

# Market Transparency Report

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

**August 2017**

[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 2017

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	-18	-4.1%	-0.1
CD	5	18.3%	1.2
Corp	-11	-1.3%	-0.1
Municipal	-18	-5.1%	-0.2
Treasury	-1	3.4%	-0.2

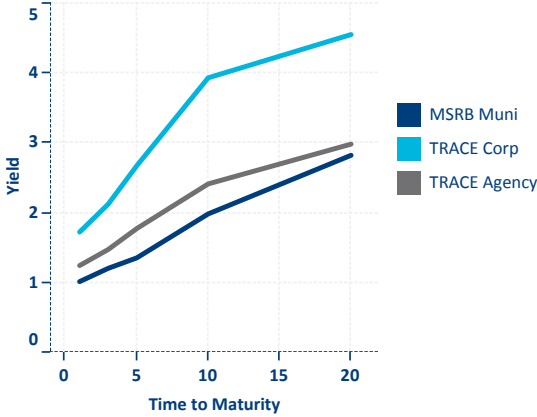
For monthly security trend data, see slides 5, 6 and 7

# Yield Matrix

## Average Yield, % for August 2017

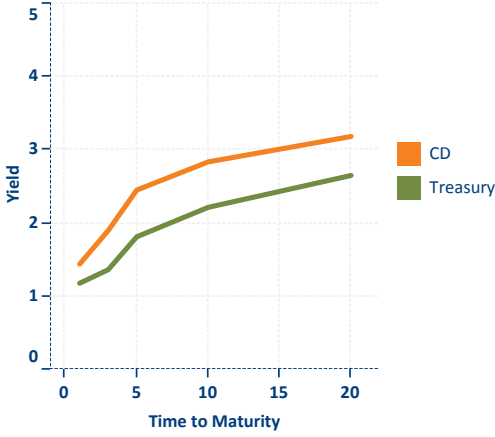
Market	TTM					Median Maturity (Years)
	1	3	5	10	20	
MSRB Muni	1.0	1.2	1.4	2.0	2.8	14
TRACE Corp	1.7	2.1	2.7	3.9	4.6	4
TRACE Agency	1.3	1.5	1.8	2.4	3.0	3
CD	1.4	1.9	2.5	2.8	3.2	1
Treasury	1.2	1.4	1.8	2.2	2.7	1

## Average Yield, %



## Asset Class

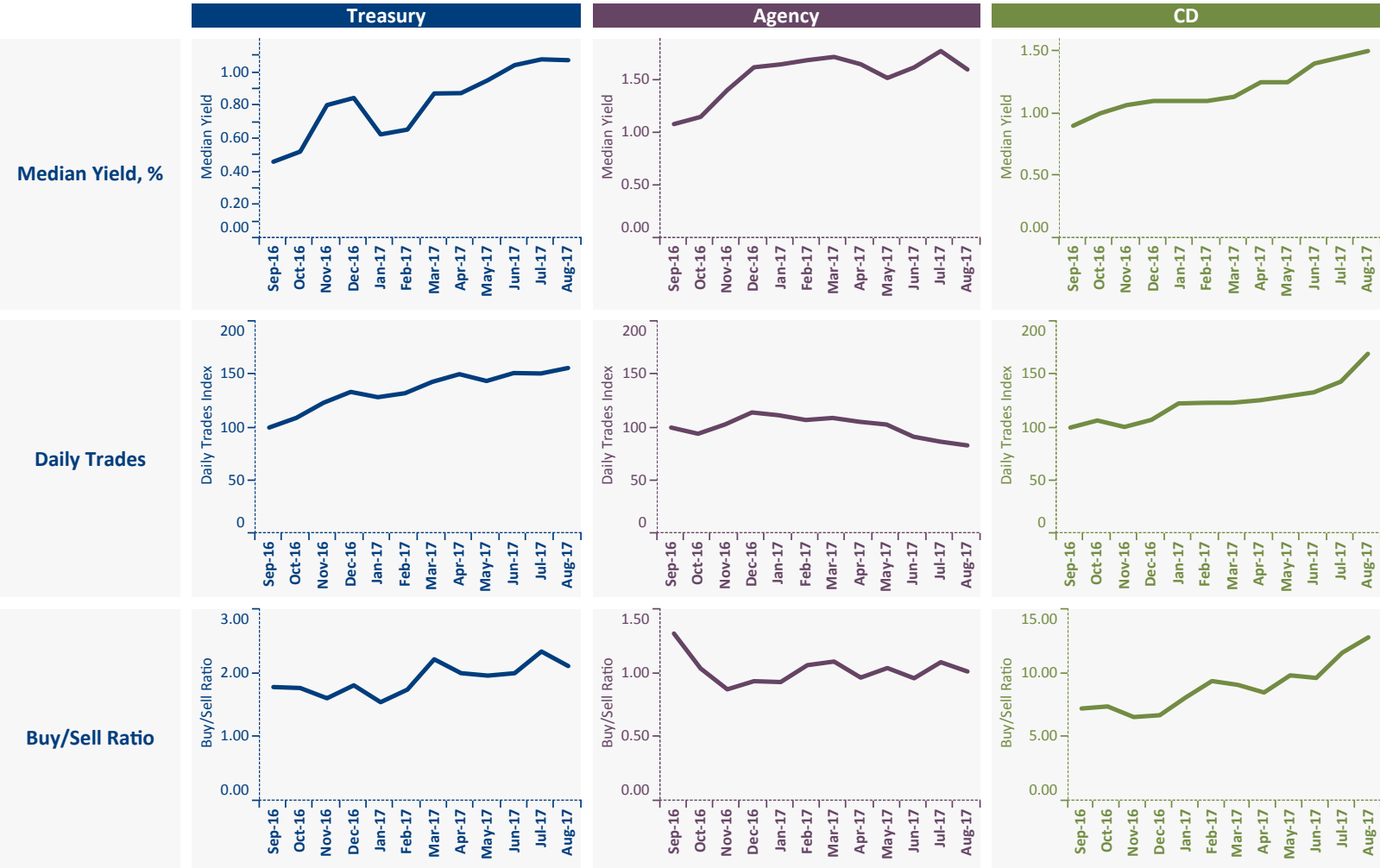
Market	Category (Filtered)	Rating Key	TTM					Median Maturity (Years)
			1	3	5	10	20	
TRACE Corp	Financial	AA	1.4	1.8	2.1	3.0		4
		A	1.5	2.0	2.5	3.2	4.0	4
		BBB	1.7	2.2	2.8	3.5	4.1	5
		HY	2.1	2.9	3.8	8.7	7.1	2
	Non-Financial	AAA	1.7	2.0	2.9	3.7		3
		AA	1.3	1.9	3.5	3.2	3.7	3
		A	1.4	1.8	2.5	3.1	4.1	2
		BBB	1.6	2.3	3.1	4.4	5.7	4
		HY	11.2	5.1	4.0	7.8	11.7	8
MSRB Muni	GO	AAA	0.9	1.0	1.2	1.8	2.8	12
		AA	0.9	1.1	1.3	1.9	2.9	13
		A	1.1	1.3	1.6	2.2	2.9	10
		BBB	1.9	2.3	2.5	3.4	3.8	12
	Revenue	HY	7.9	6.5	8.2	5.7	5.8	9
		AAA	0.9	1.0	1.2	1.8	2.5	10
		AA	1.0	1.1	1.3	1.8	2.7	15
		A	1.1	1.3	1.5	2.1	2.8	16
		BBB	1.5	2.1	2.4	3.1	3.2	17
		HY	9.4	14.5	9.7	6.0	6.2	16



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.



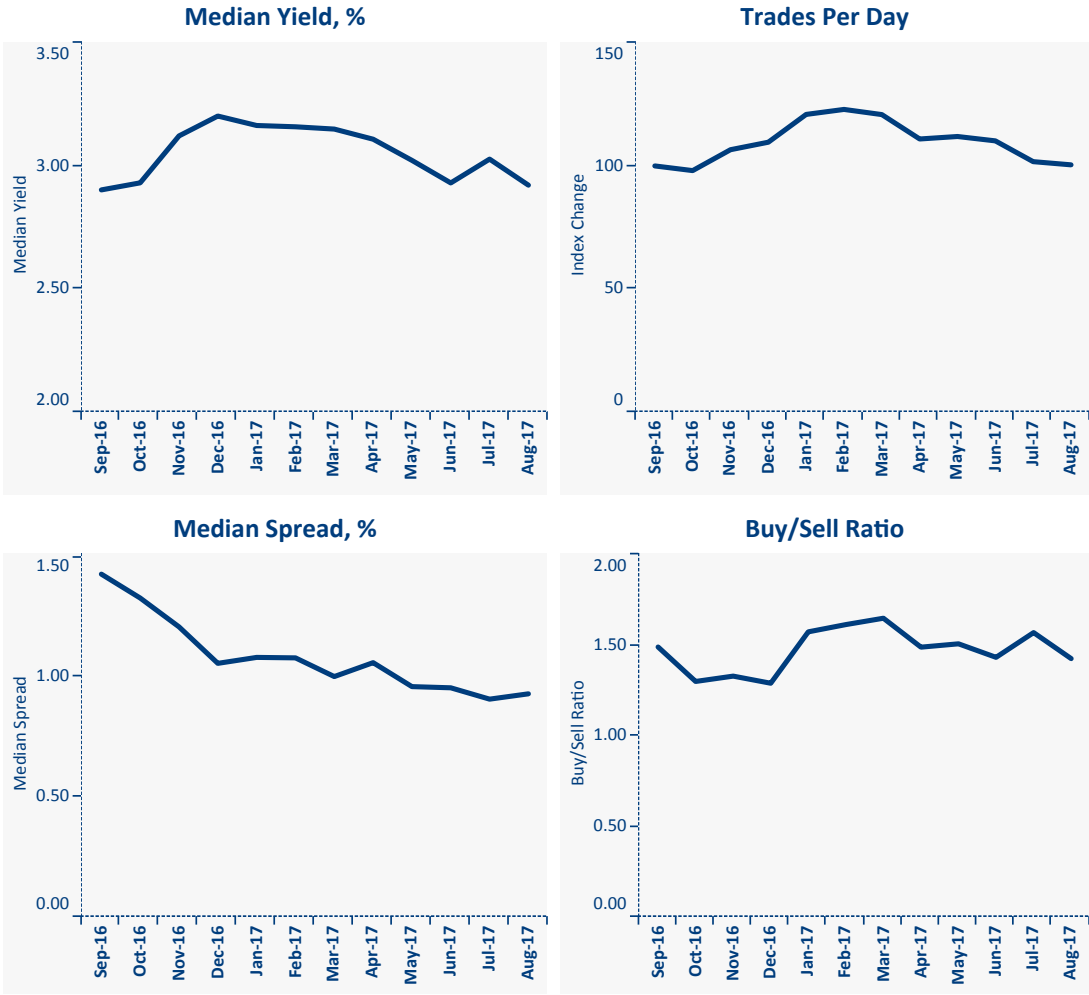
# Treasury, Agency, CD Transaction Trend Summary



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

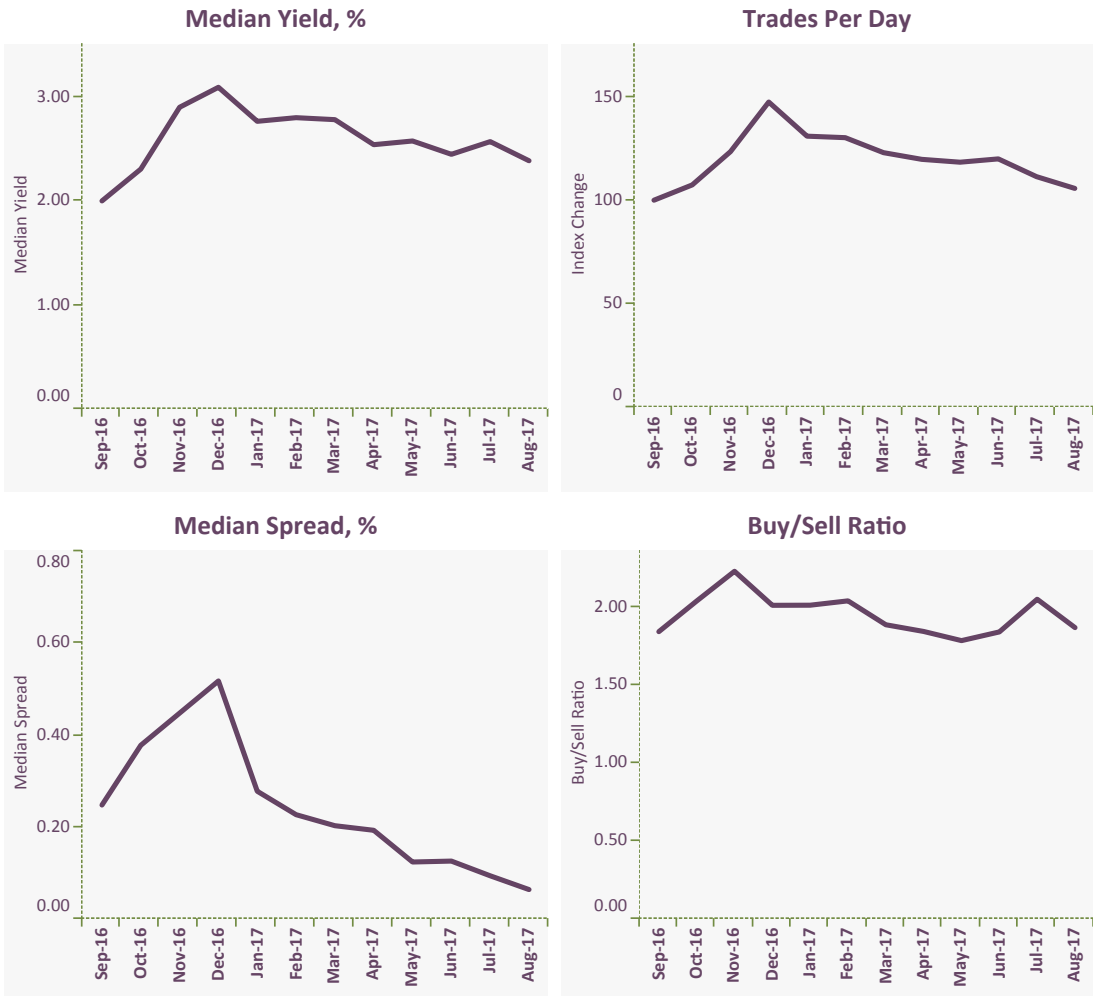


Daily Trades: First month = 100  
 Source: TRACE and Tradeweb Direct  
 -Based on odd-lot customer transactions (<100M) reported in TRACE.  
 -Median yields and spreads are based on all odd-lot customer buy transactions...

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# Municipal Bonds: Odd-Lot Customer Transaction Trend Summary



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 2017

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	BAC	BANK OF AMERICA	BBB	455	4.0%	17,858	2.0	275	1.6	2.1	2.7	3.4	3.9
2	GS	GOLDMAN SACHS	BBB	832	3.2%	14,328	1.3	286	1.7	2.1	2.6	3.4	4.2
3	JPM	JP MORGAN CHASE	A	477	2.9%	12,910	1.3	282	1.5	2.0	2.6	3.2	3.4
4	T	AT&T	BBB	88	2.7%	12,019	2.4	251	1.7	2.2	2.7	3.6	4.7
5	C	CITIGROUP	BBB	351	2.4%	10,747	1.7	248	1.7	2.2	2.6	3.5	3.5
6	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	AA	368	2.1%	9,255	0.9	184	1.4	1.8	2.2	3.2	3.8
7	VZ	VERIZON	BBB	92	1.9%	8,470	1.9	170	1.6	2.1	2.5	3.6	4.4
8	WFC	WELLS FARGO	A	195	1.9%	8,291	1.5	190	1.5	2.1	2.6	3.2	3.6
9	MS	MORGAN STANLEY	BBB	657	1.7%	7,629	1.2	182	1.7	2.1	2.7	3.3	4.1
10	AAPL	APPLE INC	AA	48	1.3%	5,635	1.7	119	1.3	1.9	2.3	2.9	3.4
11	TEVA	TEVA PHARMACEUTICAL FIN CO B V	BBB	12	1.1%	4,711	1.1	110	2.2	3.1	3.6	4.2	5.2
12	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	50	1.1%	4,689	4.2	112	1.9	2.4	3.1	4.0	5.0
13	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	A	43	1.0%	4,623	1.7	80	1.6	2.0	2.5	3.1	3.9
14	BRK	BERKSHIRE HATHAWAY	A	156	1.0%	4,371	1.5	105	1.4	1.8	2.3	3.3	3.9
15	F	FORD	BBB	234	0.8%	3,636	2.3	79	1.6	2.2	2.8	3.9	
16	FTR	FRONTIER COMMUNICATIONS CORP	B	21	0.8%	3,327	0.6	54		10.4	13.0	13.5	12.7
17	MSFT	MICROSOFT CORP	AAA	42	0.7%	3,248	1.7	75	1.3	1.7	2.1	2.8	3.4
18	CTL	CENTURYLINK	BB	27	0.7%	3,207	1.6	68		3.9	4.6	6.5	8.0
19	AXP	AMERICAN EXPRESS	A	38	0.7%	3,062	1.1	72	1.5	1.8	2.4	3.1	4.3
20	HBC	HSBC	N/R	481	0.7%	2,982	1.1	67	1.5	2.3	2.5	3.4	4.2

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 2017

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	CHRC	BAYSIDE CMNTY CHURCH SARASOTA INC BRADEN	N/R	139	0.5%	2,043	1,895	148	12.8	18		4.0	5.5	5.5	7.0
2	JWN	NORDSTROM INC	BBB	6	0.2%	1,051	971	80	12.1	23		2.6	3.0	4.1	5.8
3	WYN	WYNDHAM WORLDWIDE CORP	BBB	8	0.2%	1,022	938	84	11.2	23	1.5	3.3	3.7	4.2	
4	CBL	CBL & ASSOCS LTD PARTNERSHIP	BBB	3	0.2%	1,073	948	125	7.6	25				5.6	
5	NBR	NABORS INDS INC	BB	6	0.2%	1,094	930	164	5.7	21	2.1	4.4	5.7		
6	KR	KROGER CO	BBB	27	0.3%	1,107	905	202	4.5	25	1.7	2.1	2.5	3.5	4.7
7	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	50	1.1%	4,689	3,781	908	4.2	112	1.9	2.4	3.1	4.0	5.0
8	UTX	UNITED TECHNOLOGIES CORP	A	23	0.3%	1,373	1,069	304	3.5	31	1.6	1.9	2.2	3.0	4.0
9	MUR	MURPHY OIL CORP	BB	9	0.4%	1,651	1,254	397	3.2	36			4.4	5.5	
10	M	MACYS RETAIL HLDGS INC	BBB	21	0.4%	1,819	1,377	442	3.1	40		3.3	3.7	5.7	5.8
11	MDT	MEDTRONIC INC	A	20	0.2%	1,045	790	255	3.1	22	1.5	1.8	2.1	2.8	3.9
12	PBI	PITNEY BOWES	BBB	8	0.2%	1,038	775	263	3.0	22	1.6		3.3		4.9
13	VIA	VIACOM INC NEW	BBB	32	0.7%	2,980	2,211	769	2.9	69		1.9	2.6	3.4	5.5
14	XRX	XEROX CORP	BBB	11	0.3%	1,293	921	372	2.5	27	1.7	2.8			5.4
15	STX	SEAGATE HDD CAYMAN	BBB	7	0.6%	2,607	1,837	770	2.4	61	2.1		4.7	5.5	6.7
16	T	AT&T	BBB	88	2.7%	12,019	8,468	3,551	2.4	251	1.7	2.2	2.7	3.6	4.7
17	COF	CAPITAL ONE FINL CORP	BBB	30	0.5%	2,285	1,592	693	2.3	54	1.7	2.2	2.7	3.8	
18	STI	SUNTRUST BKS INC	BBB	23	0.3%	1,128	783	345	2.3	23	1.7	2.2	2.4	3.6	
19	F	FORD	BBB	234	0.8%	3,636	2,519	1,117	2.3	79	1.6	2.2	2.8	3.9	
20	LUK	JEFFERIES GROUP INC NEW	BB	27	0.5%	1,988	1,362	626	2.2	48	1.7	2.5	3.0	4.0	5.3

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 2017

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	BMO	BANK MONTREAL MEDIUM TERM SR NTS BOOK EN	N/R	64	0.3%	1,493	321	1,172	0.27	33	1.6	2.2	2.5		
2	FTR	FRONTIER COMMUNICATIONS CORP	B	21	0.8%	3,327	1,300	2,027	0.64	54		9.2	13.2	13.6	13.0
3	RY	ROYAL BANK OF CANADA	A	242	0.4%	1,804	728	1,076	0.68	37	1.6	2.0	2.2	3.6	3.7
4	NE	NOBLE HLDG INTL LTD	B	11	0.3%	1,168	482	686	0.70	16	5.1	10.0		13.1	11.1
5	WIN	WINDSTREAM CORP	B	6	0.3%	1,372	566	806	0.70	24		13.0	13.3		
6	CS	CREDIT SUISSE	N/R	359	0.4%	1,817	778	1,039	0.75	33	12.8	2.3	2.9	3.6	
7	FCX	FREEPORT-MCMORAN COPPER & GOLD INC	B	22	0.3%	1,530	682	848	0.80	38	2.3	3.4	4.3	5.9	6.0
8	RIG	TRANSOCEAN INC	B	14	0.3%	1,337	596	741	0.80	29			7.5	8.7	9.7
9	WMT	WAL-MART	AA	23	0.2%	1,021	457	564	0.81	23	1.5	1.8	2.2	2.9	3.6
10	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	AA	368	2.1%	9,255	4,389	4,866	0.90	184	1.8	2.0	2.3	3.4	3.9
11	PBR	PETROBRAS	B	13	0.4%	1,839	899	940	0.96	67	3.3	4.7	5.0	6.1	
12	ACT	ALLERGAN	BBB	13	0.3%	1,128	555	573	0.97	16	1.9	2.1	2.6	3.2	
13	MET	METLIFE	A	22	0.4%	1,602	804	798	1.01	33	1.8	2.1	2.5	2.9	3.9
14	USB	U S BANCORP MEDIUM TERM NTS- BOOK ENTRY	A	25	0.4%	1,725	867	858	1.01	31	1.6	2.0	2.4	3.1	
15	PDVA	PETROLEOS DE VENEZUELA SA	N/R	10	0.4%	1,820	924	896	1.03	32					
16	PTRB	PETROBRAS	B	7	0.2%	991	504	487	1.03	34		4.5			7.0
17	HBC	HSBC	N/R	481	0.7%	2,982	1,529	1,453	1.05	67	2.3	2.4	2.6	3.3	4.0
18	GNW	GENWORTH	B	8	0.4%	1,566	805	761	1.06	30	4.9	8.2	8.8		8.5
19	TEVA	TEVA PHARMACEUTICAL FIN CO B V	BBB	12	1.1%	4,711	2,456	2,255	1.09	110	2.3	3.4	3.8	4.3	5.5
20	DUK	DUKE ENERGY	BBB	92	0.2%	1,053	551	502	1.10	26	1.7	2.0	2.3	3.2	3.8

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 2017

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	BAC	BANK OF AMERICA	Jul-23	BBB	2.816	4,833	126	4,959	18			100.4	100.0
2	X	UNITED STS STL CORP NEW	Aug-25	B	6.875	1,098	15	1,113	24	6.5	6.8	101.5	100.5
3	T	AT&T	May-25	BBB	3.400	797	198	995	21	3.5	3.6	99.5	98.8
4	LUK	JEFFERIES GROUP INC NEW	Aug-37	N/R	8.000	766		766	21			99.8	
5	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Null	A	5.000	758	856	1,614	24			106.0	105.5
6	STX	SEAGATE HDD CAYMAN	Dec-34	BBB	5.750	716	263	979	22	6.7	6.7	90.4	90.3
7	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	Feb-26	A	3.650	680	247	927	15	3.1	3.2	104.2	103.5
8	BAC	BANK OF AMERICA	Apr-18	BBB	6.875	606	194	800	9	1.6	1.8	103.7	103.3
9	VIA	VIACOM INC NEW	Feb-57	BB	6.250	600	60	660	14			100.9	101.3
10	T	AT&T	Aug-27	BBB	3.900	579	42	621	12	3.8	3.9	101.0	99.9
11	UTX	UNITED TECHNOLOGIES CORP	May-18	BBB	1.778	550	15	565	9	1.6	1.7	100.1	100.0
12	T	AT&T	Aug-24	BBB	3.400	544	71	615	14	3.3	3.3	100.5	100.3
13	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	Feb-19	A	2.150	524	429	953	4	1.6	1.7	100.8	100.7
14	MCFH	HARLAND CLARKE HLDGS CORP	Feb-21	C	5.750	521	77	598	9	9.0	9.6	90.5	88.9
15	VZ	VERIZON	Aug-54	BBB	5.012	519	81	600	11	5.0	5.1	99.7	98.4
16	DISH	DISH DBS CORP	Aug-26	B	3.375	511	17	528	5	1.5	1.6	117.0	114.9
17	HAWK	Null	Jan-22	N/R	1.500	509	13	522	3		0.1	110.4	110.5
18	VZ	VERIZON	Nov-24	BBB	3.500	495	287	782	11	3.2	3.3	101.6	101.1
19	HPQ	HEWLETT PACKARD	Oct-25	BBB	4.900	494	83	577	12	4.0	4.1	106.0	105.5
20	T	AT&T	Feb-22	BBB	3.000	486	335	821	8	2.7	2.7	101.4	101.1

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).

## Corporate Bonds: Top 20 Most Sold Issues

August 2017

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	A	5.000	758	856	1,614	24			106.0	105.5
2	AOI	ALLIANCE ONE INTL INC	Jul-21	C	9.875	231	571	802	9	14.1	14.4	87.6	86.9
3	EVNT	EV Energy Partners, L.P.	Apr-19	C	8.000	147	570	717	3	78.6	84.5	40.1	37.0
4	LTD	LIMITED BRANDS INC	Feb-22	BB	5.625	142	515	657	7	4.2	4.7	105.6	103.5
5	NE	NOBLE HLDG INTL LTD	Mar-21	B	4.625	75	495	570	5		10.0	86.4	84.1
6	JPM	JP MORGAN CHASE	Null	BBB	7.900	286	471	757	17			103.7	103.1
7	FTR	FRONTIER COMMUNICATIONS CORP	Sep-21	B	6.250	252	448	700	8	10.5	12.4	85.7	82.8
8	HOS	HORNBECK OFFSHORE SVCS INC NEW	Mar-21	C	5.000	76	446	522	2	30.8	31.0	46.7	46.4
9	TEVA	TEVA PHARMACEUTICAL FIN CO B V	Nov-21	BBB	3.650	96	442	538	10	3.5	3.7	100.5	99.8
10	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	Feb-19	A	2.150	524	429	953	4	1.6	1.7	100.8	100.7
11	HTZ	HERTZ CORP	Oct-20	B	5.875	475	428	903	15	6.9	7.8	97.1	94.8
12	TEVA	TEVA PHARMACEUTICAL FIN CO B V	Jul-21	BBB	2.200	225	374	599	16	3.4	3.4	95.6	95.6
13	TEVA	TEVA PHARMACEUTICAL FIN CO B V	Jul-23	BBB	2.800	182	365	547	14	3.9	3.9	94.5	94.4
14	BMO	BANK MONTREAL MEDIUM TERM SR NTS BOOK EN	Jan-18	N/R	0.000	1	358	359	8			93.8	94.1
15	TEVA	TEVA PHARMACEUTICAL FIN CO B V	Mar-20	BBB	2.250	303	358	661	15	3.0	3.2	98.1	97.7
16	T	AT&T	Feb-22	BBB	3.000	486	335	821	8	2.7	2.7	101.4	101.1
17	VZ	VERIZON	Sep-23	BBB	5.150	306	307	613	12	3.0	3.1	111.8	111.4
18	WFC	WELLS FARGO	Null	BBB	7.980	186	305	491	10			103.4	102.9
19	DELL	DELL	Jun-23	BB	3.375	57	302	359	7	3.9	4.2	97.5	96.0
20	PBR	PETROBRAS	May-23	B	4.375	289	294	583	20	4.9	5.0	97.3	96.7

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).

## 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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