

Market Transparency Report

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

May 2016

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 May 2016

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	4	-4.3%	-0.1
CD	7	-1.7%	0.8
Corp	-11	4.3%	0.1
Municipal	-6	-1.5%	0.0
Treasury	5	9.2%	0.2

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

Yield Matrix

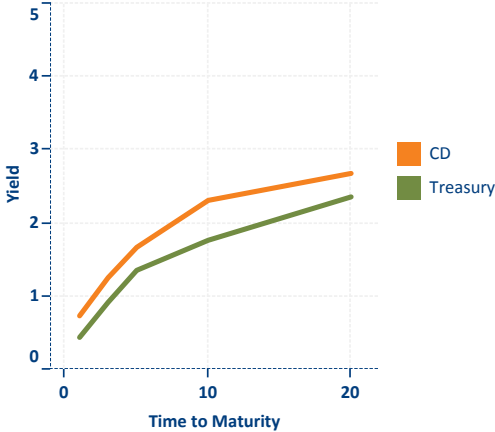
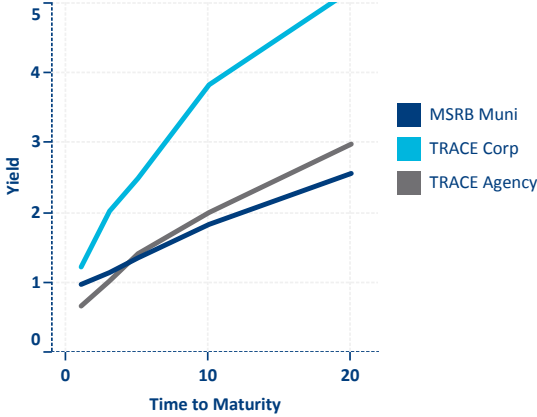
Average Yield, % for May 2016

Market	TTM					Median Maturity (Years)
	1	3	5	10	20	
MSRB Muni	1.0	1.2	1.4	1.8	2.6	13
TRACE Corp	1.2	2.0	2.5	3.8	5.2	5
TRACE Agency	0.7	1.0	1.4	2.0	3.0	3
CD	0.7	1.3	1.7	2.3	2.7	1
Treasury	0.4	0.9	1.4	1.8	2.4	1

Asset Class

Market	Category (Filtered)	Rating Key	TTM					Median Maturity (Years)
			1	3	5	10	20	
TRACE Corp	Financial	AA	0.9	1.5	1.9	3.5		3
		A	1.0	1.6	2.2	3.0	4.1	5
		BBB	1.3	2.1	2.8	3.7	4.1	5
		HY	2.1	3.2	4.5	4.7	8.2	3
	Non-Financial	AAA	1.1	1.1	1.3	2.1	3.6	5
		AA	0.6	1.3	1.6	3.4	3.8	4
		A	0.8	1.3	2.2	3.1	3.9	5
		BBB	1.7	2.2	3.4	4.4	7.0	11
		HY	3.7	7.6	6.0	8.0	10.1	6
MSRB Muni	GO	AAA	0.7	0.8	1.0	1.4	2.2	10
		AA	0.8	1.0	1.1	1.7	2.5	11
		A	0.9	1.1	1.3	1.8	2.5	9
		BBB	1.1	1.3	2.0	3.0	3.5	15
	Revenue	HY	18.9	19.5	15.0	10.3	9.5	9
		AAA	0.8	0.9	1.1	1.5	2.3	12
		AA	0.8	1.0	1.2	1.6	2.4	15
		A	0.9	1.2	1.4	2.0	2.6	17
		BBB	1.3	1.8	2.3	2.4	2.9	19
		HY	15.8	16.3	16.9	9.3	8.1	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.

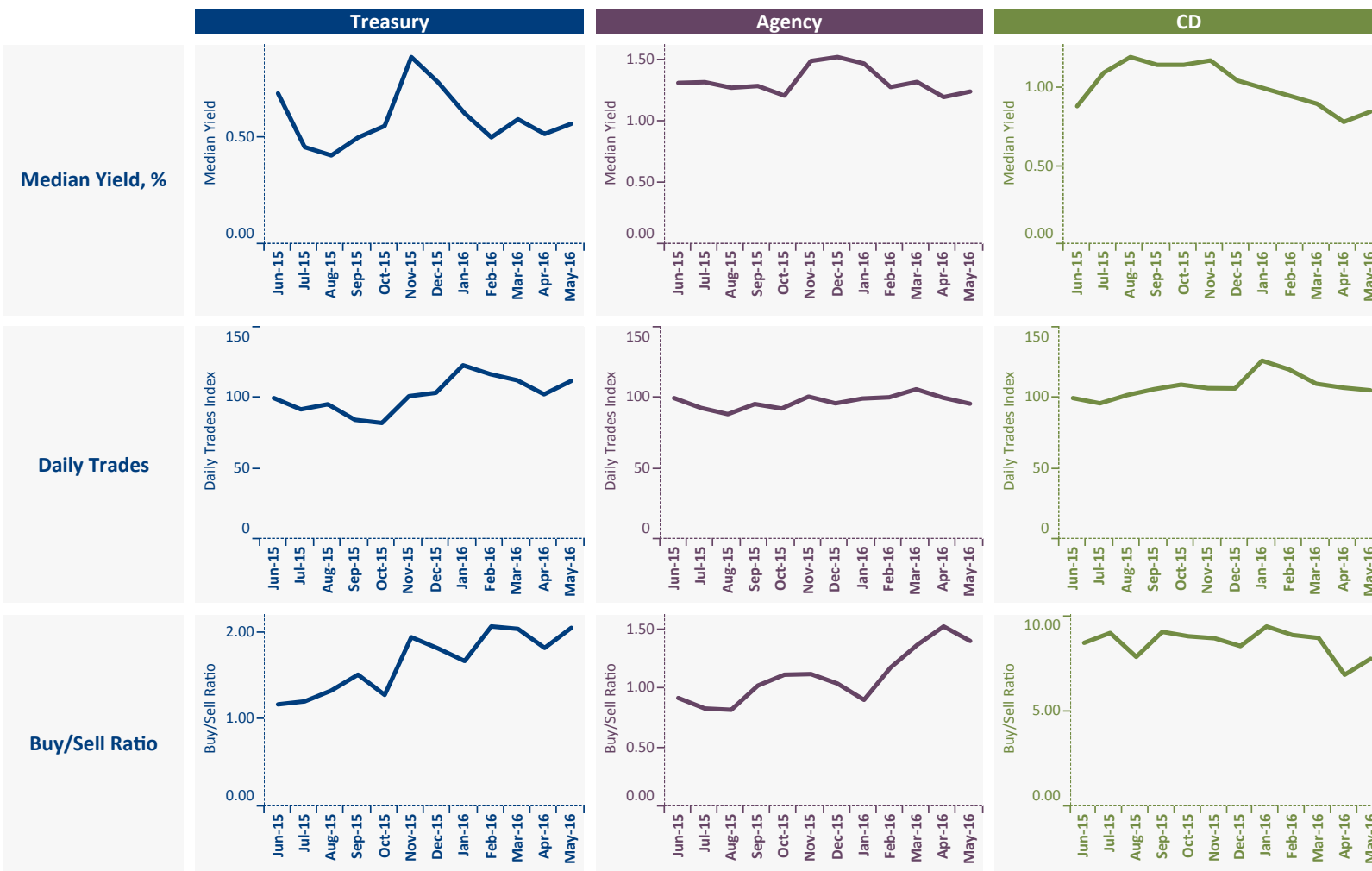
-The weights are based on transaction size.

-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



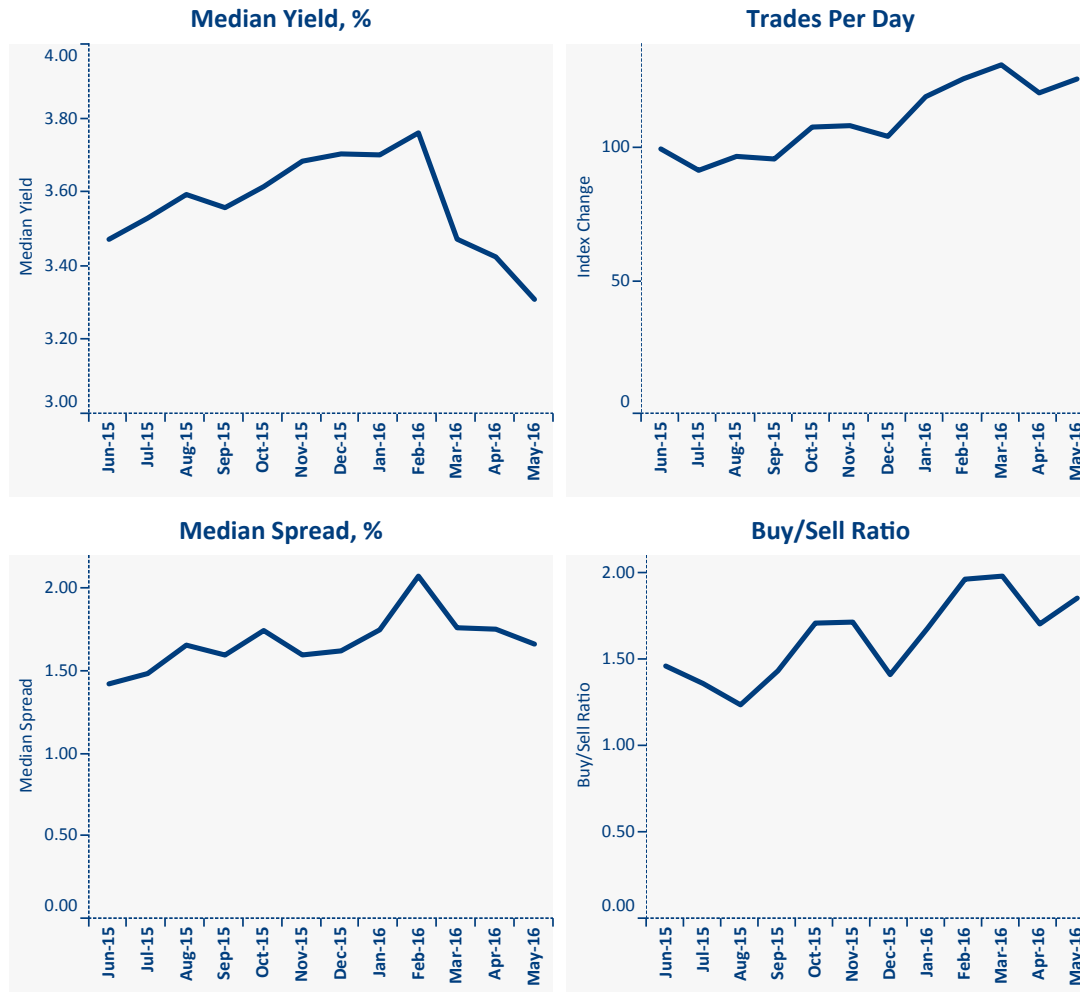
Daily Trades: First month = 100

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...

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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

May 2016

Index	Ticker	Comany	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	770	3.0%	12,529	1.6	291	1.3	2.0	2.4	3.3	4.4
2	BAC	BANK OF AMERICA	BBB	493	2.9%	12,383	1.8	264	1.3	2.0	2.4	3.7	3.9
3	JPM	JP MORGAN CHASE	BBB	423	2.8%	11,979	2.0	277	1.2	1.7	2.2	3.2	3.1
4	C	CITIGROUP	BBB	263	2.5%	10,352	2.6	241	0.9	1.8	2.4	3.8	4.5
5	WFC	WELLS FARGO	A	194	2.3%	9,558	2.1	228	1.0	1.6	2.1	3.0	4.2
6	T	AT&T	BBB	73	2.0%	8,605	3.0	178	1.1	1.6	2.4	3.2	4.4
7	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	AA	389	2.0%	8,560	1.1	197	0.8	1.4	2.0	3.0	3.7
8	MS	MORGAN STANLEY	BBB	641	1.6%	6,586	1.4	157	1.1	1.9	2.4	3.5	4.1
9	AAPL	APPLE INC	AA	31	1.1%	4,642	3.3	105	0.6	1.2	2.0	2.6	3.9
10	EMC	EMC CORP	A	3	1.1%	4,599	11.9	91		3.0	4.4		
11	VZ	VERIZON	BBB	63	1.0%	4,337	1.5	92	1.1	1.4	2.1	7.6	4.5
12	HPQ	HEWLETT PACKARD	BBB	17	1.0%	4,145	6.0	90		2.0	3.2		
13	KMI	KINDER MORGAN ENERGY PARTNERS L P	BBB	68	1.0%	4,143	3.7	85	1.9	3.0	3.9	4.4	7.0
14	AXP	AMERICAN EXPRESS	BBB	38	0.9%	3,963	3.2	89	1.1	1.5	2.1	3.4	4.7
15	BRK	BERKSHIRE HATHAWAY	AA	152	0.8%	3,395	1.0	85	0.8	1.2	1.8	2.6	3.9
16	PBR	PETROBRAS	B	15	0.8%	3,212	1.9	106	4.4	7.2	8.5	9.1	
17	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	A	42	0.7%	3,149	1.6	70	1.1	1.6	2.2	3.0	4.1
18	HBC	HSBC	BBB	358	0.7%	3,034	1.8	76	1.3	2.0	3.0	3.9	4.9
19	CTL	CENTURYLINK	BB	32	0.7%	2,796	1.7	58	1.9	4.6	6.1	7.5	7.3
20	AA	ALCOA	BBB	12	0.7%	2,761	3.3	64	1.7	2.8	4.7	5.6	6.8
21	X	UNITED STS STL CORP NEW	B	7	0.7%	2,761	0.6	54	2.3	13.0	12.6		10.6

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

May 2016

Index	Ticker	Comany	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	WFM	WHOLE FOODS MARKET INC	BBB	1	0.2%	985	954	31	30.8	19					
2	KSS	KOHL'S CORP	BBB	8	0.5%	1,921	1,784	137	13.0	41			3.3	4.7	5.9
3	ABT	ABBOTT LABS	A	8	0.4%	1,491	1,383	108	12.8	28		2.1	2.4	3.0	
4	CHRC	BAYSIDE CMNTY CHURCH SARASOTA INC BRADEN	N/R	86	0.3%	1,337	1,237	100	12.4	9		4.7			6.3
5	EMC	EMC CORP	A	3	1.1%	4,599	4,241	358	11.9	91		3.0	4.4		
6	CDE	COEUR MNG INC	B	1	0.4%	1,882	1,702	180	9.5	19			9.6		
7	M	MACYS RETAIL HLDGS INC	BBB	21	0.5%	2,009	1,781	228	7.8	45			3.3	4.2	6.4
8	FE	FIRSTENERGY CORP	BBB	19	0.2%	1,009	892	117	7.6	21	1.7	2.6			5.2
9	XRX	XEROX CORP	BBB	12	0.5%	2,072	1,823	249	7.3	42	1.6	3.4	3.8	4.9	6.9
10	GPS	GAP	BBB	1	0.4%	1,865	1,621	244	6.6	46			5.3		
11	STX	SEAGATE HDD CAYMAN	BBB	6	0.4%	1,676	1,455	221	6.6	35		3.9		8.6	9.1
12	HPQ	HEWLETT PACKARD	BBB	17	1.0%	4,145	3,551	594	6.0	90		2.0	3.2		
13	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	32	0.6%	2,589	2,140	449	4.8	62	1.7	2.3	3.2	3.9	5.1
14	WMB	WILLIAMS COS INC	BBB	30	0.4%	1,701	1,380	321	4.3	34	2.1	5.0	5.4	5.9	6.8
15	ESV	ENSCO PLC	BB	8	0.2%	976	782	194	4.0	19		8.5	9.5	10.9	11.0
16	CVX	CHEVRON CORP NEW	AA	34	0.5%	2,240	1,785	455	3.9	51	1.1	1.4	2.2	2.8	3.9
17	ETP	ENERGY TRANSFER PARTNERS L P	BBB	25	0.3%	1,329	1,049	280	3.8	27	1.3	3.1	4.4	5.2	6.7
18	KMI	KINDER MORGAN ENERGY PARTNERS L P	BBB	68	1.0%	4,143	3,252	891	3.7	85	1.9	3.0	3.9	4.4	7.0
19	MSI	MOTOROLA SOLUTIONS INC	BBB	10	0.4%	1,715	1,341	374	3.6	36			3.7	4.3	
20	D	DOMINION RES INC VA NEW	BBB	51	0.3%	1,249	976	273	3.6	27	1.1	1.8	2.4	3.0	4.3

Source: TRACE and Tradeweb Direct

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-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

May 2016

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	CHK	CHESAPEAKE ENERGY	C	14	0.4%	1,564	474	1,090	0.43	22	12.5	35.0	21.5		
2	BCS	BARCLAYS	N/R	408	0.4%	1,792	636	1,156	0.55	40	2.4	2.9	3.3	4.4	3.9
3	X	UNITED STS STL CORP NEW	B	7	0.7%	2,761	976	1,785	0.55	54	2.7	12.8	12.7		10.3
4	CHTR	CCO HOLDINGS LLC	BBB	24	0.4%	1,504	593	911	0.65	38	1.7	2.4	3.2	4.8	5.6
5	CS	CREDIT SUISSE	N/R	306	0.4%	1,485	585	900	0.65	26	2.1	3.0	3.7	4.1	
6	PTRB	Null	B	10	0.6%	2,340	936	1,404	0.67	75	3.6	7.7	8.5		9.3
7	DOW	DOW CHEM CO	BBB	127	0.4%	1,544	654	890	0.73	28	1.9	2.5	2.0	3.6	4.3
8	FCX	FREEMPORT-MCMORAN COPPER & GOLD INC	BB	18	0.5%	1,912	849	1,063	0.80	39	4.5	6.9	7.7	8.0	8.2
9	RY	ROYAL BANK OF CANADA	A	228	0.4%	1,618	731	887	0.82	38	1.2	1.6	1.9	3.6	3.7
10	SFTBF	SPRINT	B	16	0.2%	1,033	482	551	0.87	19	4.5	10.0	12.4	11.1	11.6
11	WMT	WAL-MART	AA	24	0.3%	1,154	541	613	0.88	28	0.8	1.1	1.5	2.2	3.7
12	BRK	BERKSHIRE HATHAWAY	AA	152	0.8%	3,395	1,695	1,700	1.00	85	1.0	1.5	1.9	2.7	4.1
13	CMCS	COMCAST	A	42	0.4%	1,761	900	861	1.05	45	1.1	1.6	2.0	2.6	4.0
14	CSCO	CISCO	AA	22	0.3%	1,090	562	528	1.06	28	0.9	1.4	1.8	2.5	3.8
15	ACT	ALLERGAN	BBB	17	0.2%	1,027	533	494	1.08	22	1.7	2.6	3.1	3.6	4.7
16	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	AA	389	2.0%	8,560	4,436	4,124	1.08	197	1.1	1.5	2.0	3.2	3.8
17	CAT	CATERPILLAR	A	77	0.3%	1,105	583	522	1.12	26	1.0	1.6	1.9	2.6	4.1
18	INTC	INTEL CORP	A	19	0.3%	1,107	591	516	1.15	27	1.1	1.3	1.9	2.5	1.4
19	USB	U S BANCORP MEDIUM TERM NTS- BOOK ENTRY	A	23	0.3%	1,246	666	580	1.15	28	1.0	1.4	2.0	2.8	
20	MT	ARCELORMITTAL SA LUXEMBOURG	BB	10	0.3%	1,174	636	538	1.18	30	1.7	4.5	6.3	6.9	8.8

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

May 2016

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	EMC	EMC CORP	Jun-23	A	3.375	1,708	165	1,873	35	6.3	6.2	83.8	84.0
2	CDE	COEUR MNG INC	Feb-21	B	7.875	1,702	180	1,882	19	9.6	10.6	93.4	90.3
3	GPS	GAP	Apr-21	BBB	5.950	1,621	244	1,865	46	5.3	5.6	102.8	101.5
4	EMC	EMC CORP	Jun-20	A	2.650	1,351	113	1,464	31	4.4	4.6	93.6	92.9
5	HPQ	HEWLETT PACKARD	Sep-41	BBB	6.000	1,314	39	1,353	28	6.6	6.8	92.6	89.9
6	EMC	EMC CORP	Jun-18	A	1.875	1,182	80	1,262	24	3.0	3.1	97.8	97.6
7	WFM	WHOLE FOODS MARKET INC	Dec-25	BBB	5.200	954	31	985	19			106.6	103.8
8	HPQ	HEWLETT PACKARD	Oct-25	BBB	4.900	938	33	971	20			103.1	101.8
9	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Dec-49	A	5.000	925	163	1,088	28			105.2	103.8
10	PBR	PETROBRAS	May-21	B	8.375	897	167	1,064	41	8.5	8.6	99.5	99.0
11	C	CITIGROUP	Dec-49	BB	5.950	896	57	953	22			98.9	97.8
12	HCI	HCI GROUP INC	Mar-19	N/R	3.875	834	6	840	14	7.0	8.3	92.0	89.1
13	KSS	KOHL'S CORP	Jul-25	BBB	4.250	823	28	851	18	4.7	4.8	96.5	96.0
14	WFC	WELLS FARGO	Jan-49	BBB	5.875	822	95	917	21			107.3	107.0
15	JPM	JP MORGAN CHASE	Apr-49	BBB	7.900	793	260	1,053	26			102.3	101.3
16	FE	FIRSTENERGY CORP	Aug-39	BBB	6.800	791	52	843	17	6.8	7.1	99.7	96.7
17	MET	METLIFE	Dec-49	BBB	5.250	768	77	845	22			100.0	99.0
18	AXP	AMERICAN EXPRESS	Dec-49	BBB	4.900	766	28	794	15			91.4	90.1
19	AA	ALCOA	Oct-24	BBB	5.125	697	43	740	18	5.4	5.6	98.2	96.7
20	T	AT&T	Jun-20	BBB	2.450	662	67	729	13	2.3	2.3	100.6	100.6

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

May 2016

Index	Ticker	Comany	Maturity	Rating Key (Med)	Coupon	Trades (Buy)	Trades (Sell)	Trades	Dollar Vol. Traded (MM)	Yield (Buy)	Yield (Sell)	Price (Buy)	Price (Sell)
1	X	UNITED STS STL CORP NEW	Jun-17	B	6.050	13	732	745	16	2.3	2.7	103.9	103.5
2	WFC	WELLS FARGO	Feb-49	BBB	7.980	466	588	1,054	22			105.4	104.0
3	X	UNITED STS STL CORP NEW	Feb-18	B	7.000	45	539	584	13	3.4	4.8	105.8	103.5
4	DOW	DOW CHEM CO	Nov-20	BBB	4.250	51	538	589	6	1.9	2.0	109.5	109.1
5	CHK	CHESAPEAKE ENERGY	Aug-17	C	6.500	129	338	467	8	14.9	12.5	90.3	89.3
6	PTRB	Null	Mar-19	B	7.875	196	320	516	19	7.5	7.6	101.0	100.8
7	ALGT	Null	Jul-19	BB	5.500	162	309	471	7	4.2	4.4	103.9	103.2
8	C	CITIGROUP	Dec-49	BB	5.950	445	302	747	14			98.9	96.1
9	BRK	BERKSHIRE HATHAWAY	Jan-22	AA	3.400	98	297	395	4	1.9	1.9	108.0	108.3
10	WFC	WELLS FARGO	Mar-49	BBB	5.570	181	286	467	13			100.0	99.0
11	AU	ANGLOGOLD ASHANTI HLDGS PLC	Aug-22	BBB	5.125	117	276	393	11	5.1	5.3	100.0	98.8
12	HBI	HANESBRANDS INC	Dec-20	BB	6.375	4	271	275	6	3.8	4.3	103.6	103.3
13	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Dec-17	AA	5.250	115	268	383	7	1.0	1.1	106.6	106.3
14	JPM	JP MORGAN CHASE	Dec-49	BBB	6.000	178	261	439	11			103.2	101.7
15	JPM	JP MORGAN CHASE	Apr-49	BBB	7.900	793	260	1,053	26			102.3	101.3
16	AAPL	APPLE INC	May-23	AA	2.400	551	258	809	20	2.3	2.4	100.3	100.0
17	LRCX	LAM RESH CORP	Nov-24	BBB	4.650	80	255	335	5	3.8	3.9	105.7	105.4
18	VZ	VERIZON	Sep-23	BBB	5.150	344	253	597	12	2.8	2.9	115.2	114.7
19	X	UNITED STS STL CORP NEW	Apr-20	B	7.375	519	250	769	13	13.0	12.8	83.4	84.0
20	GPS	GAP	Apr-21	BBB	5.950	1,621	244	1,865	46	5.3	5.6	102.8	101.5

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).

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.)

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