

# Market Transparency Report

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

**February 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 February 2019

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	-5	0.5%	0.6
CD	-5	-5.9%	-2.1
Corp	-24	2.1%	0.1
Municipal	-10	-4.7%	-0.1
Treasury	1	-3.0%	1.6

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

# Yield Matrix

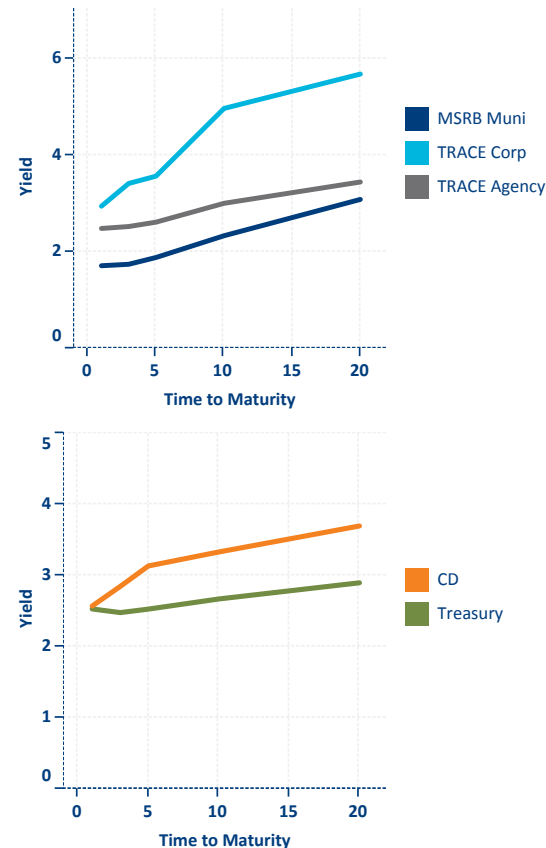
## Average Yield, % for February 2019

Market	TTM					Median Maturity (Years)
	1	3	5	10	20	
MSRB Muni	1.7	1.7	1.9	2.3	3.1	11
TRACE Corp	2.9	3.4	3.6	5.0	5.7	3
TRACE Agency	2.5	2.5	2.6	3.0	3.4	3
CD	2.6	2.8	3.2	3.4	3.7	1
Treasury	2.5	2.5	2.5	2.7	2.9	0

## Asset Class

Market	Category (Filtered)	Rating Key	1	3	5	10	20	Median Maturity (Years)
TRACE Corp	Financial	AA	2.6	2.7	4.0			2
		A	2.8	3.0	3.2	3.6	4.3	2
		BBB	3.6	3.7	3.9	4.4	5.3	4
		HY	3.1	4.0	4.0	8.5	6.2	4
	Non-Financial	AAA		2.2	2.3	3.3	3.8	2
		AA	2.5	2.6	3.8	3.5	4.0	2
		A	2.6	2.9	3.0	3.7	4.3	3
		BBB	3.0	3.9	4.2	5.4	6.1	7
		HY	13.0	6.7	10.4	9.1	19.0	8
MSRB Muni	GO	AAA	1.6	1.6	1.7	2.1	3.0	9
		AA	1.7	1.7	1.8	2.3	3.1	11
		A	1.7	1.9	2.0	2.5	3.1	8
		BBB	2.4	2.5	2.8	3.4	4.0	9
	Revenue	HY	2.3	3.6	3.3	4.1	4.0	9
		AAA	1.6	1.6	1.8	2.2	2.9	9
		AA	1.7	1.7	1.8	2.2	2.9	12
		A	1.8	1.9	2.0	2.4	3.1	14
		BBB	2.1	2.3	2.6	3.1	3.8	16
		HY	3.8	5.2	6.2	5.5	4.4	17

## 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.

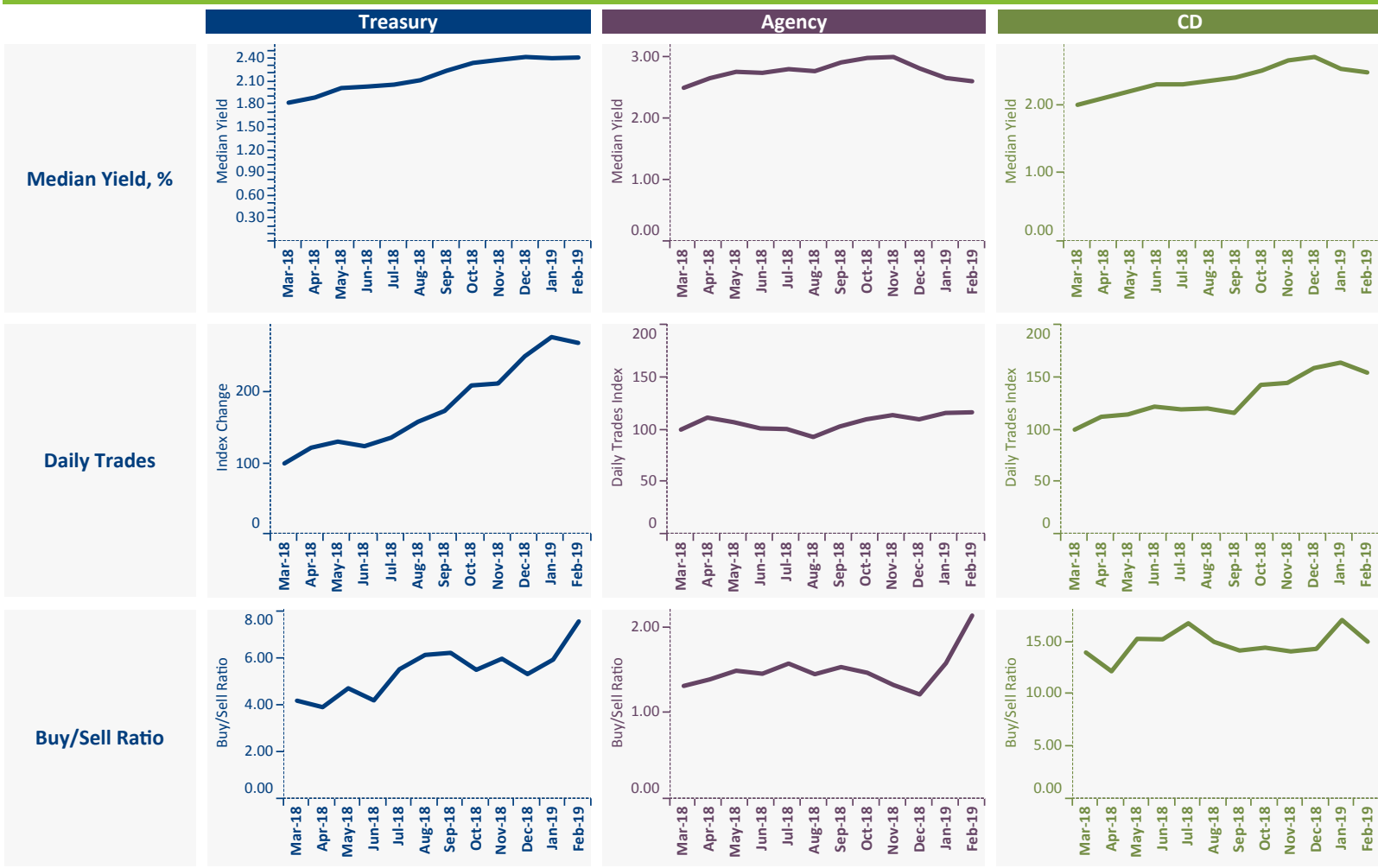
-The weights are based on transaction size.

-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



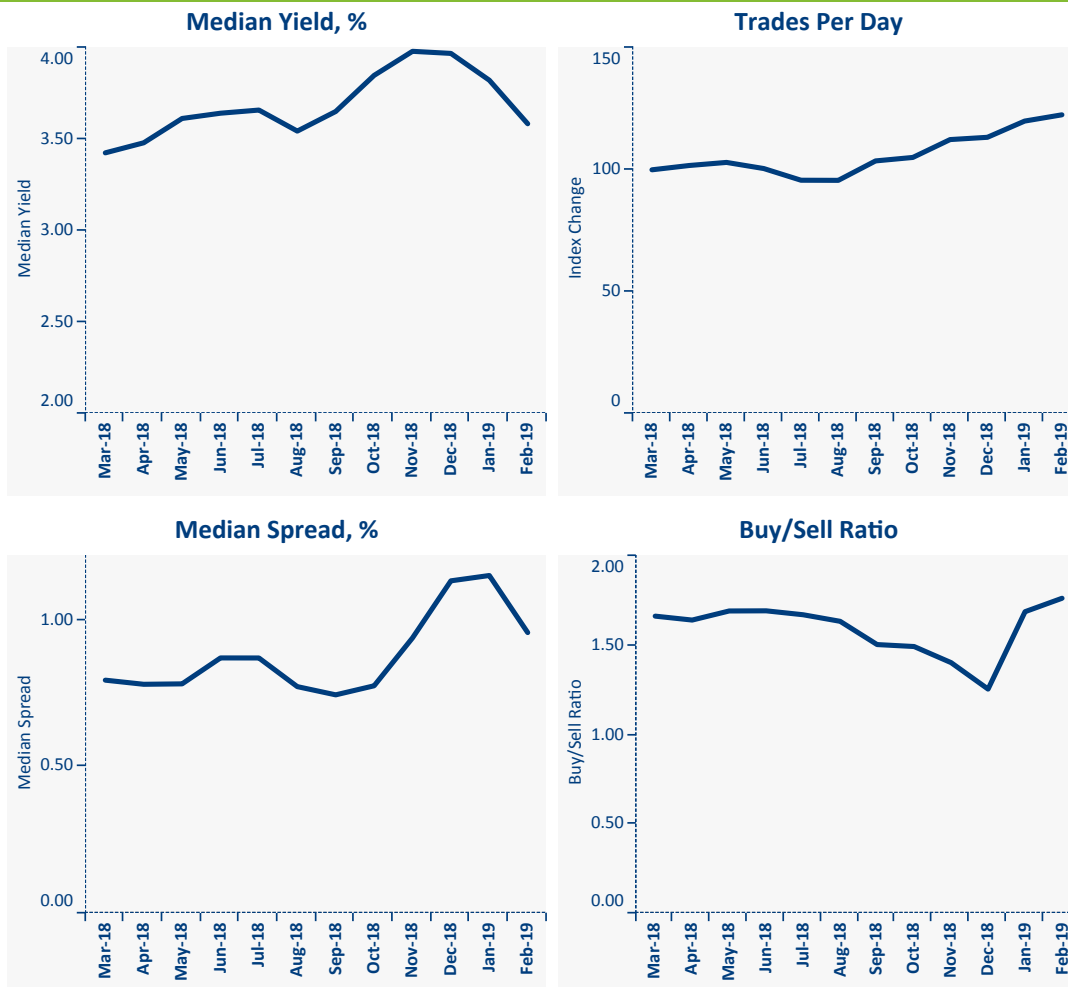
Daily Trades: First month = 100

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



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

February 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	895	3.3%	16,780	1.9	353	2.8	3.2	3.6	4.0	4.8
2	JPM	JP MORGAN CHASE	A	541	3.2%	16,174	1.9	352	2.9	3.0	3.4	3.9	4.3
3	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	BBB	328	2.7%	13,713	1.5	275	3.0	3.7	4.2	5.1	5.5
4	C	CITIGROUP	BBB	386	2.4%	12,300	1.5	277	2.8	3.1	3.5	4.2	4.5
5	BAC	BANK OF AMERICA	A	372	2.4%	12,125	1.9	262	2.8	3.1	3.6	4.0	4.3
6	T	AT&T	BBB	101	1.9%	9,721	1.9	192	2.8	3.1	3.6	4.2	5.1
7	WFC	WELLS FARGO	A	218	1.8%	9,416	1.8	213	2.8	3.1	3.4	3.8	4.5
8	MS	MORGAN STANLEY	BBB	712	1.8%	9,076	1.7	200	2.8	3.2	3.6	4.1	4.4
9	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	89	1.6%	8,066	4.0	185	3.0	3.6	4.3	5.0	6.0
10	AAPL	APPLE INC	AA	54	1.3%	6,687	1.4	141	2.5	2.7	2.9	3.3	3.9
11	F	FORD	BBB	230	1.1%	5,825	3.8	129	2.9	4.1	4.3	5.9	6.5
12	BRK	BERKSHIRE HATHAWAY	A	156	1.1%	5,823	1.8	138	2.9	2.9	3.0	4.2	5.1
13	CVS	CVS CAREMARK CORP	BBB	41	1.0%	5,184	2.5	110	3.0	3.2	3.6	4.2	4.9
14	AXP	AMERICAN EXPRESS	BBB	41	0.9%	4,495	1.9	98	2.7	3.0	3.3	3.4	4.1
15	PEMX	PETROLEOS MEXICANOS	BBB	38	0.9%	4,450	2.2	132	3.7	5.1	5.6	6.8	7.4
16	VZ	VERIZON	BBB	116	0.9%	4,345	1.0	94	2.7	2.9	3.2	3.8	4.5
17	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	BBB	47	0.8%	4,337	3.2	91	2.8	3.0	3.4	4.1	4.9
18	MSFT	MICROSOFT CORP	AAA	38	0.8%	4,257	1.7	95	2.6	2.6	2.7	3.1	3.6
19	CMCS	COMCAST	A	61	0.8%	4,247	1.8	90	2.8	2.9	3.2	3.6	4.3
20	ORCL	ORACLE CORP	AA	29	0.8%	3,911	1.4	77	2.5	2.8	3.0	3.4	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

February 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	MYL	MYLAN INC	BBB	10	0.2%	1,154	1,054	100	10.5	19		3.5	4.0	5.0	6.1
2	CHRC	BAYSIDE CMNTY CHURCH SARASOTA INC BRADEN	N/R	95	0.2%	1,245	1,109	136	8.2	9				6.4	6.6
3	EIX	EDISON MISSION	BBB	29	0.6%	3,264	2,781	483	5.8	71	4.7	3.9	4.2	5.6	5.1
4	SRE	SEMPRA ENERGY	BBB	48	0.2%	1,178	975	203	4.8	28	2.8	3.4	3.6	4.2	4.5
5	MO	ALTRIA GROUP INC	BBB	22	0.5%	2,773	2,274	499	4.6	66	2.8	3.3	3.7	4.6	5.6
6	STZ	CONSTELLATION BRANDS INC	BBB	19	0.2%	1,267	1,038	229	4.5	25	3.0	3.2	3.4	4.1	
7	LUK	JEFFERIES GROUP INC NEW	BBB	36	0.4%	2,057	1,666	391	4.3	44		3.8	4.3	5.3	6.3
8	ABBV	ABBVIE INC	BBB	16	0.6%	3,101	2,505	596	4.2	67	3.0	3.2	3.4	4.3	4.9
9	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	89	1.6%	8,066	6,455	1,611	4.0	185	3.0	3.6	4.3	5.0	6.0
10	F	FORD	BBB	230	1.1%	5,825	4,608	1,217	3.8	129	2.9	4.1	4.3	5.9	6.5
11	ANTM	Null	A	22	0.3%	1,650	1,288	362	3.6	30	2.9	3.1	3.4	3.8	4.6
12	FDX	FEDEX CORP	BBB	24	0.2%	1,202	923	279	3.3	26	2.7	3.1	3.2	3.8	4.5
13	BTI	BAT INTERNATIONAL FINANCE PLC	BBB	31	0.2%	1,158	888	270	3.3	29	3.1	3.6	3.9	4.6	5.7
14	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	BBB	47	0.8%	4,337	3,302	1,035	3.2	91	2.8	3.0	3.4	4.1	4.9
15	PSEC	PROSPECT CAP CORP INTERNOTES BOOK ENTRY	BBB	172	0.3%	1,665	1,242	423	2.9	26	3.7	4.8	5.4	6.3	6.7
16	SAN	ABBEY NATL TREAS SVCS PLC	BBB	32	0.3%	1,357	1,007	350	2.9	40	2.9	3.6	3.4	4.6	
17	PNC	PNC FDG CORP	A	38	0.4%	1,933	1,419	514	2.8	37	2.8	3.1	3.3	3.5	
18	M	MACYS RETAIL HLDGS INC	BBB	21	0.3%	1,327	973	354	2.8	29		4.7	4.8	5.9	6.5
19	DB	DEUTSCHE BANK	BBB	93	0.3%	1,720	1,257	463	2.7	34	3.9	4.3	4.7		
20	QCOM	QUALCOMM	A	11	0.3%	1,694	1,238	456	2.7	41	2.8	3.1	3.5	4.0	4.7

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

February 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	DVN	DEVON ENERGY CORP NEW	BBB	17	0.3%	1,423	218	1,205	0.18	10		3.4	5.1		5.3
2	PCG	PACIFIC GAS & ELEC CO	D	26	0.2%	1,169	187	982	0.19	21					
3	CS	CREDIT SUISSE	N/R	337	0.3%	1,306	531	775	0.69	29	3.3	3.7	4.1	4.8	
4	PTRB	PETROBRAS	BB	21	0.6%	3,236	1,362	1,874	0.73	117		4.1	4.9	6.0	6.7
5	EDP	ENTERPRISE PRODS OPER LLC	BBB	32	0.2%	1,182	544	638	0.85	26	3.1	3.1	3.5	3.7	4.8
6	CTL	CENTURYLINK	B	34	0.6%	2,974	1,435	1,539	0.93	65	4.2	4.8	6.2	8.5	9.1
7	VZ	VERIZON	BBB	116	0.9%	4,345	2,218	2,127	1.04	94	2.9	3.0	3.3	3.9	4.6
8	FTR	FRONTIER COMMUNICATIONS CORP	C	24	0.3%	1,613	832	781	1.07	22	18.3	25.2	23.6	18.6	17.6
9	TEVA	TEVA PHARMACEUTICAL FIN CO B V	BB	13	0.3%	1,574	816	758	1.08	35	4.0	4.6	5.3	6.0	6.5
10	AA	ALCOA	BB	9	0.3%	1,524	797	727	1.10	34	4.0	4.1	5.4	6.1	6.4
11	DELL	DELL	BB	10	0.3%	1,310	689	621	1.11	28	4.0	3.8	4.8	4.8	7.0
12	XRX	XEROX CORP	BB	12	0.2%	1,248	669	579	1.16	26	4.1	4.2	5.2		7.3
13	RY	ROYAL BANK OF CANADA	AA	224	0.4%	2,069	1,116	953	1.17	49	2.8	2.9	3.3	4.2	4.5
14	BCS	BARCLAYS	BBB	465	0.4%	2,202	1,191	1,011	1.18	49	3.3	3.9	4.0	4.2	4.4
15	DIS	DISNEY WALT CO NEW MEDIUM TERM NTS BOOK	A	28	0.3%	1,385	750	635	1.18	32	2.7	2.8		3.2	4.1
16	DUK	DUKE ENERGY	BBB	99	0.3%	1,663	929	734	1.27	36	3.0	3.1	3.3	3.6	4.2
17	PEP	PEPSICO	A	36	0.3%	1,676	938	738	1.27	38	2.8	2.7	2.8	3.3	4.0
18	USB	U S BANCORP MEDIUM TERM NTS- BOOK ENTRY	A	31	0.4%	2,101	1,177	924	1.27	40	2.8	3.1	3.3	3.4	
19	RDS	SHELL	AA	28	0.4%	1,830	1,028	802	1.28	41	2.8	2.8	3.0	3.3	4.0
20	HBC	HSBC	N/R	387	0.5%	2,507	1,418	1,089	1.30	54	3.0	3.1	4.0	4.6	4.5

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

February 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	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Null	BBB	5.000	1,452	1,300	2,752	45	5.6	5.6	89.7	88.5
2	WIN	WINDSTREAM CORP	Oct-23	C	8.250	1,324	369	1,693	18	13.9	13.8	81.0	81.5
3	F	FORD	Dec-26	BBB	4.346	960	157	1,117	24	5.7	5.9	91.6	90.6
4	JPM	JP MORGAN CHASE	Jul-20	A	4.400	885	119	1,004	19	3.0	3.0	102.0	101.9
5	EIX	EDISON MISSION	Apr-20	BBB	2.125	736	40	776	17	4.7	4.8	97.2	97.0
6	MS	MORGAN STANLEY	Jan-20	BBB	2.650	712	69	781	17	2.8	3.0	99.9	99.7
7	BAC	BANK OF AMERICA	Dec-48	BBB	5.875	681	52	733	20	5.9	6.0	99.6	97.1
8	GS	GOLDMAN SACHS	Dec-19	BBB	2.300	586	74	660	14	2.8	3.0	99.6	99.4
9	EIX	EDISON MISSION	Mar-21	A	2.900	560	99	659	16	3.8	3.9	98.3	98.1
10	T	AT&T	Feb-22	BBB	3.000	551	343	894	9	3.1	3.2	99.7	99.4
11	GS	GOLDMAN SACHS	Jan-23	BBB	3.625	519	128	647	15	3.4	3.4	101.0	100.8
12	BAC	BANK OF AMERICA	Jan-29	A	4.125	515	2	517	3			100.0	98.6
13	JPM	JP MORGAN CHASE	Null	BBB	0.000	515	150	665	7	6.2	6.2	100.7	100.5
14	JPM	JP MORGAN CHASE	Jan-20	A	2.250	515	162	677	16	2.8	2.9	99.5	99.4
15	GM	GENERAL MOTORS FINANCIAL COMPANY INC	Null	BB	5.750	513	82	595	7	6.6	6.6	87.0	86.6
16	PNC	PNC FDG CORP	Mar-22	A	3.300	496	34	530	6	3.1	3.1	100.6	100.6
17	ANTM	Null	Oct-42	A	2.750	496	32	528	6			434.7	420.6
18	BAC	BANK OF AMERICA	Jan-23	A	3.300	495	149	644	13	3.2	3.2	100.4	100.3
19	ABBV	ABBVIE INC	May-20	BBB	2.500	489	112	601	13	3.0	3.1	99.4	99.3
20	F	FORD	Jul-31	BBB	7.450	486	96	582	15	6.8	7.0	105.3	103.8

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).

## Corporate Bonds: Top 20 Most Sold Issues

February 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	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Null	BBB	5.000	1,452	1,300	2,752	45	5.6	5.6	89.7	88.5
2	DVN	DEVON ENERGY CORP NEW	May-22	BBB	3.250	25	1,120	1,145	4	3.4	3.4	99.5	99.7
3	CCI	CROWN CASTLE INTL CORP	Jan-23	BBB	5.250	63	586	649	6	3.6	3.7	105.8	105.6
4	WIN	WINDSTREAM CORP	Oct-23	C	8.250	1,324	369	1,693	18	13.9	13.8	81.0	81.5
5	AAPL	APPLE INC	May-23	AA	2.400	347	367	714	14	2.8	2.9	98.4	98.2
6	JPM	JP MORGAN CHASE	Oct-26	A	2.950	262	361	623	5	3.6	3.6	95.8	95.6
7	T	AT&T	Feb-22	BBB	3.000	551	343	894	9	3.1	3.2	99.7	99.4
8	VZ	VERIZON	Nov-24	BBB	3.500	260	340	600	8	3.2	3.3	101.3	101.0
9	PTRB	PETROBRAS	Jan-28	BB	5.999	285	333	618	25	5.8	6.0	101.3	100.1
10	ONNN	ON SEMICONDUCTOR CORP	Dec-20	BB	1.000	15	316	331	2			133.4	130.4
11	T	AT&T	Mar-27	BBB	4.250	272	312	584	10	4.1	4.1	101.0	100.8
12	C	CITIGROUP	Null	BB	6.250	100	303	403	11	6.0	6.0	104.8	104.4
13	AAPL	APPLE INC	Feb-26	AA	3.250	302	298	600	7	3.2	3.2	100.5	100.3
14	ORCL	ORACLE CORP	Nov-27	AA	3.250	258	292	550	6	3.4	3.4	98.8	98.6
15	C	CITIGROUP	Null	BB	6.300	131	291	422	11	6.2	6.3	102.0	100.4
16	VZ	VERIZON	Sep-23	BBB	5.150	169	282	451	9	3.0	3.1	108.9	108.6
17	PHII	PHI INC	Mar-19	C	5.250	312	270	582	8	488.4	507.3	70.5	69.3
18	WAG	WALGREEN CO	Nov-24	BBB	3.800	270	268	538	6	3.7	3.8	100.6	100.2
19	PTRB	PETROBRAS	May-23	BB	4.375	183	266	449	16	4.3	4.5	100.2	99.6
20	GILD	GILEAD SCIENCES INC	Feb-25	A	3.500	255	262	517	5	3.4	3.5	100.3	100.1

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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