

# Market Transparency Report

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

**April 2018**

[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 2018

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	16	11.5%	0.1
CD	10	12.3%	-1.8
Corp	6	1.7%	0.0
Municipal	0	4.5%	0.0
Treasury	7	22.2%	-0.3

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

# Yield Matrix

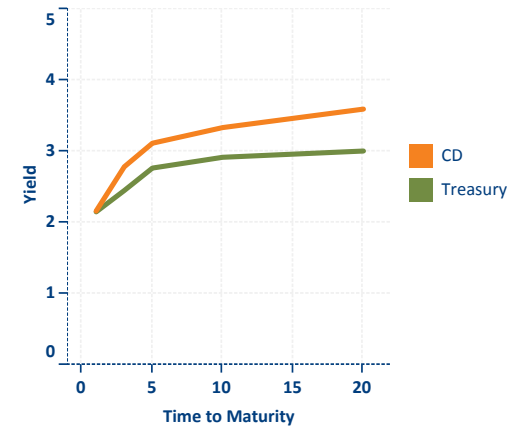
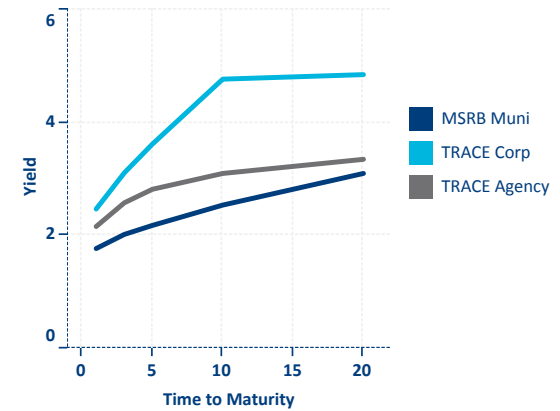
## Average Yield, % for April 2018

Market	TTM					Median Maturity (Years)
	1	3	5	10	20	
MSRB Muni	1.8	2.0	2.2	2.5	3.1	11
TRACE Corp	2.5	3.1	3.6	4.8	4.9	4
TRACE Agency	2.2	2.6	2.8	3.1	3.4	3
CD	2.2	2.8	3.1	3.4	3.6	1
Treasury	2.2	2.5	2.8	2.9	3.0	0

## Asset Class

Market	Category (Filtered)	Rating Key	1	3	5	10	20	Median Maturity (Years)
TRACE Corp	Financial	AA	2.4	2.9	3.1	3.8		2
		A	2.5	3.1	3.4	3.9	4.5	3
		BBB	2.7	3.4	3.7	4.3	4.7	6
		HY	2.7	3.7	4.1	9.2	6.4	8
		AAA	2.1	2.6	3.1	3.3	3.8	3
	Non-Financial	AA	2.3	2.8	3.0	3.6	3.9	2
		A	2.5	3.0	3.4	4.0	4.5	8
		BBB	2.6	3.3	4.1	4.8	5.4	5
		HY		5.7	4.6	9.7	11.7	9
MSRB Muni	GO	AAA	1.7	1.9	2.1	2.4	3.0	8
		AA	1.7	1.9	2.1	2.5	3.1	10
		A	1.9	2.1	2.4	2.7	3.3	9
		BBB	2.9	3.2	3.7	3.7	4.1	9
		HY	4.0	4.8	7.7	4.5	5.0	14
		AAA	1.7	1.9	2.1	2.4	2.9	8
	Revenue	AA	1.7	1.9	2.1	2.5	3.0	11
		A	1.8	2.1	2.3	2.6	3.1	14
		BBB	2.2	2.7	3.2	3.5	3.7	14
		HY	15.3	8.6	5.1	5.4	6.5	15

## 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.

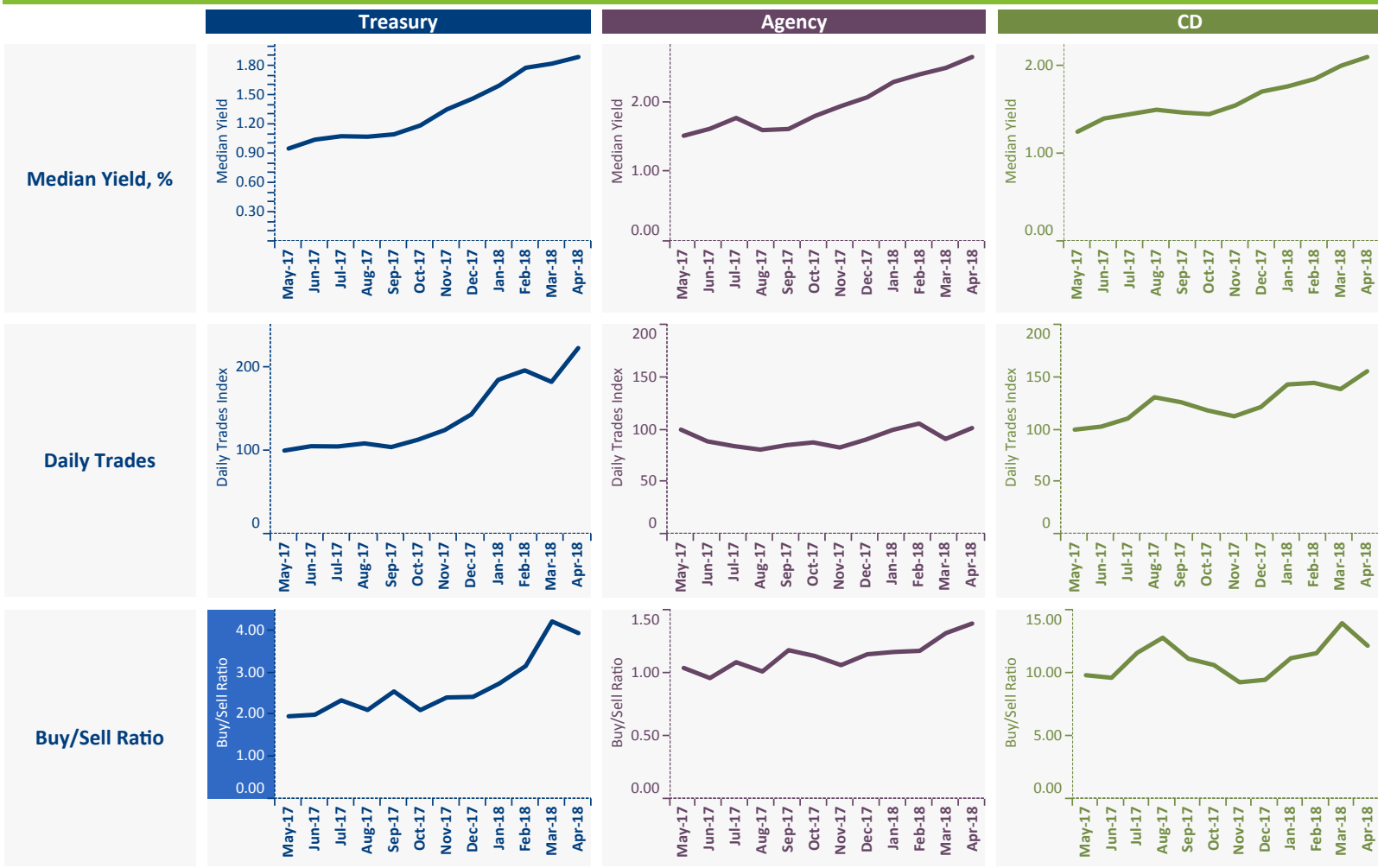
-The weights are based on transaction size.

-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



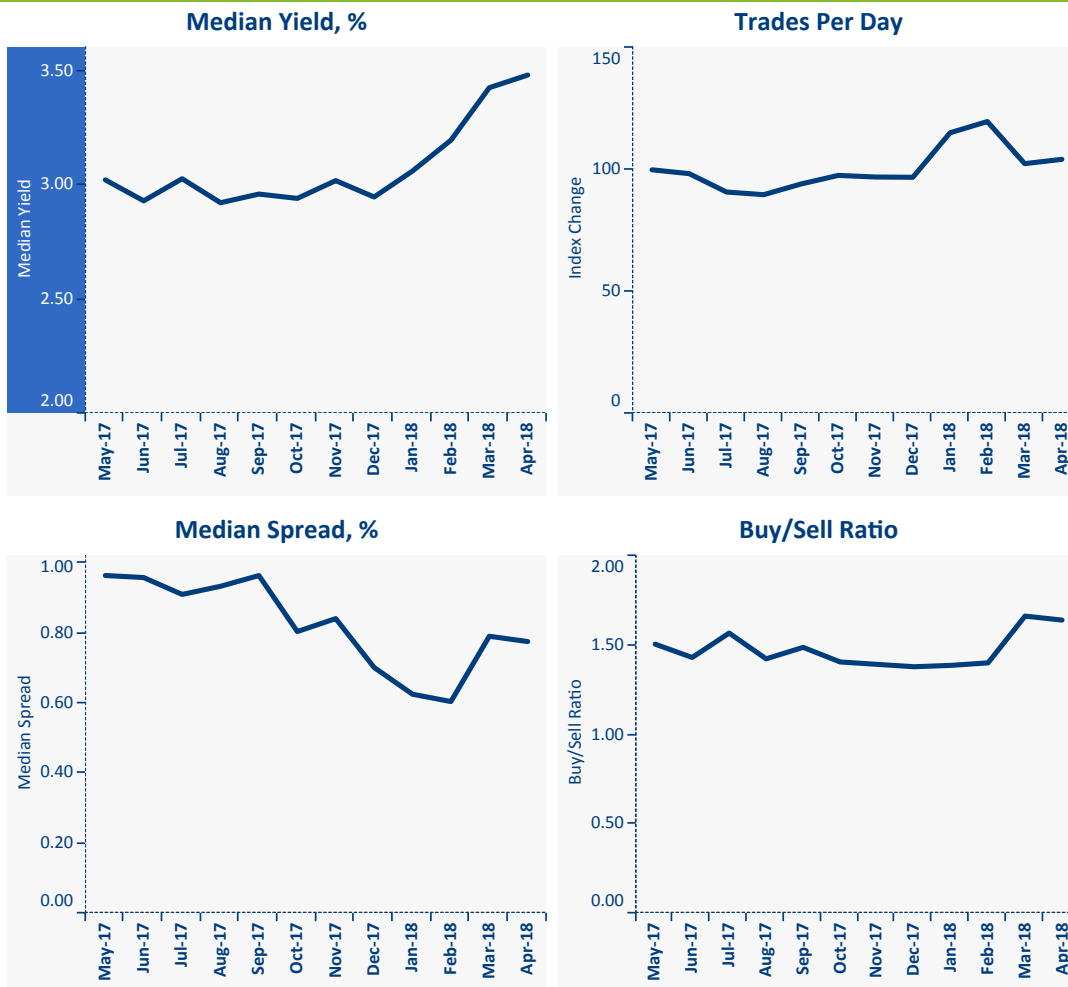
Daily Trades: First month = 100

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.

# Corporate Bonds: Odd-Lot Customer Transaction Trend Summary



Daily Trades: First month = 100

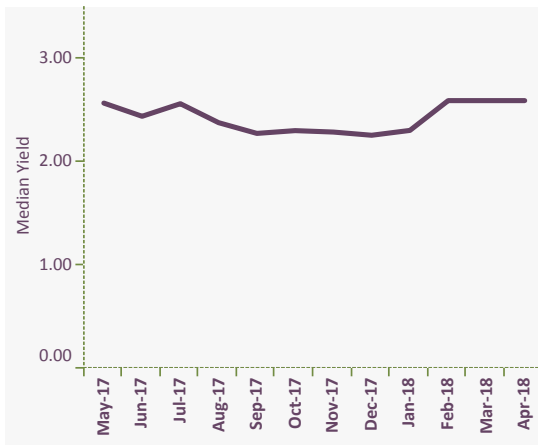
Source: TRACE and Tradeweb Direct

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

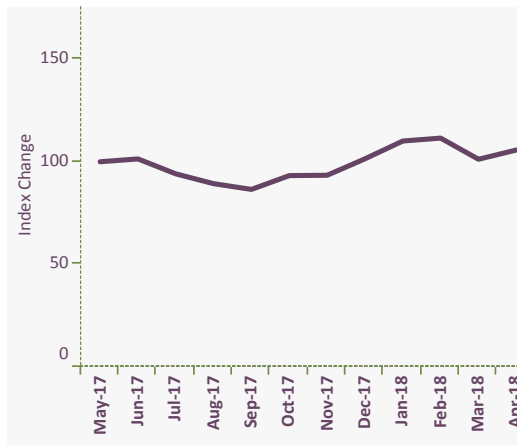
-Median yields and spreads are based on all odd-lot customer buy transactions...

# Municipal Bonds: Odd-Lot Customer Transaction Trend Summary

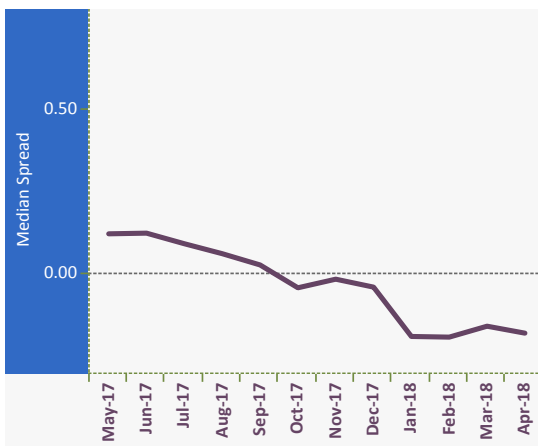
Median Yield, %



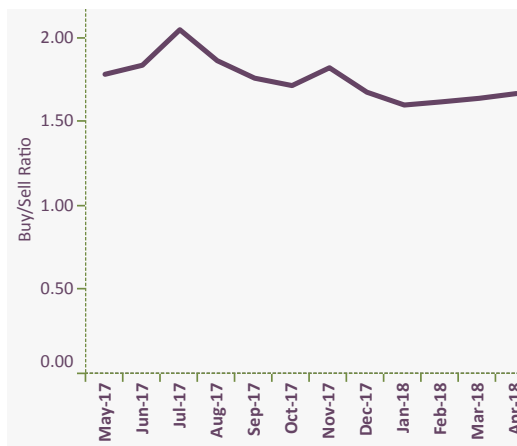
Trades Per Day



Median Spread, %



Buy/Sell Ratio



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.

## Corporate Bonds: Top 20 Most Active Issuers

April 2018

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	483	3.3%	15,360	1.9	331	2.5	3.1	3.4	4.0	4.2
2	GS	GOLDMAN SACHS	BBB	864	3.2%	15,114	1.7	314	2.5	3.2	3.5	4.1	4.5
3	BAC	BANK OF AMERICA	A	439	2.8%	13,290	1.7	266	2.6	3.0	3.5	4.1	4.3
4	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	A	349	2.6%	12,116	1.6	227	2.7	3.2	3.5	4.1	4.6
5	C	CITIGROUP	BBB	352	2.5%	11,825	1.8	257	2.5	3.2	3.6	4.2	4.1
6	WFC	WELLS FARGO	A	201	2.0%	9,281	1.8	191	2.5	3.1	3.7	4.1	4.5
7	MS	MORGAN STANLEY	BBB	693	1.8%	8,648	1.6	197	2.5	3.2	3.6	4.2	4.3
8	T	AT&T	BBB	99	1.8%	8,571	1.2	162	2.5	3.2	3.5	4.1	4.9
9	AAPL	APPLE INC	AA	57	1.4%	6,638	1.6	135	2.2	2.8	3.1	3.5	3.7
10	VZ	VERIZON	BBB	114	1.4%	6,344	1.5	122	2.6	3.1	3.5	4.0	4.5
11	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	70	1.3%	6,075	3.6	138	2.6	3.4	3.9	4.4	5.1
12	BRK	BERKSHIRE HATHAWAY	A	153	1.0%	4,884	1.7	115	2.4	2.8	3.2	3.7	4.8
13	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	A	43	1.0%	4,500	2.0	90	2.1	3.0	3.4	3.8	4.3
14	AXP	AMERICAN EXPRESS	BBB	38	0.9%	4,085	2.2	86	2.5	3.0	3.4	3.7	4.1
15	F	FORD	BBB	238	0.8%	3,859	2.2	76	2.5	3.3	4.2	4.4	5.3
16	ENB	ENBRIDGE INC	BB	25	0.8%	3,796	6.4	22		3.4	4.0	4.2	
17	MSFT	MICROSOFT CORP	AAA	42	0.8%	3,789	1.6	81	2.1	2.7	3.1	3.3	3.7
18	CVS	CVS CAREMARK CORP	BBB	33	0.8%	3,646	1.9	76	2.4	3.1	3.5	4.2	4.7
19	ORCL	ORACLE CORP	AA	32	0.7%	3,447	1.1	64	2.3	2.9	3.2	3.6	4.0
20	BP	BP	A	41	0.7%	3,197	1.8	57	2.6	3.1	3.3	3.6	

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 2018

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	WYN	WYNDHAM WORLDWIDE CORP	BBB	8	0.3%	1,233	1,113	120	9.3	23		4.5	4.8	4.3	
2	CCCX	COMMUNITY CHOICE FINL INC	C	1	0.5%	2,346	2,086	260	8.0	20	50.1				
3	ENB	ENBRIDGE INC	BB	25	0.8%	3,796	3,283	513	6.4	22		3.4	4.0	4.2	
4	NWL	NEWELL RUBBERMAID INC	BBB	14	0.2%	1,030	859	171	5.0	20	2.4	3.4	4.0	4.3	4.9
5	CHRC	BAYSIDE CMNTY CHURCH SARASOTA INC BRADEN	N/R	140	0.3%	1,407	1,133	274	4.1	8			4.8	6.0	6.3
6	STI	SUNTRUST BKS INC	BBB	26	0.4%	1,774	1,389	385	3.6	35	2.4	3.2	3.3	4.0	
7	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	70	1.3%	6,075	4,745	1,330	3.6	138	2.6	3.4	3.9	4.4	5.1
8	BNS	BANK NOVA SCOTIA B C	A	95	0.4%	1,950	1,500	450	3.3	40	2.4	3.0	3.3	4.2	
9	AIG	AIG	BBB	28	0.4%	1,695	1,285	410	3.1	32	2.9	3.1	3.6	4.2	4.5
10	TM	TOYOTA	AA	64	0.5%	2,256	1,701	555	3.1	57	2.3	2.9	3.2	3.4	
11	BMO	BANK MONTREAL MEDIUM TERM SR NTS BOOK EN	A	58	0.3%	1,414	1,062	352	3.0	33	2.6	3.1	3.3		
12	DOW	DOW CHEM CO	BBB	134	0.4%	1,978	1,480	498	3.0	31	2.8	3.1	3.4	4.1	4.4
13	COF	CAPITAL ONE FINL CORP	BBB	34	0.6%	2,669	1,978	691	2.9	65	2.6	3.3	3.7	4.3	
14	DB	DEUTSCHE BANK	BBB	107	0.5%	2,374	1,753	621	2.8	48	2.8	3.5	3.5	4.8	
15	BDX	BECTON DICKINSON & CO	BBB	22	0.2%	1,060	781	279	2.8	19	3.0	3.2	3.7	4.2	5.0
16	CELG	CELGENE CORP	BBB	20	0.3%	1,283	932	351	2.7	29	2.6	3.1	3.5	4.1	4.8
17	JNJ	JOHNSON & JOHNSON	AAA	32	0.3%	1,263	911	352	2.6	32	1.9	2.6	3.0	3.4	3.7
18	QCOM	QUALCOMM	A	16	0.3%	1,500	1,073	427	2.5	33	2.2	2.8	3.5	4.0	4.5
19	PFE	PFIZER	AA	33	0.3%	1,225	873	352	2.5	31	2.3	2.7	3.1	3.4	3.9
20	MO	ALTRIA GROUP INC	A	16	0.2%	1,031	730	301	2.4	22	2.8	3.2	3.4	3.9	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

April 2018

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	FTR	FRONTIER COMMUNICATIONS CORP	C	23	0.4%	1,762	660	1,102	0.60	29	7.1	11.5	17.5	18.4	15.6
2	BCS	BARCLAYS	BB	446	0.4%	1,718	767	951	0.81	35	3.6	3.7	3.7	4.4	4.5
3	GNW	GENWORTH	B	9	0.3%	1,377	666	711	0.94	24		9.7	10.0		9.5
4	SFTBF	SPRINT	B	17	0.2%	1,157	561	596	0.94	30	3.8	5.3	5.7	6.8	
5	EDP	ENTERPRISE PRODS OPER LLC	BBB	33	0.3%	1,241	605	636	0.95	26	3.1	3.3	3.6	3.9	4.6
6	USB	U S BANCORP MEDIUM TERM NTS- BOOK ENTRY	A	26	0.4%	1,884	923	961	0.96	33	2.7	3.1	3.4	3.8	
7	BBBY	BED BATH & BEYOND INC	BBB	3	0.3%	1,564	782	782	1.00	27					7.3
8	VIA	VIACOM INC NEW	BBB	37	0.4%	1,701	872	829	1.05	35	3.0	3.6	4.2	4.3	5.3
9	ACT	ALLERGAN	BBB	11	0.2%	1,124	578	546	1.06	18	3.0	3.7	4.0		
10	CSCO	CISCO	AA	22	0.4%	1,962	1,017	945	1.08	36	2.5	2.8	3.2	3.4	3.9
11	CTL	CENTURYLINK	B	37	0.6%	2,838	1,471	1,367	1.08	59	3.7	5.7	6.9	8.2	8.5
12	GILD	GILEAD SCIENCES INC	A	24	0.3%	1,608	840	768	1.09	29	2.7	3.0	3.5	3.6	4.1
13	ORCL	ORACLE CORP	AA	32	0.7%	3,447	1,815	1,632	1.11	64	2.5	2.9	3.2	3.6	4.0
14	KMI	KINDER MORGAN ENERGY PARTNERS L P	BBB	67	0.4%	1,886	1,004	882	1.14	40	3.2	3.6	4.1	5.8	5.4
15	T	AT&T	BBB	99	1.8%	8,571	4,663	3,908	1.19	162	2.8	3.3	3.7	4.1	5.0
16	V	VIVENDI	A	8	0.2%	1,102	605	497	1.22	22		2.8	3.1	3.5	3.7
17	CMCS	COMCAST	A	51	0.6%	2,976	1,643	1,333	1.23	52	2.9	3.0	3.5	3.8	4.3
18	PTRB	PETROBRAS	BB	22	0.6%	2,940	1,628	1,312	1.24	108	3.9	4.0	5.1	6.0	7.0
19	HBC	HSBC	N/R	460	0.6%	2,767	1,539	1,228	1.25	49	2.8	3.4	4.2	4.0	4.5
20	DELL	DELL	BB	12	0.3%	1,311	732	579	1.26	28	3.6	4.2	4.8	5.8	6.6

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

April 2018

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	ENB	ENBRIDGE INC	Apr-78	BB	6.375	2,674	358	3,032	6			25.1	25.2
2	CCCX	COMMUNITY CHOICE FINL INC	May-19	C	10.750	2,086	260	2,346	20	50.1	55.7	71.1	67.9
3	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Null	BBB	5.000	1,489	911	2,400	40			99.1	98.6
4	BAC	BANK OF AMERICA	Apr-19	A	2.650	1,054	89	1,143	21	2.6	2.7	100.1	99.9
5	MET	METLIFE	Null	BBB	5.875	904	9	913	18			103.0	102.5
6	DOW	DOW CHEM CO	Nov-20	BBB	4.250	778	78	856	11	3.1	3.1	102.5	102.6
7	GS	GOLDMAN SACHS	Null	BB	5.000	718	46	764	18			98.3	96.4
8	JPM	JP MORGAN CHASE	Null	BBB	5.000	683	183	866	19			101.7	101.0
9	WPG	Null	Aug-24	BBB	5.950	660	44	704	15	6.9	7.1	95.0	94.2
10	STI	SUNTRUST BKS INC	Null	BBB	5.125	631	23	654	9			96.5	95.8
11	WYN	WYNDHAM WORLDWIDE CORP	Mar-22	BBB	4.250	593	40	633	11	4.5	4.6	99.2	98.9
12	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	Feb-21	A	2.650	584	158	742	15	3.0	3.0	99.0	99.1
13	GS	GOLDMAN SACHS	Jan-19	BBB	2.625	528	117	645	11	2.3	2.7	100.3	99.9
14	HOS	HORNBECK OFFSHORE SVCS INC NEW	Apr-20	C	5.875	515	35	550	3	30.5	31.9	65.7	64.2
15	WFC	WELLS FARGO	Null	BBB	5.570	515	162	677	13			99.9	99.0
16	BP	BP	Mar-21	A	4.742	513	37	550	5	3.1	3.0	104.6	104.7
17	C	CITIGROUP	Dec-18	BBB	2.050	500	46	546	11	2.4	2.7	99.8	99.6
18	GM	GENERAL MOTORS FINANCIAL COMPANY INC	Null	BB	5.750	499	86	585	13			100.0	98.8
19	MHO	M/I HOMES INC	Aug-25	B	5.625	499	10	509	3	6.0	6.1	97.9	97.0
20	BAC	BANK OF AMERICA	Aug-24	BBB	4.200	495	136	631	12	4.1	4.1	100.7	100.5

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 2018

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	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Null	BBB	5.000	1,489	911	2,400	40			99.1	98.6
2	FE	FIRSTENERGY CORP	Aug-39	D	6.800	19	491	510	4			30.3	41.3
3	T	AT&T	Feb-22	BBB	3.000	382	416	798	7	3.3	3.3	99.0	98.8
4	BBBY	BED BATH & BEYOND INC	Aug-24	BBB	3.749	244	409	653	9	6.1	6.6	87.8	85.5
5	VZ	VERIZON	Nov-24	BBB	3.500	276	384	660	6	3.7	3.7	98.9	98.7
6	ENB	ENBRIDGE INC	Apr-78	BB	6.375	2,674	358	3,032	6			25.1	25.2
7	AAPL	APPLE INC	May-23	AA	2.400	337	347	684	14	3.1	3.2	96.8	96.5
8	GS	GOLDMAN SACHS	Jan-22	BBB	5.750	334	316	650	12	3.4	3.5	108.2	108.0
9	ORCL	ORACLE CORP	Nov-27	AA	3.250	230	314	544	4	3.6	3.6	97.3	97.2
10	BK	BANK NEW YORK INC MEDIUM TERM SR NTS BOO	Null	BBB	4.950	115	313	428	6			102.5	102.3
11	VZ	VERIZON	Sep-23	BBB	5.150	198	312	510	11	3.5	3.6	108.2	107.7
12	ABBV	ABBVIE INC	May-25	BBB	3.600	130	311	441	7	4.0	3.9	97.4	98.3
13	AAPL	APPLE INC	Feb-26	AA	3.250	286	308	594	6	3.4	3.5	98.7	98.5
14	JPM	JP MORGAN CHASE	Oct-26	A	2.950	261	295	556	4	3.8	3.8	93.9	93.7
15	ESRX	EXPRESS SCRIPTS HLDG CO	Mar-27	BBB	3.400	285	289	574	3	4.2	4.3	94.0	93.7
16	GILD	GILEAD SCIENCES INC	Feb-25	A	3.500	230	285	515	3	3.5	3.5	100.3	100.0
17	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	Feb-26	A	3.650	484	281	765	15	3.7	3.8	99.4	99.2
18	GS	GOLDMAN SACHS	Jul-24	BBB	3.850	205	265	470	3	3.8	3.8	100.5	100.4
19	CCCX	COMMUNITY CHOICE FINL INC	May-19	C	10.750	2,086	260	2,346	20	50.1	55.7	71.1	67.9
20	PTRB	PETROBRAS	May-23	BB	4.375	200	257	457	15	4.9	5.0	98.6	98.1

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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