

# Market Transparency Report

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

**June 2014**

As of Jun 30, 2014

[www.tradeweb.com](http://www.tradeweb.com)

1177 Avenue of the Americas  
New York, NY 10036  
866.645.7524

# 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

## Treasury, Agency and CD

- U.S. Treasury and Agency yields saw a moderate increase in June but trade volume decreased slightly from the previous month to hit 12-month lows. Treasury trade volume was down more than 16% and Agency trade volume was 20% lower than the previous year. CD yields remained close to May levels and trade volume for CDs increased slightly, closing 2% higher from the end of May. The buy-to-sell ratio for Treasury and Agency increased slightly, while the CD buy-to-sell ratio decreased during the month of June.

## Corporate

- The declining trend in daily trade volume for corporate bonds continued in June. The median yield fell in comparison to May, reaching a 12-month low. The median credit spreads dropped from the previous month, while buy-to-sell ratio for corporate bonds saw a slight increase.

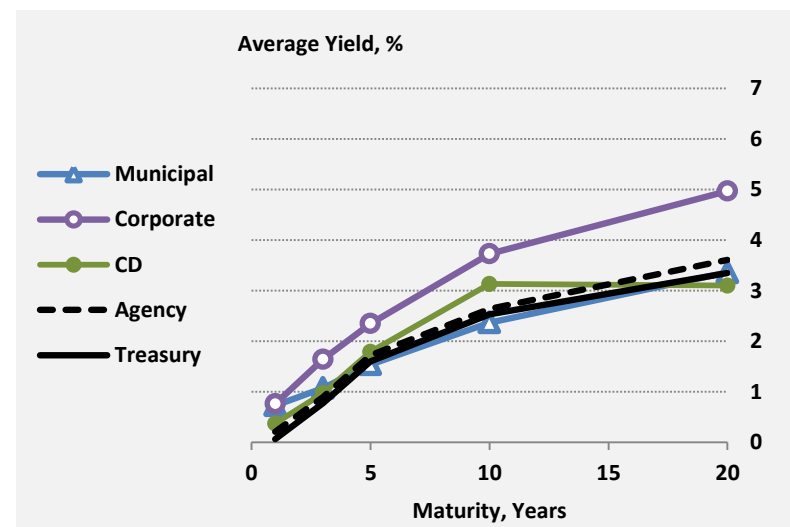
## Municipal

- Median yields and credit spreads for municipal bonds in June remained close to levels seen in May and at 12-month lows. There was a 4% rise in municipal bond daily trade volume relative to the previous month. In addition, the buy-to-sell ratio climbed marginally compared to May.

# Yield Matrix

Average Yield, % Jun-14	Asset Class	Maturity, Years					Median Maturity, Years
		1	3	5	10	20	
	Treasury	0.1	0.8	1.6	2.5	3.4	0.9
	Agency	0.2	0.9	1.7	2.6	3.6	3
	CD	0.4	1.0	1.8	3.1	3.1	1.5
	Corporate	0.8	1.6	2.4	3.7	5.0	5
	Municipal	0.7	1.1	1.5	2.4	3.4	14

Asset Class	Rating	Maturity, Years					Median Maturity, Years
		1	3	5	10	20	
Financial	AAA	-	-	-	-	-	-
	AA	0.4	1.0	1.8	2.9	4.5	3
	A	0.5	1.3	2.1	3.4	4.5	5
	BBB	0.7	1.5	2.6	3.9	5.5	5
	High Yield	1.3	3.1	3.6	4.9	6.8	3
Corporate	AAA	0.3	-	1.8	2.8	3.8	6
	AA	0.3	1.0	2.0	2.9	4.2	3
	A	0.5	1.7	2.2	3.5	4.0	7
	BBB	0.8	1.5	2.7	4.2	5.2	9
	High Yield	4.9	6.5	5.5	6.1	7.7	9
General Obligation	AAA	0.4	0.7	1.1	1.9	2.7	11
	AA	0.5	0.8	1.3	2.2	3.3	12
	A	0.6	0.9	1.4	2.2	3.1	12
	BBB	0.9	1.5	1.9	3.0	3.5	28
	High Yield	6.1	7.6	5.9	9.0	8.7	9
Municipal	AAA	0.5	0.7	1.3	2.0	2.9	11
	AA	0.5	0.8	1.4	2.2	3.1	14
	A	0.6	1.0	1.6	2.6	3.4	18
	BBB	1.0	1.7	2.4	3.2	3.7	19
	High Yield	8.0	6.8	10.0	7.6	6.4	16

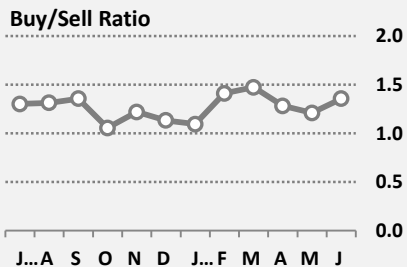
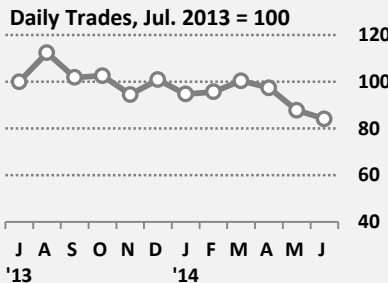
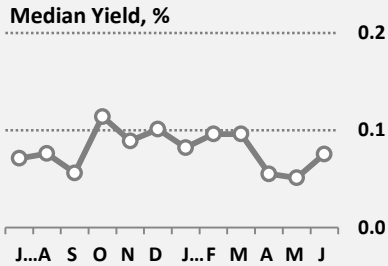


Source: TRACE, MSRB and BondDesk Group as of 6/30/2014.

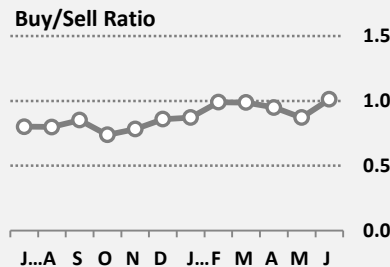
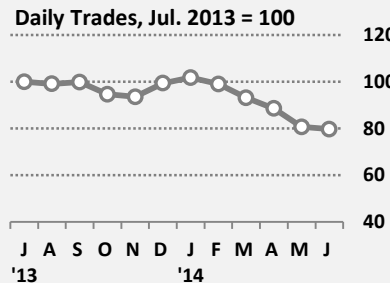
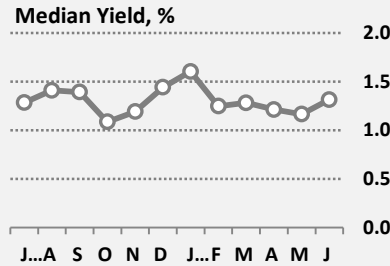
- The yields in each cell for Corporate/Agency/Municipal are the weighted average yield based on odd-lot customer buy transactions reported in TRACE/MSRB.
- The yields in each cell for Treasury/CD are the weighted average yield based on buy transactions on the Tradeweb Direct Platform.
- The weights 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

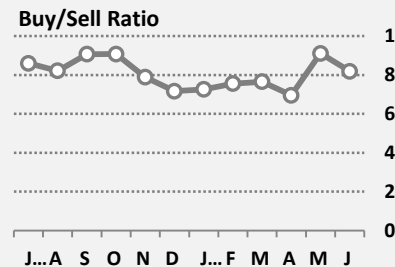
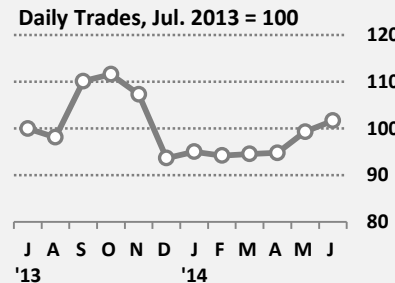
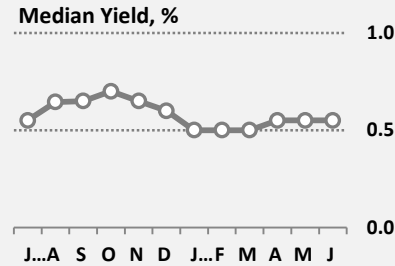
## Treasury



## Agency



## CD

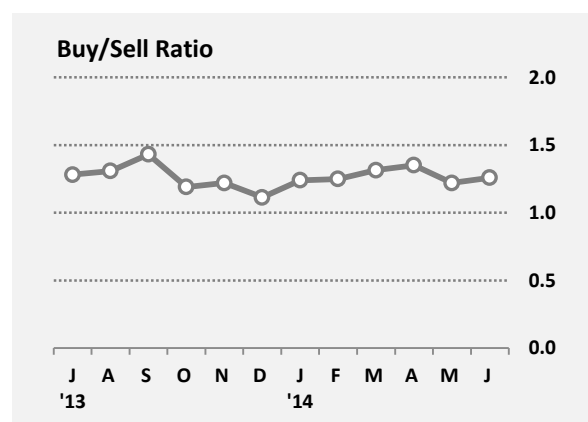
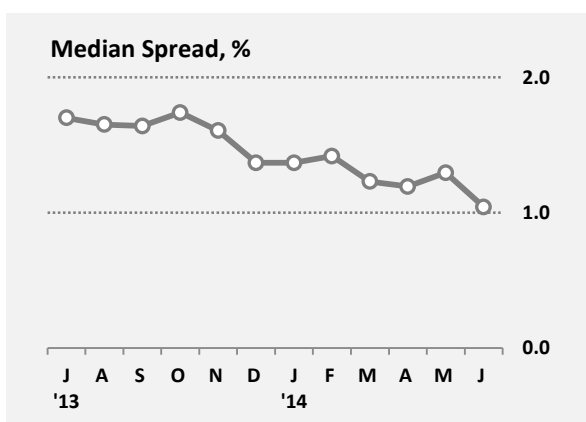
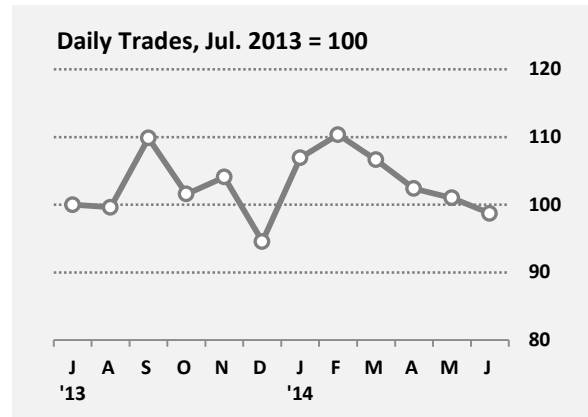
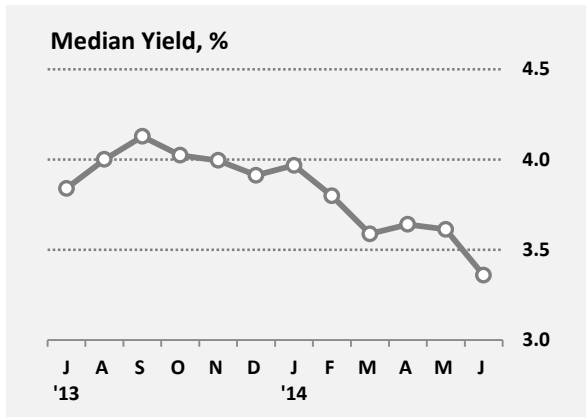


Source: TRACE and BondDesk Group as of 6/30/2014.

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.

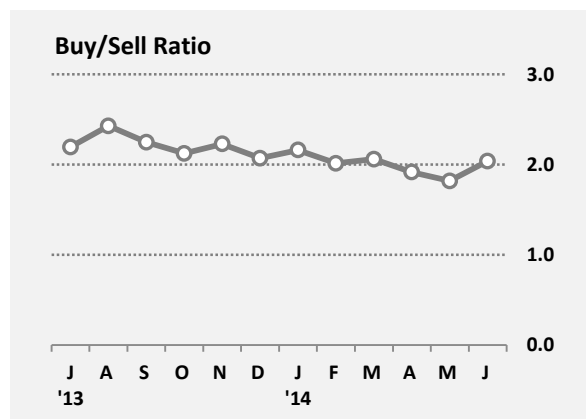
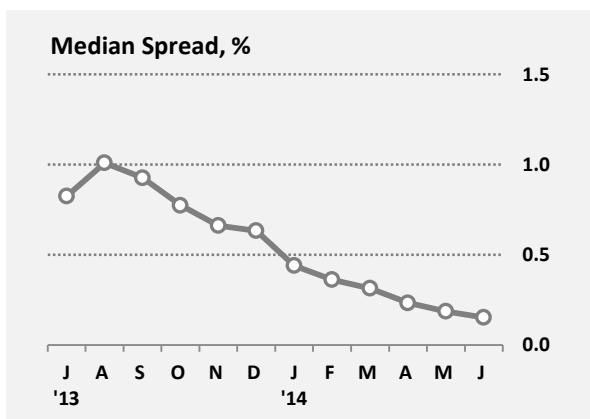
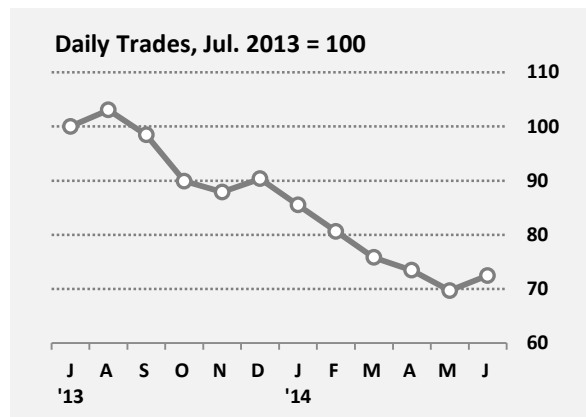
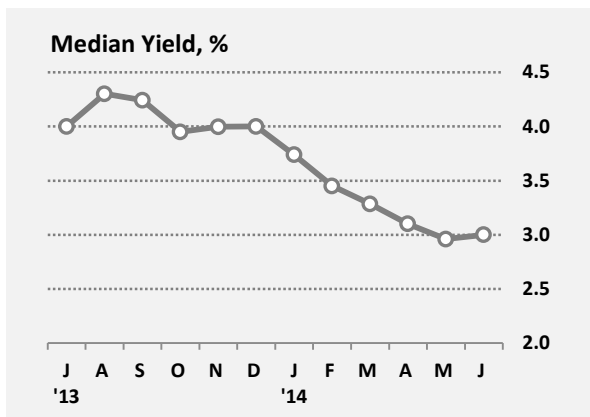
# Corporate Bonds: Odd-Lot Customer Transaction Trend Summary



Source: TRACE and BondDesk Group as of 6/30/2014.

- Based on odd-lot customer transactions (<100M) reported in TRACE.
- 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.

# Municipal Bonds: Odd-Lot Customer Transaction Trend Summary



Source: MSRB and BondDesk Group as of 6/30/2014.

- 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.

# Corporate Bonds: Top 20 Most Active Issuers

June 2014

	Issuer		Rating	Issues Traded	% of Trades	Num of Trades	Buy/Sell Ratio	Dollar Vol. Traded (in Millions)	Median Yield (%), Investor Buys				
	Reference*	Issuer Name							1Y	3Y	5Y	10Y	20Y
1	GS	GOLDMAN SACHS	BBB	628	3.7	12,163	0.9	303	0.7	1.8	2.3	3.7	4.7
2	BAC	BANK OF AMERICA	BBB	646	3.7	12,066	0.7	217	0.7	1.5	2.4	3.5	3.4
3	GE	GENERAL ELECTRIC	AA	500	3.6	11,880	1.2	270	0.5	1.4	2.1	3.2	4.1
4	JPM	JP MORGAN CHASE	A	425	2.8	9,277	1.2	203	0.6	1.6	2.3	3.4	6.0
5	MS	MORGAN STANLEY	BBB	666	2.5	7,996	0.7	183	0.8	1.4	2.2	3.8	1.1
6	C	CITIGROUP	BBB	286	2.0	6,598	1.3	154	0.7	1.3	2.1	3.6	4.8
7	WFC	WELLS FARGO	A	206	1.7	5,646	1.5	139	0.4	1.3	2.0	3.6	3.4
8	PBR	PETROBRAS	BBB	25	1.4	4,605	2.1	134	1.7	2.4	3.9	5.0	-
9	T	AT&T	A	65	1.4	4,523	1.4	99	0.6	1.5	2.0	3.1	4.7
10	VZ	VERIZON	BBB	67	1.3	4,224	1.2	91	0.6	1.0	2.0	3.5	4.9
11	CLF	CLIFFS NATURAL RESOURCES	BBB	5	1.2	3,802	2.4	87	-	3.4	5.1	-	-
12	BRK	BERKSHIRE HATHAWAY	AA	120	1.1	3,504	1.9	87	0.3	1.3	1.8	2.9	4.7
13	PDVA	PETROLEOS DE VENEZUELA SA	N/R	12	1.1	3,467	0.9	88	-	-	-	-	-
14	HBC	HSBC	A	442	0.9	2,922	0.7	80	0.7	1.8	2.6	3.1	4.7
15	CTL	CENTURYLINK	BB	35	0.9	2,892	1.0	69	0.9	1.7	4.0	4.9	5.5
16	BCS	BARCLAYS	A	470	0.8	2,704	0.6	50	0.6	1.4	2.3	3.5	4.3
17	AAPL	APPLE INC	AA	13	0.8	2,589	2.5	64	-	1.5	2.0	3.1	-
18	PPL	PPL ENERGY SUPPLY	BB	27	0.8	2,452	1.2	53	1.8	3.1	-	4.8	6.3
19	AA	ALCOA	BBB	10	0.7	2,387	0.7	58	-	2.5	2.9	4.2	5.9
20	F	FORD	BBB	113	0.7	2,343	1.2	55	0.8	1.3	2.3	3.3	4.9

Source: TRACE and BondDesk Group as of 6/30/2014.

- 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.

\* Actual issue symbol will vary.



# Corporate Bonds: Top 20 Issuers with Highest Buy/Sell Ratio

June 2014

Issuer Reference*	Issuer Name	Rating	Issues Traded	% of Trades	Num of Trades			Buy/Sell Ratio	Dollar Vol. Traded (in Millions)	Median Yield (%), Investor Buys				
					All	Buys	Sells			1Y	3Y	5Y	10Y	20Y
1	AGN ALLERGAN INC	A	4	0.5	1,617	1,596	21	76	36	-	2.2	-	4.0	-
2	CHRC REVIVAL PENTE TABERNACLE	N/R	64	0.4	1,431	1,365	66	21	11	-	-	-	-	-
3	FE FIRSTENERGY CORP	BBB	23	0.5	1,629	1,526	103	15	18	-	2.1	2.3	4.2	5.7
4	IEP ICAHN ENTERPRISES	BB	4	0.4	1,264	1,163	101	12	26	-	2.8	3.7	4.9	-
5	AGO ASSURED GTY U S HLDGS INC	A	4	0.4	1,413	1,230	183	7	33	-	-	-	4.6	5.7
6	AVP AVON PRODUCTS	BBB	7	0.4	1,222	1,061	161	7	30	-	2.8	3.6	4.7	-
7	BTU PEABODY ENERGY	BB	6	0.6	2,039	1,759	280	6	40	-	2.9	4.7	7.1	-
8	ADT ADT CORP	BB	6	0.3	957	802	155	5	20	-	2.2	3.8	4.8	-
9	WMB WILLIAMS COS INC	BBB	25	0.3	927	767	160	5	23	0.7	1.9	2.8	4.2	-
10	NSM Nationstar Mortgage LLC	B	5	0.2	653	500	153	3	12	-	4.5	5.6	6.4	-
11	TEVA TEVA PHARMACEUTICAL FIN CO B V	A	8	0.2	675	513	162	3	16	0.5	1.0	2.6	3.5	-
12	NDAQ NASDAQ OMX GROUP INC	BBB	4	0.3	874	656	218	3	21	-	2.3	3.4	4.1	-
13	DIS WALT DISNEY	A	24	0.4	1,300	968	332	3	26	0.4	0.6	2.0	2.9	4.0
14	PSEC PROSPECT CAPITAL CORPORATION	BBB	108	0.3	916	682	234	3	18	-	2.5	4.0	5.1	5.8
15	RIG TRANSOCEAN INC	BBB	14	0.2	631	466	165	3	15	1.0	1.9	-	4.0	5.5
16	PG PROCTER & GAMBLE CO	AA	22	0.3	1,030	757	273	3	24	0.4	0.7	1.7	2.7	4.0
17	AAPL APPLE INC	AA	13	0.8	2,589	1,854	735	3	64	-	1.5	2.0	3.1	-
18	AMGN AMGEN INC	A	26	0.4	1,397	991	406	2	26	-	1.2	2.2	3.4	4.7
19	CLF CLIFFS NATURAL RESOURCES	BBB	5	1.2	3,802	2,690	1,112	2	87	-	3.4	5.1	-	-
20	KMI KINDER MORGAN ENERGY PARTNERS L P	BBB	69	0.5	1,649	1,158	491	2	39	0.8	1.6	2.4	3.8	5.0

Source: TRACE and BondDesk Group as of 6/30/2014.

- 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 issuer. Bond ratings are from Moody's and S&P.

\* Actual issue symbol will vary.

# Corporate Bonds: Top 20 Issuers with Lowest Buy/Sell Ratio

June 2014

Issuer Reference*	Issuer Name	Rating	Issues Traded	% of Trades	Num of Trades			Buy/Sell Ratio	Dollar Vol. Traded (in Millions)	Median Yield (%), Investor Sells				
					All	Buys	Sells			1Y	3Y	5Y	10Y	20Y
1	GNW GENWORTH	BBB	11	0.3	893	195	698	0.3	22.4	-	2.4	3.5	4.1	5.0
2	DYN DYNEGY	C	4	0.3	913	202	711	0.3	18.4	-	7.9	6.9	5.8	8.2
3	TWC TIME WARNER	BBB	17	0.3	1,021	256	765	0.3	27.3	0.7	2.0	2.7	3.9	4.9
4	DELL DELL	B	8	0.4	1,463	395	1,068	0.4	33.9	1.7	3.8	4.4	-	7.1
5	MT ArcelorMitta	BB	12	0.5	1,585	433	1,152	0.4	41.9	1.3	3.4	4.1	4.9	-
6	SFTBF SPRINT	B	13	0.6	2,000	575	1,425	0.4	47.2	-	2.4	4.5	5.5	7.1
7	TI TELECOM ITALIA	BB	9	0.3	920	292	628	0.5	27.3	1.6	3.1	3.7	-	6.3
8	CS CREDIT SUISSE	A	183	0.5	1,568	520	1,048	0.5	36.5	0.6	2.3	3.2	4.2	-
9	BCS BARCLAYS	A	470	0.8	2,704	1,000	1,704	0.6	49.9	1.2	2.0	2.9	5.5	4.6
10	COP ConocoPhillips	A	23	0.2	793	319	474	0.7	15.6	0.5	1.0	2.0	3.1	4.3
11	AA ALCOA	BBB	10	0.7	2,387	968	1,419	0.7	57.6	-	2.3	3.2	4.4	6.0
12	HBC HSBC	A	442	0.9	2,922	1,192	1,730	0.7	80.4	1.3	2.3	3.1	3.1	5.0
13	CMCS COMCAST	A	37	0.4	1,300	538	762	0.7	32.0	0.6	1.4	2.5	3.3	4.5
14	AXP AMERICAN EXPRESS	A	35	0.5	1,684	702	982	0.7	36.0	0.6	1.3	2.0	3.0	4.6
15	BAC BANK OF AMERICA	BBB	646	3.7	12,066	5,103	6,963	0.7	217.1	1.1	1.9	2.9	3.6	5.3
16	DUK DUKE ENERGY	A	82	0.2	743	315	428	0.7	18.9	0.7	1.3	2.4	3.2	4.5
17	MS MORGAN STANLEY	BBB	666	2.5	7,996	3,393	4,603	0.7	182.7	1.0	1.7	2.7	3.9	2.9
18	AIG AIG	BBB	43	0.5	1,590	675	915	0.7	36.9	1.5	1.6	2.3	4.6	4.5
19	PRU PRUDENTIAL	A	46	0.3	981	418	563	0.7	22.0	0.7	1.7	2.7	3.6	4.6
20	UBS UBS	A	190	0.2	801	342	459	0.7	10.4	1.2	1.7	1.9	4.7	-

Source: TRACE and BondDesk Group as of 6/30/2014.

- 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 issuer. Bond ratings are from Moody's and S&P.

\* Actual issue symbol will vary.

# Corporate Bonds: Top 20 Most Bought Issues

June 2014

Issue	Issuer Reference*	Coupon	Maturity	Rating	Number of Trades			Dollar Vol. Traded (in Million)	Median Yield, %		Median Price		
					Buys	Sells	Total		Buyers	Sellers	Buyers	Sellers	
1	FIRSTENERGY CORP	FE	7.375	Nov-31	BBB	1,128	12	1,140	8.3	5.7	5.8	118.6	117.1
2	ASSURED GTY US HLDGS INC	AGO	5.000	Jul-24	A	1,111	10	1,121	25.2	4.6	4.8	103.0	101.5
3	ALLERGAN INC	AGN	3.375	Sep-20	A	1,023	13	1,036	22.2	3.5	3.7	99.4	98.4
4	BANK AMER CORP	BAC	5.125	Jun-49	BB	853	48	901	21.0	-	-	100.7	100.0
5	CLIFFS NAT RES INC	CLF	6.250	Oct-40	BBB	817	285	1,102	23.1	7.3	7.6	87.4	84.5
6	PEABODY ENERGY CORP	BTU	6.500	Sep-20	BB	739	82	821	16.2	6.1	6.4	102.3	100.5
7	JPMORGAN CHASE & CO	JPM	5.000	Jan-49	BBB	729	9	738	21.8	-	-	100.9	100.0
8	ICAHN ENTERPRISES LP/CORP	IEP	5.875	Feb-22	BB	720	52	772	13.8	4.9	4.8	104.7	105.0
9	CITIGROUP INC	C	10.000	Jun-34	A	713	0	713	15.1	-	-	99.8	-
10	PETROBRAS GLOBAL FINANCE B V	PBR	4.375	May-23	BBB	707	340	1,047	33.8	4.9	5.0	96.3	95.3
11	PPL ENERGY SUPPLY, LLC	PPL	4.600	Dec-21	BB	701	557	1,258	27.4	4.8	5.0	99.0	97.5
12	HEINZ H J CO	BRK	4.250	Oct-20	B	683	20	703	19.4	3.8	4.0	101.3	100.5
13	MORGAN STANLEY	MS	10.000	Jun-34	N/R	673	5	678	16.8	-	-	99.3	97.3
14	WACHOVIA CAP TR III	WFC	5.570	-	BBB	631	161	792	20.7	-	-	99.7	97.0
15	PEABODY ENERGY CORP	BTU	6.250	Nov-21	BB	630	31	661	12.6	6.1	6.2	100.8	100.0
16	CLIFFS NATURAL RESOURCES	CLF	4.800	Oct-20	BBB	625	214	839	19.9	5.0	5.4	98.7	96.8
17	CLIFFS NATURAL RESOURCES	CLF	4.875	Apr-21	BBB	594	300	894	21.4	5.1	5.4	98.5	97.0
18	EV ENERGY PARTNERS L P	EVNT	8.000	Apr-19	B	570	7	577	6.3	5.6	6.0	105.7	105.1
19	AVON PRODS INC	AVP	5.000	Mar-23	BBB	497	52	549	13.0	4.7	5.0	101.9	100.3
20	COEUR MNG INC	CDE	7.875	Feb-21	B	494	26	520	10.2	7.8	7.9	100.3	100.0

Source: TRACE and BondDesk Group as of 6/30/2014.

- 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).

\* Actual issue symbol will vary.

# Corporate Bonds: Top 20 Most Sold Issues

June 2014

Issue	Issuer Reference*	Coupon	Maturity	Rating	Number of Trades			Dollar Vol. Traded (in Million)	Median Yield, %		Median Price		
					Buys	Sells	Total		Buyers	Sellers	Buyers	Sellers	
1	SPRINT CAP CORP	SFTBF	6.875	Nov-28	B	145	583	728	15.7	6.5	6.7	103.7	102.0
2	SPRINT NEXTEL CORP	SFTBF	6.000	Nov-22	B	264	575	839	21.7	5.3	5.5	104.5	103.5
3	PPL ENERGY SUPPLY, LLC	PPL	4.600	Dec-21	BB	701	557	1,258	27.4	4.8	5.0	99.0	97.5
4	GOLDMAN SACHS CAP I	GS	6.345	Feb-34	BBB	13	465	478	12.4	5.2	5.4	113.8	111.7
5	PETROLEOS DE VENEZUELA SA SR NT	PDVA	5.000	Oct-15	N/R	86	445	531	12.7	-	-	95.0	94.8
6	AMERENENERGY GENERATING CO	DYN	6.300	Apr-20	C	28	393	421	7.5	6.6	6.9	98.4	97.4
7	PPL ENERGY SUPPLY LLC	PPL	6.000	Dec-36	BB	469	375	844	17.8	6.3	6.3	98.1	96.0
8	ALCOA INC	AA	5.950	Feb-37	BBB	152	358	510	13.8	5.9	6.0	101.0	99.9
9	GOLDMAN SACHS GROUP INC	GS	6.450	May-36	BBB	11	357	368	8.5	5.1	5.3	117.8	115.1
10	PETROBRAS GLOBAL FINANCE B V	PBR	4.375	May-23	BBB	707	340	1,047	33.8	4.9	5.0	96.3	95.3
11	HECKMANN CORP	NES	9.875	Apr-18	B	156	331	487	6.1	8.1	8.5	104.3	103.3
12	ALCOA INC	AA	5.400	Apr-21	BBB	191	316	507	14.1	3.9	4.1	108.8	107.5
13	APPLE INC	AAPL	2.400	May-23	AA	486	314	800	17.8	3.1	3.2	94.4	94.2
14	CLIFFS NATURAL RESOURCES	CLF	4.875	Apr-21	BBB	594	300	894	21.4	5.1	5.4	98.5	97.0
15	GOLDMAN SACHS GROUP INC	GS	5.625	Jan-17	BBB	134	291	425	9.3	1.6	1.7	110.1	109.9
16	CENTURY LINK	CTL	7.600	Sep-39	BB	149	290	439	13.7	7.3	7.5	103.4	100.8
17	CLIFFS NAT RES INC	CLF	6.250	Oct-40	BBB	817	285	1,102	23.1	7.3	7.6	87.4	84.5
18	ARCELORMITTAL	MT	7.500	Oct-39	BB	49	259	308	8.2	6.7	6.8	109.6	108.7
19	GENERAL ELEC CAP CORP MTN BE	GE	5.875	Jan-38	AA	74	254	328	5.3	4.5	4.5	119.9	119.2
20	DELL INC	DELL	6.500	Apr-38	B	101	241	342	8.0	7.0	7.1	94.5	93.0

Source: TRACE and BondDesk Group as of 6/30/2014.

- 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).

\* Actual issue symbol will vary.

# Appendix

## Maturity

We consider the following maturity ranges for maturity buckets. TTM is Time to Maturity in years.

1Y:	0.5 <= TTM <= 1.5
3Y:	2 <= TTM <= 4
5Y:	4 < TTM <= 6
10Y:	7.5 <= TTM <= 12.5
20Y:	15 <= TTM <= 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.
  - Corp 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 BBB 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.