



ITEM 13

Executive Staff

Richard Stensrud
Chief Executive Officer

Vacant
Chief Investment Officer

Robert L. Gaumer
General Counsel

Kathryn T. Regalia
Chief Operations Officer

John W. Gobel, Sr.
Chief Benefits Officer

**For Agenda of:
August 17, 2016**

August 12, 2016

TO: President and Members
Board of Retirement

FROM: JR Pearce
Investment Officer

SUBJECT: Review of Trading Cost Activity and Commission Recapture
Program for Second Quarter 2016

Recommendation:

It is recommended that your Board receives and file the attached trading cost analysis reports prepared by Elkins/McSherry and the commission recapture report from State Street.

Background/Discussion:

SCERS' policy governing trading of securities is outlined in Policy No. 2001-01 'Directed Brokerage Transaction and Commission Policy' ("Policy"). The Policy requires SCERS' investment managers to direct trades in a manner which achieves best trading execution and lowers SCERS' brokerage commission costs. The Policy also includes authority to direct commissions to brokers who participate in SCERS' commission recapture program if they will achieve best execution. SCERS benefits from the recapture program by receiving a portion of the commissions directed from our managers in the form of a rebate. State Street Global Markets ("SSGM") administers the commission recapture program on behalf of SCERS.

SCERS utilizes Elkins/McSherry ("EM"), owned by State Street Bank, to track equity and fixed income trading activity on SCERS' total portfolio and to monitor each manager's trade execution performance. EM calculates and analyzes a manager's trade activity and

compares the results with similar managers across EM’s universe of approximately 1,400 institutional investors (pension funds, investment managers, banks, and brokers).

EM’s trade analysis report will highlight potential manager trading issues and discussion points. If an investment manager is out of compliance over two or more quarters, Staff will review with the manager and hold them accountable. The EM trading activity reports will analyze and compare the following:

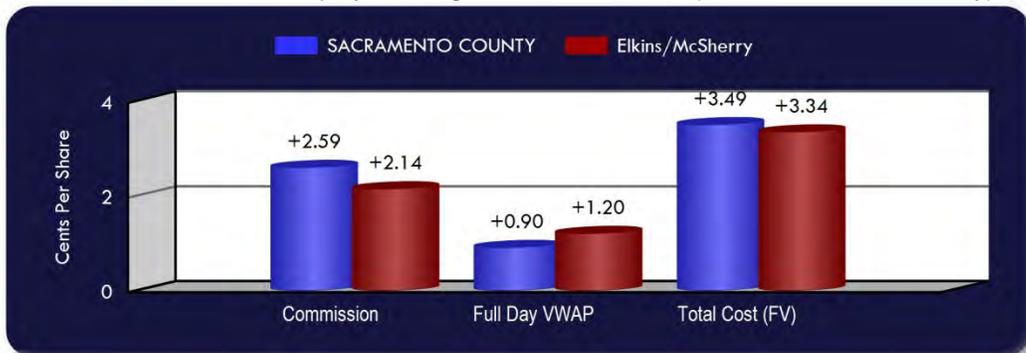
1. Commission Costs; both trade cost and any soft dollar costs.
2. Market Impact Cost; a trade performance measurement, which measures the difference between the manager’s trade price and the market’s volume-weighted average price (VWAP). VWAP is the average daily price of a security weighted by the volume of shares traded that day.
3. Total Trading Costs; equals commission costs plus market impact costs.

The trading comparisons are then aggregated and analyzed against the EM universe. Industry metrics used to measure trade performance include “cps” (cents per share) and “bps” (basis points = 1/100th of one % point).

Trading Cost Summary:

US EQUITY: During the quarter, SCERS’ US equity portfolio traded 5.8 million shares representing approximately \$199 million on the AMEX, NASDAQ and NYSE exchanges, and ranked in the 46th percentile against the EM US Equity universe. SCERS generated a total trading cost of +3.49 cps, which is 0.15 cps higher than the EM US Equity universe as follows: commission cost of +2.59 cps versus +2.14 cps and market impact cost (difference from VWAP) of +0.9 cps versus +1.20 cps. SCERS’ market impact cost was better than 59% of the EM US Equity universe.

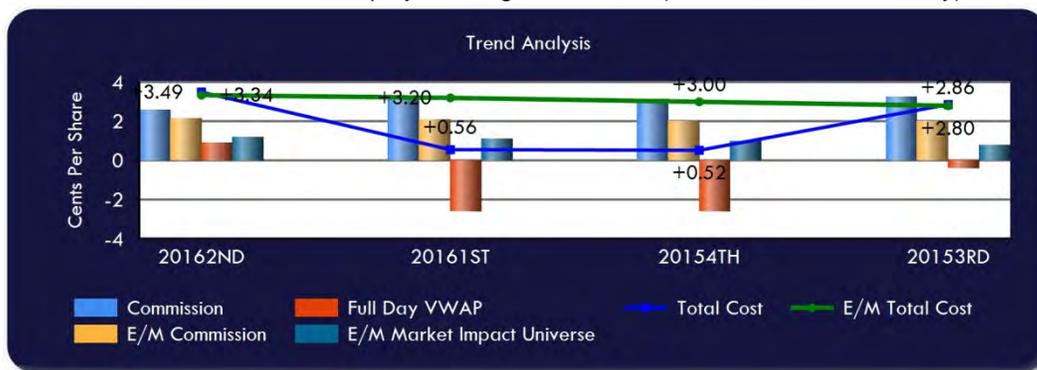
Exhibit: SCERS’ US Equity Trading Cost Performance (source: Elkins McSherry)



During the quarter, a majority of SCERS’ US Equity managers experienced unfavorable commission costs compared to the US Equity trading universe (+2.10 cps). Both AllianceBernstein and Huber Capital management had commission costs less than the

universe (+2.14 cps) at +0.53 cps and +0.65 cps, respectively. As shown below, SCERS' US Equity managers generally experience higher commission costs than the universe.

Exhibit: SCERS' US Equity Trading Cost Trend (source: Elkins McSherry)



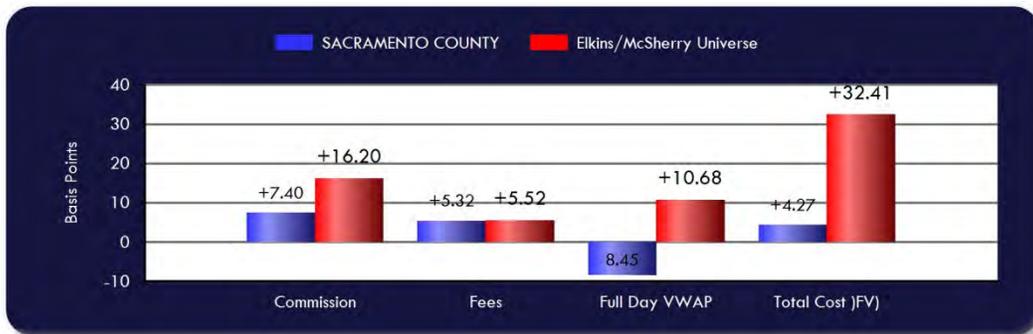
The managers with the highest commission cost during the quarter, and in general, were SCERS' US small cap managers, and SCERS' US REIT manager, CenterSquare (formerly Urdang Securities). As noted in previous reports, related to SCERS' US small cap managers, Weatherbie, DGHM, Wedge Capital and UBS Global Asset management, it is not unusual for active small-cap managers to incur additional commission costs by utilizing soft dollar relationships to direct trades to broker-dealers in exchange for brokerage research. Obtaining brokerage research can be an effective and necessary means for small cap investment managers to execute their investment strategies. Commission costs are generally higher due to the additional approximate 2.0 cps added to pay for research, but it is also expected that market impact costs should, in turn, be lower. The benchmark rate of 2.0 cps for the US equity trading universe does incorporate a range of market capitalization managers, so the US small cap manager commission costs in SCERS' portfolio can be higher to a degree.

According to Elkins McSherry, the average commission for the Bundled (Research Dollars) commission universe is +3.5 cps, which is in-line with several of the US Small Cap managers except DGHM, which has commission costs of 4.26 cps. Staff will follow up with DGHM. However, to fully understand the commission costs that SCERS' managers are paying, Staff and Verus believe it may be prudent to conduct a formal third party audit and analysis of the commission costs of SCERS' US equity managers, which would most likely involve a review of total costs incurred by SCERS' managers.

During the quarter, most of SCERS' US Equity managers experienced favorable market impact costs (-2.62 cps to +0.37 cps) compared to the US Equity trading universe (+1.20 cps), except for Alliance Capital (+2.44 cps), Weatherbie (+1.49 cps) UBS Global (+3.06 cps), and Wedge Capital (+5.95 cps). Staff will discuss the costs with the managers.

INTERNATIONAL EQUITY: During the quarter, SCERS' International Equity portfolio traded 29.8 million shares representing approximately \$188 million across 31 countries. SCERS generated a total trading cost of +4.27 bps, which is +28.14 bps lower than the EM International Equity universe, as follows: commission cost (+7.40 bps), fees (country taxes, tariffs, and other exchange charges) (+5.32 bps), and market impact cost (-8.45 bps). This compares favorably to the EM International Equity universe's commission cost, fee cost, market impact cost, and total trading cost, of +16.20 bps, +5.52 bps, +10.68 bps, and +32.41 bps, respectively.

Exhibit: SCERS' International Equity Trading Cost Performance (source: Elkins McSherry)



All of SCERS' International Equity managers generated commission costs (ranging from +1.60 bps to +9.6 bps), significantly less than the commission costs of the EM International Equity universe (ranging from +15.11 bps to +17.52 bps). This result is consistent with the previous quarters' lower trade costs than the EM peer group universe, as shown below.

Exhibit: SCERS' International Equity Trading Cost Trend (source: Elkins McSherry)



During the quarter, all of SCERS' International Equity managers experienced favorable market impact costs, as follows: William Blair (-1.79 bps versus +9.83 bps); LSV Asset Management (-0.64 bps versus +11.73 bps); Lazard Asset Management (-8.78 bps versus +11.70 bps); and CBRE Clarion (-16.41 bps versus +7.99 bps).

US FIXED INCOME: During the quarter, SCERS' US Fixed Income managers conducted 801 trades totaling approximately \$619 million, across mortgages, governments, and corporates. For the quarter, SCERS' US Fixed Income trading cost was -1.10 bps, which was 9.84 bps lower than the EM US Fixed Income universe of +8.74 bps, and specifically lower in Governments (by 9.58 bps), Mortgages (by 6.76 bps), and Corporates (by 21.69 bps). This result is consistent with the previous quarters' lower trade costs than the EM peer group universe, as shown below.

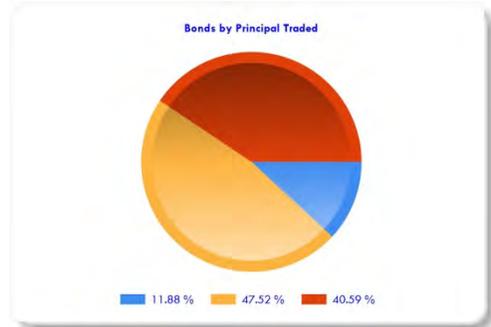
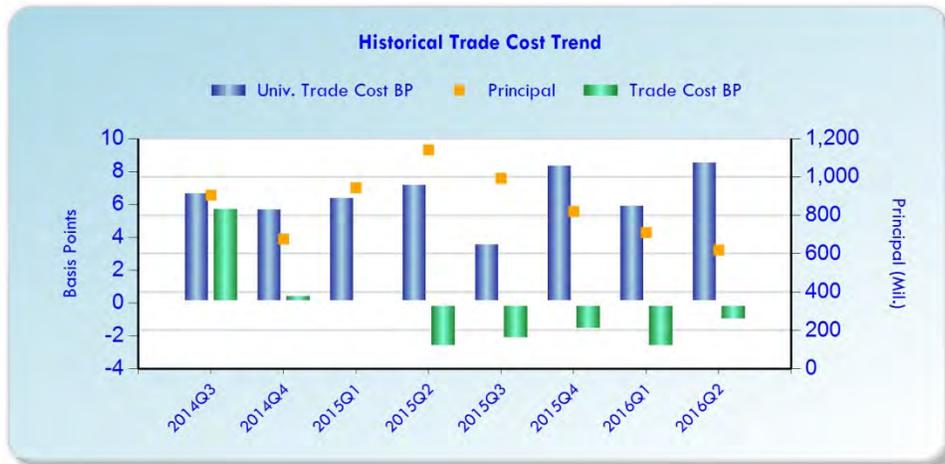
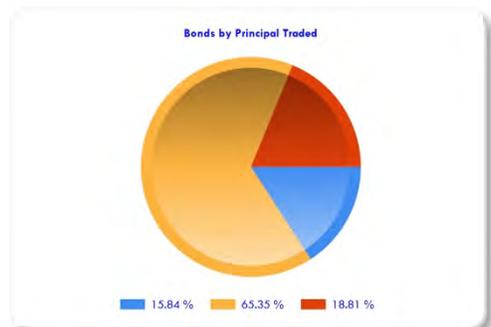


Exhibit: SCERS' US Fixed Income Trading Cost Trend (source: Elkins McSherry)



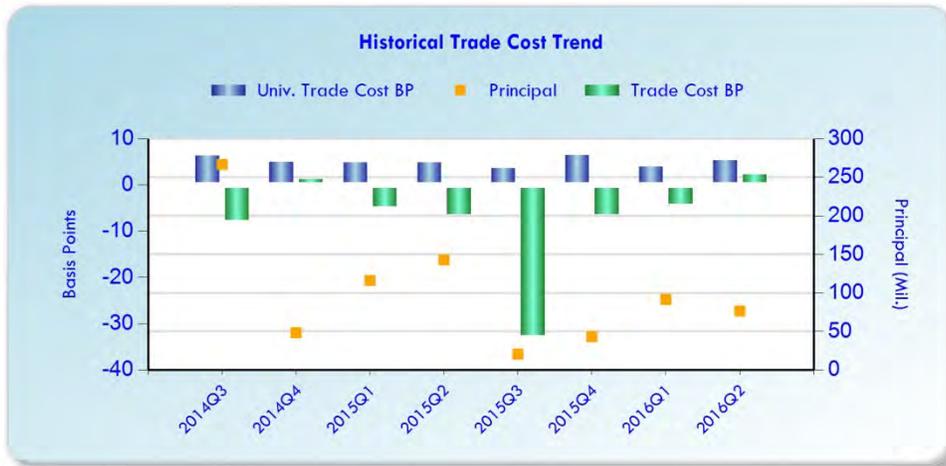
SCERS traded \$296 million in Governments, \$252 million in Mortgages, and \$71 million in Corporates. SCERS' domestic US Core Plus Fixed Income managers had trading costs below the US Fixed Income universe; TCW/MetWest (-0.41 bps versus +9.87 bps); and NeubergerBerman (-2.07 bps versus +7.37 bps).

INTERNATIONAL FIXED INCOME: SCERS' dedicated Global Fixed Income manager is Brandywine. SCERS is invested in Brandywine's commingled fund and their trading activity is not covered by EM. However, Prudential, one of SCERS' Core Fixed Income managers, is permitted per the investment management agreement to invest up to 20% in international bonds or non-US denominated bonds. Therefore, EM produced a special global fixed income report to capture Prudential's domestic and international trades.



During the quarter, Prudential conducted 102 international trades totaling approximately \$76 million in 58 different countries, as follows: \$50 million in Governments, \$14 million in Mortgages, and \$12 million in Corporates. Prudential's total trading cost of +2.94 bps, which was 3.03 bps lower than the EM peer group cost of +5.97 bps; and specifically, lower in Governments (by 6.86 bps) and Corporates (by 16.34 bps) but was higher in Mortgages (by 21.56 bps). This result is consistent with the previous quarters' lower trade costs than the EM peer group universe, as shown below.

Exhibit: SCERS' Global Fixed Income Trading Cost Trend (source: Elkins McSherry)



Commission Recapture:

SCERS' commission recapture program is administered by State Street and is designed to allow SCERS' investment managers opportunities to direct trades to a specialized list of brokerage firms within the program. SCERS' investment managers are instructed to trade with brokerage partners in the commission recapture program when it is beneficial in lowering overall trading costs and achieving "best execution." A portion of the commissions paid to SCERS' select list of brokers (approximately 60%) is then rebated for SCERS' benefit.

During the quarter, SCERS' commission recapture program generated \$21,519 in commission rebates. Year-to-date SCERS has earned \$37,645 in rebates. SCERS earned rebates of \$47,309 in 2015, \$105,736 in 2014, and \$126,980 in 2013. The rebates decreased in 2015 due to the termination of Barings Asset Management in 2014, which was an active participant in the SCERS commission recapture program.

Review of Trading Cost Activity and Commission Recapture
Program for Second Quarter 2016
August 12, 2016
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We would be happy to answer any questions.

Respectfully submitted,

Concur:

JR Pearce
Investment Officer

Richard Stensrud
Chief Executive Officer

Steve Davis
Deputy Chief Investment Officer

Attachments



SACRAMENTO COUNTY

Trade Cost Summary - Global Equity Trading

Period End June 30, 2016





REPORT CONTENTS

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(+) = Cost

EXECUTIVE SUMMARY

Elkins/McSherry has been providing trading cost analysis to institutional investors since 1991, serving many of the world's largest investment managers, pension funds, banks, and broker dealers. Using this vast experience combined with an unmatched collection of global equity market and Universe data, Elkins/McSherry has produced a Trading Cost Analysis on behalf of SACRAMENTO COUNTY. This study evaluates global equity executions from April 1, 2016 to June 30, 2016. The analysis included trading of 29,844,817 shares representing \$188.54 million in principal across 31 countries.

Methodology :

The Elkins/McSherry analysis measures trading efficiency by quantifying the cost of brokerage commission, fees, and execution quality versus an Full Day VWAP benchmark for each of the securities traded. These data have been separated to summarize results, by Buy/Sell, Commissions, Market Impact, Short Term Alpha, Market Cap, Country, Trade Difficulty, and Highest and Lowest Cost Trades. These results are quantified in \$ and Basis Points (BP) as well as being displayed graphically to highlight the outcomes.

Results :

BENCHMARK PERFORMANCE			E - Score
Commission	Fees	Full Day VWAP	
<ul style="list-style-type: none"> Your commission cost was +7.40 bp or \$ +\$139,498 (8.81 bp better than the Elkins/McSherry Universe) 	<ul style="list-style-type: none"> Your fee cost was +5.32 bp or \$ +100,276 (0.21 bp better than the Elkins/McSherry Universe) 	<ul style="list-style-type: none"> Your market impact savings was 8.45 bp or \$159,168 (19.12 bp better than the Elkins/McSherry Universe) Your overall trading cost of +4.27 bp was 28.14 bp better than the Elkins/McSherry Universe. Sacramento County trading was higher than the Elkins/McSherry Universe in 3 countries and lower than the Elkins/McSherry Universe in 28 countries. 7 of your brokers had trading cost higher than summary universe of countries (principal weighted) in which they traded. 55 of your brokers had lower trading cost. 	<ul style="list-style-type: none"> E - Score : -0.15



(+) = Cost

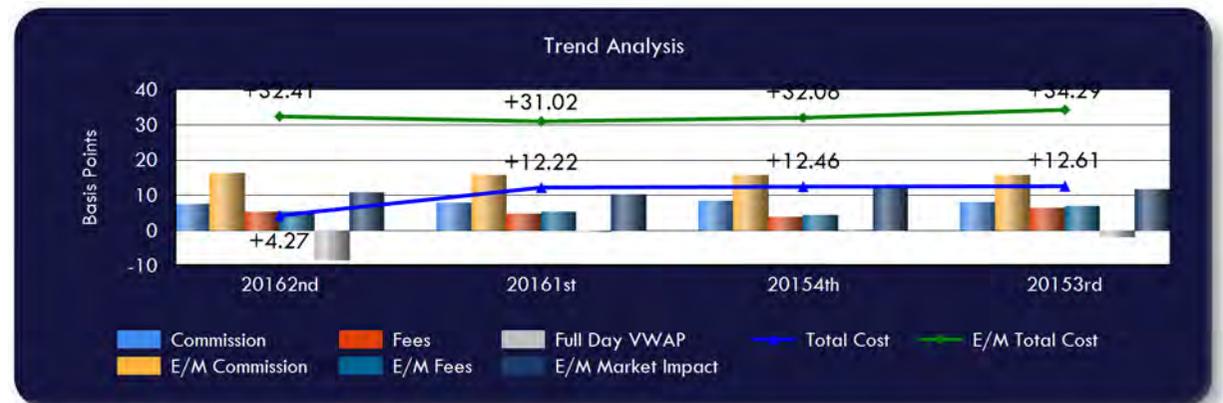
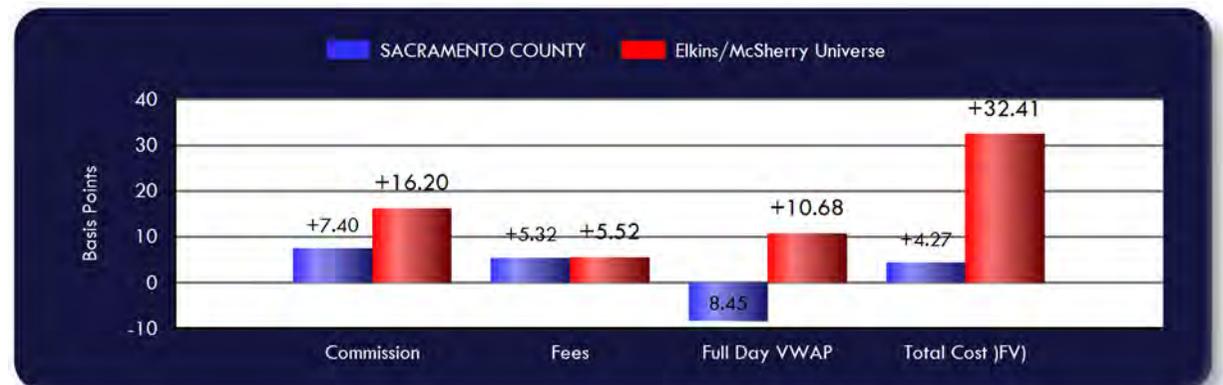
EXECUTIVE SUMMARY

TOTAL PORTFOLIO COST PERFORMANCE

Side	COMMISSION			Fees		MARKET IMPACT		Total Cost	Total Cost/Savings Vs. Universe	E - Score
	Your Avg. Commission	Bundled Universe	All Trading Universe	Fees	Universe	Full Day VWAP	Universe Full Day VWAP		Commission+Fees Full Day VWAP	
	(bp)	(bp)	(bp)	(bp)	(bp)	(bp)	(bp)	(bp)	(bp)	
Buy	+7.99	+16.31	+7.30	+10.33	+10.87	2.60	+12.89	+15.72	24.35	-0.03
Sell	+6.92	+16.12	+7.67	+1.26	+1.20	13.19	+8.89	5.01	31.22	-0.24
Total	+7.40	+16.20	+7.50	+5.32	+5.52	8.45	+10.68	+4.27	28.14	-0.15

TRADING COMPONENTS

	Buys	Sells
Trade Principal	84,358,519	104,185,669
Shares	11,304,160	18,540,657
Unique Names	215	175
Liquidity (% POV)	0.374	0.349
Avg. Order Size	10,890	16,584
Avg. Order Completion Time (min)	N/A	N/A
Total Number of Trades	1,038	1,118





(+) = Cost

EXECUTIVE SUMMARY

MARKET CAPITALIZATION

Market Cap	% Traded	Avg. Principal Per Order	COMMISSION		MARKET IMPACT		Total Cost	Total Cost/Savings	E - Score	Market Cap Definition
			Your Commission	Bundled Universe	Full Day VWAP	Universe Full Day VWAP				
	(%)	(\$)	(bp)	(bp)	(bp)	(bp)	(bp)	(bp)		
Large Cap	33.69 %	91,257	+7.13	+16.80	6.52	+10.07	+6.94	26.64	-0.17	\$5 Billion to \$25 Billion
Mid Cap	32.86 %	60,211	+7.52	+16.24	14.53	+10.65	+0.04	33.88	-0.18	\$1 Billion to \$5 Billion
Giant Cap	25.02 %	249,640	+7.69	+15.26	6.06	+11.05	+2.90	24.75	-0.11	Over \$25 Billion
Small Cap	8.31 %	66,396	+6.89	+16.52	+0.23	+12.19	+13.76	22.38	-0.04	\$250 Million to \$1 Billion
Micro Cap	0.12 %	36,782	+23.07	+15.49	+20.68	+10.36	+43.74	+17.77	0.25	Under \$250 Million

Total Cost by Market Cap: (USD)





(+) = Cost

EXECUTIVE SUMMARY

ORDER SIZE EVALUATION

Order Size	Total # Of Orders	Avg. Principal Per Order (\$)	Avg. Order Completion Time (min)	COMMISSION		MARKET IMPACT		Total Cost	Total Cost/Savings	E - Score	Absolute Size (Principal)
				Your Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	(bp)	Commission+Fees +Full Day VWAP Vs. Universe (bp)		
Large Orders	14	2,018,669	N/A	+8.15	+14.91	33.13	+9.52	23.03	49.45	-0.40	1M or Greater
Medium Orders	34	671,992	N/A	+9.16	+16.89	7.93	+11.59	+4.43	27.23	0.00	Between 500k - 1M
Small Orders	2,108	65,197	N/A	+6.95	+16.36	3.47	+10.77	+9.84	23.93	-0.12	500K or Less

Total Cost By Order Size: (USD)





(+) = Cost

EXECUTIVE SUMMARY

IMPLEMENTATION DAYS BY TRADE

Period	Percent Traded (%)	Order Vol. Vs Total Vol. (%)	Full Day VWAP (bp)	E - Score
1 Day	100.00	100%	8.45	-0.15

Implementation Days



TRADE DIFFICULTY

Methodology	Liquid. Cat.	Percent Traded (%)	Full Day VWAP (bp)	E - Score
50%+ of daily vol.	H	0%	2.89	-0.07
0%~20% of daily vol.	L	99%	8.48	-0.15
20%~50% of daily vol.	M	0%	5.47	-0.21

Avg. % of Daily Volume



EXECUTIVE SUMMARY

COUNTRY PERFORMANCE

Country	Principal (\$ Millions)	Total Principal Traded (%)	COMMISSION		FEES		MARKET IMPACT		Total Cost Diff. From Universe (bp)	E - Score
			Commission (bp)	Bundled Universe Commission (bp)	Fees (bp)	Universe Fees (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)		
HIGHEST COST COUNTRIES - Total Cost Universe Difference										
ISRAEL	1	0.60%	+5.35	+18.25	+0.00	+0.01	+86.51	+7.97	+65.63	2.29
FINLAND	<1	0.30%	+6.00	+14.02	+0.00	+0.07	+50.83	+8.81	+33.93	0.82
GERMANY	15	8.10%	+9.36	+14.45	+0.00	+0.00	+25.01	+6.87	+13.05	0.22

EXECUTIVE SUMMARY

COUNTRY PERFORMANCE

Country	Principal (\$ Millions)	Total Principal Traded (%)	COMMISSION		FEES		MARKET IMPACT		Total Cost Diff. From Universe (bp)	E - Score
			Commission (bp)	Bundled Universe Commission (bp)	Fees (bp)	Universe Fees (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)		
LOWEST COST COUNTRIES - Total Cost Universe Difference										
BELGIUM	<1	0.21%	+5.00	+14.12	+0.00	+0.00	92.89	+9.89	111.90	-1.02
IRELAND - SELLS	<1	0.31%	+7.00	+16.43	+0.02	+0.00	69.70	+17.99	97.09	-1.44
U.K. - BUYS	13	6.90%	+6.47	+16.05	+47.08	+50.00	25.67	+17.27	55.44	-0.33
DENMARK	2	1.14%	+5.55	+14.67	+0.00	+0.00	29.40	+14.45	52.97	-0.15
NETHERLANDS	1	0.66%	+5.85	+14.30	+0.00	+0.05	37.54	+5.11	51.15	-1.00
U.K. - SELLS	20	10.53%	+8.32	+15.04	+0.08	+0.00	34.17	+7.25	48.06	-0.28
AUSTRALIA	21	11.05%	+8.58	+14.81	+0.00	+0.16	25.33	+9.08	40.81	-0.43
SPAIN	5	2.67%	+6.49	+16.49	+0.00	+0.00	17.50	+12.97	40.46	-0.36
ITALY - BUYS	5	2.41%	+7.10	+15.97	+10.00	+12.00	20.20	+9.29	40.36	-0.55
SWITZERLAND	11	5.92%	+6.67	+14.70	+0.00	+0.00	21.12	+10.38	39.52	-0.49
ITALY - SELLS	2	1.19%	+3.71	+17.10	+0.00	+0.00	18.50	+7.29	39.17	-0.28
U.S.	11	6.07%	+0.90	+13.60	+0.18	+0.07	16.58	+5.67	34.84	-0.53
NORWAY	7	3.65%	+9.82	+16.31	+0.00	+0.15	+0.85	+26.75	32.54	0.00
IRELAND - BUYS	<1	0.32%	+6.82	+13.77	+100.05	+100.00	10.50	+14.63	32.03	-0.11
BRAZIL	<1	0.10%	+11.55	+17.45	+3.25	+1.51	17.44	+8.02	29.62	-0.26
SINGAPORE	8	4.26%	+9.90	+16.78	+3.78	+3.34	7.12	+9.00	22.56	-0.06
CANADA	7	3.60%	+3.72	+15.49	+0.00	+0.12	+0.18	+10.36	22.07	-0.04
FRANCE - SELLS	3	1.55%	+3.75	+14.67	+0.00	+0.00	1.64	+9.34	21.90	0.10
JAPAN	30	15.87%	+7.08	+18.29	+0.00	+0.01	+8.51	+16.04	18.75	0.10
SOUTH AFRICA - BUYS	<1	0.27%	+7.37	+15.97	+25.02	+22.03	2.84	+6.24	14.70	-0.08
HONG KONG	13	6.92%	+10.31	+22.71	+10.78	+10.44	+3.55	+5.05	13.56	0.06
FRANCE - BUYS	5	2.48%	+7.55	+14.41	+20.00	+20.00	+1.81	+7.34	12.39	-0.14
THAILAND	<1	0.31%	+10.00	+19.82	+1.05	+0.87	+2.32	+4.80	12.12	0.00

EXECUTIVE SUMMARY

COUNTRY PERFORMANCE

Country	Principal (\$ Millions)	Total Principal Traded (%)	COMMISSION		FEES		MARKET IMPACT		Total Cost Diff. From Universe (bp)	E - Score
			Commission (bp)	Bundled Universe Commission (bp)	Fees (bp)	Universe Fees (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)		
LOWEST COST COUNTRIES - Total Cost Universe Difference										
MEXICO	<1	0.41%	+9.79	+14.87	+0.00	+0.00	0.41	+5.96	11.46	0.10
TURKEY	<1	0.43%	+18.18	+15.70	+0.00	+0.00	7.17	+5.53	10.22	0.00
NEW ZEALAND	<1	0.19%	+4.10	+16.63	+0.00	+0.00	+19.78	+16.69	9.44	0.48
INDONESIA	<1	0.09%	+15.00	+18.60	+15.10	+9.22	+5.08	+12.27	4.91	0.33
SWEDEN	3	1.49%	+8.48	+14.67	+0.00	+0.00	+8.44	+4.59	2.35	0.12



(+) = Cost

TRADE CYCLE DETAIL

5 LOWEST COST MANAGER (Full Day VWAP)



Manager	Principal Traded (\$ Millions)	Total Orders Traded	% Principal	Avg. Principal (\$)	E - Score	COMMISSION		MARKET IMPACT		TOTAL COST/SAVINGS	Commission+Fees+Full Day VWAP Vs. Universe TREND		
						Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	Commission +Fees+Full Day VWAP Vs. Universe (bp)	20161st (bp)	20154th (bp)	20153rd (bp)
WILLIAM BLAIR & COMP	29	448	15.30%	64,395	-0.01	+8.77	+16.77	1.79	+9.83	19.97	15.72	13.30	8.04
LSV ASSET MANAGEMENT	33	497	17.65%	66,972	0.01	+4.09	+16.31	0.64	+11.73	24.55	32.00	32.38	36.48
LAZARD ASSET MANAGEM	61	180	32.48%	340,203	-0.14	+9.17	+15.33	8.78	+11.70	27.17	4.22	12.24	21.10
CBRE CLARION (INTL R	44	370	23.25%	118,477	-0.20	+9.36	+17.52	14.42	+10.32	32.81	18.62	14.71	-
S&P GLOBAL INFRAST-I	21	661	11.32%	32,280	-0.46	+1.60	+15.11	16.41	+7.99	37.98	20.57	25.92	-

NOTES

- Manager above made up 100.00 % of principal traded.



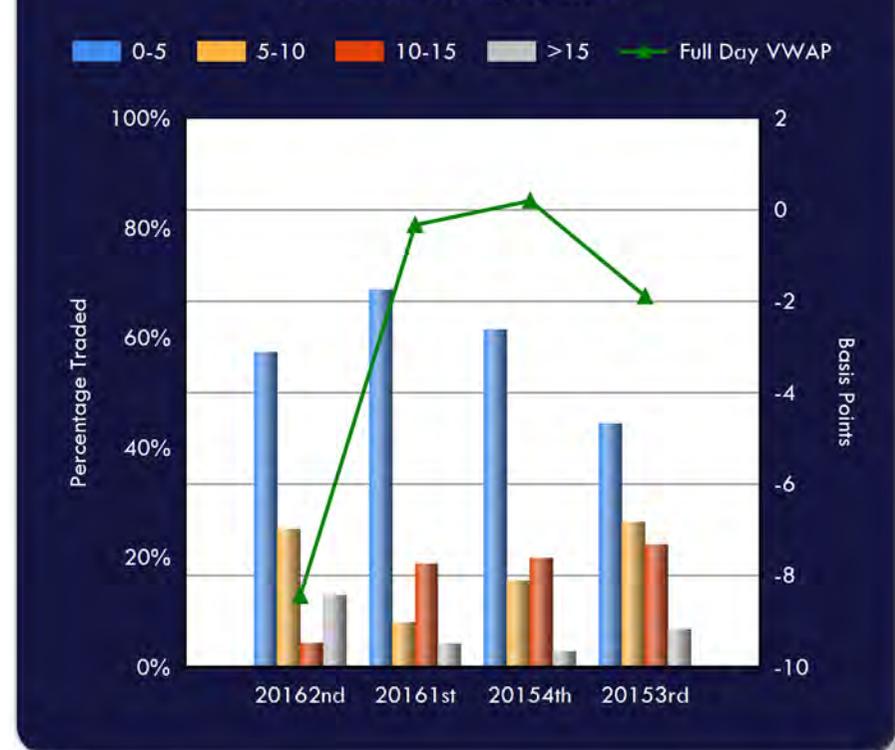
(+) = Cost

COMMISSION REVIEW

COMMISSION REVIEW - Top 20 Brokers (Commission \$)

Broker	Total Commission	Commission (bp)	Bundled Universe (bp)	All Trading Universe (bp)	Commission Trends		
					20161st (bp)	20154th (bp)	20153rd (bp)
MERRILL LY	26,785	+7.07	+15.54	+7.43	+3.89	+9.60	+4.45
CREDIT SUI	15,289	+7.80	+16.24	+7.40	+5.47	+8.58	+9.44
JP MORGAN	10,865	+10.16	+17.67	+7.49	+9.80	+9.83	+7.08
UBS	9,634	+6.30	+16.06	+7.84	+9.05	+6.04	+7.24
CITIGROUP	8,297	+4.70	+15.90	+7.60	+5.84	+5.27	+6.55
GOLDMAN SA	8,222	+9.65	+15.44	+7.57	+2.99	+6.95	+9.10
DEUTSCHE B	8,074	+10.52	+15.79	+7.39	+9.19	+7.86	+9.55
CREDIT AGR	5,338	+10.63	+16.59	+8.70	+15.35	+15.08	+11.22
MORGAN STA	3,441	+7.12	+16.14	+7.87	+12.15	+6.75	+6.37
MACQUARIE	3,226	+7.45	+17.67	+7.81	+12.93	+13.74	+13.54
SMBC SECUR	3,061	+8.31	+18.29	+6.94	+14.08	+15.00	+11.55
DAIWA SECU	3,043	+8.55	+18.29	+6.94	+12.10	+9.00	+6.08
INSTINET	2,891	+6.01	+18.24	+6.97	+7.02	+4.95	+5.66
SC BERNSTE	2,826	+8.07	+18.63	+7.65	+4.00	+5.18	-
SOCIETE GE	2,755	+5.34	+15.44	+7.04	+5.90	+6.42	+5.00
REDBURN PA	2,559	+6.00	+15.18	+7.46	+12.21	+6.00	+8.33
ITG	1,992	+5.27	+16.39	+7.25	+4.74	+4.84	+7.69
MIZUHO	1,925	+9.75	+18.78	+7.03	+16.06	+12.65	+11.87
JOH BERENB	1,570	+13.82	+14.77	+7.33	+15.00	+15.00	+12.62
BNP PARIBA	1,544	+9.04	+18.03	+7.26	+13.53	+13.39	+9.53

Commission Category Trend





(+) = Cost

TRADE CYCLE DETAIL

MANAGER PERFORMANCE (FULL DAY VWAP)



Manager	Principal Traded (\$ Millions)	Total Orders Traded	% Principal	Avg. Principal (\$)	E - Score	COMMISSION		MARKET IMPACT		TOTAL COST/SAVINGS	Commission+Fees+Full Day VWAP Vs. Universe TREND		
						Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	Commission +Fees+Full Day VWAP Vs. Universe (bp)	20161st (bp)	20154th (bp)	20153rd (bp)
LAZARD ASSET MANAGEM	61	180	32.48%	340,203	-0.14	+9.17	+15.33	8.78	+11.71	27.18	4.22	12.24	21.10
CBRE CLARION (INTL R	44	370	23.25%	118,477	-0.20	+9.36	+17.52	14.42	+10.32	32.81	18.62	14.71	-
LSV ASSET MANAGEMENT	33	497	17.65%	66,972	0.01	+4.09	+16.31	0.64	+11.73	24.56	32.00	32.38	36.48
WILLIAM BLAIR & COMP	29	448	15.30%	64,395	-0.01	+8.77	+16.77	1.79	+9.84	19.97	15.72	13.30	8.04
S&P GLOBAL INFRAS-T-I	21	661	11.32%	32,280	-0.46	+1.60	+15.11	16.41	+7.99	37.98	20.57	25.92	-

NOTES

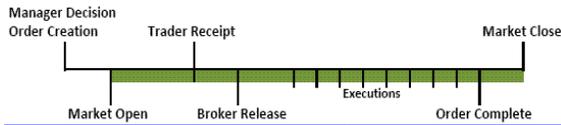
- Manager above made up 100.00 % of principal traded.



(+) = Cost

TRADE CYCLE DETAIL

BROKER PERFORMANCE (FULL DAY VWAP)



Broker	Principal Traded (\$ Millions)	Total Orders Traded	% Principal	Avg. Principal (\$)	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	Commission+Fees+Full Day VWAP Vs. Universe TREND		
						Commission (\$)	Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	Commission +Fees+Full Day VWAP Vs. Universe (bp)	20161st (bp)	20154th (bp)	20153rd (bp)
MERRILL LYNCH	38	190	20.10%	199,428	-0.33	26,785	+7.07	+15.54	14.71	+12.77	36.65	+4.33	22.07	32.83
CREDIT SUISSE	20	234	10.40%	83,764	-0.09	15,289	+7.80	+16.24	+5.18	+9.39	12.61	29.39	24.82	17.61
CITIGROUP	18	224	9.36%	78,826	-0.07	8,297	+4.70	+15.90	1.87	+8.07	20.93	16.75	23.37	55.47
UBS	15	201	8.12%	76,132	-0.07	9,634	+6.30	+16.06	4.80	+10.05	24.78	18.14	24.28	17.82
JP MORGAN CHASE	11	101	5.67%	105,922	-0.14	10,865	+10.16	+17.67	6.98	+9.00	23.72	+0.22	18.05	22.54
GOLDMAN SACHS	9	52	4.52%	163,917	-0.27	8,222	+9.65	+15.44	62.65	+8.51	76.95	38.67	28.12	21.49
DEUTSCHE BANK	8	81	4.07%	94,723	-0.02	8,074	+10.52	+15.79	+4.94	+7.92	8.31	15.32	18.03	+19.81
SOCIETE GENERALE	5	78	2.74%	66,117	-0.24	2,755	+5.34	+15.44	23.11	+12.00	46.15	35.76	52.75	83.61
CREDIT AGRICOLE	5	39	2.66%	128,810	-0.16	5,338	+10.63	+16.59	+1.22	+8.28	13.00	36.59	+1.19	+19.29
MORGAN STANLEY	5	91	2.56%	53,073	-0.25	3,441	+7.12	+16.14	8.43	+10.44	27.84	31.09	16.45	53.28

NOTES

- Brokers above made up 70.20 % of principal traded.



(+) = Cost

TRADE CYCLE DETAIL

BROKER PERFORMANCE (FULL DAY VWAP)



Broker	Principal Traded (\$ Millions)	Total Orders Traded	% Principal	Avg. Principal (\$)	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	Commission+Fees+Full Day VWAP Vs. Universe TREND		
						Commission (\$)	Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	Commission +Fees+Full Day VWAP Vs. Universe (bp)	20161st (bp)	20154th (bp)	20153rd (bp)
INSTINET	5	74	2.55%	65,012	-0.07	2,891	+6.01	+18.24	+8.73	+15.82	19.33	21.34	22.24	34.94
MACQUARIE	4	43	2.30%	100,713	0.11	3,226	+7.45	+17.67	0.26	+9.32	19.66	0.13	8.71	60.18
REDBURN PARTNERS LLP	4	5	2.26%	853,121	-0.48	2,559	+6.00	+15.18	5.72	+8.64	23.53	+25.44	+7.30	21.36
ITG	4	126	2.01%	30,008	0.03	1,992	+5.27	+16.39	5.51	+12.51	30.71	20.52	32.21	18.81
BARCLAYS	4	87	1.96%	42,412	-0.34	1,339	+3.63	+15.99	21.27	+16.73	50.16	21.62	19.35	54.36
SMBC SECURITIES INC	4	32	1.95%	115,126	-0.01	3,061	+8.31	+18.29	43.18	+16.04	69.21	+18.47	41.35	14.50
DAIWA SECURITIES	4	25	1.89%	142,343	0.28	3,043	+8.55	+18.29	+25.14	+16.04	0.65	9.78	34.23	25.76
SC BERNSTEIN	4	73	1.86%	47,979	-0.10	2,826	+8.07	+18.63	0.67	+9.02	20.13	21.62	11.10	-
HSBC BANK	3	61	1.54%	47,753	-0.71	874	+3.00	+15.38	38.09	+9.18	59.44	29.97	35.58	32.87
MIZUHO	2	25	1.05%	78,928	-0.01	1,925	+9.75	+18.78	3.72	+14.82	27.54	8.98	10.92	19.65

NOTES

- Brokers above made up 19.36 % of principal traded.



(+) = Cost

TRADE CYCLE DETAIL

BROKER PERFORMANCE (FULL DAY VWAP)



Broker	Principal Traded (\$ Millions)	Total Orders Traded	% Principal	Avg. Principal (\$)	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	Commission+Fees+Full Day VWAP Vs. Universe TREND		
						Commission (\$)	Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	Commission +Fees+Full Day VWAP Vs. Universe (bp)	20161st (bp)	20154th (bp)	20153rd (bp)
SCOTIA CAPITAL	2	35	0.95%	51,082	-0.31	263	+1.47	+15.49	6.66	+10.36	31.15	31.44	19.22	46.33
BNP PARIBAS	2	15	0.91%	113,895	-0.32	1,544	+9.04	+18.03	+3.28	+13.04	18.67	2.87	9.68	+10.08
TD WATERHOUSE	2	10	0.88%	165,563	0.47	445	+2.69	+15.49	+15.49	+10.36	7.79	15.59	-	-
AUTONOMOUS LLP	1	3	0.64%	402,238	0.12	1,484	+12.30	+15.84	3.49	+15.37	22.39	-	-	-
JOH BERENBERG GOSSLE	1	7	0.60%	162,316	-0.11	1,570	+13.82	+14.77	+7.84	+10.28	3.38	18.02	+9.19	+7.06
WEEDEN & CO	<1	9	0.47%	98,746	0.15	885	+9.96	+14.80	+1.94	+9.07	12.13	16.49	-	-
MITSUBISHI UFJ SECS	<1	10	0.47%	88,741	0.00	969	+10.92	+18.29	+4.05	+16.04	19.36	26.47	29.67	-
NUMIS SECURITIES	<1	3	0.45%	285,276	-0.16	1,051	+12.28	+15.04	1.54	+7.25	11.50	-	20.79	63.61
EXANE	<1	20	0.43%	40,986	0.03	471	+5.74	+14.44	+0.51	+7.41	15.61	21.84	21.56	14.35
SVENSKA HANDELSBANKE	<1	4	0.42%	198,603	0.31	636	+8.00	+14.67	+18.25	+4.59	+6.99	38.60	-	-

NOTES

- Brokers above made up 6.23 % of principal traded.



(+) = Cost

TRADE CYCLE DETAIL

BROKER PERFORMANCE (FULL DAY VWAP)



Broker	Principal Traded (\$ Millions)	Total Orders Traded	% Principal	Avg. Principal (\$)	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	Commission+Fees+Full Day VWAP Vs. Universe TREND		
						Commission (\$)	Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	Commission +Fees+Full Day VWAP Vs. Universe (bp)	20161st (bp)	20154th (bp)	20153rd (bp)
BANCO SANTANDER	<1	14	0.40%	54,090	-0.11	1,136	+15.00	+16.49	8.65	+12.97	23.11	15.37	16.84	13.69
D CARNEGIE AG	<1	1	0.33%	613,989	-0.07	491	+8.00	+14.67	2.89	+4.59	14.15	+8.24	-	-
GOODBODY STOCKBROKER	<1	1	0.31%	585,440	-1.44	410	+7.00	+16.43	69.70	+17.99	97.09	8.49	+64.81	119.79
PAVILION GLOBAL MKT	<1	5	0.29%	110,095	-0.16	165	+3.00	+15.49	+0.34	+10.36	22.63	43.44	23.35	44.86
JEFFERIES & CO	<1	10	0.29%	54,807	0.24	650	+11.85	+15.72	+12.16	+11.52	4.11	16.29	-	26.36
CITATION FINL GROUP	<1	1	0.29%	543,043	0.25	200	+3.68	+13.60	+3.68	+5.67	11.98	-	-	35.26
CIMB SECURITIES	<1	4	0.26%	124,063	0.21	992	+20.00	+22.71	+5.17	+5.05	2.26	-	-	-
BANK J. VONTOBEL	<1	1	0.24%	454,229	-0.27	318	+7.00	+14.70	34.34	+10.38	52.42	-	+141.08	+1.58
LIQUIDNET	<1	6	0.24%	74,403	-0.29	276	+6.19	+14.35	+1.35	+7.52	14.31	+71.24	+0.70	10.06
NATIXIS	<1	14	0.21%	28,494	-0.33	598	+15.00	+14.48	13.96	+7.43	20.96	65.48	-	-

NOTES

- Brokers above made up 2.86 % of principal traded.



(+) = Cost

TRADE CYCLE DETAIL

BROKER PERFORMANCE (FULL DAY VWAP)



Broker	Principal Traded (\$ Millions)	Total Orders Traded	% Principal	Avg. Principal (\$)	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	Commission+Fees+Full Day VWAP Vs. Universe TREND		
						Commission (\$)	Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	Commission +Fees+Full Day VWAP Vs. Universe (bp)	20161st (bp)	20154th (bp)	20153rd (bp)
WELLS FARGO	<1	80	0.19%	4,545	0.07	59	+1.63	+13.60	1.81	+5.67	19.52	-	24.39	-
DAVY STOCKBROKERS	<1	1	0.19%	360,456	0.17	252	+7.00	+13.77	1.06	+14.63	22.42	-	-	355.52
LIBERUM CAPITAL LTD	<1	5	0.17%	63,227	-0.56	474	+15.00	+15.04	9.02	+7.25	16.08	23.35	-	16.40
PERSHING	<1	10	0.11%	21,039	-0.46	65	+3.10	+15.63	37.28	+7.95	57.76	2.93	+0.26	-
ABG SECURITIES	<1	3	0.09%	56,326	0.00	253	+15.00	+14.67	1.90	+4.59	6.16	-	23.06	-
RBC DOMINION SECS	<1	3	0.09%	55,467	-0.47	194	+11.67	+15.49	23.12	+10.36	37.42	17.84	6.34	17.03
ENSKILDA SECURITIES	<1	2	0.07%	62,802	0.21	188	+15.00	+14.67	+5.32	+4.59	+1.06	-	24.78	-
NESBITT BURNS	<1	2	0.06%	55,839	0.37	342	+30.59	+15.49	+0.71	+10.36	+5.32	61.37	+32.58	-
BRDESCO	<1	1	0.05%	91,198	-0.42	105	+11.55	+17.45	47.42	+8.02	59.60	-	-	-
KEMPEN & CO	<1	1	0.04%	78,726	-0.37	0	+0.00	+14.45	19.65	+6.87	40.97	6.40	+46.26	-

NOTES

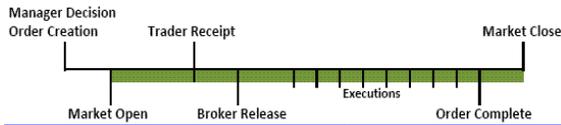
- Brokers above made up 1.06 % of principal traded.



(+) = Cost

TRADE CYCLE DETAIL

BROKER PERFORMANCE (FULL DAY VWAP)



Broker	Principal Traded (\$ Millions)	Total Orders Traded	% Principal	Avg. Principal (\$)	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	Commission+Fees+Full Day VWAP Vs. Universe TREND		
						Commission (\$)	Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	Commission +Fees+Full Day VWAP Vs. Universe (bp)	20161st (bp)	20154th (bp)	20153rd (bp)
ROYAL BANK OF CANADA	<1	4	0.04%	18,787	N/A	60	+8.00	+15.04	83.28	+7.25	97.20	-	+13.88	-
BAADER WERTPAPIERHAN	<1	1	0.04%	74,961	1.12	112	+15.00	+14.41	+35.49	+7.34	+28.74	-	33.22	-
DANSKE BANK	<1	1	0.04%	67,429	1.41	101	+15.00	+14.67	+85.27	+4.59	+81.01	-	14.81	-
CANACCORD GENUITY	<1	1	0.03%	57,563	-1.36	42	+7.33	+15.49	16.37	+10.36	35.01	-	-	21.80
AUTREPAT-STK	<1	1	0.03%	54,456	-0.10	0	+0.00	+16.05	2.77	+17.27	86.09	-	-	-
KNIGHT CAPITAL	<1	14	0.03%	3,488	0.86	13	+2.75	+15.77	+49.19	+11.62	+24.23	-	34.07	-
MEDIOBANCA	<1	5	0.02%	8,639	0.13	65	+15.00	+17.10	+11.16	+7.29	+1.77	5.76	+2.41	26.11
CARNEGIE	<1	2	0.02%	19,956	0.32	32	+8.00	+14.67	12.02	+14.45	33.14	4.87	-	-
GREEN STREET	<1	1	0.02%	36,914	-1.55	55	+15.00	+13.77	48.45	+14.63	61.47	+3.22	52.64	-
SG SECURITIES	<1	1	0.02%	28,596	-0.04	57	+20.00	+22.71	+0.07	+5.05	7.32	-	+21.14	-

NOTES

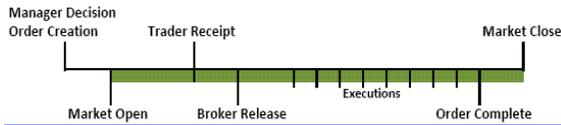
- Brokers above made up 0.28 % of principal traded.



(+) = Cost

TRADE CYCLE DETAIL

BROKER PERFORMANCE (FULL DAY VWAP)



Broker	Principal Traded (\$ Millions)	Total Orders Traded	% Principal	Avg. Principal (\$)	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	Commission+Fees+Full Day VWAP Vs. Universe TREND		
						Commission (\$)	Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	Commission +Fees+Full Day VWAP Vs. Universe (bp)	20161st (bp)	20154th (bp)	20153rd (bp)
ABN AMRO	<1	1	0.01%	22,184	-0.34	33	+15.00	+14.45	2.39	+6.87	8.71	43.11	-	-
CARGARY SECURITIES	<1	1	0.00%	1,140	-0.09	1	+5.99	+22.71	+1.11	+5.05	20.12	5.54	4.70	24.68

NOTES

- Brokers above made up 0.01 % of principal traded.



(+) = Cost

TRADE CYCLE DETAIL

CBRE CLARION (INTL RE) PERFORMANCE (FULL DAY VWAP)



Broker	Principal Traded (\$ Millions)	Total Orders Traded	% Principal	Avg. Principal (\$)	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	Commission+Fees+Full Day VWAP Vs. Universe TREND		
						Commission (\$)	Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	Commission + Fees + Full Day VWAP Vs. Universe (bp)	20161st (bp)	20154th (bp)	20153rd (bp)
GRAND TOTAL	44	370	23.25%	118,477	-0.26	41,030	+9.36	+17.52	14.42	+10.32	32.81	18.62	14.71	-
JP MORGAN CHASE	6	40	3.36%	158,198	0.03	7,720	+12.20	+18.94	0.26	+8.41	15.29	+0.01	15.69	-
UBS	5	56	2.80%	94,299	-0.23	4,712	+8.92	+16.64	8.39	+10.10	26.21	17.48	18.01	-
MERRILL LYNCH	5	27	2.57%	179,351	-1.40	3,558	+7.35	+16.53	97.97	+8.67	115.74	25.82	20.43	-
CITIGROUP	4	24	2.34%	184,053	-0.04	3,459	+7.83	+18.08	+0.82	+8.37	17.29	16.25	4.58	-
CREDIT AGRICOLE	4	32	2.09%	123,205	-0.35	3,943	+10.00	+16.24	4.85	+8.49	19.54	24.69	+5.54	-
MACQUARIE	4	29	1.94%	125,836	0.13	2,871	+7.87	+17.73	0.31	+8.47	18.48	+7.18	5.55	-
SMBC SECURITIES INC	3	22	1.39%	119,405	-0.03	1,986	+7.56	+18.29	62.23	+16.04	89.01	37.97	41.35	-
MORGAN STANLEY	3	27	1.39%	97,292	-0.01	1,895	+7.21	+16.42	+2.90	+12.47	18.81	45.12	5.06	-
DAIWA SECURITIES	2	18	1.20%	126,053	0.50	2,269	+10.00	+18.29	+45.53	+16.04	+21.19	3.65	38.68	-
INSTINET	2	27	0.98%	68,702	-0.13	1,748	+9.42	+18.29	3.38	+16.04	28.30	22.61	6.71	-



(+) = Cost

TRADE CYCLE DETAIL

LAZARD ASSET MANAGEMENT PERFORMANCE (FULL DAY VWAP)



Broker	Principal Traded (\$ Millions)	Total Orders Traded	% Principal	Avg. Principal (\$)	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	Commission+Fees+Full Day VWAP Vs. Universe TREND		
						Commission (\$)	Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	Commission + Fees + Full Day VWAP Vs. Universe (bp)	20161st (bp)	20154th (bp)	20153rd (bp)
GRAND TOTAL	61	180	32.48%	340,203	-0.07	56,150	+9.17	+15.33	8.78	+11.71	27.18	4.22	12.24	21.10
MERRILL LYNCH	27	57	14.56%	481,669	-0.08	20,945	+7.63	+15.41	1.84	+14.34	24.95	+4.63	26.73	34.72
GOLDMAN SACHS	6	2	3.10%	2,922,496	-0.03	7,014	+12.00	+15.04	67.96	+7.25	78.25	117.71	-	18.30
CREDIT SUISSE	6	12	3.02%	474,040	0.01	8,025	+14.11	+15.01	+4.11	+8.36	5.17	+9.38	+2.27	21.04
REDBURN PARTNERS LLP	4	5	2.26%	853,121	-0.48	2,559	+6.00	+15.18	5.72	+8.64	23.53	+25.44	+7.30	21.36
DEUTSCHE BANK	3	18	1.70%	177,739	-0.12	4,425	+13.83	+14.61	+4.24	+7.06	3.83	17.99	29.06	+32.83
JP MORGAN CHASE	2	14	1.12%	151,452	-0.87	1,469	+6.93	+15.52	38.13	+11.34	58.90	+52.56	21.26	32.10
UBS	2	21	1.07%	95,873	-0.13	1,208	+6.00	+15.81	11.13	+11.24	33.27	3.74	13.90	16.85
CITIGROUP	2	12	1.04%	162,985	-0.24	1,242	+6.35	+14.36	+16.80	+7.48	+1.27	20.38	33.46	93.18
AUTONOMOUS LLP	1	3	0.64%	402,238	0.12	1,484	+12.30	+15.84	3.49	+15.37	22.39	-	-	-
ITG	<1	4	0.50%	235,880	-0.19	758	+8.03	+18.23	+5.89	+15.93	20.24	-	-	-



(+) = Cost

TRADE CYCLE DETAIL

LSV ASSET MANAGEMENT PERFORMANCE (FULL DAY VWAP)



Broker	Principal Traded (\$ Millions)	Total Orders Traded	% Principal	Avg. Principal (\$)	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	Commission+Fees+Full Day VWAP Vs. Universe TREND		
						Commission (\$)	Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	Commission + Fees + Full Day VWAP Vs. Universe (bp)	20161st (bp)	20154th (bp)	20153rd (bp)
GRAND TOTAL	33	497	17.65%	66,972	-0.06	13,601	+4.09	+16.31	0.64	+11.73	24.56	32.00	32.38	36.48
CITIGROUP	6	77	3.36%	82,176	0.27	2,531	+4.00	+15.84	+10.57	+8.85	10.12	19.82	41.46	50.24
CREDIT SUISSE	5	85	2.66%	59,062	-0.04	2,533	+5.05	+18.38	+18.12	+12.89	8.05	32.69	27.33	25.50
UBS	4	42	2.15%	96,522	0.08	2,027	+5.00	+15.97	4.38	+10.70	26.11	27.18	53.25	19.96
BARCLAYS	3	82	1.75%	40,138	-0.40	987	+3.00	+16.05	24.41	+17.23	54.47	33.64	14.02	19.82
HSBC BANK	3	61	1.54%	47,753	-0.71	874	+3.00	+15.38	38.09	+9.18	59.44	48.32	32.35	40.99
INSTINET	2	18	1.15%	120,201	0.08	649	+3.00	+18.29	+26.54	+16.04	4.80	31.91	33.89	47.73
SCOTIA CAPITAL	2	33	0.90%	51,173	-0.32	187	+1.11	+15.49	6.52	+10.36	31.38	31.44	43.88	63.64
ITG	1	31	0.71%	43,199	0.21	691	+5.16	+16.00	+3.67	+13.23	20.34	36.65	38.25	34.30
DEUTSCHE BANK	1	1	0.67%	1,254,562	0.37	502	+4.00	+14.45	+15.72	+6.87	1.60	22.71	29.17	12.20
TD WATERHOUSE	1	3	0.58%	366,117	0.32	316	+2.87	+15.49	+16.14	+10.36	6.96	-	-	-



(+) = Cost

TRADE CYCLE DETAIL

S&P GLOBAL INFRAS-T-INDEX PERFORMANCE (FULL DAY VWAP)



Broker	Principal Traded (\$ Millions)	Total Orders Traded	% Principal	Avg. Principal (\$)	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	Commission+Fees+Full Day VWAP Vs. Universe TREND		
						Commission (\$)	Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	Commission + Fees + Full Day VWAP Vs. Universe (bp)	20161st (bp)	20154th (bp)	20153rd (bp)
GRAND TOTAL	21	661	11.32%	32,280	-0.26	3,405	+1.60	+15.11	16.41	+7.99	37.98	20.57	25.92	-
CREDIT SUISSE	6	107	3.32%	58,516	-0.20	1,031	+1.65	+15.14	+2.36	+8.07	19.13	35.11	29.36	-
CITIGROUP	4	102	2.16%	39,926	-0.58	287	+0.71	+14.06	32.69	+5.88	51.78	10.91	15.94	-
MERRILL LYNCH	4	63	1.89%	56,604	-0.65	526	+1.47	+14.63	9.08	+7.51	29.67	+22.61	21.73	-
UBS	2	50	0.90%	33,879	-0.40	342	+2.02	+15.33	13.39	+9.98	36.77	39.43	37.20	-
GOLDMAN SACHS	2	30	0.82%	51,382	-1.31	388	+2.52	+15.84	87.10	+9.56	110.00	44.39	27.13	-
MORGAN STANLEY	1	43	0.56%	24,529	-0.96	132	+1.25	+16.02	23.35	+6.77	44.71	14.67	11.07	-
DEUTSCHE BANK	<1	23	0.28%	23,082	-1.07	149	+2.80	+15.93	17.66	+8.22	38.98	+33.38	23.51	-
TD WATERHOUSE	<1	6	0.27%	84,429	0.88	90	+1.78	+15.49	+16.92	+10.36	7.28	15.59	-	-
SOCIETE GENERALE	<1	13	0.20%	29,394	-0.85	86	+2.25	+16.03	35.91	+9.91	59.60	-	-	-
WELLS FARGO	<1	80	0.19%	4,545	0.07	59	+1.63	+13.60	1.81	+5.67	19.52	-	24.39	-



(+) = Cost

TRADE CYCLE DETAIL

WILLIAM BLAIR & COMPANY PERFORMANCE (FULL DAY VWAP)



Broker	Principal Traded (\$ Millions)	Total Orders Traded	% Principal	Avg. Principal (\$)	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	Commission+Fees+Full Day VWAP Vs. Universe TREND		
						Commission (\$)	Commission (bp)	Bundled Universe (bp)	Full Day VWAP (bp)	Universe Full Day VWAP (bp)	Commission + Fees + Full Day VWAP Vs. Universe (bp)	20161st (bp)	20154th (bp)	20153rd (bp)
GRAND TOTAL	29	448	15.30%	64,395	0.01	25,312	+8.77	+16.77	1.79	+9.84	19.97	15.72	13.30	8.04
SC BERNSTEIN	4	73	1.86%	47,979	-0.10	2,826	+8.07	+18.63	0.67	+9.02	20.13	21.62	13.40	-
SOCIETE GENERALE	3	54	1.79%	62,385	-0.03	1,684	+5.00	+15.49	15.03	+10.60	37.59	30.15	+1.56	-
UBS	2	32	1.20%	70,642	0.19	1,345	+5.95	+15.66	+14.87	+7.74	2.57	26.99	19.14	21.57
JP MORGAN CHASE	2	28	0.93%	62,327	0.07	1,473	+8.44	+15.39	+5.30	+7.79	10.27	24.44	14.80	1.68
DAIWA SECURITIES	1	7	0.68%	184,232	-0.16	774	+6.00	+18.29	10.50	+16.04	38.84	25.07	-	27.75
MERRILL LYNCH	1	24	0.64%	50,547	-0.07	1,431	+11.80	+16.79	0.30	+8.66	13.83	-	+48.51	19.37
ITG	1	18	0.62%	64,483	-0.09	457	+3.93	+15.28	35.61	+8.93	61.02	+15.58	34.83	18.47
CREDIT SUISSE	1	21	0.57%	50,927	-0.29	1,461	+13.66	+17.15	6.60	+8.40	18.42	6.55	26.87	+75.81
GOLDMAN SACHS	1	19	0.53%	52,802	-0.10	619	+6.17	+16.94	2.93	+14.10	27.80	+2.37	26.42	22.72
DEUTSCHE BANK	<1	18	0.53%	55,059	0.23	1,217	+12.28	+16.00	+26.25	+10.67	+11.84	23.23	9.65	+13.39



(+) = Cost

TRADE DETAIL ANALYSIS

Largest Principal Volume Traded

							Market Impact
Name	# Orders	Shares	Net Principal (\$)	Principal (\$)	% of Volume	E - Score	Full Day VWAP (bp)
BAYER AG REG COMMON STOCK	12	72,755	4,933,461	7,488,460	0.19%	0.37	+44.01
NOVARTIS AG REG COMMON STOCK C	4	90,865	6,945,954	6,945,954	0.50%	-0.49	7.89
STATOIL ASA COMMON STOCK NOK2.	14	392,453	-6,583,263	6,583,263	0.94%	-0.03	0.17
LLOYDS BANKING GROUP PLC COMMO	1	6,802,943	5,523,854	5,523,854	0.36%	-0.01	70.45
SABMILLER PLC COMMON STOCK USD	3	76,008	4,448,467	4,448,467	0.70%	-0.41	3.87
ASTELLAS PHARMA INC COMMON STO	16	277,600	-4,071,481	4,071,481	0.19%	0.08	+24.44
LINK REIT REIT	16	615,000	3,282,937	3,989,644	0.68%	0.10	+4.91
MEDIASET SPA COMMON STOCK EUR.	31	921,487	-3,948,443	3,948,443	0.48%	-0.53	23.85
SCENTRE GROUP REIT	21	1,022,897	-503,449	3,529,584	0.52%	-0.34	13.78
KENEDIX RETAIL REIT CORP REIT	32	1,340	1,079,175	3,426,639	1.03%	-0.18	56.16

Names Most Traded - Total Orders (\$)

							Market Impact
Name	# Orders	Shares	Net Principal (\$)	Commission (bp)	% of Volume	E - Score	Full Day VWAP (bp)
DISTRIBUIDORA INTERNACIONAL CO	55	248,804	-288,272	+7.04	0.21%	-0.28	16.53
OC OERLIKON CORP AG REG COMMON	34	78,600	768,541	+4.94	0.30%	-0.50	23.76
KENEDIX RETAIL REIT CORP REIT	32	1,340	1,079,175	+7.38	1.03%	-0.18	56.16
MEDIASET SPA COMMON STOCK EUR.	31	921,487	-3,948,443	+6.95	0.48%	-0.53	23.85
ROYAL MAIL PLC COMMON STOCK GB	29	124,800	-884,083	+3.00	0.33%	N/A	12.80
MEGGITT PLC COMMON STOCK GBP.0	26	39,700	-223,856	+3.47	0.25%	-0.39	20.08
BRITISH LAND CO PLC REIT GBP.2	25	39,145	-85,214	+7.81	0.05%	-0.46	6.89
ARYZTA AG COMMON STOCK CHF.02	24	13,700	-539,312	+4.98	0.20%	-0.32	14.98
CHALLENGER LTD COMMON STOCK	23	285,933	606,729	+5.47	0.71%	-0.11	7.83
TRAVELSKY TECHNOLOGY LTD H COM	22	601,000	1,145,557	+11.46	0.77%	-0.26	5.68



(+) = Cost

TRADE CONTRIBUTIONS

Cost/Savings Performance				
Category	Principal USD	# of Trades	Avg. Market Impact (bp)	Percentage of all Cost/Savings
10 High Cost Trades	5,423,222	10	+199.16	30.85%
Cost Trades	77,551,003	900	+32.72	100.00%
Saving Trades	110,712,779	1,254	36.93	100.00%
10 Low Cost Trades	16,523,975	10	140.58	37.43%





(+) = Cost

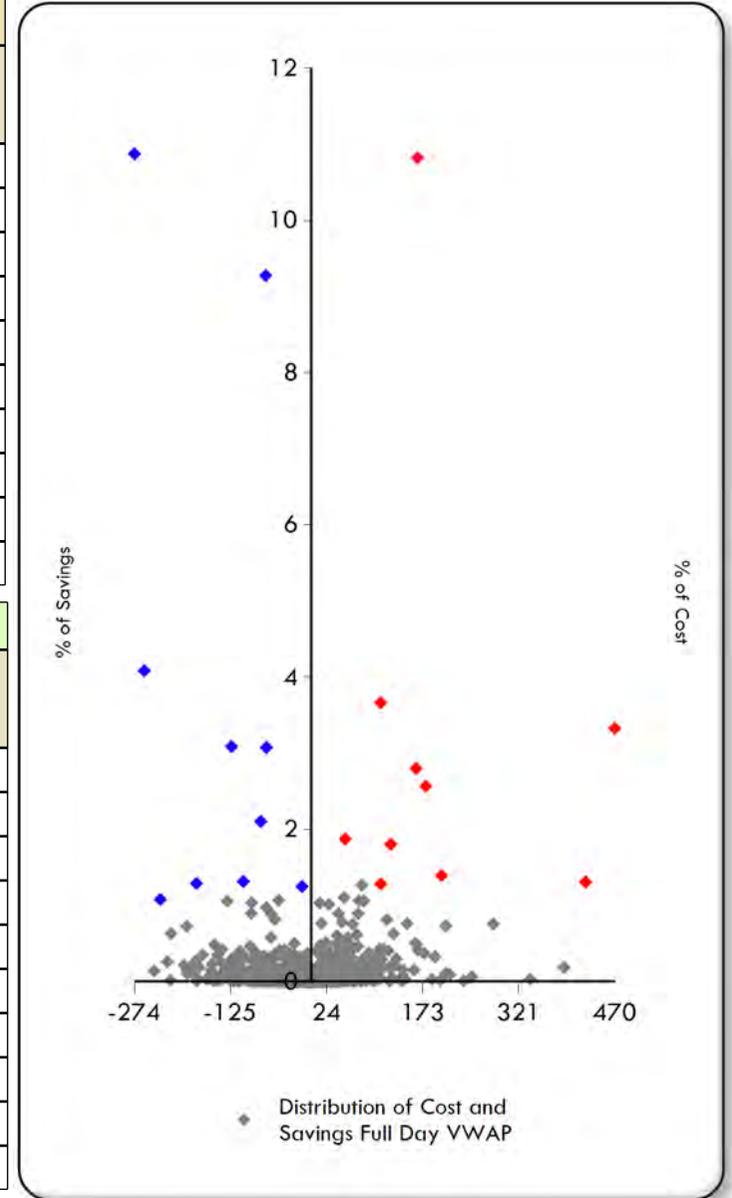
TRADE LEVEL DETAILS

10 High Cost Trades (Full Day VWAP)

Side	Country	Security	Trade Date	Principal (\$)	Cost (%)	E - Score	Full Day VWAP (bp)	Manager	Exbroker
Sell	GER	BAYER AG R	20160512	1,664,361	10.82%	1.17	+164.70	LAZAR	MERRI
Sell	ISR	TEVA PHARM	20160621	869,774	3.67%	2.89	+107.40	LSV A	CITIG
Buy	JAP	ASTELLAS P	20160624	190,969	3.33%	0.90	+470.17	LSV A	CREDI
Buy	JAP	MITSUI FUD	20160408	452,114	2.80%	1.43	+162.22	CBRE	DAIWA
Buy	JAP	SOFTBANK G	20160630	379,466	2.57%	1.22	+177.42	LAZAR	MERRI
Sell	SGP	HONGKONG L	20160531	916,849	1.87%	1.62	+52.36	CBRE	CITIG
Buy	JAP	JAPAN TOBA	20160630	381,864	1.80%	1.69	+123.22	LAZAR	MERRI
Sell	HKG	LINK REIT	20160627	174,531	1.39%	2.02	+201.62	CBRE	JP MO
Buy	JAP	SUMITOMO O	20160624	82,709	1.31%	1.12	+424.97	LSV A	CREDI
Buy	JAP	SUMITOMO R	20160408	310,584	1.28%	0.91	+107.58	CBRE	DAIWA

10 Low Cost Trades (Full Day VWAP)

Side	Country	Security	Trade Date	Principal (\$)	Savings (%)	E - Score	Full Day VWAP (bp)	Manager	Exbroker
Sell	AST	INVESTA OF	20160412	1,699,741	10.87%	-3.93	273.85	CBRE	MERRI
Sell	UK	LLOYDS BAN	20160624	5,523,854	9.27%	-0.01	70.45	LAZAR	GOLDM
Buy	JAP	KENEDIX RE	20160413	640,990	4.09%	N/A	258.75	CBRE	SMBC
Sell	UK	AUTO TRADE	20160630	1,055,510	3.09%	N/A	123.48	LAZAR	MERRI
Sell	SWI	CREDIT SUI	20160624	1,857,169	3.08%	-0.54	69.53	LAZAR	MERRI
Buy	UK	AUTO TRADE	20160616	1,111,864	2.10%	N/A	78.24	LAZAR	MERRI
Buy	ITA	MEDIASET S	20160509	515,324	1.32%	-2.77	105.34	LAZAR	JP MO
Buy	UK	3I GROUP P	20160627	296,883	1.29%	-1.07	177.89	LSV A	HSBC
Sell	SWI	NOVARTIS A	20160421	3,625,927	1.25%	-0.66	14.37	LAZAR	MERRI
Sell	ITA	FINECOBANK	20160627	196,711	1.08%	-0.77	233.88	WILLI	SOCIE





(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

BAYER AG REG COMMON STOCK - 20160512

Side	Manager	Broker	Country	Currency	CUSIP	Time In	Time Out	Principal	Client Price	Full Day VWAP	Cost Full Day VWAP	Cost Full Day VWAP	E - Score	Volume
								(\$)			(\$)	(bp)		(%)
S	LAZARD ASSET MANAGEMENT	MERRILL LYNCH	GER	EUR	5069211	05/12/2016 09:00:00	05/12/2016 17:30:00	1,664,361	95.08	96.67	+27,871	+164.69	1.17	0.31



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 10.82% of your market impact cost.

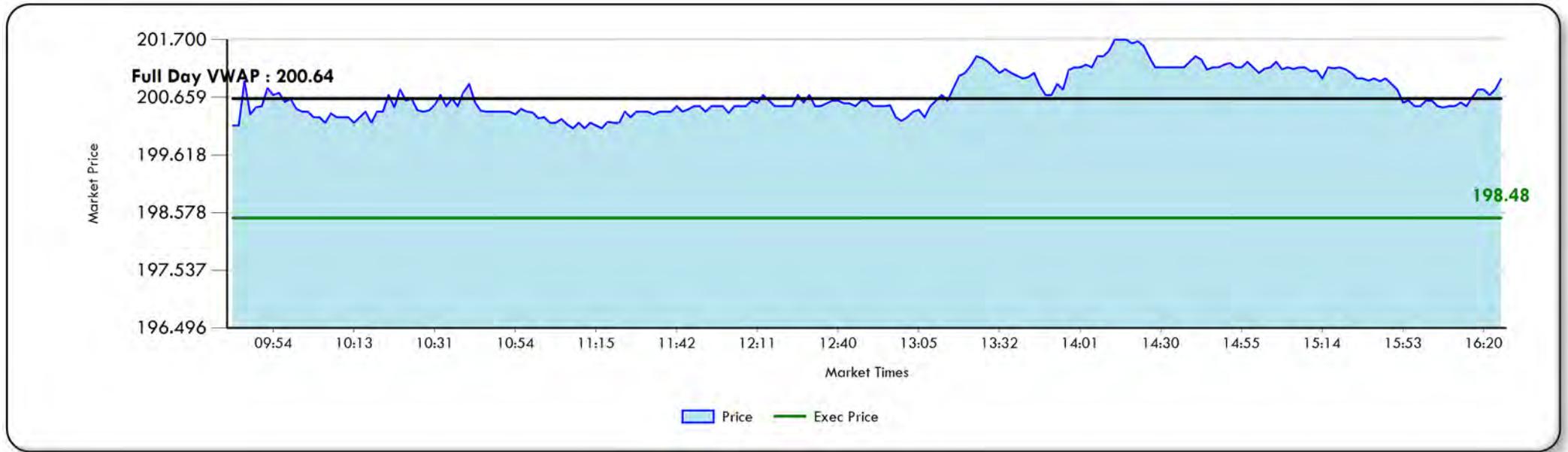


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

TEVA PHARMACEUTICAL IND LTD CO - 20160621

Side	Manager	Broker	Country	Currency	CUSIP	Time In	Time Out	Principal	Client Price	Full Day VWAP	Cost Full Day VWAP	Cost Full Day VWAP	E - Score	Volume
								(\$)			(\$)	(bp)		(%)
S	LSV ASSET MANAGEMENT	CITIGROUP	ISR	ILS	6882172	06/21/2016 09:00:00	06/21/2016 16:30:00	869,774	198.48	200.64	+9,443	+107.40	2.89	16.66



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 3.67% of your market impact cost.

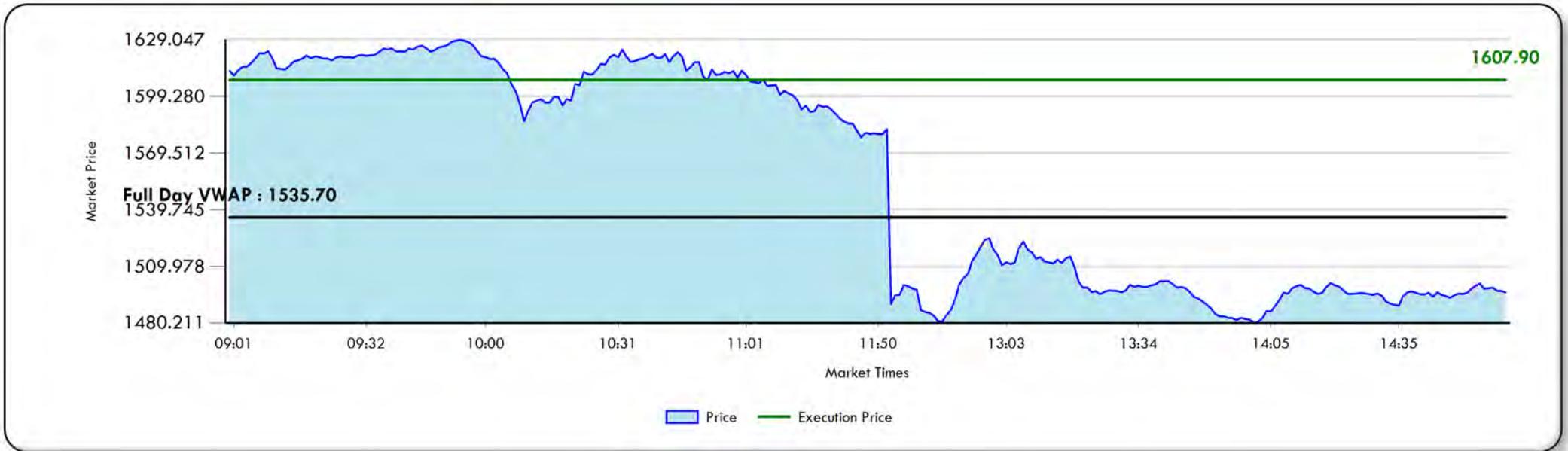


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

ASTELLAS PHARMA INC COMMON STO - 20160624

Side	Manager	Broker	Country	Currency	CUSIP	Time In	Time Out	Principal	Client Price	Full Day VWAP	Cost Full Day VWAP	Cost Full Day VWAP	E - Score	Volume
								(\$)			(\$)	(bp)		(%)
B	LSV ASSET MANAGEMENT	CREDIT SUISSE	JAP	JPY	6985383	06/24/2016 09:00:00	06/24/2016 15:00:00	190,969	1607.90	1535.70	+8,576	+470.16	0.90	0.09



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 3.33% of your market impact cost.

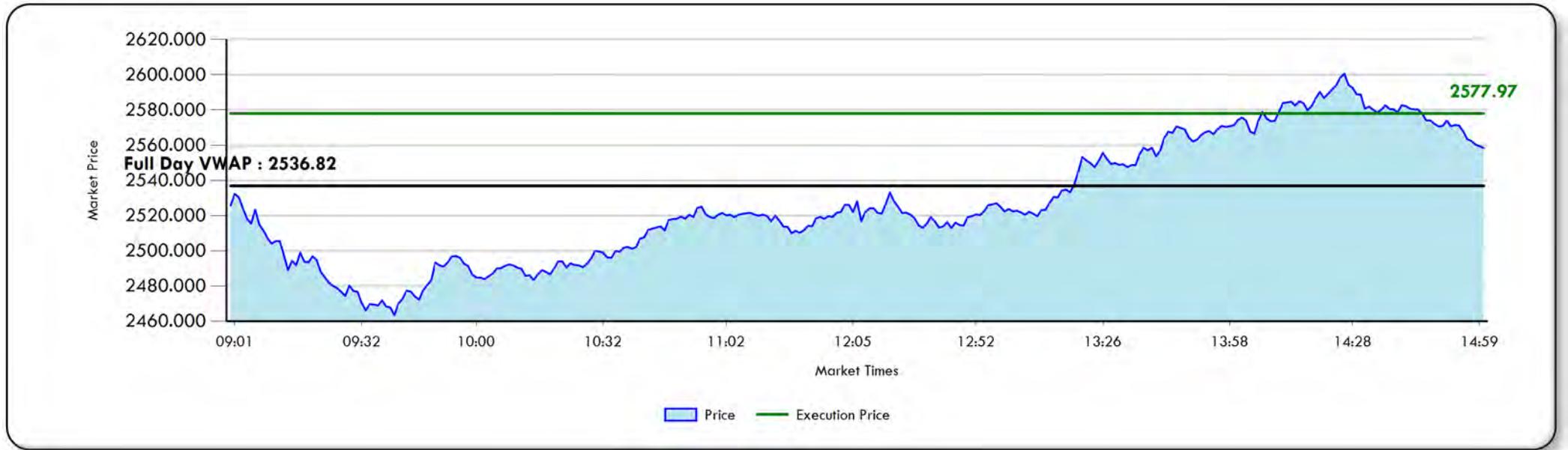


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

MITSUI FUDOSAN CO LTD COMMON S - 20160408

Side	Manager	Broker	Country	Currency	CUSIP	Time In	Time Out	Principal	Client Price	Full Day VWAP	Cost Full Day VWAP	Cost Full Day VWAP	E - Score	Volume
								(\$)			(\$)	(bp)		(%)
B	CBRE CLARION (INTL RE)	DAIWA SECURITIES	JAP	JPY	6597603	04/08/2016 09:00:00	04/08/2016 15:00:00	452,114	2577.97	2536.82	+7,217	+162.21	1.43	0.27



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 2.80% of your market impact cost.

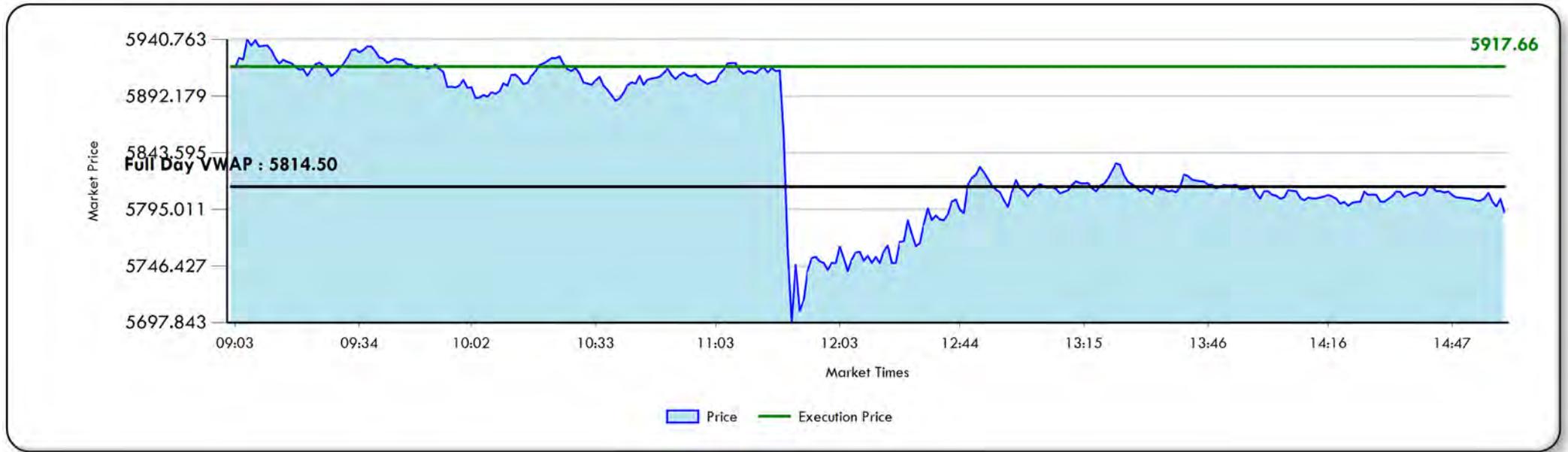


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

SOFTBANK GROUP CORP COMMON STO - 20160630

Side	Manager	Broker	Country	Currency	CUSIP	Time In	Time Out	Principal	Client Price	Full Day VWAP	Cost Full Day VWAP	Cost Full Day VWAP	E - Score	Volume
								(\$)			(\$)	(bp)		(%)
B	LAZARD ASSET MANAGEMENT	MERRILL LYNCH	JAP	JPY	6770620	06/30/2016 09:00:00	06/30/2016 15:00:00	379,466	5917.66	5814.50	+6,615	+177.41	1.22	0.08



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 2.57% of your market impact cost.



(+) = Cost

TRADE LEVEL DETAIL - LOW COST

INVESTA OFFICE FUND REIT - 20160412

Side	Manager	Broker	Country	Currency	CUSIP	Time In	Time Out	Principal	Client Price	Full Day VWAP	Cost Full Day VWAP	Cost Full Day VWAP	E - Score	Volume
								(\$)			(\$)	(bp)		(%)
S	CBRE CLARION (INTL RE)	MERRILL LYNCH	AST	AUD	6205694	04/12/2016 10:00:00	04/12/2016 16:12:00	1,699,741	4.24	4.13	45,306	273.84	-3.93	8.18



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 10.87% of your market impact cost.

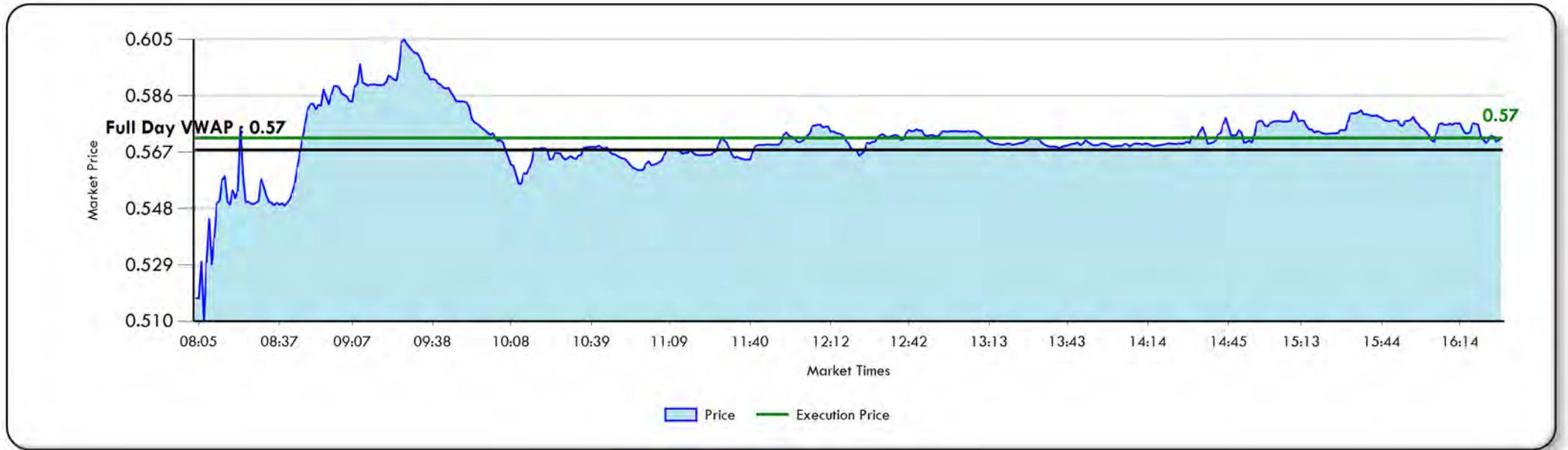


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TRADE LEVEL DETAIL - LOW COST

LLOYDS BANKING GROUP PLC COMMO - 20160624

Side	Manager	Broker	Country	Currency	CUSIP	Time In	Time Out	Principal	Client Price	Full Day VWAP	Cost Full Day VWAP	Cost Full Day VWAP	E - Score	Volume
								(\$)			(\$)	(bp)		(%)
S	LAZARD ASSET MANAGEMENT	GOLDMAN SACHS	UK	GBP	0870612	06/24/2016 08:00:00	06/24/2016 16:30:00	5,523,854	0.57	0.57	38,641	70.44	-0.01	0.36



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 9.27% of your market impact cost.

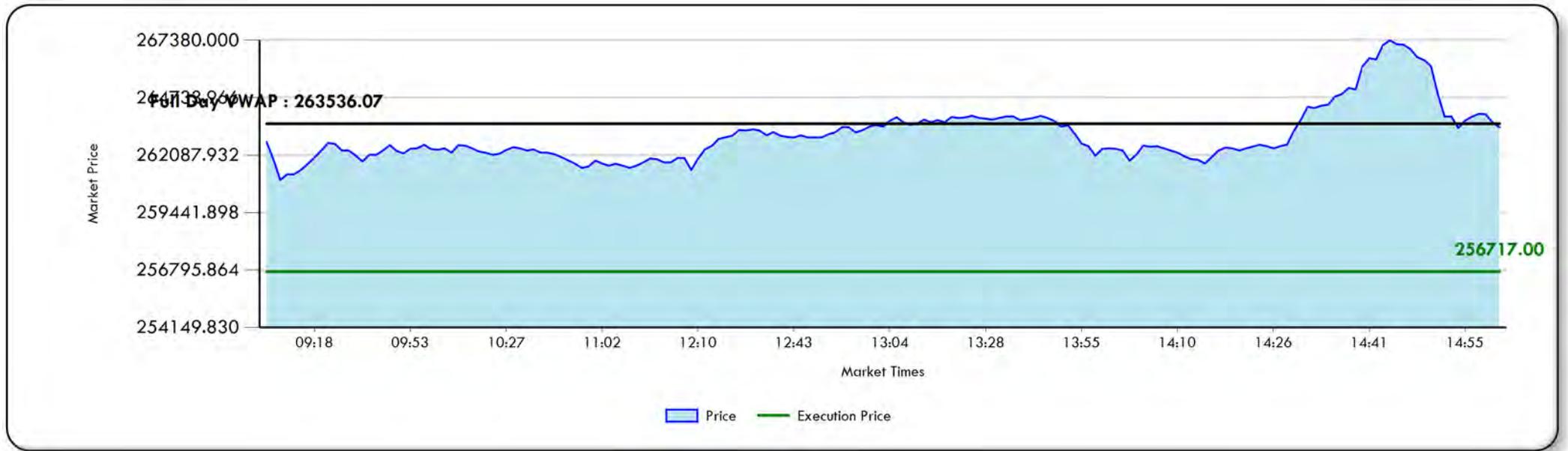


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TRADE LEVEL DETAIL - LOW COST

KENEDIX RETAIL REIT CORP REIT - 20160413

Side	Manager	Broker	Country	Currency	CUSIP	Time In	Time Out	Principal	Client Price	Full Day VWAP	Cost Full Day VWAP	Cost Full Day VWAP	E - Score	Volume
								(\$)			(\$)	(bp)		(%)
B	CBRE CLARION (INTL RE)	SMBC SECURITIES INC	JAP	JPY	BTLX226	04/13/2016 09:00:00	04/13/2016 15:00:00	640,990	256717.00	263536.07	17,026	258.75	N/A	4.63



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 4.09% of your market impact cost.

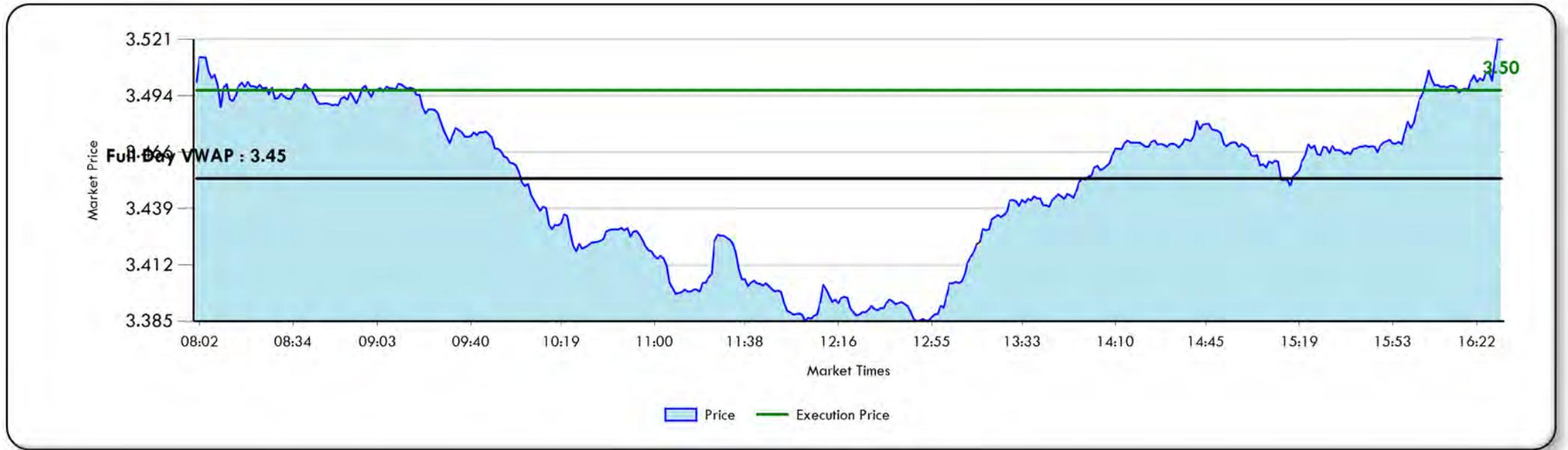


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

AUTO TRADER GROUP PLC COMMON S - 20160630

Side	Manager	Broker	Country	Currency	CUSIP	Time In	Time Out	Principal	Client Price	Full Day VWAP	Cost Full Day VWAP	Cost Full Day VWAP	E - Score	Volume
								(\$)			(\$)	(bp)		(%)
S	LAZARD ASSET MANAGEMENT	MERRILL LYNCH	UK	GBP	BVYVFW2	06/30/2016 08:00:00	06/30/2016 16:30:00	1,055,510	3.50	3.45	12,874	123.47	N/A	7.11



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 3.09% of your market impact cost.



(+) = Cost

TRADE LEVEL DETAIL - LOW COST

CREDIT SUISSE GROUP AG REG COM - 20160624

Side	Manager	Broker	Country	Currency	CUSIP	Time In	Time Out	Principal	Client Price	Full Day VWAP	Cost Full Day VWAP	Cost Full Day VWAP	E - Score	Volume
								(\$)			(\$)	(bp)		(%)
S	LAZARD ASSET MANAGEMENT	MERRILL LYNCH	SWI	CHF	7171589	06/24/2016 09:00:00	06/24/2016 17:20:00	1,857,169	11.51	11.43	12,825	69.53	-0.54	0.39

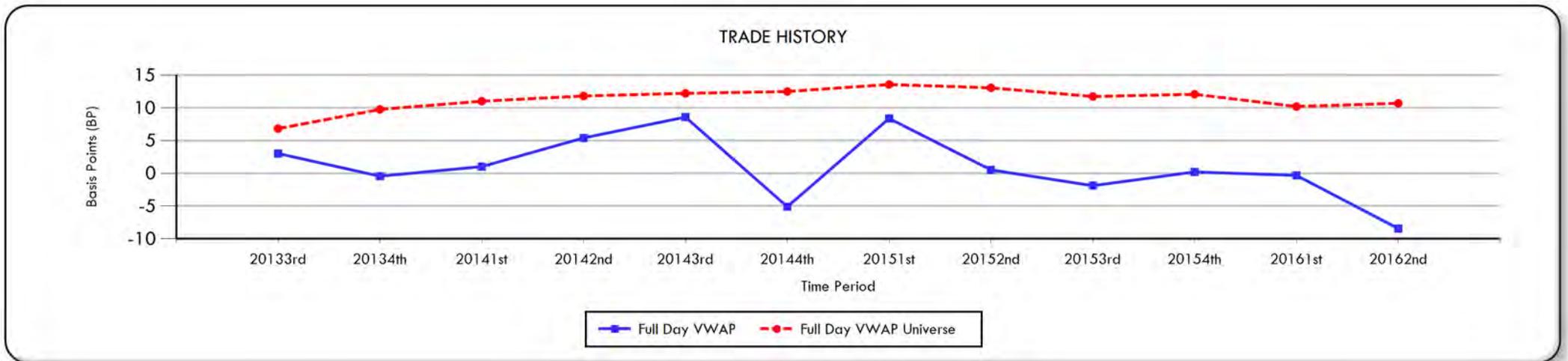


NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 3.08% of your market impact cost.

TRADE HISTORY

Period	Total Principal (\$)	Commission (bp)	Commission Universe (bp)	Fees (bp)	Fees Universe (bp)	Full Day VWAP (bp)	Full Day VWAP Universe (bp)	Total Cost/Savings Vs. Universe (bp)
20133rd	205,338,037	+11.05	+15.84	+4.58	+4.91	+3.02	+6.81	8.92
20134th	266,556,243	+8.77	+16.08	+6.27	+7.38	0.45	+9.75	18.63
20141st	297,706,884	+10.15	+16.32	+7.74	+8.63	+1.01	+11.00	17.04
20142nd	202,889,836	+9.35	+16.34	+5.26	+6.84	+5.39	+11.79	14.98
20143rd	241,057,898	+9.95	+17.56	+6.32	+7.26	+8.57	+12.20	12.19
20144th	506,158,401	+5.52	+17.06	+2.16	+2.30	5.11	+12.48	29.27
20151st	128,681,090	+9.88	+16.54	+6.39	+6.57	+8.36	+13.55	12.03
20152nd	105,915,243	+8.16	+17.11	+6.69	+6.43	+0.51	+13.04	21.21
20153rd	125,280,679	+8.08	+15.73	+6.43	+6.85	1.90	+11.72	21.69
20154th	149,071,955	+8.39	+15.71	+3.87	+4.30	+0.20	+12.06	19.60
20161st	122,988,471	+7.80	+15.62	+4.75	+5.22	0.33	+10.19	18.81
20162nd	188,544,188	+7.40	+16.20	+5.32	+5.52	8.45	+10.68	28.14



Elkins/McSherry Global Universe

Country	Price	Commission	Fees	Market Impact	Total
ARGENTINA	2.97 BP	42.15 BP	0.00 BP	24.97 BP	67.12 BP
AUSTRALIA	4.69 BP	14.81 BP	0.16 BP	9.08 BP	24.05 BP
AUSTRIA	14.82 BP	14.60 BP	0.00 BP	14.33 BP	28.93 BP
BELGIUM	54.35 BP	14.12 BP	0.00 BP	9.89 BP	24.01 BP
BRAZIL	4.91 BP	17.45 BP	1.51 BP	8.02 BP	26.98 BP
CANADA	18.24 BP	15.49 BP	0.12 BP	10.36 BP	25.97 BP
CHILE	0.13 BP	17.02 BP	0.89 BP	9.25 BP	27.16 BP
CHINA	2.29 BP	13.99 BP	8.20 BP	8.07 BP	30.26 BP
COLOMBIA	1.43 BP	23.09 BP	0.28 BP	15.43 BP	38.80 BP
CZECH REPUBLIC	36.19 BP	18.84 BP	0.00 BP	7.20 BP	26.04 BP
DENMARK	35.35 BP	14.67 BP	0.00 BP	14.45 BP	29.12 BP
EGYPT	1.46 BP	28.17 BP	2.09 BP	8.16 BP	38.42 BP
FINLAND	15.14 BP	14.02 BP	0.07 BP	8.81 BP	22.90 BP
FRANCE - BUYS	43.32 BP	14.41 BP	20.00 BP	7.34 BP	41.75 BP
FRANCE - SELLS	43.94 BP	14.67 BP	0.00 BP	9.34 BP	24.01 BP
GERMANY	45.08 BP	14.45 BP	0.00 BP	6.87 BP	21.32 BP
GREECE	1.88 BP	19.91 BP	2.79 BP	36.02 BP	58.72 BP
HONG KONG	1.54 BP	22.71 BP	10.44 BP	5.05 BP	38.20 BP
HUNGARY	11.32 BP	17.07 BP	0.05 BP	9.00 BP	26.12 BP
INDIA	7.30 BP	17.45 BP	10.54 BP	9.83 BP	37.82 BP

Elkins/McSherry Global Universe

Country	Price	Commission	Fees	Market Impact	Total
INDONESIA	0.37 BP	18.60 BP	9.22 BP	12.27 BP	40.09 BP
IRELAND - BUYS	5.71 BP	13.77 BP	100.00 BP	14.63 BP	128.40 BP
IRELAND - SELLS	1.46 BP	16.43 BP	0.00 BP	17.99 BP	34.42 BP
ISRAEL	11.09 BP	18.25 BP	0.01 BP	7.97 BP	26.23 BP
ITALY - BUYS	5.97 BP	15.97 BP	12.00 BP	9.29 BP	37.26 BP
ITALY - SELLS	5.37 BP	17.10 BP	0.00 BP	7.29 BP	24.39 BP
JAPAN	15.77 BP	18.29 BP	0.01 BP	16.04 BP	34.34 BP
KOREA - BUYS	86.92 BP	21.02 BP	0.00 BP	13.76 BP	34.78 BP
KOREA - SELLS	78.62 BP	18.98 BP	39.44 BP	13.76 BP	72.18 BP
LUXEMBOURG	8.24 BP	3.41 BP	0.00 BP	27.80 BP	31.21 BP
MALAYSIA	1.43 BP	20.88 BP	3.57 BP	15.12 BP	39.57 BP
MEXICO	2.22 BP	14.87 BP	0.00 BP	5.96 BP	20.83 BP
NETHERLANDS	21.62 BP	14.30 BP	0.05 BP	5.11 BP	19.46 BP
NEW ZEALAND	3.35 BP	16.63 BP	0.00 BP	16.69 BP	33.32 BP
NORWAY	9.12 BP	16.31 BP	0.15 BP	26.75 BP	43.21 BP
PERU	2.02 BP	0.00 BP	0.00 BP	36.13 BP	36.13 BP
PHILIPPINES	0.89 BP	20.36 BP	22.06 BP	9.62 BP	52.04 BP
POLAND	9.13 BP	18.29 BP	0.00 BP	12.76 BP	31.05 BP
PORTUGAL	3.40 BP	14.96 BP	0.00 BP	9.23 BP	24.19 BP
RUSSIA	0.02 BP	45.42 BP	0.05 BP	40.62 BP	86.09 BP

Elkins/McSherry Global Universe

Country	Price	Commission	Fees	Market Impact	Total
SINGAPORE	3.16 BP	16.78 BP	3.34 BP	9.00 BP	29.12 BP
SOUTH AFRICA - BUYS	6.73 BP	15.97 BP	22.03 BP	6.24 BP	44.24 BP
SOUTH AFRICA - SELLS	9.73 BP	15.96 BP	0.01 BP	15.99 BP	31.96 BP
SPAIN	6.94 BP	16.49 BP	0.00 BP	12.97 BP	29.46 BP
SWEDEN	11.03 BP	14.67 BP	0.00 BP	4.59 BP	19.26 BP
SWITZERLAND	64.20 BP	14.70 BP	0.00 BP	10.38 BP	25.08 BP
TAIWAN - BUYS	1.54 BP	17.88 BP	0.00 BP	8.81 BP	26.69 BP
TAIWAN - SELLS	1.89 BP	14.22 BP	27.16 BP	18.69 BP	60.07 BP
THAILAND	2.00 BP	19.82 BP	0.87 BP	4.80 BP	25.49 BP
TURKEY	6.15 BP	15.70 BP	0.00 BP	5.53 BP	21.23 BP
U.K. - BUYS	4.62 BP	16.05 BP	50.00 BP	17.27 BP	83.32 BP
U.K. - SELLS	8.51 BP	15.04 BP	0.00 BP	7.25 BP	22.29 BP
U.S.	41.16 BP	13.60 BP	0.07 BP	5.67 BP	19.34 BP
VENEZUELA	10.50 BP	43.22 BP	9.10 BP	31.03 BP	83.35 BP
TOTAL: 54	14.76 BP	17.83 BP	6.60 BP	13.12 BP	37.55 BP

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SACRAMENTO COUNTY

Global Fixed Income Analysis

Period End June 30, 2016



Sacramento County
Period End June 30, 2016
(Global Fixed Income Analysis)

EXECUTIVE SUMMARY

Elkins/McSherry has been providing trading cost analyses to institutional investors since 1991. During that time we have produced Post-Trade Cost Analyses for many of the worlds largest investment managers, pension funds, banks, and broker dealers. Using this vast experience combined with an un-matched collection of global fixed income market and Universe data, Elkins/McSherry has recently produced a Trading Cost Analysis on behalf of Sacramento County. This study evaluates global fixed income executions from April 01,2016 to June 30,2016. The analysis included trading of 102 trades in 58 different issues representing \$76,455,184 in principal across mortgages, governments and corporates.

Methodology:

The cost of each trade will be determined by comparing your executed price to the average or benchmark price of the issue on the day of the trade and to the Elkins/McSherry Fixed Income Trading Cost Universe. For comparison purposes, Elkins/McSherry establishes average institutional trading costs quarterly for governments, corporates and agency issues. The Universe is the average trading cost incurred by pension funds, investment managers, banks and brokers.

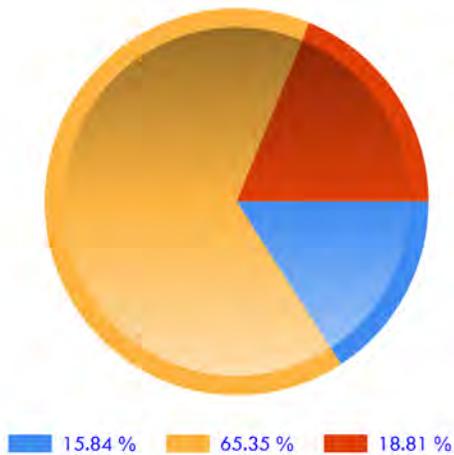
Results:

GRAND TOTAL PERFORMANCE								TRADE COST HISTORICAL PERFORMANCE				
Buy/Sell	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$)	BP	Q1 2016	Q4 2015	Q3 2015	Q2 2015
BUYS	39	60	42	+4.22	+1.07	+5.97	19.30	4.90	17.47	23.54	53.53	1.53
SELLS	37	42	25	+18.27	+4.93	+5.97	3.87	1.04	+9.62	+13.98	+10.34	10.43
GRAND TOTAL	76	102	58	+22.49	+2.94	+5.97	23.17	3.03	4.66	6.91	33.07	6.86

EXECUTIVE SUMMARY

BOND TYPES PERFORMANCE								TRADE COST HISTORICAL PERFORMANCE				
Bond Type	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$)	BP	Q1 2016	Q4 2015	Q3 2015	Q2 2015
Governments	50	64	22	4.47	0.89	+5.97	34.51	6.86	2.06	+6.29	2.54	0.67
Mortgages	14	8	8	+39.26	+27.53	+5.97	+30.75	+21.56	58.42	13.17	226.91	81.35
Corporates	12	30	28	12.30	10.36	+5.98	19.40	16.34	4.87	37.16	3.73	2.54

Bonds by Principal Traded



Historical Trade Cost Trend



EXECUTIVE SUMMARY

EXECUTION PERFORMANCE SUMMARY

Trade Size (Millions)	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$)	BP
0~2	49	95	56	+14.39	+2.91	+5.97	15.12	3.06
2~5	14	5	4	+3.84	+2.65	+5.97	4.80	3.32
5~10	13	2	2	+4.26	+3.38	+5.97	3.26	2.59





EXECUTIVE SUMMARY

GRADING SUMMARY

Grading	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$)	Cost Diff. from Universe BP
Govt-INVESTMENT GRADE	50	64	22	4.47	0.89	+5.97	34.51	6.86
Mtge-High Yield	12	5	5	+52.26	+45.26	+5.97	+45.37	+39.29
Corp-High Yield	7	17	16	8.06	12.33	+5.99	11.98	18.32
Corp-INVESTMENT GRADE	5	13	12	4.24	7.95	+5.97	7.42	13.92
Mtge-INVESTMENT GRADE	3	3	3	13.00	47.86	+5.97	14.62	53.83





EXECUTIVE SUMMARY

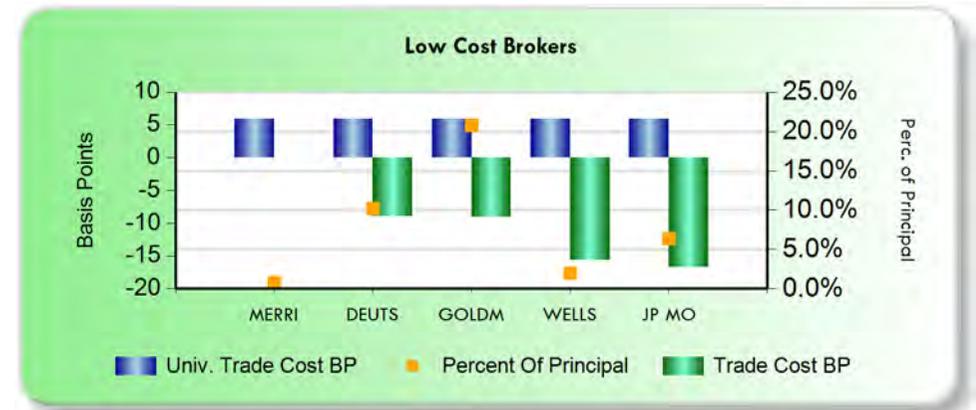
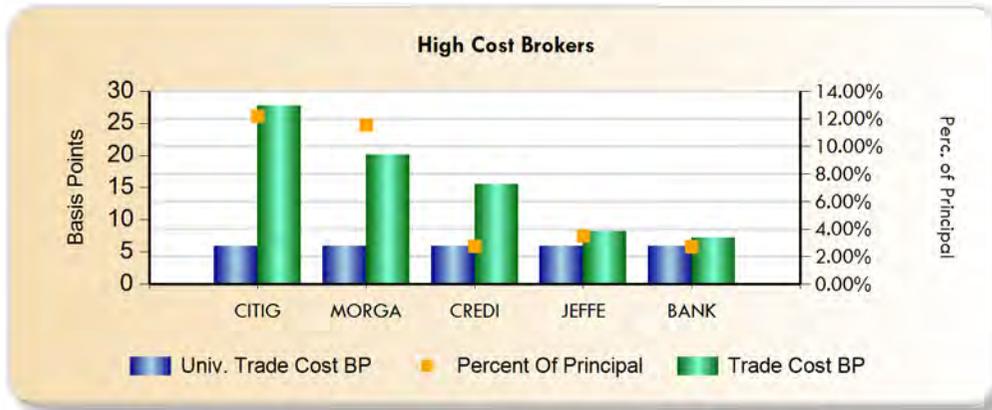
RATING SUMMARY

Rating	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous.\$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$)	Cost Diff. from Universe BP
AAA	53.04	67	25	17.47	3.29	+5.97	49.14	9.26
NR	8.14	3	3	+19.73	+24.23	+5.97	+14.87	+18.26
BB	3.11	5	5	3.81	12.25	+6.02	5.69	18.27
B-	2.32	3	2	+35.13	+151.68	+5.97	+33.75	+145.71
B+	1.72	3	3	1.07	6.19	+5.97	2.09	12.16
A-	1.60	4	3	+5.61	+35.07	+5.97	+4.66	+29.10
BBB+	1.59	2	2	2.03	12.75	+5.97	2.98	18.72
BB-	1.25	4	4	3.32	26.57	+5.97	4.07	32.54
BBB-	1.20	4	4	6.99	58.35	+5.97	7.70	64.32
BB+	1.20	3	3	2.66	22.26	+5.97	3.38	28.23



EXECUTIVE SUMMARY

BROKER	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous.\$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$)	BP
5 HIGHEST COST BROKERS (Sorted By Trade Cost BP)								
CITIGROUP	9	12	9	+25.91	+27.80	+5.97	+20.34	+21.83
MORGAN STANLEY	9	6	5	+17.80	+20.17	+5.97	+12.53	+14.20
CREDIT SUISSE	2	3	3	+3.28	+15.56	+5.97	+2.02	+9.59
JEFFERIES & CO	3	9	6	+2.20	+8.19	+5.97	+0.60	+2.22
BANK OF AMERICA	2	5	5	+1.51	+7.26	+5.97	+0.27	+1.29
5 LOWEST COST BROKERS (Sorted By Trade Cost BP)								
MERRILL LYNCH	<1	1	1	+0.00	+0.00	+5.97	0.36	5.97
DEUTSCHE BANK	8	9	9	7.00	8.97	+5.97	11.66	14.94
GOLDMAN SACHS	16	16	14	14.35	9.03	+5.97	23.85	15.00
WELLS FARGO	2	5	5	2.38	15.67	+5.97	3.29	21.64
JP MORGAN CHASE	5	14	12	8.17	16.69	+5.97	11.10	22.66



COUNTRY PERFORMANCE

COUNTRY SUMMARY									TRADE COST HISTORICAL PERFORMANCE			
Country	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$)		Q1 2016	Q4 2015	Q3 2015	Q2 2015
UNITED STATES	76	101	57	+22.49	+2.95	+5.97	23.02	3.02	3.63	9.52	33.07	6.91
LUXEMBOURG	<1	1	1	+0.00	+0.00	+6.68	0.15	6.68	-	-	-	-



COUNTRY PERFORMANCE BASED ON BUYS AND SELLS

Country									
		Principal	No. of	No. of	Trade Cost	Trade Cost	Univ. Trade	Cost Diff. from Universe	
	Side	(Mil. \$)	Trades	Issues	(Thous. \$)	BP	Cost BP	(Thous. \$)	BP
UNITED STATES	SELLS	37	42	25	+18.27	+4.93	+5.97	3.87	1.04
	BUYS	39	59	41	+4.22	+1.08	+5.97	19.15	4.89
LUXEMBOURG	BUYS	<1	1	1	+0.00	+0.00	+6.68	0.15	6.68

Manager PERFORMANCE

Manager PERFORMANCE									TRADE COST HISTORICAL PERFORMANCE			
Manager	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$) BP		Q1 2016	Q4 2015	Q3 2015	Q2 2015
PRUDENTIAL INVESTMEN	76	102	58	+22.49	+2.94	+5.97	23.17	3.03	4.66	6.91	33.07	6.86

BROKER PERFORMANCE

BROKER PERFORMANCE									TRADE COST HISTORICAL PERFORMANCE			
BROKER	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$) BP		Q1 2016	Q4 2015	Q3 2015	Q2 2015
GOLDMAN SACHS	16	16	14	14.35	9.03	+5.97	23.85	15.00	+1.64	+0.00	114.04	0.59
NOMURA	11	8	4	+2.36	+2.09	+5.97	4.39	3.88	0.42	-	-	111.60
CITIGROUP	9	12	9	+25.91	+27.80	+5.97	+20.34	+21.83	+0.11	+16.60	2.57	+0.23
MORGAN STANLEY	9	6	5	+17.80	+20.17	+5.97	+12.53	+14.20	25.52	24.73	+11.82	17.07
DEUTSCHE BANK	8	9	9	7.00	8.97	+5.97	11.66	14.94	+1.95	+4.40	17.45	+6.27
BARCLAYS	5	8	8	+0.58	+1.07	+6.00	2.66	4.93	0.60	+21.75	14.75	+0.07
JP MORGAN CHASE	5	14	12	8.17	16.69	+5.97	11.10	22.66	22.26	66.64	+5.73	12.66
BNY MELLON	3	5	5	+0.57	+1.76	+5.97	1.36	4.21	+0.72	+18.71	-	-
JEFFERIES & CO	3	9	6	+2.20	+8.19	+5.97	+0.60	+2.22	+46.00	0.55	-	+6.88
CREDIT SUISSE	2	3	3	+3.28	+15.56	+5.97	+2.02	+9.59	26.74	+62.64	8.53	2.74
BANK OF AMERICA	2	5	5	+1.51	+7.26	+5.97	+0.27	+1.29	4.25	1.89	-	+1.46
WELLS FARGO	2	5	5	2.38	15.67	+5.97	3.29	21.64	8.40	+4.14	-	4.10
BAIRD, ROBERT W	<1	1	1	+0.19	+2.40	+5.97	0.28	3.57	+8.25	-	+0.00	3.19
MERRILL LYNCH	<1	1	1	+0.00	+0.00	+5.97	0.36	5.97	-	12.89	-	+43.04

TRADE DETAILS

Buy/Sell	Security	Bond Type	Trade Date/ Maturity	Manager/ Broker	Cty	Local Curr.	Principal (\$)	Price	Benchmark Price	Trade Cost BP	Trading Cost
15 Highest Cost Trades											
B	863579FU STRUCTURED ADJUSTABLE RATE M	Mtge	04/06/2016 12/25/2034	PRUDENTIAL INVE CITIGROUP	US	USD	1,926,079	95.125	93.330	+188.70	+36,345
S	3138AEKC FNMA POOL A11190 FN 04/41 FI	Mtge	05/26/2016 04/01/2041	PRUDENTIAL INVE MORGAN STANLEY	US	USD	6,261,223	110.141	110.430	+26.27	+16,450
S	912810RP US TREASURY N/B 11/45 3	Govt	05/11/2016 11/15/2045	PRUDENTIAL INVE JEFFERIES & CO	US	USD	692,500	108.203	108.848	+59.57	+4,125
B	20826FAQ CONOCOPHILLIPS COMPANY COMPA	Corp	04/14/2016 03/15/2026	PRUDENTIAL INVE BANK OF AMERICA	US	USD	756,322	108.046	107.476	+52.78	+3,992
S	912828QN WI TREASURY SEC.	Govt	04/21/2016 05/15/2021	PRUDENTIAL INVE NOMURA	US	USD	2,712,402	108.496	108.633	+12.60	+3,418
B	912810RJ US TREASURY N/B 11/44 3	Govt	04/19/2016 11/15/2044	PRUDENTIAL INVE NOMURA	US	USD	2,874,939	108.611	108.570	+11.32	+3,255
S	31416YT8 FB3274	Mtge	05/26/2016 07/01/2041	PRUDENTIAL INVE CREDIT SUISSE	US	USD	1,445,558	109.719	109.910	+17.43	+2,520
S	455780BF REPUBLIC OF INDONESIA	Govt	06/20/2016 05/05/2021	PRUDENTIAL INVE DEUTSCHE BANK	US	USD	1,075,000	107.500	107.689	+17.59	+1,891
S	91086QBB UNITED MEXICAN STATES SR UNS	Govt	04/05/2016 03/08/2044	PRUDENTIAL INVE BARCLAYS	US	USD	540,000	100.000	100.285	+28.49	+1,538
S	92343VCX VERIZON COMMUNICATIONS SR UN	Corp	04/06/2016 09/15/2048	PRUDENTIAL INVE MORGAN STANLEY	US	USD	365,636	102.707	102.982	+26.74	+978
B	912810RB US TREASURY N/B 05/43 2.875	Govt	06/30/2016 05/15/2043	PRUDENTIAL INVE BARCLAYS	US	USD	2,814,355	112.574	112.535	+3.47	+976
B	P3579EAH DOMINICAN REPUBLIC SR UNSECU	Govt	04/07/2016 12/30/1899	PRUDENTIAL INVE JEFFERIES & CO	US	USD	165,300	110.200	109.554	+58.59	+969
S	912810RP US TREASURY N/B 11/45 3	Govt	04/20/2016 11/15/2045	PRUDENTIAL INVE NOMURA	US	USD	1,344,951	107.167	107.242	+6.98	+938
S	534187BA LINCOLN NATIONAL CORP	Corp	04/06/2016 06/15/2040	PRUDENTIAL INVE GOLDMAN SACHS	US	USD	146,914	122.429	123.107	+55.38	+814



S	3138AEKD FI1191	Mtge	05/26/2016 04/01/2041	PRUDENTIAL INVE CREDIT SUISSE	US	USD	436,939	109.719	109.910	+17.43	+762
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TRADE DETAILS

Buy/Sell	Security	Bond Type	Trade Date/ Maturity	Manager/ Broker	Cty	Local Curr.	Principal (\$)	Price	Benchmark Price	Trade Cost BP	Trading Cost
15 Lowest Cost Trades											
B	912810RB US TREASURY N/B 05/43 2.875	Govt	06/01/2016 05/15/2043	PRUDENTIAL INVE GOLDMAN SACHS	US	USD	6,327,187	105.453	105.656	19.27	12,190
S	12593FBD COMM MORTGAGE TRUST COMM 201	Mtge	05/16/2016 07/10/2048	PRUDENTIAL INVE CITIGROUP	US	USD	1,084,531	108.453	107.720	67.60	7,331
B	12592KBC COMM MORTGAGE TRUST COMM 201	Mtge	06/13/2016 09/10/2047	PRUDENTIAL INVE DEUTSCHE BANK	US	USD	1,417,152	109.012	109.420	37.45	5,308
S	912810RP US TREASURY N/B 11/45 3	Govt	04/19/2016 11/15/2045	PRUDENTIAL INVE NOMURA	US	USD	2,810,499	108.723	108.547	16.24	4,563
B	912810RQ US TREASURY N/B 02/46 2.5	Govt	05/11/2016 02/15/2046	PRUDENTIAL INVE JEFFERIES & CO	US	USD	664,700	97.750	98.350	61.34	4,077
B	29445FCQ EQUIFIRST MORTGAGE LOAN TRUS	Mtge	05/06/2016 04/25/2035	PRUDENTIAL INVE GOLDMAN SACHS	US	USD	1,477,130	86.656	86.880	25.82	3,814
B	25152R5F DEUTSCHE BANK AG SR UNSECURE	Corp	05/09/2016 05/12/2021	PRUDENTIAL INVE DEUTSCHE BANK	US	USD	1,226,248	99.695	99.939	24.52	3,007
B	172967KM CITIGROUP INC JR SUBORDINA 1	Corp	04/18/2016 12/31/2099	PRUDENTIAL INVE CITIGROUP	US	USD	190,000	100.000	101.500	150.00	2,850
B	25272KAD DIAMOND 1 FIN/DIAMOND 2 SR S	Corp	05/17/2016 06/15/2021	PRUDENTIAL INVE JP MORGAN CHASE	US	USD	279,918	99.971	100.760	78.92	2,209
B	50077LAA KRAFT HEINZ FOODS CO COMPANY	Corp	05/10/2016 06/01/2046	PRUDENTIAL INVE WELLS FARGO	US	USD	144,541	99.684	101.200	152.08	2,198
B	911365BE UNITED RENTALS NORTH AM COMP	Corp	04/29/2016 09/15/2026	PRUDENTIAL INVE BANK OF AMERICA	US	USD	225,000	100.000	100.956	95.60	2,151
B	25272KAA DIAMOND 1 FIN/DIAMOND 2 SR S	Corp	05/17/2016 06/01/2019	PRUDENTIAL INVE JP MORGAN CHASE	US	USD	329,917	99.975	100.530	55.51	1,832
B	71647NAP PETROBRAS GLOBAL FINANCE COM	Corp	05/17/2016 05/23/2021	PRUDENTIAL INVE JP MORGAN CHASE	US	USD	569,261	99.002	99.293	29.39	1,673
S	912828R3 US TREASURY N/B 05/26 1.625	Govt	05/17/2016 05/15/2026	PRUDENTIAL INVE CITIGROUP	US	USD	1,876,992	98.789	98.703	8.70	1,633
S	10552TAE BRF SA SR UNSECURED 144A 05/	Corp	04/27/2016 05/22/2023	PRUDENTIAL INVE JP MORGAN CHASE	US	USD	473,750	94.750	94.500	26.39	1,250



AGENCIES



BOND TYPE PERFORMANCE

Bond Type	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous.\$)	BP
CORPORATES	12	30	28	12.30	10.36	+5.98	19.40	16.34

CORPORATES



BOND TYPE PERFORMANCE

Bond Type	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe	
							(Thous.\$)	BP
GOVERNMENTS	50	64	22	4.47	0.89	+5.97	34.51	6.86

GOVERNMENTS



BOND TYPE PERFORMANCE

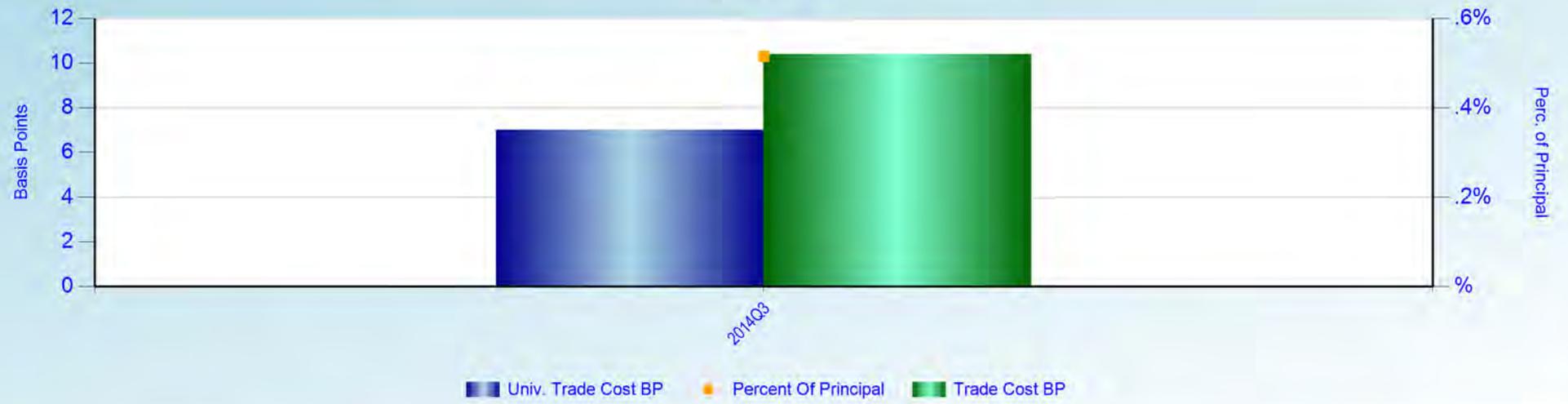
Bond Type	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous.\$)	BP
MORTGAGES	14	8	8	+39.26	+27.53	+5.97	+30.75	+21.56

MORTGAGES





UNCLASSIFIED



(Note: Number of Issues may not Add up to the Grand Total, as the same issue may overlap within above groupings.)

RATING BY EACH BOND TYPE

GOVERNMENTS - RATING DETAILS

Rating	Principal	No. of	No. of Issues	Trade Cost	Trade Cost	Univ. Trade	Cost Diff. from Universe	
	(Mil. \$)	Trades		(Thous. \$)	BP	Cost BP	(Thous. \$)	BP
AAA	50	64	22	4.47	0.89	+5.97	34.51	6.86

RATING BY EACH BOND TYPE

MORTGAGES - RATING DETAILS

Rating	Principal	No. of	No. of Issues	Trade Cost	Trade Cost	Univ. Trade	Cost Diff. from Universe	
	(Mil. \$)	Trades		(Thous. \$)	BP	Cost BP	(Thous. \$)	BP
NR	8	3	3	+19.73	+24.23	+5.97	+14.87	+18.26
AAA	3	3	3	13.00	47.86	+5.97	14.62	53.83
B-	2	1	1	+36.34	+188.70	+5.97	+35.20	+182.73
BB	1	1	1	3.81	25.82	+5.97	4.70	31.79

RATING BY EACH BOND TYPE

CORPORATES - RATING DETAILS

Rating	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost		Univ. Trade		Cost Diff. from Universe	
				(Thous. \$)	BP	Cost BP	(Thous. \$)	BP	
B+	2	3	3	1.07	6.19	+5.97	2.09	12.16	
BB	2	4	4	+0.00	+0.00	+6.07	0.99	6.07	
A-	2	4	3	+5.61	+35.07	+5.97	+4.66	+29.10	
BBB+	2	2	2	2.03	12.75	+5.97	2.98	18.72	
BB-	1	4	4	3.32	26.57	+5.97	4.07	32.54	
BBB-	1	4	4	6.99	58.35	+5.97	7.70	64.32	
BB+	1	3	3	2.66	22.26	+5.97	3.38	28.23	
BBB	<1	2	2	0.84	12.54	+5.97	1.24	18.51	
B-	<1	2	1	1.21	31.13	+5.97	1.45	37.10	
CCC+	<1	1	1	+0.20	+5.88	+5.97	+0.00	0.09	
AA-	<1	1	1	+0.00	+0.00	+5.97	0.16	5.97	



COUNTRIES BY EACH BOND TYPE

GOVERNMENTS								
Country	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$) BP	
UNITED STATES	50	64	22	4.47	0.89	+5.97	34.51	6.86



COUNTRIES BY EACH BOND TYPE

MORTGAGES								
Country	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe	
							(Thous. \$)	BP
UNITED STATES	14	8	8	+39.26	+27.53	+5.97	+30.75	+21.56

COUNTRIES BY EACH BOND TYPE

CORPORATES								
Country	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost	Trade Cost	Univ. Trade	Cost Diff. from Universe	
				(Thous. \$)	BP	Cost BP	(Thous. \$)	BP
UNITED STATES	12	29	27	12.30	10.56	+5.97	19.25	16.53
LUXEMBOURG	<1	1	1	+0.00	+0.00	+6.68	0.15	6.68

HISTORICAL DATA

Quarter	Principal (Thous. \$)	No. of Trades	No. of Issues	Trade Cost		Univ. Trade Cost BP	Cost Diff. from Universe	
				(Thous. \$)	BP		(Thous. \$)	BP
04/01/2016-06/30/2016	76,455	102	58	+22.49	+2.94	+5.97	23.17	3.03
01/02/2016-03/31/2016	91,594	125	57	42.69	4.66	+4.69	85.61	9.35
Year-Ending 2016	168,049	227		20.20	1.20	+5.27	108.78	6.47
10/01/2015-12/31/2015	43,193	60	34	29.83	6.91	+7.18	60.85	14.09
07/01/2015-09/30/2015	20,663	41	24	68.34	33.07	+4.30	77.22	37.37
04/01/2015-06/30/2015	143,060	122	71	98.11	6.86	+5.55	177.48	12.41
01/01/2015-03/31/2015	116,093	109	56	60.79	5.24	+5.51	124.75	10.75
Year-Ending 2015	323,008	332		257.06	7.96	+5.67	440.30	13.63
10/01/2014-12/31/2014	48,315	72	50	+9.25	+1.91	+5.72	18.39	3.81
07/01/2014-09/30/2014	266,740	204	99	216.37	8.11	+7.08	405.13	15.19
04/01/2014-06/30/2014	244,265	204	138	+42.48	+1.74	+8.55	166.48	6.81
01/02/2014-03/31/2014	187,634	187	128	+186.20	+9.92	+8.13	+33.59	+1.79
Year-Ending 2014	746,953	667		+21.55	+0.29	+7.74	556.41	7.45
10/01/2013-12/31/2013	143,798	142	84	+56.51	+3.93	+8.36	63.70	4.43
07/01/2013-09/30/2013	187,166	136	90	+47.79	+2.55	+6.68	77.19	4.13
04/01/2013-06/30/2013	157,154	129	98	+104.81	+6.67	+1.44	+82.21	+5.23
01/02/2013-03/31/2013	281,064	206	156	+366.87	+13.05	+1.56	+323.04	+11.49
Year-Ending 2013	769,183	613		+575.98	+7.49	+4.05	+264.35	+3.44
10/01/2012-12/31/2012	132,722	116	90	+470.95	+35.48	+2.11	+442.94	+33.37
07/01/2012-09/30/2012	120,859	101	77	+125.20	+10.36	+2.09	+99.92	+8.27
04/01/2012-06/30/2012	85,150	85	60	+71.84	+8.44	+2.27	+52.54	+6.17
01/02/2012-03/31/2012	31,666	13	9	0.75	0.24	+7.38	24.12	7.62
Year-Ending 2012	370,398	315		+667.24	+18.01	+2.59	+571.28	+15.42
10/01/2011-12/31/2011	54,456	22	11	+249.88	+45.89	+3.18	+232.57	+42.71

HISTORICAL DATA

Quarter	Principal (Thous. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe	
							(Thous. \$)	BP
07/01/2011-09/30/2011	45,561	26	10	+31.66	+6.95	+4.14	+12.80	+2.81
04/01/2011-06/30/2011	40,214	15	6	+83.99	+20.88	+4.01	+67.86	+16.87
01/02/2011-03/31/2011	45,680	23	3	+2.18	+0.48	+5.21	21.63	4.73
Year-Ending 2011	185,912	86		+367.70	+19.78	+4.09	+291.59	+15.68
10/01/2010-12/31/2010	57,022	27	11	152.30	26.71	+8.46	200.51	35.17
Year-Ending 2010	57,022	27		152.30	26.71	+8.46	200.51	35.16

BENCHMARK VENDOR REPORT

Bonds	Number of Trades	Number of Issues	Vendor Benchmark	Percent Of Principal
CORPORATES	14	12	BLOOMBERGTERMINAL	40.71 %
	8	8	MARKETAXESS-TRADES	34.56 %
	7	7	ISSUE PRICE	20.73 %
	1	1	MARKETAXESS-EMQUOTES	3.99 %
GOVERNMENTS	61	21	BLOOMBERGTERMINAL	93.89 %
	2	1	TULLET PREBON	5.71 %
	1	1	ISSUE PRICE	0.40 %
MORTGAGES	8	8	BLOOMBERGTERMINAL	100.00 %

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SACRAMENTO COUNTY

Trade Cost Summary - U.S. Equity Trading

Period End June 30, 2016



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(+) = Cost

EXECUTIVE SUMMARY

Elkins/McSherry has been providing trading cost analysis to institutional investors since 1991, serving many of the worlds largest investment managers, pension funds, banks, and broker dealers. Using this vast experience combined with an un-matched collection of global equity market and Universe data, Elkins/McSherry has produced a Trading Cost Analysis on behalf of SACRAMENTO COUNTY. This study evaluates U.S. equity executions from April 1 , 2016 to June 30, 2016. The analysis included trading of 5,778,580 shares representing \$199.52 million in principal.

Methodology :

The Elkins/McSherry analysis measures trading efficiency by quantifying the cost of brokerage commission and execution quality versus a Full Day VWAP benchmark for each of the securities traded. These data have been aggregated to summarize results by Buy/Sell, Commissions, Market Impact, Short Term Alpha, Market Cap, Trade Difficulty and Trade Detail. These results are quantified in USD as well as being displayed graphically to highlight the outcomes.

Results :

BENCHMARK PERFORMANCE

Commission	Full Day VWAP	E - Score
<ul style="list-style-type: none"> Your commission cost was +2.59 cps (+7.50 bp) or +\$149,738 (+0.45 cps (+1.31 bp) worse than the Elkins/McSherry All Trading Universe) 	<ul style="list-style-type: none"> Your market impact cost was +0.90 cps (+2.61 bp) or 0.30 cps (0.86 bp) better than the Elkins/McSherry Universe Your overall trading cost of +3.49 cps (+10.12 bp) was +0.15 cps (+0.45 bp) worse than the Elkins/McSherry Universe Full Day VWAP Universe Rank: 59% Total Cost Universe Rank: 46% 	<ul style="list-style-type: none"> E-Score Rank : 56 E-Score : 0.58

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)	
Bundled	All Trading	Execution Only	Program	Median	Full Day VWAP
+3.50	+2.14	+1.60	+1.60	75 %	+1.20
				25 %	+2.90



(+) = Cost

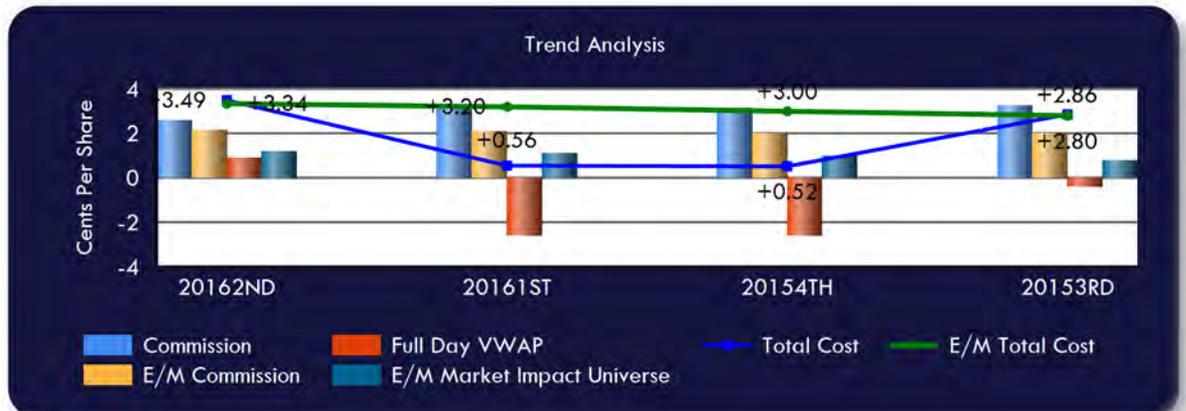
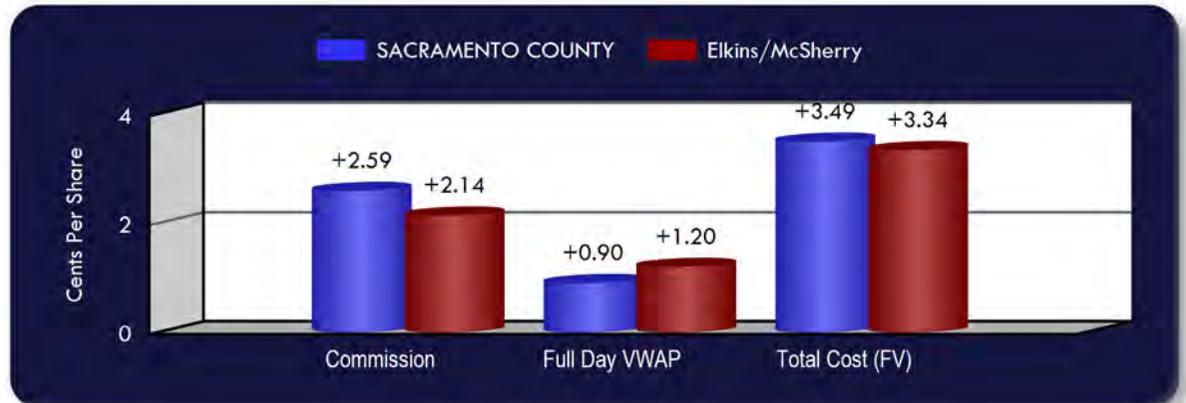
EXECUTIVE SUMMARY

TOTAL PORTFOLIO COST PERFORMANCE

Side	COMMISSION			MARKET IMPACT		Total Cost	Total Cost/Savings Vs. Universe	E - Score (Rank)	E -Score
	Your Avg. Commission (cps)	All Trading Universe (cps)	Bundled Universe (cps)	Full Day VWAP (cps)	Universe Full Day VWAP (cps)	(cps)	Commission+ Full Day VWAP (cps)		
Buys	+2.75	+2.14	+3.50	0.05	+1.20	+2.70	0.64	55	0.59
Sells	+2.44	+2.14	+3.50	+1.78	+1.20	+4.22	+0.88	58	0.56
Total	+2.59	+2.14	+3.50	+0.90	+1.20	+3.49	+0.15	56	0.58

TRADING COMPONENTS

	Buys	Sells
Trade Principal	101,967,303	97,555,628
Shares	2,765,349	3,013,231
Unique Names	789	598
Liquidity (% ADV)	0.031	0.035
Avg. Execution Size	920	1,228
Avg. Order Completion Time (min)	N/A	N/A
Total Number of Trades	3,005	2,453





(+) = Cost

EXECUTIVE SUMMARY

MARKET CAPITALIZATION

Market Cap	% Traded (\$)	Avg. Shares Per Order	COMMISSION		MARKET IMPACT			Total Cost	Total Cost/Savings	E - Score (Rank)	E - Score	Market Cap Definition
			Your Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Universe Full Day VWAP (cps)	Rank Full Day VWAP %	(cps)	Commission+ Full Day VWAP Vs. Universe (cps)			
Mid Cap	38.45 %	1,551	+2.78	+2.14	+1.08	+0.96	48 %	+3.86	+0.75	60	0.53	\$1 B TO \$5 B
Giant Cap	31.22 %	893	+1.79	+2.14	+0.67	+1.40	57 %	+2.46	1.08	52	0.63	Over \$25 B
Large Cap	23.71 %	513	+2.16	+2.14	+1.42	+0.79	40 %	+3.58	+0.65	54	0.61	\$5 B TO \$25 B
Small Cap	6.20 %	1,790	+3.51	+2.14	0.38	+0.73	73 %	+3.13	+0.27	64	0.47	\$250 M TO \$1 B
N.A.	0.32 %	1,646	+2.81	+2.14	+1.38	+1.20	48 %	+4.19	+0.85	74	0.34	
Micro Cap	0.10 %	853	+2.88	+2.14	+2.03	+0.39	25 %	+4.91	+2.39	70	0.38	Under \$250 M

Total Cost by Market Cap: (USD)

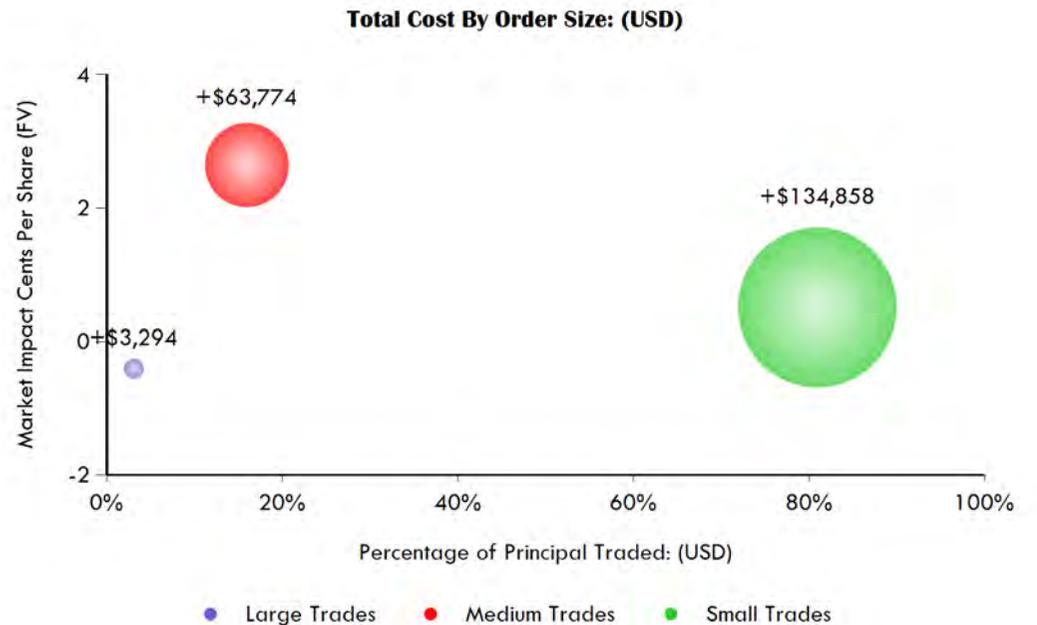
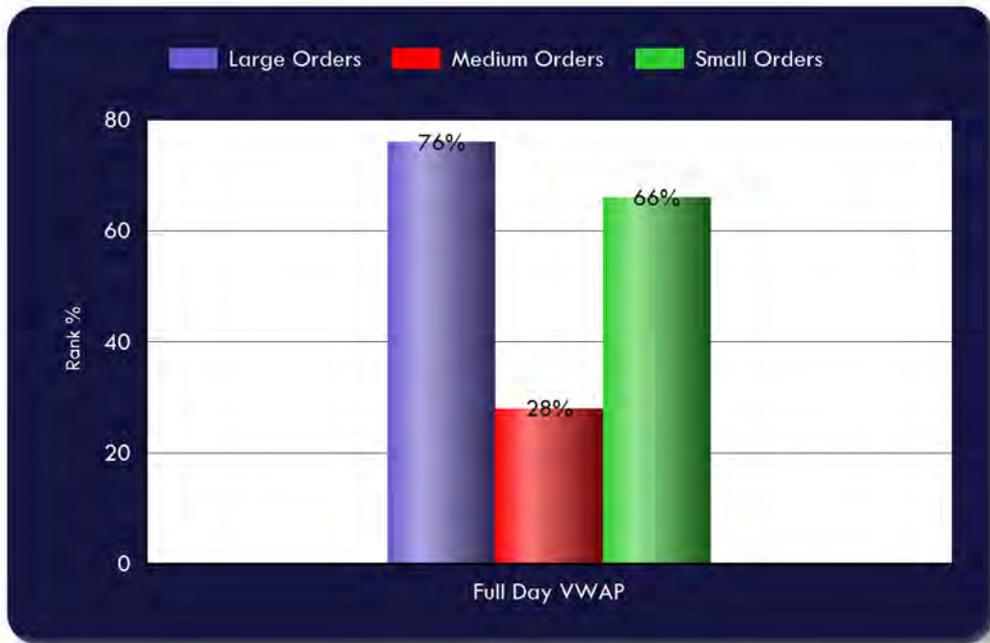


(+) = Cost

EXECUTIVE SUMMARY

ORDER SIZE EVALUATION

Order Size	Total # Of Orders	Avg. Shares Per Order	Avg. Order Completion Time (min)	COMMISSION		MARKET IMPACT			Total Cost	Total Cost/Savings	E - Score (Rank)	E - Score	Absolute Size (Shares)
				Your Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Universe Full Day VWAP (cps)	Rank Full Day VWAP	(cps)	Commission+Full Day VWAP Vs. Universe (cps)			
Large Orders	4	75,944	N/A	+1.49	+2.14	0.40	+1.20	76 %	+1.08	2.26	80	0.25	50K or More
Med. Orders	74	16,175	N/A	+2.68	+2.14	+2.64	+1.20	28 %	+5.33	+1.99	57	0.57	10K-50K
Small Orders	5,380	795	N/A	+2.64	+2.14	+0.51	+1.20	66 %	+3.15	0.19	55	0.59	10K or Less





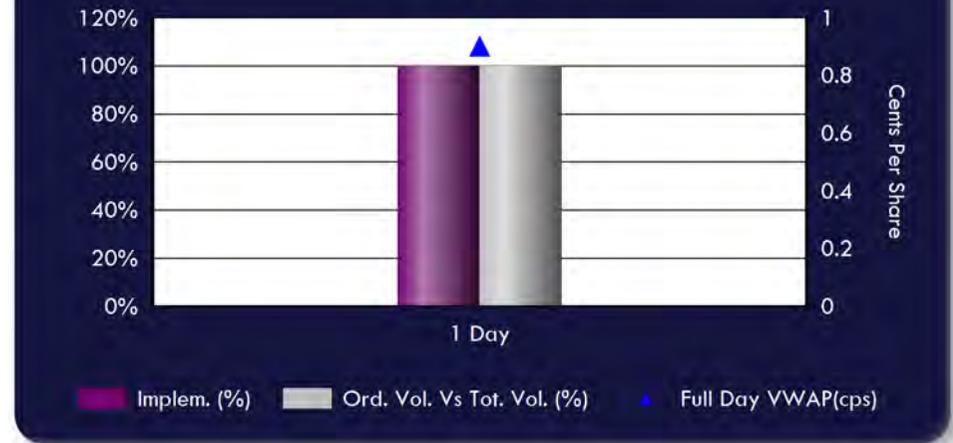
(+) = Cost

EXECUTIVE SUMMARY

IMPLEMENTATION DAYS BY TRADE

Period	Percent Traded (%)	Order Vol. Vs Total Vol. (%)	Full Day VWAP (cps)	E - Score (Rank)	E - Score
1 Day	100.00	100%	+0.90	56	0.58

Implementation Days



TRADE DIFFICULTY

Methodology	Liquid. Cat.	Percent Traded (%)	Full Day VWAP (cps)	E - Score (Rank)	E - Score
0%~20% of daily vol.	L	100%	+0.90	56	0.58

Avg. % of Daily Volume





(+) = Cost

EXECUTIVE SUMMARY

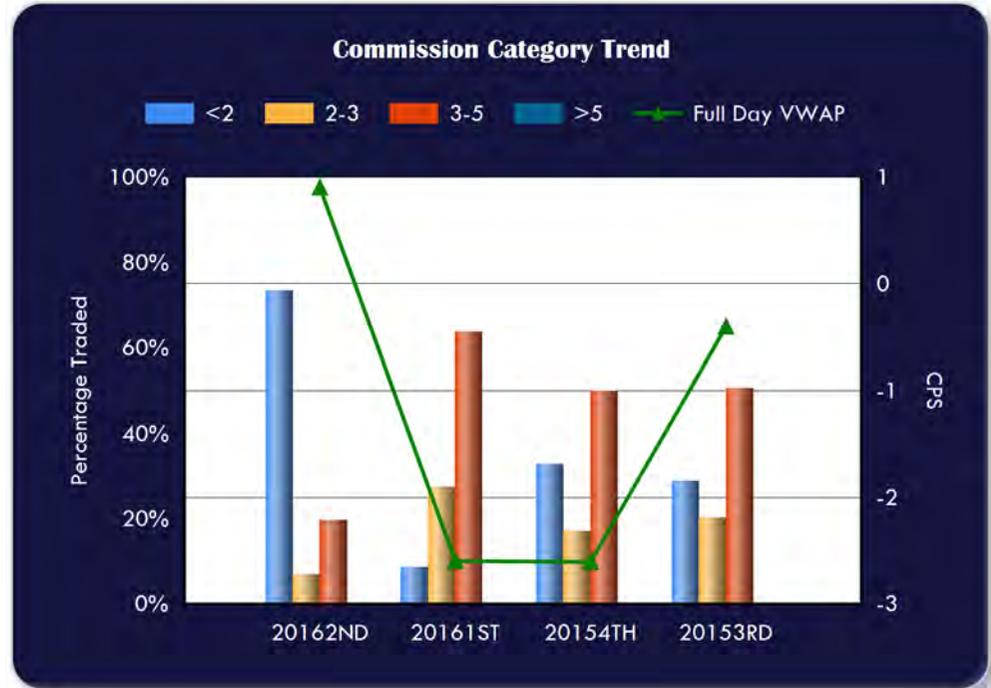
COMMISSION REVIEW

Top 10 Broker

Commission Trends

Broker	Total Commission (\$)	Commission 20162nd (cps)	All Trading Universe (cps)	Bundled Universe (cps)	20161ST (cps)	20154TH (cps)	20153RD (cps)
ITG	19,551	+3.86	+2.14	+3.50	+3.71	+3.87	+3.58
CAPITAL IN	17,056	+3.24	+2.14	+3.50	+3.67	+3.51	+3.86
JP MORGAN	13,282	+1.02	+2.14	+3.50	+3.43	+2.90	+3.05
LIQUIDNET	11,558	+3.05	+2.14	+3.50	+2.98	+2.99	+2.90
THEMIS TRA	7,691	+4.00	+2.14	+3.50	+4.00	+4.00	+4.00
CONVERGEX	6,964	+4.47	+2.14	+3.50	+4.79	+4.73	+4.69
CITIGROUP	5,944	+1.73	+2.14	+3.50	+2.22	+2.23	+2.41
JEFFERIES	4,279	+3.88	+2.14	+3.50	+3.82	+3.76	+3.64
WILLIAM BL	4,058	+4.05	+2.14	+3.50	+4.46	+3.81	+3.80
WELLS FARG	3,708	+3.35	+2.14	+3.50	+3.53	+3.75	+3.54

Commission Category Trend



NOTES

(+) = Cost

TRADE CYCLE DETAIL

Manager Performance (Full Day VWAP)



Manager	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION		MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
ALLIANCE R 3000 CAPI	58	357	1,375,783	47	0.71	+0.53	+2.14	+2.44	30 %	0.36	1	6	99
WEATHERBIE	36	2,117	1,058,714	61	0.51	+3.96	+2.14	+1.49	46 %	+2.11	68	82	18
URDANG SECURITIES MA	34	2,706	979,661	51	0.66	+3.35	+2.14	+0.37	68 %	+0.38	66	75	56
EAGLE CAPITAL MANAGE	19	24,974	424,566	64	0.47	+2.73	+2.14	2.41	91 %	3.02	98	99	85
BROWN ADVISORY	15	1,537	218,300	70	0.39	+2.40	+2.14	2.62	92 %	3.56	92	71	94
DALTON, GREINER, HAR	13	2,920	607,261	63	0.48	+4.26	+2.14	2.52	92 %	1.60	92	73	81
UBS GLOBAL ASSET MGM	10	2,848	395,894	55	0.60	+2.46	+2.14	+3.06	24 %	+2.18	94	78	5
WEDGE CAPITAL MGMT L	9	2,274	386,501	66	0.44	+3.37	+2.14	+5.95	7 %	+5.98	33	78	76
HUBER CAPITAL MANAGE	6	5,029	331,900	69	0.40	+0.65	+2.14	1.39	85 %	4.08	92	92	88

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.50	+2.14	+1.60	+1.60	+1.20

NOTES

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(+) = Cost

TRADE CYCLE DETAIL

Broker Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score	E - Score Rank	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP		20161ST (%)	20154TH (%)	20153RD (%)
JP MORGAN CHASE	50	380	1,302,920	58	0.56	13,282	+1.02	+2.14	+0.33	69 %	1.99	79	56	86
CAPITAL INSTL SVCS	23	6,505	526,941	63	0.48	17,056	+3.24	+2.14	2.75	92 %	2.86	93	99	37
ITG	18	1,829	506,544	61	0.50	19,551	+3.86	+2.14	+1.75	41 %	+2.27	42	78	84
FIDELITY	13	545	273,734	31	0.99	1,369	+0.50	+2.14	+4.26	15 %	+1.42	-	13	-
LIQUIDNET	12	2,872	379,161	52	0.64	11,558	+3.05	+2.14	0.17	74 %	0.47	90	89	80
THEMIS TRADING LLC	8	2,024	192,277	65	0.46	7,691	+4.00	+2.14	+4.50	13 %	+5.16	12	18	8
CITIGROUP	6	5,723	343,396	55	0.60	5,944	+1.73	+2.14	+3.08	23 %	+1.47	59	75	10
MORGAN STANLEY	6	3,540	113,287	27	1.07	2,937	+2.59	+2.14	+14.30	1 %	+13.55	99	37	31
UBS	6	2,369	168,176	57	0.57	3,056	+1.82	+2.14	2.10	89 %	3.62	92	88	94
SC BERNSTEIN	5	1,547	97,461	69	0.40	2,650	+2.72	+2.14	+1.42	47 %	+0.80	1	84	83

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.50	+2.14	+1.60	+1.60	+1.20

NOTES

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(+) = Cost

TRADE CYCLE DETAIL

Broker Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
GOLDMAN SACHS	4	5,437	119,615	72	0.35	1,833	+1.53	+2.14	+5.39	9 %	+3.58	97	99	98
WILLIAM BLAIR	3	3,578	100,175	66	0.43	4,058	+4.05	+2.14	5.13	95 %	4.42	96	40	99
CREDIT SUISSE	3	1,902	74,183	47	0.72	2,475	+3.34	+2.14	+8.07	4 %	+8.07	47	6	27
BROADCORT CAPITAL	3	5,000	105,002	65	0.45	3,210	+3.06	+2.14	+2.24	33 %	+1.96	89	81	74
JEFFERIES & CO	3	2,205	110,248	61	0.51	4,279	+3.88	+2.14	+1.03	54 %	+1.57	93	89	68
CONVERGEX	3	2,227	155,906	63	0.48	6,964	+4.47	+2.14	1.33	85 %	0.21	78	37	73
WELLS FARGO	3	2,257	110,606	57	0.56	3,708	+3.35	+2.14	5.28	95 %	5.27	17	85	61
JONES TRADING	2	5,530	99,540	68	0.41	2,443	+2.45	+2.14	+4.51	13 %	+3.63	99	3	83
MERRILL LYNCH	2	3,175	82,547	45	0.75	2,282	+2.76	+2.14	1.76	88 %	2.33	95	15	3
STATE STREET BANK	2	1,815	67,144	55	0.59	2,364	+3.52	+2.14	+0.98	56 %	+1.16	66	10	26

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.50	+2.14	+1.60	+1.60	+1.20

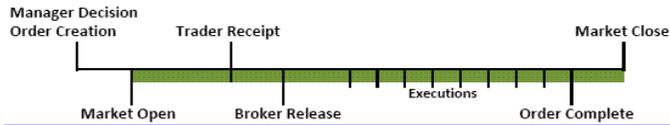
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(+) = Cost

TRADE CYCLE DETAIL

Broker Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
RBC CAPITAL MARKETS	2	2,065	86,747	63	0.49	2,612	+3.01	+2.14	3.76	93 %	4.09	81	49	83
BAIRD, ROBERT W	2	1,127	33,803	63	0.48	1,385	+4.10	+2.14	2.15	90 %	1.39	89	58	22
CANTOR FITZGERALD	2	2,115	65,553	58	0.56	2,046	+3.12	+2.14	+0.06	71 %	0.16	35	1	14
RAYMOND JAMES	2	1,977	37,566	76	0.30	1,471	+3.92	+2.14	+0.30	69 %	+0.87	96	85	70
ISI GROUP INC	1	1,818	30,912	43	0.78	1,385	+4.48	+2.14	4.38	95 %	3.24	44	96	23
STIFEL NICOLAUS & CO	1	2,403	52,860	58	0.55	1,767	+3.34	+2.14	8.11	97 %	8.11	86	80	93
BARCLAYS	1	1,617	29,102	79	0.27	1,137	+3.91	+2.14	2.36	91 %	1.80	91	71	89
WEEDEN & CO	<1	1,896	34,135	61	0.52	1,222	+3.58	+2.14	+2.35	32 %	+2.59	66	94	97
CITATION FINL GROUP	<1	8,788	8,788	72	0.36	44	+0.50	+2.14	14.58	99 %	17.42	-	-	-
COWEN & CO	<1	3,121	21,849	53	0.63	688	+3.15	+2.14	+12.57	1 %	+12.38	89	93	1

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.50	+2.14	+1.60	+1.60	+1.20

NOTES

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(+) = Cost

TRADE CYCLE DETAIL

Broker Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
GREEN STREET	<1	1,516	18,186	58	0.55	784	+4.31	+2.14	3.09	92 %	2.12	94	80	95
PIPER JAFFRAY	<1	3,205	32,047	48	0.70	1,086	+3.39	+2.14	8.37	97 %	8.32	99	22	3
APEX CLEARING CORP	<1	3,434	24,040	49	0.68	481	+2.00	+2.14	9.37	98 %	10.71	-	-	-
WUNDERLICH SECUR	<1	9,191	64,338	64	0.47	2,635	+4.10	+2.14	2.21	90 %	1.46	99	13	34
OPPENHEIMER & CO INC	<1	2,242	40,354	83	0.21	1,485	+3.68	+2.14	+1.02	55 %	+1.36	99	99	98
STEPHENS & CO INC	<1	2,291	22,909	49	0.69	1,004	+4.38	+2.14	+3.01	24 %	+4.06	33	5	38
LEERINK SWANN	<1	2,507	12,535	78	0.28	494	+3.94	+2.14	1.25	84 %	0.65	1	99	11
KNIGHT CAPITAL	<1	6,150	12,300	28	1.04	246	+2.00	+2.14	+173.64	1 %	+172.30	26	96	91
BMO CAPITAL MARKETS	<1	2,764	19,350	50	0.67	774	+4.00	+2.14	0.82	80 %	0.16	51	-	37
YAMNER & CO	<1	11,200	11,200	71	0.37	112	+1.00	+2.14	+19.14	1 %	+16.80	-	-	-

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.50	+2.14	+1.60	+1.60	+1.20

NOTES

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(+) = Cost

TRADE CYCLE DETAIL

Broker Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
DAVIDSON D.A. & CO	<1	5,288	26,439	54	0.62	1,322	+5.00	+2.14	5.12	95 %	3.46	99	84	92
ANCORA SECURITIES	<1	1,480	14,800	83	0.21	740	+5.00	+2.14	+0.06	71 %	+1.72	-	-	77
BLOOMBERG	<1	903	4,517	75	0.32	90	+2.00	+2.14	12.19	99 %	13.53	27	88	99
FBN SECURITIES	<1	5,114	20,455	65	0.46	1,023	+5.00	+2.14	2.26	90 %	0.60	-	1	-
PERSHING	<1	4,750	9,500	61	0.51	359	+3.77	+2.14	+7.92	4 %	+8.36	99	9	96
NEEDHAM & CO INC	<1	8,223	8,223	53	0.62	329	+4.00	+2.14	15.22	99 %	14.56	1	10	92
NATL FINANCIAL SERVS	<1	17,340	34,680	27	1.07	1,387	+4.00	+2.14	9.85	98 %	9.19	-	-	-
FRIEDMAN BILLINGS	<1	5,600	11,200	85	0.19	520	+4.64	+2.14	0.19	74 %	+1.11	-	-	57
KEYBANC	<1	753	6,020	54	0.62	301	+5.00	+2.14	6.18	96 %	4.52	4	91	82
KEEFE BRUYETTE WOODS	<1	1,283	8,979	77	0.29	323	+3.60	+2.14	0.64	78 %	0.38	91	89	83

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.50	+2.14	+1.60	+1.60	+1.20

NOTES

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(+) = Cost

TRADE CYCLE DETAIL

Broker Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
DEUTSCHE BANK	<1	1,188	5,940	48	0.70	239	+4.03	+2.14	0.53	78 %	+0.15	91	83	88
SEAPORT GROUP SECS	<1	2,233	6,700	84	0.21	335	+5.00	+2.14	2.36	91 %	0.70	1	-	98
INDUSTRIAL & COMMERC	<1	2,941	5,881	18	1.29	294	+5.00	+2.14	0.29	75 %	+1.37	-	-	-
INTL FC STONE SECURI	<1	2,585	2,585	55	0.59	129	+5.00	+2.14	10.46	98 %	8.80	-	99	-
BLUEFIN RESEARCH	<1	2,490	2,490	73	0.35	125	+5.00	+2.14	20.85	99 %	19.19	-	-	18
TELSEY ADVISORY GR	<1	3,317	3,317	71	0.37	116	+3.50	+2.14	+11.65	1 %	+11.81	-	2	1
BTIG LLC	<1	1,114	3,341	63	0.48	67	+2.00	+2.14	4.15	94 %	5.49	-	98	-
SCOTIA CAPITAL	<1	3,200	3,200	8	1.71	115	+3.60	+2.14	+35.85	1 %	+36.11	93	-	-
LEK SECURITIES CORP	<1	4,500	4,500	90	0.12	225	+5.00	+2.14	+0.85	60 %	+2.51	99	-	-
CREDIT RESEARCH & TR	<1	4,000	4,000	43	0.78	40	+1.00	+2.14	5.64	95 %	7.98	1	-	19

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.50	+2.14	+1.60	+1.60	+1.20

NOTES

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(+) = Cost

TRADE CYCLE DETAIL

Broker Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
LUMINEX TRADING	<1	1,465	1,465	7	1.81	4	+0.25	+2.14	18.85	99 %	21.94	-	-	-
WEDBUSH MORGAN SEC	<1	1,456	2,911	82	0.23	87	+3.00	+2.14	0.14	74 %	0.48	-	96	-

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.50	+2.14	+1.60	+1.60	+1.20

NOTES

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(+) = Cost

TRADE CYCLE DETAIL

ALLIANCE R 3000 CAPITAL MANAGEM Performance (Full Day VWAP)

						COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	2016 1ST (%)	2015 4TH (%)	2015 3RD (%)
Grand Total	58	357	1,375,783	47	0.71	7,329	+0.53	+2.14	+2.44	30 %	0.36	1	6	99
JP MORGAN CHASE	42	315	1,053,456	58	0.55	5,879	+0.56	+2.14	+0.75	63 %	2.04	-	1	1
FIDELITY	13	545	273,734	31	0.99	1,369	+0.50	+2.14	+4.26	15 %	+1.42	-	13	-
MORGAN STANLEY	2	12,921	38,763	2	2.52	29	+0.07	+2.14	+40.23	1 %	+36.96	-	28	-
CITATION FINL GROUP	<1	8,788	8,788	72	0.36	44	+0.50	+2.14	14.58	99 %	17.42	-	-	-
GOLDMAN SACHS	<1	1,042	1,042	21	1.21	8	+0.75	+2.14	21.03	99 %	23.62	1	-	99



(+) = Cost

TRADE CYCLE DETAIL

BROWN ADVISORY Performance (Full Day VWAP)

						COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
Grand Total	15	1,537	218,300	70	0.39	5,240	+2.40	+2.14	2.62	92 %	3.56	92	71	94
CAPITAL INSTL SVCS	5	3,122	81,160	78	0.28	1,961	+2.42	+2.14	+0.56	66 %	0.36	88	27	18
SC BERNSTEIN	3	911	43,750	62	0.50	678	+1.55	+2.14	1.00	82 %	2.79	89	85	13
JP MORGAN CHASE	2	3,189	28,697	79	0.26	648	+2.26	+2.14	1.10	84 %	2.18	99	86	9
MORGAN STANLEY	1	503	4,023	67	0.43	134	+3.33	+2.14	67.70	99 %	67.71	1	1	1
WILLIAM BLAIR	<1	1,274	7,642	83	0.22	267	+3.50	+2.14	12.77	99 %	12.61	-	1	99
MERRILL LYNCH	<1	1,147	4,587	48	0.70	161	+3.50	+2.14	+10.20	1 %	+10.36	-	50	99
BLOOMBERG	<1	903	4,517	75	0.32	90	+2.00	+2.14	12.19	99 %	13.53	27	88	99
JONES TRADING	<1	1,660	6,640	55	0.60	133	+2.00	+2.14	+17.86	1 %	+16.52	-	-	99
ISI GROUP INC	<1	1,820	1,820	38	0.86	64	+3.50	+2.14	102.23	99 %	102.07	-	99	-
PIPER JAFFRAY	<1	4,019	4,019	42	0.79	141	+3.50	+2.14	16.10	99 %	15.94	99	96	-
JEFFERIES & CO	<1	1,652	4,957	68	0.41	174	+3.50	+2.14	1.48	86 %	1.31	1	99	99
LEERINK SWANN	<1	1,500	1,500	75	0.32	53	+3.50	+2.14	+44.53	1 %	+44.69	-	-	99
GOLDMAN SACHS	<1	1,248	2,495	74	0.33	87	+3.50	+2.14	4.18	94 %	4.02	99	-	-
RAYMOND JAMES	<1	1,925	3,850	94	0.07	135	+3.50	+2.14	+1.66	42 %	+1.82	99	-	95
WELLS FARGO	<1	1,993	1,993	96	0.05	70	+3.50	+2.14	0.78	79 %	0.62	91	1	58
ITG	<1	655	2,618	45	0.74	52	+2.00	+2.14	52.14	99 %	53.48	99	1	-
TELSEY ADVISORY GR	<1	3,317	3,317	71	0.37	116	+3.50	+2.14	+11.65	1 %	+11.81	-	99	1
BTIG LLC	<1	1,114	3,341	63	0.48	67	+2.00	+2.14	4.15	94 %	5.49	-	99	-
UBS	<1	829	829	22	1.18	29	+3.50	+2.14	+83.70	1 %	+83.86	99	1	99
STIFEL NICOLAUS & CO	<1	789	789	82	0.23	28	+3.50	+2.14	+4.31	14 %	+4.47	-	99	19



(+) = Cost

TRADE CYCLE DETAIL

BROWN ADVISORY Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
CREDIT SUISSE	<1	1,009	2,017	65	0.46	71	+3.50	+2.14	9.09	97 %	8.93	99	-	99
BAIRD, ROBERT W	<1	284	2,274	63	0.48	80	+3.50	+2.14	0.43	76 %	0.27	98	20	99
LUMINEX TRADING	<1	1,465	1,465	7	1.81	4	+0.25	+2.14	18.85	99 %	21.94	-	-	-



(+) = Cost

TRADE CYCLE DETAIL

DALTON, GREINER, HARTMAN, MAHER Performance (Full Day VWAP)

						COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
Grand Total	13	2,920	607,261	63	0.48	25,869	+4.26	+2.14	2.52	92 %	1.60	92	73	81
CONVERGEX	3	2,248	152,861	62	0.49	6,888	+4.51	+2.14	1.37	85 %	0.21	78	30	73
RBC CAPITAL MARKETS	2	2,045	83,847	63	0.48	2,525	+3.01	+2.14	3.56	93 %	3.89	82	85	83
CAPITAL INSTL SVCS	1	11,605	46,419	66	0.43	2,321	+5.00	+2.14	2.68	92 %	1.02	97	85	76
LIQUIDNET	<1	3,481	34,808	58	0.56	1,392	+4.00	+2.14	1.46	86 %	0.80	72	87	86
MORGAN STANLEY	<1	2,245	8,980	89	0.14	449	+5.00	+2.14	+2.23	33 %	+3.89	-	1	91
RAYMOND JAMES	<1	2,750	16,500	74	0.33	825	+5.00	+2.14	+4.83	12 %	+6.49	94	72	-
DAVIDSON D.A. & CO	<1	5,288	26,439	54	0.62	1,322	+5.00	+2.14	5.12	95 %	3.46	99	84	92
BAIRD, ROBERT W	<1	2,600	7,800	65	0.46	390	+5.00	+2.14	7.93	97 %	6.27	-	-	98
ANCORA SECURITIES	<1	1,480	14,800	83	0.21	740	+5.00	+2.14	+0.06	71 %	+1.72	-	-	77
FBN SECURITIES	<1	5,114	20,455	65	0.46	1,023	+5.00	+2.14	2.26	90 %	0.60	-	1	-
ITG	<1	2,059	24,704	66	0.45	511	+2.07	+2.14	2.26	90 %	3.54	76	38	78
WUNDERLICH SECUR	<1	11,160	44,638	47	0.72	1,926	+4.31	+2.14	2.56	92 %	1.59	99	-	31
WILLIAM BLAIR	<1	3,008	12,030	62	0.50	602	+5.00	+2.14	+10.66	1 %	+12.32	90	-	1
ISI GROUP INC	<1	1,400	9,800	66	0.44	392	+4.00	+2.14	3.16	92 %	2.50	-	-	20
STEPHENS & CO INC	<1	4,400	8,800	38	0.86	440	+5.00	+2.14	8.43	97 %	6.77	-	1	89
NATL FINANCIAL SERVS	<1	17,340	34,680	27	1.07	1,387	+4.00	+2.14	9.85	98 %	9.19	-	-	-
FRIEDMAN BILLINGS	<1	10,200	10,200	92	0.10	510	+5.00	+2.14	+1.31	49 %	+2.97	-	-	57
SEAPORT GROUP SECS	<1	2,233	6,700	84	0.21	335	+5.00	+2.14	2.36	91 %	0.70	1	-	98
INDUSTRIAL & COMMERC	<1	2,941	5,881	18	1.29	294	+5.00	+2.14	0.29	75 %	+1.37	-	-	-
INTL FC STONE SECURI	<1	2,585	2,585	55	0.59	129	+5.00	+2.14	10.46	98 %	8.80	-	99	-



(+) = Cost

TRADE CYCLE DETAIL

DALTON, GREINER, HARTMAN, MAHER Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
KEYBANC	<1	934	4,670	79	0.27	234	+5.00	+2.14	3.63	93 %	1.97	93	88	95
BLUEFIN RESEARCH	<1	2,490	2,490	73	0.35	125	+5.00	+2.14	20.85	99 %	19.19	-	-	18
WEEDEN & CO	<1	1,269	5,074	39	0.85	178	+3.50	+2.14	5.38	95 %	5.22	63	71	97
UBS	<1	3,950	7,900	44	0.77	395	+5.00	+2.14	+1.38	48 %	+3.04	39	68	90
LEK SECURITIES CORP	<1	4,500	4,500	90	0.12	225	+5.00	+2.14	+0.85	60 %	+2.51	99	-	-
PIPER JAFFRAY	<1	4,850	9,700	18	1.30	313	+3.23	+2.14	10.29	98 %	10.41	-	-	4



(+) = Cost

TRADE CYCLE DETAIL

EAGLE CAPITAL MANAGEMENT Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
Grand Total	19	24,974	424,566	64	0.47	11,600	+2.73	+2.14	2.41	91 %	3.02	98	99	85
CAPITAL INSTL SVCS	12	27,323	273,232	58	0.55	8,197	+3.00	+2.14	6.56	96 %	6.90	98	99	-
GOLDMAN SACHS	3	20,567	41,134	82	0.23	411	+1.00	+2.14	+10.38	1 %	+8.04	-	-	81
JONES TRADING	2	56,811	56,811	67	0.43	1,704	+3.00	+2.14	+5.55	8 %	+5.21	-	-	-
SC BERNSTEIN	1	19,200	19,200	91	0.12	768	+4.00	+2.14	+1.89	38 %	+2.55	-	-	91
YAMNER & CO	<1	11,200	11,200	71	0.37	112	+1.00	+2.14	+19.14	1 %	+16.80	-	-	-
LIQUIDNET	<1	17,789	17,789	73	0.35	356	+2.00	+2.14	+4.51	13 %	+3.17	-	-	19
UBS	<1	5,200	5,200	4	2.10	52	+1.00	+2.14	58.46	99 %	60.80	-	-	95



(+) = Cost

TRADE CYCLE DETAIL

HUBER CAPITAL MANAGEMENT Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
Grand Total	6	5,029	331,900	69	0.40	2,170	+0.65	+2.14	1.39	85 %	4.08	92	92	88
UBS	3	2,576	115,900	65	0.46	985	+0.85	+2.14	1.85	88 %	4.34	94	93	93
CITIGROUP	2	18,460	184,600	89	0.14	369	+0.20	+2.14	+1.25	50 %	1.89	35	88	13
JP MORGAN CHASE	<1	3,163	25,300	34	0.94	759	+3.00	+2.14	16.90	99 %	17.24	97	91	99
CREDIT RESEARCH & TR	<1	4,000	4,000	43	0.78	40	+1.00	+2.14	5.64	95 %	7.98	-	-	19
MERRILL LYNCH	<1	1,100	1,100	43	0.77	7	+0.60	+2.14	10.55	98 %	13.29	99	99	1
FRIEDMAN BILLINGS	<1	1,000	1,000	28	1.05	10	+1.00	+2.14	15.51	99 %	17.85	-	-	-



(+) = Cost

TRADE CYCLE DETAIL

UBS GLOBAL ASSET MGMT Performance (Full Day VWAP)

						COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
Grand Total	10	2,848	395,894	55	0.60	9,739	+2.46	+2.14	+3.06	24 %	+2.18	94	78	5
BROADCORT CAPITAL	2	4,428	70,840	70	0.38	1,980	+2.80	+2.14	+3.00	24 %	+2.46	91	-	-
MERRILL LYNCH	2	3,809	76,170	51	0.66	2,115	+2.78	+2.14	1.04	83 %	1.60	95	10	1
CREDIT SUISSE	1	1,768	42,441	49	0.68	1,042	+2.45	+2.14	+12.16	1 %	+11.27	42	4	1
APEX CLEARING CORP	<1	3,434	24,040	49	0.68	481	+2.00	+2.14	9.37	98 %	10.71	-	-	-
GOLDMAN SACHS	<1	5,179	46,615	67	0.42	416	+0.89	+2.14	+10.51	1 %	+8.06	92	99	77
STATE STREET BANK	<1	1,240	12,404	42	0.80	202	+1.63	+2.14	5.47	95 %	7.18	62	-	-
PERSHING	<1	4,750	9,500	61	0.51	359	+3.77	+2.14	+7.92	4 %	+8.36	-	9	96
BAIRD, ROBERT W	<1	998	9,975	82	0.23	365	+3.66	+2.14	+1.70	41 %	+2.02	98	29	5
JP MORGAN CHASE	<1	5,173	31,036	67	0.43	760	+2.45	+2.14	0.74	79 %	1.63	87	10	99
MORGAN STANLEY	<1	2,761	8,284	37	0.88	191	+2.30	+2.14	+13.82	1 %	+12.78	99	1	92
COWEN & CO	<1	9,312	9,312	26	1.10	186	+2.00	+2.14	+20.29	1 %	+18.95	-	-	99
PIPER JAFFRAY	<1	2,560	12,798	55	0.60	411	+3.21	+2.14	3.04	92 %	3.17	-	43	1
CITIGROUP	<1	4,876	9,752	49	0.69	305	+3.13	+2.14	+3.23	22 %	+3.02	77	-	-
UBS	<1	999	1,997	73	0.34	50	+2.50	+2.14	+29.10	1 %	+28.26	-	-	-
ISI GROUP INC	<1	1,081	2,162	3	2.26	73	+3.38	+2.14	33.48	99 %	33.44	-	-	-
WILLIAM BLAIR	<1	3,121	6,241	75	0.32	218	+3.50	+2.14	+1.26	50 %	+1.42	-	99	-
SC BERNSTEIN	<1	1,247	4,987	93	0.09	141	+2.83	+2.14	+0.32	69 %	0.18	9	84	-
JEFFERIES & CO	<1	1,403	2,806	31	1.00	75	+2.68	+2.14	11.64	98 %	12.30	65	89	1
OPPENHEIMER & CO INC	<1	2,350	4,700	42	0.80	102	+2.17	+2.14	+13.61	1 %	+12.44	99	-	-
CONVERGEX	<1	1,523	3,045	88	0.16	76	+2.50	+2.14	+0.66	65 %	0.18	-	88	-



(+) = Cost

TRADE CYCLE DETAIL

UBS GLOBAL ASSET MGMT Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
WEDBUSH MORGAN SEC	<1	1,456	2,911	82	0.23	87	+3.00	+2.14	0.14	74 %	0.48	-	-	-
RBC CAPITAL MARKETS	<1	2,900	2,900	25	1.11	87	+3.00	+2.14	9.55	98 %	9.89	7	-	-
STIFEL NICOLAUS & CO	<1	259	778	72	0.36	12	+1.50	+2.14	1.70	87 %	3.54	60	-	-
BARCLAYS	<1	100	100	37	0.88	4	+4.00	+2.14	+15.68	1 %	+16.34	90	-	-
WEEDEN & CO	<1	100	100	81	0.25	2	+1.60	+2.14	3.00	92 %	4.74	76	96	-



(+) = Cost

TRADE CYCLE DETAIL

URDANG SECURITIES MANAGEMENT Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
Grand Total	34	2,706	979,661	51	0.66	32,837	+3.35	+2.14	+0.37	68 %	+0.38	66	75	56
LIQUIDNET	9	2,680	262,596	51	0.66	7,251	+2.76	+2.14	0.59	78 %	1.17	91	83	85
JP MORGAN CHASE	5	2,760	154,562	50	0.67	4,880	+3.16	+2.14	+0.77	62 %	+0.59	5	82	92
CAPITAL INSTL SVCS	4	3,076	126,130	61	0.51	4,577	+3.63	+2.14	+3.35	21 %	+3.63	27	80	28
CITIGROUP	3	4,711	127,210	37	0.89	4,442	+3.49	+2.14	+5.85	8 %	+6.00	91	43	8
WELLS FARGO	2	3,529	67,060	49	0.68	2,127	+3.17	+2.14	10.83	98 %	11.00	10	48	49
UBS	2	1,361	25,850	53	0.63	1,167	+4.51	+2.14	+4.70	12 %	+5.87	73	43	85
CREDIT SUISSE	1	2,287	29,725	44	0.77	1,363	+4.58	+2.14	+3.40	20 %	+4.65	17	58	24
MORGAN STANLEY	1	2,678	29,460	49	0.68	1,272	+4.32	+2.14	+4.99	11 %	+5.96	16	78	1
JEFFERIES & CO	<1	2,911	23,290	65	0.45	969	+4.16	+2.14	+0.51	66 %	+1.33	1	56	54
BARCLAYS	<1	2,138	17,102	81	0.24	705	+4.12	+2.14	3.94	93 %	3.16	99	99	92
ISI GROUP INC	<1	2,447	17,130	54	0.61	857	+5.00	+2.14	+8.99	2 %	+10.65	44	89	29
GREEN STREET	<1	1,516	18,186	58	0.55	784	+4.31	+2.14	3.09	92 %	2.12	94	80	95
ITG	<1	1,202	15,630	64	0.47	445	+2.84	+2.14	+4.07	15 %	+3.58	79	94	93
STIFEL NICOLAUS & CO	<1	3,573	28,580	43	0.78	851	+2.98	+2.14	6.72	96 %	7.08	95	1	96
BMO CAPITAL MARKETS	<1	2,764	19,350	50	0.67	774	+4.00	+2.14	0.82	80 %	0.16	51	-	37
RAYMOND JAMES	<1	1,117	7,820	70	0.39	173	+2.22	+2.14	4.47	95 %	5.59	93	88	5
MERRILL LYNCH	<1	690	690	5	1.98	0	+0.00	+2.14	147.01	99 %	150.35	1	83	91
GOLDMAN SACHS	<1	4,640	4,640	5	1.98	0	+0.00	+2.14	30.09	99 %	33.43	99	48	89
DEUTSCHE BANK	<1	1,100	3,300	40	0.82	134	+4.05	+2.14	5.07	95 %	4.37	93	88	74
KEYBANC	<1	450	1,350	16	1.36	68	+5.00	+2.14	15.00	99 %	13.34	5	99	69



(+) = Cost

TRADE CYCLE DETAIL

WEATHERBIE Performance (Full Day VWAP)

						COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
Grand Total	36	2,117	1,058,714	61	0.51	41,930	+3.96	+2.14	+1.49	46 %	+2.11	68	82	18
ITG	17	1,869	463,592	61	0.51	18,544	+4.00	+2.14	+2.19	33 %	+2.85	21	75	74
THEMIS TRADING LLC	8	2,024	192,277	65	0.46	7,691	+4.00	+2.14	+4.50	13 %	+5.16	12	18	8
WILLIAM BLAIR	2	4,641	74,262	61	0.51	2,970	+4.00	+2.14	7.44	97 %	6.78	98	22	92
LIQUIDNET	2	2,781	63,968	52	0.64	2,559	+4.00	+2.14	+0.93	58 %	+1.59	90	99	95
STATE STREET BANK	2	2,177	47,892	58	0.56	1,916	+4.00	+2.14	+2.85	26 %	+3.51	75	10	21
JEFFERIES & CO	<1	2,763	52,493	54	0.61	2,100	+4.00	+2.14	+4.46	13 %	+5.12	99	93	48
BAIRD, ROBERT W	<1	1,528	13,754	55	0.60	550	+4.00	+2.14	1.95	89 %	1.29	1	99	1
CANTOR FITZGERALD	<1	1,090	19,620	27	1.06	392	+2.00	+2.14	0.23	75 %	1.57	78	1	38
STIFEL NICOLAUS & CO	<1	1,843	14,745	74	0.34	590	+4.00	+2.14	+0.99	56 %	+1.65	66	70	99
GOLDMAN SACHS	<1	3,498	20,989	57	0.57	813	+3.87	+2.14	5.47	95 %	4.94	1	1	8
COWEN & CO	<1	2,090	12,537	74	0.33	501	+4.00	+2.14	+6.84	6 %	+7.50	89	98	1
STEPHENS & CO INC	<1	1,764	14,109	55	0.60	564	+4.00	+2.14	+10.15	1 %	+10.81	33	88	1
OPPENHEIMER & CO INC	<1	8,252	24,756	94	0.08	990	+4.00	+2.14	0.37	76 %	+0.29	94	99	98
LEERINK SWANN	<1	2,759	11,035	80	0.26	441	+4.00	+2.14	7.47	97 %	6.81	1	99	1
CITIGROUP	<1	1,517	10,617	52	0.64	425	+4.00	+2.14	+7.04	6 %	+7.70	99	99	64
NEEDHAM & CO INC	<1	8,223	8,223	53	0.62	329	+4.00	+2.14	15.22	99 %	14.56	1	10	92
PIPER JAFFRAY	<1	2,765	5,530	59	0.53	221	+4.00	+2.14	11.70	98 %	11.04	31	1	16
WELLS FARGO	<1	1,999	3,998	29	1.04	160	+4.00	+2.14	19.36	99 %	18.70	96	99	6
DEUTSCHE BANK	<1	1,320	2,640	65	0.46	106	+4.00	+2.14	+5.14	10 %	+5.80	99	80	95
MORGAN STANLEY	<1	1,677	1,677	32	0.96	67	+4.00	+2.14	6.90	96 %	6.24	97	99	28



(+) = Cost

TRADE CYCLE DETAIL

WEDGE CAPITAL MGMT LLP Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
Grand Total	9	2,274	386,501	66	0.44	13,024	+3.37	+2.14	+5.95	7 %	+5.98	33	78	76
BROADCORT CAPITAL	<1	6,832	34,162	55	0.59	1,230	+3.60	+2.14	+0.67	64 %	+0.93	66	81	74
CANTOR FITZGERALD	<1	3,533	45,933	85	0.19	1,654	+3.60	+2.14	+0.18	70 %	+0.44	13	1	15
WEEDEN & CO	<1	2,228	28,961	64	0.46	1,043	+3.60	+2.14	+3.72	18 %	+3.98	-	97	-
JEFFERIES & CO	<1	1,483	26,702	66	0.45	961	+3.60	+2.14	3.49	93 %	3.23	25	98	96
WELLS FARGO	<1	1,391	37,555	73	0.34	1,352	+3.60	+2.14	+5.88	8 %	+6.14	93	99	89
KNIGHT CAPITAL	<1	6,150	12,300	28	1.04	246	+2.00	+2.14	+173.64	1 %	+172.30	26	96	91
JONES TRADING	<1	2,776	36,089	82	0.23	606	+1.68	+2.14	+0.43	66 %	1.23	99	96	85
MORGAN STANLEY	<1	11,050	22,100	88	0.15	796	+3.60	+2.14	+2.86	26 %	+3.12	-	65	98
SC BERNSTEIN	<1	2,952	29,524	59	0.54	1,063	+3.60	+2.14	+4.89	11 %	+5.15	1	-	89
RAYMOND JAMES	<1	2,349	9,396	77	0.30	338	+3.60	+2.14	4.26	94 %	4.00	93	-	99
WUNDERLICH SECUR	<1	6,567	19,700	83	0.21	709	+3.60	+2.14	1.43	86 %	1.17	93	13	96
BARCLAYS	<1	1,322	11,900	72	0.36	428	+3.60	+2.14	0.25	75 %	+0.01	5	67	42
STATE STREET BANK	<1	1,370	6,848	65	0.45	247	+3.60	+2.14	0.48	77 %	0.22	-	-	97
OPPENHEIMER & CO INC	<1	838	10,898	72	0.36	392	+3.60	+2.14	1.24	84 %	0.98	-	-	-
STIFEL NICOLAUS & CO	<1	3,984	7,968	55	0.60	287	+3.60	+2.14	31.80	99 %	31.54	-	88	64
CITIGROUP	<1	801	11,217	56	0.59	404	+3.60	+2.14	2.14	90 %	1.88	1	99	42
JP MORGAN CHASE	<1	1,410	9,869	59	0.53	355	+3.60	+2.14	+1.09	53 %	+1.35	99	99	76
KEEFE BRUYETTE WOODS	<1	1,283	8,979	77	0.29	323	+3.60	+2.14	0.64	78 %	0.38	91	89	73
GOLDMAN SACHS	<1	2,700	2,700	81	0.24	97	+3.60	+2.14	+5.49	8 %	+5.75	99	1	-
UBS	<1	10,500	10,500	78	0.28	378	+3.60	+2.14	9.06	97 %	8.80	73	-	-



(+) = Cost

TRADE CYCLE DETAIL

WEDGE CAPITAL MGMT LLP Performance (Full Day VWAP)



Broker	Principal Traded (USD/Mil)	Shares Per Order	Total Shares	E - Score Rank	E - Score	COMMISSION			MARKET IMPACT		TOTAL COST/SAVINGS	RANK TREND - Full Day VWAP		
						Commission (USD)	Your Avg. Commission (cps)	All Trading Universe (cps)	Full Day VWAP (cps)	Rank Full Day VWAP	Commission + Full Day VWAP Vs. Universe	20161ST (%)	20154TH (%)	20153RD (%)
SCOTIA CAPITAL	<1	3,200	3,200	8	1.71	115	+3.60	+2.14	+35.85	1 %	+36.11	93	-	-



(+) = Cost

TRADE DETAIL ANALYSIS

Largest Shares Volume Traded

							Market Impact
Security	# Orders	Shares	US Dollars	Commission (cps)	% of Volume	E - Score	Full Day VWAP (cps)
ESV	13	211,200	2,121,416	+0.46	0.05%	0.16	0.32
WPX	15	120,820	935,078	+4.09	0.07%	0.78	6.41
EXAM	22	104,235	3,583,109	+3.94	0.49%	0.41	0.65
CBL	17	99,400	1,020,777	+2.62	0.09%	0.54	+5.54
VRX	1	83,066	2,988,482	+3.00	0.34%	0.25	7.12
FRAN	27	80,250	1,199,298	+3.90	0.30%	0.63	+4.25
DRH	9	79,800	732,357	+2.00	0.27%	0.79	3.23
DISCK	6	76,400	2,056,919	+2.71	0.84%	0.41	+5.25
JPM	4	74,100	4,705,531	+3.21	0.16%	0.69	+2.44
SRC	10	72,690	831,292	+2.11	0.09%	1.25	+0.18

Names Most Traded - Total Orders

							Market Impact
Security	# Orders	Shares	US Dollars	Commission (cps)	% of Volume	E - Score	Full Day VWAP (cps)
ADBE	35	28,043	2,667,956	+1.97	0.04%	0.50	0.02
EXAM	22	104,235	3,583,109	+3.94	0.49%	0.41	0.65
AAPL	15	47,988	4,635,043	+1.81	0.01%	0.31	1.08
SRCL	15	26,983	2,596,223	+2.22	0.07%	0.25	1.46
WCN	11	53,092	3,744,403	+3.49	0.24%	0.72	+16.10
C	9	54,200	2,442,509	+2.39	0.03%	0.19	+4.29
KHC	6	32,400	2,549,291	+2.92	0.24%	0.75	17.30
JPM	4	74,100	4,705,531	+3.21	0.16%	0.69	+2.44
BABA	2	33,000	2,608,325	+1.16	0.17%	0.35	+3.73
VRX	1	83,066	2,988,482	+3.00	0.34%	0.25	7.12



(+) = Cost

TRADE CONTRIBUTIONS

Cost\Savings Performance				
Category	Principal USD	# of Trades	Avg. Market Impact (cps)	Percentage of all Cost\Savings
10 High Cost Trades	10,082,930	10	+52.45	18.99%
Cost Trades	108,288,474	2,868	+23.53	100.00%
Saving Trades	91,234,458	2,590	22.17	100.00%
10 Low Cost Trades	7,892,064	10	89.97	14.89%





(+) = Cost

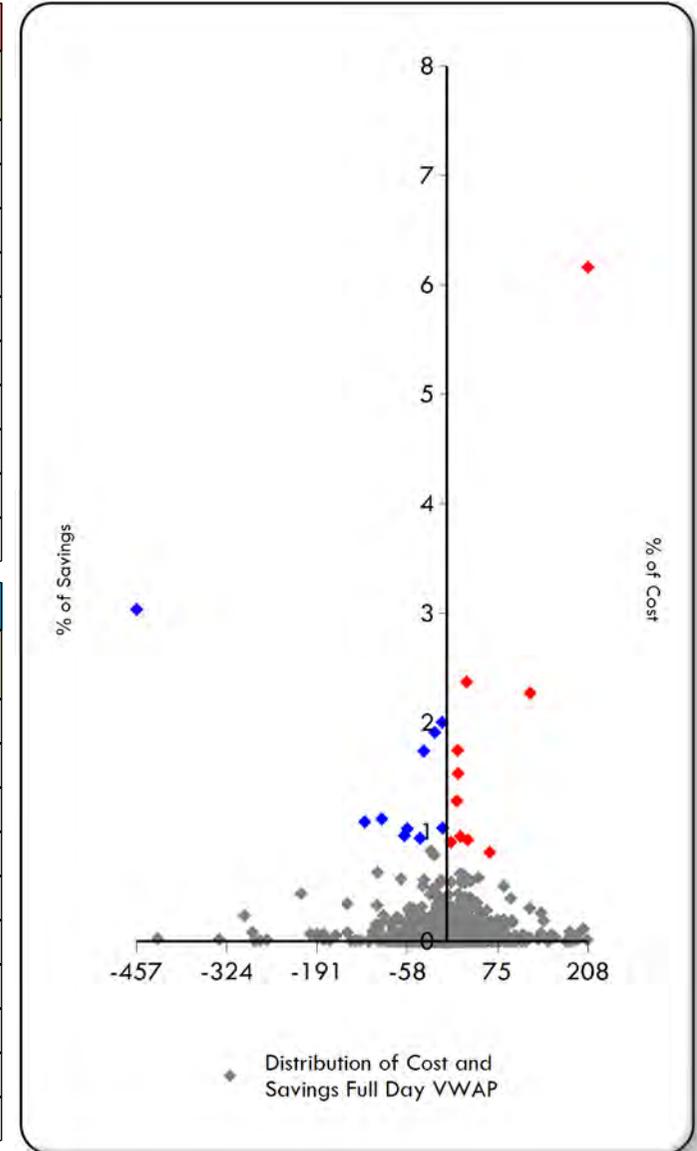
TRADE LEVEL DETAILS

10 High Cost Trades (Full Day VWAP)

Side	Security	Trade Date	Shares	Cost (%)	E - Score	Full Day VWAP (cps)	Manager	Broker
Sell	AAWW	2016/05/05	10,300	6.16	1.22	+207.53	WEDGE CAPI	KNIGHT CAP
Sell	BXLT	2016/06/02	28,495	2.37	2.81	+28.90	ALLIANCE R	MORGAN STA
Sell	WCN	2016/05/31	6,440	2.27	1.80	+122.44	ALLIANCE R	MORGAN STA
Buy	JPM	2016/04/19	38,500	1.75	0.62	+15.76	EAGLE CAPI	CAPITAL IN
Buy	EXAS	2016/06/30	32,542	1.54	0.39	+16.39	UBS GLOBAL	GOLDMAN SA
Sell	BABA	2016/05/16	30,334	1.28	0.25	+14.70	EAGLE CAPI	GOLDMAN SA
Buy	PTEN	2016/04/28	16,881	0.96	0.77	+19.73	UBS GLOBAL	MERRILL LY
Buy	CAVM	2016/05/02	10,545	0.93	0.79	+30.58	UBS GLOBAL	CREDIT SUI
Sell	DISCK	2016/06/02	56,811	0.91	0.43	+5.55	EAGLE CAPI	JONES TRAD
Buy	RDS/A	2016/04/12	4,500	0.82	1.27	+62.93	HUBER CAPI	UBS

10 Low Cost Trades (Full Day VWAP)

Side	Security	Trade Date	Shares	Savings (%)	E - Score	Full Day VWAP (cps)	Manager	Broker
Buy	SSS	2016/05/20	1,960	3.04	2.66	456.70	URDANG SEC	WELLS FARG
Sell	VRX	2016/04/22	83,066	2.00	0.25	7.12	EAGLE CAPI	CAPITAL IN
Sell	KHC	2016/04/19	31,400	1.91	0.74	17.96	EAGLE CAPI	CAPITAL IN
Buy	JPM	2016/05/12	15,000	1.74	1.56	34.23	EAGLE CAPI	CAPITAL IN
Buy	COTV	2016/05/26	3,443	1.12	2.58	95.90	WEATHERBIE	WILLIAM BL
Sell	BABA	2016/05/12	2,666	1.09	1.49	120.99	EAGLE CAPI	CAPITAL IN
Buy	BAC	2016/05/12	48,300	1.04	0.74	6.33	EAGLE CAPI	CAPITAL IN
Buy	LBTYK	2016/06/02	5,200	1.03	2.10	58.46	EAGLE CAPI	UBS
Sell	BOFI	2016/04/14	4,560	0.97	0.72	62.61	WEATHERBIE	THEMIS TRA
Buy	EXAS	2016/06/30	7,058	0.94	0.94	39.43	UBS GLOBAL	MERRILL LY





(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

AAWW - 2016/05/05

Side	Manager	Broker	Time In (EST)	Time Out (EST)	Shares	Client Price (USD)	Full Day VWAP (USD)	Cost Full Day VWAP (USD)	Cost Full Day VWAP (cps)	E - Score	Volume (%)
Sell	WEDGE CAPITAL MGMT LLP	KNIGHT CAPITAL	05/05/2016 09:30:00	05/05/2016 16:00:00	10,300	47.9018	49.9771	+21,375	+207.53	1.22	0.25



NOTES

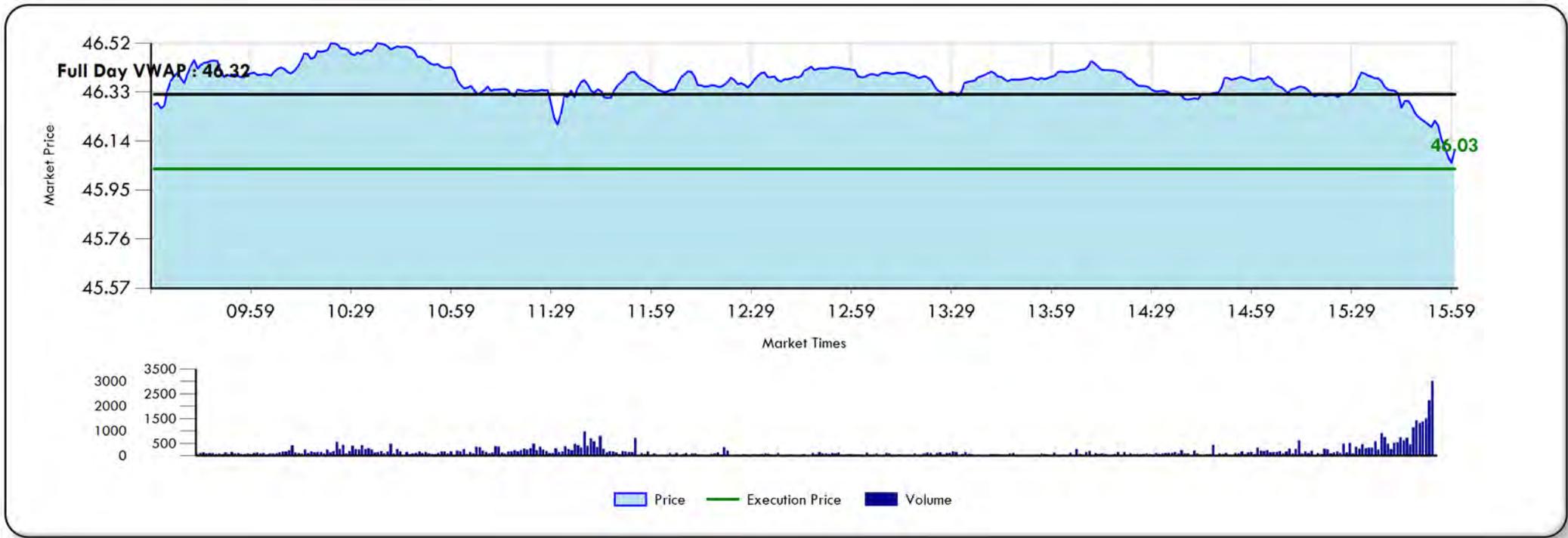
- Out of all your high cost trades that lost to Full Day VWAP, this order made up 6.16% of your market impact cost.

(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

BXLT - 2016/06/02

Side	Manager	Broker	Time In (EST)	Time Out (EST)	Shares	Client Price USD	Full Day VWAP (USD)	Cost Full Day VWAP (USD)	Cost Full Day VWAP (cps)	E - Score	Volume (%)
Sell	ALLIANCE R 3000 CAPITAL MANAGEM	MORGAN STANLEY	06/02/2016 09:30:00	06/02/2016 16:00:00	28,495	46.0310	46.3200	+8,235	+28.90	2.81	0.04



NOTES

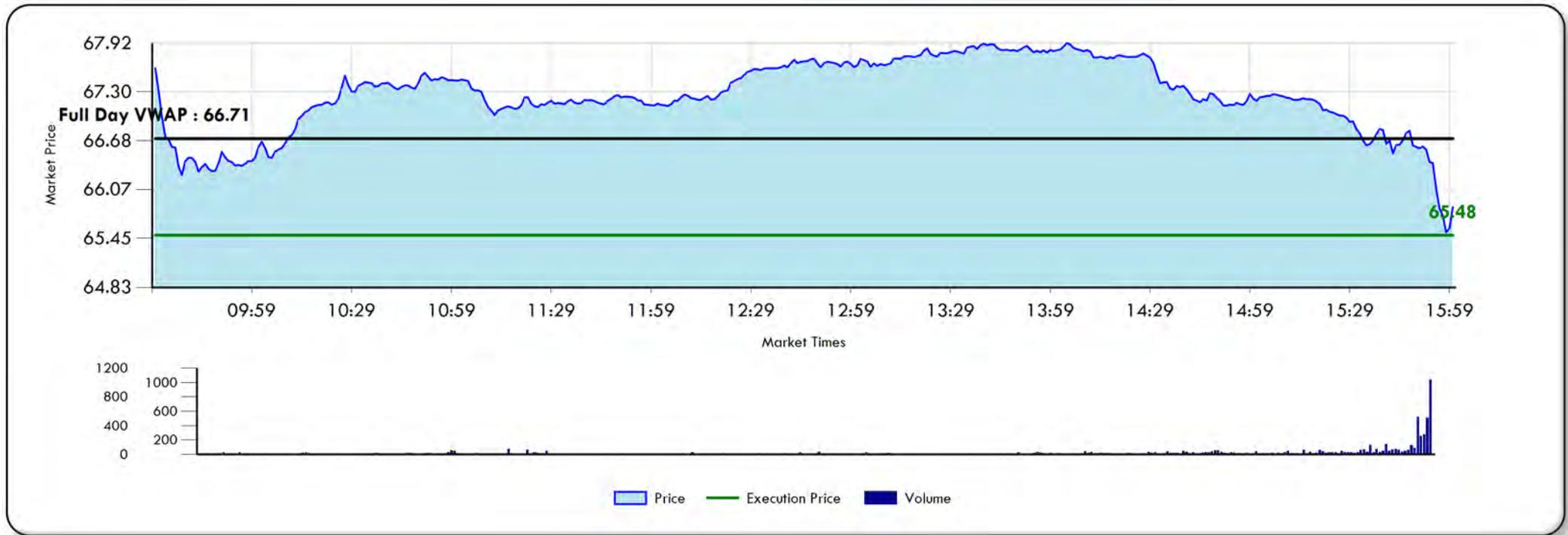
- Out of all your high cost trades that lost to Full Day VWAP, this order made up 2.37% of your market impact cost.

(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

WCN - 2016/05/31

Side	Manager	Broker	Time In (EST)	Time Out (EST)	Shares	Client Price (USD)	Full Day VWAP (USD)	Cost Full Day VWAP (USD)	Cost Full Day VWAP (cps)	E - Score	Volume (%)
Sell	ALLIANCE R 3000 CAPITAL MANAGEM	MORGAN STANLEY	05/31/2016 09:30:00	05/31/2016 16:00:00	6,440	65.4846	66.7089	+7,885	+122.44	1.80	0.08



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 2.27% of your market impact cost.

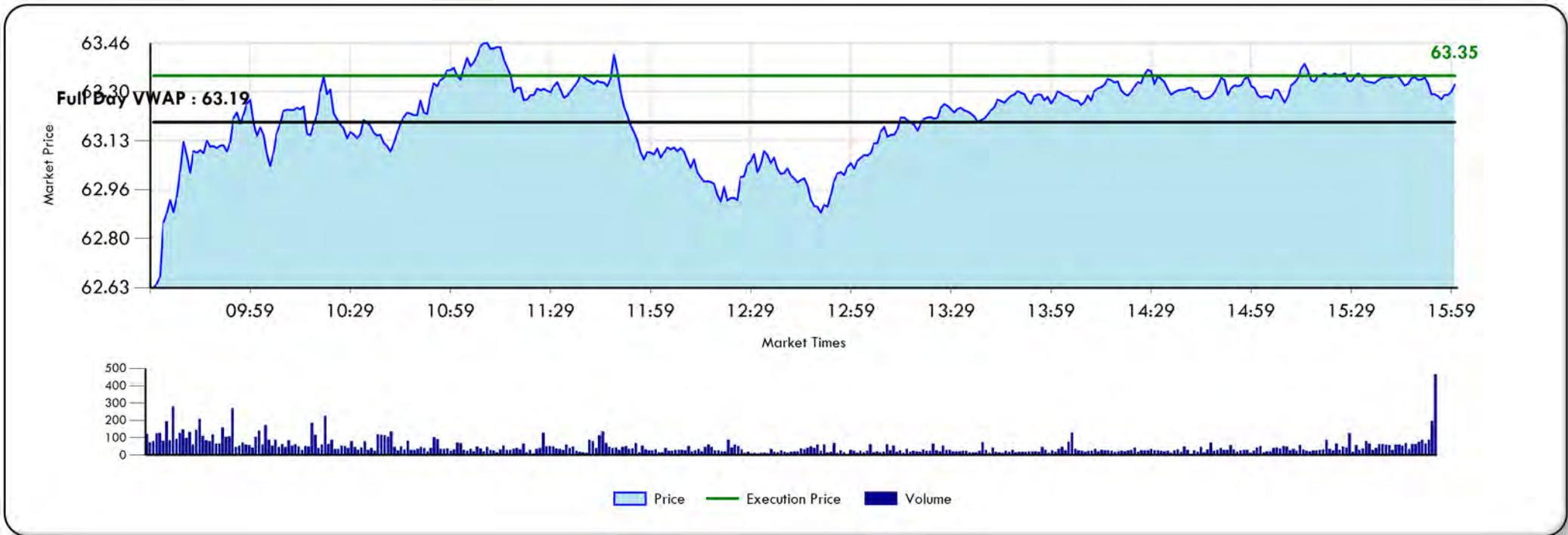


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

JPM - 2016/04/19

Side	Manager	Broker	Time In (EST)	Time Out (EST)	Shares	Client Price (USD)	Full Day VWAP (USD)	Cost Full Day VWAP (USD)	Cost Full Day VWAP (cps)	E - Score	Volume (%)
Buy	EAGLE CAPITAL MANAGEMENT	CAPITAL INSTL SVCS	04/19/2016 09:30:00	04/19/2016 16:00:00	38,500	63.3500	63.1924	+6,069	+15.76	0.62	0.21



NOTES

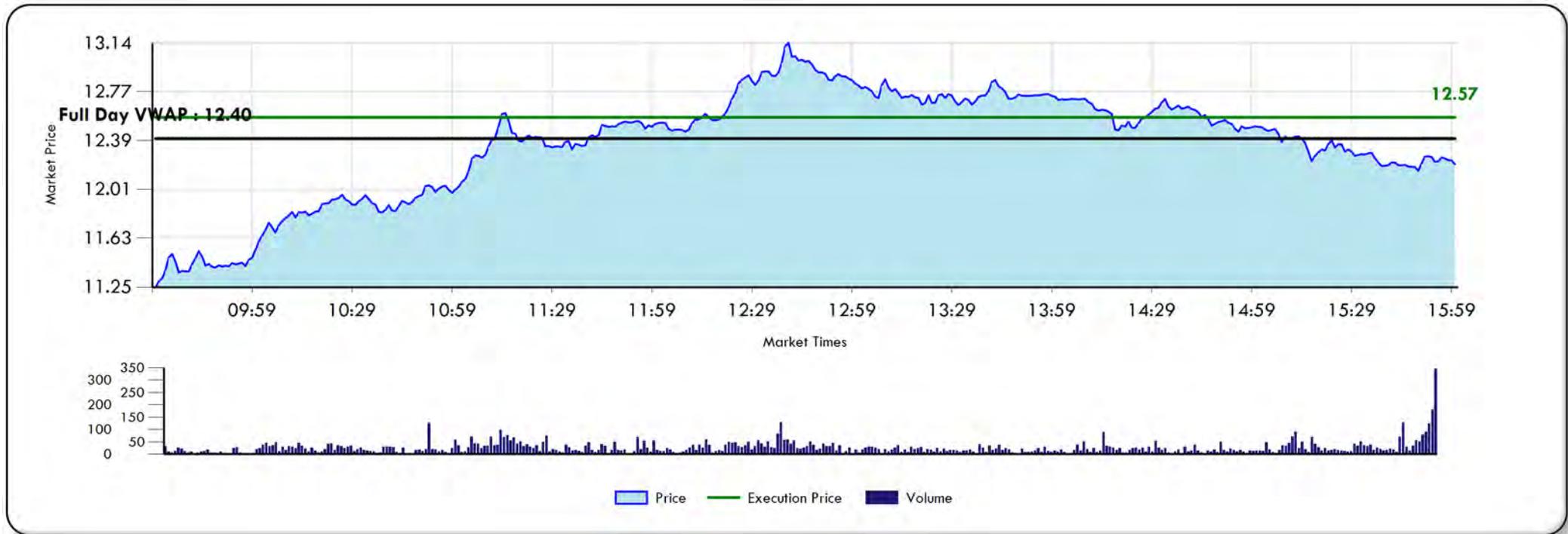
- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.75% of your market impact cost.

(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

EXAS - 2016/06/30

Side	Manager	Broker	Time In (EST)	Time Out (EST)	Shares	Client Price (USD)	Full Day VWAP (USD)	Cost Full Day VWAP (USD)	Cost Full Day VWAP (cps)	E - Score	Volume (%)
Buy	UBS GLOBAL ASSET MGMT	GOLDMAN SACHS	06/30/2016 09:30:00	06/30/2016 16:00:00	32,542	12.5659	12.4021	+5,332	+16.39	0.39	0.33



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.54% of your market impact cost.

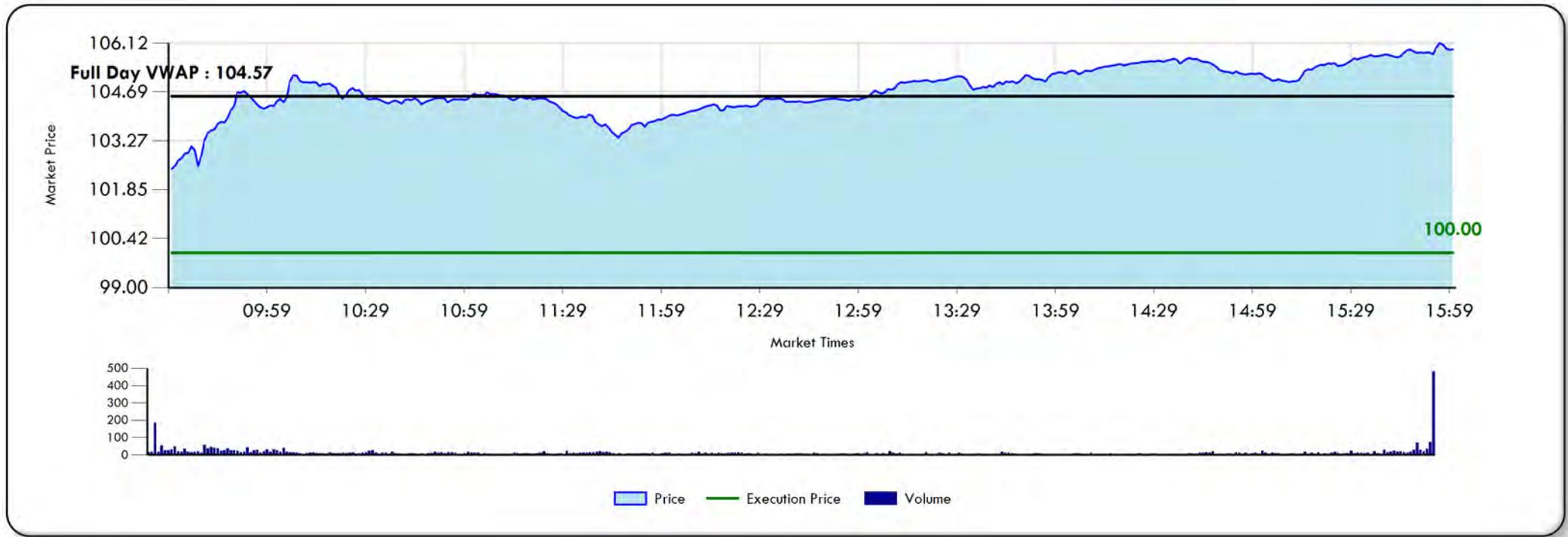


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

SSS - 2016/05/20

Side	Manager	Broker	Time In (EST)	Time Out (EST)	Shares	Client Price (USD)	Full Day VWAP (USD)	Cost Full Day VWAP (USD)	Cost Full Day VWAP (cps)	E - Score	Volume (%)
Buy	URDANG SECURITIES MANAGEMENT	WELLS FARGO	05/20/2016 09:30:00	05/20/2016 16:00:00	1,960	100.0000	104.5670	8,951	456.70	2.66	0.05



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 3.04% of your market impact savings.



(+) = Cost

TRADE LEVEL DETAIL - LOW COST

VRX - 2016/04/22

Side	Manager	Broker	Time In (EST)	Time Out (EST)	Shares	Client Price (USD)	Full Day VWAP (USD)	Cost Full Day VWAP (USD)	Cost Full Day VWAP (cps)	E - Score	Volume (%)
Sell	EAGLE CAPITAL MANAGEMENT	CAPITAL INSTL SVCS	04/22/2016 09:30:00	04/22/2016 16:00:00	83,066	35.9772	35.9060	5,911	7.12	0.25	0.34



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 2.00% of your market impact savings.

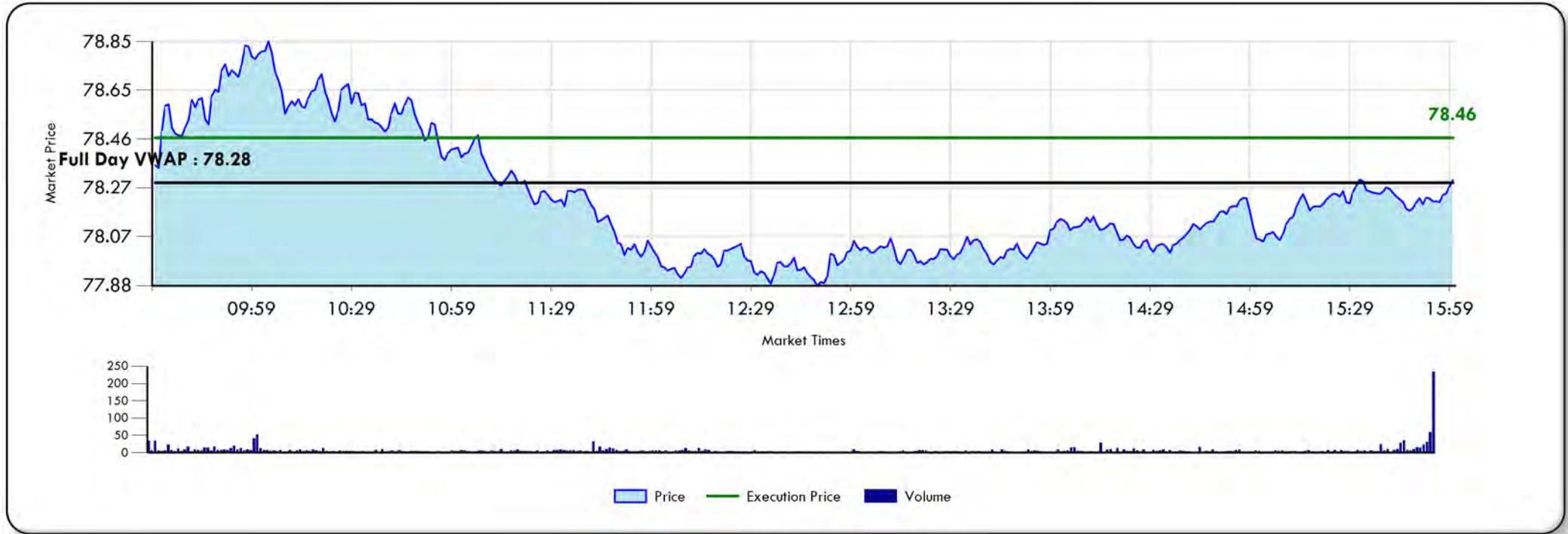


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

KHC - 2016/04/19

Side	Manager	Broker	Time In (EST)	Time Out (EST)	Shares	Client Price (USD)	Full Day VWAP (USD)	Cost Full Day VWAP (USD)	Cost Full Day VWAP (cps)	E - Score	Volume (%)
Sell	EAGLE CAPITAL MANAGEMENT	CAPITAL INSTL SVCS	04/19/2016 09:30:00	04/19/2016 16:00:00	31,400	78.4642	78.2847	5,638	17.96	0.74	1.36



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 1.91% of your market impact savings.

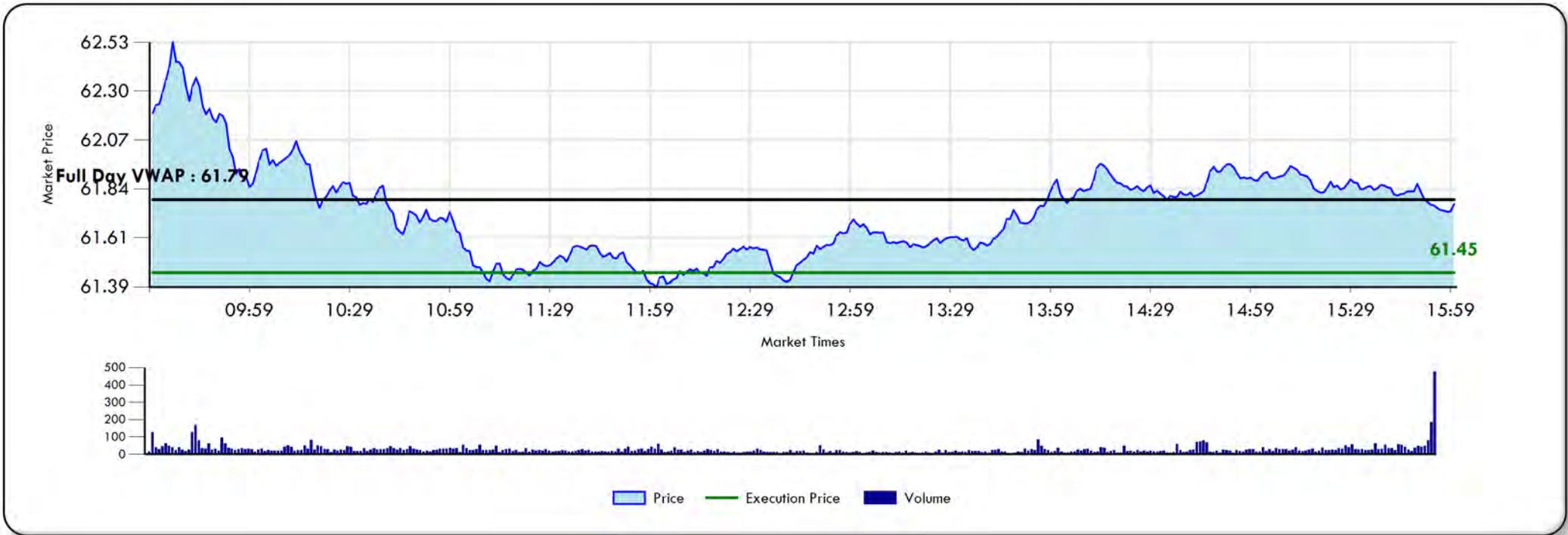


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

JPM - 2016/05/12

Side	Manager	Broker	Time In (EST)	Time Out (EST)	Shares	Client Price (USD)	Full Day VWAP (USD)	Cost Full Day VWAP (USD)	Cost Full Day VWAP (cps)	E - Score	Volume (%)
Buy	EAGLE CAPITAL MANAGEMENT	CAPITAL INSTL SVCS	05/12/2016 09:30:00	05/12/2016 16:00:00	15,000	61.4500	61.7923	5,134	34.23	1.56	0.15



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 1.74% of your market impact savings.

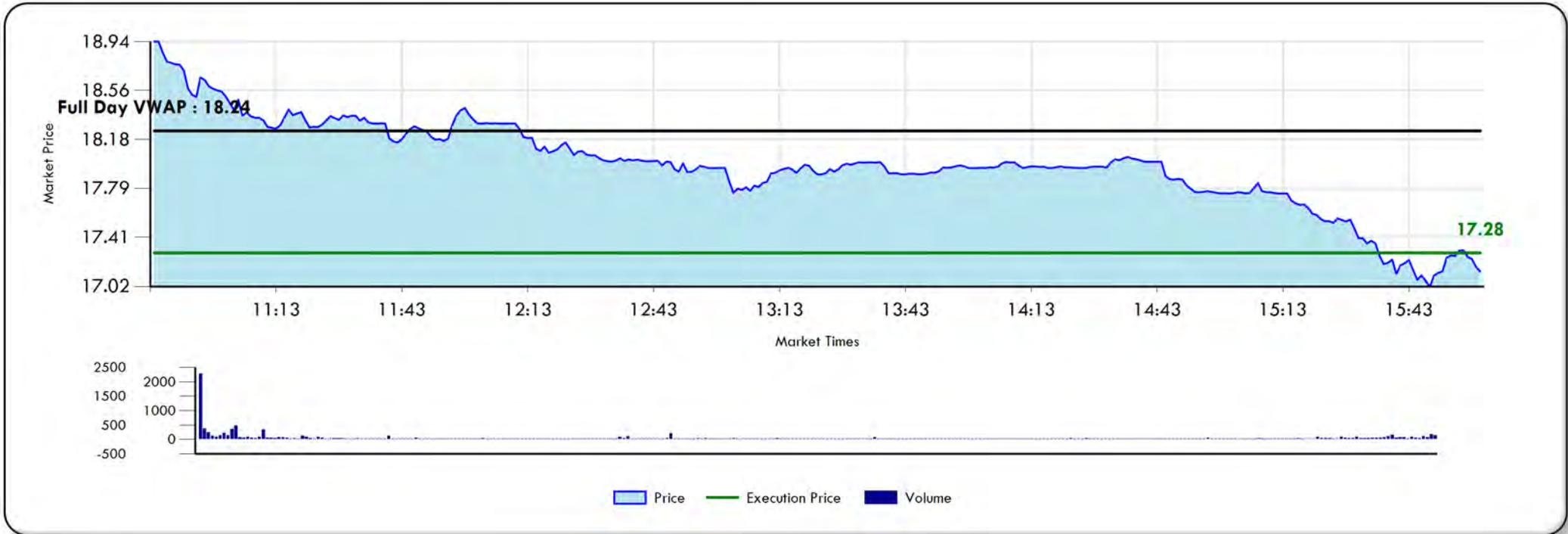


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

COTV - 2016/05/26

Side	Manager	Broker	Time In (EST)	Time Out (EST)	Shares	Client Price (USD)	Full Day VWAP (USD)	Cost Full Day VWAP (USD)	Cost Full Day VWAP (cps)	E - Score	Volume (%)
Buy	WEATHERBIE	WILLIAM BLAIR	05/26/2016 09:30:00	05/26/2016 16:00:00	3,443	17.2837	18.2427	3,302	95.90	2.58	0.03



NOTES

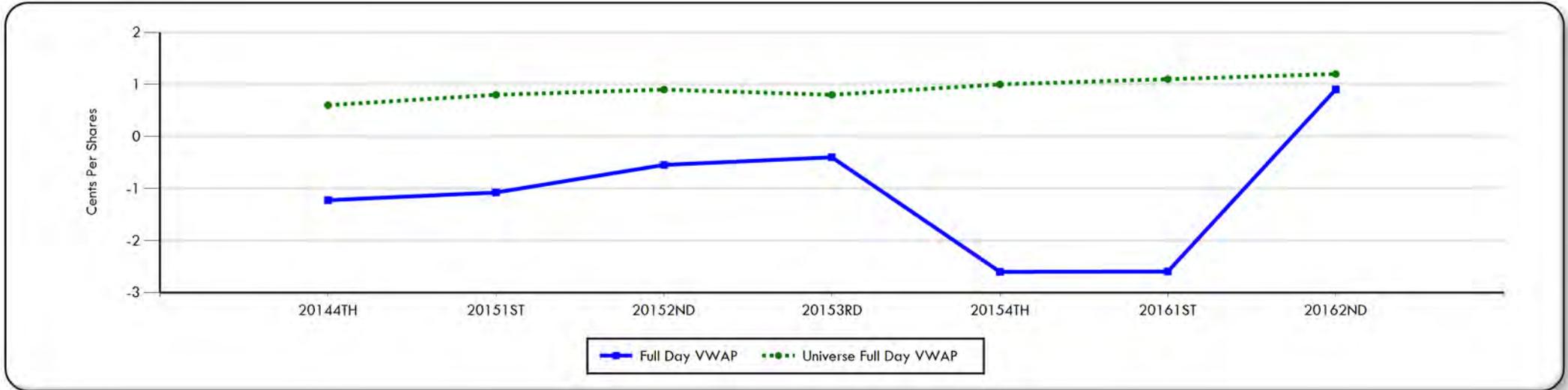
- Out of all your low cost trades that beat to Full Day VWAP, this order made up 1.12% of your market impact savings.



(+) = Cost

TRADE HISTORY

Trade History						
Period	Total Shares	Total Dollars Traded	Commission		Full Day VWAP	Full Day VWAP Universe Rank
			(cps)	(\$)	(cps)	(%)
20144TH	3,513,494	119,545,745	+3.15	110,697	1.23	78
20151ST	2,458,738	89,514,764	+3.38	83,165	1.08	78
20152ND	4,973,211	203,371,426	+2.63	130,933	0.55	73
20153RD	3,703,701	131,933,893	+3.26	120,764	0.40	70
20154TH	4,115,237	141,230,488	+3.13	128,699	2.60	86
20161ST	3,048,612	94,866,660	+3.15	96,160	2.60	89
20162ND	5,778,580	199,522,932	+2.59	149,738	+0.90	59



Note on Universes:

Universes constructed of preferred securities are exclusive of fixed income transactions such as convertible bonds

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SACRAMENTO COUNTY

US Fixed Income Analysis

Period End June 30, 2016



Sacramento County
Period End June 30, 2016
(US Fixed Income Analysis)

EXECUTIVE SUMMARY

Elkins/McSherry has been providing trading cost analyses to institutional investors since 1991. During that time we have produced Post-Trade Cost Analyses for many of the worlds largest investment managers, pension funds, banks, and broker dealers. Using this vast experience combined with an un-matched collection of global fixed income market and Universe data, Elkins/McSherry has recently produced a Trading Cost Analysis on behalf of Sacramento County. This study evaluates U.S. fixed income executions from April 01,2016 to June 30,2016. The analysis included trading of 801 trades in 269 different issues representing \$619,129,684 in principal across mortgages, governments and corporates.

Methodology:

The Elkins/McSherry analysis measures trading efficiency by quantifying the cost of each trade by comparing your executed price to the average price or benchmark price on the day of the trade and to the Elkins/McSherry U.S. Fixed Income Trading Cost Universe. Daily prices are calculated from Market Axess, Tullett Prebon, Bloomberg and Reuters. For comparison purposes, Elkins/McSherry establishes average institutional trading costs quarterly for the most actively traded U.S.treasury, corporates, agencies, mortgages and municipal issues. The "Universe" is the average trading cost incurred by pension funds, investment managers, banks and brokers for Treasuries, Corporates, Agencies, Mortgages and Municipals. Benchmark prices are calculated by using the following methodologies: Government Bonds – Average of six indicative prices received from Tullett Prebon. Municipal Bonds – Average of institutional sized execution prices from MSRB. If actual trade prices are not available the Elkins/McSherry analysis defaults to a fair value price from Reuters or Bloomberg. Corporate Bonds – Average of execution prices where available, from TRACE and Market Axess. If actual trade prices are not available the Elkins/McSherry analysis defaults to a fair value price from Reuters or Bloomberg. Mortgage Bonds – Reuters or Bloomberg fair value prices.

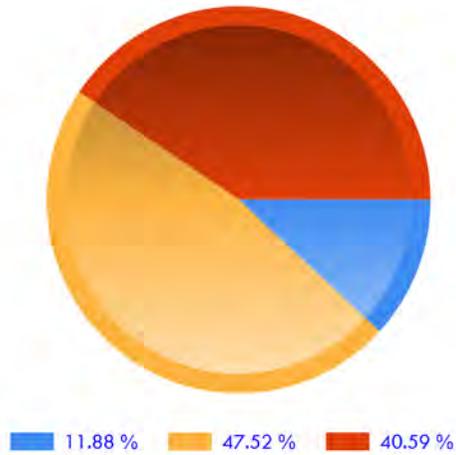
Results:

GRAND TOTAL PERFORMANCE								TRADE COST HISTORICAL PERFORMANCE				
Buy/Sell	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$)	BP	Q1 2016	Q4 2015	Q3 2015	Q2 2015
BUYS	294	377	171	26.56	0.90	+8.20	267.93	9.10	+3.79	+9.25	+13.20	+8.21
SELLS	325	424	178	41.25	1.27	+9.23	340.82	10.50	8.27	12.52	13.65	11.80
GRAND TOTAL	619	801	269	67.81	1.10	+8.74	608.75	9.84	2.72	1.69	2.27	2.72

EXECUTIVE SUMMARY

BOND TYPES PERFORMANCE								TRADE COST HISTORICAL PERFORMANCE			
Bond Type	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$) BP	Q1 2016	Q4 2015	Q3 2015	Q2 2015
Governments	296	284	84	3.26	0.11	+9.47	283.80 9.58	+0.15	0.05	+3.08	+1.36
Mortgages	252	411	92	29.32	1.17	+5.59	170.03 6.76	3.23	3.00	3.62	5.62
Corporates	71	106	93	35.22	4.93	+16.76	154.93 21.69	16.25	1.86	12.98	6.72

Bonds by Principal Traded



Historical Trade Cost Trend





EXECUTIVE SUMMARY

EXECUTION PERFORMANCE SUMMARY

Trade Size (Millions)	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$)	BP
0~2	383	734	251	82.17	2.14	+9.09	430.42	11.23
2~5	178	61	32	+15.44	+0.87	+7.67	120.71	6.80
5~10	31	4	4	6.04	1.95	+7.16	28.28	9.11
10~50	27	2	2	+4.97	+1.82	+12.55	29.35	10.73



EXECUTIVE SUMMARY

GRADING SUMMARY

Grading	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$)	BP
Govt-INVESTMENT GRADE	296	284	84	3.26	0.11	+9.47	283.80	9.58
Mtge-High Yield	250	408	90	23.98	0.96	+5.59	163.71	6.55
Corp-INVESTMENT GRADE	70	102	90	38.15	5.42	+16.72	155.73	22.14
Mtge-INVESTMENT GRADE	1	3	2	5.34	36.21	+6.64	6.32	42.85
Corp-High Yield	1	4	3	+2.93	+26.47	+19.24	+0.80	+7.23



EXECUTIVE SUMMARY

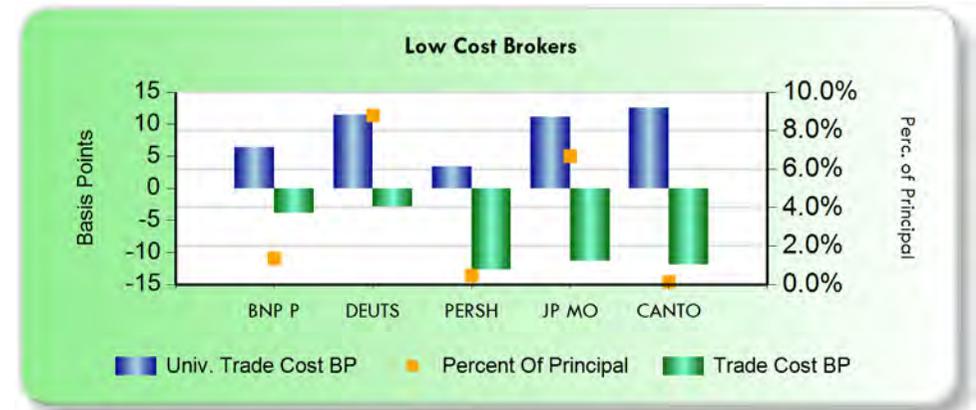
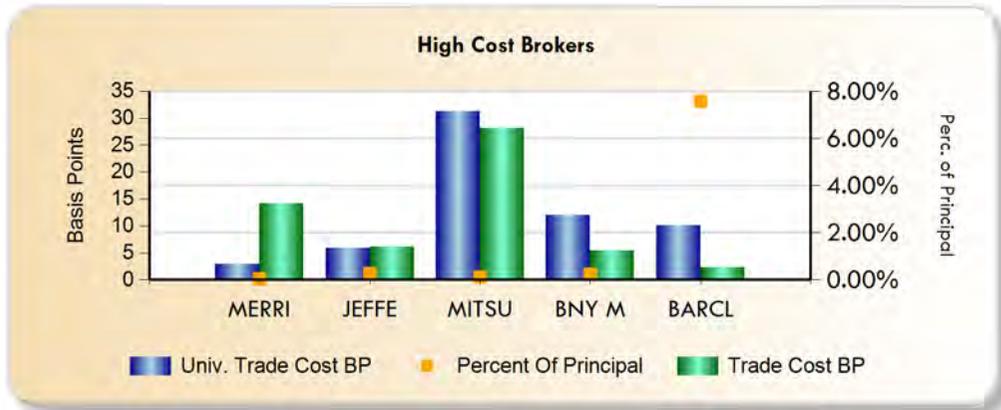
RATING SUMMARY

Rating	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous.\$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$)	BP
AAA	301.33	291	89	+0.27	+0.01	+9.64	290.18	9.63
NR	250.07	408	90	23.98	0.96	+5.59	163.71	6.55
BBB+	17.80	29	23	+0.28	+0.16	+18.54	32.72	18.38
BBB-	11.57	15	15	38.02	32.85	+13.81	54.01	46.66
BBB	8.24	12	12	3.49	4.23	+17.83	18.19	22.06
A-	7.85	16	12	1.96	2.49	+15.90	14.43	18.39
A	7.76	8	8	+0.56	+0.72	+11.66	8.50	10.94
AA-	7.35	9	8	3.55	4.82	+12.61	12.81	17.43
AA+	4.08	6	6	5.12	12.57	+23.52	14.71	36.09
A+	1.42	2	2	+2.88	+20.22	+31.47	1.60	11.25



EXECUTIVE SUMMARY

BROKER	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous.\$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$)	BP
5 HIGHEST COST BROKERS (Sorted By Trade Cost BP)								
MERRILL LYNCH	<1	1	1	+0.39	+14.15	+2.88	+0.31	+11.27
JEFFERIES & CO	2	3	3	+1.01	+6.14	+5.87	+0.04	+0.27
MITSUBISHI UFJ SECS	<1	2	2	+2.21	+28.17	+31.25	0.24	3.08
BNY MELLON	1	2	2	+0.82	+5.46	+12.03	0.98	6.57
BARCLAYS	47	72	43	+10.72	+2.28	+10.11	36.78	7.83
5 LOWEST COST BROKERS (Sorted By Trade Cost BP)								
BNP PARIBAS	8	41	22	3.24	3.85	+6.35	8.59	10.20
DEUTSCHE BANK	54	43	29	15.39	2.83	+11.44	77.61	14.27
PERSHING	3	4	4	3.63	12.73	+3.41	4.60	16.14
JP MORGAN CHASE	41	42	35	46.62	11.27	+11.11	92.56	22.38
CANTOR FITZGERALD	<1	1	1	1.03	11.96	+12.54	2.12	24.50





COUNTRY PERFORMANCE BASED ON BUYS AND SELLS

Country	Side	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe	
								(Thous. \$)	BP
								UNITED STATES	BUYS
	SELLS	325	424	178	41.25	1.27	+9.23	340.82	10.50

Manager PERFORMANCE

Manager PERFORMANCE									TRADE COST HISTORICAL PERFORMANCE			
Manager	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$) BP		Q1 2016	Q4 2015	Q3 2015	Q2 2015
METROPOLITAN WEST MG	378	259	98	15.60	0.41	+9.87	389.01	10.28	2.90	0.18	+3.57	+0.13
NEUBERGER BERMAN	211	455	166	43.62	2.07	+7.37	199.23	9.44	3.00	3.92	8.25	5.31
BARCLAYS 1-10 YR TIP	30	87	25	8.59	2.88	+4.00	20.51	6.88	+7.29	-	-	-

BROKER PERFORMANCE

BROKER PERFORMANCE									TRADE COST HISTORICAL PERFORMANCE			
BROKER	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$) BP		Q1 2016	Q4 2015	Q3 2015	Q2 2015
GOLDMAN SACHS	99	101	68	+21.05	+2.13	+9.15	69.32	7.02	1.53	0.42	2.90	2.74
CITIGROUP	64	115	67	5.11	0.80	+7.71	54.66	8.51	1.56	5.96	3.54	5.48
CREDIT SUISSE	60	38	25	3.26	0.55	+3.80	25.93	4.35	+1.24	+0.70	1.90	+3.99
NOMURA	57	74	49	10.13	1.79	+6.36	46.15	8.15	7.17	2.14	0.37	1.57
DEUTSCHE BANK	54	43	29	15.39	2.83	+11.44	77.61	14.27	+2.26	2.60	1.58	0.35
RBC CAPITAL MARKETS	52	30	21	0.79	0.15	+15.07	78.88	15.22	13.94	+5.12	+0.69	1.55
BARCLAYS	47	72	43	+10.72	+2.28	+10.11	36.78	7.83	3.96	+0.45	6.87	0.75
BANK OF AMERICA	45	94	65	6.67	1.49	+10.12	52.01	11.61	4.85	6.31	7.53	6.44
JP MORGAN CHASE	41	42	35	46.62	11.27	+11.11	92.56	22.38	5.63	+0.72	5.58	6.40
WELLS FARGO	33	52	32	6.81	2.05	+2.98	16.73	5.03	1.28	3.92	6.28	3.86
MORGAN STANLEY	18	30	25	+1.76	+0.98	+8.45	13.43	7.47	7.76	0.33	+44.39	0.48
UBS	12	32	23	3.06	2.61	+8.45	13.00	11.06	+2.84	+7.64	0.28	+0.93
JJ KENNY DRAKE INC	11	11	7	+0.19	+0.17	+7.69	8.40	7.52	+5.45	+7.11	+4.29	-
BNP PARIBAS	8	41	22	3.24	3.85	+6.35	8.59	10.20	8.67	9.11	11.99	4.49
HSBC BANK	7	6	6	0.02	0.03	+8.18	5.54	8.21	3.15	+0.18	+2.41	2.74
PERSHING	3	4	4	3.63	12.73	+3.41	4.60	16.14	1.52	0.56	15.64	2.83
JEFFERIES & CO	2	3	3	+1.01	+6.14	+5.87	+0.04	+0.27	1.97	+21.27	+12.40	+4.96
BNY MELLON	1	2	2	+0.82	+5.46	+12.03	0.98	6.57	15.40	+7.89	9.21	+10.49
WACHOVIA BANK	1	3	3	0.14	1.08	+1.73	0.36	2.81	+4.07	-	-	-
BANK SHOOP REIFF	<1	2	1	+0.00	+0.00	+3.26	0.30	3.26	-	-	-	-

TRADE DETAILS

Buy/Sell	Security	Bond Type	Trade Date/ Maturity	Manager/ Broker	Cty	Local Curr.	Principal (\$)	Price	Benchmark Price	Trade Cost BP	Trading Cost
15 Highest Cost Trades											
B	01F02247 FNCI 2.5 7/12	Mtge	06/07/2016 12/31/2099	METROPOLITAN WE GOLDMAN SACHS	US	USD	4,696,389	102.766	102.248	+50.39	+23,665
B	912828S2 US TREASURY N/B 06/21 1.125	Govt	06/21/2016 06/30/2021	METROPOLITAN WE RBC CAPITAL MAR	US	USD	13,589,776	99.668	99.527	+14.15	+19,224
B	01F02245 FNCI 2.5 5/12	Mtge	04/12/2016 12/31/2099	METROPOLITAN WE GOLDMAN SACHS	US	USD	2,909,197	102.617	102.214	+39.29	+11,430
B	01F02245 FNCI 2.5 5/12	Mtge	04/06/2016 12/31/2099	Multiple Mgrs. GOLDMAN SACHS	US	USD	2,178,930	102.529	102.175	+35.40	+7,713
S	912810RQ US TREASURY N/B 02/46 2.5	Govt	05/20/2016 02/15/2046	METROPOLITAN WE GOLDMAN SACHS	US	USD	1,648,937	96.712	97.158	+46.15	+7,610
S	912810RQ US TREASURY N/B 02/46 2.5	Govt	05/19/2016 02/15/2046	METROPOLITAN WE GOLDMAN SACHS	US	USD	2,428,369	96.725	97.011	+27.18	+6,600
B	01F03068 FNCL 3 8/12	Mtge	06/28/2016 12/31/2099	METROPOLITAN WE GOLDMAN SACHS	US	USD	1,862,296	103.461	103.143	+30.78	+5,732
S	912828Q3 US TREASURY N/B 03/21 1.25	Govt	05/05/2016 03/31/2021	METROPOLITAN WE JP MORGAN CHASE	US	USD	2,835,876	100.031	100.232	+20.15	+5,713
B	01F02247 FNCI 2.5 7/12	Mtge	06/01/2016 12/31/2099	METROPOLITAN WE CREDIT SUISSE	US	USD	2,348,789	102.344	102.120	+21.86	+5,135
B	912810RS US TREASURY N/B 05/46 2.5	Govt	05/16/2016 05/15/2046	METROPOLITAN WE BANK OF AMERICA	US	USD	2,230,431	98.257	98.040	+22.07	+4,922
B	912828Q7 US TREASURY N/B 04/21 1.375	Govt	05/18/2016 04/30/2021	METROPOLITAN WE DEUTSCHE BANK	US	USD	1,573,495	100.223	99.923	+29.91	+4,707
S	3128MJW9 FED HM LN PC POOL G08671 FG	Mtge	04/18/2016 10/01/2045	METROPOLITAN WE RBC CAPITAL MAR	US	USD	2,685,496	104.727	104.910	+17.52	+4,704
S	912810RL TSY INFL IX N/B 02/45 0.75	Govt	04/01/2016 02/15/2045	METROPOLITAN WE JP MORGAN CHASE	US	USD	1,958,336	97.314	97.535	+22.78	+4,461
S	912828N8 US TREASURY N/B 01/21 1.375	Govt	05/05/2016 01/31/2021	METROPOLITAN WE BARCLAYS	US	USD	2,456,584	100.680	100.856	+17.55	+4,312



S	3128MJWQ FED HM LN PC POOL G08654 FG	Mtge	04/18/2016 07/01/2045	METROPOLITAN WE NOMURA	US	USD	2,393,361	104.734	104.910	+16.77	+4,013
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TRADE DETAILS

Buy/Sell	Security	Bond Type	Trade Date/ Maturity	Manager/ Broker	Cty	Local Curr.	Principal (\$)	Price	Benchmark Price	Trade Cost BP	Trading Cost
15 Lowest Cost Trades											
B	25272KAG DIAMOND 1 FIN/DIAMOND 2 SR S	Corp	05/17/2016 06/15/2023	NEUBERGER BERMA JP MORGAN CHASE	US	USD	2,259,028	99.957	101.000	104.34	23,572
S	912828Q7 US TREASURY N/B 04/21 1.375	Govt	06/21/2016 04/30/2021	METROPOLITAN WE RBC CAPITAL MAR	US	USD	13,756,437	100.891	100.786	10.36	14,250
S	01F02247 FNCL 2.5 7/12	Mtge	06/28/2016 12/31/2099	METROPOLITAN WE GOLDMAN SACHS	US	USD	4,725,308	103.398	103.128	26.20	12,382
S	01F04264 FNCL 4.5 4/10	Mtge	04/08/2016 12/31/2099	METROPOLITAN WE CREDIT SUISSE	US	USD	2,094,264	108.793	108.269	48.16	10,086
S	01F02244 FNCL 2.5 4/12	Mtge	04/06/2016 12/31/2099	Multiple Mgrs. GOLDMAN SACHS	US	USD	2,182,749	102.718	102.243	46.18	10,080
S	01F04064 FNCL 4 4/10	Mtge	04/08/2016 12/31/2099	METROPOLITAN WE JP MORGAN CHASE	US	USD	1,566,233	106.910	106.297	57.33	8,979
B	912810RS US TREASURY N/B 05/46 2.5	Govt	05/20/2016 05/15/2046	METROPOLITAN WE GOLDMAN SACHS	US	USD	1,640,908	96.809	97.267	47.30	7,761
S	01F03064 FNCL 3 4/12	Mtge	04/06/2016 12/31/2099	METROPOLITAN WE DEUTSCHE BANK	US	USD	1,709,616	102.680	102.221	44.69	7,641
S	01F03264 FNCL 3.5 4/11	Mtge	04/04/2016 12/31/2099	NEUBERGER BERMA NOMURA	US	USD	1,384,143	104.859	104.300	53.39	7,390
B	912810RS US TREASURY N/B 05/46 2.5	Govt	05/19/2016 05/15/2046	METROPOLITAN WE GOLDMAN SACHS	US	USD	2,415,851	96.828	97.094	27.48	6,638
B	68389XBK ORACLE CORP SR UNSECURED 09/	Corp	06/29/2016 09/15/2021	NEUBERGER BERMA JP MORGAN CHASE	US	USD	1,916,659	99.826	100.160	33.46	6,413
S	912828Q3 US TREASURY N/B 03/21 1.25	Govt	05/24/2016 03/31/2021	METROPOLITAN WE RBC CAPITAL MAR	US	USD	9,273,492	99.341	99.277	6.42	5,950
B	50077LAA KRAFT HEINZ FOODS CO COMPANY	Corp	05/10/2016 06/01/2046	METROPOLITAN WE WELLS FARGO	US	USD	378,799	99.684	101.200	152.08	5,761
B	912828Q7 US TREASURY N/B 04/21 1.375	Govt	05/05/2016 04/30/2021	METROPOLITAN WE JP MORGAN CHASE	US	USD	2,853,127	100.639	100.841	20.01	5,710
S	10620WAA BELA 2012-1 A1	Mtge	06/08/2016 12/26/2035	METROPOLITAN WE DEUTSCHE BANK	US	USD	559,978	97.984	97.050	95.36	5,340



AGENCIES



BOND TYPE PERFORMANCE

Bond Type	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe	
							(Thous.\$)	BP
CORPORATES	71	106	93	35.22	4.93	+16.76	154.93	21.69

CORPORATES



BOND TYPE PERFORMANCE

Bond Type	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe	
							(Thous.\$)	BP
GOVERNMENTS	296	284	84	3.26	0.11	+9.47	283.80	9.58

GOVERNMENTS



BOND TYPE PERFORMANCE

Bond Type	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe	
							(Thous.\$)	BP
MORTGAGES	252	411	92	29.32	1.17	+5.59	170.03	6.76

MORTGAGES





MUNICIPALS





RATING BY EACH BOND TYPE

GOVERNMENTS - RATING DETAILS

Rating	Principal	No. of	No. of Issues	Trade Cost	Trade Cost	Univ. Trade	Cost Diff. from Universe	
	(Mil. \$)	Trades		(Thous. \$)	BP	Cost BP	(Thous. \$)	BP
AAA	296	284	84	3.26	0.11	+9.47	283.80	9.58

RATING BY EACH BOND TYPE

MORTGAGES - RATING DETAILS

Rating	Principal	No. of	No. of Issues	Trade Cost	Trade Cost	Univ. Trade	Cost Diff. from Universe	
	(Mil. \$)	Trades		(Thous. \$)	BP	Cost BP	(Thous. \$)	BP
NR	250	408	90	23.98	0.96	+5.59	163.71	6.55
AAA	<1	2	1	+0.00	+0.00	+3.26	0.30	3.26
AA+	<1	1	1	5.34	95.36	+12.16	6.02	107.52

RATING BY EACH BOND TYPE

CORPORATES - RATING DETAILS

Rating	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost		Univ. Trade		Cost Diff. from Universe	
				(Thous. \$)	BP	Cost BP	(Thous. \$)	BP	
BBB+	18	29	23	+0.28	+0.16	+18.54	32.72	18.38	
BBB-	12	15	15	38.02	32.85	+13.81	54.01	46.66	
BBB	8	12	12	3.49	4.23	+17.83	18.19	22.06	
A-	8	16	12	1.96	2.49	+15.90	14.43	18.39	
A	8	8	8	+0.56	+0.72	+11.66	8.50	10.94	
AA-	7	9	8	3.55	4.82	+12.61	12.81	17.43	
AAA	4	5	4	+3.53	+8.28	+22.55	6.08	14.27	
AA+	4	5	5	+0.22	+0.61	+25.32	8.69	24.71	
A+	1	2	2	+2.88	+20.22	+31.47	1.60	11.25	
AA	<1	1	1	+1.40	+25.80	+1.93	+1.30	+23.87	
BB+	<1	2	1	+2.80	+55.43	+23.12	+1.63	+32.31	
BB	<1	1	1	+0.00	+0.00	+13.34	0.50	13.34	
B-	<1	1	1	+0.13	+5.81	+20.46	0.33	14.65	

HISTORICAL DATA

Quarter	Principal (Thous. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$)	BP
04/01/2016-06/30/2016	619,130	801	269	67.81	1.10	+8.74	608.75	9.84
01/02/2016-03/31/2016	710,978	1117	262	193.39	2.72	+6.08	625.45	8.80
Year-Ending 2016	1,330,108	1918		261.20	1.96	+7.32	1,234.20	9.28
10/01/2015-12/31/2015	820,526	980	212	138.86	1.69	+8.52	837.57	10.21
07/01/2015-09/30/2015	992,841	1625	204	225.86	2.27	+3.74	596.77	6.01
04/01/2015-06/30/2015	1,141,971	1504	246	310.14	2.72	+7.36	1,150.64	10.08
01/01/2015-03/31/2015	944,141	1100	191	8.38	0.09	+6.57	628.26	6.66
Year-Ending 2015	3,899,478	5209		683.23	1.75	+6.49	3,213.25	8.24
10/01/2014-12/31/2014	676,216	885	213	+41.55	+0.61	+5.86	354.40	5.25
07/01/2014-09/30/2014	905,295	785	133	+534.89	+5.91	+6.85	85.46	0.94
04/01/2014-06/30/2014	727,152	957	240	48.64	0.67	+7.04	560.46	7.71
01/02/2014-03/31/2014	920,513	1033	210	131.04	1.42	+6.54	733.34	7.96
Year-Ending 2014	3,229,176	3660		+396.76	+1.23	+6.60	1,733.66	5.37
10/01/2013-12/31/2013	804,252	799	216	45.80	0.57	+5.50	487.92	6.07
07/01/2013-09/30/2013	778,379	825	214	+21.56	+0.28	+6.25	465.02	5.97
04/01/2013-06/30/2013	937,180	803	217	51.74	0.55	+7.82	784.80	8.37
01/02/2013-03/31/2013	635,964	613	190	+89.06	+1.40	+8.12	427.14	6.72
Year-Ending 2013	3,155,775	3040		+13.07	+0.04	+6.90	2,164.88	6.86
10/01/2012-12/31/2012	528,034	613	192	215.02	4.07	+7.49	610.46	11.56
07/01/2012-09/30/2012	567,084	722	230	+18.83	+0.33	+8.56	466.39	8.23
04/01/2012-06/30/2012	520,106	739	204	+102.98	+1.98	+8.39	333.44	6.41
01/02/2012-03/31/2012	136,055	131	54	+29.91	+2.20	+7.08	66.46	4.88
Year-Ending 2012	1,751,279	2205		63.30	0.36	+8.07	1,476.76	8.43
10/01/2011-12/31/2011	91,474	88	43	18.39	2.01	+6.04	73.67	8.05

HISTORICAL DATA

Quarter	Principal (Thous. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe	
							(Thous. \$)	BP
07/01/2011-09/30/2011	101,872	106	49	47.22	4.64	+4.74	95.51	9.38
04/01/2011-06/30/2011	100,523	97	54	4.28	0.43	+4.90	53.56	5.33
01/02/2011-03/31/2011	205,267	171	56	143.81	7.01	+7.08	289.08	14.09
Year-Ending 2011	499,136	462		213.70	4.28	+5.97	511.82	10.25
10/01/2010-12/31/2010	184,240	138	57	8.71	0.47	+5.73	114.34	6.20
07/01/2010-09/30/2010	219,586	151	60	20.80	0.95	+4.97	129.88	5.92
04/01/2010-06/30/2010	161,213	123	50	+101.24	+6.28	+7.34	17.15	1.06
01/02/2010-03/31/2010	221,701	181	70	+60.21	+2.72	+11.49	194.49	8.77
Year-Ending 2010	786,740	593		+131.95	+1.68	+7.47	455.85	5.79

BENCHMARK VENDOR REPORT

Bonds	Number of Trades	Number of Issues	Vendor Benchmark	Percent Of Principal
CORPORATES	52	48	BLOOMBERGTERMINAL	46.60 %
	41	34	MARKETAXESS-TRADES	39.23 %
	9	9	MARKETAXESS-SUMMARYDATA	9.34 %
	4	4	ISSUE PRICE	4.83 %
GOVERNMENTS	277	81	BLOOMBERGTERMINAL	98.31 %
	5	5	TULLET PREBON	1.21 %
	2	2	ISSUE PRICE	0.48 %
MORTGAGES	316	78	BLOOMBERGTERMINAL	79.58 %
	95	15	TULLET PREBON	20.42 %

DISCLAIMER

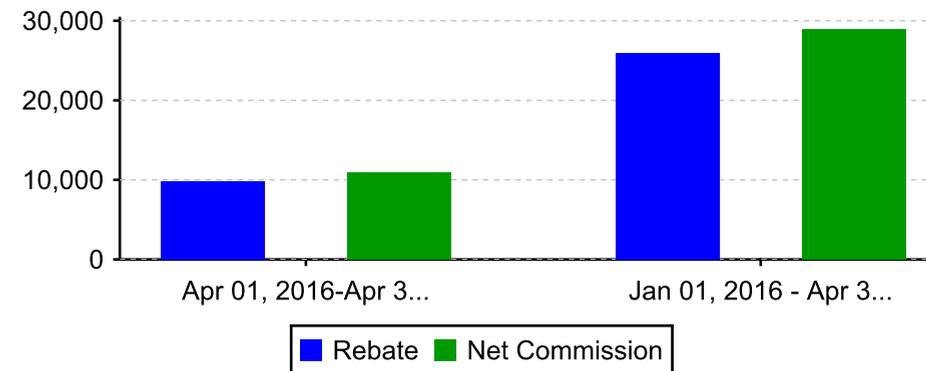
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Sacramento County Employees Retirement System

Currency: USD	Apr 01, 2016- Apr 30, 2016	Jan 01, 2016- Apr 30, 2016
Opening Balance	5,493.91	6,257.54
Rebate	9,875.80	26,002.08
Payments	-5,493.91	-22,383.83
Adjustments	.00	.00
Closing Balance	9,875.79	9,875.79
Commission	18,765.10	47,539.67
Net Commission	10,973.11	28,891.20

Rebate vs Net Commission(USD)



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Manager Breakout

Currency: USD

Money Manager	04/01/2016 - 04/30/2016			01/01/2016 - 04/30/2016		
	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Dalton, Greiner, Hartman, Maher & Company	1,965.55	1,326.75	1,474.17	6,137.90	4,143.09	4,603.43
Eagle Capital Management	6,217.98	3,264.44	3,627.16	13,376.73	7,022.79	7,803.10
Lazard Asset Management	3,170.90	1,141.52	1,268.36	5,516.83	2,197.20	2,441.34
M.A. Weatherbie & Co.	4,331.52	2,144.12	2,382.35	11,024.92	5,457.30	6,063.67
UBS Global Asset Mgmt.	387.15	218.88	243.20	2,355.95	1,146.84	1,274.27
Urdang Investment Management	2,692.00	1,780.08	1,977.87	7,354.35	4,971.06	5,523.40

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Currency: USD	04/01/2016 - 04/30/2016			01/01/2016 - 04/30/2016		
Money Manager	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Wedge Capital Mgmt	.00	.00	.00	1,772.99	1,063.79	1,181.99
Total:	18,765.10	9,875.80	10,973.11	47,539.67	26,002.08	28,891.20

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Broker Breakout

Currency: USD

Broker	04/01/2016 - 04/30/2016			01/01/2016 - 04/30/2016		
	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Capital Institutional Services (CAPIS)	10,875.53	6,371.28	7,079.20	26,868.98	16,136.94	17,929.93
HSBC Securities	3,170.90	1,141.52	1,268.36	3,170.90	1,141.52	1,268.36
ITG Inc	4,331.52	2,144.12	2,382.35	11,024.92	5,457.30	6,063.67
Merrill Lynch	387.15	218.88	243.20	4,128.94	2,210.63	2,456.26
SG Securities	.00	.00	.00	2,345.93	1,055.68	1,172.98
Total:	18,765.10	9,875.80	10,973.11	47,539.67	26,002.08	28,891.20

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Commission Recapture Payments

Currency: USD

Vendor	Service	Request Date	Payment Date	Invoice Date	Invoice #	Amount	Payment Method
Payment	Payment of March Credits	04/21/2016	04/21/2016	04/21/2016	201603	5,493.91	
Total:						5,493.91	

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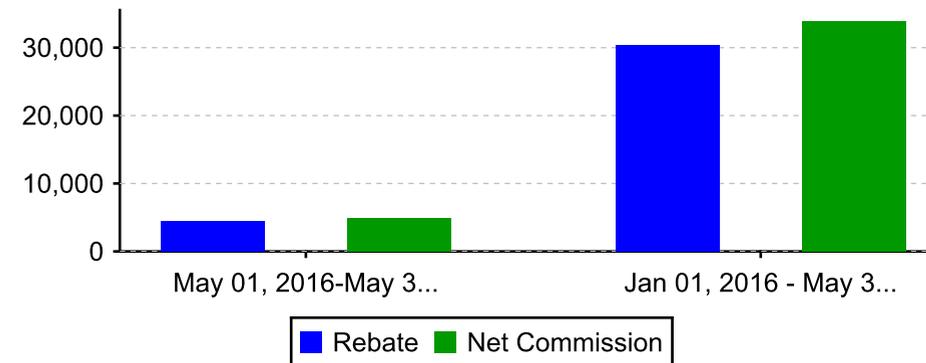
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Sacramento County Employees Retirement System

Currency: USD	May 01, 2016- May 31, 2016	Jan 01, 2016- May 31, 2016
Opening Balance	9,875.79	6,257.54
Rebate	4,447.00	30,449.08
Payments	-9,875.79	-32,259.62
Adjustments	.00	.00
Closing Balance	4,447.01	4,447.01
Commission	8,082.76	55,622.43
Net Commission	4,941.12	33,832.31

Rebate vs Net Commission(USD)



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Manager Breakout

Currency: USD

Money Manager	05/01/2016 - 05/31/2016			01/01/2016 - 05/31/2016		
	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Dalton, Greiner, Hartman, Maher & Company	705.25	476.05	528.94	6,843.15	4,619.13	5,132.37
Eagle Capital Management	1,978.98	1,038.97	1,154.41	15,355.71	8,061.76	8,957.51
Lazard Asset Management	.00	.00	.00	5,516.83	2,197.20	2,441.34
M.A. Weatherbie & Co.	2,389.36	1,182.72	1,314.13	13,414.28	6,640.02	7,377.80
UBS Global Asset Mgmt.	1,528.97	765.10	850.11	3,884.92	1,911.94	2,124.38
Urdang Investment Management	1,480.20	984.18	1,093.53	8,834.55	5,955.24	6,616.93

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Currency: USD	05/01/2016 - 05/31/2016			01/01/2016 - 05/31/2016		
Money Manager	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Wedge Capital Mgmt	.00	.00	.00	1,772.99	1,063.79	1,181.99
Total:	8,082.76	4,447.00	4,941.12	55,622.43	30,449.08	33,832.31

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Broker Breakout

Currency: USD

Broker	05/01/2016 - 05/31/2016			01/01/2016 - 05/31/2016		
	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Capital Institutional Services (CAPIS)	4,164.43	2,499.19	2,776.88	31,033.41	18,636.13	20,706.81
HSBC Securities	.00	.00	.00	3,170.90	1,141.52	1,268.36
ITG Inc	2,389.36	1,182.72	1,314.13	13,414.28	6,640.02	7,377.80
Merrill Lynch	1,528.97	765.10	850.11	5,657.91	2,975.73	3,306.37
SG Securities	.00	.00	.00	2,345.93	1,055.68	1,172.98
Total:	8,082.76	4,447.00	4,941.12	55,622.43	30,449.08	33,832.31

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Commission Recapture Payments

Currency: USD

Vendor	Service	Request Date	Payment Date	Invoice Date	Invoice #	Amount	Payment Method
Payment	Payment of April Credits	05/20/2016	05/20/2016	05/20/2016	201604	9,875.79	
Total:						9,875.79	

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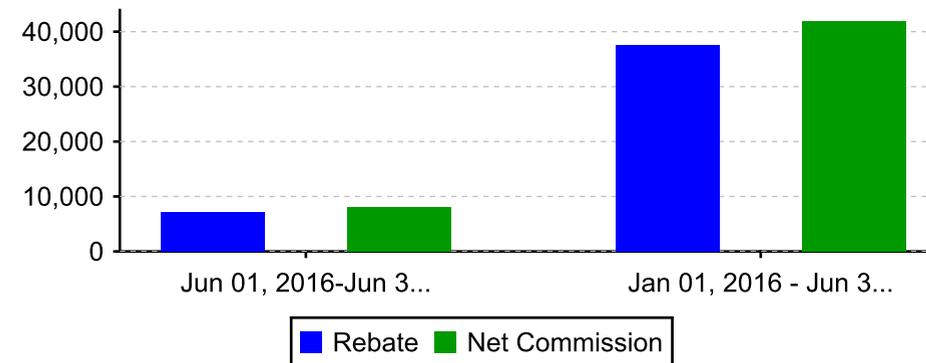
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Sacramento County Employees Retirement System

Currency: USD	Jun 01, 2016- Jun 30, 2016	Jan 01, 2016- Jun 30, 2016
Opening Balance	4,447.01	6,257.54
Rebate	7,196.23	37,645.32
Payments	-4,447.01	-36,706.63
Adjustments	.00	.00
Closing Balance	7,196.23	7,196.23
Commission	13,979.12	69,601.55
Net Commission	7,995.82	41,828.13

Rebate vs Net Commission(USD)



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Manager Breakout

Currency: USD

Money Manager	06/01/2016 - 06/30/2016			01/01/2016 - 06/30/2016		
	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Dalton, Greiner, Hartman, Maher & Company	.00	.00	.00	6,843.15	4,619.13	5,132.37
Eagle Capital Management	.00	.00	.00	15,355.71	8,061.76	8,957.51
Lazard Asset Management	.00	.00	.00	5,516.83	2,197.20	2,441.34
M.A. Weatherbie & Co.	11,822.80	5,852.25	6,502.50	25,237.08	12,492.27	13,880.30
UBS Global Asset Mgmt.	98.29	49.10	54.55	3,983.21	1,961.03	2,178.93
Urdang Investment Management	828.20	556.99	618.88	9,662.75	6,512.23	7,235.81

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Currency: USD	06/01/2016 - 06/30/2016			01/01/2016 - 06/30/2016		
Money Manager	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Wedge Capital Mgmt	1,229.83	737.90	819.89	3,002.82	1,801.69	2,001.88
Total:	13,979.12	7,196.23	7,995.82	69,601.55	37,645.32	41,828.13

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Broker Breakout

Currency: USD

Broker	06/01/2016 - 06/30/2016			01/01/2016 - 06/30/2016		
	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Capital Institutional Services (CAPIS)	828.20	556.99	618.88	31,861.61	19,193.12	21,325.69
HSBC Securities	.00	.00	.00	3,170.90	1,141.52	1,268.36
ITG Inc	11,822.80	5,852.25	6,502.50	25,237.08	12,492.27	13,880.30
Merrill Lynch	1,328.12	786.99	874.44	6,986.03	3,762.72	4,180.80
SG Securities	.00	.00	.00	2,345.93	1,055.68	1,172.98
Total:	13,979.12	7,196.23	7,995.82	69,601.55	37,645.32	41,828.13

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Commission Recapture Payments

Currency: USD

Vendor	Service	Request Date	Payment Date	Invoice Date	Invoice #	Amount	Payment Method
Payment	Payment of May Credits	06/21/2016	06/21/2016	06/21/2016	201605	4,447.01	
Total:						4,447.01	

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