.7
3	CI	CIGNA CORP	Oct-28	BBB	4.375	2,075	1,924	3,999	33	4.8	4.9	98.5	98.3
4	CMCS	COMCAST	Oct-28	A	4.150	1,832	1,735	3,567	30	4.6	4.7	98.4	98.1
5	DWDP	Null	Nov-28	BBB	4.725	1,772	612	2,384	14	4.6	4.7	100.3	100.2
6	HPQ	HEWLETT PACKARD	Oct-25	BBB	4.900	1,696	644	2,340	12	4.7	4.9	100.1	100.0
7	AAPL	APPLE INC	Nov-27	AA	3.000	1,666	627	2,293	11	4.2	4.3	96.7	96.6
8	UTX	UNITED TECHNOLOGIES CORP	Aug-25	BBB	3.950	1,642	658	2,300	11	4.5	4.8	99.6	99.5
9	GS	GOLDMAN SACHS	Mar-30	A	3.800	1,556	1,374	2,930	35	5.2	4.9	93.8	94.8
10	PSX	PHILLIPS 66	Nov-34	BBB	4.650	1,532	401	1,933	13	5.3	5.3	95.1	95.0
11	LOW	LOWES COS INC	Apr-26	BBB	2.500	1,521	600	2,121	10	4.5	4.5	97.5	97.4
12	AJGG	Null	Dec-29	BBB	4.850	1,418	32	1,450	9	5.0	5.1	100.2	99.2
13	ABBV	ABBVIE INC	Nov-28	A	4.250	1,344	609	1,953	14	4.6	4.6	98.9	98.9
14	FISV	FISERV INC	Mar-30	BBB	4.750	1,341	44	1,385	12	4.9	5.1	99.3	98.6
15	NOC	NORTHROP GRUMMAN CORP	Jan-28	BBB	3.250	1,256	550	1,806	18	4.8	4.7	95.7	95.8
16	HD	HOME DEPOT	Sep-32	A	4.500	1,255	349	1,604	11	4.7	4.7	98.6	99.0
17	UNH	UNITEDHEALTH	May-32	A	4.200	1,254	181	1,435	12	4.9	5.0	95.6	95.3
18	PNC	PNC FDG CORP	Jun-29	A	5.582	1,205	556	1,761	15			102.2	102.3
19	BP	BP	Sep-27	A	3.279	1,201	591	1,792	9	4.5	4.5	97.0	96.8
20	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	Jun-30	A	3.500	1,173	384	1,557	8	4.7	4.7	94.5	94.3

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

December 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	EEFT	Null	Mar-49	BBB	0.750	32	2,151	2,183	12	0.8	0.8	98.8	98.6
2	CVS	CVS CAREMARK CORP	Mar-28	BBB	4.300	2,175	2,072	4,247	33	5.0	5.1	97.9	97.7
3	PSN	Null	Aug-25	N/R	0.250	4	2,065	2,069	11			212.9	212.3
4	CI	CIGNA CORP	Oct-28	BBB	4.375	2,075	1,924	3,999	33	4.8	4.9	98.5	98.3
5	CMCS	COMCAST	Oct-28	A	4.150	1,832	1,735	3,567	30	4.6	4.7	98.4	98.1
6	AXP	AMERICAN EXPRESS	Nov-27	A	5.850	340	1,565	1,905	14	4.5	4.6	103.6	103.3
7	COF	CAPITAL ONE FINL CORP	May-28	BBB	4.927	100	1,530	1,630	10			100.1	100.1
8	T	AT&T	Jun-27	BBB	2.300	227	1,466	1,693	12	4.6	4.7	94.7	94.4
9	FANG	Diamondback Energy, Inc.	Apr-27	BBB	5.200	114	1,400	1,514	10	4.6	4.6	101.4	101.3
10	GS	GOLDMAN SACHS	Mar-30	A	3.800	1,556	1,374	2,930	35	5.2	4.9	93.8	94.8
11	UNH	UNITEDHEALTH	May-29	A	4.000	843	1,357	2,200	20	5.0	4.8	96.2	96.9
12	VZ	VERIZON	Mar-27	BBB	4.125	721	1,346	2,067	22	4.5	4.6	99.1	99.0
13	WFC	WELLS FARGO	May-28	A	3.584	320	1,201	1,521	13			97.3	97.1
14	T	AT&T	Dec-33	BBB	2.550	328	1,151	1,479	13	5.0	5.1	82.3	82.1
15	C	CITIGROUP	Jul-28	BBB	3.668	290	1,016	1,306	13			97.1	97.1
16	AMZN	AMAZON COM INC	Jun-30	AA	1.500	342	989	1,331	9	4.5	4.5	85.6	85.6
17	MS	MORGAN STANLEY	Jul-28	A	3.591	247	916	1,163	8			96.9	96.8
18	C	CITIGROUP	Jan-28	BBB	3.887	444	910	1,354	12			98.3	98.1
19	JPM	JP MORGAN CHASE	Dec-29	A	4.452	490	903	1,393	12			98.7	98.7
20	ABBV	ABBVIE INC	Mar-31	A	4.950	666	775	1,441	16	4.8	4.8	101.0	100.9

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 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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