

# Market Transparency Report

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

**August 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 August 2018

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	-3	-7.6%	-0.1
CD	5	0.7%	-1.8
Corp	-12	-0.1%	0.0
Municipal	2	1.9%	0.0
Treasury	6	16.4%	0.6

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

# Yield Matrix

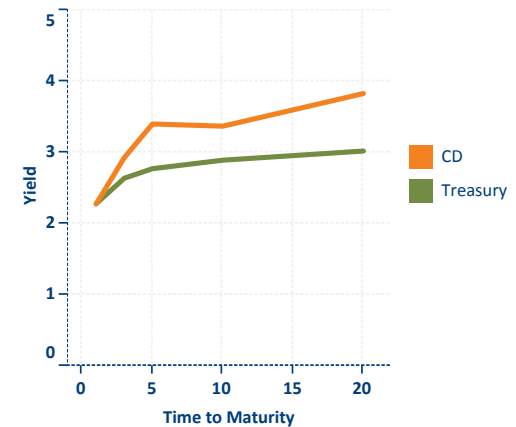
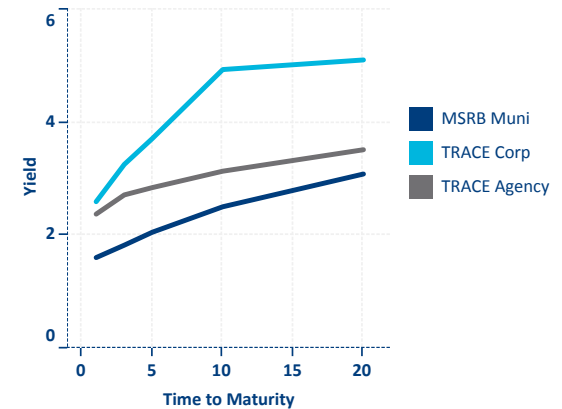
## Average Yield, % for August 2018

Market	TTM					Median Maturity (Years)
	1	3	5	10	20	
MSRB Muni	1.6	1.8	2.1	2.5	3.1	11
TRACE Corp	2.6	3.3	3.7	4.9	5.1	3
TRACE Agency	2.4	2.7	2.9	3.1	3.5	2
CD	2.3	2.9	3.4	3.6	3.8	1
Treasury	2.3	2.7	2.8	2.9	3.0	1

## Asset Class

Market	Category (Filtered)	Rating Key	1	3	5	10	20	Median Maturity (Years)
TRACE Corp	Financial	AA	2.6	3.0	3.5			2
		A	2.5	3.2	3.4	4.0	4.6	3
		BBB	2.9	3.6	3.9	4.2	5.1	5
		HY	3.2	4.1	4.4	7.9	6.4	4
	Non-Financial	AAA	2.2	2.5	2.6	3.3	3.9	2
		AA	2.4	2.9	3.2	3.7	4.0	2
		A	2.6	3.2	3.6	4.2	4.7	4
		BBB	2.7	3.6	4.2	5.0	5.8	7
		HY	3.3	6.1	8.6	9.9	14.0	9
MSRB Muni	GO	AAA	1.5	1.7	1.9	2.4	3.1	9
		AA	1.6	1.8	2.0	2.5	3.2	11
		A	1.7	2.0	2.3	2.7	3.4	9
		BBB	2.5	2.8	3.3	3.5	3.9	9
	Revenue	HY		3.9	6.6	5.2	4.5	12
		AAA	1.5	1.7	2.0	2.4	2.9	9
		AA	1.6	1.8	2.0	2.5	3.0	11
		A	1.6	1.9	2.1	2.6	3.0	15
		BBB	1.9	2.5	2.6	3.0	3.5	15
		HY	6.3	6.7	7.0	4.8	6.4	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.

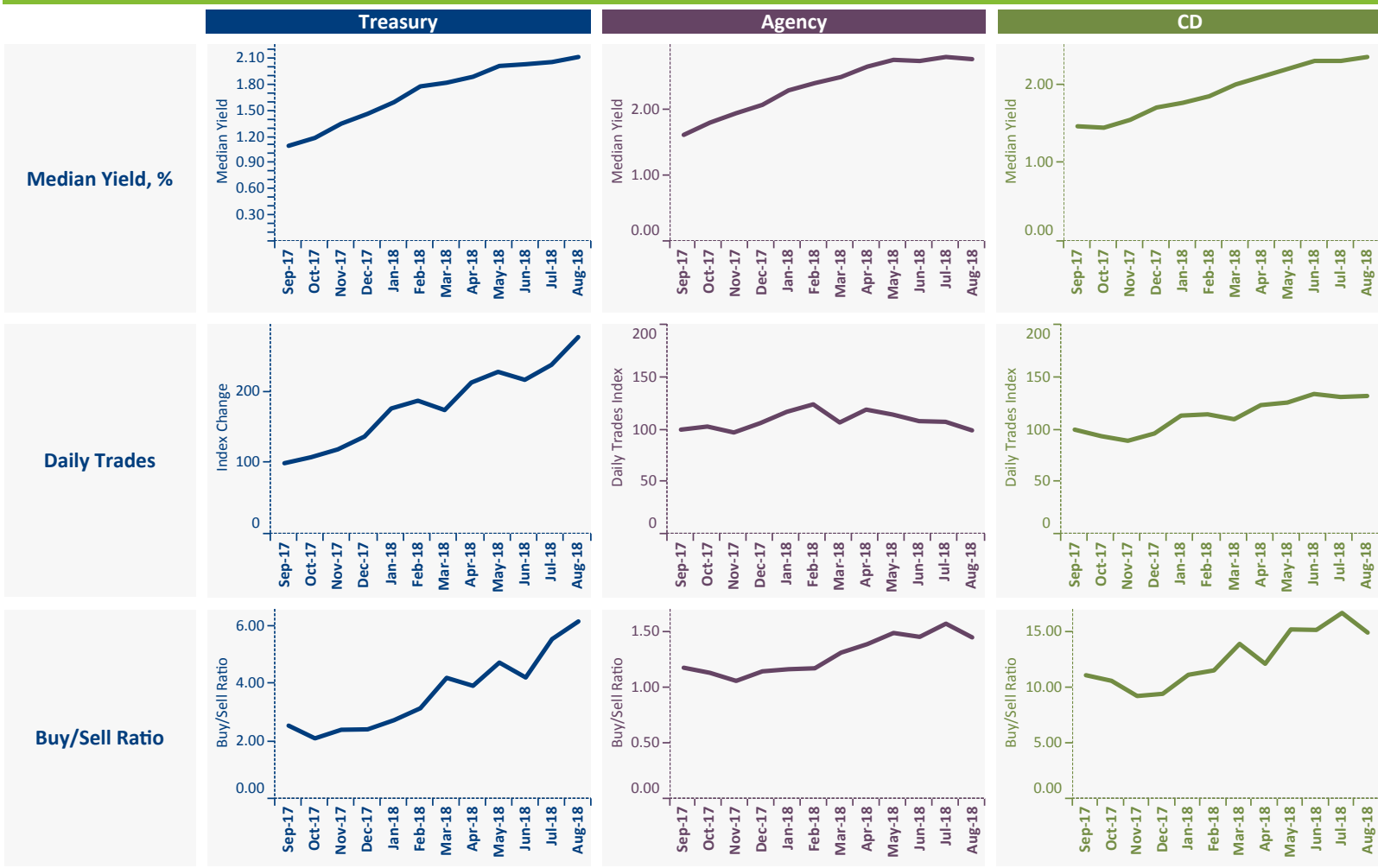
-The weights are based on transaction size.

-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



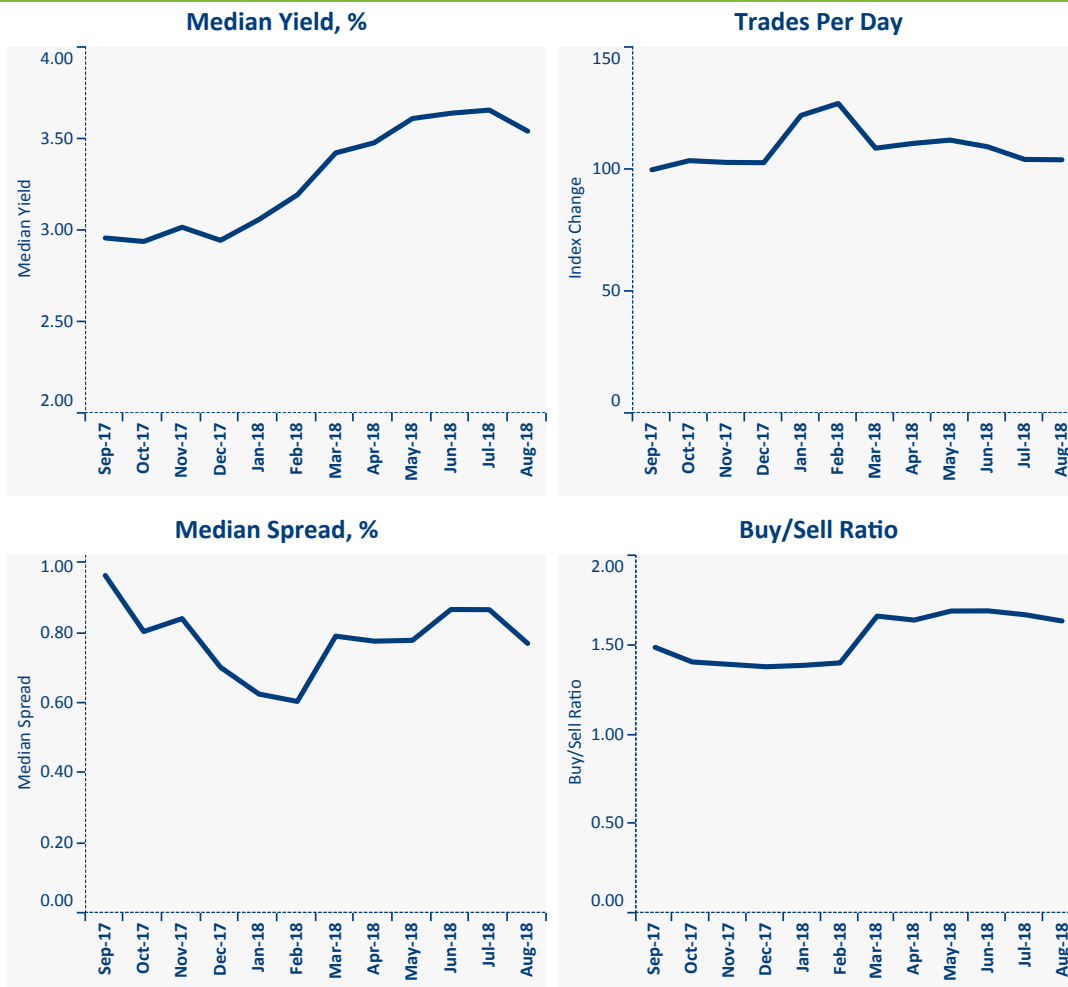
Daily Trades: First month = 100

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.

# 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.

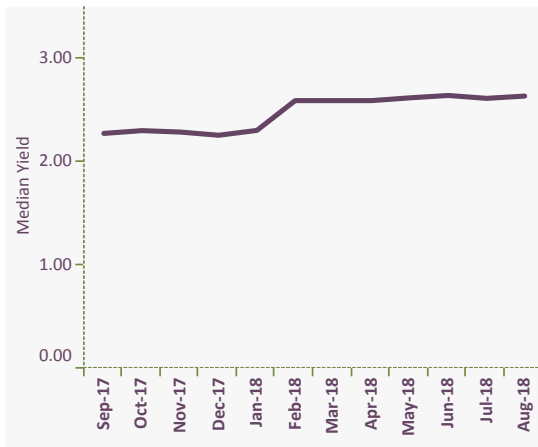
-Median yields and spreads are based on all odd-lot customer buy transactions...

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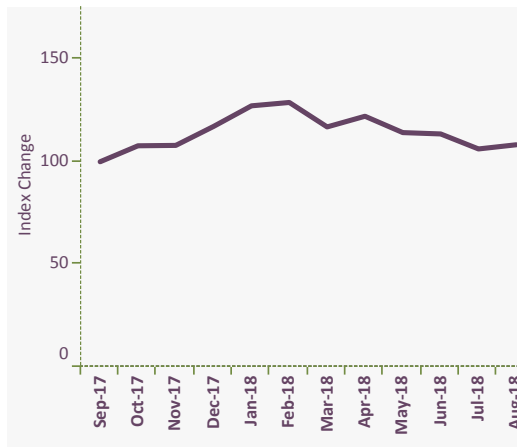


# Municipal Bonds: Odd-Lot Customer Transaction Trend Summary

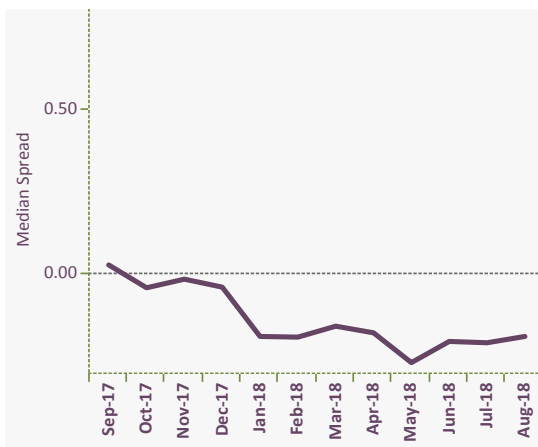
Median Yield, %



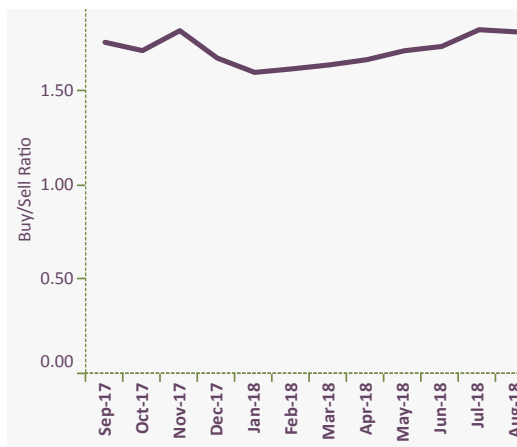
Trades Per Day



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.

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## Corporate Bonds: Top 20 Most Active Issuers

August 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	GS	GOLDMAN SACHS	BBB	950	3.4%	16,483	1.7	334	2.6	3.3	3.7	4.1	4.7
2	JPM	JP MORGAN CHASE	A	554	3.4%	16,466	2.0	325	2.8	3.2	3.5	4.0	4.4
3	C	CITIGROUP	BBB	372	2.6%	12,684	2.0	277	2.7	3.3	3.7	4.4	4.4
4	BAC	BANK OF AMERICA	A	413	2.5%	12,229	1.7	251	2.5	3.1	3.6	4.1	4.4
5	T	AT&T	BBB	98	2.4%	11,682	1.8	218	2.5	3.4	3.7	4.3	5.3
6	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	A	336	2.0%	9,871	1.4	177	2.9	3.4	3.7	4.4	4.7
7	MS	MORGAN STANLEY	BBB	734	1.9%	9,211	1.5	202	2.6	3.3	3.8	4.3	4.6
8	WFC	WELLS FARGO	A	199	1.9%	8,960	1.6	182	2.6	3.2	3.7	4.1	4.3
9	AAPL	APPLE INC	AA	56	1.4%	6,833	1.6	135	2.3	2.9	3.1	3.5	4.0
10	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	89	1.2%	5,987	2.9	132	2.7	3.5	4.1	4.6	5.4
11	BRK	BERKSHIRE HATHAWAY	A	152	1.2%	5,864	2.3	134	2.5	3.1	3.3	4.0	5.0
12	AXP	AMERICAN EXPRESS	BBB	38	1.0%	4,818	2.6	93	2.5	3.1	3.5	3.6	4.1
13	VZ	VERIZON	BBB	112	1.0%	4,623	1.3	88	2.7	3.3	3.5	4.0	4.6
14	F	FORD	BBB	253	0.9%	4,430	1.7	91	2.9	3.7	4.2	4.8	5.8
15	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	A	38	0.9%	4,167	2.0	91	2.9	3.1	3.5	3.9	4.5
16	MSFT	MICROSOFT CORP	AAA	40	0.8%	4,081	1.4	89	2.3	2.8	3.1	3.4	3.8
17	CVS	CVS CAREMARK CORP	BBB	30	0.8%	3,877	1.9	81	2.7	3.3	3.7	4.3	4.8
18	ORCL	ORACLE CORP	AA	31	0.8%	3,679	1.1	68	2.5	3.0	3.3	3.6	4.0
19	CTL	CENTURYLINK	B	37	0.8%	3,670	1.0	85	3.4	4.5	5.7	7.7	8.4
20	PTRB	PETROBRAS	BB	24	0.6%	3,061	1.7	99		4.6	5.8	7.2	7.5

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

August 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	CNP	CENTERPOINT ENERGY INC	BBB	23	0.3%	1,289	1,216	73	16.7	36	2.8	3.5	3.6	4.9	4.6
2	GD	GENERAL DYNAMICS CORP	A	14	0.3%	1,591	1,402	189	7.4	29		3.0	3.2	3.5	
3	GIS	GENERAL MLS INC	BBB	17	0.2%	1,122	920	202	4.6	27	2.7	3.3	3.6	4.1	4.6
4	XRX	XEROX CORP	BBB	11	0.4%	2,163	1,770	393	4.5	45	2.9	4.1	4.9		6.7
5	KEY	KEYCORP MEDIUM TERM SR NTS BOOK ENTRY	BBB	17	0.3%	1,272	1,023	249	4.1	20	2.8	3.3		4.0	
6	FITB	FIFTH THIRD BANCORP	BBB	14	0.3%	1,373	1,087	286	3.8	19	2.5	3.4	3.9	4.0	5.1
7	PCG	PACIFIC GAS & ELEC CO	BBB	28	0.3%	1,584	1,242	342	3.6	34		3.5	3.9	4.4	5.0
8	PRU	PRUDENTIAL	BBB	43	0.6%	2,697	2,091	606	3.5	36	2.6	3.2	3.4	3.8	4.5
9	SAN	ABBEY NATL TREAS SVCS PLC	BBB	34	0.2%	1,145	865	280	3.1	30	2.6	3.5	4.0	4.7	
10	TWX	TIME WARNER	BBB	28	0.4%	1,715	1,295	420	3.1	32	2.7	3.4	3.8	4.2	5.2
11	GT	GOODYEAR TIRE & RUBBER	BB	5	0.2%	1,145	861	284	3.0	24		3.6	5.1	5.9	
12	STI	SUNTRUST BKS INC	BBB	25	0.5%	2,309	1,719	590	2.9	43	2.8	3.2	3.3	4.1	
13	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	89	1.2%	5,987	4,444	1,543	2.9	132	2.7	3.5	4.1	4.6	5.4
14	CELG	CELGENE CORP	BBB	20	0.3%	1,297	962	335	2.9	27	2.6	3.2	3.6	4.2	4.9
15	PEMX	PETROLEOS MEXICANOS	BBB	36	0.6%	2,701	1,995	706	2.8	85	2.9	4.3	4.9	6.2	6.9
16	COF	CAPITAL ONE FINL CORP	BBB	32	0.5%	2,523	1,852	671	2.8	55	2.6	3.4	3.8	4.4	
17	AMGN	AMGEN INC	A	32	0.5%	2,619	1,898	721	2.6	58	2.5	3.2	3.5	3.8	4.6
18	TD	TORONTO DOMINION BK SR MEDIUM TERM BK NT	AA	79	0.4%	2,134	1,544	590	2.6	51	2.6	3.1	3.4	3.6	
19	ANTM	Null	A	19	0.3%	1,209	873	336	2.6	24	2.6	3.1	3.5	4.2	4.7
20	PSEC	PROSPECT CAP CORP INTERNOTES BOOK ENTRY	BBB	158	0.3%	1,299	938	361	2.6	22	2.9	5.2	5.2	6.0	6.5

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

August 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	GNW	GENWORTH	B	7	0.3%	1,251	323	928	0.35	20		6.3	7.4		7.8
2	CS	CREDIT SUISSE	N/R	392	0.3%	1,258	440	818	0.54	24	3.3	3.7	3.9	4.6	5.0
3	FTR	FRONTIER COMMUNICATIONS CORP	C	25	0.4%	1,887	757	1,130	0.67	30	6.4	11.9	15.8	8.6	15.1
4	EDP	ENTERPRISE PRODS OPER LLC	BBB	32	0.2%	1,173	537	636	0.84	24	3.1	3.2	3.5	3.9	4.7
5	CMCS	COMCAST	A	51	0.6%	2,959	1,454	1,505	0.97	52	2.9	3.3	3.6	3.9	4.6
6	HBC	HSBC	N/R	485	0.6%	3,039	1,495	1,544	0.97	61	2.9	3.5	3.7	4.4	4.7
7	CTL	CENTURYLINK	B	37	0.8%	3,670	1,815	1,855	0.98	85	3.9	5.0	5.8	7.8	7.4
8	HD	HOME DEPOT	A	23	0.4%	1,708	864	844	1.02	33	2.6	2.9	3.3	3.5	4.1
9	CSCO	CISCO	AA	20	0.4%	2,097	1,065	1,032	1.03	38	2.7	3.0	3.2	3.4	4.1
10	RY	ROYAL BANK OF CANADA	AA	244	0.4%	2,158	1,119	1,039	1.08	50	2.8	3.1	4.1	4.2	
11	RDS	SHELL	AA	28	0.4%	1,815	957	858	1.12	39	2.8	3.0	3.3	3.5	4.1
12	ORCL	ORACLE CORP	AA	31	0.8%	3,679	1,954	1,725	1.13	68	2.7	3.0	3.3	3.6	4.0
13	HCA	HCA INC	BBB	25	0.3%	1,256	674	582	1.16	28	3.7	4.2	4.6	4.9	7.0
14	BP	BP	A	38	0.6%	2,751	1,501	1,250	1.20	56	2.9	3.3	3.5	3.7	
15	KO	COCA COLA CO	AA	28	0.3%	1,291	708	583	1.21	28	2.6	2.8	3.2	3.6	
16	KMI	KINDER MORGAN ENERGY PARTNERS L P	BBB	65	0.4%	1,803	992	811	1.22	38	3.2	3.5	3.9	5.5	5.4
17	DELL	DELL	BB	10	0.3%	1,210	673	537	1.25	25	3.7	4.0	4.9	6.1	6.7
18	PNC	PNC FDG CORP	BBB	36	0.2%	1,189	661	528	1.25	25	2.8	3.3	3.8	3.7	
19	DBD	Null	C	1	0.3%	1,242	700	542	1.29	11			17.3		
20	HPQ	HEWLETT PACKARD	BBB	20	0.4%	2,003	1,127	876	1.29	43		3.4	3.7	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 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

August 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	PRU	PRUDENTIAL	Aug-58	BBB	5.625	1,261	142	1,403	8			25.0	24.8
2	CNP	CENTERPOINT ENERGY INC	Dec-49	BBB	6.125	1,082	9	1,091	32			102.6	101.1
3	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Null	BBB	5.000	995	671	1,666	28			99.0	98.7
4	JPM	JP MORGAN CHASE	Null	BBB	5.809	830	258	1,088	10			101.1	100.8
5	JPM	JP MORGAN CHASE	Null	BBB	6.750	769	156	925	7			109.9	109.5
6	AXP	AMERICAN EXPRESS	Null	BBB	5.200	739	147	886	8			101.9	101.6
7	CCCX	COMMUNITY CHOICE FINL INC	May-19	C	10.750	704	66	770	7	41.4	43.2	83.0	81.8
8	DBD	Null	Apr-24	C	8.500	700	542	1,242	11	16.9	17.3	70.1	69.0
9	STI	SUNTRUST BKS INC	Null	BBB	5.625	700	65	765	5			102.9	102.6
10	KEY	KEYCORP MEDIUM TERM SR NTS BOOK ENTRY	Mar-21	BBB	5.100	686	50	736	8	3.4	3.3	104.4	104.4
11	TEVA	TEVA PHARMACEUTICAL FIN CO B V	Jul-19	BB	1.700	645	45	690	8	3.3	3.7	98.5	98.2
12	GS	GOLDMAN SACHS	Dec-49	BB	5.000	635	57	692	18			95.6	93.9
13	GD	GENERAL DYNAMICS CORP	May-21	A	3.000	633	26	659	9	3.0	3.1	100.0	99.8
14	FITB	FIFTH THIRD BANCORP	Null	BBB	4.900	625	37	662	3			101.3	100.6
15	VZ	VERIZON	Nov-24	BBB	3.500	611	351	962	11	3.7	3.7	99.0	98.7
16	PCG	PACIFIC GAS & ELEC CO	Oct-20	BBB	3.500	580	160	740	15	3.5	3.7	100.1	99.6
17	AAPL	APPLE INC	May-21	AA	2.850	558	241	799	8	2.9	2.9	99.9	99.9
18	JPM	JP MORGAN CHASE	Jan-20	A	2.250	551	154	705	13	2.9	3.0	99.1	99.0
19	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	Feb-21	A	2.650	538	151	689	17	3.1	3.2	98.9	98.8
20	WFC	WELLS FARGO	Null	BBB	5.900	537	102	639	15			101.9	101.3

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

August 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	995	671	1,666	28			99.0	98.7
2	GNW	GENWORTH	Sep-21	B	7.625	56	582	638	8	6.1	6.3	104.2	103.6
3	DBD	Null	Apr-24	C	8.500	700	542	1,242	11	16.9	17.3	70.1	69.0
4	HOS	HORNBECK OFFSHORE SVCS INC NEW	Mar-21	C	5.000	24	441	465	3	18.9	18.8	72.9	72.9
5	T	AT&T	Feb-22	BBB	3.000	409	388	797	7	3.5	3.5	98.5	98.2
6	RCII	RENT A CTR INC NEW	Nov-20	C	6.625	78	363	441	6	6.4	4.3	100.0	100.5
7	JPM	JP MORGAN CHASE	Oct-26	A	2.950	314	352	666	5	3.8	3.9	93.8	93.7
8	VZ	VERIZON	Nov-24	BBB	3.500	611	351	962	11	3.7	3.7	99.0	98.7
9	GS	GOLDMAN SACHS	Jan-22	BBB	5.750	287	345	632	9	3.5	3.6	107.2	106.9
10	VZ	VERIZON	Sep-23	BBB	5.150	244	339	583	11	3.5	3.5	107.7	107.5
11	AAPL	APPLE INC	May-23	AA	2.400	321	337	658	14	3.1	3.1	96.9	96.8
12	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	Feb-26	A	3.650	425	331	756	16	3.9	3.9	98.4	98.2
13	CPB	CAMPBELL SOUP CO	Mar-25	BBB	3.950	149	328	477	13	4.3	4.4	98.2	97.5
14	AAPL	APPLE INC	Feb-26	AA	3.250	321	299	620	6	3.4	3.5	98.8	98.4
15	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Jan-38	A	5.875	146	296	442	7	4.7	4.7	114.6	114.3
16	ORCL	ORACLE CORP	Nov-27	AA	3.250	215	279	494	4	3.6	3.6	97.4	97.2
17	ESRX	EXPRESS SCRIPTS HLDG CO	Mar-27	BBB	3.400	262	278	540	3	4.4	4.4	93.2	92.9
18	F	FORD	Dec-26	BBB	4.346	463	277	740	15	4.8	4.9	97.0	96.4
19	GS	GOLDMAN SACHS	Mar-24	BBB	4.000	217	264	481	9	3.8	3.8	101.1	100.9
20	JPM	JP MORGAN CHASE	Null	BBB	5.809	830	258	1,088	10			101.1	100.8

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

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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