

Market Transparency Report

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

February 2016

www.tradeweb.com

1177 Avenue of the Americas
New York, NY 10036
212.852.1234

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.

Page Reference

3. Market Commentary
4. Yield Matrix
5. Treasury, Agency, CD Transaction Trend Summary
6. Corporate Bonds: Odd-Lot Customer Transaction Trend Summary
7. Municipal Bonds: Odd-Lot Customer Transaction Trend Summary
8. Corporate Bonds: Top 20 Most Active Issuers
9. Corporate Bonds: Top 20 Issuers with Highest Buy/Sell Ratio
10. Corporate Bonds: Top 20 Issuers with Lowest Buy/Sell Ratio
11. Corporate Bonds: Top 20 Most Bought Issues
12. Corporate Bonds: Top 20 Most Sold Issues
13. Appendix
14. Disclosures

Market Commentary

Monthly Change Table for February 2016

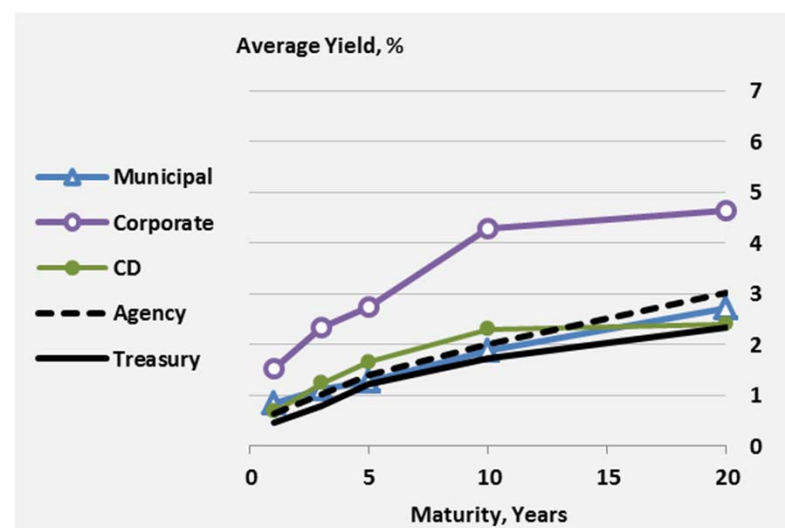
	Median Yield (bps)	Daily Trade Volume	Buy/Sell Ratio
Agency	-19	0.8%	0.3
CD	-5	-4.9%	-0.5
Corp	6	5.6%	0.3
Municipal	-2	-2.8%	0.1
Treasury	-11	-5.1%	0.4

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

Yield Matrix

Average Yield, % Feb-16	Asset Class	Maturity, Years					Median Maturity, Years
		1	3	5	10	20	
	Treasury	0.5	0.8	1.2	1.7	2.3	0.9
	Agency	0.6	1.0	1.4	2.0	3.0	3
	CD	0.7	1.2	1.7	2.3	2.4	1.5
	Corporate	1.5	2.3	2.8	4.3	4.6	5
	Municipal	0.8	1.1	1.3	1.9	2.7	15

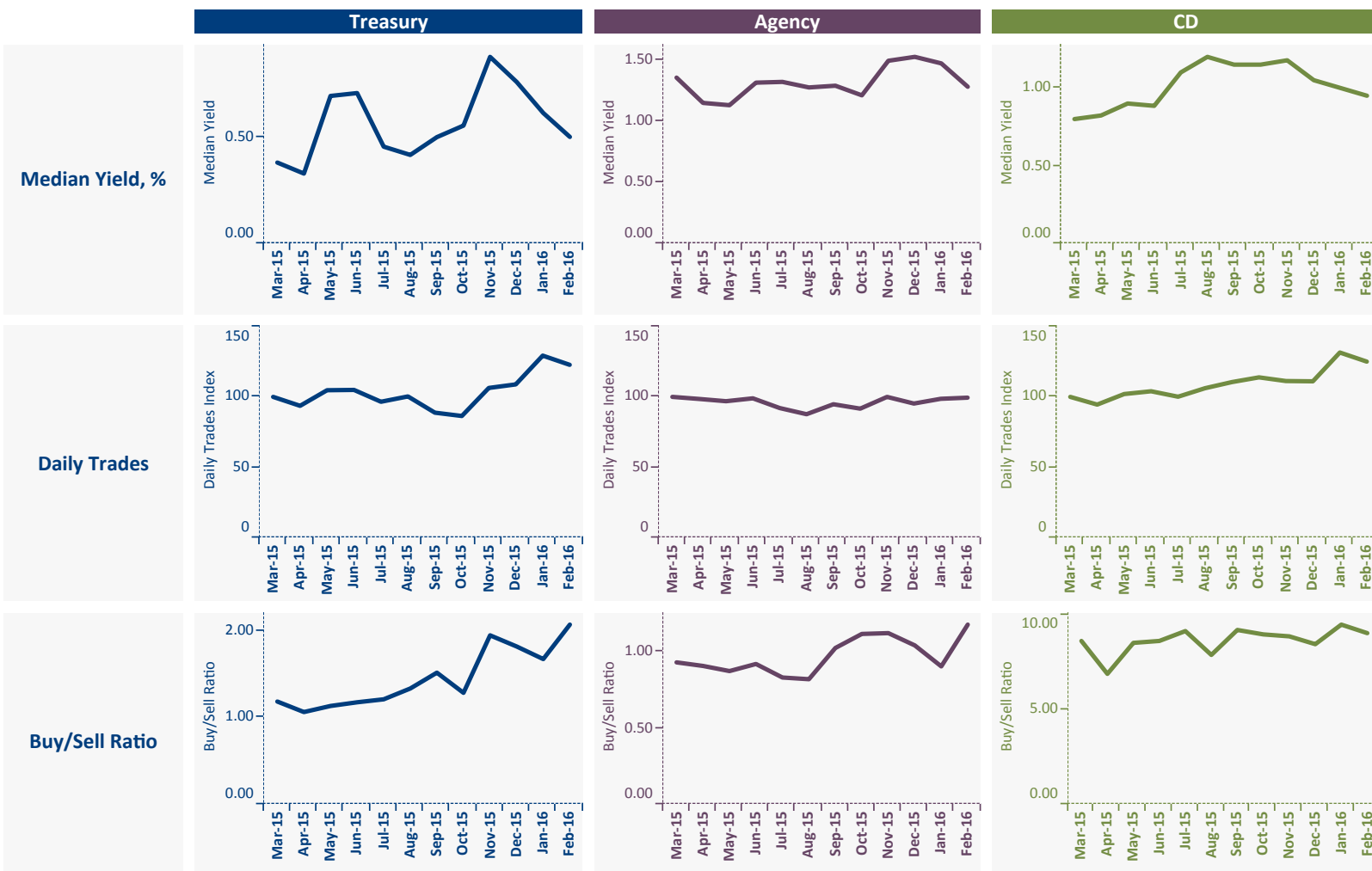
Asset Class	Rating	Maturity, Years					Median Maturity, Years
		1	3	5	10	20	
Financial	AAA	-	-	-	-	-	-
	AA	0.9	1.7	2.0	3.0	-	3
	A	1.2	1.9	2.3	3.4	4.7	5
	BBB	1.6	2.5	2.9	4.2	4.3	7
	High Yield	3.4	4.3	4.9	5.5	9.6	2
Corporate	AAA	-	1.2	1.6	2.3	4.0	5
	AA	0.7	1.2	1.8	2.8	4.2	5
	A	1.2	1.4	3.6	3.8	5.0	6
	BBB	1.8	2.1	4.2	5.0	6.6	9
	High Yield	-	5.4	8.9	9.4	11.6	8
Non-Financial	AAA	0.6	0.8	1.0	1.6	2.7	14
	AA	0.7	0.9	1.1	1.7	2.6	12
	A	0.8	1.1	1.3	1.9	2.8	10
	BBB	1.1	1.5	2.2	2.5	3.6	15
	High Yield	18.3	11.2	7.4	8.7	6.9	9
General Obligation	AAA	0.6	0.8	1.0	1.5	2.5	12
	AA	0.7	0.9	1.1	1.6	2.5	15
	A	0.9	1.2	1.4	2.1	2.7	18
	BBB	1.2	1.9	1.9	2.4	3.5	21
	High Yield	10.3	15.3	16.0	10.0	11.1	13
Municipal	AAA	0.6	0.8	1.0	1.5	2.5	12
	AA	0.7	0.9	1.1	1.6	2.5	15
	A	0.9	1.2	1.4	2.1	2.7	18
	BBB	1.2	1.9	1.9	2.4	3.5	21
	High Yield	10.3	15.3	16.0	10.0	11.1	13



Source: TRACE, RTRS (MSRB's Real-time Transaction Reporting System) and Tradeweb Direct as of 2/29/2016.

- 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



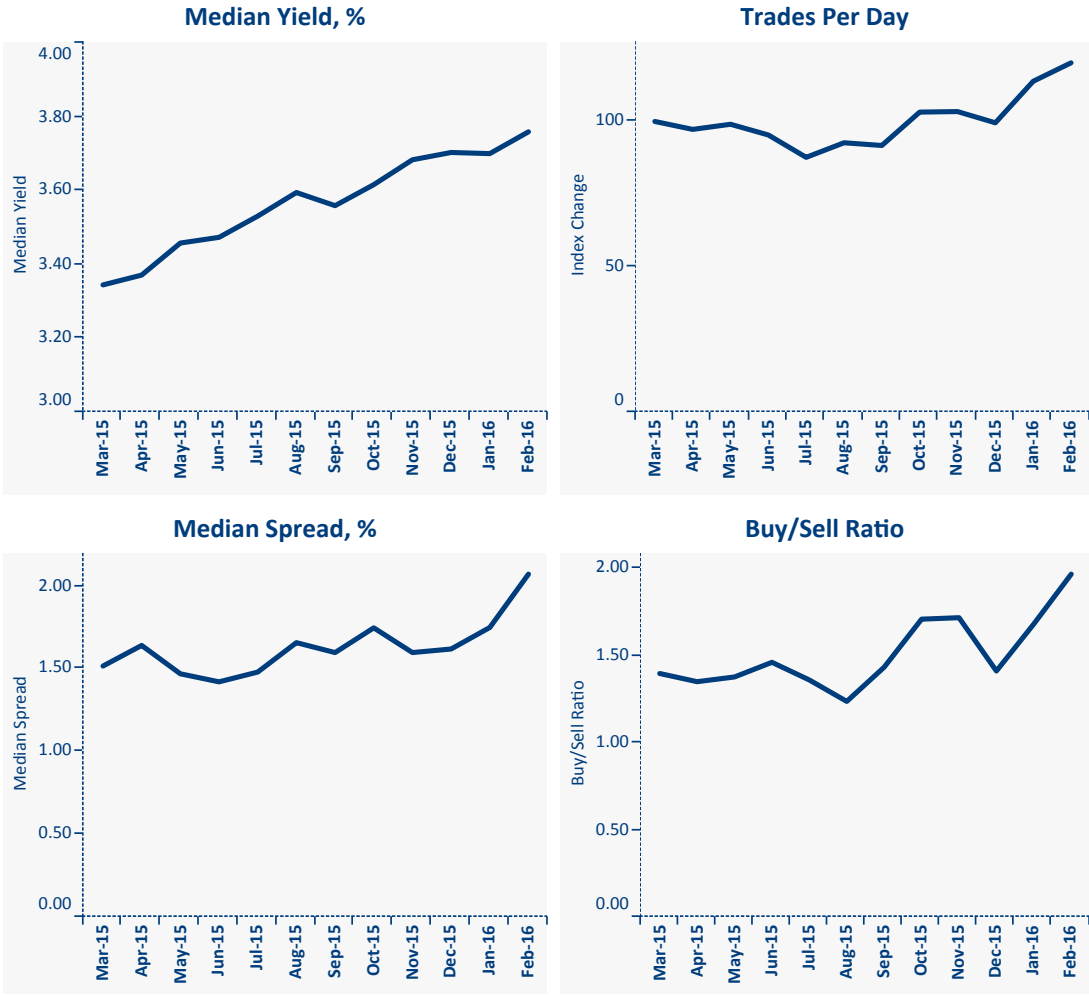
Daily Trades: First month = 100

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.

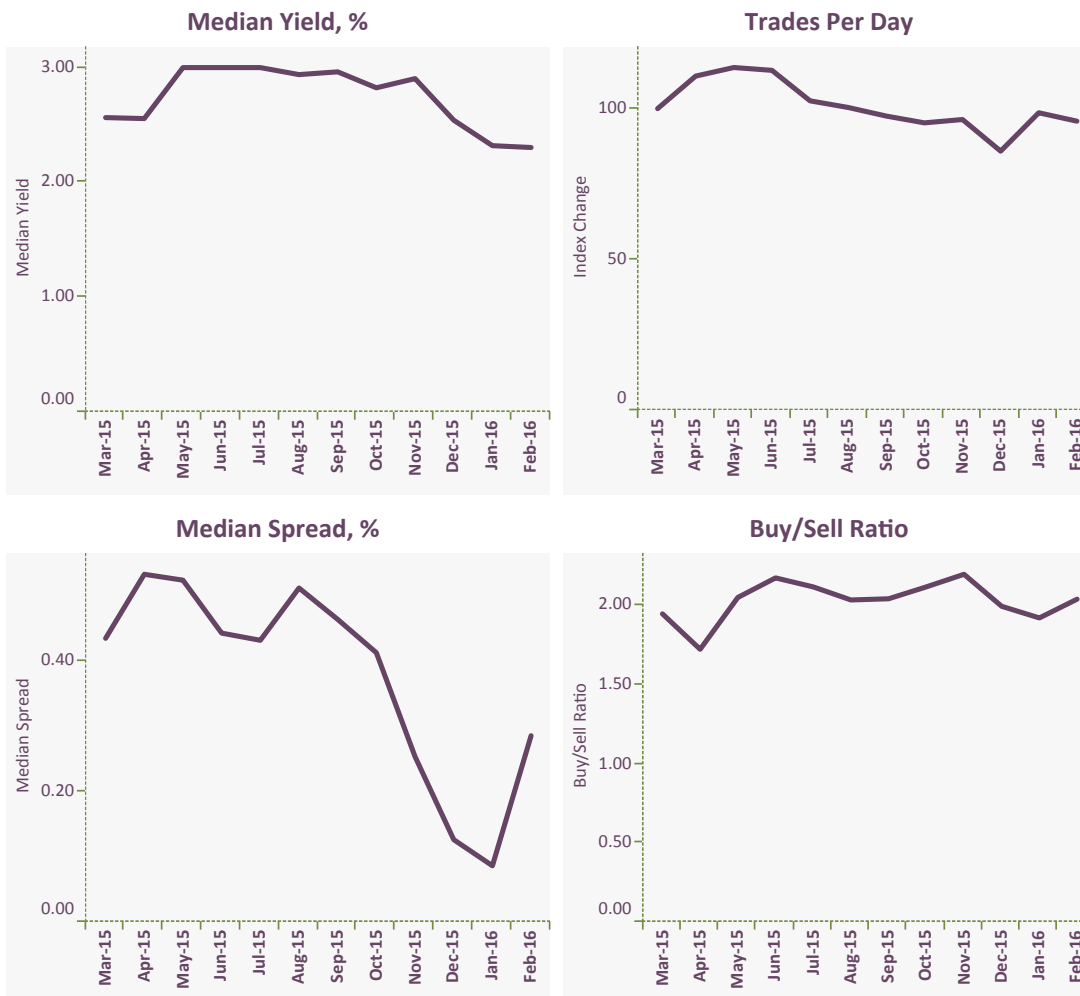
Corporate Bonds: Odd-Lot Customer Transaction Trend Summary



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.

©2016 Tradeweb Markets LLC. All rights reserved. The information contained herein: (1) is confidential and proprietary; (2) may not be copied or redistributed; (3) and is not offered as investment, tax or legal advice or an offer to buy or sell securities.



Corporate Bonds: Top 20 Most Active Issuers

February 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	JPM	JP MORGAN CHASE	BBB	430	3.6%	14,450	2.3	310	1.5	2.1	2.6	3.9	3.4
2	BAC	BANK OF AMERICA	BBB	470	3.5%	13,997	2.0	284	1.4	2.3	2.7	4.2	3.6
3	GS	GOLDMAN SACHS	BBB	726	3.2%	12,995	1.9	276	1.6	2.4	2.8	3.7	4.7
4	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	AA	389	2.6%	10,579	1.5	222	1.0	1.6	2.1	3.3	4.0
5	C	CITIGROUP	BBB	238	2.3%	9,388	3.0	212	1.3	2.2	2.7	4.3	5.2
6	WFC	WELLS FARGO	A	152	2.3%	9,008	2.7	210	1.1	1.8	2.4	3.4	4.6
7	T	AT&T	BBB	61	2.1%	8,453	3.8	173	1.1	2.0	2.8	3.6	5.4
8	COP	CONOCOPHILLIPS	A	33	1.7%	6,819	5.7	127	1.4	3.8	4.3	5.0	6.4
9	VZ	VERIZON	BBB	65	1.6%	6,396	2.5	134	1.0	1.9	2.6	3.5	5.1
10	MS	MORGAN STANLEY	BBB	588	1.6%	6,243	1.4	149	1.4	2.3	2.7	4.2	4.4
11	AAPL	APPLE INC	AA	31	1.3%	5,054	3.5	113	0.7	1.2	2.1	2.9	4.1
12	BUD	ANHEUSER BUSCH INBEV WORLDWIDE INC	A	41	1.0%	3,919	2.7	91	1.2	1.8	2.4	3.3	4.4
13	KMI	KINDER MORGAN ENERGY PARTNERS L P	BBB	72	0.9%	3,562	5.0	69	3.3	5.2	5.8	6.1	7.8
14	MRO	MARATHON OIL CORP	BBB	21	0.9%	3,418	8.1	57		3.5	10.1	8.3	10.0
15	F	FORD	BBB	151	0.8%	3,278	3.0	76	1.6	2.6	3.3	4.0	3.3
16	CHK	CHESAPEAKE ENERGY	C	15	0.8%	3,227	0.6	22		92.2	56.7		
17	BRK	BERKSHIRE HATHAWAY	AA	141	0.8%	3,132	1.6	77	0.8	1.5	2.2	3.0	4.7
18	AXP	AMERICAN EXPRESS	BBB	35	0.8%	3,023	2.0	70	1.2	1.9	2.4	3.7	5.0
19	CTL	CENTURYLINK	BB	31	0.7%	2,774	1.3	52	2.4	5.1	5.6	9.2	7.4
20	HPQ	HEWLETT PACKARD	BBB	18	0.7%	2,742	5.4	63		2.1	4.1		

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 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	WFM	Null	BBB	1	0.3%	1,164	1,163	1	1,163.0	28					
2	BBBY	Null	BBB	3	0.3%	1,045	1,032	13	79.4	14				4.1	5.9
3	HES	HESS CORP	BBB	8	0.3%	1,029	942	87	10.8	20	3.3	6.8		6.2	8.4
4	KSS	KOHL'S CORP	BBB	7	0.2%	996	911	85	10.7	18			3.7	4.4	6.2
5	CHRC	BAYSIDE CMNTY CHURCH SARASOTA INC BRADEN	N/R	133	0.3%	1,142	1,043	99	10.5	9	3.7	3.7		5.0	6.4
6	DVN	DEVON ENERGY CORP NEW	BBB	18	0.4%	1,672	1,516	156	9.7	30		8.7	8.1	7.8	10.2
7	RCII	RENT A CTR INC NEW	B	2	0.3%	1,372	1,230	142	8.7	12			11.9		
8	M	MACYS RETAIL HLDGS INC	BBB	22	0.2%	976	874	102	8.6	21			3.5	4.4	6.5
9	MRO	MARATHON OIL CORP	BBB	21	0.9%	3,418	3,041	377	8.1	57		3.5	10.1	8.3	10.0
10	EMC	EMC CORP	A	3	0.6%	2,242	1,990	252	7.9	42		3.8	5.0		
11	ESRX	EXPRESS SCRIPTS HLDG CO	BBB	13	0.3%	1,145	1,013	132	7.7	26	1.5	2.3	3.2	4.1	
12	HAL	HALLIBURTON CO	A	18	0.3%	1,018	882	136	6.5	25	0.9	2.3	3.1	4.4	5.7
13	MON	MONSANTO CO NEW	BBB	19	0.3%	1,309	1,133	176	6.4	24	1.2	1.8	2.6	4.1	5.1
14	GM	GENERAL MOTORS FINANCIAL COMPANY INC	BBB	31	0.5%	2,075	1,784	291	6.1	49	2.9	3.2	3.7	4.8	6.1
15	COP	CONOCOPHILLIPS	A	33	1.7%	6,819	5,794	1,025	5.7	127	1.4	3.8	4.3	5.0	6.4
16	SO	GEORGIA POWER CO	BBB	49	0.3%	1,260	1,066	194	5.5	27	1.4	2.0	2.5	3.9	4.3
17	HPQ	HEWLETT PACKARD	BBB	18	0.7%	2,742	2,314	428	5.4	63		2.1	4.1		
18	KMI	KINDER MORGAN ENERGY PARTNERS L P	BBB	72	0.9%	3,562	2,971	591	5.0	69	3.3	5.2	5.8	6.1	7.8
19	RDS	SHELL	AA	25	0.5%	1,945	1,600	345	4.6	41	1.4	2.1	2.6	3.5	5.1
20	ALLY	ALLY FINANCIAL	BB	76	0.4%	1,608	1,319	289	4.6	34	3.0	4.1	4.2	6.0	6.9

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 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	444	0.5%	1,988	419	1,569	0.27	29	2.0	2.8	3.4	3.7	4.1
2	CS	CREDIT SUISSE	N/R	272	0.4%	1,557	386	1,171	0.33	22	28.1	3.6	3.0	3.0	
3	GNW	GENWORTH	B	9	0.4%	1,475	489	986	0.50	19		18.1	20.0	15.4	14.9
4	SFTBF	SPRINT	B	15	0.4%	1,600	576	1,024	0.56	25	8.8	16.6	17.3	15.2	14.0
5	CHK	CHESAPEAKE ENERGY	C	15	0.8%	3,227	1,240	1,987	0.62	22	96.6	88.3	57.2		12.6
6	BTU	PEABODY ENERGY	C	6	0.2%	929	361	568	0.64	1		161.6	256.5	307.2	
7	PBR	PETROBRAS	B	13	0.3%	1,036	447	589	0.76	24	9.0	13.2	12.9	12.0	
8	DB	DEUTSCHE BANK	BBB	170	0.6%	2,353	1,031	1,322	0.78	41	2.6	3.3	3.7	4.6	
9	BNPQF	Null	BBB	110	0.2%	962	426	536	0.79	22	3.0	2.9	3.3	5.9	
10	RIG	TRANSOCEAN INC	BB	13	0.4%	1,627	716	911	0.79	20	9.7	22.8	22.2	20.5	17.4
11	PDVA	PETROLEOS DE VENEZUELA SA	N/R	10	0.4%	1,422	702	720	0.98	19					
12	PTRB	Null	B	10	0.3%	1,276	632	644	0.98	33	6.9	13.0	12.8		11.4
13	INTC	INTEL CORP	A	16	0.3%	1,095	544	551	0.99	26	1.1	1.7	2.2	2.8	1.2
14	CMCS	COMCAST	A	42	0.4%	1,791	919	872	1.05	46	1.4	1.6	2.0	2.9	4.5
15	WMT	WAL-MART	AA	26	0.3%	1,232	655	577	1.14	31	0.9	1.2	1.8	3.0	4.2
16	X	UNITED STS STL CORP NEW	B	6	0.3%	1,313	716	597	1.20	16	22.0	29.1	27.1		18.6
17	BNS	BANK NOVA SCOTIA B C	BBB	61	0.3%	1,031	566	465	1.22	23	1.3	1.8	2.4	4.3	
18	IEP	ICAHN ENTERPRISES	BB	4	0.4%	1,769	973	796	1.22	33	4.6	9.2	9.5		
19	FTR	FRONTIER COMMUNICATIONS CORP	BB	22	0.4%	1,563	876	687	1.28	26		7.7	9.2	11.8	12.4
20	CTL	CENTURYLINK	BB	31	0.7%	2,774	1,584	1,190	1.33	52	3.3	5.5	6.4	8.5	8.5

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 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	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Dec-49	A	5.000	2,773	94	2,867	59			102.1	101.4
2	MRO	MARATHON OIL CORP	Mar-18	BBB	5.900	1,399	88	1,487	25	9.3		93.4	92.4
3	C	CITIGROUP	Dec-49	C	6.125	1,250	36	1,286	32			99.2	97.3
4	RCII	RENT A CTR INC NEW	Nov-20	B	6.625	1,187	122	1,309	11	11.9	12.4	81.2	79.8
5	WFM	Null	Dec-25	BBB	5.200	1,163	1	1,164	28			101.6	99.5
6	EBAY	EBAY INC	Feb-56	C	6.000	1,156	197	1,353	8			25.0	24.9
7	JPM	JP MORGAN CHASE	Apr-49	BBB	7.900	942	490	1,432	34			100.3	98.5
8	T	AT&T	Jun-22	BBB	3.000	934	39	973	22	3.1	3.3	99.7	98.3
9	BBBY	Null	Aug-24	BBB	3.749	867	5	872	11	4.1	4.2	97.4	97.0
10	JPM	JP MORGAN CHASE	Aug-49	BBB	6.750	854	123	977	18			105.9	104.8
11	EMC	EMC CORP	Jun-18	A	1.875	823	103	926	17	3.8	4.1	95.8	95.2
12	COP	CONOCOPHILLIPS	Feb-19	A	5.750	818	113	931	19	4.0	4.3	104.7	104.0
13	COP	CONOCOPHILLIPS	Nov-24	A	3.350	788	27	815	11	5.0	5.2	88.1	87.0
14	T	AT&T	May-25	BBB	3.400	762	267	1,029	17	3.6	3.8	98.5	96.7
15	BAC	BANK OF AMERICA	Dec-49	BB	6.250	755	52	807	22			98.6	96.0
16	BAC	BANK OF AMERICA	Dec-49	BB	6.100	747	403	1,150	19			96.8	93.3
17	GS	GOLDMAN SACHS	Oct-19	BBB	2.550	725	44	769	12	2.5	2.6	100.3	99.9
18	JPM	JP MORGAN CHASE	Oct-49	BBB	6.125	715	35	750	19			99.9	97.6
19	WFC	WELLS FARGO	Mar-49	BBB	5.570	714	122	836	19			97.3	94.3
20	C	CITIGROUP	Dec-49	BB	5.950	713	68	781	10			94.4	93.8

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 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	CHK	CHESAPEAKE ENERGY	Apr-19	C	3.872	148	541	689	2			15.1	17.5
2	JPM	JP MORGAN CHASE	Apr-49	BBB	7.900	942	490	1,432	34			100.3	98.5
3	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Mar-23	AA	1.512	22	459	481	7			99.5	98.1
4	COP	CONOCOPHILLIPS	Oct-31	A	7.250	14	431	445	1	6.1	6.2	111.2	110.0
5	JPM	JP MORGAN CHASE	Jan-49	BBB	5.000	242	419	661	11			92.9	88.1
6	BTU	PEABODY ENERGY	Nov-18	C	6.000	135	414	549	0	188.6	161.6	5.5	7.2
7	BAC	BANK OF AMERICA	Dec-49	BB	6.100	747	403	1,150	19			96.8	93.3
8	ADT	ADT CORP	Apr-19	BB	4.125	15	376	391	5	4.0	2.4	100.5	105.3
9	CHK	CHESAPEAKE ENERGY	Mar-16	C	3.250	350	374	724	13	107.3	200.1	92.5	85.4
10	WFC	WELLS FARGO	Feb-49	BBB	7.980	564	364	928	18			103.5	102.2
11	IEP	ICAHN ENTERPRISES	Aug-20	BB	6.000	285	347	632	11	8.2	9.7	91.9	86.9
12	SFTBF	SPRINT	Nov-22	B	6.000	18	343	361	5	13.3	14.9	68.1	62.8
13	GNW	GENWORTH	May-18	B	6.515	178	322	500	7	14.6	18.2	84.9	79.0
14	GS	GOLDMAN SACHS	Dec-49	BB	5.375	398	319	717	14			96.3	92.3
15	JBL	JABIL CIRCUIT INC	Dec-20	BBB	5.625	167	298	465	4	4.6	4.6	104.5	104.2
16	IP	INTERNATIONAL PAPER CO	Jan-26	BBB	3.800	102	294	396	4	4.0	4.3	98.6	95.9
17	GE	GENERAL ELEC CAP CORP MEDIUM TERM NTS BO	Dec-17	AA	5.250	107	277	384	7	1.1	1.3	107.4	107.1
18	XLNX	XILINX INC	Jun-17	C	2.625	17	276	293	2			166.8	161.6
19	T	AT&T	May-25	BBB	3.400	762	267	1,029	17	3.6	3.8	98.5	96.7
20	CTL	CENTURYLINK	Mar-22	BB	5.800	204	261	465	6	7.1	7.3	93.8	92.8

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.

Fixed income securities are subject to increased loss of principal during periods of rising interest rates. Fixed-income investments are subject to various risks including changes in credit quality, market valuations, liquidity, prepayments, early redemption, corporate events, tax ramifications and other factors. Defaults on interest payments and/or principal may also occur. Projections, results and assumptions contained herein reflect past performance of the referenced securities and asset classes. Past performance is no guarantee of future results. The investment return and principal value of an investment will fluctuate such that an investment, if and when redeemed, may be worth more or less than its original cost.

This information is intended for general informational purposes only, and should not be used as the sole basis for any investment decisions. None of the information in the report constitutes an offer or solicitation to buy or sell any security or financial product, a recommendation concerning any security, financial product or asset class, or an offer to provide investment advice or any other service. Where appropriate, please consult with a qualified financial and tax professional.