

Market Transparency Report

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

April 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 April 2016

	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	-12	-5.7%	0.2
CD	-12	-2.5%	-1.9
Corp	-5	-8.0%	-0.3
Municipal	-34	-4.0%	-0.3
Treasury	-7	-8.8%	-0.2

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

Yield Matrix

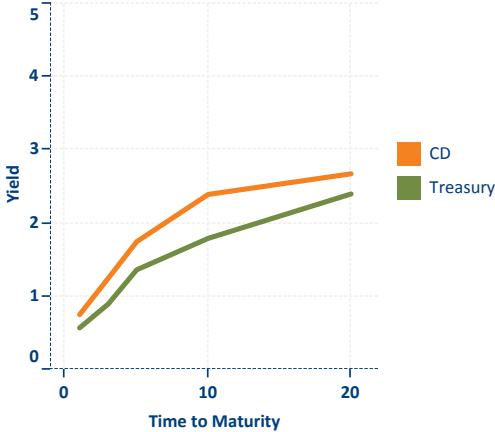
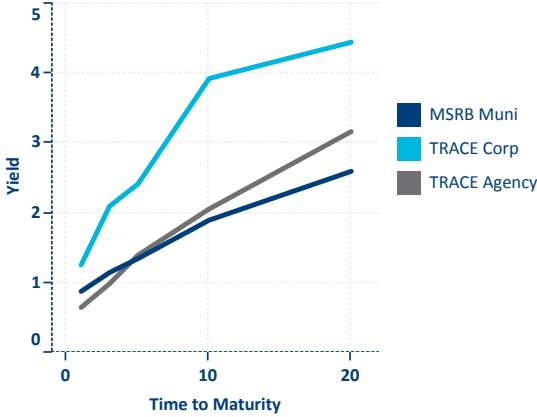
Average Yield, % for April 2016

Market	TTM					Median Maturity (Years)
	1	3	5	10	20	
MSRB Muni	0.9	1.2	1.4	1.9	2.6	13
TRACE Corp	1.3	2.1	2.4	3.9	4.5	5
TRACE Agency	0.7	1.0	1.4	2.1	3.2	3
CD	0.8	1.2	1.8	2.4	2.7	1
Treasury	0.6	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	3.6	3	
		A	1.0	1.6	2.2	3.1	5	
		BBB	1.3	2.0	2.6	3.8	6	
		HY	2.3	3.4	4.4	4.7	7.9	
	Non-Financial	AAA	1.0	1.2	2.1	3.6	4	
		AA	0.6	1.0	1.7	2.5	3.7	
		A	1.5	1.3	2.3	3.3	4.6	
		BBB	2.3	1.7	3.2	4.7	6.5	
		HY	3.5	4.1	8.0	7.9	10.2	
MSRB Muni	GO	AAA	0.7	0.9	1.1	1.5	2.1	
		AA	0.8	1.0	1.2	1.7	2.6	
		A	0.9	1.1	1.3	1.9	2.5	
		BBB	1.5	1.7	2.3	3.2	3.6	
		HY	16.7	15.9	11.8	10.0	9.8	
	Revenue	AAA	0.8	0.9	1.1	1.5	2.3	
		AA	0.8	1.0	1.2	1.7	2.5	
		A	0.9	1.2	1.5	2.1	2.6	
		BBB	1.4	1.9	2.1	2.5	2.7	
		HY	8.8	16.4	16.0	8.5	8.1	

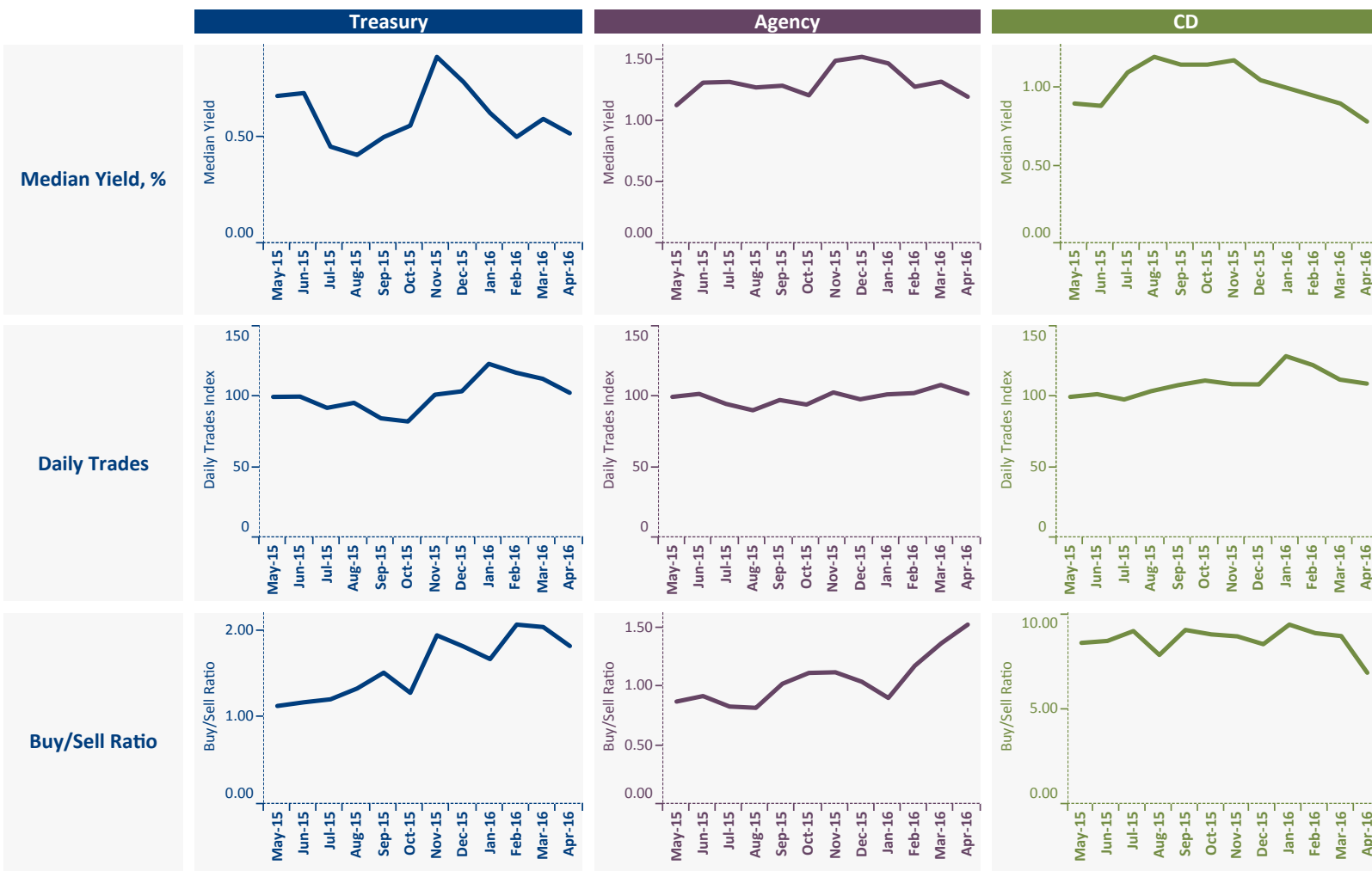
Average Yield, %



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



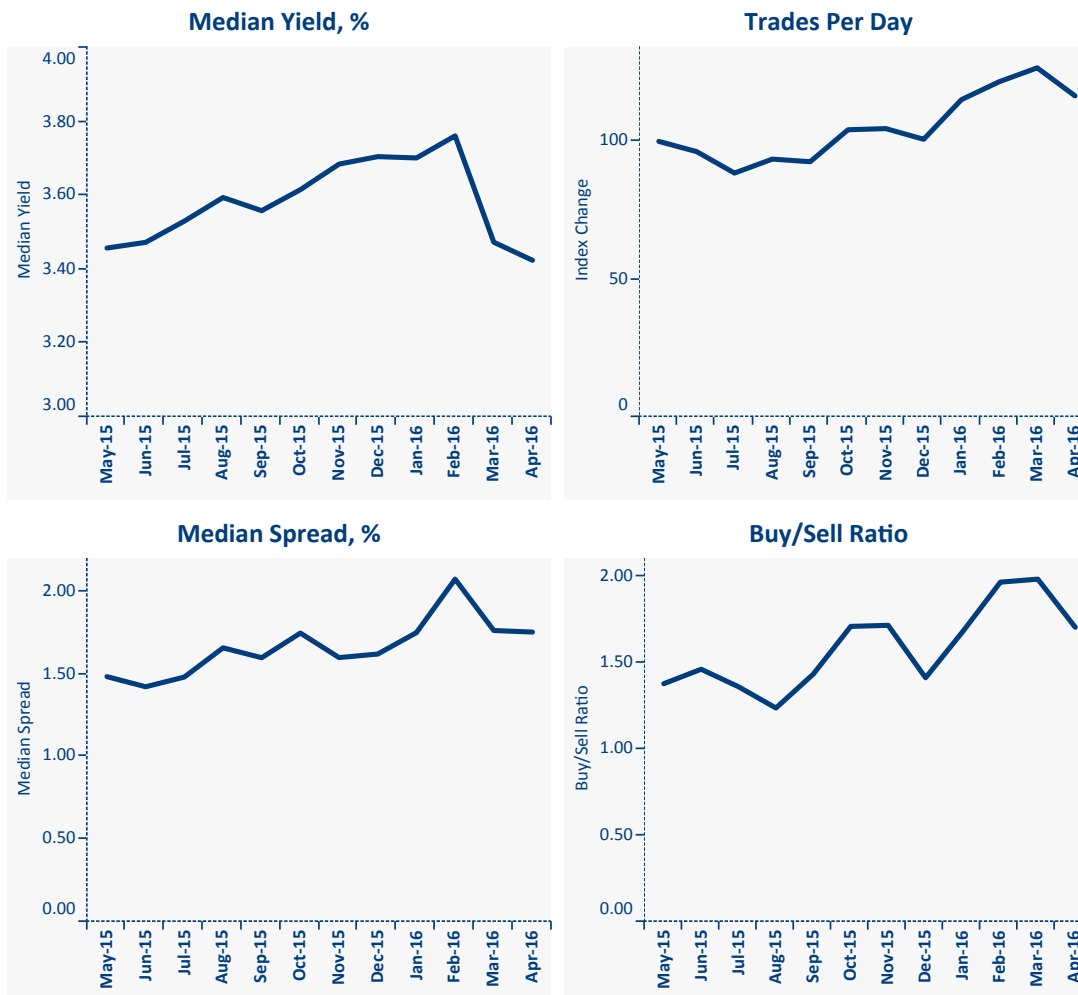
Daily Trades: First month = 100

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



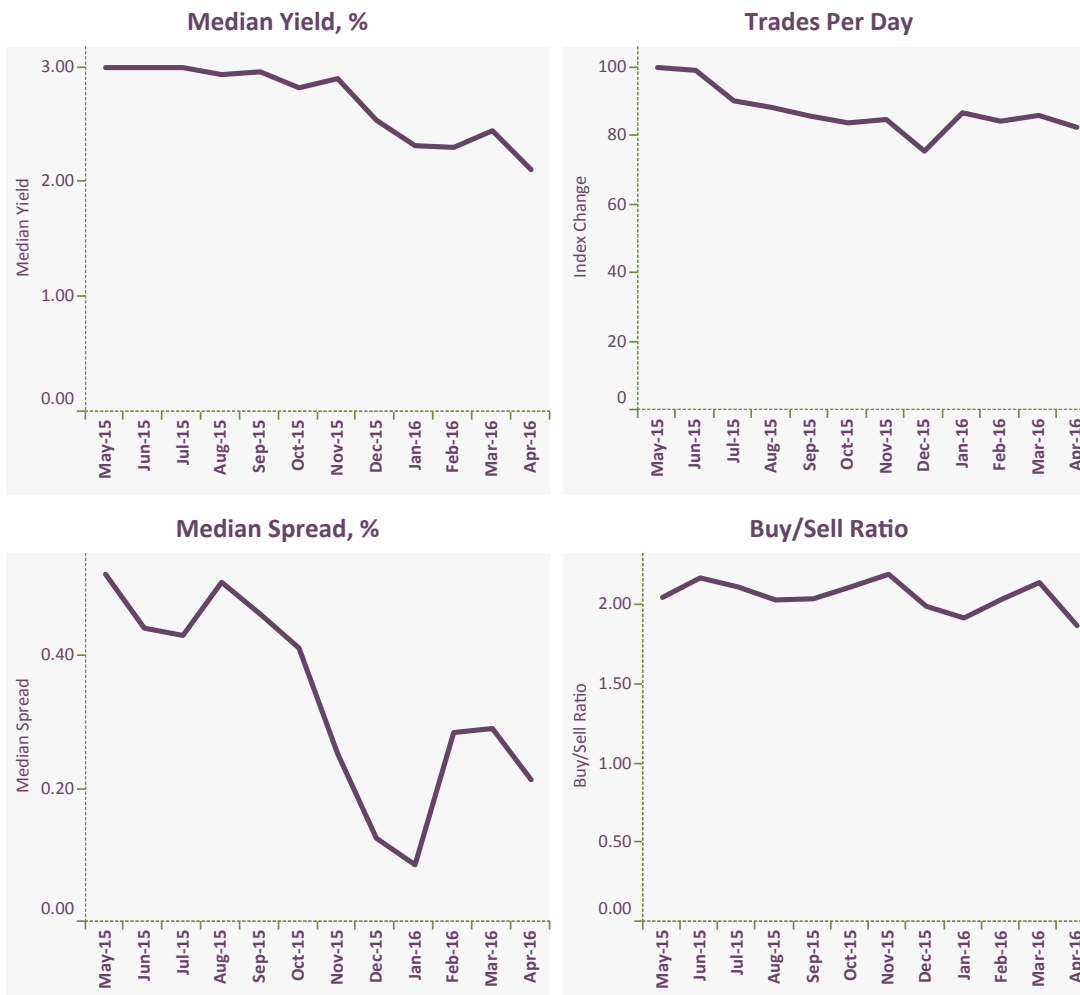
Daily Trades: First month = 100

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



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

April 2016

Index	Ticker	Company Name	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	503	3.5%	13,956	1.8	285	1.3	2.0	2.4	3.8	3.9
2	GS	GOLDMAN SACHS	BBB	772	3.2%	12,795	1.6	289	1.3	1.9	2.5	3.4	4.4
3	JPM	JP MORGAN CHASE	BBB	451	3.0%	12,167	1.7	265	1.2	1.8	2.2	3.1	3.4
4	C	CITIGROUP	BBB	286	2.7%	10,880	2.8	246	1.1	1.8	2.4	4.0	4.7
5	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	AA	402	2.4%	9,871	1.3	212	0.8	1.4	1.9	3.1	3.7
6	WFC	WELLS FARGO	A	177	2.1%	8,398	2.1	196	0.9	1.5	2.2	3.1	4.3
7	T	AT&T	BBB	74	1.9%	7,467	1.5	161	1.1	1.5	2.4	3.1	4.3
8	MS	MORGAN STANLEY	BBB	664	1.7%	6,890	1.2	166	1.2	1.8	2.3	3.4	3.9
9	VZ	VERIZON	BBB	68	1.1%	4,528	1.2	98	1.0	1.4	2.1	4.7	4.2
10	EMC	EMC CORP	A	3	0.9%	3,784	12.7	75		2.3	4.1		
11	AAPL	APPLE INC	AA	31	0.9%	3,737	2.2	92	0.7	1.1	1.8	2.5	3.7
12	BRK	BERKSHIRE HATHAWAY	AA	140	0.9%	3,729	1.0	88	0.8	1.2	1.8	2.6	4.0
13	KMI	KINDER MORGAN ENERGY PARTNERS L P	BBB	74	0.9%	3,628	3.6	78	2.3	3.2	4.1	4.6	6.7
14	HPQ	HEWLETT PACKARD	BBB	17	0.9%	3,555	3.2	85		1.9	3.2		
15	COP	CONOCOPHILLIPS	A	34	0.9%	3,463	1.9	82	0.8	2.2	2.8	3.6	5.0
16	AXP	AMERICAN EXPRESS	BBB	37	0.8%	3,159	2.6	72	1.1	1.5	1.9	3.5	4.6
17	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	A	40	0.8%	3,028	1.4	66	0.9	1.4	2.0	2.9	3.7
18	HBC	HSBC	BBB	398	0.7%	2,893	1.6	67	1.4	2.1	2.9	3.9	5.1
19	F	FORD	BBB	170	0.7%	2,703	1.8	58	1.3	2.1	2.7	2.5	1.5
20	AA	ALCOA	BBB	12	0.6%	2,564	2.4	58	2.0	3.2	4.6	5.7	6.9

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

April 2016

Index	Ticker	Company Name	Rating Key (Med)	Issues Traded	% of Total Trades	Trades	Trades (Buy)	Trades (Sell)	Buy/Sell Ratio	Vol. Traded (MM)	1Y Yield (Buy)	3Y Yield (Buy)	5Y Yield (Buy)	10Y Yield (Buy)	20Y Yield (Buy)
1	KSS	KOHL'S CORP	BBB	7	0.4%	1,608	1,503	105	14.3	36			3.0	4.2	5.5
2	EMC	EMC CORP	A	3	0.9%	3,784	3,508	276	12.7	75		2.3	4.1		
3	STX	SEAGATE HDD CAYMAN	BBB	6	0.5%	1,865	1,707	158	10.8	34		3.3	5.7	8.5	9.1
4	MU	MICRON TECHNOLOGY INC	BB	11	0.2%	946	862	84	10.3	15		1.3	8.6		
5	CHRC	BAYSIDE CMNTY CHURCH SARASOTA INC BRADEN	N/R	143	0.3%	1,061	936	125	7.5	7	2.0	3.7	4.4	5.5	6.4
6	M	MACYS RETAIL HLDGS INC	BBB	21	0.3%	1,336	1,163	173	6.7	32			3.1	3.6	5.1
7	XRX	XEROX CORP	BBB	13	0.5%	2,006	1,732	274	6.3	42	1.8	2.6	3.8	4.8	7.1
8	IEP	ICAHN ENTERPRISES	BB	4	0.5%	1,841	1,515	326	4.7	38	3.2	5.5	6.5		
9	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	29	0.5%	2,077	1,692	385	4.4	57	2.0	2.3	3.4	4.1	5.2
10	D	DOMINION RES INC VA NEW	BBB	50	0.3%	1,306	1,063	243	4.4	25	1.2	1.8	2.5	3.1	4.5
11	ETP	ENERGY TRANSFER PARTNERS L P	BBB	26	0.3%	1,379	1,106	273	4.1	27	2.6	3.6	5.0	5.6	7.1
12	MSI	MOTOROLA SOLUTIONS INC	BBB	10	0.4%	1,779	1,425	354	4.0	39			3.4	4.5	
13	HAL	HALLIBURTON CO	A	18	0.2%	921	736	185	4.0	23	1.4	1.8	2.4	3.5	4.8
14	KMI	KINDER MORGAN ENERGY PARTNERS L P	BBB	74	0.9%	3,628	2,832	796	3.6	78	2.3	3.2	4.1	4.6	6.7
15	MET	METLIFE	A	23	0.6%	2,451	1,912	539	3.6	53		1.6	2.0	2.9	4.2
16	SAN	ABBAY NATL TREAS SVCS PLC	A	27	0.2%	1,003	782	221	3.5	24	1.5	2.1	2.9	4.1	
17	COF	CAPITAL ONE FINL CORP	BBB	26	0.4%	1,752	1,345	407	3.3	31	1.6	2.0	2.7	3.9	
18	MRO	MARATHON OIL CORP	BBB	20	0.6%	2,313	1,772	541	3.3	48		2.1	4.6	4.5	7.3
19	WU	WESTERN UN CO	BBB	7	0.2%	929	709	220	3.2	20	0.9	2.4			6.1
20	HPQ	HEWLETT PACKARD	BBB	17	0.9%	3,555	2,711	844	3.2	85		1.9	3.2		

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 2016

Index	Ticker	Company Name	Rating Key (Med)	Issues Traded	% of Total Trades	Trades	Trades (Buy)	Trades (Sell)	Buy/Sell Ratio	Vol. Traded (MM)	1Y Yield (Sell)	3Y Yield (Sell)	5Y Yield (Sell)	10Y Yield (Sell)	20Y Yield (Sell)
1	BCS	BARCLAYS	N/R	438	0.4%	1,743	580	1,163	0.50	36	2.9	2.8	3.4	3.9	4.0
2	NEM	NEWMONT MINING	BBB	6	0.3%	1,019	349	670	0.52	21	0.8		3.6		6.2
3	TWC	TIME WARNER	BBB	15	0.3%	1,204	424	780	0.54	30	1.6	2.3	2.9		5.6
4	CS	CREDIT SUISSE	N/R	316	0.4%	1,546	552	994	0.56	26	13.2	3.1		3.9	
5	AU	ANGLOGOLD ASHANTI HLDGS PLC	BBB	4	0.2%	955	350	605	0.58	19		5.4	5.8		7.5
6	MT	ARCELORMITTAL SA LUXEMBOURG	BB	10	0.4%	1,617	602	1,015	0.59	38	3.0	4.7	5.9	6.3	8.7
7	CHK	CHESAPEAKE ENERGY	C	14	0.3%	1,296	563	733	0.77	16		45.5	24.7		
8	CED	CANADIAN NAT RES LTD	BBB	13	0.3%	1,357	618	739	0.84	16	2.9		4.9	5.4	6.9
9	SFTBF	SPRINT	B	17	0.3%	1,290	589	701	0.84	22	6.9	11.5	13.1	12.3	11.9
10	AMGN	AMGEN INC	A	29	0.4%	1,641	752	889	0.85	33	1.2	1.5	2.1	2.8	4.6
11	CMCS	COMCAST	A	41	0.4%	1,612	753	859	0.88	40	1.1	1.5	1.9	2.5	4.0
12	INTC	INTEL CORP	A	16	0.3%	1,082	509	573	0.89	26	0.9	1.4	1.9	2.5	1.4
13	QCOM	Null	A	8	0.3%	1,252	595	657	0.91	26		1.2	1.6	2.9	4.3
14	WMT	WAL-MART	AA	25	0.3%	1,251	605	646	0.94	32	0.8	0.9	1.5	2.3	3.7
15	BRK	BERKSHIRE HATHAWAY	AA	140	0.9%	3,729	1,831	1,898	0.96	88	1.0	1.4	2.0	2.8	4.2
16	PBR	PETROBRAS	B	13	0.4%	1,581	780	801	0.97	44	5.5	8.5		9.2	
17	CVS	CVS CAREMARK CORP	BBB	23	0.4%	1,563	772	791	0.98	35	0.9	1.3	1.9	2.8	4.0
18	CSCO	CISCO	AA	22	0.3%	1,040	517	523	0.99	27	0.9	1.3	1.7	2.4	3.8
19	FCX	FREEPORT-MCMORAN COPPER & GOLD INC	BB	19	0.5%	2,190	1,098	1,092	1.01	39	4.6	8.6	8.7	8.4	8.5
20	GNW	GENWORTH	B	9	0.2%	919	465	454	1.02	16		8.7	11.2	10.0	10.7

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

April 2016

Index	Ticker	Company Name	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	1,632	84	1,716	31	6.0	6.2	85.2	84.0
2	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Dec-49	A	5.000	1,420	205	1,625	34			103.9	102.7
3	EMC	EMC CORP	Jun-20	A	2.650	1,247	95	1,342	29	4.1	4.3	94.4	93.7
4	HPQ	HEWLETT PACKARD	Sep-41	BBB	6.000	1,029	217	1,246	27	6.4	6.6	95.6	93.0
5	MET	METLIFE	Dec-49	BBB	5.250	1,017	35	1,052	23			98.0	95.7
6	KSS	KOHL'S CORP	Jul-25	BBB	4.250	843	13	856	20	4.3	4.4	99.8	98.7
7	WYNN	WYNN LAS VEGAS LLC	Mar-25	BB	5.500	830	8	838	21			98.8	97.0
8	STX	SEAGATE HDD CAYMAN	Jun-23	BBB	4.750	823	32	855	14	8.3	8.4	81.2	80.8
9	GPS	GAP	Apr-21	BBB	5.950	820	99	919	22	4.2	4.4	107.5	106.7
10	C	CITIGROUP	Dec-49	BB	6.250	811	4	815	17			102.3	102.1
11	WFM	Null	Dec-25	BBB	5.200	746	16	762	15			105.8	104.8
12	C	CITIGROUP	Dec-49	BB	5.950	740	260	1,000	15			97.1	96.3
13	BAC	BANK OF AMERICA	Dec-49	BB	6.250	637	55	692	14			100.3	99.0
14	EMC	EMC CORP	Jun-18	A	1.875	629	97	726	16	2.3	2.5	99.1	98.7
15	COF	CAPITAL ONE FINL CORP	Dec-49	BB	5.550	603	39	642	8			101.0	99.8
16	GS	GOLDMAN SACHS	Dec-49	BB	4.000	600	112	712	15			73.7	71.4
17	JPM	JP MORGAN CHASE	Apr-49	BBB	7.900	585	566	1,151	27			100.9	100.2
18	T	AT&T	May-25	BBB	3.400	566	473	1,039	15	3.1	3.2	102.0	101.3
19	MU	MICRON TECHNOLOGY INC	Feb-22	BB	5.875	562	17	579	8	8.6	9.4	87.5	84.6
20	C	CITIGROUP	Dec-49	BB	5.950	544	44	588	14			98.7	96.5

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 2016

Index	Ticker	Company Name	Maturity	Rating Key (Med)	Coupon	Trades (Buy)	Trades (Sell)	Trades	Dollar Vol. Traded (MM)	Yield (Buy)	Yield (Sell)	Price (Buy)	Price (Sell)
1	CED	CANADIAN NAT RES LTD	Nov-21	BBB	3.450	212	678	890	6	4.3	4.9	95.8	93.0
2	WYNN	WYNN LAS VEGAS LLC	Mar-22	BB	5.375	195	607	802	18	4.4	4.7	103.4	102.5
3	JPM	JP MORGAN CHASE	Apr-49	BBB	7.900	585	566	1,151	27			100.9	100.2
4	T	AT&T	May-25	BBB	3.400	566	473	1,039	15	3.1	3.2	102.0	101.3
5	BRK	BERKSHIRE HATHAWAY	Jan-22	AA	3.400	104	453	557	6	1.9	2.1	108.4	107.2
6	QCOM	Null	May-25	A	3.450	135	384	519	8	2.8	2.9	104.7	104.4
7	MT	ARCELORMITTAL SA LUXEMBOURG	Jun-18	BB	6.125	100	374	474	6	4.1	4.7	104.0	102.8
8	EBAY	EBAY INC	Aug-24	BBB	3.450	147	374	521	7	3.3	3.4	101.0	100.2
9	WFC	WELLS FARGO	Mar-49	BBB	5.570	361	362	723	15			99.9	98.8
10	X	UNITED STS STL CORP NEW	Apr-20	B	7.375	375	348	723	14	11.1	10.7	88.4	89.6
11	JPM	JP MORGAN CHASE	Jan-49	BBB	5.000	354	340	694	9			96.5	96.0
12	AMGN	AMGEN INC	May-24	A	3.625	27	316	343	4	2.7	2.8	106.5	106.0
13	URI	UNITED RENTALS NORTH AMER INC	Jun-23	B	6.125	39	312	351	4	4.6	5.0	105.2	104.5
14	CLF	CLIFFS NAT RES INC	Jan-18	C	5.950	25	305	330	3	43.0	52.7	58.0	50.1
15	NBL	NOBLE ENERGY INC	Nov-24	BBB	3.900	6	303	309	4	4.3	4.8	97.4	93.8
16	NEM	NEWMONT MINING	Mar-22	BBB	3.500	124	300	424	10		3.6	100.5	99.6
17	VALE	VALE OVERSEAS LTD	Nov-36	BB	6.875	270	300	570	17	8.2	8.2	87.2	86.8
18	AU	ANGLOGOLD ASHANTI HLDGS PLC	Aug-22	BBB	5.125	111	285	396	8	5.6	5.8	97.5	96.6
19	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Dec-17	AA	5.250	92	271	363	6	0.9	1.0	107.0	106.8
20	WFC	WELLS FARGO	Feb-49	BBB	7.980	428	271	699	15			104.3	103.6

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).

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

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