

# Market Transparency Report

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

**May 2014**

As of May 30, 2014

[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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## Treasury, Agency and CD

- U.S. Treasury and Agency and CD yields remained close to April levels. In addition, daily trade volume for Treasury and Agency declined, reaching 12-month lows. CD trade volume increased slightly during the month and ended 5% higher from the end of April. The buy-to-sell ratio for Treasury and Agency dropped compared to the month of April, while the CD buy-to-sell ratio increased in May.

## Corporate

- The median credit spreads for corporate bonds increased slightly in comparison to April, while median yields remained flat and near 12-month lows. The daily trade volume dropped marginally and the buy-to-sell ratio for corporate bonds declined during the month of May.

## Municipal

- Median yields and credit spreads for municipal bonds continued their decline in May. Amid the decline in yields and spreads, daily trade volume fell 5% from April levels. May trade volume reached a 12-month low, down 32% from a year ago. In addition, the buy-to-sell ratio dropped slightly from April.

# Yield Matrix

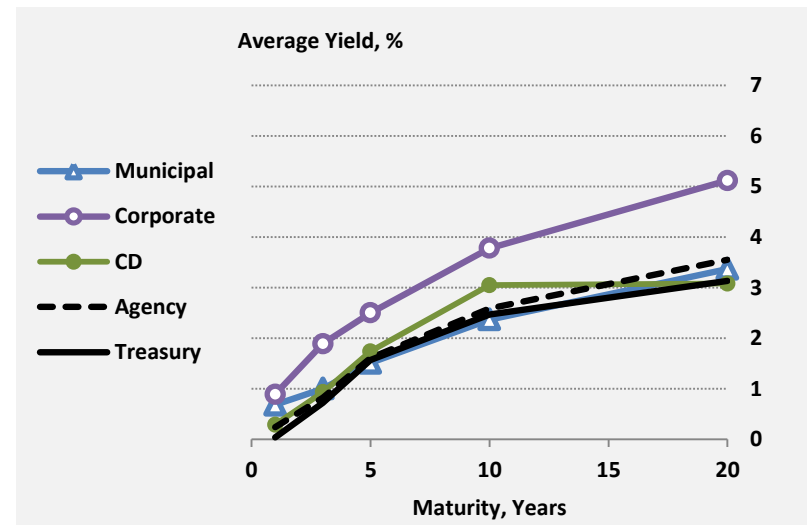
Average Yield, %  
May 2014

Asset Class	Maturity, Years					Median Maturity, Years
	1	3	5	10	20	
Treasury	0.0	0.7	1.6	2.5	3.1	0.7
Agency	0.2	0.8	1.6	2.6	3.6	3
CD	0.3	0.9	1.7	3.1	3.1	2.0
Corporate	0.9	1.9	2.5	3.8	5.1	5
Municipal	0.7	1.0	1.5	2.4	3.4	14

Asset Class	Rating	Maturity, Years					Median Maturity, Years
		1	3	5	10	20	
Financial	AAA	-	-	-	-	-	-
	AA	0.3	1.0	1.7	2.8	4.4	4
	A	0.5	1.2	2.0	3.4	4.5	5
	BBB	0.7	1.5	2.5	4.0	5.5	5
	High Yield	1.4	2.8	3.5	4.9	6.8	6
Corporate	AAA	0.2	-	1.8	3.0	3.9	6
	AA	0.3	1.2	1.8	2.7	4.2	4
	A	0.5	1.6	0.5	3.6	4.0	7
	BBB	0.5	1.6	2.5	4.3	5.0	9
	High Yield	6.5	7.7	6.4	6.6	8.0	9
Non-Financial	AAA	0.4	0.7	1.1	1.9	2.8	11
	AA	0.5	0.8	1.2	2.1	3.3	11
	A	0.6	0.9	1.3	2.2	2.9	12
	BBB	1.0	1.9	1.9	3.0	3.8	10
	High Yield	5.9	8.1	8.3	9.0	8.0	8
Municipal	AAA	0.4	0.7	1.2	2.0	2.8	12
	AA	0.5	0.8	1.3	2.2	3.1	14
	A	0.6	1.0	1.6	2.5	3.5	18
	BBB	1.2	1.7	2.1	3.2	3.9	19
	High Yield	7.1	7.1	9.3	7.7	6.3	17

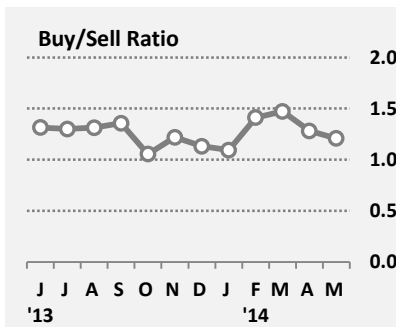
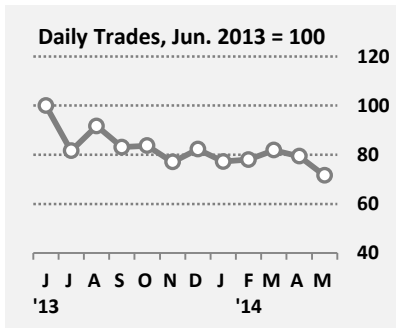
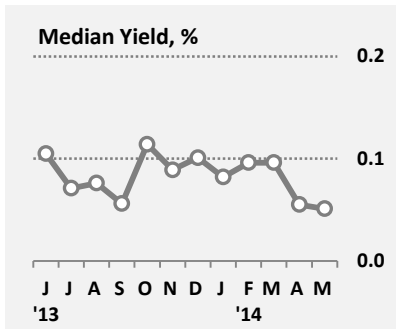
Source: TRACE, MSRB and BondDesk Group as of 5/30/2014.

- 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.

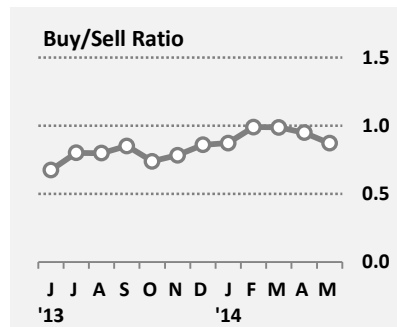
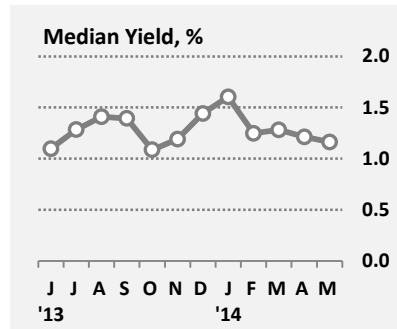


# Treasury, Agency, CD Transaction Trend Summary

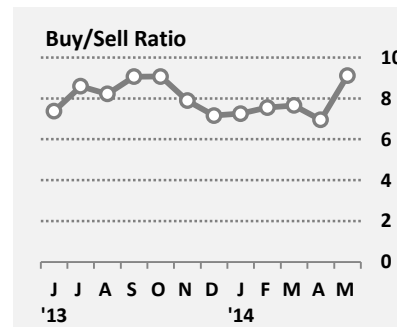
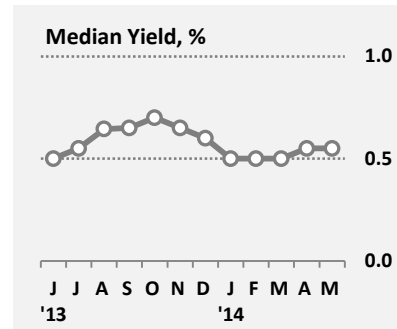
## Treasury



## Agency



## CD



Source: TRACE and BondDesk Group as of 5/30/2014.

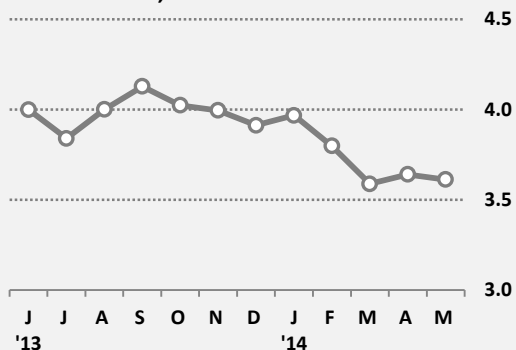
Treasury and CD are based on transactions on the Tradeweb Direct Platform. Median yields are based on all customer buy transactions.

Agency is based on odd-lot customer transactions (<100M) reported in TRACE. Median yields are based on all odd-lot customer buy transactions.

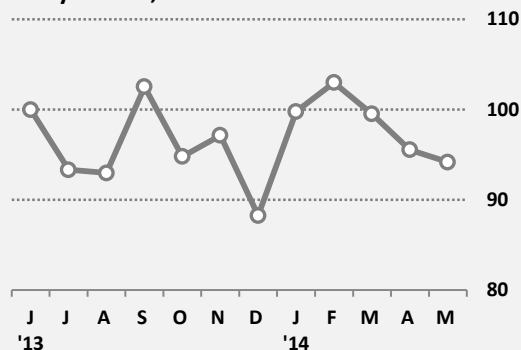


# Corporate Bonds: Odd-Lot Customer Transaction Trend Summary

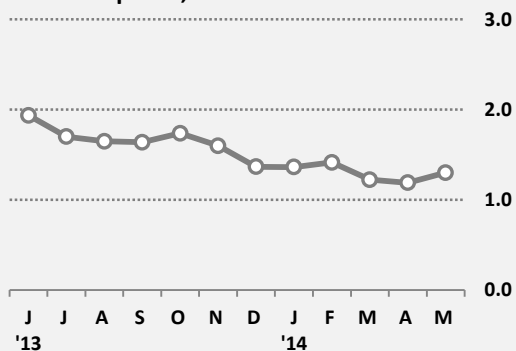
### Median Yield, %



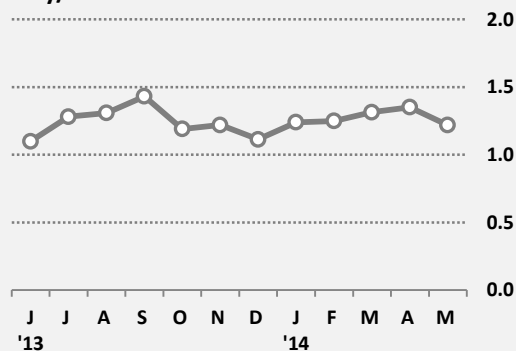
### Daily Trades, Jun. 2013 = 100



### Median Spread, %



### Buy/Sell Ratio

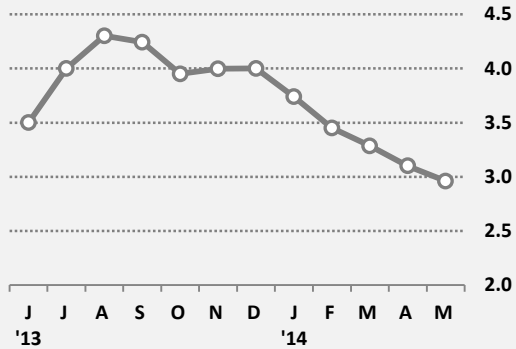


Source: TRACE and BondDesk Group as of 5/30/2014.

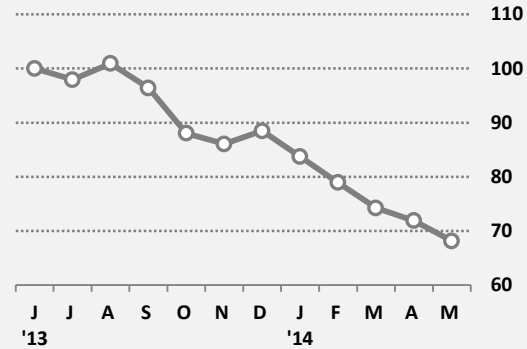
- Based on odd-lot customer transactions (<100M) reported in TRACE.
- Median yields and spreads are based on all odd-lot customer buy transactions.
- Spread for each transaction is calculated against the Treasury yield for the same maturity.

# Municipal Bonds: Odd-Lot Customer Transaction Trend Summary

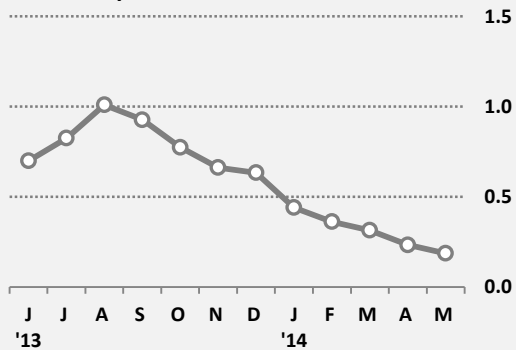
### Median Yield, %



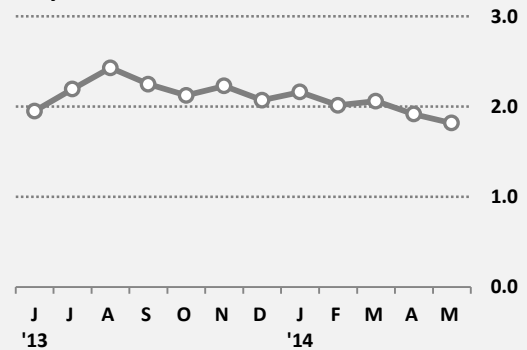
### Daily Trades, Jun. 2013 = 100



### Median Spread, %



### Buy/Sell Ratio



Source: MSRB and BondDesk Group as of 5/30/2014.

- 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

May 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				
								1Y	3Y	5Y	10Y	20Y
1 GS	GOLDMAN SACHS	BBB	604	4.2	14,160	1.2	329	0.6	1.8	2.3	3.7	5.7
2 GE	GENERAL ELECTRIC	AA	486	3.4	11,448	1.1	264	0.4	1.4	2.1	3.2	4.1
3 BAC	BANK OF AMERICA	BBB	652	3.2	10,692	0.7	196	0.7	1.5	2.4	3.5	3.7
4 MS	MORGAN STANLEY	BBB	639	2.7	8,915	0.7	191	0.6	1.5	2.3	3.9	1.2
5 JPM	JP MORGAN CHASE	A	427	2.4	7,954	1.0	165	0.6	1.5	2.2	3.5	6.0
6 C	CITIGROUP	BBB	275	2.3	7,644	1.6	176	0.6	1.3	2.1	3.6	5.0
7 WFC	WELLS FARGO	A	189	1.7	5,733	1.6	139	0.4	1.2	2.0	3.6	3.3
8 PBR	PETROBRAS	BBB	25	1.6	5,276	1.9	155	0.9	2.4	4.0	5.1	-
9 CLF	CLIFFS NATURAL RESOURCES	BBB	5	1.5	4,851	1.6	96	-	3.0	4.5	-	-
10 T	AT&T	A	66	1.4	4,623	1.2	99	0.5	1.3	2.0	3.1	4.8
11 VZ	VERIZON	BBB	66	1.4	4,538	1.1	92	0.5	0.9	2.0	3.5	4.8
12 PPL	PPL ENERGY SUPPLY	BBB	21	1.1	3,754	3.6	78	1.1	2.9	-	4.5	6.1
13 CTL	CENTURYLINK	BB	36	1.0	3,481	1.3	79	0.8	1.9	4.1	4.9	5.7
14 FTR	FRONTIER COMMUNICATIONS CORP	BB	19	0.9	3,097	4.9	52	-	-	4.3	6.7	8.3
15 AAPL	APPLE INC	AA	13	0.9	3,041	3.2	73	-	1.4	1.9	3.1	-
16 HPQ	HEWLETT PACKARD	BBB	25	0.8	2,685	0.6	67	0.6	1.2	2.2	3.3	5.1
17 HBC	HSBC	A	414	0.8	2,591	0.8	66	0.7	1.7	1.7	3.2	5.2
18 BCS	BARCLAYS	A	436	0.7	2,497	0.8	51	0.6	1.3	2.5	3.5	4.2
19 BRK	BERKSHIRE HATHAWAY	AA	121	0.7	2,463	1.1	56	0.2	1.1	1.9	2.9	5.8
20 SLM	SLM CORP	BB	233	0.7	2,362	0.9	50	1.5	3.0	4.1	5.7	7.5

Source: TRACE and BondDesk Group as of 5/30/2014.

- 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

May 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 NSR	NEUSTAR INC	BB	1	0.3	1,026	1,013	13	78	12	-	-	-	6.4	-
2 CDE	COEUR MNG INC	B	1	0.2	758	743	15	50	13	-	-	-	-	-
3 CHRC	REVIVAL PENTE TABERNACLE	N/R	50	0.5	1,734	1,689	45	38	13	-	-	-	-	-
4 AGN	ALLERGAN INC	A	4	0.3	952	921	31	30	22	-	2.1	-	4.0	-
5 IEP	ICAHN ENTERPRISES	BBB	8	0.4	1,248	1,158	90	13	29	-	2.7	3.9	5.0	-
6 SFY	SWIFT ENERGY CO	B	3	0.3	930	834	96	9	22	-	5.5	4.9	7.0	-
7 AVP	AVON PRODUCTS	BBB	7	0.5	1,802	1,582	220	7	44	-	2.8	3.8	5.0	-
8 WMB	WILLIAMS COS INC	BBB	22	0.4	1,194	1,016	178	6	26	0.7	1.9	2.7	4.3	5.9
9 WIN	WINDSTREAM CORP	B	7	0.3	864	730	134	5	18	-	3.1	0.5	6.2	-
10 BTU	PEABODY ENERGY	BB	6	0.4	1,344	1,125	219	5	25	-	2.2	4.2	5.7	-
11 FTR	FRONTIER COMMUNICATIONS CORP	BB	19	0.9	3,097	2,569	528	5	52	-	-	4.3	6.7	8.3
12 LTD	LIMITED BRANDS INC	BB	9	0.2	750	590	160	4	13	-	2.2	3.9	4.6	6.5
13 ACI	ARCH COAL	C	4	0.3	1,012	792	220	4	14	-	-	12.5	-	-
14 PPL	PPL ENERGY SUPPLY	BBB	21	1.1	3,754	2,929	825	4	78	1.1	2.9	-	4.5	6.1
15 PSEC	PROSPECT CAPITAL CORPORATION	BBB	123	0.3	1,048	815	233	3	21	-	2.6	4.1	5.2	6.0
16 SWY	SAFEGWAY	BBB	8	0.7	2,245	1,716	529	3	54	-	1.5	4.0	4.1	6.9
17 AAPL	APPLE INC	AA	13	0.9	3,041	2,319	722	3	73	-	1.4	1.9	3.1	-
18 NRG	NRG ENERGY	B	14	0.5	1,730	1,315	415	3	44	-	5.2	0.1	5.0	9.0
19 ADT	ADT CORP	BB	7	0.4	1,254	952	302	3	24	-	2.3	4.0	4.9	-
20 OKE	ONEOK INC NEW	BBB	15	0.2	788	551	237	2	15	-	0.8	2.0	3.5	5.9

Source: TRACE and BondDesk Group as of 5/30/2014.

- 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

May 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 FST	FOREST OIL	C	2	0.3	1,011	107	904	0.1	21.8	-	-	7.7	-	-
2 TWC	TIME WARNER	BBB	17	0.5	1,809	234	1,575	0.1	45.3	0.7	1.4	2.7	3.8	4.8
3 GNW	GENWORTH	BBB	11	0.3	1,164	191	973	0.2	28.7	-	2.4	3.5	4.0	5.0
4 TI	TELECOM ITALIA	BB	9	0.3	991	293	698	0.4	29.6	1.6	3.1	3.7	-	6.3
5 COP	ConocoPhillips	A	23	0.2	725	217	508	0.4	14.3	0.5	0.8	2.0	3.0	4.2
6 HPQ	HEWLETT PACKARD	BBB	25	0.8	2,685	974	1,711	0.6	66.7	0.7	1.5	2.3	3.4	5.4
7 RIO	RIO TINTO	A	22	0.3	834	318	516	0.6	17.8	0.6	1.2	2.2	3.3	4.6
8 CMCS	COMCAST	A	37	0.4	1,272	490	782	0.6	28.6	0.6	1.3	2.4	3.2	4.4
9 AXP	AMERICAN EXPRESS	A	34	0.5	1,725	666	1,059	0.6	37.1	0.6	1.4	1.8	3.0	4.7
10 MT	ArcelorMitta	BB	12	0.4	1,477	575	902	0.6	41.1	2.0	3.6	4.4	5.0	-
11 CVS	CVS CAREMARK CORP	BBB	17	0.2	719	283	436	0.6	13.7	0.5	0.9	1.9	3.3	-
12 MLET	HARRAHS OPERATING	C	11	0.3	921	374	547	0.7	14.0	4.3	16.0	14.4	-	-
13 X	US STEEL	B	8	0.5	1,552	631	921	0.7	32.8	-	3.9	5.4	5.3	7.5
14 CS	CREDIT SUISSE	BBB	156	0.4	1,219	496	723	0.7	28.8	0.6	2.1	3.1	-	-
15 UBS	UBS	A	171	0.3	836	342	494	0.7	26.3	1.1	1.9	2.2	4.1	-
16 MS	MORGAN STANLEY	BBB	639	2.7	8,915	3,683	5,232	0.7	190.5	1.0	1.7	2.8	4.0	3.0
17 DUK	DUKE ENERGY	A	80	0.2	685	288	397	0.7	17.6	0.5	1.4	2.4	3.3	4.4
18 BAC	BANK OF AMERICA	BBB	652	3.2	10,692	4,519	6,173	0.7	196.2	1.1	1.8	2.6	3.7	5.7
19 DTV	DIRECTV Holdings LLC	BBB	15	0.3	955	405	550	0.7	21.2	0.7	1.4	2.8	3.6	-
20 USB	US BANCORP	A	22	0.2	737	314	423	0.7	15.1	0.5	1.1	1.9	3.2	-

Source: TRACE and BondDesk Group as of 5/30/2014.

- 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

May 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	PPL ENERGY SUPPLY, LLC	PPL	4.600	Dec-21	BBB	1,508	654	2,162	44.6	4.5	4.7	100.7	99.1
2	CITIZENS COMMUNICATIONS CO	FTR	9.000	Aug-31	BB	1,350	77	1,427	15.1	8.3	8.4	106.8	105.6
3	CITIGROUP INC	C	6.300	May-49	BB	1,325	4	1,329	31.5	-	-	101.8	100.6
4	CLIFFS NAT RES INC	CLF	6.250	Oct-40	BBB	1,206	261	1,467	25.8	7.3	7.5	87.3	86.0
5	GOLDMAN SACHS CAP I	GS	6.345	Feb-34	BBB	1,205	845	2,050	34.2	5.7	5.3	107.8	113.0
6	PPL ENERGY SUPPLY LLC	PPL	6.000	Dec-36	BBB	1,118	62	1,180	22.6	6.1	6.0	99.9	97.7
7	RRI ENERGY INC	NRG	7.875	Jun-17	B	1,061	20	1,081	28.1	5.2	6.2	107.3	104.8
8	NEUSTAR INC	NSR	4.500	Jan-23	BB	1,013	13	1,026	12.3	6.4	6.5	87.4	86.8
9	WACHOVIA CAP TR III	WFC	5.570	Mar-49	BBB	966	175	1,141	29.2	-	-	99.0	96.3
10	GOLDMAN SACHS GRP INC	GS	5.700	Apr-49	BB	947	8	955	29.3	-	-	105.2	103.4
11	CLIFFS NATURAL RESOURCES	CLF	4.875	Apr-21	BBB	870	412	1,282	29.6	5.0	5.2	99.3	98.2
12	AVON PRODS INC	AVP	5.000	Mar-23	BBB	867	47	914	22.2	5.0	5.1	100.1	99.6
13	PETROBRAS GLOBAL FINANCE B V	PBR	4.375	May-23	BBB	798	361	1,159	35.8	5.0	5.1	95.4	94.6
14	SWIFT ENERGY CO	SFY	7.875	Mar-22	B	744	51	795	20.6	7.0	7.6	104.0	101.3
15	COEUR MNG INC	CDE	7.875	Feb-21	B	743	15	758	13.0	8.0	8.4	99.2	97.3
16	SAFEWAY INC	SWY	7.250	Feb-31	BBB	711	240	951	24.3	6.9	7.1	103.9	101.6
17	WINDSTREAM CORP	WIN	6.375	Aug-23	B	680	79	759	16.1	6.2	6.7	100.8	98.1
18	PEABODY ENERGY CORP	BTU	6.250	Nov-21	BB	622	44	666	10.6	5.7	5.9	103.2	101.8
19	APPLE INC	AAPL	2.400	May-23	AA	592	354	946	24.8	3.1	3.1	94.8	94.5
20	WILLIAMS COMPANIES INC	WMB	3.700	Jan-23	BBB	585	122	707	15.9	4.3	4.6	95.5	93.8

Source: TRACE and BondDesk Group as of 5/30/2014.

- 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

May 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	GOLDMAN SACHS CAP I	GS	6.345	Feb-34	BBB	1,205	845	2,050	34.2	5.7	5.3	107.8	113.0
2	FOREST OIL CORP	FST	7.250	Jun-19	C	69	755	824	18.0	-	7.7	100.1	99.7
3	PPL ENERGY SUPPLY, LLC	PPL	4.600	Dec-21	BBB	1,508	654	2,162	44.6	4.5	4.7	100.7	99.1
4	CLIFFS NATURAL RESOURCES	CLF	5.900	Mar-20	BBB	156	594	750	11.2	4.5	4.7	106.9	106.0
5	HEWLETT PACKARD CO	HPQ	4.650	Dec-21	BBB	143	423	566	12.3	3.3	3.3	108.8	109.1
6	ALPHA NATURAL RESOURCES	ANR	6.000	Jun-19	C	130	415	545	7.8	11.3	11.7	80.0	78.8
7	CLIFFS NATURAL RESOURCES	CLF	4.875	Apr-21	BBB	870	412	1,282	29.6	5.0	5.2	99.3	98.2
8	CLIFFS NATURAL RESOURCES	CLF	4.800	Oct-20	BBB	541	372	913	18.8	4.8	4.9	100.3	99.7
9	PETROBRAS GLOBAL FINANCE B V	PBR	4.375	May-23	BBB	798	361	1,159	35.8	5.0	5.1	95.4	94.6
10	TIME WARNER CABLE INC	TWC	5.000	Feb-20	BBB	56	359	415	9.7	2.6	2.7	112.8	111.8
11	CENTURY LINK	CTL	7.600	Sep-39	BB	284	354	638	16.6	7.5	7.7	101.4	98.8
12	APPLE INC	AAPL	2.400	May-23	AA	592	354	946	24.8	3.1	3.1	94.8	94.5
13	NEWMONT MINING CORP	NEM	3.500	Mar-22	BBB	381	327	708	17.1	4.2	4.5	95.7	93.7
14	CHESAPEAKE ENERGY CORP	CHK	6.500	Aug-17	BB	21	316	337	5.8	-	2.5	113.1	112.0
15	UNITED STATES STEEL CORP	X	7.375	Apr-20	B	87	306	393	7.4	5.1	5.4	111.7	109.7
16	CELGENE CORP	CELG	3.250	Aug-22	BBB	57	301	358	3.4	3.3	3.3	99.9	99.7
17	TIME WARNER CABLE INC	TWC	4.125	Feb-21	BBB	7	290	297	7.1	2.8	3.0	107.7	106.7
18	GOLDMAN SACHS GROUP INC	GS	5.625	Jan-17	BBB	71	286	357	8.8	1.5	1.7	110.7	110.0
19	GENERAL ELECTRIC CO	GE	5.250	Dec-17	AA	284	274	558	9.9	1.4	1.5	113.3	113.1
20	ANGLOGOLD ASHANTI HLDGS FIN	AU	8.500	Jul-20	BBB	193	273	466	11.9	5.0	5.7	112.7	111.4

Source: TRACE and BondDesk Group as of 5/30/2014.

- 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.

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