

# Market Transparency Report

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

**April 2019**

[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 April 2019

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	-7	-1.5%	-0.1
CD	-8	-12.2%	-4.2
Corp	-14	-1.6%	-0.1
Municipal	-14	-1.4%	0.1
Treasury	-3	2.9%	-0.9

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

# Yield Matrix

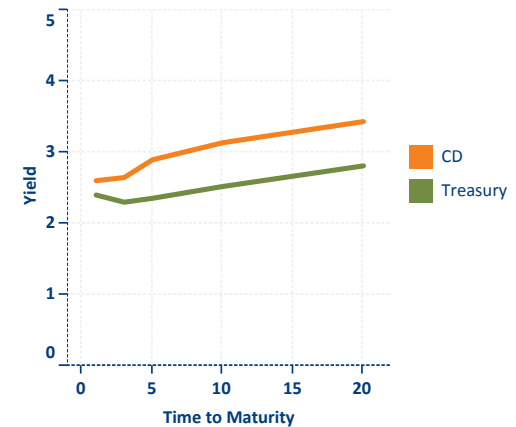
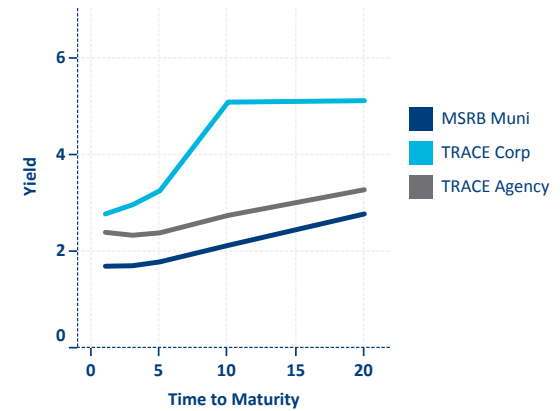
## Average Yield, % for April 2019

Market	TTM					Median Maturity (Years)
	1	3	5	10	20	
MSRB Muni	1.7	1.7	1.8	2.1	2.8	10
TRACE Corp	2.8	3.0	3.3	5.1	5.1	4
TRACE Agency	2.4	2.3	2.4	2.8	3.3	3
CD	2.6	2.6	2.9	3.2	3.4	1
Treasury	2.4	2.3	2.4	2.5	2.8	0

## Asset Class

Market	Category (Filtered)	Rating Key	TTM					Median Maturity (Years)
			1	3	5	10	20	
TRACE Corp	Financial	AA	2.6	2.6	2.8			2
		A	2.6	2.8	3.0	3.3	4.1	3
		BBB	3.0	3.3	3.5	4.1	5.2	4
		HY	2.9	3.7	4.5	7.9	6.2	3
		AAA	2.4		2.1	3.1	3.6	2
	Non-Financial	AA	2.5	2.4	2.7	3.2	3.8	1
		A	2.5	2.6	2.9	3.5	4.3	3
		BBB	2.9	3.3	4.0	4.9	5.8	8
		HY	7.5	4.3	6.6	11.4	18.1	8
MSRB Muni	GO	AAA	1.6	1.6	1.7	1.9	2.7	8
		AA	1.6	1.7	1.7	2.1	2.8	9
		A	1.7	1.8	1.9	2.3	2.9	7
		BBB	2.4	2.4	3.0	3.4	3.6	11
		HY	2.7	3.8	5.5	4.0	4.2	8
		AAA	1.7	1.6	1.7	1.9	2.6	8
	Revenue	AA	1.7	1.7	1.7	2.0	2.6	10
		A	1.7	1.8	1.9	2.2	2.8	13
		BBB	2.2	2.2	2.5	2.9	3.2	15
		HY	3.4	4.7	5.0	4.6	5.0	12

## 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.

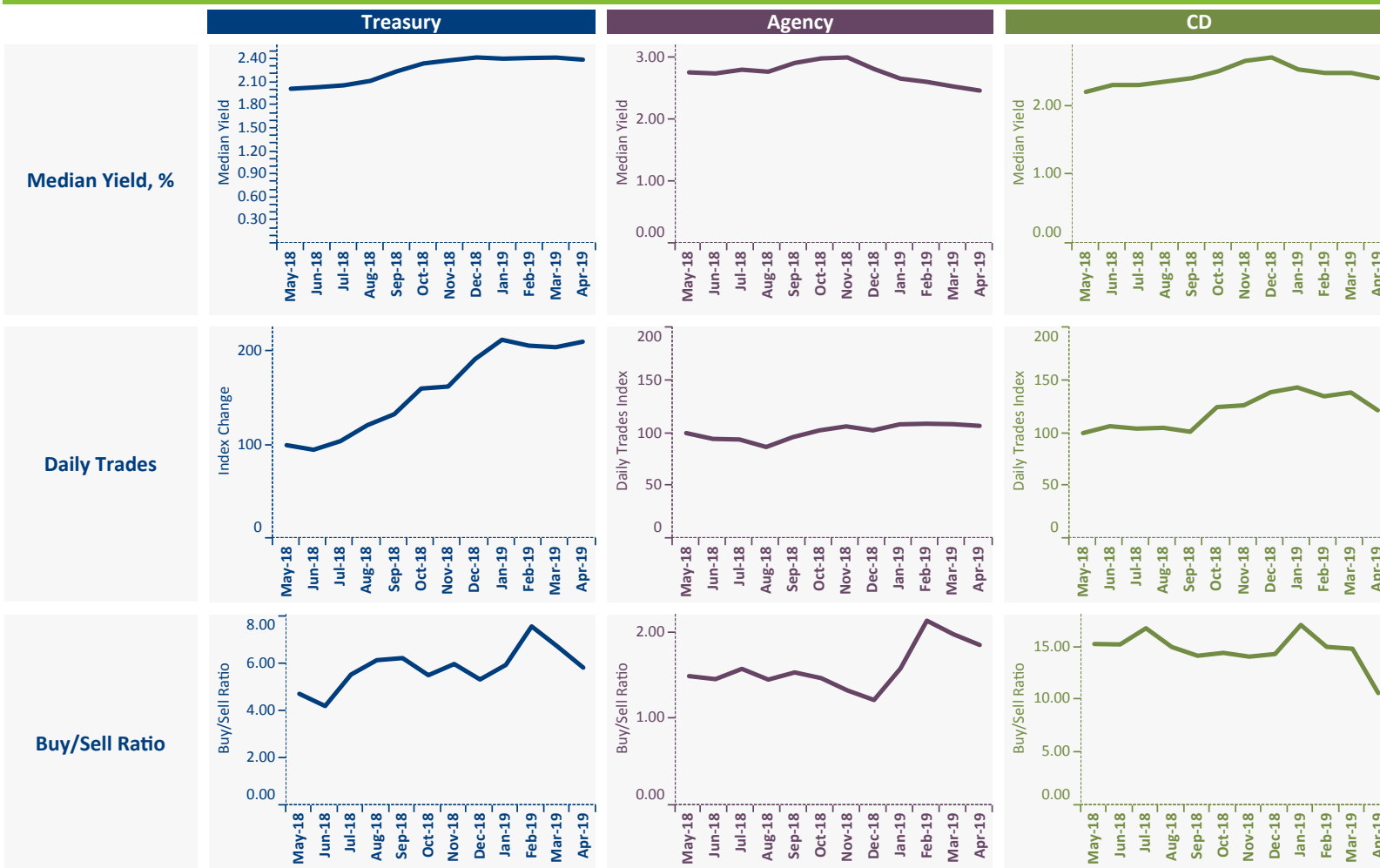
-The weights are based on transaction size.

-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

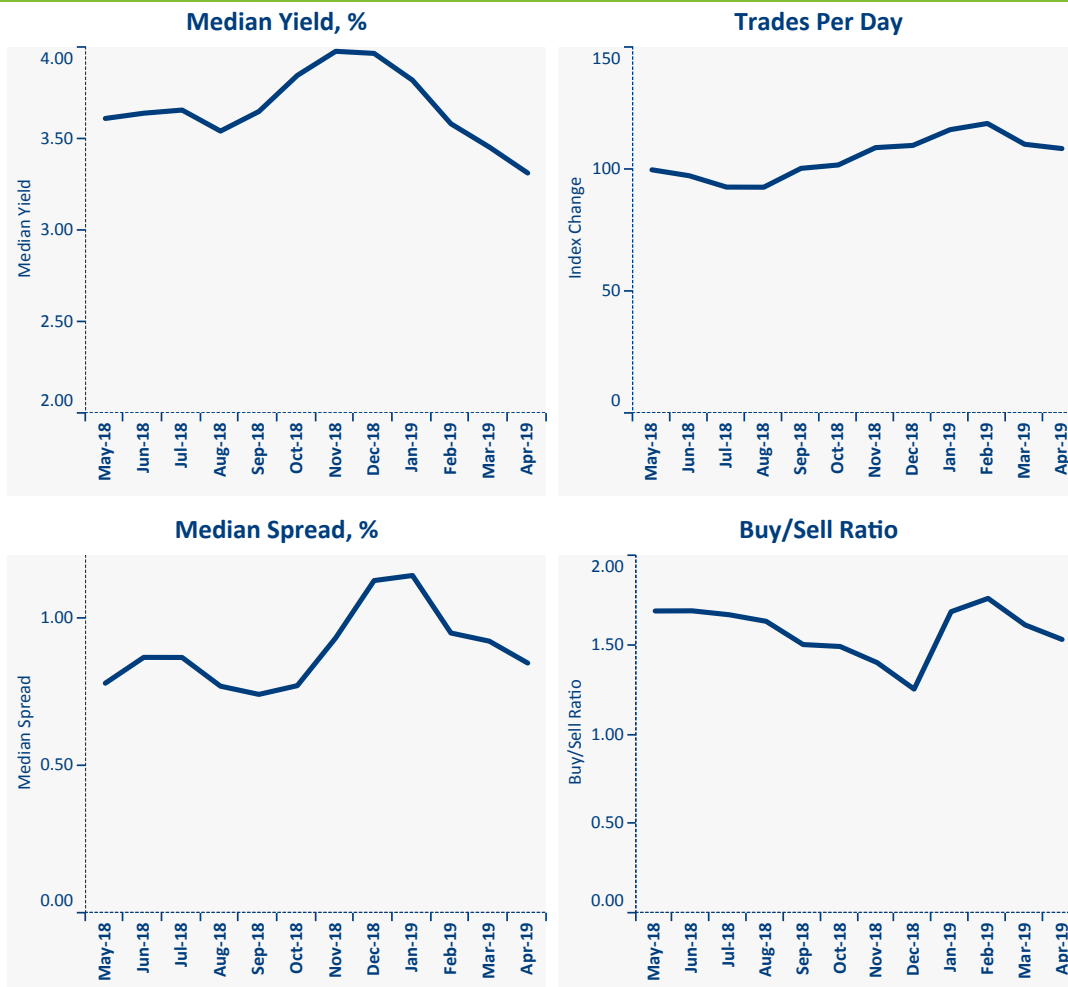
-Treasury and CD are based on transactions on the Tradeweb Direct Platform. Median yields are based on all customer buy transactions.

-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

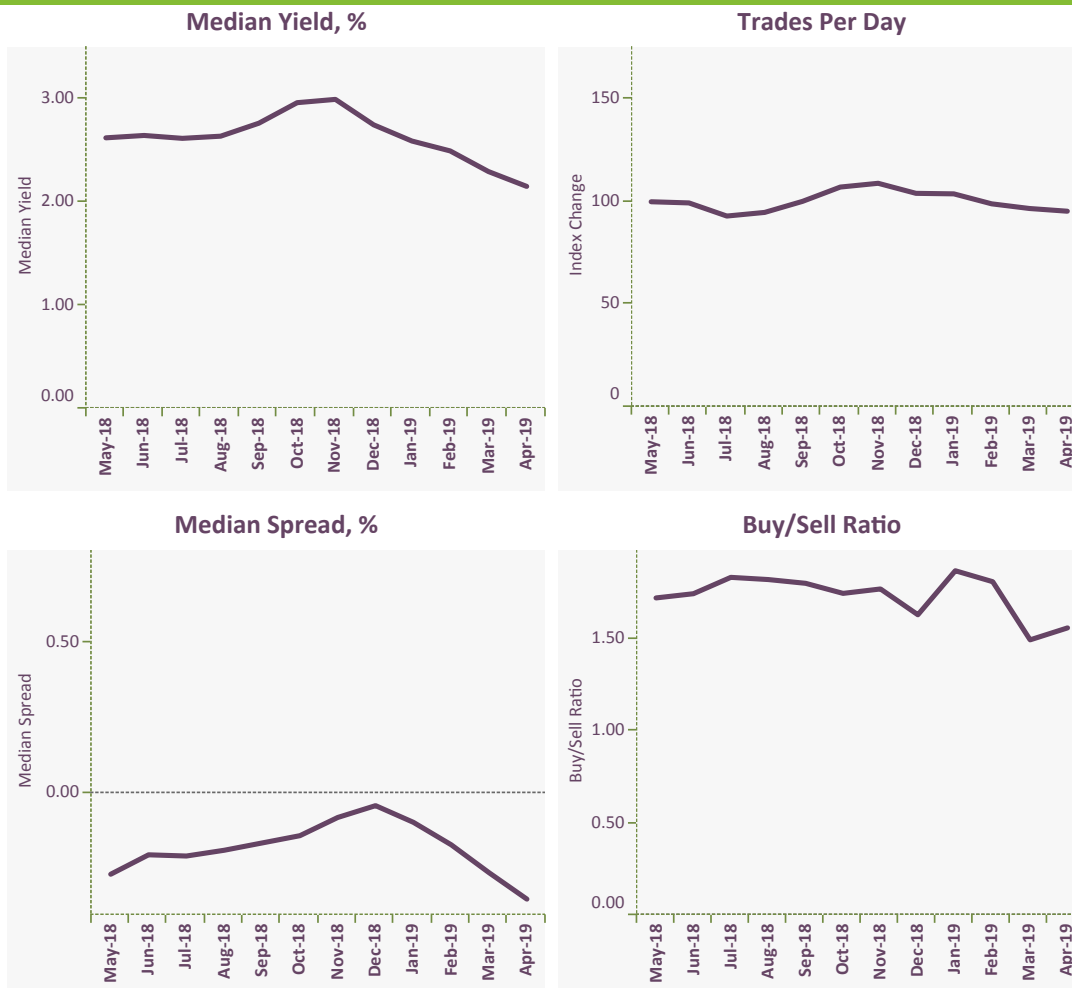
-Based on odd-lot customer transactions (<100M) reported in TRACE.

-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

April 2019

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	BBB	978	3.2%	16,503	1.6	352	2.7	3.0	3.3	3.7	4.6
2	JPM	JP MORGAN CHASE	A	666	3.1%	16,233	1.2	338	2.6	2.8	3.0	3.4	4.1
3	BAC	BANK OF AMERICA	A	425	2.4%	12,446	1.7	272	2.6	2.9	3.4	3.6	4.1
4	C	CITIGROUP	BBB	427	2.4%	12,337	1.3	265	2.7	2.9	3.2	3.9	4.1
5	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	BBB	326	2.1%	10,697	1.3	208	2.9	3.3	3.8	4.7	5.2
6	WFC	WELLS FARGO	A	213	1.8%	9,375	1.6	210	2.7	2.9	3.1	3.4	4.0
7	MS	MORGAN STANLEY	BBB	765	1.7%	8,862	1.1	191	2.7	2.9	3.2	3.6	4.2
8	T	AT&T	BBB	96	1.7%	8,536	1.2	180	2.7	2.9	3.2	3.8	4.7
9	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	96	1.6%	8,258	2.7	193	3.0	3.3	3.8	4.5	5.6
10	AAPL	APPLE INC	AA	52	1.3%	6,530	1.4	137	2.4	2.5	2.8	3.1	3.6
11	F	FORD	BBB	241	1.2%	6,357	2.3	154	3.1	3.3	4.0	5.1	6.2
12	CVS	CVS CAREMARK CORP	BBB	41	1.2%	6,133	2.6	135	2.8	3.1	3.4	4.1	4.8
13	BRK	BERKSHIRE HATHAWAY	A	158	1.0%	5,166	1.5	124	2.6	2.6	2.8	3.7	5.0
14	VZ	VERIZON	BBB	130	1.0%	5,031	1.0	103	2.7	2.7	3.0	3.4	4.1
15	CMCS	COMCAST	A	61	0.9%	4,584	1.7	96	2.7	2.7	3.0	3.4	4.0
16	AXP	AMERICAN EXPRESS	BBB	37	0.9%	4,403	1.5	99	2.6	2.8	3.0	3.1	4.1
17	ORCL	ORACLE CORP	AA	29	0.8%	4,199	1.5	81	2.5	2.7	2.8	3.2	3.7
18	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	BBB	47	0.8%	4,057	2.6	81	2.6	2.9	3.1	3.8	4.6
19	MSFT	MICROSOFT CORP	AAA	39	0.8%	3,987	1.5	89	2.4	2.5	2.6	2.9	3.4
20	MET	METLIFE	BBB	22	0.7%	3,735	3.1	64		2.6	2.8	4.8	3.9

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

April 2019

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	NWL	NEWELL RUBBERMAID INC	BBB	10	0.4%	1,852	1,664	188	8.9	38	3.0	3.7	4.4		6.0
2	VOD	VODAFONE	BBB	15	0.5%	2,511	2,055	456	4.5	73		3.1	3.4	4.0	5.1
3	X	UNITED STS STL CORP NEW	B	3	0.2%	1,201	967	234	4.1	28					8.0
4	PSEC	PROSPECT CAP CORP INTERNOTES BOOK ENTRY	BBB	181	0.5%	2,525	1,968	557	3.5	41	3.2	4.9	6.3	6.0	6.6
5	FDX	FEDEX CORP	BBB	25	0.3%	1,372	1,056	316	3.3	29	2.7	2.9	2.9	3.5	4.5
6	MO	ALTRIA GROUP INC	BBB	22	0.5%	2,466	1,884	582	3.2	55	2.7	3.0	3.3	4.3	5.2
7	MET	METLIFE	BBB	22	0.7%	3,735	2,824	911	3.1	64		2.6	2.8	4.8	3.9
8	BTI	BAT INTERNATIONAL FINANCE PLC	BBB	30	0.3%	1,426	1,054	372	2.8	38	3.0	3.3	3.5	4.3	5.2
9	SCHW	SCHWAB CHARLES CORP NEW	BBB	15	0.3%	1,369	1,007	362	2.8	37	2.6	2.7	2.8	3.2	
10	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	96	1.6%	8,258	6,029	2,229	2.7	193	3.0	3.3	3.8	4.5	5.6
11	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	BBB	47	0.8%	4,057	2,937	1,120	2.6	81	2.6	2.9	3.1	3.8	4.6
12	CVS	CVS CAREMARK CORP	BBB	41	1.2%	6,133	4,424	1,709	2.6	135	2.8	3.1	3.4	4.1	4.8
13	ABBV	ABBVIE INC	BBB	16	0.6%	2,991	2,149	842	2.6	67	2.7	2.9	3.1	3.9	4.6
14	CI	CIGNA CORP	BBB	31	0.4%	2,099	1,500	599	2.5	45	2.8	3.0	3.2	3.8	4.9
15	AMGN	AMGEN INC	A	32	0.5%	2,735	1,951	784	2.5	56	2.7	2.8	3.0	3.4	4.5
16	GT	GOODYEAR TIRE & RUBBER	BB	5	0.2%	1,232	865	367	2.4	29	3.0		4.1	5.7	
17	WAG	WALGREEN CO	BBB	9	0.3%	1,566	1,098	468	2.4	32	2.7	2.9	3.5		4.7
18	LUK	JEFFERIES GROUP INC NEW	BBB	36	0.3%	1,311	915	396	2.3	30		3.3	4.0	4.7	6.1
19	EIX	EDISON MISSION	BBB	32	0.5%	2,420	1,680	740	2.3	43	3.2	3.8	3.2	4.4	4.6
20	F	FORD	BBB	241	1.2%	6,357	4,407	1,950	2.3	154	3.1	3.3	4.0	5.1	6.2

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

April 2019

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	BMJ	BRISTOL MYERS SQUIBB CO	BBB	31	0.6%	3,284	713	2,571	0.28	74	2.9	3.0	3.3	3.6	4.4
2	CBL	CBL & ASSOCS LTD PARTNERSHIP	BB	3	0.2%	1,254	373	881	0.42	17			11.9	11.2	
3	CTL	CENTURYLINK	B	34	0.5%	2,815	1,142	1,673	0.68	63	3.9	4.7	5.6	7.7	8.8
4	CS	CREDIT SUISSE	N/R	405	0.4%	2,041	930	1,111	0.84	35	3.1	3.0	4.2	4.2	5.0
5	RY	ROYAL BANK OF CANADA	AA	236	0.3%	1,737	825	912	0.90	40	2.7	2.7	3.1	3.8	4.4
6	EDP	ENTERPRISE PRODS OPER LLC	BBB	32	0.3%	1,367	655	712	0.92	29	2.9	3.0	3.2	3.4	4.5
7	USB	U S BANCORP MEDIUM TERM NTS- BOOK ENTRY	A	28	0.4%	1,969	951	1,018	0.93	35	2.7	2.8	3.0	3.2	
8	VZ	VERIZON	BBB	130	1.0%	5,031	2,461	2,570	0.96	103	2.7	2.8	3.0	3.6	4.2
9	VIA	VIACOM INC NEW	BBB	38	0.3%	1,465	730	735	0.99	31	3.4	3.2	3.4	3.9	5.3
10	HBC	HSBC	N/R	463	0.6%	3,183	1,644	1,539	1.07	60	3.0	2.9	3.8	4.1	4.3
11	MS	MORGAN STANLEY	BBB	765	1.7%	8,862	4,585	4,277	1.07	191	2.8	3.0	3.3	3.9	4.3
12	BNS	BANK NOVA SCOTIA B C	AA	128	0.3%	1,576	827	749	1.10	35	2.7	2.7	3.9	4.5	
13	BCS	BARCLAYS	BBB	524	0.5%	2,552	1,360	1,192	1.14	58	3.4	3.7	3.9	3.8	4.3
14	PTRB	PETROBRAS	BB	23	0.5%	2,748	1,472	1,276	1.15	107		3.8	4.5	5.8	6.7
15	ETP	ENERGY TRANSFER PARTNERS L P	BBB	39	0.3%	1,436	778	658	1.18	36	3.1	3.4	3.8	4.3	5.5
16	T	AT&T	BBB	96	1.7%	8,536	4,626	3,910	1.18	180	2.8	2.9	3.3	3.9	4.9
17	HCA	HCA INC	BBB	25	0.2%	1,288	699	589	1.19	33	3.2	3.5	3.8	4.7	6.3
18	HPQ	HEWLETT PACKARD	BBB	17	0.4%	1,852	1,012	840	1.20	45	3.0	3.1		5.0	5.5
19	DUK	DUKE ENERGY	BBB	98	0.4%	1,997	1,095	902	1.21	43	2.8	2.8	3.1	3.3	4.0
20	PRU	PRUDENTIAL	A	41	0.3%	1,560	854	706	1.21	33	2.7	2.8	2.8	3.3	4.4

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.

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## Corporate Bonds: Top 20 Most Bought Issues

April 2019

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	VOD	VODAFONE	Apr-79	BBB	7.000	1,351	31	1,382	43			104.6	104.0
2	MET	METLIFE	Null	BBB	5.250	1,287	176	1,463	18	5.2	5.2	101.1	100.8
3	F	FORD	Dec-26	BBB	4.346	1,061	294	1,355	36	5.0	5.1	95.9	95.4
4	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Null	BBB	5.000	1,059	781	1,840	24	5.3	5.4	94.2	92.8
5	PSEC	PROSPECT CAP CORP INTERNOTES BOOK ENTRY	Mar-25	BBB	6.375	704	2	706	10	6.4	6.6	100.0	98.9
6	AMGN	AMGEN INC	May-24	A	3.625	589	68	657	10	3.0	3.0	102.8	102.7
7	BAC	BANK OF AMERICA	Jan-23	A	3.300	589	164	753	15	3.0	3.0	101.2	101.1
8	BAC	BANK OF AMERICA	Aug-24	BBB	4.200	585	152	737	14	3.5	3.5	103.5	103.3
9	MGM	MGM RESORTS INTL	Dec-21	BB	6.625	538	22	560	3	3.7	3.7	107.5	107.3
10	GT	GOODYEAR TIRE & RUBBER	May-26	BB	5.000	529	196	725	17	5.3	5.5	98.0	96.9
11	MET	METLIFE	Jun-47	BBB	4.700	514	43	557	12	5.9	6.0	83.7	82.2
12	SCHW	SCHWAB CHARLES CORP NEW	Dec-48	BBB	5.000	503	59	562	15	5.1	5.2	98.0	95.3
13	DELL	DELL	Aug-22	BBB	2.950	490	60	550	10	3.1	3.2	99.5	99.1
14	RNG	Null	Mar-23	N/R	0.000	486	35	521	3			138.8	140.2
15	CVS	CVS CAREMARK CORP	Mar-23	BBB	3.700	484	171	655	15	3.3	3.3	101.5	101.3
16	PATK	Null	Feb-23	N/R	1.000	479	12	491	3	2.4	2.9	95.1	93.3
17	X	UNITED STS STL CORP NEW	Aug-25	B	6.875	477	105	582	14	7.7	7.8	96.0	95.5
18	GS	GOLDMAN SACHS	Jan-23	BBB	3.625	467	133	600	13	3.1	3.2	101.8	101.6
19	CVS	CVS CAREMARK CORP	Mar-28	BBB	4.300	457	182	639	15	4.1	4.2	101.2	100.9
20	CMCS	COMCAST	Mar-26	A	3.150	447	108	555	7	3.2	3.2	99.7	99.7

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

April 2019

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	BMY	BRISTOL MYERS SQUIBB CO	May-24	BBB	3.625	72	911	983	14	3.2	3.3	101.9	101.6
2	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Null	BBB	5.000	1,059	781	1,840	24	5.3	5.4	94.2	92.8
3	JPM	JP MORGAN CHASE	Null	BBB	6.125	173	500	673	11	5.7	5.8	106.7	105.7
4	CBL	CBL & ASSOCS LTD PARTNERSHIP	Dec-23	BB	5.250	140	450	590	9	11.6	11.9	77.7	77.0
5	EIX	EDISON MISSION	Null	BB	6.250	127	444	571	5	6.5	6.4	96.4	97.3
6	C	CITIGROUP	Null	BB	5.350	138	387	525	8	5.3	5.4	100.3	99.4
7	JPM	JP MORGAN CHASE	Null	BBB	4.625	256	376	632	20	4.8	4.9	96.6	94.8
8	JPM	JP MORGAN CHASE	Oct-26	A	2.950	391	375	766	6	3.3	3.3	97.8	97.6
9	T	AT&T	Feb-22	BBB	3.000	270	368	638	7	2.8	2.9	100.5	100.3
10	BMY	BRISTOL MYERS SQUIBB CO	Aug-22	BBB	3.550	37	347	384	10	2.9	3.0	102.0	101.6
11	VZ	VERIZON	Nov-24	BBB	3.500	284	343	627	7	3.0	3.1	102.2	102.1
12	AAPL	APPLE INC	May-23	AA	2.400	379	339	718	16	2.7	2.7	98.9	98.7
13	ECOH	ECOPETROL S A	Jan-25	BBB	4.125	63	338	401	7	3.9	3.9	101.2	101.1
14	BMY	BRISTOL MYERS SQUIBB CO	Aug-22	BBB	3.250	47	333	380	7	2.9	3.0	101.0	100.8
15	ILMN	ILLUMINA INC	Jun-19	BBB	0.000	12	325	337	3			127.0	124.7
16	ORCL	ORACLE CORP	Nov-27	AA	3.250	269	325	594	5	3.2	3.2	100.4	100.2
17	BMY	BRISTOL MYERS SQUIBB CO	Aug-20	BBB	2.875	79	313	392	14	2.8	2.9	100.1	100.0
18	WFC	WELLS FARGO	Null	BBB	0.000	239	309	548	12	5.6	5.6	99.8	99.2
19	VZ	VERIZON	Sep-23	BBB	5.150	223	299	522	10	2.8	2.9	109.6	109.4
20	F	FORD	Dec-26	BBB	4.346	1,061	294	1,355	36	5.0	5.1	95.9	95.4

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).

## 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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