



ITEM 9

Executive Staff

Richard Stensrud
Chief Executive Officer

Steve Davis
Chief Investment Officer

Robert L. Gaumer
General Counsel

Kathryn T. Regalia
Chief Operations Officer

John W. Gobel, Sr.
Chief Benefits Officer

**For Agenda of:
November 7, 2016**

November 3, 2016

TO: President and Members
Board of Retirement

FROM: JR Pearce
Investment Officer

SUBJECT: Review of Trading Activity and Commission Recapture Program for Third
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 the authority to direct commissions to brokers who participate in SCERS' commission recapture program if they will achieve the 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:

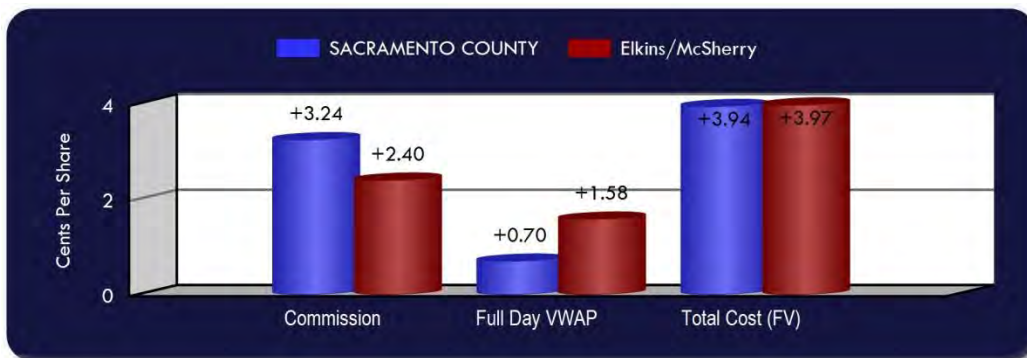
1. Commission Costs; both trade cost and any soft dollar costs.
2. Market Impact Cost; a trade performance measurement, which measures the difference between the manager's trade price and the market's volume-weighted average price (VWAP). VWAP is the average daily price of a security weighted by the 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:

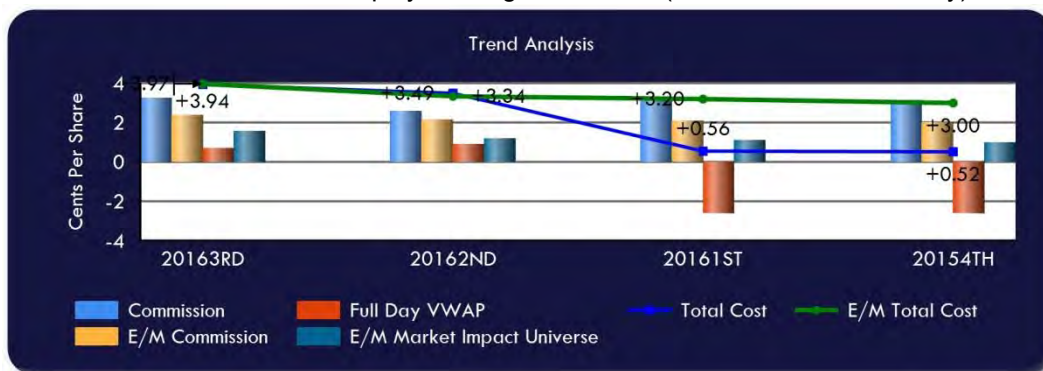
US EQUITY: During the quarter, SCERS' US equity portfolio traded 3.7 million shares representing approximately \$130.6 million on the AMEX, NASDAQ and NYSE exchanges, and ranked in the 47th percentile against the EM US Equity universe. SCERS generated a total trading cost of +3.94 cps, which is 0.03 cps less than the EM US Equity universe as follows: commission cost of +3.24 cps versus +2.40 cps and market impact cost (difference from VWAP) of +0.70 cps versus +1.58 cps. SCERS' market impact cost was better than 67% of the EM US Equity universe.

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



During the quarter, several of SCERS' US Equity managers experienced unfavorable commission costs compared to the US Equity trading universe (+2.40 cps). UBS Global, AllianceBernstein, Huber Capital Management, and Eagle Capital Management had commission costs less than the universe (+2.40 cps) at +1.65 cps, +0.75 cps, +0.87 cps, and +1.0 cps, respectively. However, 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 costs 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.

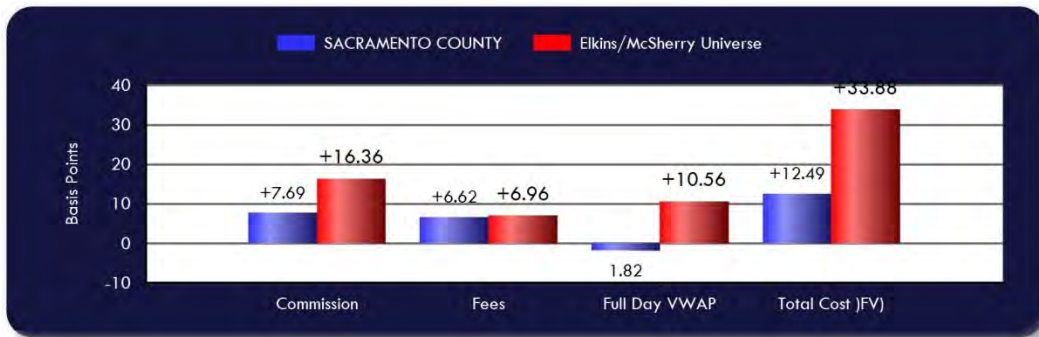
According to Elkins McSherry, the average commission for the Bundled (Research Dollars) commission universe is +2.40 cps, which is lower than SCERS' US Small Cap managers, except UBS Global Asset Management, which has a commission cost of 1.65 cps. DGHM commission cost at +4.36 cps was the highest among the managers and exceeded the universe of +2.40 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 re-engage a formal third party audit and analysis of the commission costs of SCERS' US equity managers, similar to what SCERS performed in the past, which would most likely involve a review of total costs incurred by SCERS' managers.

During the quarter, half of SCERS' US Equity managers experienced favorable market impact costs compared to the US Equity trading universe (+1.58 cps), except for Weatherbie (+2.56 cps), Brown Advisory (+2.79 cps), UBS Global Asset Management (+2.52 cps), Wedge Capital (+3.54 cps), and Eagle Capital (+17.38 cps). Staff will review the costs with the managers.

INTERNATIONAL EQUITY: During the quarter, SCERS' International Equity portfolio traded 23.6 million shares representing approximately \$170.4 million across 30 countries.

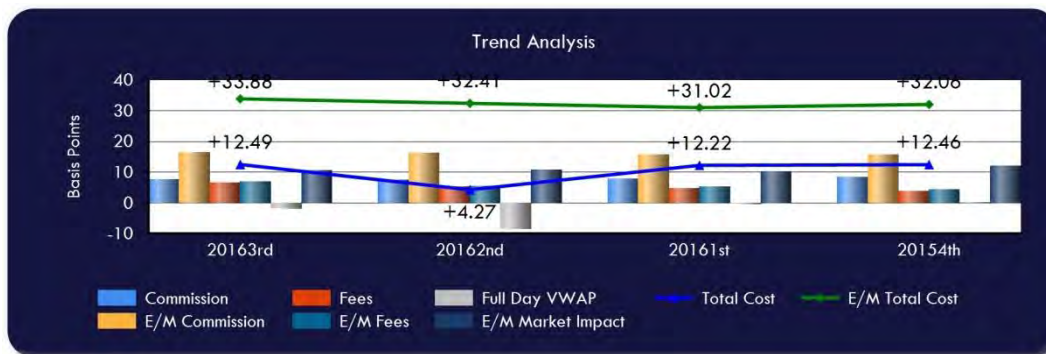
SCERS generated a total trading cost of +12.49 bps, which is +21.39 bps lower than the EM International Equity universe, as follows: commission cost (+7.69 bps), fees (country taxes, tariffs, and other exchange charges) (+6.62 bps), and market impact cost (-1.82 bps). This compares favorably to the EM International Equity universe's commission cost, fee cost, market impact cost, and total trading cost, of +16.36 bps, +6.96 bps, +10.56 bps, and +33.88 bps, respectively.

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



All of SCERS' International Equity managers generated commission costs (ranging from +3.96 bps to +11.66 bps), significantly less than the commission costs of the EM International Equity universe (ranging from +15.57 bps to +17.73 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 (+1.72 bps versus +10.92 bps); LSV Asset Management (-13.41 bps versus +11.41 bps); Lazard Asset Management (+3.16 bps versus +11.22 bps); and CBRE Clarion (-15.02 bps versus +10.19 bps).

US FIXED INCOME: During the quarter, SCERS' US Fixed Income managers conducted 684 trades totaling approximately \$589.7 million, across mortgages, governments, and corporates. For the quarter, SCERS' US Fixed Income trading cost was -0.25 bps, which was +6.60 bps lower than the EM US Fixed Income universe of +6.35 bps, and specifically lower in Governments (by +6.58 bps), Mortgages (by +6.58 bps), and Corporates (by +5.28 bps). This result is consistent with the previous quarters' lower trade costs than the EM peer group universe, as shown below.

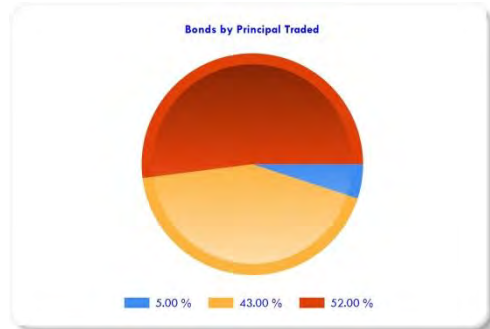
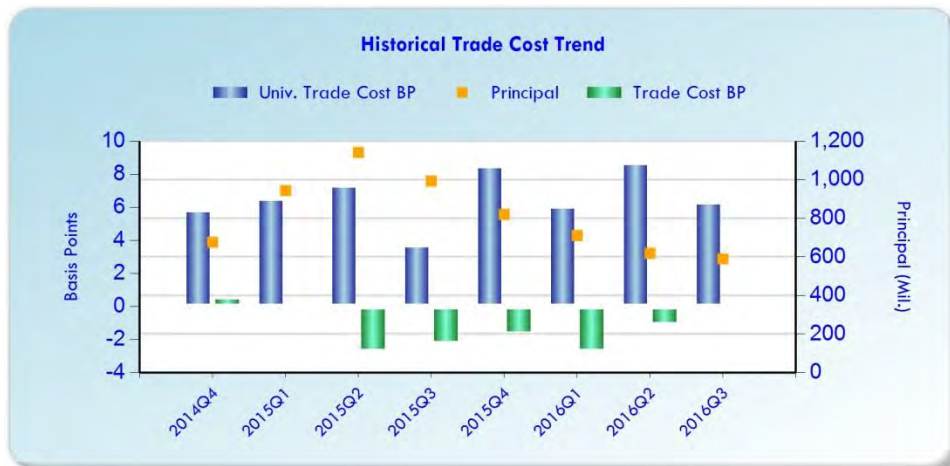
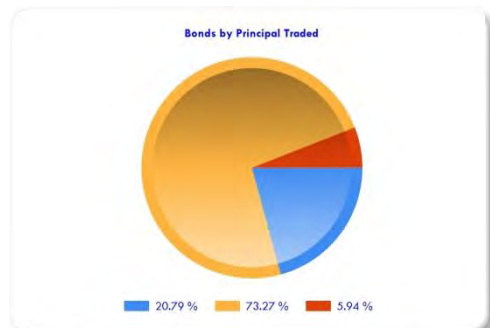


Exhibit: SCERS' US Fixed Income Trading Cost Trend (source: Elkins McSherry)



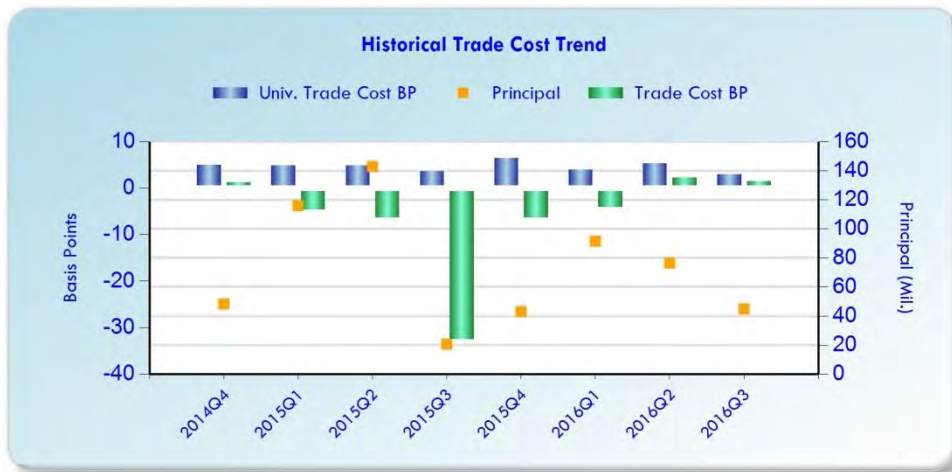
SCERS traded \$252 million in Governments, \$405 million in Mortgages, and \$30 million in Corporates. SCERS' domestic US Core Plus Fixed Income managers had trading costs below the US Fixed Income universe; TCW/MetWest (-0.16 bps versus +6.33 bps) and NeubergerBerman (-0.20 bps versus +6.61 bps).

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 produces a special global fixed income report to capture Prudential's domestic and international trades.



During the quarter, Prudential conducted 135 international trades totaling approximately \$44.9 million in 53 different countries, as follows: \$33 million in Governments, \$2 million in Mortgages, and \$9 million in Corporates. Prudential’s total trading cost was +2.18 bps, which was +1.40 bps lower than the EM peer group cost of +3.58 bps; and specifically, lower in Governments (by +0.02 bps) and Corporates (by +9.45 bps), but was higher in Mortgages (by 9.90 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 \$10,991 in commission rebates. Year-to-date SCERS has earned \$48,636 in rebates. As a comparison, 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 Activity and Commission
Recapture Program for Third Quarter 2016
Date: November 3, 2016
Page 7 of 7

We would be happy to answer any questions.

Respectfully submitted,

Concur:

JR Pearce
Investment Officer

Richard Stensrud
Chief Executive Officer

Steve Davis
Chief Investment Officer

Attachments



SACRAMENTO COUNTY

Trade Cost Summary - U.S. Equity Trading

Period End September 30, 2016





REPORT CONTENTS

Tab 1 : Executive Summary

- **Results / Methodology**
- **Performance vs. Universe / Trading Components**
- **Short Term Alpha**
- **Market Capitalization Performance**
- **Order Size Performance**
- **Commission Review**

Tab 2 : Trade Detail

- **Manager Performance**
- **Broker Performance**

Tab 3 : High / Low Cost Trades

- **Trade Contributions**
- **Most Active Stocks**
- **10 High / Low Cost Trades**
- **10 High Cost Trade Graphs**
- **10 Low Cost Trade Graphs**



(+) = 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 July 1, 2016 to September 30, 2016. The analysis included trading of 3,727,750 shares representing \$130.61 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 +3.24 cps (+9.26 bp) or +\$120,906 (+0.85 cps (+2.42 bp) worse than the Elkins/McSherry All Trading Universe) 	<ul style="list-style-type: none"> Your market impact cost was +0.70 cps (+1.99 bp) or 0.88 cps (2.51 bp) better than the Elkins/McSherry Universe Your overall trading cost of +3.94 cps (+11.24 bp) was 0.03 cps (0.09 bp) better than the Elkins/McSherry Universe Full Day VWAP Universe Rank: 67% Total Cost Universe Rank: 47% 	<ul style="list-style-type: none"> E-Score Rank : 60 E-Score : 0.53

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)	
Bundled	All Trading	Execution Only	Program		Full Day VWAP
+3.40	+2.40	+1.45	+1.61	Median	+1.58
				75 %	+0.10
				25 %	+3.33



(+) = Cost

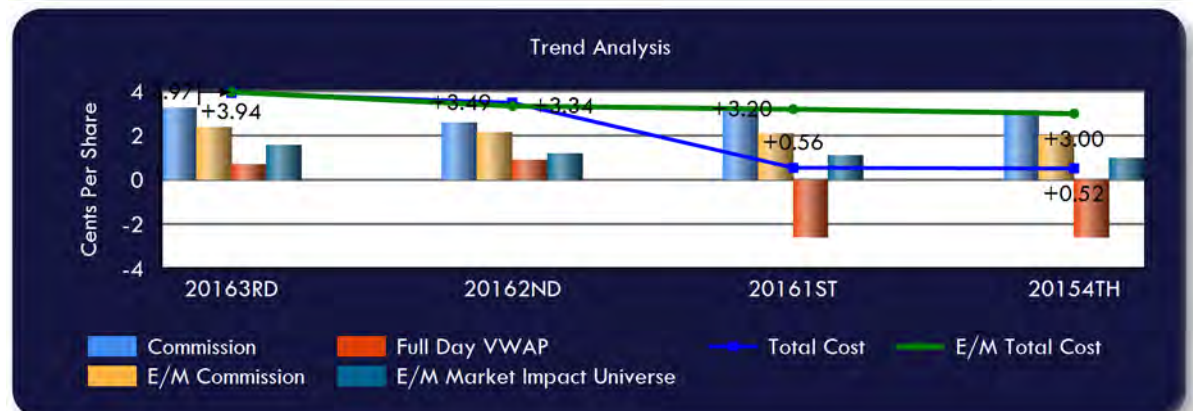
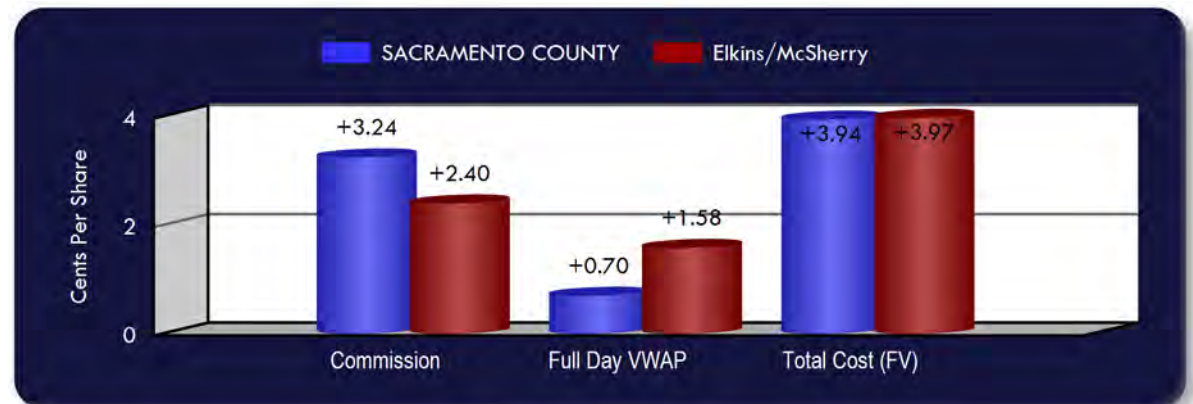
EXECUTIVE SUMMARY

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	+3.12	+2.40	+3.40	+0.81	+1.58	+3.93	0.04	55	0.59
Sells	+3.39	+2.40	+3.40	+0.57	+1.58	+3.95	0.02	64	0.47
Total	+3.24	+2.40	+3.40	+0.70	+1.58	+3.94	0.03	60	0.53

TRADING COMPONENTS

	Buys	Sells
Trade Principal	67,574,157	63,037,911
Shares	2,013,111	1,714,639
Unique Names	487	144
Liquidity (% ADV)	0.058	0.151
Avg. Execution Size	1,774	2,518
Avg. Order Completion Time (min)	N/A	N/A
Total Number of Trades	1,135	681



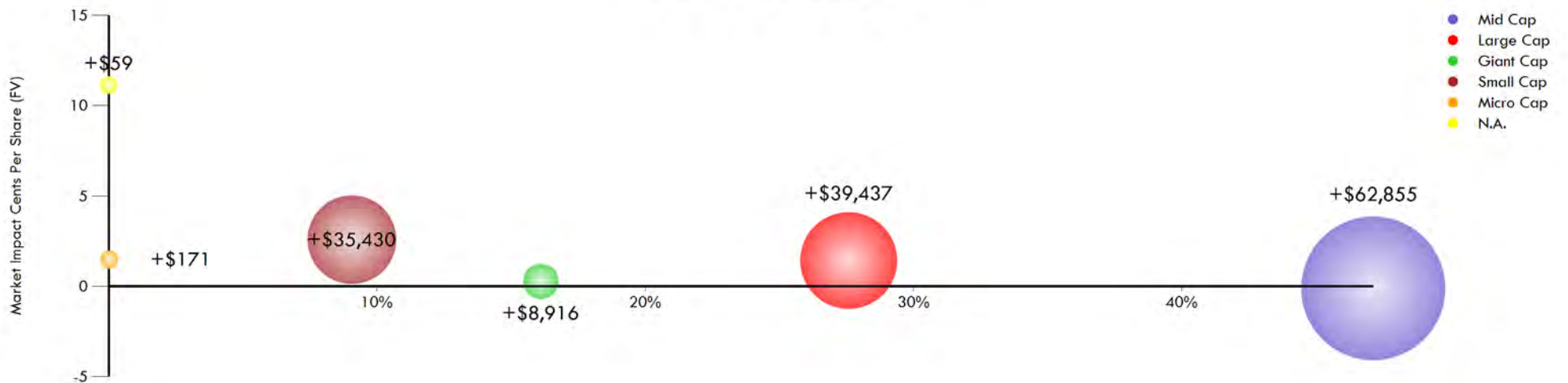
(+) = Cost

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	47.15 %	2,360	+3.37	+2.40	0.12	+1.21	73 %	+3.25	0.36	60	0.52	\$1 B TO \$5 B
Large Cap	27.60 %	1,778	+3.04	+2.40	+1.43	+1.94	58 %	+4.46	+0.13	55	0.60	\$5 B TO \$25 B
Giant Cap	16.12 %	1,424	+2.33	+2.40	+0.27	+2.43	73 %	+2.60	2.23	61	0.51	Over \$25 B
Small Cap	9.08 %	2,314	+3.74	+2.40	+2.59	+0.57	20 %	+6.33	+3.37	68	0.41	\$250 M TO \$1 B
Micro Cap	0.04 %	473	+0.77	+2.40	+1.49	+1.35	49 %	+2.26	1.49	65	0.46	Under \$250 M
N.A.	0.01 %	500	+0.75	+2.40	+11.14	+1.58	2 %	+11.89	+7.91	51	0.66	

Total Cost by Market Cap: (USD)

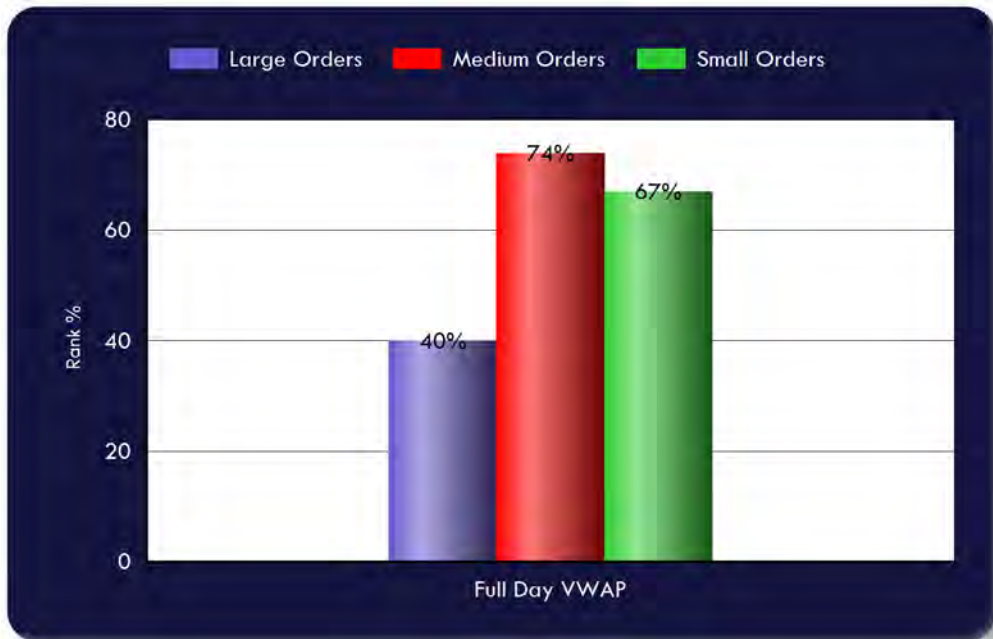


(+) = Cost

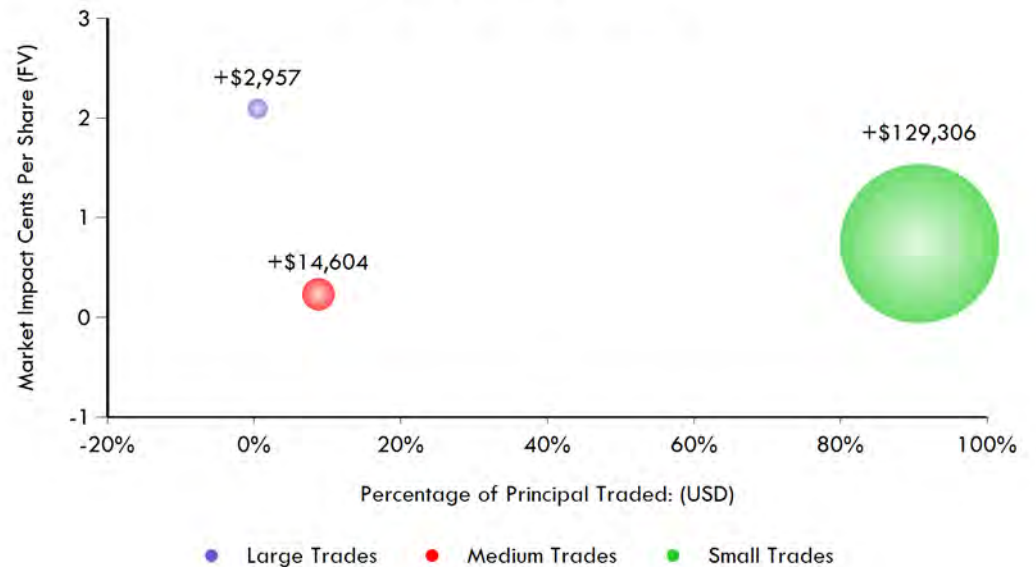
EXECUTIVE SUMMARY

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	1	58,040	N/A	+3.00	+2.40	+2.09	+1.58	40 %	+5.09	+1.12	52	0.65	50K or More
Med. Orders	35	14,073	N/A	+2.73	+2.40	+0.23	+1.58	74 %	+2.97	1.01	68	0.41	10K-50K
Small Orders	1,780	1,785	N/A	+3.33	+2.40	+0.74	+1.58	67 %	+4.07	+0.10	59	0.54	10K or Less



Total Cost By Order Size: (USD)





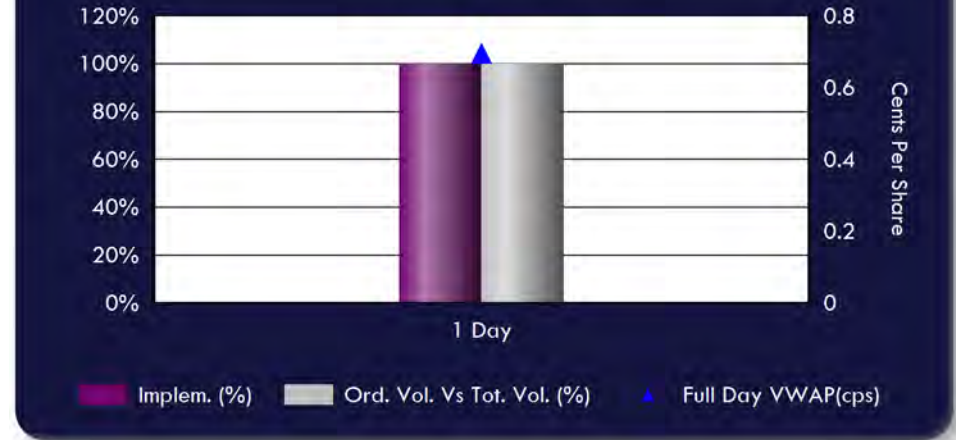
(+) = Cost

EXECUTIVE SUMMARY

IMPLEMENTATION DAYS BY TRADE

Period	Percent Traded (%)	Order Vol. Vs Total Vol. (%)	Full Day VWAP (cps)	E - Score (Rank)	E - Score
1 Day	100.00	100%	+0.70	60	0.53

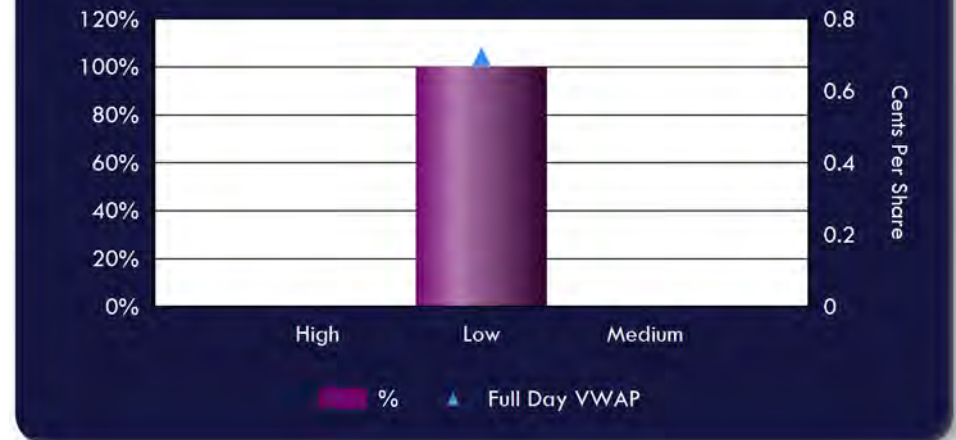
Implementation Days



TRADE DIFFICULTY

Methodology	Liquid. Cat.	Percent Traded (%)	Full Day VWAP (cps)	E - Score (Rank)	E - Score
0%~20% of daily vol.	L	100%	+0.70	60	0.53

Avg. % of Daily Volume





(+) = Cost

EXECUTIVE SUMMARY

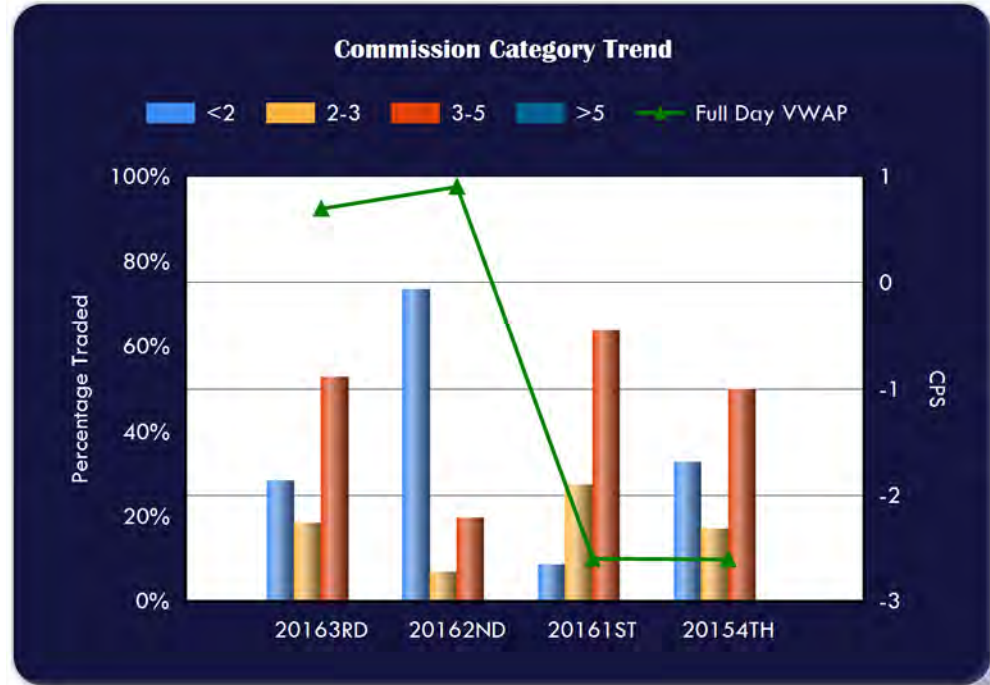
COMMISSION REVIEW

Top 10 Broker

Commission Trends

Broker	Total Commission (\$)	Commission 20163rd (cps)	All Trading Universe (cps)	Bundled Universe (cps)	20162ND (cps)	20161ST (cps)	20154TH (cps)
THEMIS TRA	13,046	+4.00	+2.40	+3.40	+4.00	+4.00	+4.00
CAPITAL IN	12,346	+3.41	+2.40	+3.40	+3.24	+3.67	+3.51
LIQUIDNET	9,991	+3.08	+2.40	+3.40	+3.05	+2.98	+2.99
ITG	9,913	+3.83	+2.40	+3.40	+3.86	+3.71	+3.87
CONVERGEX	5,392	+4.88	+2.40	+3.40	+4.47	+4.79	+4.73
JP MORGAN	4,801	+3.64	+2.40	+3.40	+1.02	+3.43	+2.90
WELLS FARG	4,478	+4.11	+2.40	+3.40	+3.35	+3.53	+3.75
MORGAN STA	4,327	+2.80	+2.40	+3.40	+2.59	+3.24	+1.91
BARCLAYS	4,224	+3.28	+2.40	+3.40	+3.91	+3.88	+3.58
WILLIAM BL	4,080	+4.09	+2.40	+3.40	+4.05	+4.46	+3.81

Commission Category Trend

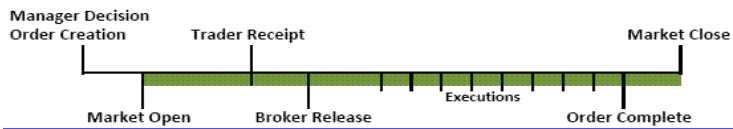


NOTES

(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
WEATHERBIE	33	2,204	954,129	61	0.52	+3.95	+2.40	+2.56	33 %	+2.53	46	68	82
URDANG SECURITIES MA	32	2,496	1,033,144	52	0.64	+3.50	+2.40	+0.34	73 %	0.13	68	66	75
BROWN ADVISORY	26	2,386	439,088	70	0.38	+2.72	+2.40	+2.79	31 %	+1.54	92	92	71
DALTON, GREINER, HAR	13	2,675	478,855	71	0.38	+4.36	+2.40	2.00	90 %	1.61	92	92	73
UBS GLOBAL ASSET MGM	9	2,827	257,274	61	0.51	+1.65	+2.40	+2.52	34 %	+0.19	24	94	78
ALLIANCE R 3000 CAPI	6	399	145,514	22	1.18	+0.75	+2.40	1.05	86 %	4.28	30	1	6
HUBER CAPITAL MANAGE	6	3,367	218,827	57	0.56	+0.87	+2.40	8.00	98 %	11.10	85	92	92
WEDGE CAPITAL MGMT L	5	2,324	195,219	72	0.36	+3.57	+2.40	+3.54	24 %	+3.13	7	33	78
EAGLE CAPITAL MANAGE	<1	5,700	5,700	66	0.44	+1.00	+2.40	+17.38	1 %	+14.41	91	98	99

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.40	+2.40	+1.45	+1.61	+1.58

NOTES

--

(+) = 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		Commission + Full Day VWAP Vs. Universe	2016 2ND (%)	2016 1ST (%)
CAPITAL INSTL SVCS	18	3,480	361,924	70	0.39	12,346	+3.41	+2.40	+3.47	24 %	+2.91	92	93	99
THEMIS TRADING LLC	12	2,609	326,155	61	0.51	13,046	+4.00	+2.40	+8.20	4 %	+8.22	13	12	18
LIQUIDNET	10	2,104	324,075	58	0.55	9,991	+3.08	+2.40	2.03	90 %	2.92	74	90	89
ITG	9	1,370	258,839	62	0.50	9,913	+3.83	+2.40	+1.46	53 %	+1.32	41	42	78
UBS	8	3,058	211,004	62	0.49	3,097	+1.47	+2.40	5.30	96 %	7.81	89	92	88
DEUTSCHE BANK	6	431	160,687	25	1.11	2,038	+1.27	+2.40	3.58	93 %	6.29	78	91	83
JP MORGAN CHASE	6	1,693	132,066	50	0.67	4,801	+3.64	+2.40	3.88	94 %	4.22	69	79	56
WILLIAM BLAIR	4	2,266	99,720	70	0.39	4,080	+4.09	+2.40	+2.56	34 %	+2.67	95	96	40
WELLS FARGO	4	2,595	109,003	69	0.40	4,478	+4.11	+2.40	+1.84	45 %	+1.97	95	17	85
RBC CAPITAL MARKETS	3	2,361	118,057	70	0.38	3,865	+3.27	+2.40	+1.06	60 %	+0.37	93	81	49

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.40	+2.40	+1.45	+1.61	+1.58

NOTES

--

(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
JEFFERIES & CO	3	2,147	90,189	46	0.73	3,707	+4.11	+2.40	+4.25	17 %	+4.39	54	93	89
CREDIT SUISSE	3	2,125	76,484	73	0.34	1,032	+1.35	+2.40	0.81	85 %	3.44	4	47	6
CONVERGEX	3	1,842	110,504	71	0.37	5,392	+4.88	+2.40	2.69	92 %	1.79	85	78	37
CITIGROUP	3	2,659	101,031	37	0.88	3,034	+3.00	+2.40	+3.87	20 %	+2.90	23	59	75
MORGAN STANLEY	3	5,734	154,811	60	0.52	4,327	+2.80	+2.40	+3.43	24 %	+2.25	1	99	37
BARCLAYS	3	3,477	128,648	53	0.63	4,224	+3.28	+2.40	2.02	90 %	2.71	91	91	71
GOLDMAN SACHS	2	2,553	71,472	58	0.55	1,727	+2.42	+2.40	4.48	95 %	6.04	9	97	99
STIFEL NICOLAUS & CO	2	3,731	97,012	47	0.72	3,486	+3.59	+2.40	+0.47	70 %	+0.09	97	86	80
MERRILL LYNCH	2	2,627	55,165	42	0.80	1,137	+2.06	+2.40	+0.84	65 %	1.07	88	95	15
SC BERNSTEIN	2	4,347	56,509	75	0.32	1,475	+2.61	+2.40	4.51	95 %	5.87	47	1	84

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.40	+2.40	+1.45	+1.61	+1.58

NOTES

--

(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
BROADCORT CAPITAL	2	3,592	50,289	71	0.37	1,231	+2.45	+2.40	+8.49	4 %	+6.97	33	89	81
WEEDEN & CO	2	3,224	74,146	64	0.47	2,432	+3.28	+2.40	0.12	79 %	0.81	32	66	94
BAIRD, ROBERT W	2	2,790	58,596	66	0.44	2,067	+3.53	+2.40	10.62	99 %	11.07	90	89	58
COWEN & CO	2	3,995	55,934	56	0.58	1,436	+2.57	+2.40	+6.69	6 %	+5.28	1	89	93
STEPHENS & CO INC	1	2,986	50,765	66	0.44	2,107	+4.15	+2.40	+3.20	26 %	+3.38	24	33	5
NEEDHAM & CO INC	1	2,822	25,394	80	0.26	1,014	+3.99	+2.40	0.31	80 %	0.29	99	1	10
STATE STREET BANK	1	1,305	28,713	35	0.91	1,132	+3.94	+2.40	+3.71	22 %	+3.68	56	66	10
ISI GROUP INC	<1	2,012	20,117	46	0.73	696	+3.46	+2.40	+2.04	41 %	+1.53	95	44	96
CANTOR FITZGERALD	<1	1,140	25,071	53	0.63	697	+2.78	+2.40	+2.87	31 %	+1.68	71	35	1
OPPENHEIMER & CO INC	<1	3,164	28,476	74	0.33	1,118	+3.93	+2.40	0.23	80 %	0.27	55	99	99

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.40	+2.40	+1.45	+1.61	+1.58

NOTES

--

(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
LUMINEX TRADING	<1	1,332	14,654	61	0.51	43	+0.30	+2.40	2.41	91 %	6.09	99	-	-
RAYMOND JAMES	<1	2,427	24,271	72	0.35	828	+3.41	+2.40	+4.38	17 %	+3.82	69	96	85
GREEN STREET	<1	1,192	14,307	70	0.38	497	+3.47	+2.40	+7.63	5 %	+7.13	92	94	80
PIPER JAFFRAY	<1	9,004	45,019	71	0.37	1,783	+3.96	+2.40	5.49	96 %	5.50	97	99	22
KEYBANC	<1	1,592	19,100	73	0.35	913	+4.78	+2.40	2.87	92 %	2.06	96	4	91
TELSEY ADVISORY GR	<1	5,486	16,459	60	0.52	823	+5.00	+2.40	8.67	98 %	7.65	1	-	2
FRIEDMAN BILLINGS	<1	2,822	16,930	83	0.21	847	+5.00	+2.40	+1.27	56 %	+2.30	74	-	-
JONES TRADING	<1	3,256	16,280	37	0.88	326	+2.00	+2.40	+0.69	68 %	1.29	13	99	3
BTIG LLC	<1	11,160	11,160	48	0.70	223	+2.00	+2.40	+21.51	1 %	+19.54	94	-	98
LEERINK SWANN	<1	1,935	7,740	60	0.52	310	+4.00	+2.40	1.45	88 %	1.42	84	1	99

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.40	+2.40	+1.45	+1.61	+1.58

NOTES

--

(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
WALL STREET ACCESS	<1	1,919	9,596	71	0.37	480	+5.00	+2.40	+4.62	15 %	+5.65	-	-	-
CANACCORD GENUITY	<1	2,807	5,613	74	0.34	225	+4.00	+2.40	26.23	99 %	26.20	-	6	18
MAXIM GROUP	<1	2,900	2,900	87	0.16	104	+3.60	+2.40	+6.13	8 %	+5.76	-	-	84
KING, CL, & ASSOC	<1	2,003	4,006	50	0.68	185	+4.61	+2.40	8.68	98 %	8.04	-	99	-
MIZUHO	<1	11,437	11,437	69	0.40	343	+3.00	+2.40	0.81	85 %	1.78	-	-	-
BMO CAPITAL MARKETS	<1	2,350	9,400	27	1.08	282	+3.00	+2.40	5.02	96 %	5.99	80	51	-
MKM PARTNERS	<1	4,300	4,300	38	0.86	43	+1.00	+2.40	19.73	99 %	22.71	-	83	-
DAVIDSON D.A. & CO	<1	2,987	5,974	23	1.16	299	+5.00	+2.40	2.43	91 %	1.40	95	99	84
BLOOMBERG	<1	229	229	33	0.95	5	+2.00	+2.40	+160.65	1 %	+158.68	99	27	88
KNIGHT CAPITAL	<1	2,054	4,108	96	0.06	82	+2.00	+2.40	+0.54	69 %	1.44	1	26	96

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.40	+2.40	+1.45	+1.61	+1.58

NOTES

--

(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
SUNTRUST CAPITAL MAR	<1	4,600	4,600	72	0.36	230	+5.00	+2.40	+3.37	24 %	+4.40	-	-	89
LEK SECURITIES CORP	<1	2,246	2,246	75	0.32	112	+5.00	+2.40	+5.20	12 %	+6.22	60	99	-
BLUEFIN RESEARCH	<1	3,440	3,440	47	0.72	172	+5.00	+2.40	+14.77	1 %	+15.79	99	-	-
BREAN CAPITAL LLC	<1	1,690	1,690	67	0.43	85	+5.00	+2.40	7.91	98 %	6.89	-	-	-
KEEFE BRUYETTE WOODS	<1	3,147	6,294	93	0.10	298	+4.73	+2.40	+0.49	70 %	+1.25	78	91	89
INTL FC STONE SECURI	<1	2,450	2,450	79	0.27	123	+5.00	+2.40	+1.74	47 %	+2.77	98	-	99
MACQUARIE	<1	933	933	77	0.29	33	+3.50	+2.40	2.23	90 %	2.70	-	-	-
WUNDERLICH SECUR	<1	1,758	1,758	89	0.14	88	+5.00	+2.40	+1.39	54 %	+2.42	90	99	13

ELKINS/MCSHERRY UNIVERSE VALUES

Commission (cps)				Market Impact (cps)
Bundled	All Trading	Execution Only	Program	Full Day VWAP
+3.40	+2.40	+1.45	+1.61	+1.58

NOTES

--



(+) = Cost

TRADE CYCLE DETAIL

ALLIANCE R 3000 CAPITAL MANAGEM 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	20162ND (%)	20161ST (%)	20154TH (%)
Grand Total	6	399	145,514	22	1.18	1,091	+0.75	+2.40	1.05	86 %	4.28	30	1	6
DEUTSCHE BANK	6	365	132,800	22	1.19	996	+0.75	+2.40	4.28	94 %	7.51	-	-	-
MORGAN STANLEY	<1	12,714	12,714	32	0.96	95	+0.75	+2.40	+32.66	1 %	+29.44	1	-	28



(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
Grand Total	26	2,386	439,088	70	0.38	11,952	+2.72	+2.40	+2.79	31 %	+1.54	92	92	71
CAPITAL INSTL SVCS	13	3,333	206,631	72	0.36	5,570	+2.70	+2.40	+5.51	10 %	+4.23	66	88	27
SC BERNSTEIN	2	4,347	56,509	75	0.32	1,475	+2.61	+2.40	4.51	95 %	5.87	82	89	85
WILLIAM BLAIR	2	1,016	17,274	67	0.42	605	+3.50	+2.40	+17.36	1 %	+16.89	99	-	1
JP MORGAN CHASE	2	1,139	19,370	81	0.25	424	+2.19	+2.40	6.89	97 %	8.67	84	99	86
UBS	1	1,722	18,937	64	0.47	663	+3.50	+2.40	+0.74	67 %	+0.27	1	99	1
BROADCORT CAPITAL	<1	1,220	8,538	75	0.32	299	+3.50	+2.40	0.91	85 %	1.38	-	-	-
BAIRD, ROBERT W	<1	3,068	18,410	71	0.38	629	+3.42	+2.40	+2.72	32 %	+2.16	76	98	20
LUMINEX TRADING	<1	1,332	14,654	61	0.51	43	+0.30	+2.40	2.41	91 %	6.09	99	-	-
ITG	<1	1,540	9,239	62	0.50	185	+2.00	+2.40	+6.33	7 %	+4.36	99	99	1
ISI GROUP INC	<1	5,689	5,689	53	0.62	199	+3.50	+2.40	9.54	99 %	10.02	99	-	99
STIFEL NICOLAUS & CO	<1	2,543	10,173	57	0.57	356	+3.50	+2.40	6.93	97 %	7.40	14	-	99
WELLS FARGO	<1	2,565	5,129	93	0.09	180	+3.50	+2.40	2.87	92 %	3.34	79	91	1
RAYMOND JAMES	<1	3,407	10,221	83	0.22	307	+3.00	+2.40	1.97	90 %	2.94	42	99	-
JEFFERIES & CO	<1	579	2,897	54	0.61	101	+3.50	+2.40	+1.77	46 %	+1.30	86	1	99
NEEDHAM & CO INC	<1	415	415	83	0.21	15	+3.50	+2.40	+20.69	1 %	+20.22	-	-	-
BTIG LLC	<1	11,160	11,160	48	0.70	223	+2.00	+2.40	+21.51	1 %	+19.54	94	-	99
CREDIT SUISSE	<1	1,023	5,114	58	0.55	135	+2.63	+2.40	1.40	88 %	2.75	97	99	-
CONVERGEX	<1	6,680	6,680	32	0.97	200	+3.00	+2.40	11.15	99 %	12.12	-	-	-
BLOOMBERG	<1	229	229	33	0.95	5	+2.00	+2.40	+160.65	1 %	+158.68	99	27	88
BARCLAYS	<1	968	2,905	64	0.46	102	+3.50	+2.40	+0.42	71 %	0.06	-	-	-



(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
CITIGROUP	<1	1,343	2,685	75	0.32	94	+3.50	+2.40	+1.23	56 %	+0.75	-	99	1
MORGAN STANLEY	<1	1,372	1,372	89	0.14	14	+1.00	+2.40	2.30	91 %	5.27	99	1	1
DEUTSCHE BANK	<1	1,291	1,291	42	0.79	45	+3.50	+2.40	10.83	99 %	11.30	-	1	66
JONES TRADING	<1	1,317	2,633	39	0.85	53	+2.00	+2.40	+23.67	1 %	+21.69	1	-	-
MACQUARIE	<1	933	933	77	0.29	33	+3.50	+2.40	2.23	90 %	2.70	-	-	-



(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
Grand Total	13	2,675	478,855	71	0.38	20,895	+4.36	+2.40	2.00	90 %	1.61	92	92	73
CONVERGEX	3	1,760	103,824	75	0.32	5,191	+5.00	+2.40	2.15	90 %	1.12	85	78	30
RBC CAPITAL MARKETS	3	2,358	84,898	69	0.40	2,575	+3.03	+2.40	+1.15	57 %	+0.21	93	82	85
WEEDEN & CO	2	2,985	56,713	73	0.34	2,170	+3.83	+2.40	0.59	83 %	0.73	95	63	71
CAPITAL INSTL SVCS	1	6,124	55,116	73	0.35	2,561	+4.65	+2.40	0.26	80 %	+0.41	92	97	85
WILLIAM BLAIR	<1	2,014	18,130	80	0.25	907	+5.00	+2.40	0.27	80 %	+0.75	1	90	-
TELSEY ADVISORY GR	<1	5,486	16,459	60	0.52	823	+5.00	+2.40	8.67	98 %	7.65	-	-	1
FRIEDMAN BILLINGS	<1	2,822	16,930	83	0.21	847	+5.00	+2.40	+1.27	56 %	+2.30	49	-	-
BAIRD, ROBERT W	<1	6,607	6,607	69	0.40	330	+5.00	+2.40	118.13	99 %	117.10	97	-	-
KEYBANC	<1	1,763	14,100	74	0.33	705	+5.00	+2.40	2.01	90 %	0.98	93	93	88
WALL STREET ACCESS	<1	1,919	9,596	71	0.37	480	+5.00	+2.40	+4.62	15 %	+5.65	-	-	-
ITG	<1	1,892	9,461	69	0.40	303	+3.20	+2.40	+2.34	37 %	+1.56	90	76	38
UBS	<1	9,570	9,570	77	0.30	479	+5.00	+2.40	2.82	92 %	1.79	48	39	68
PIPER JAFFRAY	<1	14,215	28,430	65	0.46	1,120	+3.94	+2.40	0.78	84 %	0.81	98	-	-
KING, CL, & ASSOC	<1	2,900	2,900	44	0.76	145	+5.00	+2.40	12.31	99 %	11.28	-	99	-
LIQUIDNET	<1	1,515	4,546	66	0.44	182	+4.00	+2.40	+5.73	8 %	+5.76	86	72	87
DAVIDSON D.A. & CO	<1	2,987	5,974	23	1.16	299	+5.00	+2.40	2.43	91 %	1.40	95	99	84
STEPHENS & CO INC	<1	3,810	7,620	85	0.19	381	+5.00	+2.40	+1.07	60 %	+2.10	97	-	1
SUNTRUST CAPITAL MAR	<1	4,600	4,600	72	0.36	230	+5.00	+2.40	+3.37	24 %	+4.40	-	-	89
LEK SECURITIES CORP	<1	2,246	2,246	75	0.32	112	+5.00	+2.40	+5.20	12 %	+6.22	60	99	-
JEFFERIES & CO	<1	6,721	6,721	37	0.88	336	+5.00	+2.40	+10.91	2 %	+11.94	-	-	-



(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
BLUEFIN RESEARCH	<1	3,440	3,440	47	0.72	172	+5.00	+2.40	+14.77	1 %	+15.79	99	-	-
BREAN CAPITAL LLC	<1	1,690	1,690	67	0.43	85	+5.00	+2.40	7.91	98 %	6.89	-	-	-
KEEFE BRUYETTE WOODS	<1	5,076	5,076	95	0.06	254	+5.00	+2.40	+0.46	70 %	+1.49	-	-	-
INTL FC STONE SECURI	<1	2,450	2,450	79	0.27	123	+5.00	+2.40	+1.74	47 %	+2.77	98	-	99
WUNDERLICH SECUR	<1	1,758	1,758	89	0.14	88	+5.00	+2.40	+1.39	54 %	+2.42	92	99	-



(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
Grand Total	<1	5,700	5,700	66	0.44	57	+1.00	+2.40	+17.38	1 %	+14.41	91	98	99
UBS	<1	5,700	5,700	66	0.44	57	+1.00	+2.40	+17.38	1 %	+14.41	99	-	-



(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
Grand Total	6	3,367	218,827	57	0.56	1,909	+0.87	+2.40	8.00	98 %	11.10	85	92	92
UBS	5	3,542	162,927	61	0.51	1,385	+0.85	+2.40	7.38	97 %	10.51	88	94	93
CITIGROUP	<1	2,775	22,200	57	0.56	44	+0.20	+2.40	+0.73	67 %	3.05	50	35	88
JP MORGAN CHASE	<1	1,638	13,100	45	0.75	393	+3.00	+2.40	4.17	94 %	5.14	99	97	91
GOLDMAN SACHS	<1	13,500	13,500	24	1.13	27	+0.20	+2.40	28.43	99 %	32.20	-	-	-
MKM PARTNERS	<1	4,300	4,300	38	0.86	43	+1.00	+2.40	19.73	99 %	22.71	-	-	-
MERRILL LYNCH	<1	2,800	2,800	57	0.56	17	+0.60	+2.40	14.14	99 %	17.51	98	99	99



(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
Grand Total	9	2,827	257,274	61	0.51	4,240	+1.65	+2.40	+2.52	34 %	+0.19	24	94	78
CREDIT SUISSE	2	2,214	53,129	75	0.32	213	+0.40	+2.40	2.06	90 %	5.64	1	42	4
MERRILL LYNCH	2	2,473	46,985	58	0.56	1,120	+2.38	+2.40	+5.85	8 %	+4.26	83	95	10
COWEN & CO	1	4,451	40,059	53	0.63	801	+2.00	+2.40	+11.34	2 %	+9.37	1	-	-
GOLDMAN SACHS	<1	1,613	22,587	65	0.45	155	+0.69	+2.40	+9.72	2 %	+6.43	1	92	99
BROADCORT CAPITAL	<1	12,484	37,451	71	0.37	778	+2.08	+2.40	+11.28	2 %	+9.38	24	91	-
WEEDEN & CO	<1	4,358	17,433	35	0.92	262	+1.50	+2.40	+1.40	54 %	1.07	92	76	96
JP MORGAN CHASE	<1	2,888	5,776	26	1.10	173	+3.00	+2.40	129.71	99 %	130.68	79	87	10
MORGAN STANLEY	<1	1,520	9,121	88	0.15	36	+0.40	+2.40	+0.70	67 %	2.87	1	99	1
MIZUHO	<1	11,437	11,437	69	0.40	343	+3.00	+2.40	0.81	85 %	1.78	-	-	-
BARCLAYS	<1	5,858	5,858	35	0.92	176	+3.00	+2.40	20.99	99 %	21.96	1	90	-
JEFFERIES & CO	<1	2,060	4,119	44	0.76	124	+3.00	+2.40	+52.82	1 %	+51.85	98	65	89
STATE STREET BANK	<1	481	481	12	1.49	2	+0.50	+2.40	+44.63	1 %	+41.16	95	62	-
CANTOR FITZGERALD	<1	1,461	1,461	100	0.00	44	+3.00	+2.40	0.03	78 %	1.01	-	-	-
BAIRD, ROBERT W	<1	344	1,377	85	0.20	14	+1.00	+2.40	1.92	90 %	4.89	41	98	29



(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
Grand Total	32	2,496	1,033,144	52	0.64	36,156	+3.50	+2.40	+0.34	73 %	0.13	68	66	75
LIQUIDNET	8	2,090	261,294	59	0.54	7,480	+2.86	+2.40	1.92	90 %	3.03	78	91	83
CAPITAL INSTL SVCS	4	3,036	100,177	63	0.48	4,215	+4.21	+2.40	+1.32	55 %	+1.55	21	27	80
JP MORGAN CHASE	3	1,815	85,320	40	0.83	3,505	+4.11	+2.40	+4.12	19 %	+4.26	62	5	82
WELLS FARGO	3	2,434	82,749	63	0.49	3,528	+4.26	+2.40	+2.38	37 %	+2.67	98	10	48
CITIGROUP	2	2,727	65,439	32	0.98	2,491	+3.81	+2.40	+7.48	5 %	+7.32	8	91	43
MORGAN STANLEY	2	7,542	128,210	62	0.49	4,060	+3.17	+2.40	+0.92	63 %	+0.12	11	16	78
JEFFERIES & CO	1	2,750	33,000	36	0.90	1,444	+4.38	+2.40	4.02	94 %	3.62	66	1	56
STIFEL NICOLAUS & CO	1	3,665	58,640	37	0.87	2,029	+3.46	+2.40	+0.16	75 %	0.35	96	95	1
ITG	<1	950	18,050	44	0.77	542	+3.00	+2.40	0.13	79 %	1.11	15	79	94
BARCLAYS	<1	3,235	42,060	35	0.92	1,145	+2.72	+2.40	6.81	97 %	8.06	93	99	99
GOLDMAN SACHS	<1	2,426	19,410	73	0.34	916	+4.72	+2.40	1.92	90 %	1.17	99	99	48
GREEN STREET	<1	1,192	14,307	70	0.38	497	+3.47	+2.40	+7.63	5 %	+7.13	92	94	80
RBC CAPITAL MARKETS	<1	3,426	23,980	72	0.36	959	+4.00	+2.40	+0.24	74 %	+0.27	-	-	-
MERRILL LYNCH	<1	5,380	5,380	10	1.59	0	+0.00	+2.40	35.08	99 %	39.06	99	1	83
UBS	<1	1,387	13,870	52	0.63	514	+3.71	+2.40	0.10	79 %	0.37	12	73	43
DEUTSCHE BANK	<1	3,606	18,030	66	0.44	654	+3.63	+2.40	+0.21	74 %	0.13	95	93	88
ISI GROUP INC	<1	1,603	14,428	39	0.84	497	+3.45	+2.40	+6.61	6 %	+6.08	2	44	89
BAIRD, ROBERT W	<1	3,160	25,280	68	0.41	817	+3.23	+2.40	+1.02	61 %	+0.28	-	99	-
CREDIT SUISSE	<1	2,390	7,170	56	0.58	287	+4.00	+2.40	+7.15	5 %	+7.18	20	17	58
BMO CAPITAL MARKETS	<1	2,350	9,400	27	1.08	282	+3.00	+2.40	5.02	96 %	5.99	80	51	-



(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
KEYBANC	<1	1,250	5,000	70	0.39	208	+4.17	+2.40	5.29	96 %	5.10	99	5	99
RAYMOND JAMES	<1	650	1,950	49	0.69	86	+4.38	+2.40	6.57	97 %	6.16	95	93	88



(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
Grand Total	33	2,204	954,129	61	0.52	37,643	+3.95	+2.40	+2.56	33 %	+2.53	46	68	82
THEMIS TRADING LLC	12	2,609	326,155	61	0.51	13,046	+4.00	+2.40	+8.20	4 %	+8.22	13	12	18
ITG	8	1,397	222,089	64	0.47	8,884	+4.00	+2.40	+1.35	54 %	+1.38	33	21	75
WILLIAM BLAIR	2	3,573	64,316	70	0.39	2,569	+3.99	+2.40	0.62	83 %	0.60	97	98	22
LIQUIDNET	2	2,240	58,235	55	0.59	2,329	+4.00	+2.40	3.15	92 %	3.12	58	90	99
STEPHENS & CO INC	1	2,876	43,145	63	0.48	1,726	+4.00	+2.40	+3.57	23 %	+3.60	1	33	88
JEFFERIES & CO	1	2,464	34,499	52	0.63	1,380	+4.00	+2.40	+3.24	26 %	+3.26	13	99	93
STATE STREET BANK	1	1,344	28,232	37	0.89	1,129	+4.00	+2.40	+3.02	29 %	+3.04	26	75	10
NEEDHAM & CO INC	<1	3,122	24,979	79	0.27	999	+4.00	+2.40	0.66	83 %	0.63	99	1	10
STIFEL NICOLAUS & CO	<1	4,300	21,499	51	0.65	860	+4.00	+2.40	+3.93	20 %	+3.96	56	66	70
OPPENHEIMER & CO INC	<1	5,815	23,261	77	0.29	930	+4.00	+2.40	+0.64	68 %	+0.67	76	94	99
COWEN & CO	<1	3,175	15,875	65	0.46	635	+4.00	+2.40	5.05	96 %	5.02	6	89	98
GOLDMAN SACHS	<1	3,319	13,275	38	0.87	531	+4.00	+2.40	10.92	99 %	10.89	95	1	1
CANTOR FITZGERALD	<1	1,536	12,289	35	0.91	246	+2.00	+2.40	+2.00	42 %	+0.03	75	78	1
PIPER JAFFRAY	<1	5,530	16,589	76	0.30	664	+4.00	+2.40	13.56	99 %	13.53	98	31	1
LEERINK SWANN	<1	1,935	7,740	60	0.52	310	+4.00	+2.40	1.45	88 %	1.42	97	1	99
JONES TRADING	<1	4,549	13,647	36	0.89	273	+2.00	+2.40	3.75	94 %	5.72	-	-	1
CANACCORD GENUITY	<1	2,807	5,613	74	0.34	225	+4.00	+2.40	26.23	99 %	26.20	-	6	10
BAIRD, ROBERT W	<1	3,461	6,922	30	1.01	277	+4.00	+2.40	+12.25	1 %	+12.27	89	1	99
DEUTSCHE BANK	<1	2,855	8,566	100	0.00	343	+4.00	+2.40	+0.37	72 %	+0.39	10	99	80
CITIGROUP	<1	2,404	4,807	8	1.73	192	+4.00	+2.40	42.05	99 %	42.02	6	99	99



(+) = 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	20162ND (%)	20161ST (%)	20154TH (%)
WELLS FARGO	<1	1,198	2,396	95	0.07	96	+4.00	+2.40	+3.57	24 %	+3.59	99	96	99



(+) = Cost

TRADE CYCLE DETAIL

WEDGE CAPITAL MGMT LLP 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	20162ND (%)	20161ST (%)	20154TH (%)
Grand Total	5	2,324	195,219	72	0.36	6,962	+3.57	+2.40	+3.54	24 %	+3.13	7	33	78
BARCLAYS	2	3,891	77,825	64	0.47	2,802	+3.60	+2.40	+1.91	45 %	+1.54	75	5	67
JP MORGAN CHASE	<1	2,125	8,500	67	0.42	306	+3.60	+2.40	+8.62	3 %	+8.25	53	99	99
CANTOR FITZGERALD	<1	871	11,321	68	0.42	408	+3.60	+2.40	+4.19	17 %	+3.82	70	13	1
WELLS FARGO	<1	4,682	18,729	95	0.06	674	+3.60	+2.40	+0.53	69 %	+0.15	8	93	99
CREDIT SUISSE	<1	2,768	11,071	91	0.12	399	+3.60	+2.40	+0.28	74 %	0.09	-	-	80
BROADCORT CAPITAL	<1	1,075	4,300	59	0.54	155	+3.60	+2.40	+2.88	30 %	+2.50	64	66	81
OPPENHEIMER & CO INC	<1	1,043	5,215	69	0.41	188	+3.60	+2.40	4.09	94 %	4.47	84	-	-
JEFFERIES & CO	<1	1,119	8,953	65	0.45	322	+3.60	+2.40	+12.11	1 %	+11.74	93	25	98
MAXIM GROUP	<1	2,900	2,900	87	0.16	104	+3.60	+2.40	+6.13	8 %	+5.76	-	-	-
RAYMOND JAMES	<1	3,025	12,100	63	0.48	436	+3.60	+2.40	+11.50	2 %	+11.13	94	93	-
RBC CAPITAL MARKETS	<1	1,311	9,179	82	0.23	330	+3.60	+2.40	+2.40	37 %	+2.03	-	87	19
CITIGROUP	<1	2,950	5,900	76	0.31	212	+3.60	+2.40	+14.29	1 %	+13.92	90	1	99
GOLDMAN SACHS	<1	2,700	2,700	65	0.46	97	+3.60	+2.40	+9.63	2 %	+9.26	8	99	1
KNIGHT CAPITAL	<1	2,054	4,108	96	0.06	82	+2.00	+2.40	+0.54	69 %	1.44	1	26	96
MORGAN STANLEY	<1	1,697	3,394	69	0.40	122	+3.60	+2.40	1.79	89 %	2.16	26	-	65
STIFEL NICOLAUS & CO	<1	6,700	6,700	90	0.13	241	+3.60	+2.40	+3.30	26 %	+2.92	99	-	88
KING, CL, & ASSOC	<1	1,106	1,106	94	0.08	40	+3.60	+2.40	+0.84	65 %	+0.47	-	-	-
KEEFE BRUYETTE WOODS	<1	1,218	1,218	84	0.21	44	+3.60	+2.40	+0.62	68 %	+0.25	78	91	89



(+) = 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)
VER	13	141,640	1,514,838	+2.95	0.16%	0.55	+0.33
ESRT	35	107,930	2,247,559	+3.26	0.22%	0.61	+0.62
DDR	33	105,550	2,015,432	+2.99	0.07%	0.64	+1.51
CNO	17	90,400	1,431,276	+0.85	0.12%	0.75	6.68
SAAS	20	75,278	1,043,288	+3.40	0.88%	0.38	+0.28
BMJ	7	57,499	3,495,710	+2.07	0.03%	0.30	+10.51
FCE/A	23	55,300	1,298,096	+3.75	0.16%	0.41	+1.65
FAST	18	53,146	2,284,921	+3.37	0.07%	0.37	+0.48
PYPL	16	52,194	1,945,730	+3.10	0.05%	0.43	2.83
FRAN	14	51,578	720,150	+3.98	0.26%	0.53	0.23

Names Most Traded - Total Orders

							Market Impact
Security	# Orders	Shares	US Dollars	Commission (cps)	% of Volume	E - Score	Full Day VWAP (cps)
ESRT	35	107,930	2,247,559	+3.26	0.22%	0.61	+0.62
DXCM	26	33,112	3,014,113	+3.39	0.13%	0.37	+7.97
ROP	24	13,903	2,462,498	+2.29	0.13%	0.46	8.26
FTV	22	39,846	2,025,131	+2.73	0.07%	0.37	1.95
FAST	18	53,146	2,284,921	+3.37	0.07%	0.37	+0.48
AIV	17	48,610	2,201,616	+4.05	0.19%	0.53	+3.07
FLTX	16	42,920	2,294,063	+4.00	0.18%	0.43	+0.81
ESRX	14	45,576	3,402,912	+2.36	0.07%	0.37	+4.01
EQR	11	31,140	2,070,669	+4.35	0.07%	0.39	3.42
BMJ	7	57,499	3,495,710	+2.07	0.03%	0.30	+10.51



(+) = Cost

TRADE CONTRIBUTIONS

Cost\Savings Performance				
Category	Principal USD	# of Trades	Avg. Market Impact (cps)	Percentage of all Cost\Savings
10 High Cost Trades	2,301,733	10	+98.69	16.54%
Cost Trades	70,901,061	884	+14.98	100.00%
Saving Trades	59,711,007	932	15.33	100.00%
10 Low Cost Trades	2,085,379	10	89.83	22.15%





(+) = Cost

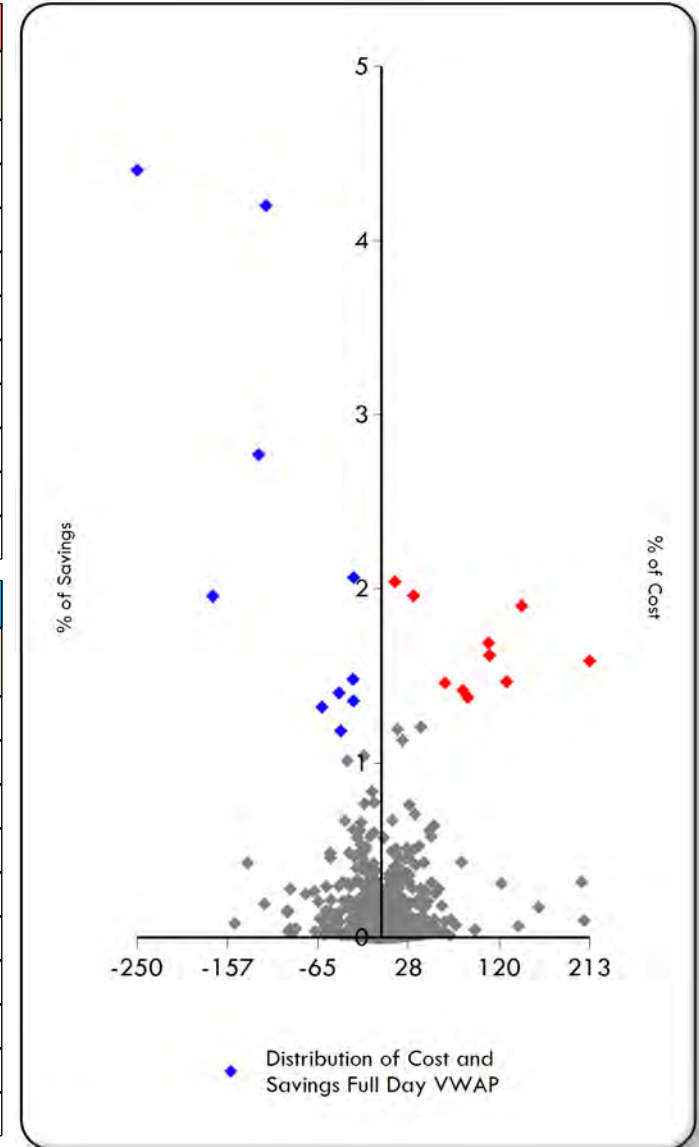
TRADE LEVEL DETAILS

10 High Cost Trades (Full Day VWAP)

Side	Security	Trade Date	Shares	Cost (%)	E - Score	Full Day VWAP (cps)	Manager	Broker
Buya1	RPD	2016/08/31	31,555	2.04	0.47	+13.69	UBS GLOBAL	BROADCORT
Sella2	INFO	2016/07/15	12,714	1.96	0.96	+32.66	ALLIANCE R	MORGAN STA
Buya3	EBIX	2016/08/08	2,812	1.90	1.64	+143.46	WEATHERBIE	THEMIS TRA
Buya4	EVBG	2016/09/16	3,277	1.69	1.10	+109.36	WEATHERBIE	THEMIS TRA
Sella5	ESRX	2016/08/25	3,109	1.62	1.46	+110.46	BROWN ADVI	CAPITAL IN
Buya6	COTV	2016/08/22	1,581	1.59	1.30	+212.85	WEATHERBIE	LIQUIDNET
Buya7	AKAM	2016/07/27	2,433	1.47	1.16	+127.94	BROWN ADVI	CAPITAL IN
Buya8	LOGM	2016/09/15	4,763	1.46	0.97	+65.02	UBS GLOBAL	COWEN & CO
Buya9	GME	2016/08/26	3,620	1.42	1.88	+83.12	DALTON, GR	RBC CAPITA
Sella10	ACAD	2016/07/21	3,308	1.38	1.51	+88.32	WEATHERBIE	THEMIS TRA

10 Low Cost Trades (Full Day VWAP)

Side	Security	Trade Date	Shares	Savings (%)	E - Score	Full Day VWAP (cps)	Manager	Broker
Buya1	ELLI	2016/08/04	3,276	4.40	1.30	249.82	UBS GLOBAL	JP MORGAN
Sella2	GCO	2016/09/01	6,607	4.20	0.40	118.13	DALTON, GR	BAIRD, ROB
Sella3	HLF	2016/07/15	4,100	2.77	0.71	125.61	HUBER CAPI	UBS
Buya4	CNO	2016/09/30	13,500	2.06	1.13	28.43	HUBER CAPI	GOLDMAN SA
Buya5	BLUE	2016/08/25	2,109	1.96	1.57	172.57	UBS GLOBAL	CREDIT SUI
Buya6	MPW	2016/09/27	9,430	1.48	1.83	29.24	URDANG SEC	BARCLAYS
Sella7	RARE	2016/08/12	6,016	1.41	0.63	43.41	WEATHERBIE	THEMIS TRA
Buya8	HPE	2016/09/08	8,800	1.36	1.42	28.71	HUBER CAPI	UBS
Buya9	EVBG	2016/09/16	4,049	1.32	0.61	60.76	WEATHERBIE	LIQUIDNET
Buya10	SWN	2016/09/08	5,300	1.19	1.53	41.63	ALLIANCE R	DEUTSCHE B



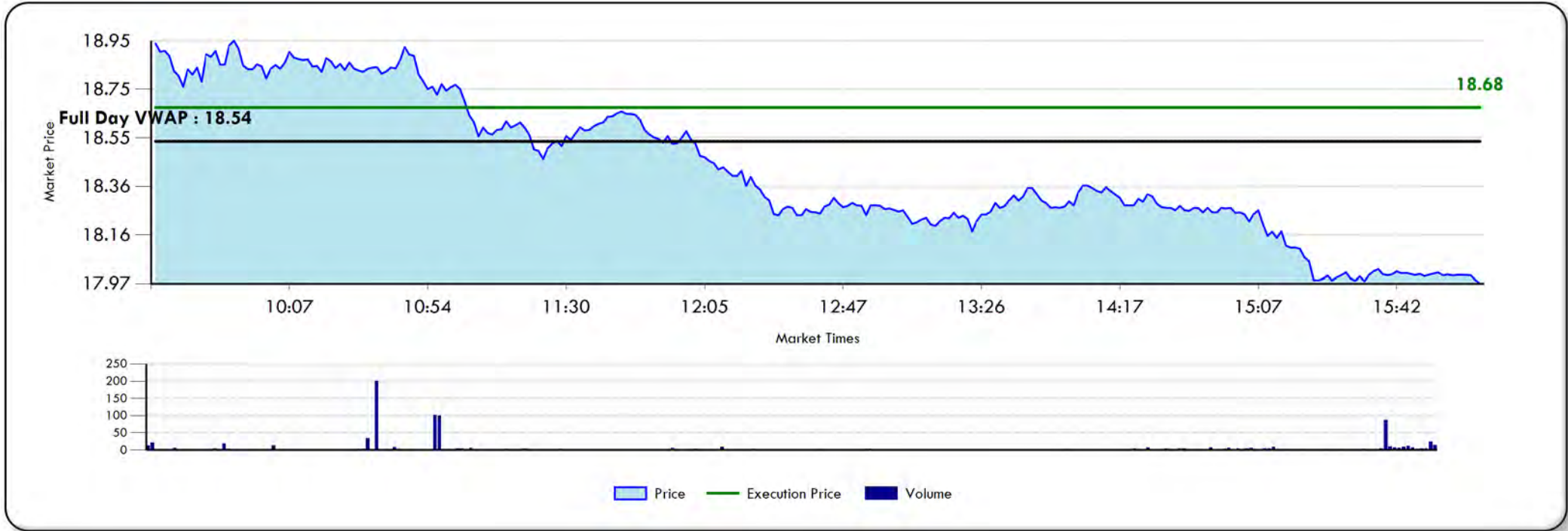


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

RPD - 2016/08/31

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 (%)
Buy	UBS GLOBAL ASSET MGMT	BROADCORT CAPITAL	08/31/2016 09:30:00	08/31/2016 16:00:00	31,555	18.6758	18.5389	+4,321	+13.69	0.47	3.12



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 2.04% of your market impact cost.

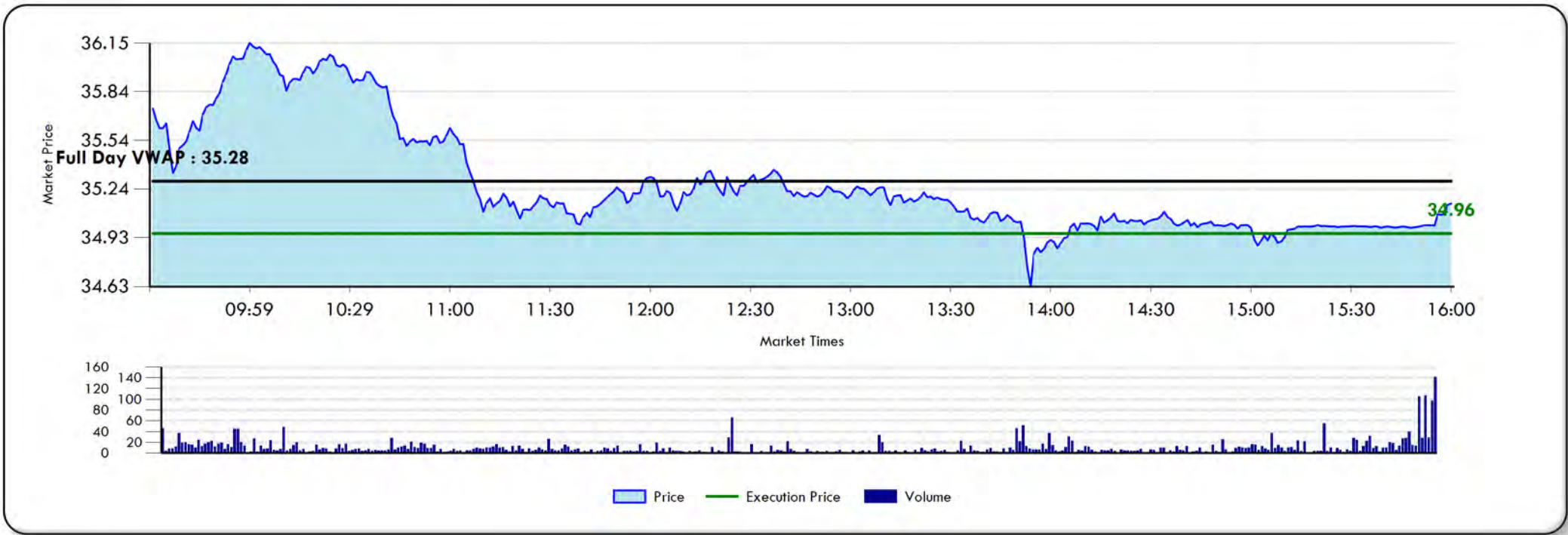


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

INFO - 2016/07/15

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	07/15/2016 09:30:00	07/15/2016 16:00:00	12,714	34.9577	35.2843	+4,153	+32.66	0.96	0.33



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.96% of your market impact cost.

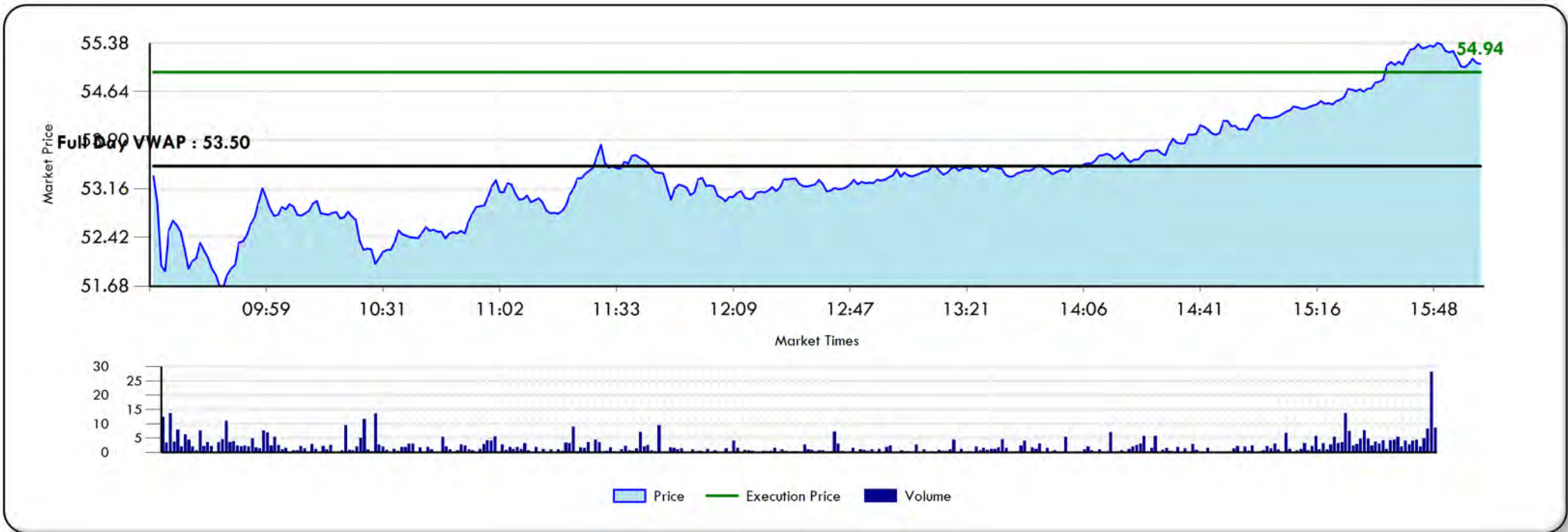


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

EBIX - 2016/08/08

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	THEMIS TRADING LLC	08/08/2016 09:30:00	08/08/2016 16:00:00	2,812	54.9361	53.5015	+4,034	+143.46	1.64	0.40



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.90% of your market impact cost.

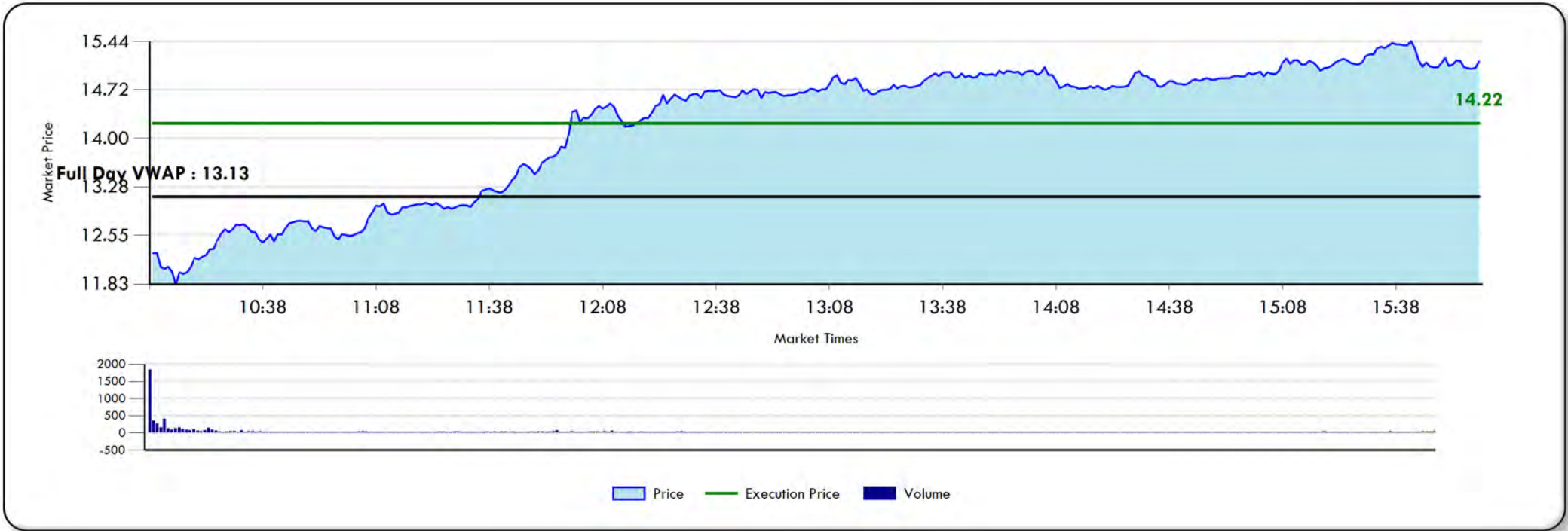


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

EVBG - 2016/09/16

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	THEMIS TRADING LLC	09/16/2016 09:30:00	09/16/2016 16:00:00	3,277	14.2224	13.1288	+3,584	+109.36	1.10	0.04



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.69% of your market impact cost.

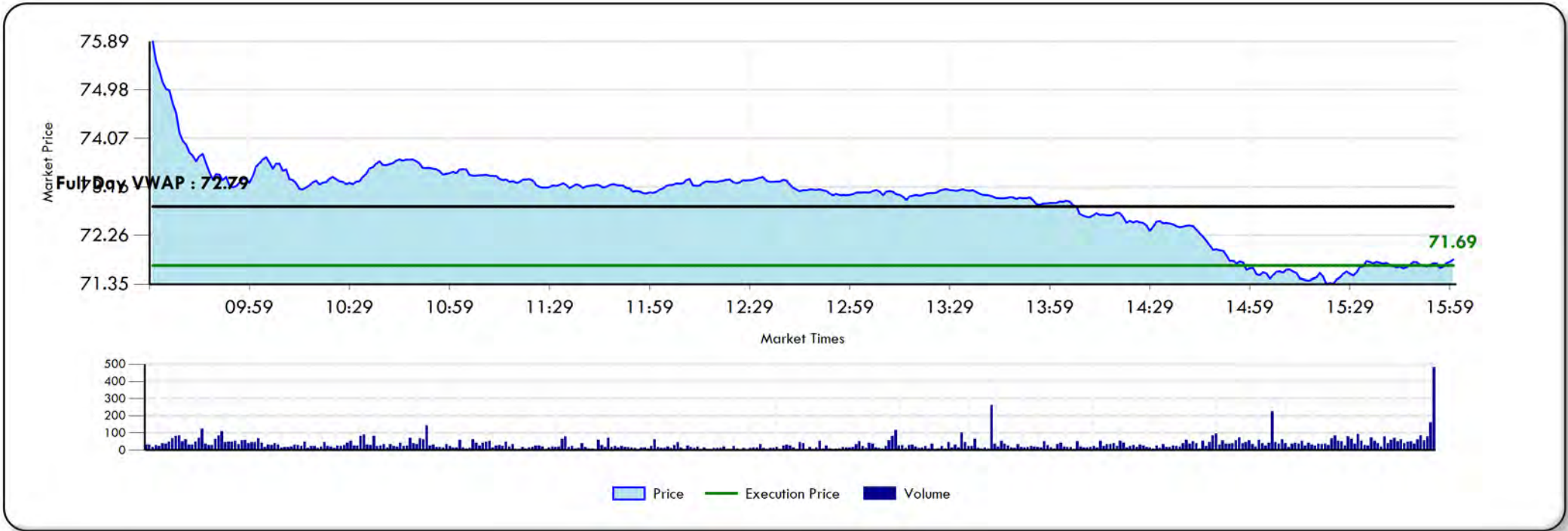


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

ESRX - 2016/08/25

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	BROWN ADVISORY	CAPITAL INSTL SVCS	08/25/2016 09:30:00	08/25/2016 16:00:00	3,109	71.6899	72.7945	+3,434	+110.46	1.46	0.02



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.62% of your market impact cost.



(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

COTV - 2016/08/22

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 (%)
Buy	WEATHERBIE	LIQUIDNET	08/22/2016 09:30:00	08/22/2016 16:00:00	1,581	31.7486	29.6201	+3,365	+212.85	1.30	0.10



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.59% of your market impact cost.



(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

AKAM - 2016/07/27

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	BROWN ADVISORY	CAPITAL INSTL SVCS	07/27/2016 09:30:00	07/27/2016 16:00:00	2,433	50.4063	49.1269	+3,113	+127.94	1.16	0.01



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.47% of your market impact cost.

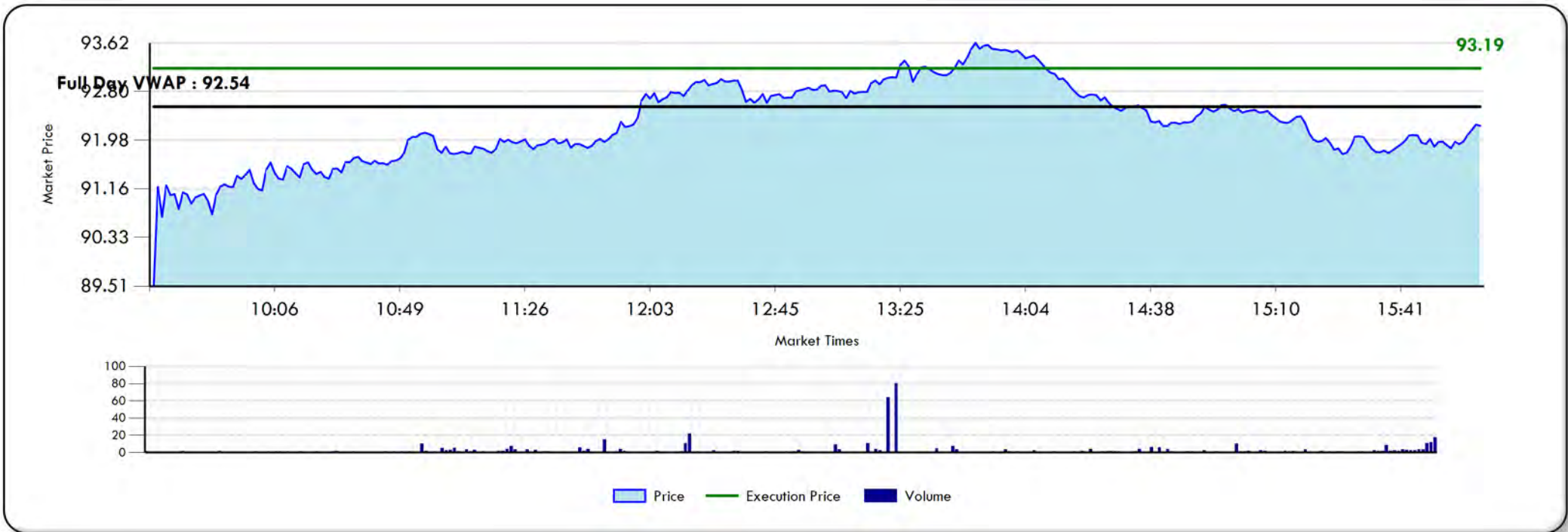


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

LOGM - 2016/09/15

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	COWEN & CO	09/15/2016 09:30:00	09/15/2016 16:00:00	4,763	93.1931	92.5429	+3,097	+65.02	0.97	0.84



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.46% of your market impact cost.

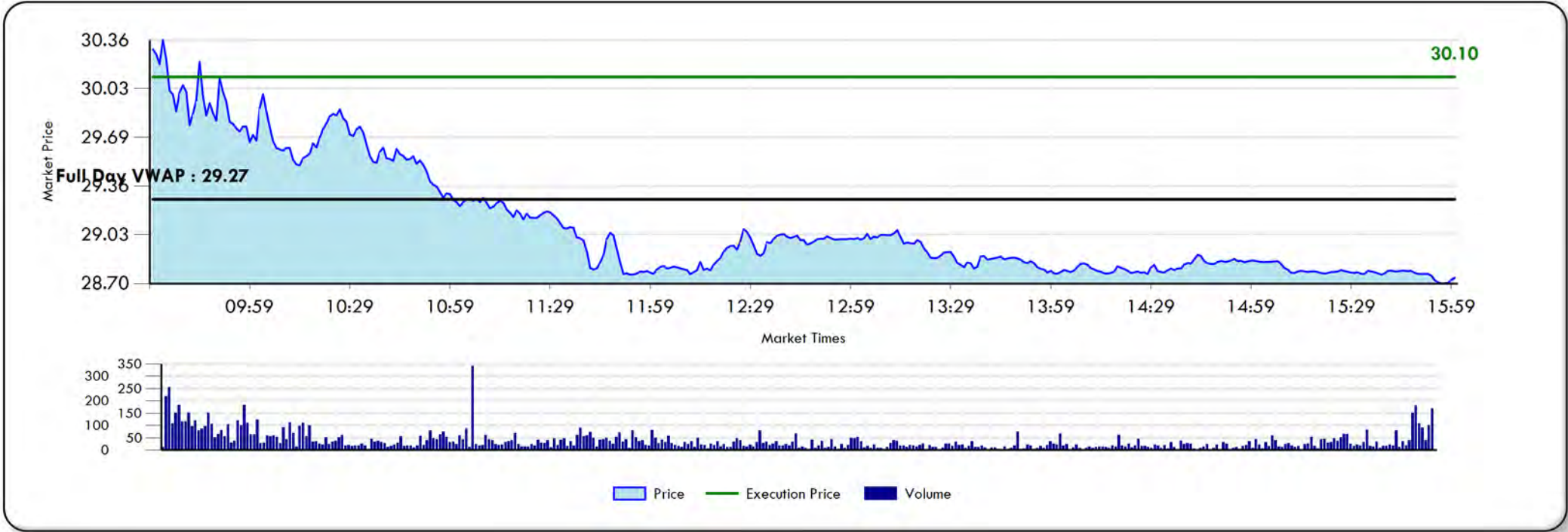


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

GME - 2016/08/26

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	DALTON, GREINER, HARTMAN, MAHER	RBC CAPITAL MARKETS	08/26/2016 09:30:00	08/26/2016 16:00:00	3,620	30.1043	29.2731	+3,009	+83.12	1.88	0.03



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.42% of your market impact cost.



(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

ACAD - 2016/07/21

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	WEATHERBIE	THEMIS TRADING LLC	07/21/2016 09:30:00	07/21/2016 16:00:00	3,308	35.7636	36.6468	+2,922	+88.32	1.51	0.11



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.38% of your market impact cost.

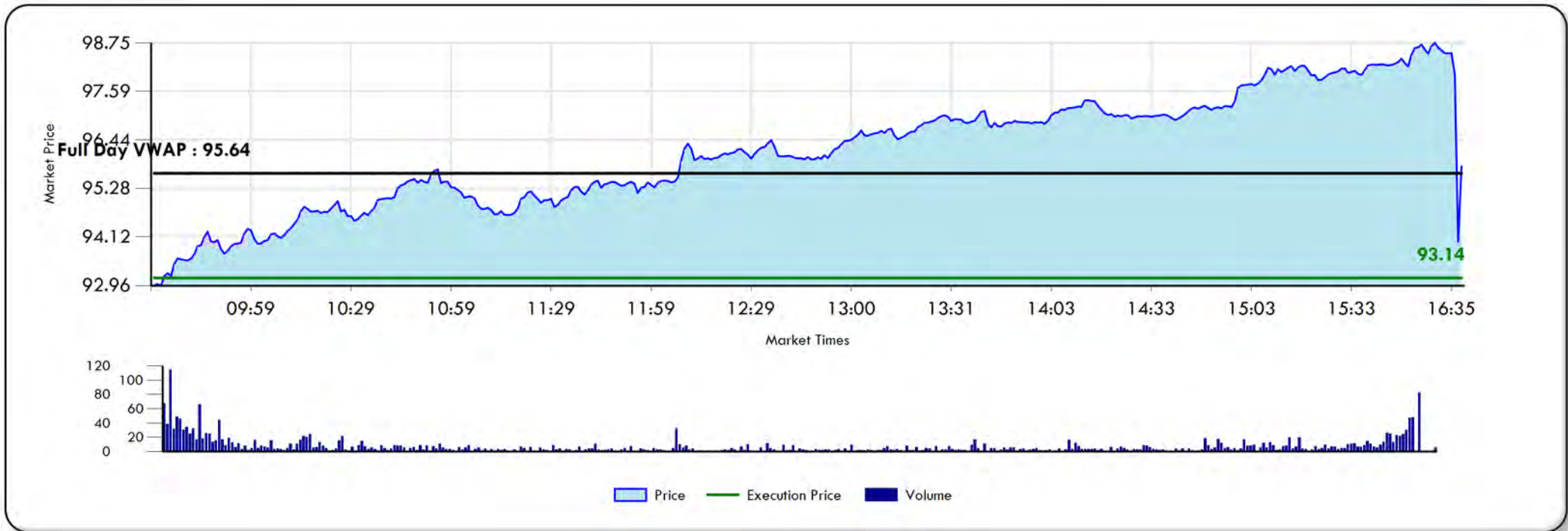


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

ELLI - 2016/08/04

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	JP MORGAN CHASE	08/04/2016 09:30:00	08/04/2016 16:00:00	3,276	93.1369	95.6351	8,184	249.82	1.30	0.12



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 4.40% of your market impact savings.

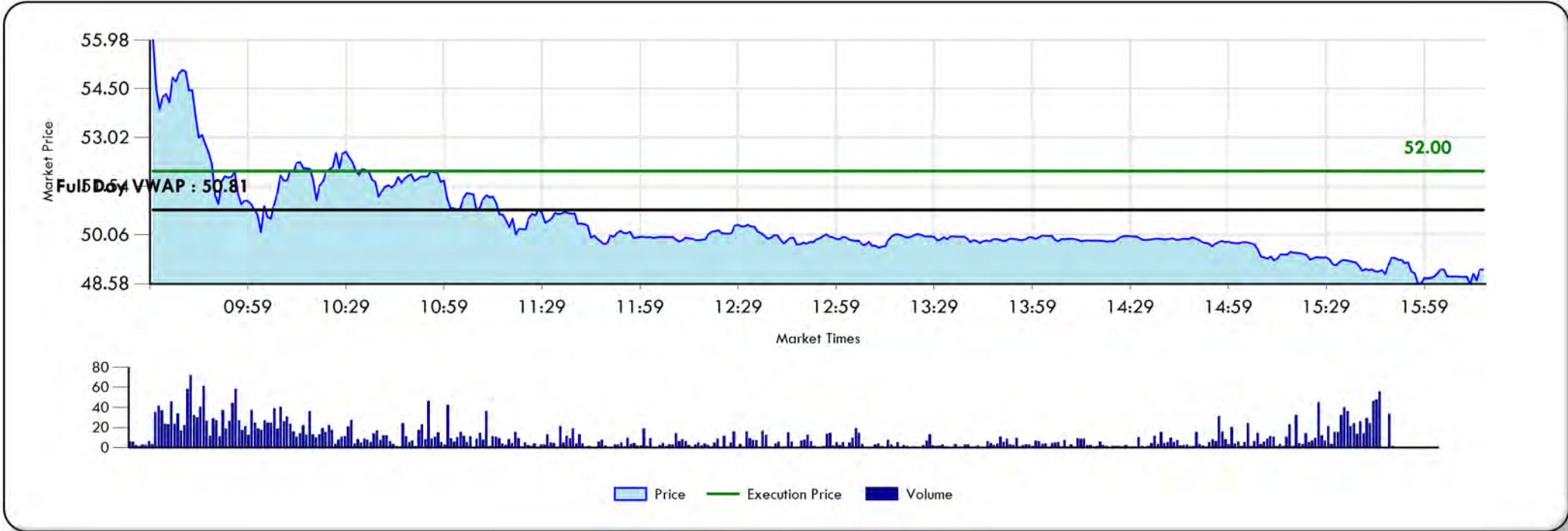


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

GCO - 2016/09/01

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	DALTON, GREINER, HARTMAN, MAHER	BAIRD, ROBERT W	09/01/2016 09:30:00	09/01/2016 16:00:00	6,607	51.9955	50.8142	7,805	118.13	0.40	0.16



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 4.20% of your market impact savings.

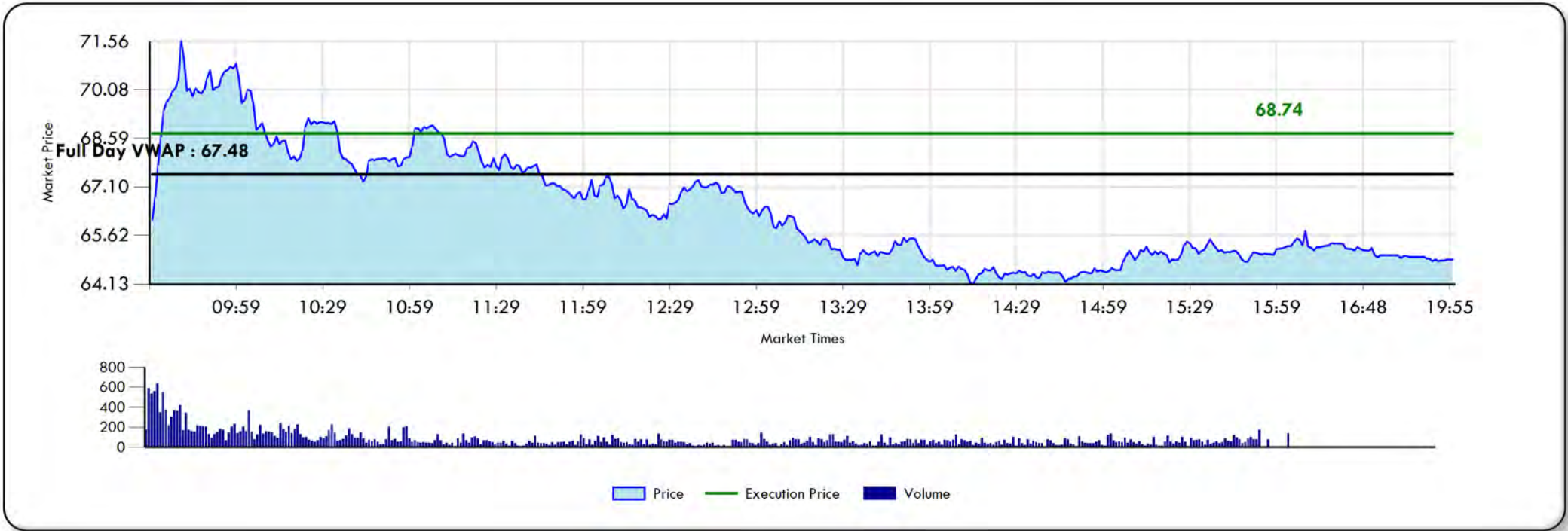


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

HLF - 2016/07/15

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	HUBER CAPITAL MANAGEMENT	UBS	07/15/2016 09:30:00	07/15/2016 16:00:00	4,100	68.7376	67.4815	5,150	125.61	0.71	0.01



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 2.77% of your market impact savings.

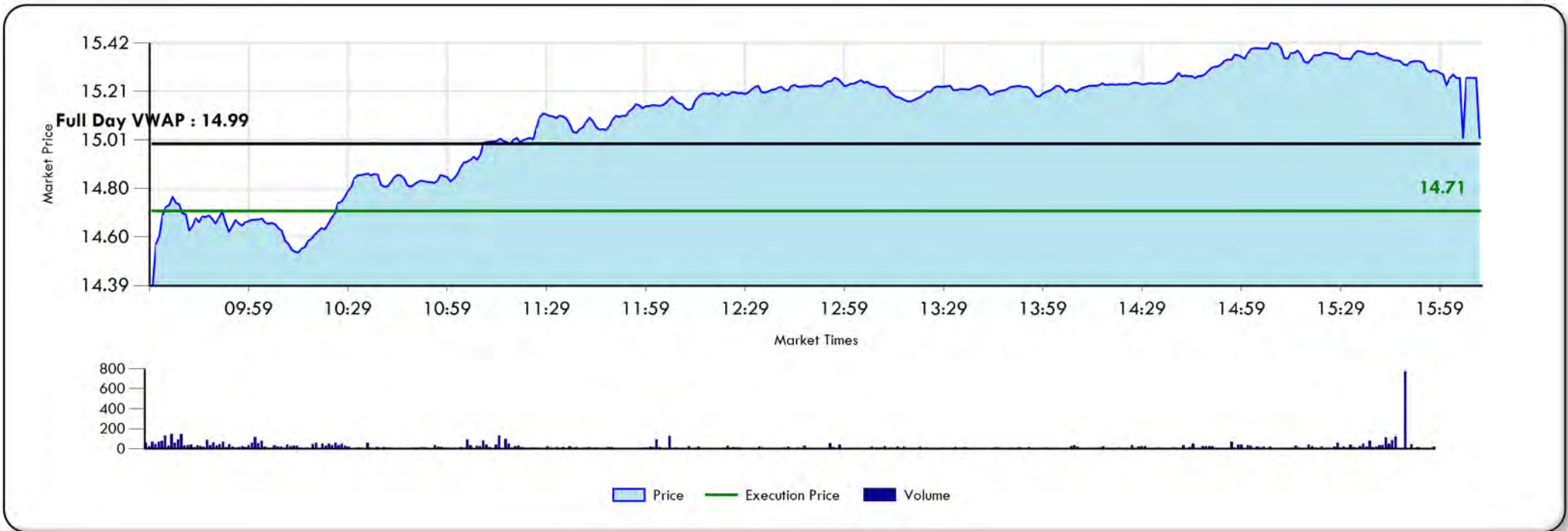


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

CNO - 2016/09/30

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	HUBER CAPITAL MANAGEMENT	GOLDMAN SACHS	09/30/2016 09:30:00	09/30/2016 16:00:00	13,500	14.7076	14.9919	3,838	28.43	1.13	0.19



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 2.06% of your market impact savings.

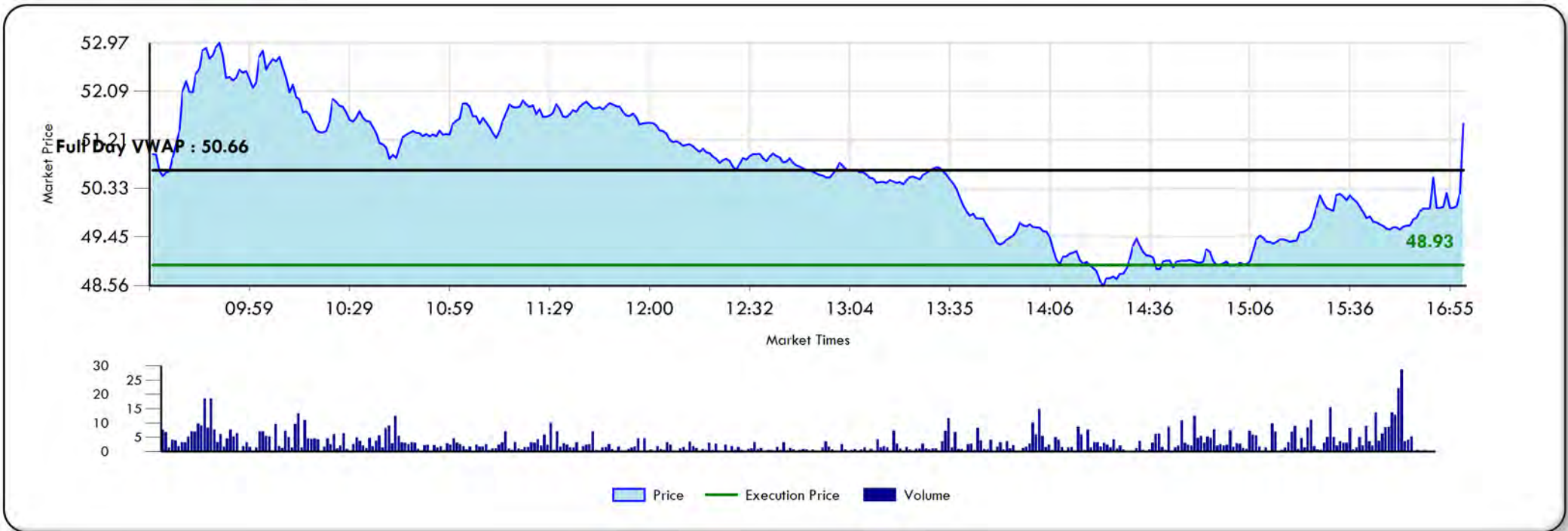


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

BLUE - 2016/08/25

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	CREDIT SUISSE	08/25/2016 09:30:00	08/25/2016 16:00:00	2,109	48.9311	50.6568	3,640	172.57	1.57	0.18



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 1.96% of your market impact savings.

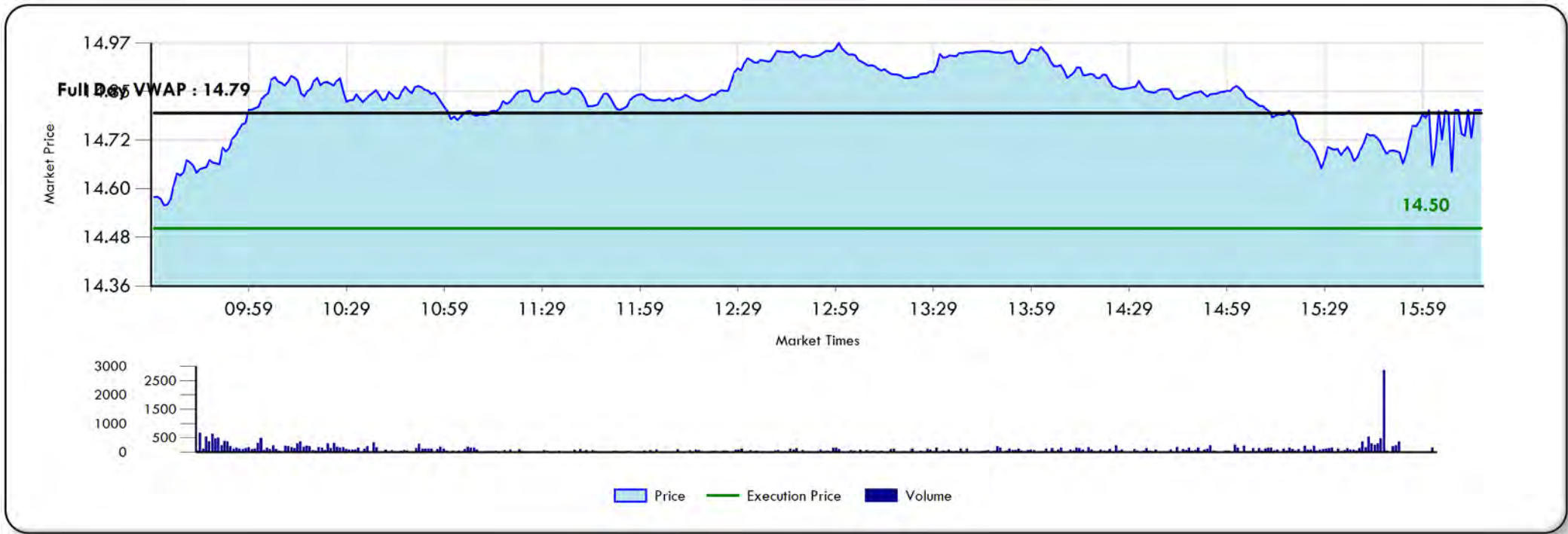


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

MPW - 2016/09/27

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	BARCLAYS	09/27/2016 09:30:00	09/27/2016 16:00:00	9,430	14.5000	14.7924	2,757	29.24	1.83	0.03



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 1.48% of your market impact savings.



(+) = Cost

TRADE LEVEL DETAIL - LOW COST

RARE - 2016/08/12

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 (%)
Sell	WEATHERBIE	THEMIS TRADING LLC	08/12/2016 09:30:00	08/12/2016 16:00:00	6,016	66.3476	65.9135	2,612	43.41	0.63	0.97



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 1.41% of your market impact savings.



(+) = Cost

TRADE LEVEL DETAIL - LOW COST

HPE - 2016/09/08

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	HUBER CAPITAL MANAGEMENT	UBS	09/08/2016 09:30:00	09/08/2016 16:00:00	8,800	21.3952	21.6823	2,527	28.71	1.42	0.03



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 1.36% of your market impact savings.

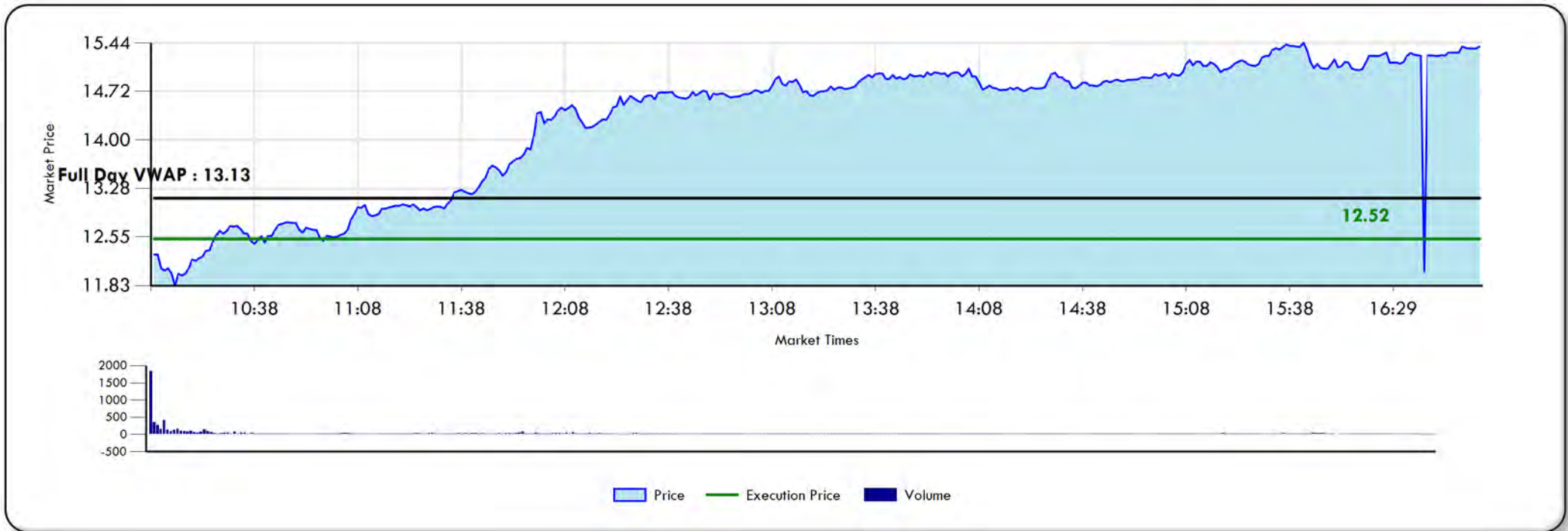


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

EVBG - 2016/09/16

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	LIQUIDNET	09/16/2016 09:30:00	09/16/2016 16:00:00	4,049	12.5212	13.1288	2,460	60.76	0.61	0.05



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 1.32% of your market impact savings.



(+) = Cost

TRADE LEVEL DETAIL - LOW COST

SWN - 2016/09/08

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	ALLIANCE R 3000 CAPITAL MANAGEM	DEUTSCHE BANK	09/08/2016 09:30:00	09/08/2016 16:00:00	5,300	14.7732	15.1895	2,206	41.63	1.53	0.04



NOTES

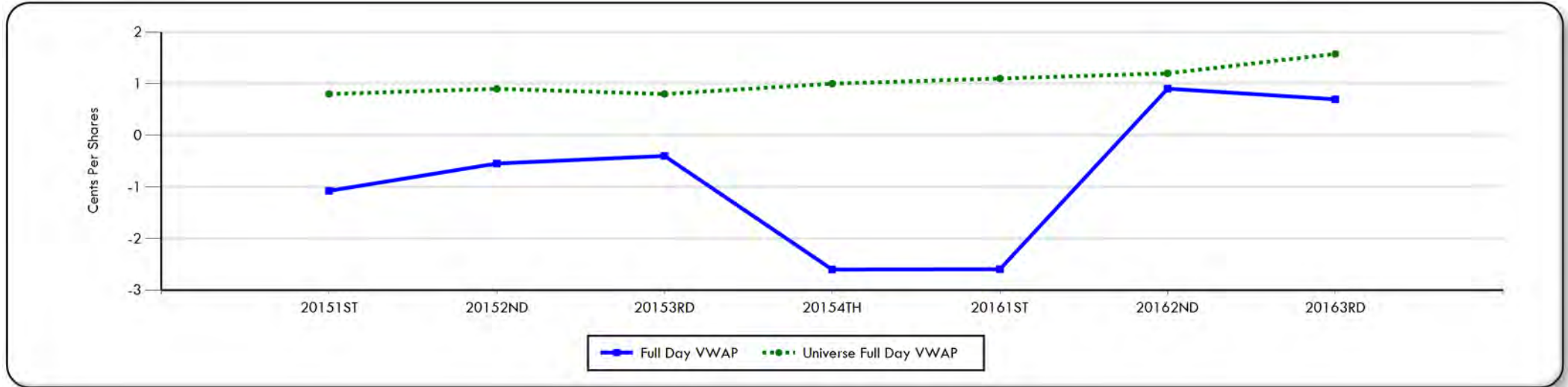
- Out of all your low cost trades that beat to Full Day VWAP, this order made up 1.19% of your market impact savings.



(+) = Cost

TRADE HISTORY

Trade History						
Period	Total Shares	Total Dollars Traded	Commission		Full Day VWAP	Full Day VWAP Universe Rank
			(cps)	(\$)		
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
20163RD	3,727,750	130,612,069	+3.24	120,906	+0.70	67



Note on Universes:

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

DISCLAIMER

State Street Corporation and its subsidiaries and affiliates, including Elkins/McSherry, LLC (“State Street”), provide products and services to professional and institutional clients and this report and information (“Report”) is provided solely for general, marketing and/or informational purposes and is subject to these terms and conditions, including that the Report does not constitute investment research or investment, legal, regulatory, or tax advice. Nothing herein is an offer or solicitation to buy or sell any product, service or securities or any financial instrument and this does not create or constitute any binding contractual commitment or obligations for State Street of any kind. Not all products and features may be available in all jurisdictions. Any opinions expressed or other information in the Report are subject to change without notice. The Report has been prepared and obtained from sources believed to be reliable at the time of preparation, however, it is provided “as-is” and State Street makes no guarantee, representation, or warranty of any kind including but not limited to its accuracy, suitability, timeliness, merchantability, fitness for a particular purpose, non-infringement of third-party rights, etc. This Report is not intended to be relied upon by any person or entity. State Street disclaims all liability, whether arising in contract, tort or otherwise, for any losses, liabilities, damages, expenses or costs arising, either direct or consequential, from or in connection with the use of the Report. No permission is granted to reprint, sell, copy, distribute, or modify any of the Report, in any form or by any means without the prior written consent of State Street. The Report may contain certain statements that may be deemed forward-looking statements. Please note that any such statements or forecasted information are not guarantees or reliable indicators for future performance and actual results or developments may differ materially from those depicted or projected. Investing involves risk, including the risk of loss of principal. Diversification does not ensure a profit or guarantee against loss. The Report does not take into account any client’s particular investment objectives, strategies, or tax and legal status, relevant regulations, nor does it purport to be comprehensive or intended to replace the exercise of a client’s or investor’s own careful independent review regarding any corresponding investment decision or related analysis.

Copyright © 2016 State Street Corporation, All rights reserved.



SACRAMENTO COUNTY

Trade Cost Summary - Global Equity Trading

Period End September 30, 2016





REPORT CONTENTS

Tab 1 : Executive Summary

- **Results / Methodology**
- **Performance vs. Universe / Trading Components**
- **Short Term Alpha**
- **Market Capitalization Performance**
- **Order Size Performance**
- **Implementation days / Liquidity By Trade Performance**
- **Country Performance**
- **High / Low Cost Managers**
- **Commission Review**

Tab 2 : Trade Detail

- **Manager Performance**
- **Broker Performance**

Tab 3 : High / Low Cost Trades

- **Trade Contributions**
- **10 High / Low Cost Trades**
- **10 High Cost Data Graphs**
- **10 Low Cost Data Graphs**



(+) = 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 July 1, 2016 to September 30, 2016. The analysis included trading of 23,625,520 shares representing \$170.43 million in principal across 30 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 +7.69 bp or \$ +\$131,112 (8.66 bp better than the Elkins/McSherry Universe) 	<ul style="list-style-type: none"> Your fee cost was +6.62 bp or \$ +112,852 (0.34 bp better than the Elkins/McSherry Universe) 	<ul style="list-style-type: none"> Your market impact savings was 1.82 bp or \$31,048 (12.38 bp better than the Elkins/McSherry Universe) Your overall trading cost of +12.49 bp was 21.39 bp better than the Elkins/McSherry Universe. Sacramento County trading was higher than the Elkins/McSherry Universe in 6 countries and lower than the Elkins/McSherry Universe in 24 countries. 10 of your brokers had trading cost higher than summary universe of countries (principal weighted) in which they traded. 46 of your brokers had lower trading cost. 	<ul style="list-style-type: none"> E - Score : 0.04



(+) = Cost

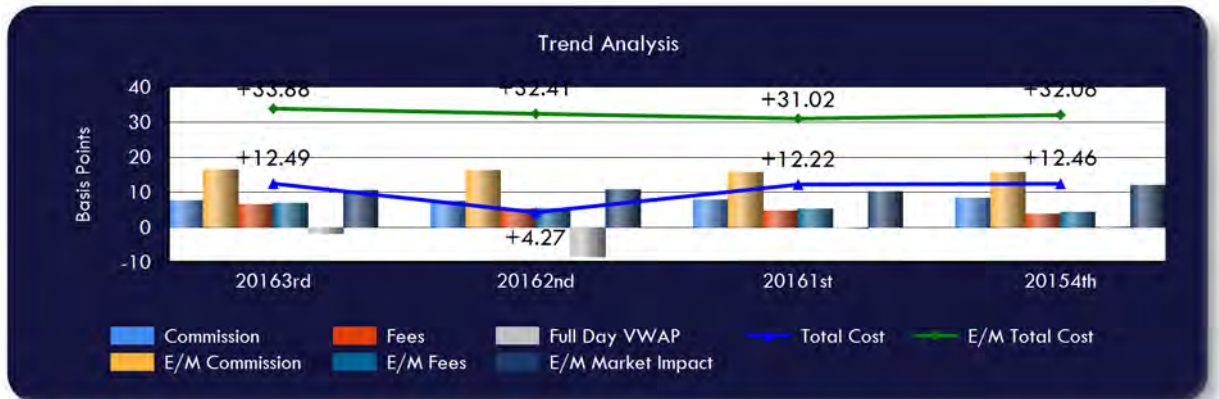
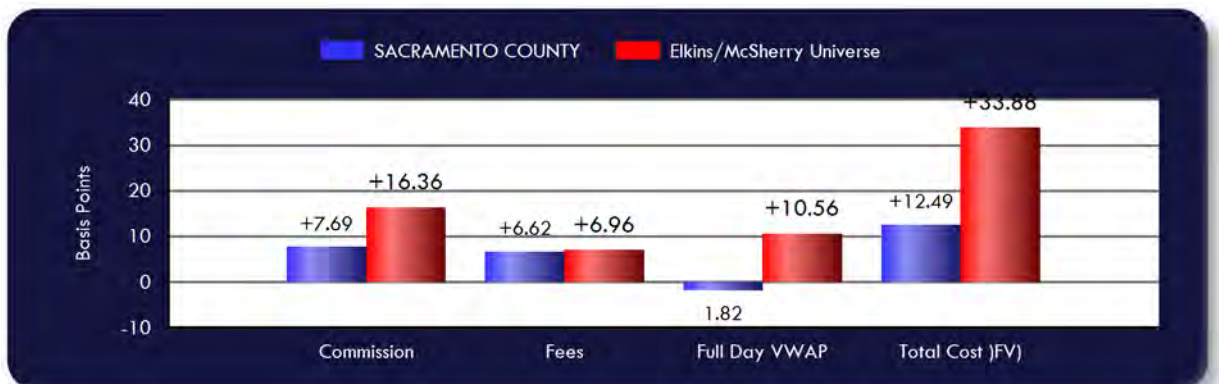
EXECUTIVE SUMMARY

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	+7.65	+16.53	+7.87	+11.05	+11.68	2.55	+10.38	+16.15	22.43	0.13
Sell	+7.74	+16.14	+7.73	+1.05	+1.01	0.91	+10.80	+7.89	20.07	-0.07
Total	+7.69	+16.36	+7.80	+6.62	+6.96	1.82	+10.56	+12.49	21.39	0.04

TRADING COMPONENTS

	Buys	Sells
Trade Principal	94,969,450	75,464,615
Shares	14,159,847	9,465,673
Unique Names	202	157
Liquidity (% POV)	0.484	0.482
Avg. Order Size	15,160	15,341
Avg. Order Completion Time (min)	N/A	N/A
Total Number of Trades	934	617





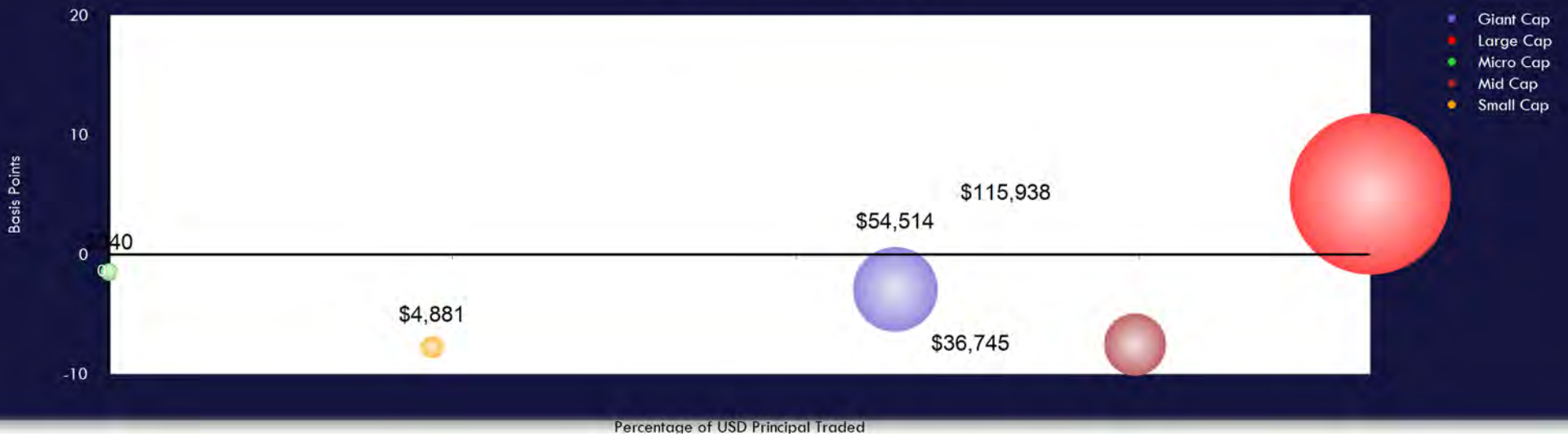
(+) = Cost

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		Commission+Fees+ Full Day VWAP Vs. Universe		
	(%)	(\$)	(bp)	(bp)	(bp)	(bp)	(bp)	(bp)		
Large Cap	36.95 %	121,114	+7.61	+16.81	+5.06	+10.12	+18.41	14.84	0.12	\$5 Billion to \$25 Billion
Mid Cap	30.10 %	83,013	+8.32	+16.09	7.53	+9.67	+7.17	25.19	0.08	\$1 Billion to \$5 Billion
Giant Cap	23.12 %	271,712	+6.39	+16.19	2.92	+11.65	+13.84	24.33	-0.05	Over \$25 Billion
Small Cap	9.62 %	63,063	+8.78	+15.83	7.74	+12.47	+2.98	27.90	-0.19	\$250 Million to \$1 Billion
Micro Cap	0.21 %	44,751	+24.93	+16.77	1.47	+10.08	+23.46	3.47	-0.06	Under \$250 Million

Total Cost by Market Cap: (USD)





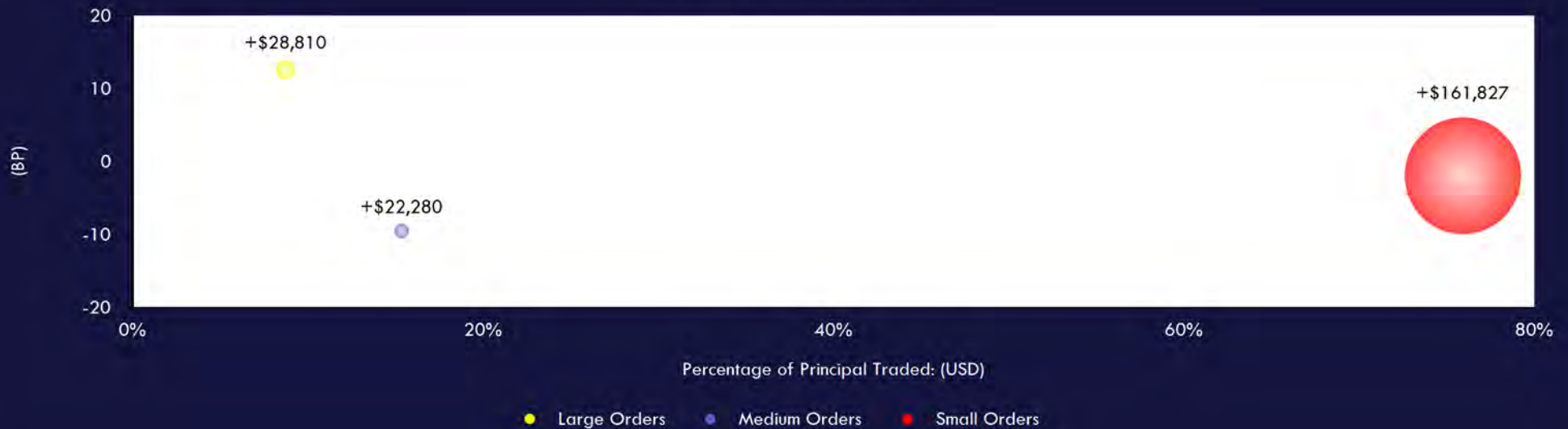
(+) = Cost

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	9	1,652,858	N/A	+6.77	+15.87	+12.60	+12.26	+19.37	8.78	0.58	1M or Greater
Medium Orders	39	670,700	N/A	+7.90	+16.73	9.50	+10.63	+8.51	30.55	-0.10	Between 500k - 1M
Small Orders	1,503	86,095	N/A	+7.76	+16.34	1.93	+10.36	+12.50	20.99	0.00	500K or Less

Total Cost By Order Size: (USD)





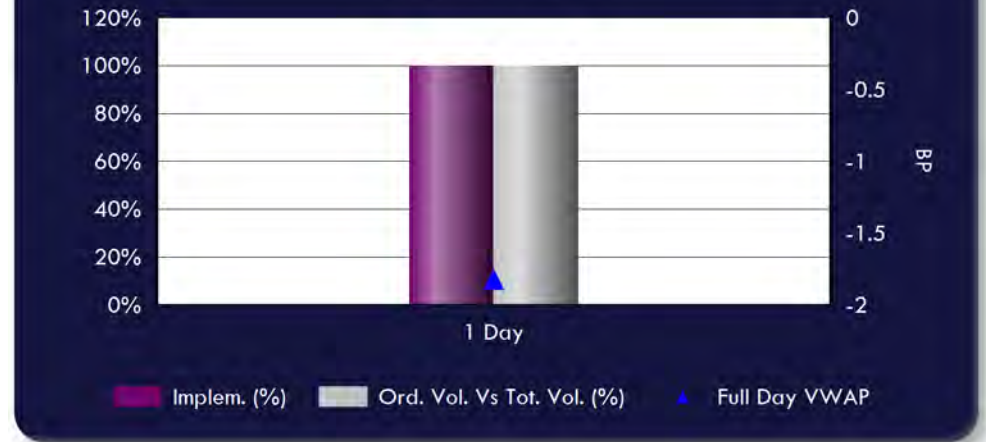
(+) = Cost

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%	1.82	0.04

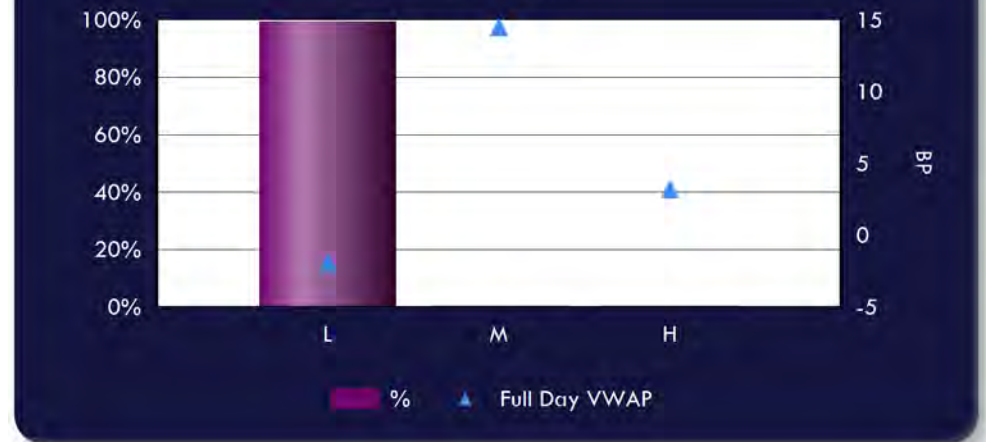
Implementation Days



TRADE DIFFICULTY

Methodology	Liquid. Cat.	Percent Traded (%)	Full Day VWAP (bp)	E - Score
50%+ of daily vol.	H	0%	+3.21	0.12
0%~20% of daily vol.	L	99%	1.90	0.04
20%~50% of daily vol.	M	0%	+14.52	-0.18

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										
ITALY - BUYS	1	0.65%	+3.89	+13.89	+15.37	+12.00	+93.68	+15.44	+71.61	2.30
NEW ZEALAND	<1	0.41%	+14.80	+17.73	+0.00	+0.00	+34.30	+15.01	+16.36	0.53
TURKEY	<1	0.32%	+17.83	+14.63	+0.00	+0.00	+13.61	+3.82	+12.99	0.35
FINLAND	<1	0.48%	+13.31	+13.70	+0.00	+0.00	+18.92	+6.50	+12.03	0.56
KOREA - BUYS	1	0.84%	+17.81	+18.24	+0.00	+0.00	+22.40	+13.14	+8.83	0.05
ITALY - SELLS	<1	0.21%	+8.07	+14.64	+0.00	+0.00	+17.69	+8.26	+2.86	-0.12

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										
IRELAND - SELLS	<1	0.42%	+7.28	+15.76	+0.11	+0.00	20.50	+25.21	54.08	-0.08
BRAZIL	<1	0.22%	+11.62	+17.01	+3.25	+1.19	37.77	+9.86	50.96	-0.64
U.K. - BUYS	16	9.51%	+7.17	+15.82	+45.75	+50.00	12.52	+16.91	42.32	-0.41
SINGAPORE	7	3.84%	+12.92	+15.91	+3.46	+3.42	19.57	+9.26	31.78	-0.02
GERMANY	7	3.83%	+5.80	+14.11	+0.00	+0.00	14.30	+6.77	29.38	-0.09
DENMARK	<1	0.39%	+7.72	+14.65	+0.00	+0.00	4.02	+18.29	29.24	0.12
U.K. - SELLS	17	10.08%	+5.54	+14.93	+0.08	+0.00	4.53	+13.20	27.04	-0.43
AUSTRALIA	12	7.17%	+8.24	+14.81	+0.00	+0.07	11.77	+7.13	25.54	-0.02
JAPAN	36	21.34%	+8.43	+16.48	+0.00	+0.01	1.82	+15.56	25.45	0.02
SWITZERLAND	7	3.95%	+8.71	+14.67	+0.00	+0.00	10.23	+8.91	25.10	-0.16
IRELAND - BUYS	<1	0.13%	+5.80	+13.47	+100.13	+100.00	6.82	+10.21	24.58	-0.21
SOUTH AFRICA - BUYS	1	0.62%	+11.26	+15.09	+25.11	+21.20	17.10	+4.93	21.95	-0.34
FRANCE - SELLS	2	1.17%	+6.97	+14.62	+0.00	+0.00	3.55	+8.91	20.10	-0.15
SWEDEN	3	1.76%	+7.40	+14.08	+0.00	+0.00	7.39	+5.87	19.95	-0.26
HONG KONG	13	7.47%	+10.54	+25.34	+10.75	+10.67	+0.90	+4.02	17.83	0.27
BELGIUM	3	1.61%	+5.52	+13.95	+0.00	+0.00	+4.18	+10.94	15.19	0.78
U.S.	11	6.33%	+2.08	+15.79	+0.09	+0.08	+8.81	+5.22	10.12	0.25
CANADA	14	8.44%	+5.52	+16.92	+0.00	+0.12	+9.17	+7.11	9.46	0.39
SOUTH AFRICA - SELLS	<1	0.14%	+15.00	+16.01	+0.03	+0.01	+5.86	+12.62	7.75	0.41
NETHERLANDS	2	0.92%	+9.26	+13.45	+0.00	+0.05	+0.39	+3.73	7.58	0.02
FRANCE - BUYS	7	3.94%	+5.84	+14.18	+20.00	+20.00	+7.67	+6.04	6.71	0.17
ISRAEL	2	0.90%	+18.55	+18.20	+0.00	+0.01	+5.52	+12.06	6.20	0.43
INDIA	2	1.18%	+13.30	+15.80	+11.96	+10.44	+4.92	+7.86	3.92	0.05

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										
SPAIN	3	1.73%	+6.88	+16.63	+0.00	+0.00	+14.45	+8.28	3.58	0.77



(+) = Cost

TRADE CYCLE DETAIL

1 HIGHEST 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)	20162nd (bp)	20161st (bp)	20154th (bp)
S&P GLOBAL INFRAS-I	19	229	10.94%	81,399	0.85	+2.65	+17.19	+27.95	+7.29	+6.24	37.97	20.57	25.92

NOTES

- Managers above made up 10.94 % of principal traded.



(+) = Cost

TRADE CYCLE DETAIL

4 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)	20162nd (bp)	20161st (bp)	20154th (bp)
WILLIAM BLAIR & COMP	28	334	16.50%	84,207	-0.01	+11.66	+16.26	+1.72	+10.92	13.85	19.97	15.72	13.30
LAZARD ASSET MANAGEM	51	187	29.69%	270,630	0.19	+8.63	+15.69	+3.16	+11.22	15.95	27.17	4.22	12.24
CBRE CLARION (INTL R	36	337	21.34%	107,904	-0.12	+9.67	+17.73	15.02	+10.19	33.73	32.80	18.62	14.71
LSV ASSET MANAGEMENT	37	464	21.53%	79,089	-0.36	+3.96	+15.57	13.41	+11.41	36.40	24.56	32.00	32.38

NOTES

- Manager above made up 89.06 % of principal traded.



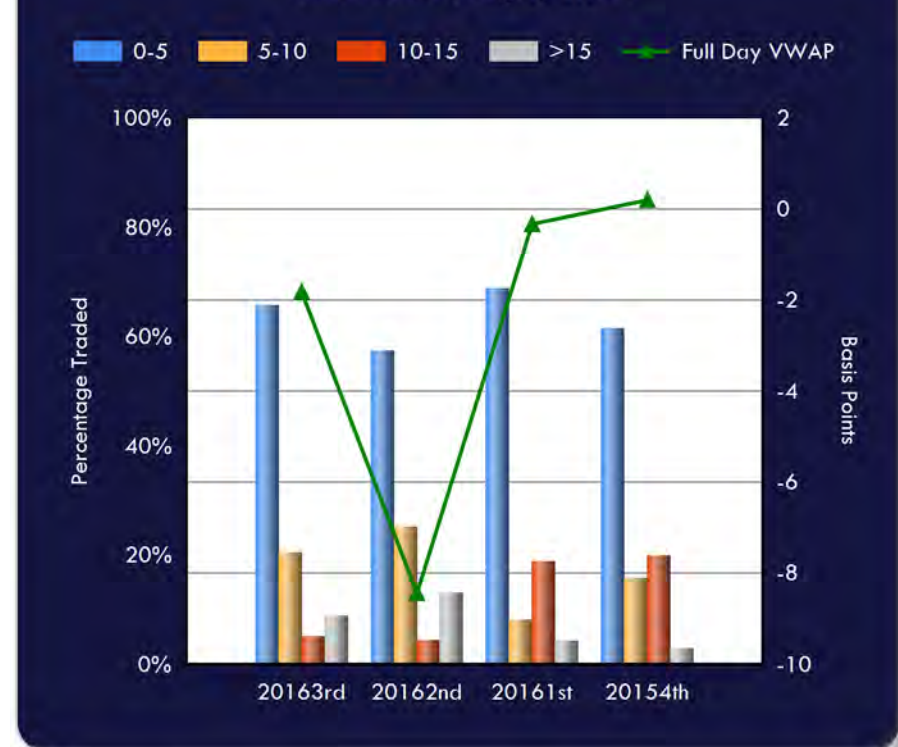
(+) = Cost

COMMISSION REVIEW

COMMISSION REVIEW - Top 20 Brokers (Commission \$)

Broker	Total Commission	Commission (bp)	Bundled Universe (bp)	All Trading Universe (bp)	Commission Trends		
					20162nd (bp)	20161st (bp)	20154th (bp)
CITIGROUP	11,894	+7.52	+17.66	+7.80	+4.70	+5.84	+5.27
UBS	11,168	+9.23	+15.82	+7.79	+6.30	+9.05	+6.04
JP MORGAN	8,846	+9.21	+19.26	+8.01	+10.16	+9.80	+9.83
MERRILL LY	7,493	+6.90	+14.79	+7.37	+7.07	+3.89	+9.60
REDBURN PA	6,758	+12.00	+15.67	+6.75	+6.00	+12.21	+6.00
SMBC SECUR	6,511	+10.43	+16.48	+7.19	+8.31	+14.08	+15.00
MACQUARIE	6,379	+10.49	+17.71	+8.32	+7.45	+12.93	+13.74
MORGAN STA	6,002	+8.36	+16.37	+8.07	+7.12	+12.15	+6.75
SOCIETE GE	5,653	+6.33	+14.71	+7.47	+5.34	+5.90	+6.42
DEUTSCHE B	5,111	+9.06	+15.25	+7.41	+10.52	+9.19	+7.86
GOLDMAN SA	5,031	+3.76	+15.96	+7.37	+9.65	+2.99	+6.95
CREDIT SUI	4,773	+7.63	+16.39	+7.82	+7.80	+5.47	+8.58
RBC DOMINI	4,721	+8.41	+16.92	+10.89	+11.67	+9.75	+10.01
HSBC BANK	4,331	+4.11	+15.29	+7.65	+3.00	+6.01	+4.88
CREDIT AGR	3,654	+11.52	+19.16	+8.13	+10.63	+15.35	+15.08
EXANE	3,613	+5.68	+14.77	+7.43	+5.74	+8.28	+9.34
INSTINET	3,533	+6.35	+17.91	+7.27	+6.01	+7.02	+4.95
DAIWA SECU	3,398	+11.18	+17.12	+7.23	+8.55	+12.10	+9.00
NOMURA	2,674	+12.00	+16.48	+7.19	-	+12.00	-
MIZUHO	2,571	+10.98	+17.24	+7.23	+9.75	+16.06	+12.65

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)	20162nd (bp)	20161st (bp)	20154th (bp)
LAZARD ASSET MANAGEM	51	187	29.69%	270,630	0.19	+8.63	+15.69	+3.16	+11.23	15.96	27.17	4.22	12.24
LSV ASSET MANAGEMENT	37	464	21.53%	79,089	-0.36	+3.96	+15.57	13.41	+11.41	36.40	24.56	32.00	32.38
CBRE CLARION (INTL R	36	337	21.34%	107,904	-0.12	+9.67	+17.73	15.02	+10.19	33.74	32.80	18.62	14.71
WILLIAM BLAIR & COMP	28	334	16.50%	84,207	-0.01	+11.66	+16.26	+1.72	+10.91	13.85	19.97	15.72	13.30
S&P GLOBAL INFRAS-I	19	229	10.94%	81,399	0.85	+2.65	+17.19	+27.95	+7.29	+6.25	37.97	20.57	25.92

NOTES

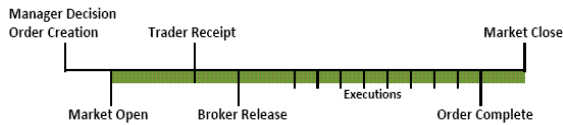
- Manager above made up 100.00 % of principal traded.



(+) = 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)	20162nd (bp)	20161st (bp)	20154th (bp)
CITIGROUP	16	107	9.28%	147,849	0.13	11,894	+7.52	+17.66	12.51	+11.03	33.50	20.93	16.75	23.37
GOLDMAN SACHS	13	114	7.86%	117,494	0.67	5,031	+3.76	+15.96	+16.66	+8.43	3.72	76.95	38.67	28.12
UBS	12	189	7.10%	64,030	0.05	11,168	+9.23	+15.82	+1.47	+9.32	14.75	24.78	18.14	24.28
MERRILL LYNCH	11	84	6.37%	129,246	-0.24	7,493	+6.90	+14.79	+7.54	+9.14	13.23	36.65	+4.33	22.07
HSBC BANK	11	91	6.18%	115,697	-0.74	4,331	+4.11	+15.29	26.36	+13.60	50.87	59.44	29.97	35.58
JP MORGAN CHASE	10	72	5.64%	133,450	0.02	8,846	+9.21	+19.26	18.01	+7.59	35.64	23.72	+0.22	18.05
SOCIETE GENERALE	9	99	5.24%	90,187	0.02	5,653	+6.33	+14.71	+3.55	+11.18	16.23	46.15	35.76	52.75
MORGAN STANLEY	7	90	4.21%	79,762	-0.11	6,002	+8.36	+16.37	7.78	+10.07	25.86	27.84	31.09	16.45
EXANE	6	17	3.73%	373,937	-0.23	3,613	+5.68	+14.77	4.69	+11.83	25.60	15.61	21.84	21.56
CREDIT SUISSE	6	69	3.67%	90,667	-0.09	4,773	+7.63	+16.39	5.68	+8.35	22.78	12.61	29.39	24.82

NOTES

- Brokers above made up 59.28 % 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)	2016 2nd (bp)	2016 1st (bp)	2015 4th (bp)
SMBC SECURITIES INC	6	35	3.66%	178,291	0.27	6,511	+10.43	+16.48	+9.63	+15.56	11.98	69.21	+18.47	41.35
MACQUARIE	6	46	3.57%	132,259	-0.18	6,379	+10.49	+17.71	11.56	+7.78	26.49	19.66	0.13	8.71
DEUTSCHE BANK	6	53	3.31%	106,399	0.19	5,111	+9.06	+15.25	+11.98	+9.64	3.80	8.31	15.32	18.03
REDBURN PARTNERS LLP	6	10	3.30%	563,175	-0.08	6,758	+12.00	+15.67	+2.09	+16.28	17.84	23.53	+25.44	+7.30
RBC DOMINION SECS	6	22	3.30%	255,283	0.09	4,721	+8.41	+16.92	7.01	+7.11	22.75	37.42	17.84	6.34
INSTINET	6	52	3.26%	106,953	-0.27	3,533	+6.35	+17.91	13.70	+13.70	38.96	19.33	21.34	22.24
BARCLAYS	4	48	2.12%	75,162	-0.43	1,642	+4.55	+15.55	24.50	+15.35	50.72	50.16	21.62	19.35
LIQUIDNET	3	12	1.88%	267,486	1.26	1,347	+4.20	+16.64	+23.80	+7.25	+4.01	14.31	+71.24	+0.70
CREDIT AGRICOLE	3	24	1.86%	132,171	1.07	3,654	+11.52	+19.16	+14.29	+7.66	1.01	13.00	36.59	+1.19
DAIWA SECURITIES	3	21	1.78%	144,739	-0.08	3,398	+11.18	+17.12	1.05	+14.72	21.72	0.65	9.78	34.23

NOTES

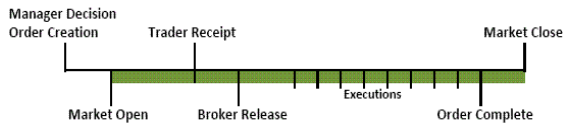
- Brokers above made up 28.05 % of principal traded.



(+) = 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)	20162nd (bp)	20161st (bp)	20154th (bp)
ITG	3	66	1.54%	39,674	-0.10	1,297	+4.95	+16.18	+6.24	+12.07	19.75	30.71	20.52	32.21
MIZUHO	2	24	1.37%	97,590	-0.14	2,571	+10.98	+17.24	9.30	+14.57	30.13	27.54	8.98	10.92
SCOTIA CAPITAL	2	40	1.36%	57,788	0.60	406	+1.76	+16.72	+42.64	+6.77	+20.79	31.15	31.44	19.22
NOMURA	2	4	1.31%	557,006	0.19	2,674	+12.00	+16.48	+7.47	+15.56	12.58	-	37.19	-
BNP PARIBAS	2	19	1.09%	97,775	0.13	1,470	+7.91	+16.67	+7.75	+9.51	10.58	18.67	2.87	9.68
JEFFERIES & CO	2	6	0.94%	266,932	-0.13	1,645	+10.27	+15.98	6.21	+8.44	20.11	4.11	16.29	-
SC BERNSTEIN	1	21	0.67%	54,258	0.17	597	+5.24	+16.69	+16.29	+10.88	6.09	20.13	21.62	11.10
JOH BERENBERG GOSSLE	1	14	0.60%	72,473	0.07	1,316	+12.97	+14.66	+2.86	+11.12	9.95	3.38	18.02	+9.19
MITSUBISHI UFJ SECS	<1	11	0.44%	68,129	-0.27	862	+11.50	+16.48	7.29	+15.56	27.84	19.36	26.47	29.67
CITATION FINL GROUP	<1	2	0.40%	344,555	0.34	195	+2.84	+15.79	+6.78	+5.22	11.32	11.98	-	-

NOTES

- Brokers above made up 9.71 % 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)	20162nd (bp)	20161st (bp)	20154th (bp)
BANK J. VONTOBEL	<1	2	0.40%	337,325	0.88	945	+14.00	+14.67	+75.86	+8.91	+66.28	52.42	-	+141.08
ENSKILDA SECURITIES	<1	2	0.32%	271,478	-0.24	814	+15.00	+14.08	4.48	+5.87	9.43	+1.06	-	24.78
TD WATERHOUSE	<1	6	0.22%	63,200	-0.31	581	+15.33	+16.92	+3.83	+7.11	4.99	7.79	15.59	-
KEMPEN & CO	<1	4	0.20%	86,659	0.09	285	+8.21	+13.66	60.30	+4.70	70.49	40.97	6.40	+46.26
GREEN STREET	<1	4	0.17%	73,652	-0.87	354	+12.00	+15.56	4.46	+16.06	66.13	61.47	+3.22	52.64
PERSHING	<1	1	0.16%	272,395	-2.86	0	+0.00	+14.11	259.00	+6.77	279.88	57.76	2.93	+0.26
NESBITT BURNS	<1	2	0.16%	132,862	0.70	128	+4.81	+16.92	+22.62	+7.11	+3.27	+5.32	61.37	+32.58
SAMSUNG SECURITIES	<1	1	0.15%	261,045	1.29	653	+25.00	+18.24	+118.79	+13.14	+112.41	-	-	-
MEDIOBANCA	<1	3	0.15%	84,831	-0.12	382	+15.00	+14.26	14.42	+11.94	26.64	+1.77	5.76	+2.41
STANDARD BANK	<1	1	0.14%	236,105	0.41	354	+15.00	+16.01	+5.86	+12.62	7.75	-	-	-

NOTES

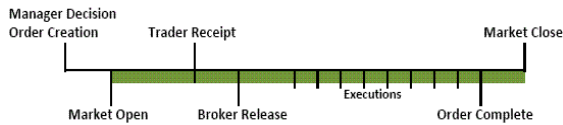
- Brokers above made up 2.07 % of principal traded.



(+) = 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)	2016 2nd (bp)	2016 1st (bp)	2015 4th (bp)
KEPLER EQUITIES	<1	4	0.13%	54,542	0.58	327	+15.00	+14.38	+15.10	+7.38	+8.34	-	-	-
DANSKE BANK	<1	2	0.13%	108,267	1.15	325	+15.00	+14.44	+34.54	+13.67	+21.44	+81.01	-	14.81
INVESTEC SECURITIES	<1	6	0.12%	33,339	-0.32	279	+13.96	+15.09	11.87	+4.93	13.53	-	-	-
DBS VICKERS SECS	<1	3	0.11%	60,727	-0.35	182	+10.00	+19.11	2.44	+7.48	19.10	-	-	48.45
WELLS FARGO	<1	28	0.08%	4,740	0.24	19	+1.42	+15.79	+7.99	+5.22	11.67	19.52	-	24.39
WEEDEN & CO	<1	3	0.08%	44,087	1.08	132	+10.00	+14.81	+14.50	+7.13	+2.49	12.13	16.49	-
ABN AMRO	<1	2	0.06%	53,341	-1.19	128	+12.00	+13.78	27.77	+4.86	34.43	8.71	43.11	-
CARNEGIE	<1	2	0.04%	33,135	-0.05	99	+15.00	+14.65	+2.51	+18.29	15.43	33.14	4.87	-
BANCO SANTANDER	<1	3	0.04%	21,806	0.09	98	+15.00	+16.63	2.82	+8.28	12.73	23.11	15.37	16.84
PAVILION GLOBAL MKT	<1	1	0.03%	58,159	-0.87	17	+3.00	+16.92	20.55	+7.11	41.70	22.63	43.44	23.35

NOTES

- Brokers above made up 0.81 % 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)	2016 2nd	2016 1st	2015 4th
DAVY STOCKBROKERS	<1	2	0.03%	26,034	0.01	62	+12.00	+15.76	3.05	+25.21	31.49	22.42	-	-
AUTREPAT-STK	<1	1	0.02%	26,656	N/A	0	+0.00	+25.34	360.10	+4.02	400.13	86.09	-	-
LIBERUM CAPITAL LTD	<1	2	0.02%	13,180	-0.53	40	+15.00	+14.93	54.15	+13.20	66.79	16.08	23.35	-
HOARE GOVETT	<1	1	0.01%	24,382	-0.08	0	+0.00	+15.82	10.06	+16.91	92.79	-	-	-
ROYAL BANK OF CANADA	<1	2	0.01%	5,701	N/A	17	+15.00	+14.93	+140.28	+13.20	+127.15	97.20	-	+13.88
CARGARY SECURITIES	<1	1	0.00%	3,425	0.28	2	+6.00	+25.34	+78.15	+4.02	+55.06	20.12	5.54	4.70

NOTES

- Brokers above made up 0.08 % 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)	2016 2nd (bp)	2016 1st (bp)	2015 4th (bp)
GRAND TOTAL	36	337	21.34%	107,904	-0.12	35,178	+9.67	+17.73	15.02	+10.19	33.74	32.81	18.62	14.71
JP MORGAN CHASE	6	39	3.62%	158,397	-0.22	7,416	+12.00	+20.67	19.39	+8.14	36.17	15.29	+0.01	15.69
SMBC SECURITIES INC	5	26	2.71%	177,763	0.33	4,622	+10.00	+16.48	+12.70	+15.56	9.35	89.01	37.97	41.35
MACQUARIE	4	23	2.57%	190,185	-0.30	3,571	+8.16	+17.57	17.40	+6.95	33.71	18.48	+7.18	5.55
CITIGROUP	4	47	2.44%	88,581	0.19	2,868	+6.89	+21.30	35.37	+7.67	57.30	17.29	16.25	4.58
MORGAN STANLEY	3	34	1.47%	73,920	-0.05	2,393	+9.52	+16.33	+2.59	+9.79	14.00	18.81	45.12	5.06
EXANE	2	12	1.36%	192,914	-0.68	807	+3.48	+14.58	19.31	+10.36	40.75	35.78	-	9.63
INSTINET	2	24	1.13%	80,047	-0.39	1,591	+8.28	+17.77	9.94	+13.88	33.30	28.30	22.61	6.71
DEUTSCHE BANK	2	28	0.98%	59,668	-0.07	2,082	+12.46	+16.12	+6.88	+10.33	7.24	23.88	24.78	1.11
DAIWA SECURITIES	2	12	0.91%	129,218	-0.19	1,551	+10.00	+16.48	0.73	+15.56	22.78	+21.19	3.65	38.68
UBS	1	33	0.87%	44,751	0.08	1,677	+11.36	+16.84	25.85	+8.83	43.57	26.21	17.48	18.01



(+) = 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)	2016 2nd (bp)	2016 1st (bp)	2015 4th (bp)
GRAND TOTAL	51	187	29.69%	270,630	0.19	43,675	+8.63	+15.69	+3.16	+11.23	15.96	27.18	4.22	12.24
CITIGROUP	8	10	4.53%	772,230	0.29	6,125	+7.93	+16.18	+1.60	+14.01	20.66	+1.27	20.38	33.46
REDBURN PARTNERS LLP	6	10	3.30%	563,175	-0.08	6,758	+12.00	+15.67	+2.09	+16.28	17.84	23.53	+25.44	+7.30
RBC DOMINION SECS	5	14	3.17%	385,975	0.09	3,661	+6.77	+16.92	7.31	+7.11	24.69	+47.42	17.84	6.34
MERRILL LYNCH	5	43	3.08%	122,129	-0.02	3,849	+7.33	+14.54	+3.84	+8.92	20.13	24.95	+4.63	26.73
MORGAN STANLEY	4	12	2.18%	309,845	-0.10	2,533	+6.81	+16.23	15.32	+10.20	34.95	26.74	+9.09	+8.42
EXANE	4	2	2.12%	1,809,241	0.01	2,171	+6.00	+14.93	+3.32	+13.20	18.80	-	27.36	+14.87
SOCIETE GENERALE	3	28	2.01%	122,450	0.03	2,773	+8.09	+14.70	5.50	+12.23	24.30	11.29	-	-
LIQUIDNET	3	7	1.77%	432,139	1.29	1,136	+3.75	+16.66	+21.39	+7.32	+1.06	49.94	+11.52	40.88
UBS	3	14	1.64%	199,140	0.29	3,630	+13.02	+14.59	+18.03	+7.88	+8.60	33.27	3.74	13.90
NOMURA	2	4	1.31%	557,006	0.19	2,674	+12.00	+16.48	+7.47	+15.56	12.58	-	37.19	-



(+) = 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)	2016 2nd	2016 1st	2015 4th
GRAND TOTAL	37	464	21.53%	79,089	-0.36	14,535	+3.96	+15.57	13.41	+11.41	36.40	24.56	32.00	32.38
HSBC BANK	9	86	5.41%	107,278	-0.86	2,768	+3.00	+15.22	31.89	+14.41	58.42	59.44	48.32	32.35
CREDIT SUISSE	5	45	2.68%	101,464	0.03	2,283	+5.00	+16.56	4.59	+8.44	24.59	8.05	32.69	27.33
UBS	4	100	2.64%	44,957	-0.15	2,248	+5.00	+15.62	6.19	+11.00	27.82	26.11	27.18	53.25
MERRILL LYNCH	4	23	2.25%	166,841	-0.52	1,539	+4.01	+14.83	12.22	+8.63	31.69	29.94	51.81	30.18
BARCLAYS	3	45	1.82%	68,860	-0.54	930	+3.00	+15.70	29.87	+16.41	58.81	54.47	33.64	14.02
DEUTSCHE BANK	2	16	1.42%	150,826	0.32	965	+4.00	+14.13	+19.92	+6.80	+2.99	1.60	22.71	29.17
INSTINET	2	15	1.35%	153,942	-0.20	693	+3.00	+16.48	1.68	+15.56	30.73	4.80	31.91	33.89
CITIGROUP	2	20	1.15%	97,869	-0.25	786	+4.02	+15.40	12.85	+8.86	33.14	10.12	19.82	41.46
SOCIETE GENERALE	2	25	0.93%	63,398	0.13	923	+5.82	+14.64	+7.27	+9.27	10.81	80.31	36.32	29.93
ITG	1	20	0.85%	72,818	-0.31	785	+5.39	+16.17	19.05	+10.99	40.81	20.34	36.65	38.25



(+) = Cost

TRADE CYCLE DETAIL

S&P GLOBAL INFRAST-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)	2016 2nd (bp)	2016 1st (bp)	2015 4th (bp)
GRAND TOTAL	19	229	10.94%	81,399	0.85	4,931	+2.65	+17.19	+27.95	+7.29	+6.25	37.98	20.57	25.92
GOLDMAN SACHS	11	84	6.50%	131,893	0.77	1,543	+1.39	+15.93	+30.09	+7.88	+8.05	110.00	44.39	27.13
JP MORGAN CHASE	3	26	1.78%	116,548	0.69	982	+3.24	+16.89	+16.95	+6.35	3.08	25.75	-	+10.93
SCOTIA CAPITAL	1	15	0.78%	88,810	1.28	191	+1.43	+16.57	+78.78	+6.53	+57.01	-	-	-
CREDIT AGRICOLE	<1	7	0.55%	134,032	3.19	737	+7.85	+25.34	+54.90	+4.02	+33.50	-	-	-
INSTINET	<1	4	0.36%	155,477	-0.55	617	+9.92	+25.31	80.76	+4.02	100.07	80.04	33.02	29.80
CITIGROUP	<1	10	0.34%	57,806	0.10	417	+7.22	+21.70	17.53	+5.77	37.75	51.78	10.91	15.94
ITG	<1	31	0.25%	13,542	1.05	95	+2.26	+16.25	+108.79	+13.69	+81.04	+2.75	+39.84	+7.70
MACQUARIE	<1	3	0.10%	55,034	1.03	165	+10.00	+23.79	+15.69	+4.99	3.03	30.43	+4.12	13.43
WELLS FARGO	<1	28	0.08%	4,740	0.24	19	+1.42	+15.79	+7.99	+5.22	11.67	19.52	-	24.39
MORGAN STANLEY	<1	3	0.07%	41,808	1.26	120	+9.60	+15.84	+23.79	+9.12	+8.27	44.71	14.67	11.07



(+) = 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)	2016 2nd	2016 1st	2015 4th
GRAND TOTAL	28	334	16.50%	84,207	-0.01	32,793	+11.66	+16.26	+1.72	+10.91	13.85	19.97	15.72	13.30
SOCIETE GENERALE	4	46	2.30%	85,108	-0.06	1,957	+5.00	+14.74	+9.98	+11.03	11.35	37.59	30.15	+1.56
UBS	3	37	1.90%	87,430	0.13	3,590	+11.10	+16.67	+10.98	+8.24	2.43	2.57	26.99	19.14
GOLDMAN SACHS	2	21	0.95%	77,240	0.23	2,015	+12.42	+16.26	9.10	+10.94	23.87	27.80	+2.37	26.42
MIZUHO	2	14	0.91%	110,526	-0.07	1,777	+11.48	+17.63	6.43	+14.06	26.64	26.51	+4.10	14.71
DAIWA SECURITIES	1	8	0.86%	182,969	0.04	1,835	+12.54	+17.81	1.26	+13.83	20.36	38.84	25.07	-
SMBC SECURITIES INC	1	8	0.84%	178,514	0.15	1,661	+11.63	+16.48	+1.43	+15.56	18.99	21.32	+144.43	-
CITIGROUP	1	20	0.82%	69,943	-0.50	1,698	+12.13	+16.48	19.62	+9.80	32.23	23.89	+6.83	16.57
HSBC BANK	1	5	0.76%	260,506	0.09	1,563	+12.00	+15.80	+12.88	+7.86	+2.58	-	36.20	11.97
MACQUARIE	1	17	0.70%	70,062	-0.12	2,075	+17.42	+18.26	+4.26	+11.43	7.82	22.88	34.32	34.76
BNP PARIBAS	1	10	0.68%	115,256	-0.21	870	+7.55	+16.36	6.01	+10.15	25.06	28.25	1.92	54.46



(+) = Cost

TRADE DETAIL ANALYSIS

Largest Principal Volume Traded

							Market Impact
Name	# Orders	Shares	Net Principal (\$)	Principal (\$)	% of Volume	E - Score	Full Day VWAP (bp)
SOFTBANK GROUP CORP COMMON STO	7	112,600	6,536,673	6,536,673	0.17%	0.17	+9.48
ALIMENTATION COUCHE TARD B CO	22	129,180	-6,046,432	6,046,432	1.01%	0.68	+11.50
DIAGEO PLC COMMON STOCK GBP.28	9	168,012	-4,753,235	4,753,235	0.46%	-0.13	+3.03
ARM HOLDINGS PLC COMMON STOCK	3	171,240	3,773,198	3,773,198	1.13%	-0.05	+2.76
SUNCOR ENERGY INC COMMON STOCK	5	133,775	-3,721,426	3,721,426	0.89%	0.05	11.26
ROCHE HOLDING AG GENUSSSCHEIN C	15	13,500	-3,344,832	3,344,832	0.12%	-0.59	14.42
ROYAL DUTCH SHELL PLC B SHS CO	11	120,800	3,130,677	3,130,677	0.19%	-0.92	30.00
MITSUBISHI ESTATE CO LTD COMMO	16	155,400	2,830,347	2,981,464	0.18%	0.11	+6.65
SINO LAND CO COMMON STOCK	16	1,500,000	-2,615,183	2,615,183	1.94%	0.17	+14.51
ACTELION LTD REG COMMON STOCK	13	15,131	2,554,354	2,554,354	0.43%	0.11	+12.44

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	38	73,700	-449,241	+4.50	0.14%	-0.62	22.22
ATOS SE COMMON STOCK EUR1.0	37	13,700	-1,193,473	+5.16	0.20%	-0.22	5.30
FAURECIA COMMON STOCK EUR7.	28	56,187	-2,257,211	+6.64	0.56%	-0.04	0.40
ALIMENTATION COUCHE TARD B CO	22	129,180	-6,046,432	+3.81	1.01%	0.68	+11.50
ORACLE CORP JAPAN COMMON STOCK	22	12,100	-696,791	+6.92	0.24%	-0.29	10.58
WM MORRISON SUPERMARKETS COMMO	21	244,200	647,106	+3.00	0.14%	-0.57	22.70
MORI HILLS REIT INVESTMENT C R	20	850	1,268,874	+9.98	0.99%	-0.27	4.33
RICOH CO LTD COMMON STOCK	19	251,700	2,335,659	+4.95	0.39%	-0.03	+2.04
ALSTOM COMMON STOCK EUR7.0	19	46,200	1,246,680	+5.22	0.49%	-0.30	6.66
HULIC CO LTD COMMON STOCK	18	149,100	-1,487,954	+8.51	0.58%	0.28	+6.64



(+) = Cost

TRADE CONTRIBUTIONS

Cost/Savings Performance				
Category	Principal USD	# of Trades	Avg. Market Impact (bp)	Percentage of all Cost/Savings
10 High Cost Trades	5,913,948	10	+161.54	23.74%
Cost Trades	83,497,190	679	+31.40	100.00%
Saving Trades	86,936,875	872	33.33	100.00%
10 Low Cost Trades	4,628,513	10	230.53	26.33%





(+) = Cost

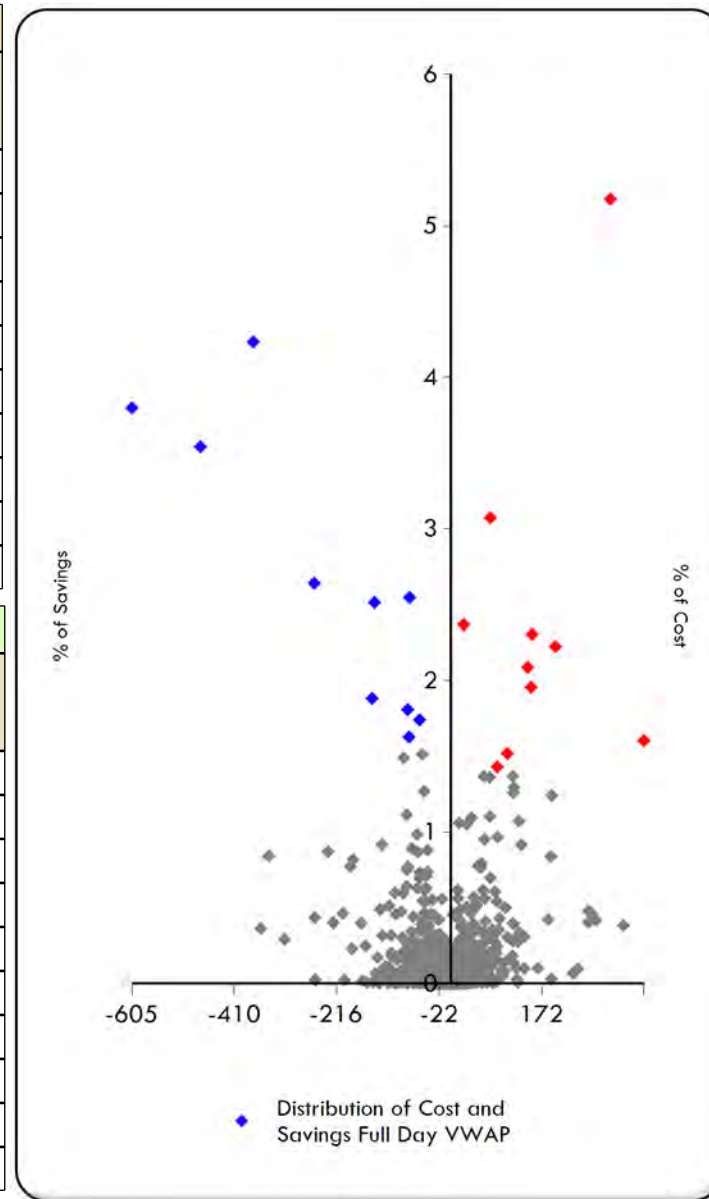
TRADE LEVEL DETAILS

10 High Cost Trades (Full Day VWAP)

Side	Country	Security	Trade Date	Principal (\$)	Cost (%)	E - Score	Full Day VWAP (bp)	Manager	Exbroker
Sell	UK	MICRO FOCU	20160908	403,286	5.17%	N/A	+302.92	WILLI	MERRI
Buy	GER	EVONIK IND	20160902	1,004,783	3.07%	1.44	+74.99	LSV A	DEUTS
Buy	CAN	ALIMENTATI	20160725	2,357,997	2.37%	1.60	+24.49	LAZAR	LIQUI
Buy	CAN	ENBRIDGE I	20160729	369,233	2.31%	1.45	+154.35	S&P G	SCOTI
Sell	SWI	CIE FINANC	20160727	267,535	2.22%	2.79	+198.37	LAZAR	BANK
Sell	JAP	SOFTBANK G	20160809	343,275	2.09%	1.66	+145.90	LAZAR	NOMUR
Buy	ITA	ATLANTIA S	20160930	317,186	1.96%	3.58	+152.46	S&P G	GOLDM
Buy	JAP	JAPAN AIRP	20160729	110,475	1.60%	3.02	+366.43	S&P G	ITG
Buy	ITA	ATLANTIA S	20160729	348,373	1.52%	2.80	+107.31	S&P G	GOLDM
Sell	JAP	MITSUBISHI	20160823	391,806	1.43%	1.01	+88.16	CBRE	SMBC

10 Low Cost Trades (Full Day VWAP)

Side	Country	Security	Trade Date	Principal (\$)	Savings (%)	E - Score	Full Day VWAP (bp)	Manager	Exbroker
Buy	JAP	GLP J REIT	20160824	298,575	4.23%	N/A	374.62	CBRE	CITIG
Buy	SWI	STRAUMANN	20160830	161,958	3.80%	N/A	604.70	WILLI	JP MO
Buy	SGP	MAPLETREE	20160727	194,917	3.54%	N/A	474.91	CBRE	GOLDM
Buy	GER	STABILUS S	20160706	272,395	2.64%	-2.86	259.00	WILLI	PERSH
Sell	UK	ROYAL DUTC	20160902	899,340	2.54%	-1.65	78.27	LSV A	HSBC
Sell	SGP	ASCENDAS R	20160914	483,491	2.51%	-1.80	144.76	CBRE	JP MO
Buy	AST	CHARTER HA	20160923	341,226	1.88%	N/A	149.17	CBRE	MACQU
Sell	HKG	CHINA MERC	20160930	613,602	1.81%	-0.55	81.58	S&P G	INSTI
Buy	CAN	SUNCOR ENE	20160705	802,250	1.74%	-0.01	59.22	LAZAR	RBC D
Buy	AST	SCENTRE GR	20160909	560,760	1.63%	-1.66	79.05	CBRE	MACQU



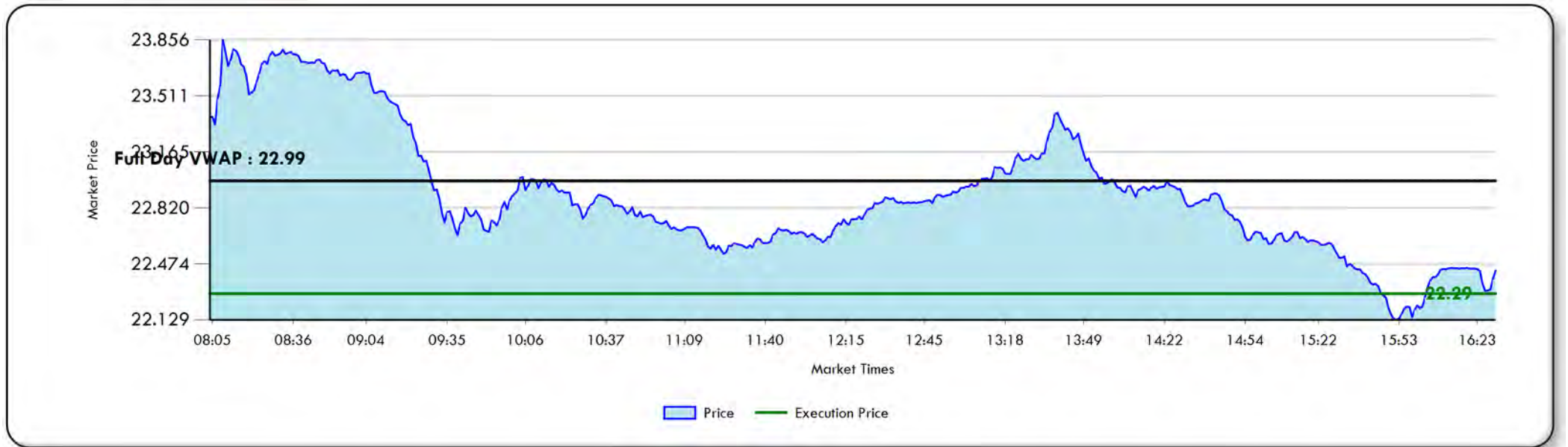


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

MICRO FOCUS INTERNATIONAL COMM - 20160908

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	WILLIAM BLAIR & COMPANY	MERRILL LYNCH	UK	GBP	BQY7BX8	09/08/2016 08:00:00	09/08/2016 16:30:00	403,286	22.29	22.99	+12,598	+302.92	N/A	0.28



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 5.17% of your market impact cost.



(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

EVONIK INDUSTRIES AG COMMON ST - 20160902

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	DEUTSCHE BANK	GER	EUR	B5ZQ9D3	09/02/2016 09:00:00	09/02/2016 17:30:00	1,004,783	30.65	30.43	+7,479	+74.99	1.44	6.76



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 3.07% of your market impact cost.

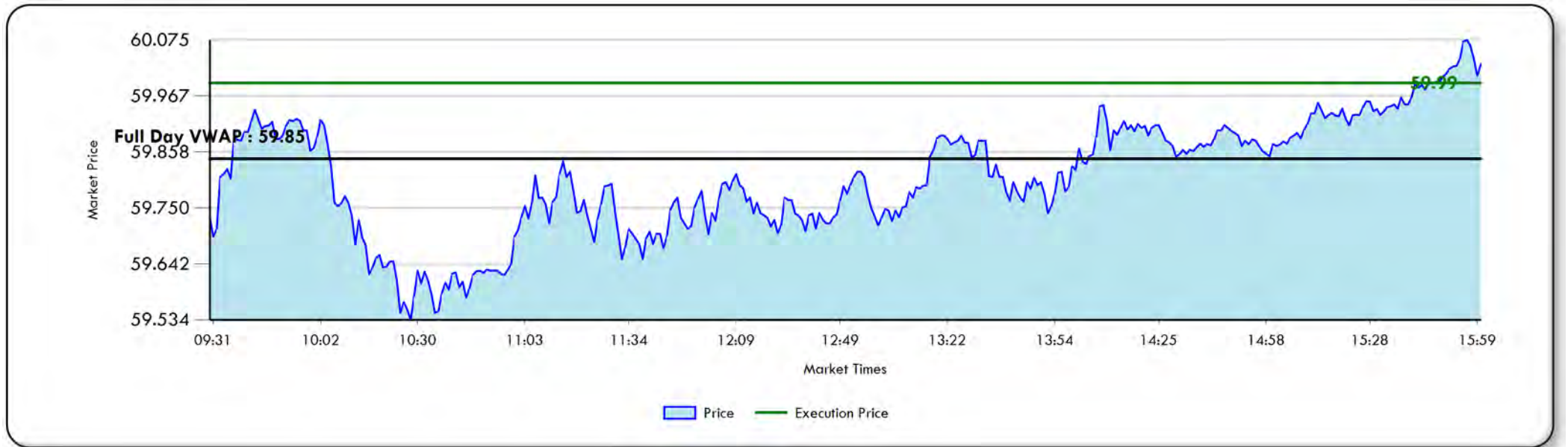


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

ALIMENTATION COUCHE TARD B CO - 20160725

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	LIQUIDNET	CAN	CAD	2011646	07/25/2016 09:30:00	07/25/2016 16:00:00	2,357,997	59.99	59.85	+5,762	+24.49	1.60	11.43



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.

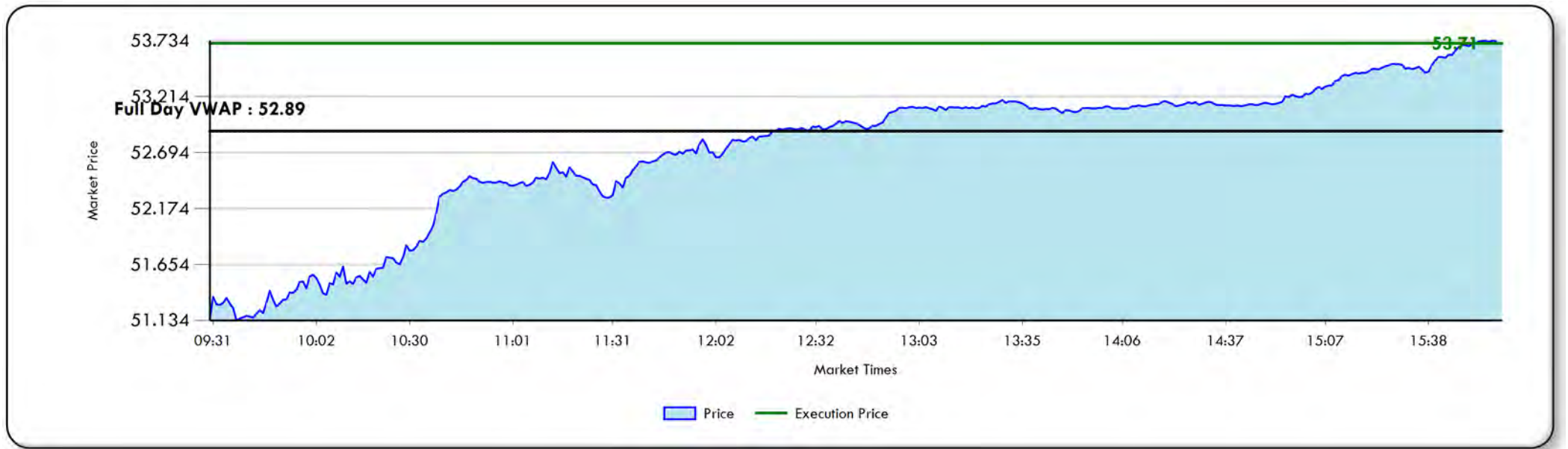


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

ENBRIDGE INC COMMON STOCK - 20160729

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	S&P GLOBAL INFRAST-INDEX	SCOTIA CAPITAL	CAN	CAD	2466149	07/29/2016 09:30:00	07/29/2016 16:00:00	369,233	53.71	52.89	+5,612	+154.34	1.45	0.43



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 2.31% of your market impact cost.

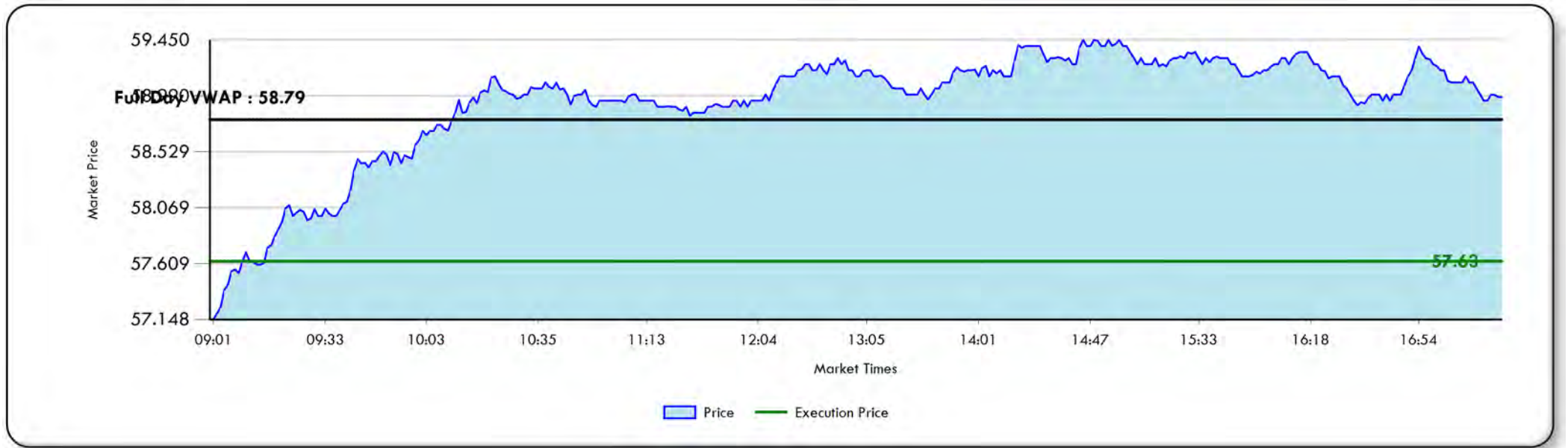


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

CIE FINANCIERE RICHEMONT REG C - 20160727

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	BANK J. VONTOBEL	SWI	CHF	BCRWZ18	07/27/2016 09:00:00	07/27/2016 17:20:00	267,535	57.63	58.79	+5,415	+198.37	2.79	0.27



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 2.22% of your market impact cost.

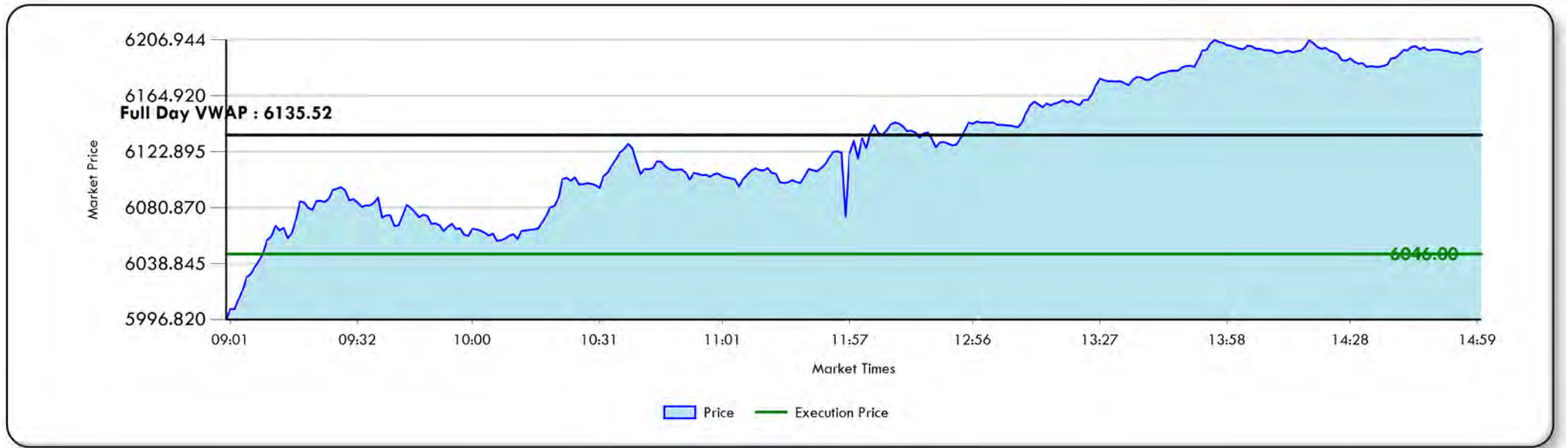


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

SOFTBANK GROUP CORP COMMON STO - 20160809

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	NOMURA	JAP	JPY	6770620	08/09/2016 09:00:00	08/09/2016 15:00:00	343,275	6046.00	6135.52	+5,083	+145.90	1.66	0.05



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 2.09% of your market impact cost.

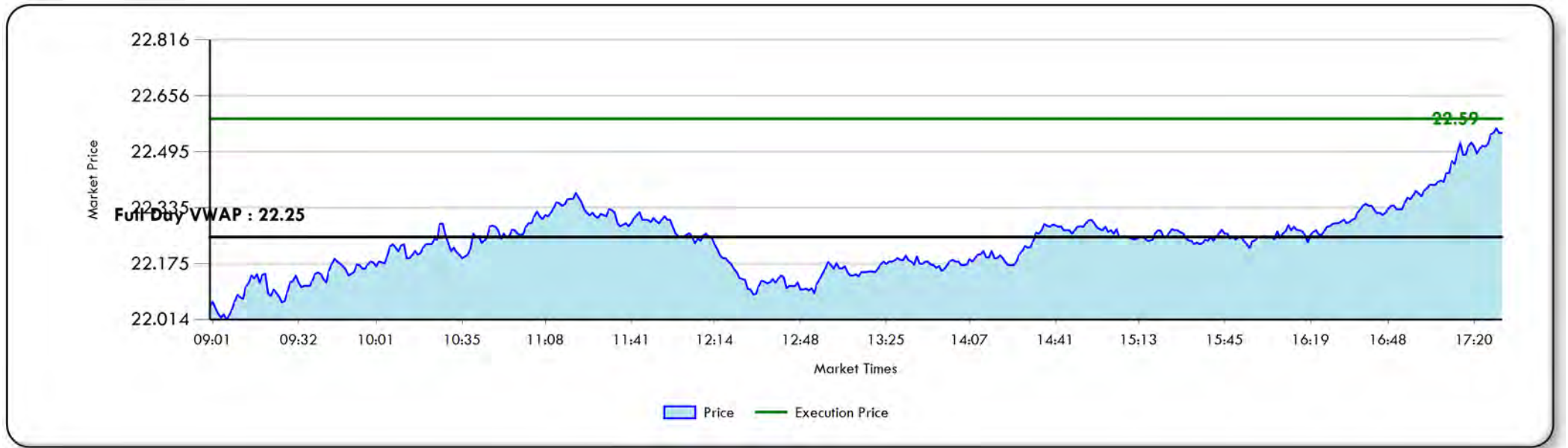


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

ATLANTIA SPA COMMON STOCK EUR1 - 20160930

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	S&P GLOBAL INFRAST-INDEX	GOLDMAN SACHS	ITA	EUR	7667163	09/30/2016 09:00:00	09/30/2016 17:30:00	317,186	22.59	22.25	+4,763	+152.45	3.58	0.81



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.96% of your market impact cost.



(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

JAPAN AIRPORT TERMINAL CO COMM - 20160729

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	S&P GLOBAL INFRAST-INDEX	ITG	JAP	JPY	6472175	07/29/2016 09:00:00	07/29/2016 15:00:00	110,475	4580.00	4418.11	+3,905	+366.43	3.02	0.26



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.60% of your market impact cost.

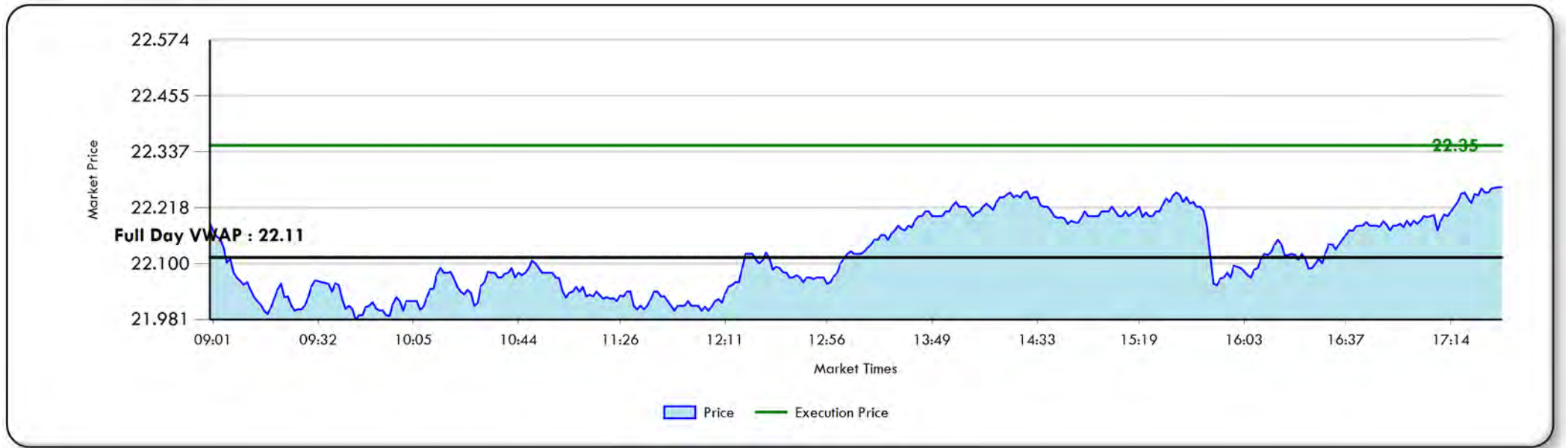


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

ATLANTIA SPA COMMON STOCK EUR1 - 20160729

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	S&P GLOBAL INFRAST-INDEX	GOLDMAN SACHS	ITA	EUR	7667163	07/29/2016 09:00:00	07/29/2016 17:30:00	348,373	22.35	22.11	+3,699	+107.31	2.80	1.12



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.52% of your market impact cost.

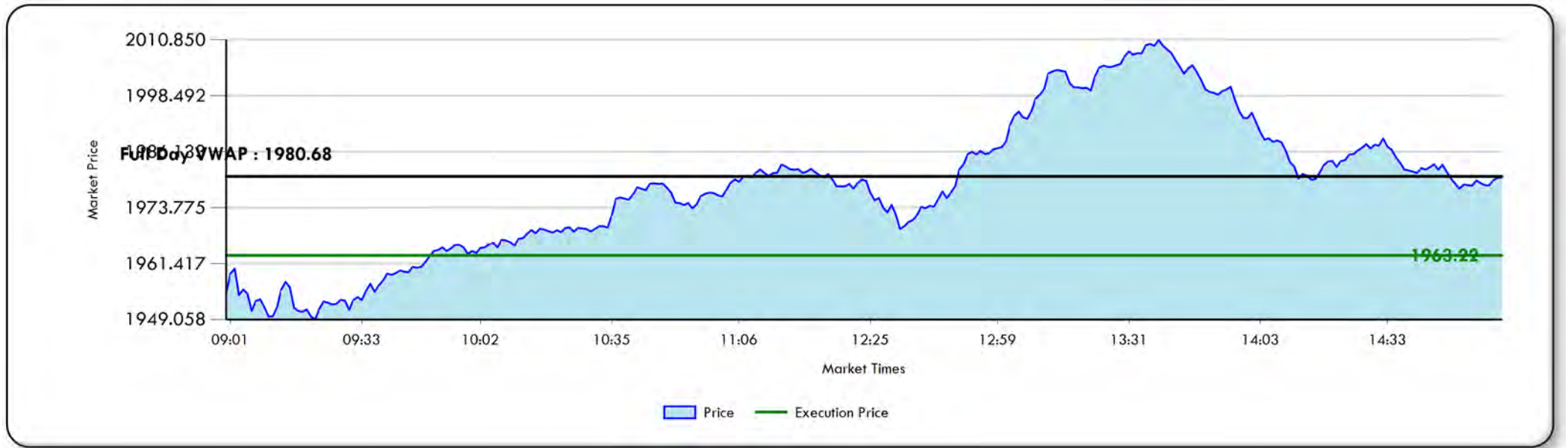


(+) = Cost

TRADE LEVEL DETAIL - HIGH COST

MITSUBISHI ESTATE CO LTD COMMO - 20160823

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)	SMBC SECURITIES INC	JAP	JPY	6596729	08/23/2016 09:00:00	08/23/2016 15:00:00	391,806	1963.22	1980.68	+3,485	+88.15	1.01	0.32



NOTES

- Out of all your high cost trades that lost to Full Day VWAP, this order made up 1.43% of your market impact cost.

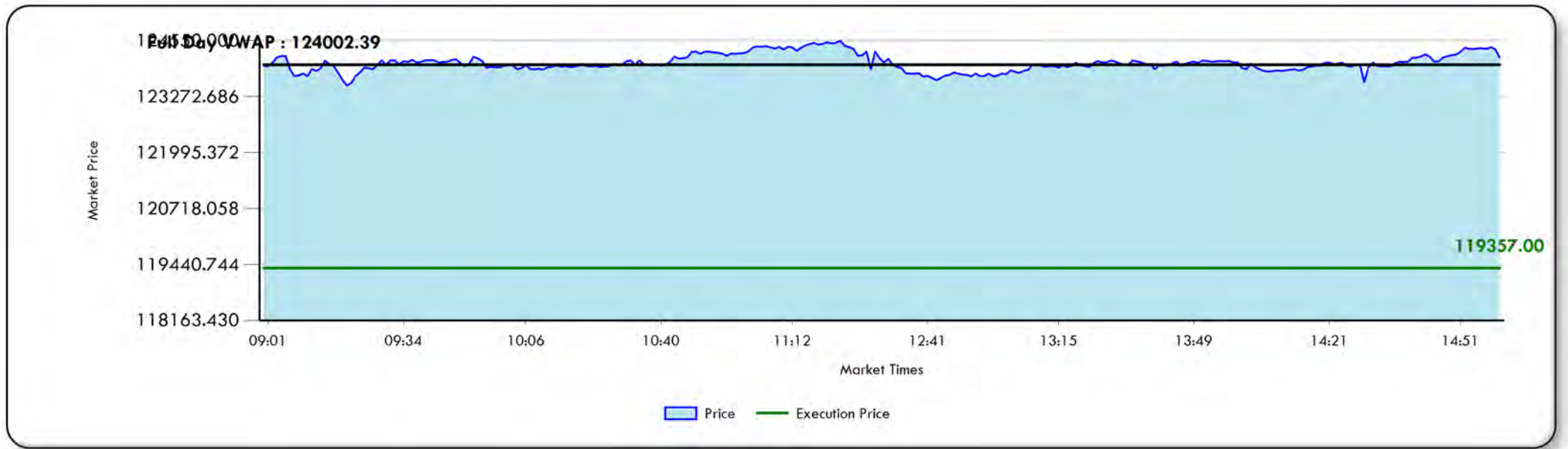


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

GLP J REIT REIT - 20160824

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)	CITIGROUP	JAP	JPY	B8RBZV7	08/24/2016 09:00:00	08/24/2016 15:00:00	298,575	119357.00	124002.39	11,621	374.62	N/A	1.51



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 4.23% of your market impact cost.

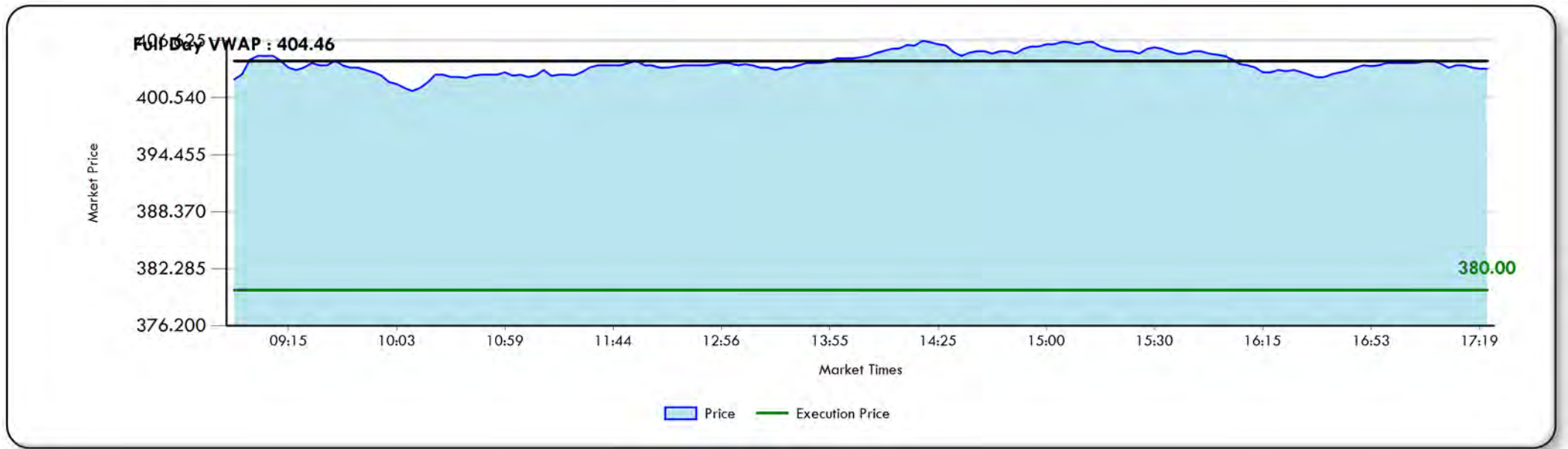


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

STRAUMANN HOLDING AG REG COMMO - 20160830

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	WILLIAM BLAIR & COMPANY	JP MORGAN CHASE	SWI	CHF	7156832	08/30/2016 09:00:00	08/30/2016 17:20:00	161,958	380.00	404.46	10,424	604.70	N/A	2.33



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 3.80% of your market impact cost.

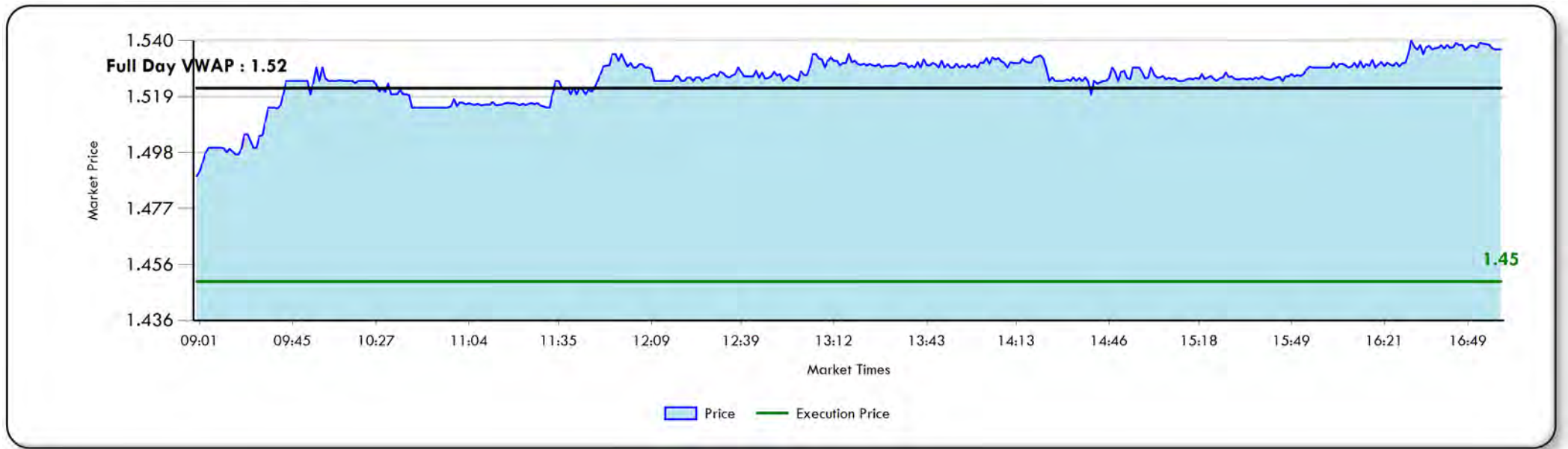


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

MAPLETREE COMMERCIAL TRUST REI - 20160727

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)	GOLDMAN SACHS	SGP	SGD	B5143W8	07/27/2016 09:00:00	07/27/2016 17:00:00	194,917	1.45	1.52	9,718	474.91	N/A	1.17



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 3.54% of your market impact cost.



(+) = Cost

TRADE LEVEL DETAIL - LOW COST

STABILUS SA COMMON STOCK EUR.0 - 20160706

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	WILLIAM BLAIR & COMPANY	PERSHING	GER	EUR	BMM1PP4	07/06/2016 09:00:00	07/06/2016 17:30:00	272,395	40.00	41.06	7,243	259.00	-2.86	8.86



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 2.64% of your market impact cost.

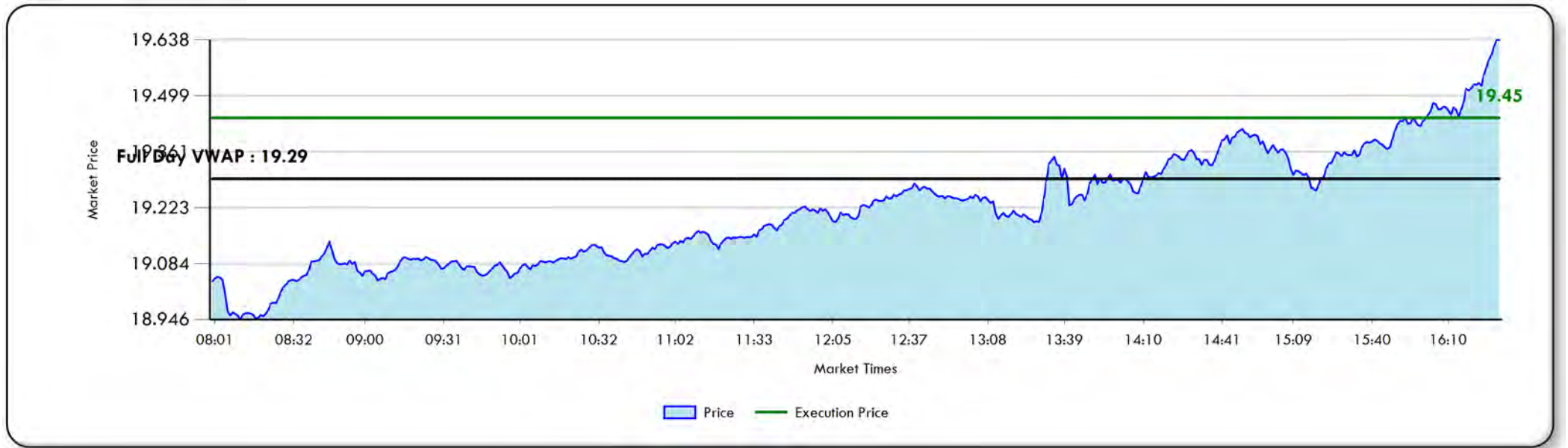


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

ROYAL DUTCH SHELL PLC B SHS CO - 20160902

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	HSBC BANK	UK	GBP	B03MM40	09/02/2016 08:00:00	09/02/2016 16:30:00	899,340	19.45	19.29	6,985	78.27	-1.65	0.41



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 2.54% of your market impact cost.

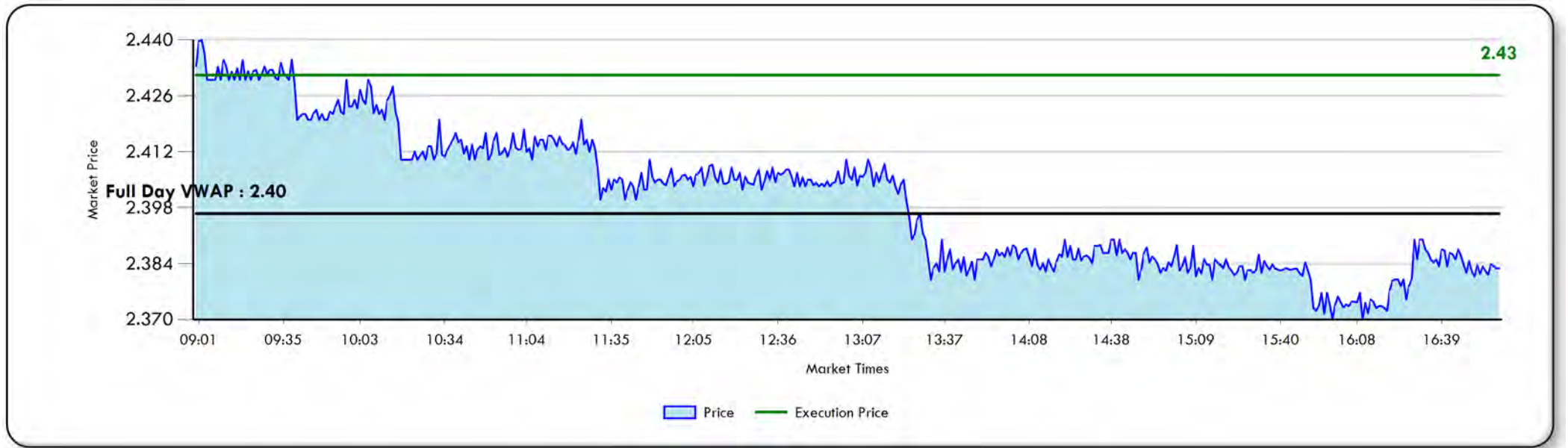


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

ASCENDAS REAL ESTATE INV TRT R - 20160914

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)	JP MORGAN CHASE	SGP	SGD	6563875	09/14/2016 09:00:00	09/14/2016 17:00:00	483,491	2.43	2.40	6,899	144.75	-1.80	1.73



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 2.51% of your market impact cost.

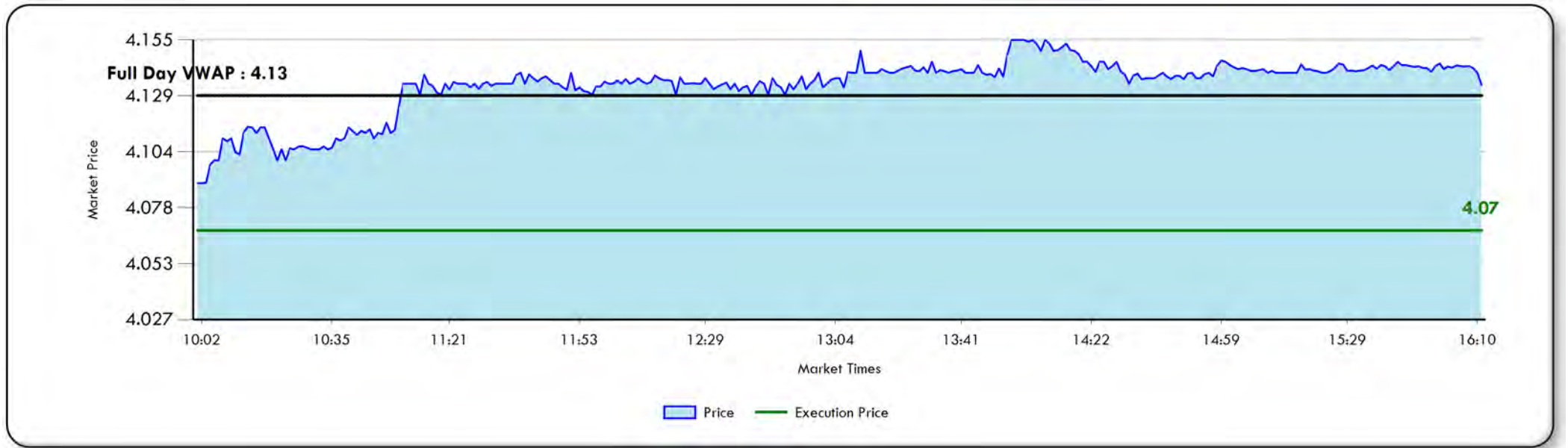


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

CHARTER HALL RETAIL REIT REIT - 20160923

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)	MACQUARIE	AST	AUD	6225595	09/23/2016 10:00:00	09/23/2016 16:12:00	341,226	4.07	4.13	5,167	149.16	N/A	4.11



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 1.88% of your market impact cost.

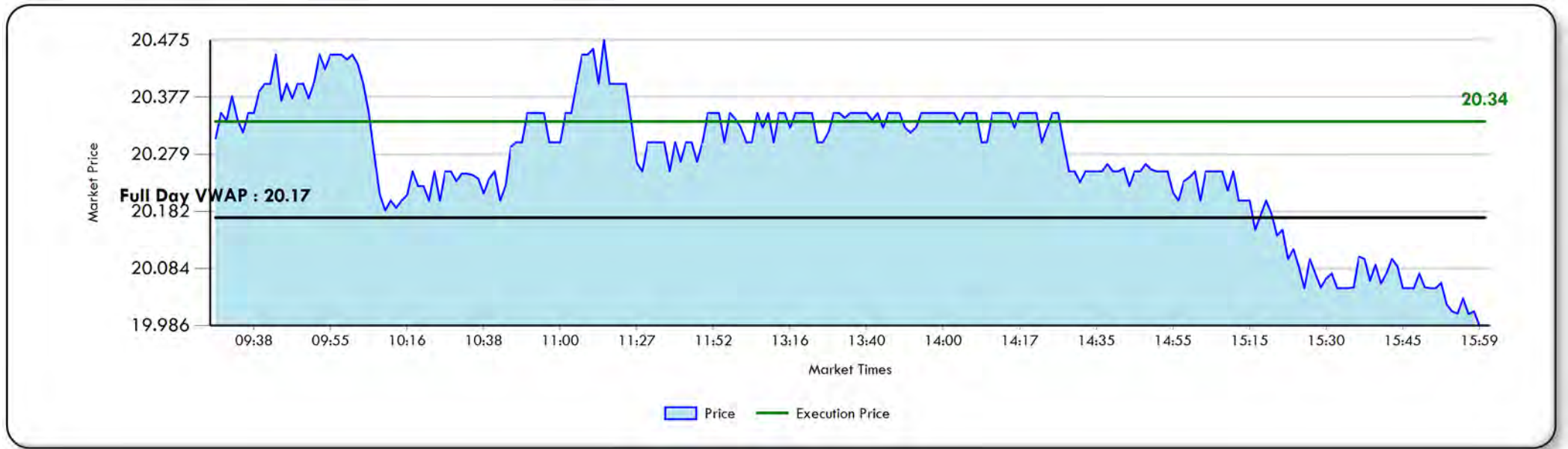


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

CHINA MERCHANTS PORT HOLDING C - 20160930

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	S&P GLOBAL INFRAST-INDEX	INSTINET	HKG	HKD	6416139	09/30/2016 09:30:00	09/30/2016 16:00:00	613,602	20.34	20.17	4,965	81.58	-0.55	2.46



NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 1.81% of your market impact cost.

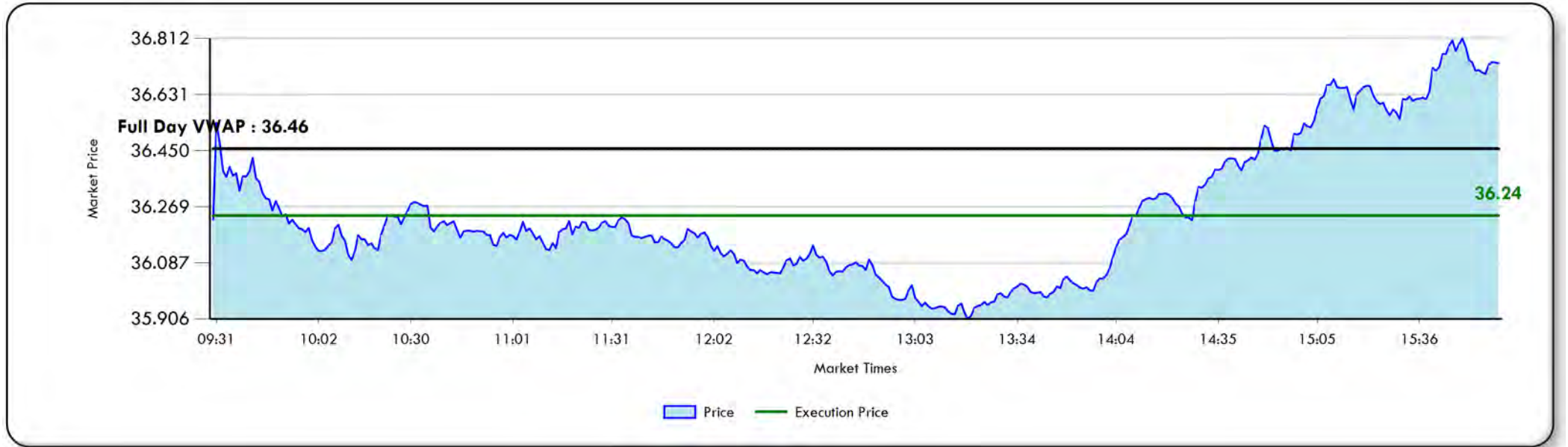


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

SUNCOR ENERGY INC COMMON STOCK - 20160705

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	RBC DOMINION SECS	CAN	CAD	B3NB1P2	07/05/2016 09:30:00	07/05/2016 16:00:00	802,250	36.24	36.46	4,779	59.22	-0.01	0.50



NOTES

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

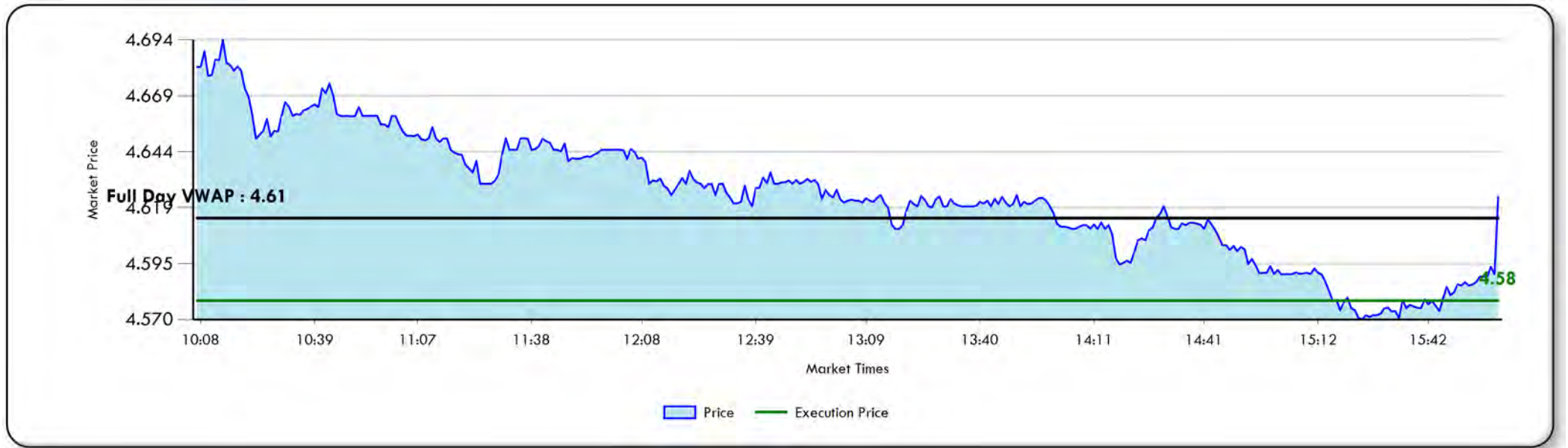


(+) = Cost

TRADE LEVEL DETAIL - LOW COST

SCENTRE GROUP REIT - 20160909

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)	MACQUARIE	AST	AUD	BLZH0Z7	09/09/2016 10:00:00	09/09/2016 16:12:00	560,760	4.58	4.61	4,468	79.04	-1.66	0.88

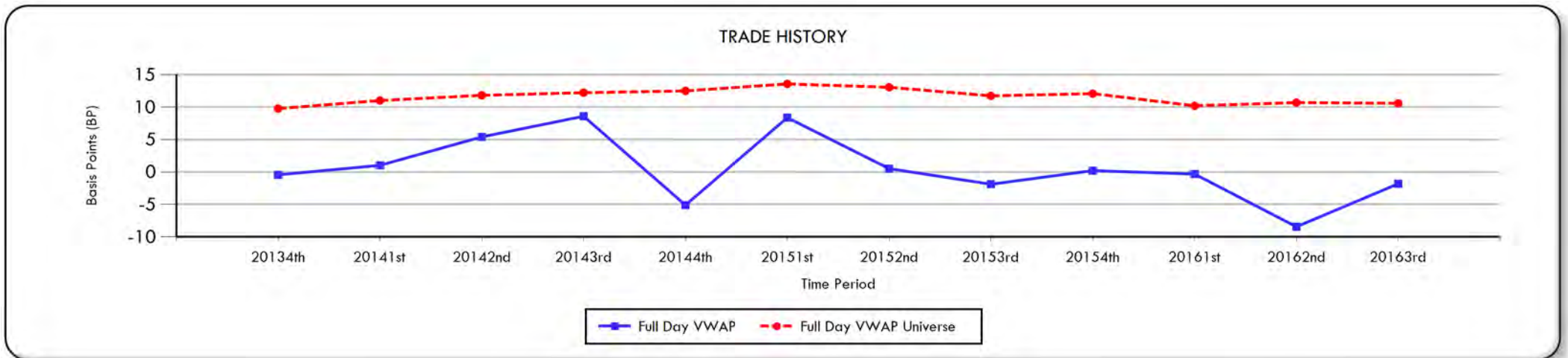


NOTES

- Out of all your low cost trades that beat to Full Day VWAP, this order made up 1.63% 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)
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
20163rd	170,434,065	+7.69	+16.36	+6.62	+6.96	1.82	+10.56	21.39



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	4.46 BP	14.81 BP	0.07 BP	7.13 BP	22.01 BP
AUSTRIA	10.05 BP	15.00 BP	0.00 BP	11.69 BP	26.69 BP
BELGIUM	63.86 BP	13.95 BP	0.00 BP	10.94 BP	24.89 BP
BRAZIL	4.33 BP	17.01 BP	1.19 BP	9.86 BP	28.06 BP
CANADA	13.86 BP	16.92 BP	0.12 BP	7.11 BP	24.15 BP
CHILE	0.12 BP	16.66 BP	0.88 BP	7.74 BP	25.28 BP
CHINA	1.90 BP	13.99 BP	8.52 BP	6.88 BP	29.39 BP
COLOMBIA	1.28 BP	23.33 BP	0.52 BP	17.62 BP	41.47 BP
CZECH REPUBLIC	30.25 BP	18.82 BP	0.00 BP	6.32 BP	25.14 BP
DENMARK	39.69 BP	14.65 BP	0.00 BP	18.29 BP	32.94 BP
EGYPT	1.19 BP	29.23 BP	0.14 BP	9.08 BP	38.45 BP
FINLAND	13.93 BP	13.70 BP	0.00 BP	6.50 BP	20.20 BP
FRANCE - BUYS	40.62 BP	14.18 BP	20.00 BP	6.04 BP	40.22 BP
FRANCE - SELLS	43.81 BP	14.62 BP	0.00 BP	8.91 BP	23.53 BP
GERMANY	46.89 BP	14.11 BP	0.00 BP	6.77 BP	20.88 BP
GREECE	5.29 BP	14.00 BP	2.53 BP	27.68 BP	44.21 BP
HONG KONG	1.37 BP	25.34 BP	10.67 BP	4.02 BP	40.03 BP
HUNGARY	11.15 BP	17.62 BP	0.06 BP	7.05 BP	24.73 BP
INDIA	7.26 BP	15.80 BP	10.44 BP	7.86 BP	34.10 BP



Elkins/McSherry Global Universe

Country	Price	Commission	Fees	Market Impact	Total
INDONESIA	0.40 BP	18.39 BP	8.17 BP	10.54 BP	37.10 BP
IRELAND - BUYS	4.69 BP	13.47 BP	100.00 BP	10.21 BP	123.68 BP
IRELAND - SELLS	0.43 BP	15.76 BP	0.00 BP	25.21 BP	40.97 BP
ISRAEL	12.56 BP	18.20 BP	0.01 BP	12.06 BP	30.27 BP
ITALY - BUYS	5.15 BP	13.89 BP	12.00 BP	15.44 BP	41.33 BP
ITALY - SELLS	5.10 BP	14.64 BP	0.00 BP	8.26 BP	22.90 BP
JAPAN	16.18 BP	16.48 BP	0.01 BP	15.56 BP	32.05 BP
KOREA - BUYS	95.83 BP	18.24 BP	0.00 BP	13.14 BP	31.38 BP
KOREA - SELLS	68.72 BP	21.31 BP	41.96 BP	12.99 BP	76.26 BP
LUXEMBOURG	10.53 BP	0.00 BP	0.00 BP	37.97 BP	37.97 BP
MALAYSIA	1.32 BP	17.08 BP	3.38 BP	9.13 BP	29.59 BP
MEXICO	2.19 BP	16.33 BP	0.00 BP	3.49 BP	19.82 BP
NETHERLANDS	22.24 BP	13.45 BP	0.05 BP	3.73 BP	17.23 BP
NEW ZEALAND	3.09 BP	17.73 BP	0.00 BP	15.01 BP	32.74 BP
NORWAY	9.61 BP	18.93 BP	0.01 BP	23.40 BP	42.34 BP
PERU	0.33 BP	7.12 BP	1.58 BP	28.09 BP	36.79 BP
PHILIPPINES	0.65 BP	22.09 BP	17.58 BP	13.53 BP	53.20 BP
POLAND	7.59 BP	17.88 BP	0.00 BP	8.60 BP	26.48 BP
PORTUGAL	3.07 BP	14.65 BP	0.00 BP	12.93 BP	27.58 BP
RUSSIA	0.09 BP	45.42 BP	0.00 BP	27.91 BP	73.33 BP

Elkins/McSherry Global Universe

Country	Price	Commission	Fees	Market Impact	Total
SINGAPORE	2.86 BP	15.91 BP	3.42 BP	9.26 BP	28.59 BP
SOUTH AFRICA - BUYS	5.54 BP	15.09 BP	21.20 BP	4.93 BP	41.22 BP
SOUTH AFRICA - SELLS	10.08 BP	16.01 BP	0.01 BP	12.62 BP	28.64 BP
SPAIN	6.03 BP	16.63 BP	0.00 BP	8.28 BP	24.91 BP
SWEDEN	12.63 BP	14.08 BP	0.00 BP	5.87 BP	19.95 BP
SWITZERLAND	62.31 BP	14.67 BP	0.00 BP	8.91 BP	23.58 BP
TAIWAN - BUYS	1.78 BP	21.44 BP	0.00 BP	6.57 BP	28.01 BP
TAIWAN - SELLS	1.60 BP	18.04 BP	26.25 BP	12.94 BP	57.23 BP
THAILAND	1.94 BP	19.36 BP	0.81 BP	5.68 BP	25.85 BP
TURKEY	7.86 BP	14.63 BP	0.00 BP	3.82 BP	18.45 BP
U.K. - BUYS	3.54 BP	15.82 BP	50.00 BP	16.91 BP	82.73 BP
U.K. - SELLS	8.11 BP	14.93 BP	0.00 BP	13.20 BP	28.13 BP
U.S.	39.50 BP	15.79 BP	0.08 BP	5.22 BP	21.09 BP
VENEZUELA	10.50 BP	43.22 BP	9.10 BP	31.03 BP	83.35 BP
TOTAL: 54	14.60 BP	17.83 BP	6.50 BP	12.31 BP	36.63 BP

DISCLAIMER

State Street Corporation and its subsidiaries and affiliates, including Elkins/McSherry, LLC (“State Street”), provide products and services to professional and institutional clients and this report and information (“Report”) is provided solely for general, marketing and/or informational purposes and is subject to these terms and conditions, including that the Report does not constitute investment research or investment, legal, regulatory, or tax advice. Nothing herein is an offer or solicitation to buy or sell any product, service or securities or any financial instrument and this does not create or constitute any binding contractual commitment or obligations for State Street of any kind. Not all products and features a may be available in all jurisdictions. Any opinions expressed or other information in the Report are subject to change without notice. The Report has been prepared and obtained from sources believed to be reliable at the time of preparation, however, it is provided “as-is” and State Street makes no guarantee, representation, or warranty of any kind including but not limited to its accuracy, suitability, timeliness, merchantability, fitness for a particular purpose, non-infringement of third-party rights, etc. This Report is not intended to be relied upon by any person or entity. State Street disclaims all liability, whether arising in contract, tort or otherwise, for any losses, liabilities, damages, expenses or costs arising, either direct or consequential, from or in connection with the use of the Report. No permission is granted to reprint, sell, copy, distribute, or modify any of the Report, in any form or by any means without the prior written consent of State Street. The Report may contain certain statements that may be deemed forward-looking statements. Please note that any such statements or forecasted information are not guarantees or reliable indicators for future performance and actual results or developments may differ materially from those depicted or projected. Investing involves risk, including the risk of loss of principal. Diversification does not ensure a profit or guarantee against loss. The Report does not take into account any client’s particular investment objectives, strategies, or tax and legal status, relevant regulations, nor does it purport to be comprehensive or intended to replace the exercise of a client’s or investor’s own careful independent review regarding any corresponding investment decision or related analysis.

Copyright © 2016 State Street Corporation, All rights reserved.



SACRAMENTO COUNTY

US Fixed Income Analysis

Period End September 30, 2016



Sacramento County
Period End September 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 July 01,2016 to September 30,2016. The analysis included trading of 684 trades in 203 different issues representing \$589,730,715 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.

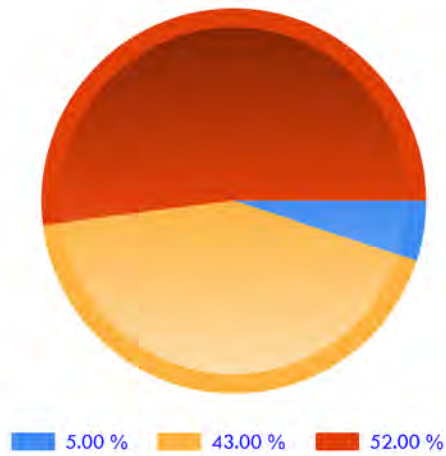
Results:

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	Q2 2016	Q1 2016	Q4 2015	Q3 2015
BUYS	294	341	136	+77.22	+2.63	+6.79	122.16	4.16	0.90	+3.79	+9.25	+13.20
SELLS	296	343	132	91.93	3.11	+5.92	267.14	9.03	1.27	8.27	12.52	13.65
GRAND TOTAL	590	684	203	14.71	0.25	+6.35	389.30	6.60	1.10	2.72	1.69	2.27

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	Q2 2016	Q1 2016	Q4 2015	Q3 2015
Mortgages	308	405	83	40.25	1.31	+5.27	202.70 6.58	1.17	3.23	3.00	3.62
Governments	252	235	83	+1.78	+0.07	+6.86	171.00 6.79	0.11	+0.15	0.05	+3.08
Corporates	30	44	37	+23.76	+8.03	+13.31	15.60 5.28	4.93	16.25	1.86	12.98

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	310	610	185	6.14	0.20	+6.76	215.35	6.96
2~5	207	63	33	5.61	0.27	+5.76	124.88	6.03
5~10	60	10	6	+9.58	+1.60	+6.94	31.91	5.34
10~50	13	1	1	12.54	9.54	+3.52	17.16	13.06



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
Mtge-High Yield	305	401	79	36.42	1.19	+5.19	194.69	6.38
Govt-INVESTMENT GRADE	252	235	83	+1.78	+0.07	+6.86	171.00	6.79
Corp-INVESTMENT GRADE	29	42	36	+19.33	+6.72	+13.43	19.34	6.71
Mtge-INVESTMENT GRADE	3	4	4	3.83	12.42	+13.58	8.01	26.00
Corp-High Yield	<1	2	1	+4.43	+56.01	+8.65	+3.74	+47.36



EXECUTIVE SUMMARY

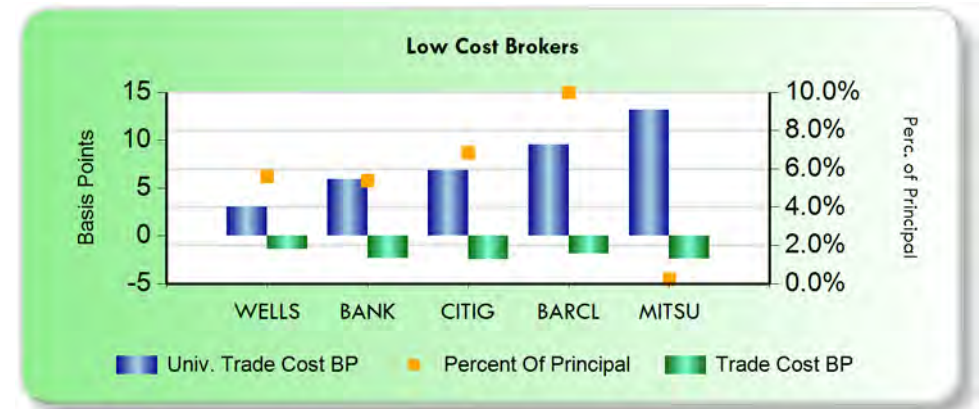
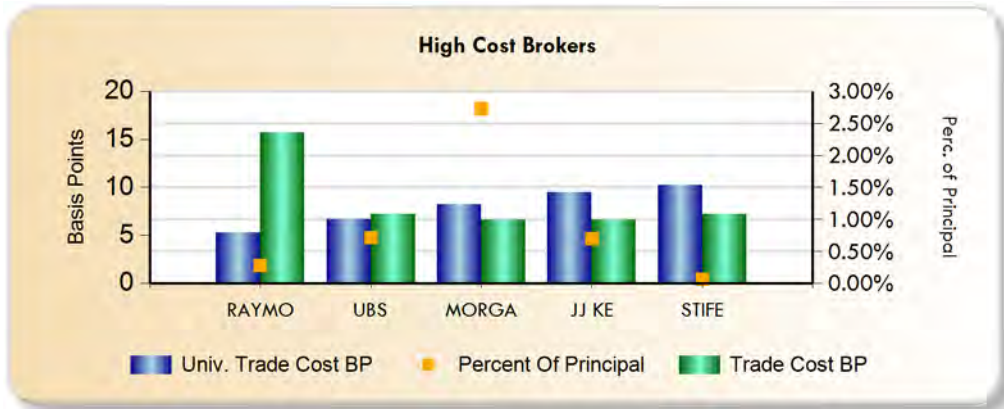
RATING SUMMARY

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
NR	304.40	400	78	36.02	1.18	+5.18	193.61	6.36
AAA	257.80	241	89	2.05	0.08	+7.00	182.39	7.08
BBB+	6.34	11	8	+2.08	+3.29	+15.91	8.00	12.62
BBB-	6.23	8	6	+3.40	+5.45	+15.09	6.01	9.64
BBB	5.21	7	7	+6.05	+11.62	+9.01	+1.36	+2.61
A-	3.80	6	6	+5.94	+15.65	+16.88	0.47	1.23
A	2.80	5	5	+2.52	+8.99	+9.22	0.06	0.23
A+	1.71	3	2	0.66	3.83	+12.44	2.79	16.27
BB	<1	2	1	+4.43	+56.01	+8.65	+3.74	+47.36
CCC	<1	1	1	0.40	6.06	+10.33	1.08	16.39



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)								
RAYMOND JAMES	2	2	2	+2.64	+15.71	+5.27	+1.75	+10.44
UBS	4	18	17	+3.06	+7.24	+6.72	+0.22	+0.52
MORGAN STANLEY	16	28	25	+10.68	+6.63	+8.21	2.54	1.58
JJ KENNY DRAKE INC	4	4	3	+2.74	+6.64	+9.48	1.17	2.84
STIFEL NICOLAUS & CO	<1	1	1	+0.29	+7.21	+10.21	0.12	3.00
5 LOWEST COST BROKERS (Sorted By Trade Cost BP)								
WELLS FARGO	33	49	22	4.57	1.38	+3.00	14.50	4.38
BANK OF AMERICA	32	91	58	7.49	2.36	+5.90	26.23	8.26
CITIGROUP	40	85	47	10.14	2.51	+6.82	37.68	9.33
BARCLAYS	59	66	40	10.94	1.86	+9.56	67.24	11.42
MITSUBISHI UFJ SECS	1	2	2	0.34	2.43	+13.15	2.21	15.58





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	BUYS	294	341	136	+77.22	+2.63	+6.79	122.16	4.16
	SELLS	296	343	132	91.93	3.11	+5.92	267.14	9.03

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		Q2 2016	Q1 2016	Q4 2015	Q3 2015
METROPOLITAN WEST MG	407	224	71	6.48	0.16	+6.33	264.24	6.49	0.41	2.90	0.18	+3.57
NEUBERGER BERMAN	164	374	127	3.27	0.20	+6.61	111.45	6.81	2.07	3.00	3.92	8.25
BARCLAYS 1-10 YR TIP	19	86	25	4.95	2.57	+4.50	13.61	7.07	2.88	+7.29	-	-

BROKER PERFORMANCE

BROKER	BROKER PERFORMANCE								TRADE COST HISTORICAL PERFORMANCE			
	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous. \$) BP		Q2 2016	Q1 2016	Q4 2015	Q3 2015
GOLDMAN SACHS	113	108	65	+18.23	+1.61	+7.37	65.31	5.76	+2.13	1.53	0.42	2.90
CREDIT SUISSE	87	35	25	9.76	1.12	+4.98	53.11	6.10	0.55	+1.24	+0.70	1.90
JP MORGAN CHASE	79	43	33	7.15	0.91	+4.93	45.92	5.84	11.27	5.63	+0.72	5.58
BARCLAYS	59	66	40	10.94	1.86	+9.56	67.24	11.42	+2.28	3.96	+0.45	6.87
NOMURA	50	71	50	6.41	1.29	+5.26	32.47	6.55	1.79	7.17	2.14	0.37
CITIGROUP	40	85	47	10.14	2.51	+6.82	37.68	9.33	0.80	1.56	5.96	3.54
WELLS FARGO	33	49	22	4.57	1.38	+3.00	14.50	4.38	2.05	1.28	3.92	6.28
BANK OF AMERICA	32	91	58	7.49	2.36	+5.90	26.23	8.26	1.49	4.85	6.31	7.53
DEUTSCHE BANK	26	20	15	2.89	1.12	+6.54	19.74	7.66	2.83	+2.26	2.60	1.58
MORGAN STANLEY	16	28	25	+10.68	+6.63	+8.21	2.54	1.58	+0.98	7.76	0.33	+44.39
RBC CAPITAL MARKETS	13	5	4	+2.44	+1.81	+8.75	9.33	6.94	0.15	13.94	+5.12	+0.69
BMO CAPITAL MARKETS	9	6	5	+0.90	+0.97	+2.55	1.46	1.58	-	+0.39	0.23	-
BNP PARIBAS	8	35	23	+1.90	+2.33	+11.12	7.17	8.79	3.85	8.67	9.11	11.99
HSBC BANK	6	2	2	+0.22	+0.36	+7.51	4.43	7.15	0.03	3.15	+0.18	+2.41
UBS	4	18	17	+3.06	+7.24	+6.72	+0.22	+0.52	2.61	+2.84	+7.64	0.28
JJ KENNY DRAKE INC	4	4	3	+2.74	+6.64	+9.48	1.17	2.84	+0.17	+5.45	+7.11	+4.29
BNY MELLON	4	3	3	+1.35	+3.49	+1.40	+0.81	+2.09	+5.46	15.40	+7.89	9.21
RAYMOND JAMES	2	2	2	+2.64	+15.71	+5.27	+1.75	+10.44	-	-	+21.75	-
MITSUBISHI UFJ SECS	1	2	2	0.34	2.43	+13.15	2.21	15.58	+28.17	6.66	+11.25	-
WACHOVIA BANK	<1	4	4	+0.31	+3.49	+2.09	+0.13	+1.40	1.08	+4.07	-	-

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	912810RT US TREASURY N/B 08/46 2.25	Govt	09/08/2016 08/15/2046	METROPOLITAN WE NOMURA	US	USD	1,586,775	99.484	98.830	+65.77	+10,436
B	912810RT US TREASURY N/B 08/46 2.25	Govt	09/20/2016 08/15/2046	METROPOLITAN WE GOLDMAN SACHS	US	USD	1,533,655	96.761	96.161	+61.96	+9,502
S	912810RS US TREASURY N/B 05/46 2.5	Govt	09/21/2016 05/15/2046	METROPOLITAN WE GOLDMAN SACHS	US	USD	959,846	101.571	102.503	+91.77	+8,808
B	3138LCLR FNMA POOL AN0335 FN 01/31 FI	Mtge	09/13/2016 01/01/2031	METROPOLITAN WE JP MORGAN CHASE	US	USD	785,492	108.344	107.140	+111.10	+8,727
B	912828S7 US TREASURY N/B 07/21 1.125	Govt	08/26/2016 07/31/2021	METROPOLITAN WE CREDIT SUISSE	US	USD	4,627,465	99.623	99.445	+17.86	+8,265
B	02R0306A FGLMC 3 10/12	Mtge	09/08/2016 12/31/2099	METROPOLITAN WE GOLDMAN SACHS	US	USD	2,071,562	103.578	103.222	+34.43	+7,133
B	9128282A US TREASURY N/B 08/26 1.5	Govt	09/13/2016 08/15/2026	METROPOLITAN WE BARCLAYS	US	USD	1,128,149	98.528	97.957	+58.01	+6,545
S	912810QY US TREASURY N/B 11/42 2.75	Govt	08/01/2016 11/15/2042	NEUBERGER BERMA MORGAN STANLEY	US	USD	1,067,527	110.625	111.252	+56.71	+6,054
B	9128282F US TREASURY N/B 08/21 1.125	Govt	09/08/2016 08/31/2021	METROPOLITAN WE GOLDMAN SACHS	US	USD	4,748,830	99.870	99.745	+12.57	+5,967
B	912810RT US TREASURY N/B 08/46 2.25	Govt	09/14/2016 08/15/2046	METROPOLITAN WE BARCLAYS	US	USD	1,418,247	96.152	95.765	+40.25	+5,709
S	912810RS US TREASURY N/B 05/46 2.5	Govt	09/16/2016 05/15/2046	METROPOLITAN WE GOLDMAN SACHS	US	USD	1,141,759	101.041	101.491	+44.60	+5,092
S	21H03269 G2SF 3.5 9/11	Mtge	08/22/2016 12/31/2099	METROPOLITAN WE JP MORGAN CHASE	US	USD	5,753,043	106.047	106.141	+8.84	+5,086
B	9128282F US TREASURY N/B 08/21 1.125	Govt	09/15/2016 08/31/2021	METROPOLITAN WE GOLDMAN SACHS	US	USD	3,116,100	99.875	99.720	+15.54	+4,843
B	912828S7 US TREASURY N/B 07/21 1.125	Govt	08/31/2016 07/31/2021	METROPOLITAN WE GOLDMAN SACHS	US	USD	5,388,366	99.692	99.607	+8.59	+4,630



S	01F03069 FNCL 3 9/12	Mtge	09/06/2016 12/31/2099	METROPOLITAN WE CREDIT SUISSE	US	USD	3,844,386	103.902	104.016	+10.90	+4,192
---	-------------------------	------	--------------------------	----------------------------------	----	-----	-----------	---------	---------	--------	--------



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											
S	912828R7 US TREASURY N/B 05/21 1.375	Govt	07/25/2016 05/31/2021	METROPOLITAN WE JP MORGAN CHASE	US	USD	21,012,662	101.217	101.121	9.48	19,924
S	01F02247 FNCL 2.5 7/12	Mtge	07/07/2016 12/31/2099	METROPOLITAN WE CREDIT SUISSE	US	USD	2,380,972	103.746	103.218	50.90	12,120
S	912810RS US TREASURY N/B 05/46 2.5	Govt	09/08/2016 05/15/2046	METROPOLITAN WE NOMURA	US	USD	1,626,120	104.911	104.243	63.64	10,349
B	912810RT US TREASURY N/B 08/46 2.25	Govt	09/21/2016 08/15/2046	METROPOLITAN WE GOLDMAN SACHS	US	USD	933,880	96.276	97.294	105.70	9,871
S	912810RS US TREASURY N/B 05/46 2.5	Govt	09/20/2016 05/15/2046	METROPOLITAN WE GOLDMAN SACHS	US	USD	2,033,952	101.952	101.485	45.86	9,328
S	01F03267 FNCL 3.5 7/11	Mtge	07/06/2016 12/31/2099	METROPOLITAN WE CITIGROUP	US	USD	1,442,794	105.699	105.238	43.68	6,302
S	912828S2 US TREASURY N/B 06/21 1.125	Govt	09/08/2016 06/30/2021	METROPOLITAN WE GOLDMAN SACHS	US	USD	4,912,348	99.844	99.718	12.68	6,228
S	01F03267 FNCL 3.5 7/11	Mtge	07/07/2016 12/31/2099	NEUBERGER BERMA NOMURA	US	USD	1,526,281	105.625	105.198	40.43	6,170
S	912828S2 US TREASURY N/B 06/21 1.125	Govt	09/15/2016 06/30/2021	METROPOLITAN WE GOLDMAN SACHS	US	USD	3,220,212	99.852	99.666	18.57	5,980
S	912828R3 US TREASURY N/B 05/26 1.625	Govt	09/13/2016 05/15/2026	METROPOLITAN WE BARCLAYS	US	USD	1,160,631	99.625	99.120	50.73	5,888
S	912810RS US TREASURY N/B 05/46 2.5	Govt	09/14/2016 05/15/2046	METROPOLITAN WE BARCLAYS	US	USD	1,455,930	101.459	101.069	38.38	5,588
S	912810RS US TREASURY N/B 05/46 2.5	Govt	09/22/2016 05/15/2046	METROPOLITAN WE DEUTSCHE BANK	US	USD	2,086,870	103.567	103.313	24.50	5,112
S	912828S7 US TREASURY N/B 07/21 1.125	Govt	09/23/2016 07/31/2021	METROPOLITAN WE BARCLAYS	US	USD	9,970,178	99.852	99.805	4.65	4,637
B	9128282A US TREASURY N/B 08/26 1.5	Govt	09/15/2016 08/15/2026	METROPOLITAN WE JP MORGAN CHASE	US	USD	1,611,112	97.940	98.217	28.24	4,550
S	01F03067 FNCL 3 7/12	Mtge	07/01/2016 12/31/2099	NEUBERGER BERMA CITIGROUP	US	USD	955,434	103.852	103.384	45.06	4,305



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	30	44	37	+23.76	+8.03	+13.31	15.60	5.28

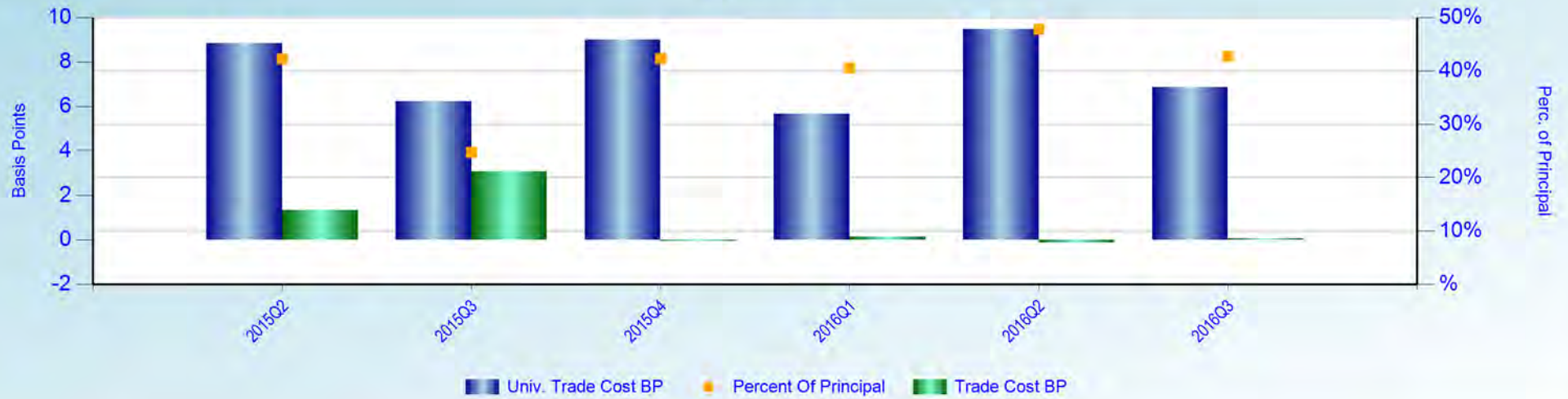
CORPORATES



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	252	235	83	+1.78	+0.07	+6.86	171.00	6.79

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	308	405	83	40.25	1.31	+5.27	202.70	6.58

MORTGAGES





MUNICIPALS



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	304	400	78	36.02	1.18	+5.18	193.61	6.36
AAA	3	4	4	3.83	12.42	+13.58	8.01	26.00
CCC	<1	1	1	0.40	6.06	+10.33	1.08	16.39



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	252	235	83	+1.78	+0.07	+6.86	171.00	6.79

RATING BY EACH BOND TYPE

CORPORATES - RATING DETAILS

Rating	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost		Univ. Trade Cost BP	Cost Diff. from Universe	
				(Thous. \$)	BP		(Thous. \$)	BP
BBB+	6	11	8	+2.08	+3.29	+15.91	8.00	12.62
BBB-	6	8	6	+3.40	+5.45	+15.09	6.01	9.64
BBB	5	7	7	+6.05	+11.62	+9.01	+1.36	+2.61
A-	4	6	6	+5.94	+15.65	+16.88	0.47	1.24
A	3	5	5	+2.52	+8.99	+9.22	0.06	0.22
AAA	3	2	2	+0.00	+0.00	+12.50	3.38	12.50
A+	2	3	2	0.66	3.83	+12.44	2.79	16.27
BB	<1	2	1	+4.43	+56.01	+8.65	+3.74	+47.36

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
07/01/2016-09/30/2016	589,731	684	203	14.71	0.25	+6.35	389.30	6.60
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	1,919,839	2602		275.91	1.44	+7.02	1,623.50	8.46
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

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
10/01/2011-12/31/2011	91,474	88	43	18.39	2.01	+6.04	73.67	8.05
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	12	12	ISSUE PRICE	41.02 %
	20	16	BLOOMBERGTERMINAL	35.69 %
	12	11	MARKETAXESS-SUMMARYDATA	23.28 %
GOVERNMENTS	231	80	BLOOMBERGTERMINAL	99.57 %
	4	4	ISSUE PRICE	0.43 %
MORTGAGES	333	71	BLOOMBERGTERMINAL	89.48 %
	72	12	TULLET PREBON	10.52 %

DISCLAIMER

State Street Corporation and its subsidiaries and affiliates, including Elkins/McSherry, LLC (“State Street”), provide products and services to professional and institutional clients and this report and information (“Report”) is provided solely for general, marketing and/or informational purposes and is subject to these terms and conditions, including that the Report does not constitute investment research or investment, legal, regulatory, or tax advice. Nothing herein is an offer or solicitation to buy or sell any product, service or securities or any financial instrument and this does not create or constitute any binding contractual commitment or obligations for State Street of any kind. Not all products and features a may be available in all jurisdictions. Any opinions expressed or other information in the Report are subject to change without notice. The Report has been prepared and obtained from sources believed to be reliable at the time of preparation, however, it is provided “as-is” and State Street makes no guarantee, representation, or warranty of any kind including but not limited to its accuracy, suitability, timeliness, merchantability, fitness for a particular purpose, non-infringement of third-party rights, etc. This Report is not intended to be relied upon by any person or entity. State Street disclaims all liability, whether arising in contract, tort or otherwise, for any losses, liabilities, damages, expenses or costs arising, either direct or consequential, from or in connection with the use of the Report. No permission is granted to reprint, sell, copy, distribute, or modify any of the Report, in any form or by any means without the prior written consent of State Street. The Report may contain certain statements that may be deemed forward-looking statements. Please note that any such statements or forecasted information are not guarantees or reliable indicators for future performance and actual results or developments may differ materially from those depicted or projected. Investing involves risk, including the risk of loss of principal. Diversification does not ensure a profit or guarantee against loss. The Report does not take into account any client’s particular investment objectives, strategies, or tax and legal status, relevant regulations, nor does it purport to be comprehensive or intended to replace the exercise of a client’s or investor’s own careful independent review regarding any corresponding investment decision or related analysis.

Copyright © 2016 State Street Corporation, All rights reserved.



SACRAMENTO COUNTY

Global Fixed Income Analysis

Period End September 30, 2016



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 July 01,2016 to September 30,2016. The analysis included trading of 135 trades in 53 different issues representing \$44,926,569 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.

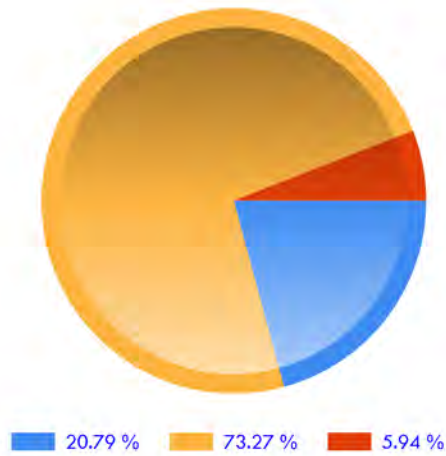
Results:

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	Q2 2016	Q1 2016	Q4 2015	Q3 2015
BUYS	22	69	35	+5.34	+2.38	+3.53	2.56	1.15	+1.07	17.47	23.54	53.53
SELLS	23	66	28	+4.45	+1.98	+3.62	3.71	1.64	+4.93	+9.62	+13.98	+10.34
GRAND TOTAL	45	135	53	+9.79	+2.18	+3.58	6.28	1.40	+2.94	4.66	6.91	33.07

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	Q2 2016	Q1 2016	Q4 2015	Q3 2015
Governments	33	92	22	+11.96	+3.61	+3.59	+0.07 +0.02	0.89	2.06	+6.29	2.54
Corporates	9	40	28	5.52	5.92	+3.53	8.81 9.45	10.36	4.87	37.16	3.73
Mortgages	2	3	3	+3.35	+13.43	+3.53	+2.47 +9.90	+27.53	58.42	13.17	226.91

Bonds by Principal Traded



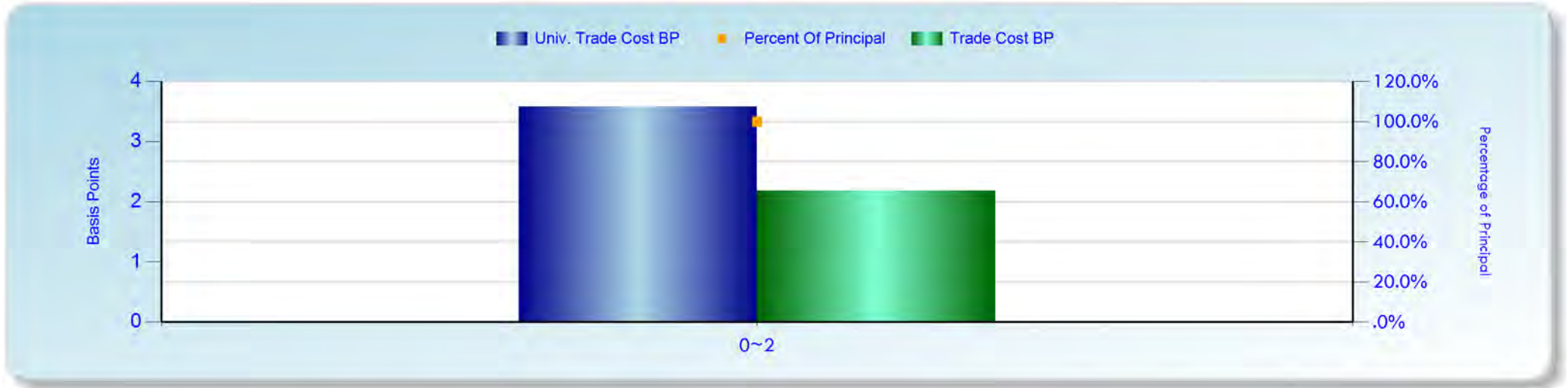
Historical Trade Cost Trend



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	45	135	53	+9.79	+2.18	+3.58	6.28	1.40





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	33	91	21	+11.07	+3.37	+3.60	0.74	0.23
Corp-INVESTMENT GRADE	7	31	20	3.77	5.39	+3.53	6.23	8.92
Corp-High Yield	2	9	8	1.75	7.49	+3.53	2.58	11.02
Mtge-INVESTMENT GRADE	2	2	2	+1.82	+8.68	+3.53	+1.08	+5.15
Mtge-High Yield	<1	1	1	+1.53	+38.30	+3.53	+1.39	+34.77
Govt-High Yield	<1	1	1	+0.90	+31.20	+3.24	+0.80	+27.96



EXECUTIVE SUMMARY

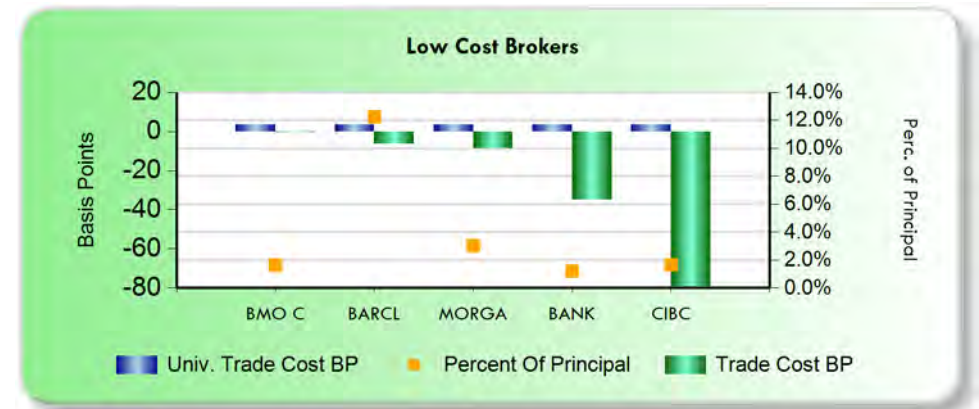
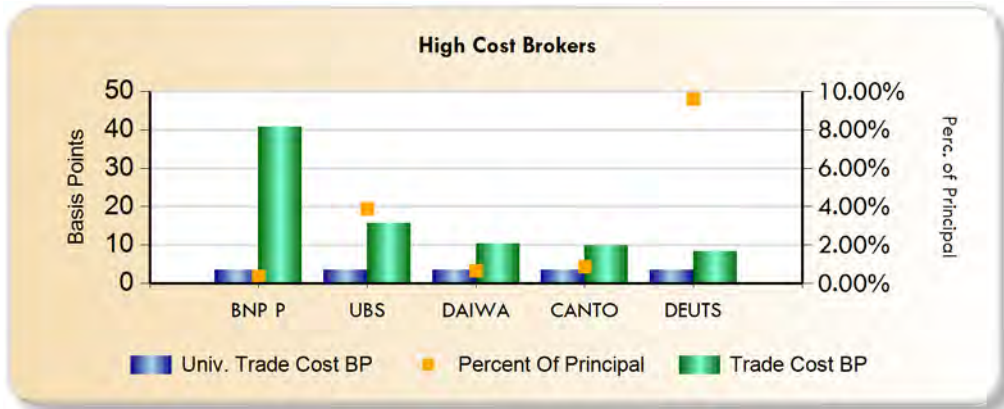
RATING SUMMARY

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	34.45	91	22	+11.66	+3.39	+3.53	0.50	0.14
A-	2.88	9	5	1.03	3.58	+4.27	2.26	7.85
BBB+	1.94	11	3	1.38	7.11	+3.53	2.07	10.64
BBB	1.36	8	8	+0.66	+4.87	+3.53	+0.18	+1.34
B-	1.20	4	3	+1.12	+9.34	+3.53	+0.70	+5.81
BB+	<1	2	2	+1.29	+18.88	+3.41	+1.05	+15.47
BBB-	<1	3	3	0.32	5.79	+3.53	0.51	9.32
BB-	<1	1	1	+0.00	+0.00	+3.53	0.16	3.53
AA-	<1	1	1	+0.00	+0.00	+3.53	0.14	3.53
A	<1	1	1	0.48	14.48	+3.53	0.60	18.01



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)								
BNP PARIBAS	<1	1	1	+0.69	+40.81	+3.53	+0.63	+37.28
UBS	2	2	2	+2.74	+15.70	+3.53	+2.13	+12.17
DAIWA SECURITIES	<1	1	1	+0.31	+10.37	+3.53	+0.21	+6.84
CANTOR FITZGERALD	<1	1	1	+0.39	+9.90	+3.53	+0.25	+6.37
DEUTSCHE BANK	4	13	9	+3.61	+8.37	+3.51	+2.10	+4.86
5 LOWEST COST BROKERS (Sorted By Trade Cost BP)								
BMO CAPITAL MARKETS	<1	4	3	0.02	0.22	+3.53	0.28	3.75
BARCLAYS	5	12	8	3.53	6.43	+3.53	5.48	9.96
MORGAN STANLEY	1	2	2	1.21	8.84	+3.53	1.69	12.37
BANK OF AMERICA	<1	2	2	1.93	35.07	+3.53	2.12	38.60
CIBC WORLD MARKETS	<1	2	2	5.90	79.07	+3.53	6.17	82.60



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. \$) BP		Q2 2016	Q1 2016	Q4 2015	Q3 2015
UNITED STATES	44	132	51	+7.68	+1.74	+3.53	7.92	1.79	+2.95	3.63	9.52	33.07
LUXEMBOURG	<1	2	1	+1.22	+25.95	+8.08	+0.84	+17.87	+0.00	-	-	-
SINGAPORE	<1	1	1	+0.90	+31.20	+3.24	+0.80	+27.96	-	-	-	-

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	SELLS	22	64	27	+3.23	+1.47	+3.53	4.55	2.06
	BUYS	22	68	34	+4.45	+2.01	+3.53	3.37	1.52
LUXEMBOURG	SELLS	<1	2	1	+1.22	+25.95	+8.08	+0.84	+17.87
SINGAPORE	BUYS	<1	1	1	+0.90	+31.20	+3.24	+0.80	+27.96

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	Q2 2016	Q1 2016	Q4 2015	Q3 2015
PRUDENTIAL INVESTMEN	45	135	53	+9.79	+2.18	+3.58	6.28 1.40	+2.94	4.66	6.91	33.07

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		Q2 2016	Q1 2016	Q4 2015	Q3 2015
JP MORGAN CHASE	11	28	14	+4.37	+4.16	+3.53	+0.66	+0.63	16.69	22.26	66.64	+5.73
CITIGROUP	7	20	13	+4.59	+6.66	+3.84	+1.94	+2.82	+27.80	+0.11	+16.60	2.57
GOLDMAN SACHS	6	16	14	+3.87	+6.85	+3.53	+1.88	+3.32	9.03	+1.64	+0.00	114.04
BARCLAYS	5	12	8	3.53	6.43	+3.53	5.48	9.96	+1.07	0.60	+21.75	14.75
DEUTSCHE BANK	4	13	9	+3.61	+8.37	+3.51	+2.10	+4.86	8.97	+1.95	+4.40	17.45
WELLS FARGO	2	4	4	+0.07	+0.35	+3.53	0.61	3.18	15.67	8.40	+4.14	-
UBS	2	2	2	+2.74	+15.70	+3.53	+2.13	+12.17	-	+5.67	-	-
JEFFERIES & CO	1	14	8	+0.83	+5.93	+3.53	+0.33	+2.40	+8.19	+46.00	0.55	-
MORGAN STANLEY	1	2	2	1.21	8.84	+3.53	1.69	12.37	+20.17	25.52	24.73	+11.82
NOMURA	1	4	4	+0.13	+1.02	+3.53	0.31	2.51	+2.09	0.42	-	-
RBC CAPITAL MARKETS	<1	3	3	+0.65	+7.87	+3.53	+0.36	+4.34	-	+24.33	-	-
CIBC WORLD MARKETS	<1	2	2	5.90	79.07	+3.53	6.17	82.60	-	-	-	-
BMO CAPITAL MARKETS	<1	4	3	0.02	0.22	+3.53	0.28	3.75	-	0.93	-	+0.81
BANK OF AMERICA	<1	2	2	1.93	35.07	+3.53	2.12	38.60	+7.26	4.25	1.89	-
BAIRD, ROBERT W	<1	2	2	+0.04	+0.95	+3.53	0.11	2.58	+2.40	+8.25	-	+0.00
CANTOR FITZGERALD	<1	1	1	+0.39	+9.90	+3.53	+0.25	+6.37	-	+21.54	-	-
DAIWA SECURITIES	<1	1	1	+0.31	+10.37	+3.53	+0.21	+6.84	-	-	-	-
BNP PARIBAS	<1	1	1	+0.69	+40.81	+3.53	+0.63	+37.28	-	1.88	-	-
BNY MELLON	<1	2	1	+0.08	+7.05	+3.53	+0.04	+3.52	+1.76	+0.72	+18.71	-
BREAN CAPITAL LLC	<1	2	2	+0.00	+0.12	+3.53	0.04	3.41	-	-	-	-

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	912810RS US TREASURY N/B 05/46 2.5	Govt	09/07/2016 05/15/2046	PRUDENTIAL INVE JP MORGAN CHASE	US	USD	552,581	106.266	105.631	+59.72	+3,300
B	912810RS US TREASURY N/B 05/46 2.5	Govt	09/06/2016 05/15/2046	PRUDENTIAL INVE JP MORGAN CHASE	US	USD	805,837	106.031	105.697	+31.55	+2,542
S	12592KBC COMM MORTGAGE TRUST COMM 201	Mtge	08/24/2016 09/10/2047	PRUDENTIAL INVE UBS	US	USD	1,438,328	110.641	110.820	+16.21	+2,332
S	912828R3 US TREASURY N/B 05/26 1.625	Govt	07/29/2016 05/15/2026	PRUDENTIAL INVE CITIGROUP	US	USD	840,657	101.281	101.555	+26.72	+2,246
S	912828R3 US TREASURY N/B 05/26 1.625	Govt	07/26/2016 05/15/2026	PRUDENTIAL INVE DEUTSCHE BANK	US	USD	1,415,838	100.414	100.563	+14.78	+2,093
S	912828R3 US TREASURY N/B 05/26 1.625	Govt	07/08/2016 05/15/2026	PRUDENTIAL INVE JP MORGAN CHASE	US	USD	1,022,070	102.207	102.402	+19.11	+1,953
B	912810QL US TREASURY N/B	Govt	09/14/2016 11/15/2040	PRUDENTIAL INVE RBC CAPITAL MAR	US	USD	461,552	135.751	135.274	+35.11	+1,621
B	912810RS US TREASURY N/B 05/46 2.5	Govt	08/15/2016 05/15/2046	PRUDENTIAL INVE JEFFERIES & CO	US	USD	347,332	105.252	104.771	+45.69	+1,587
B	65536HCS NOMURA HOME EQUITY LOAN INC	Mtge	08/18/2016 02/25/2036	PRUDENTIAL INVE GOLDMAN SACHS	US	USD	399,500	94.000	93.640	+38.30	+1,530
B	9128282A US TREASURY N/B 08/26 1.5	Govt	08/24/2016 08/15/2026	PRUDENTIAL INVE CITIGROUP	US	USD	1,095,058	99.551	99.439	+11.18	+1,225
S	BJV4412 REPUBLIC OF SLOVENIA SR UNSE	Govt	09/27/2016 02/18/2024	PRUDENTIAL INVE CITIGROUP	LUX	USD	469,000	117.250	117.554	+25.95	+1,217
S	912810RK US TREASURY N/B 02/45 2.5	Govt	08/18/2016 02/15/2045	PRUDENTIAL INVE JP MORGAN CHASE	US	USD	650,273	104.883	105.070	+17.88	+1,163
B	912810RS US TREASURY N/B 05/46 2.5	Govt	09/07/2016 05/15/2046	PRUDENTIAL INVE BAIRD, ROBERT W	US	USD	196,562	106.250	105.631	+58.26	+1,145
B	912810RS US TREASURY N/B 05/46 2.5	Govt	09/07/2016 05/15/2046	PRUDENTIAL INVE GOLDMAN SACHS	US	USD	180,704	106.297	105.631	+62.64	+1,132



S	912810RQ US TREASURY N/B 02/46 2.5	Govt	07/28/2016 02/15/2046	PRUDENTIAL INVE JP MORGAN CHASE	US	USD	263,281	105.313	105.742	+40.80	+1,074
---	---------------------------------------	------	--------------------------	------------------------------------	----	-----	---------	---------	---------	--------	--------



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	74815HCB PROVINCE OF QUEBEC UNSECURED	Govt	09/08/2016 02/27/2026	PRUDENTIAL INVE CIBC WORLD MARK	US	USD	414,159	138.053	139.903	133.98	5,549
S	035242AM ANHEUSER BUSCH INBEV FIN COM	Corp	09/07/2016 02/01/2036	PRUDENTIAL INVE JP MORGAN CHASE	US	USD	900,480	116.191	115.696	42.57	3,833
S	912828R3 US TREASURY N/B 05/26 1.625	Govt	08/05/2016 05/15/2026	PRUDENTIAL INVE BARCLAYS	US	USD	1,387,654	100.555	100.361	19.23	2,668
B	71647NAP PETROBRAS GLOBAL FINANCE COM	Corp	07/07/2016 05/23/2021	PRUDENTIAL INVE BANK OF AMERICA	US	USD	326,307	101.971	102.534	55.21	1,802
S	912810RQ US TREASURY N/B 02/46 2.5	Govt	08/15/2016 02/15/2046	PRUDENTIAL INVE JEFFERIES & CO	US	USD	346,706	105.063	104.582	45.73	1,586
B	912828R3 US TREASURY N/B 05/26 1.625	Govt	07/15/2016 05/15/2026	PRUDENTIAL INVE JP MORGAN CHASE	US	USD	1,614,150	100.258	100.348	8.97	1,447
B	655044AJ NOBLE ENERGY INC SR UNSECURE	Corp	07/28/2016 11/15/2044	PRUDENTIAL INVE JP MORGAN CHASE	US	USD	370,905	98.908	99.292	38.80	1,439
S	92343VCM VERIZON COMMUNICATIONS SR UN	Corp	09/06/2016 08/21/2054	PRUDENTIAL INVE JP MORGAN CHASE	US	USD	960,331	111.021	110.881	12.62	1,212
S	9128282A US TREASURY N/B 08/26 1.5	Govt	09/26/2016 08/15/2026	PRUDENTIAL INVE MORGAN STANLEY	US	USD	1,152,296	99.336	99.232	10.48	1,208
S	912810RS US TREASURY N/B 05/46 2.5	Govt	09/14/2016 05/15/2046	PRUDENTIAL INVE RBC CAPITAL MAR	US	USD	365,006	101.391	101.069	31.70	1,157
S	035242AN ANHEUSER BUSCH INBEV FIN COM	Corp	09/07/2016 02/01/2046	PRUDENTIAL INVE BAIRD, ROBERT W	US	USD	248,421	121.181	120.643	44.40	1,103
B	912810RK US TREASURY N/B 02/45 2.5	Govt	07/14/2016 02/15/2045	PRUDENTIAL INVE CITIGROUP	US	USD	314,425	104.808	105.137	31.32	985
S	912828XE US TREASURY N/B 05/20 1.5	Govt	08/11/2016 05/31/2020	PRUDENTIAL INVE BARCLAYS	US	USD	377,486	102.023	101.811	20.87	788
B	31359MFJ FANNIE MAE	Govt	07/29/2016 01/15/2030	PRUDENTIAL INVE CITIGROUP	US	USD	458,594	158.136	158.401	16.77	769
S	29379VBC ENTERPRISE PRODUCTS OPER COM	Corp	09/07/2016 02/15/2045	PRUDENTIAL INVE GOLDMAN SACHS	US	USD	252,234	109.667	109.356	28.38	716



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	9	40	28	5.52	5.92	+3.53	8.81	9.45



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	33	92	22	+11.96	+3.61	+3.59	+0.07	+0.02

GOVERNMENTS



BOND TYPE PERFORMANCE

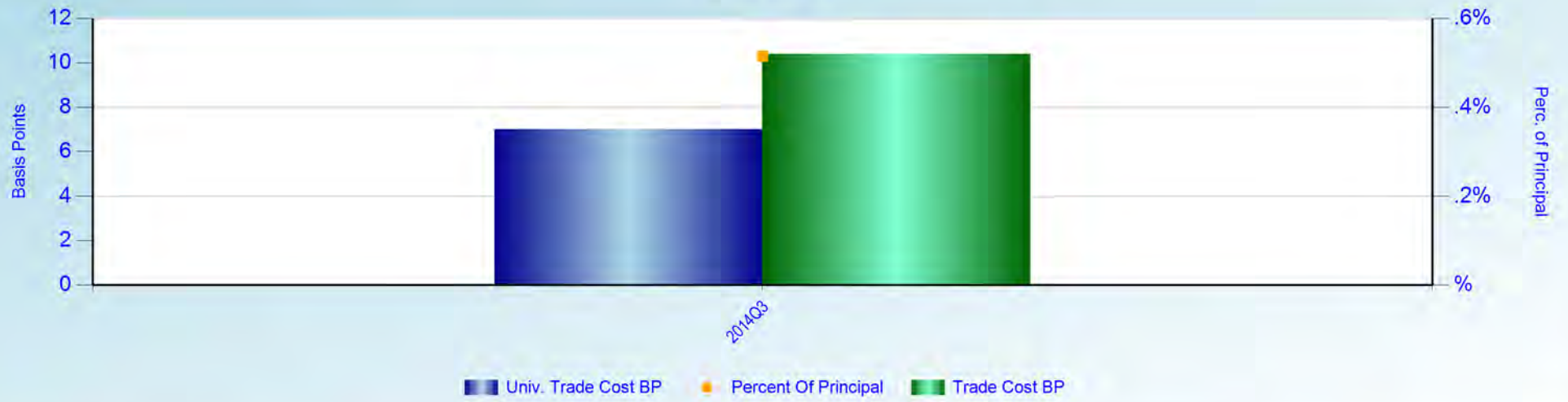
Bond Type	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost (Thous. \$)	Trade Cost BP	Univ. Trade Cost BP	Cost Diff. from Universe (Thous.\$)	BP
MORTGAGES	2	3	3	+3.35	+13.43	+3.53	+2.47	+9.90

MORTGAGES





UNCLASSIFIED



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	32	89	20	+9.85	+3.04	+3.53	1.57	0.49
A-	<1	2	1	+1.22	+25.95	+8.08	+0.84	+17.87
BB+	<1	1	1	+0.90	+31.20	+3.24	+0.80	+27.96

RATING BY EACH BOND TYPE

CORPORATES - RATING DETAILS

Rating	Principal (Mil. \$)	No. of Trades	No. of Issues	Trade Cost		Univ. Trade Cost BP	Cost Diff. from Universe	
				(Thous. \$)	BP		(Thous. \$)	BP
A-	2	7	4	2.25	9.32	+3.53	3.10	12.85
BBB+	2	11	3	1.38	7.11	+3.53	2.07	10.64
BBB	1	8	8	+0.66	+4.87	+3.53	+0.18	+1.34
B-	<1	3	2	0.41	5.06	+3.53	0.69	8.59
BBB-	<1	3	3	0.32	5.79	+3.53	0.51	9.32
BB-	<1	1	1	+0.00	+0.00	+3.53	0.16	3.53
BB+	<1	1	1	+0.39	+9.90	+3.53	+0.25	+6.37
AA-	<1	1	1	+0.00	+0.00	+3.53	0.14	3.53
A	<1	1	1	0.48	14.48	+3.53	0.60	18.01
B+	<1	1	1	1.80	55.21	+3.53	1.92	58.74
BB	<1	1	1	+0.00	+0.00	+3.53	0.09	3.53
B	<1	1	1	0.13	12.17	+3.53	0.16	15.70
D	<1	1	1	+0.19	+405.32	+3.53	+0.19	+401.79

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
AAA	2	2	2	+1.82	+8.68	+3.53	+1.08	+5.15
B-	<1	1	1	+1.53	+38.30	+3.53	+1.39	+34.77

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	32	89	20	+9.85	+3.04	+3.53	1.57	0.49
LUXEMBOURG	<1	2	1	+1.22	+25.95	+8.08	+0.84	+17.87
SINGAPORE	<1	1	1	+0.90	+31.20	+3.24	+0.80	+27.96

COUNTRIES BY EACH BOND TYPE

CORPORATES								
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	9	40	28	5.52	5.92	+3.53	8.81	9.45

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	2	3	3	+3.35	+13.43	+3.53	+2.47	+9.90

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
07/01/2016-09/30/2016	44,927	135	53	+9.79	+2.18	+3.58	6.28	1.40
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	212,975	362		10.42	0.49	+4.91	115.06	5.40
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

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
10/01/2011-12/31/2011	54,456	22	11	+249.88	+45.89	+3.18	+232.57	+42.71
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	22	11	BLOOMBERGTERMINAL	40.80 %
	11	10	MARKETAXESS-SUMMARYDATA	40.66 %
	7	7	ISSUE PRICE	18.53 %
GOVERNMENTS	92	22	BLOOMBERGTERMINAL	100.00 %
MORTGAGES	3	3	BLOOMBERGTERMINAL	100.00 %

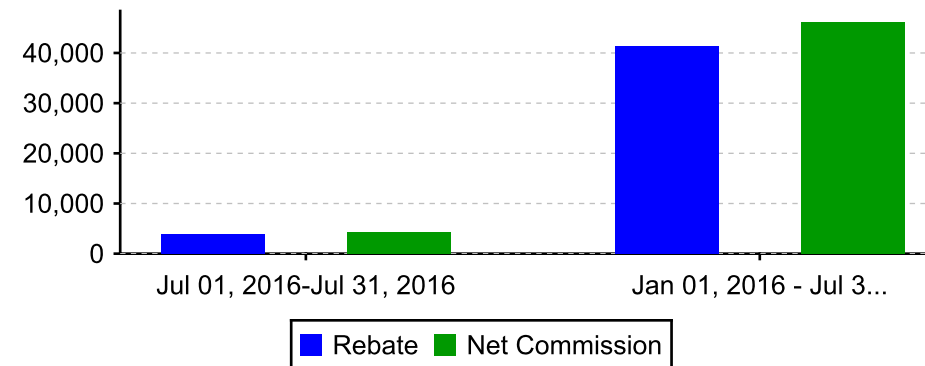
DISCLAIMER

State Street Corporation and its subsidiaries and affiliates, including Elkins/McSherry, LLC (“State Street”), provide products and services to professional and institutional clients and this report and information (“Report”) is provided solely for general, marketing and/or informational purposes and is subject to these terms and conditions, including that the Report does not constitute investment research or investment, legal, regulatory, or tax advice. Nothing herein is an offer or solicitation to buy or sell any product, service or securities or any financial instrument and this does not create or constitute any binding contractual commitment or obligations for State Street of any kind. Not all products and features a may be available in all jurisdictions. Any opinions expressed or other information in the Report are subject to change without notice. The Report has been prepared and obtained from sources believed to be reliable at the time of preparation, however, it is provided “as-is” and State Street makes no guarantee, representation, or warranty of any kind including but not limited to its accuracy, suitability, timeliness, merchantability, fitness for a particular purpose, non-infringement of third-party rights, etc. This Report is not intended to be relied upon by any person or entity. State Street disclaims all liability, whether arising in contract, tort or otherwise, for any losses, liabilities, damages, expenses or costs arising, either direct or consequential, from or in connection with the use of the Report. No permission is granted to reprint, sell, copy, distribute, or modify any of the Report, in any form or by any means without the prior written consent of State Street. The Report may contain certain statements that may be deemed forward-looking statements. Please note that any such statements or forecasted information are not guarantees or reliable indicators for future performance and actual results or developments may differ materially from those depicted or projected. Investing involves risk, including the risk of loss of principal. Diversification does not ensure a profit or guarantee against loss. The Report does not take into account any client’s particular investment objectives, strategies, or tax and legal status, relevant regulations, nor does it purport to be comprehensive or intended to replace the exercise of a client’s or investor’s own careful independent review regarding any corresponding investment decision or related analysis.

Copyright © 2016 State Street Corporation, All rights reserved.

Sacramento County Employees Retirement System

Currency: USD	Jul 01, 2016-Jul 31, 2016	Jan 01, 2016-Jul 31, 2016
Opening Balance	7,196.23	6,257.54
Rebate	3,812.14	41,457.46
Payments	-7,196.23	-43,902.86
Adjustments	.00	.00
Closing Balance	3,812.14	3,812.14
Commission	6,535.20	76,136.74
Net Commission	4,235.71	46,063.84

Rebate vs Net Commission(USD)


Donna Luti
 Assistant Vice President
 dmluti@statestreet.com
 617-664-8367

Jennifer Santaguida
 Vice President
 jlsantaguida@statestreet.com
 617-664-0827

Jason Saucier
 Assistant Vice President
 jrsaucier@statestreet.com
 617-664-6353



Manager Breakout

Currency: USD

Money Manager	07/01/2016 - 07/31/2016			01/01/2016 - 07/31/2016		
	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Brown Advisory	200.40	132.26	146.96	200.40	132.26	146.96
Dalton, Greiner, Hartman, Maher & Company	1,680.75	1,134.51	1,260.57	8,523.90	5,753.65	6,392.94
Eagle Capital Management	.00	.00	.00	15,355.71	8,061.76	8,957.51
Lazard Asset Management	750.61	337.77	375.30	6,267.43	2,534.97	2,816.64
M.A. Weatherbie & Co.	2,249.00	1,113.26	1,236.95	27,486.08	13,605.53	15,117.25
UBS Global Asset Mgmt.	.00	.00	.00	3,983.21	1,961.03	2,178.93

Donna Luti
 Assistant Vice President
 dmluti@statestreet.com
 617-664-8367

Jennifer Santaguida
 Vice President
 jlsantaguida@statestreet.com
 617-664-0827

Jason Saucier
 Assistant Vice President
 jrsaucier@statestreet.com
 617-664-6353



Currency: USD	07/01/2016 - 07/31/2016			01/01/2016 - 07/31/2016		
Money Manager	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Urdang Investment Management	1,654.44	1,094.34	1,215.93	11,317.19	7,606.57	8,451.74
Wedge Capital Mgmt	.00	.00	.00	3,002.82	1,801.69	2,001.88
Total:	6,535.20	3,812.14	4,235.71	76,136.74	41,457.46	46,063.84

Donna Luti
Assistant Vice President
dmluti@statestreet.com
617-664-8367

Jennifer Santaguida
Vice President
jlsantaguida@statestreet.com
617-664-0827

Jason Saucier
Assistant Vice President
jrsaucier@statestreet.com
617-664-6353

Broker Breakout

Currency: USD

Broker	07/01/2016 - 07/31/2016			01/01/2016 - 07/31/2016		
	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Capital Institutional Services (CAPIS)	3,335.19	2,228.85	2,476.50	35,196.80	21,421.97	23,802.19
ConvergEx Group	200.40	132.26	146.96	200.40	132.26	146.96
HSBC Securities	.00	.00	.00	3,170.90	1,141.52	1,268.36
ITG Inc	2,249.00	1,113.26	1,236.95	27,486.08	13,605.53	15,117.25
Merrill Lynch	.00	.00	.00	6,986.03	3,762.72	4,180.80
SG Securities	750.61	337.77	375.30	3,096.53	1,393.45	1,548.28

 Donna Luti
 Assistant Vice President
 dmluti@statestreet.com
 617-664-8367

 Jennifer Santaguida
 Vice President
 jlsantaguida@statestreet.com
 617-664-0827

 Jason Saucier
 Assistant Vice President
 jrsaucier@statestreet.com
 617-664-6353



Currency: USD		07/01/2016 - 07/31/2016			01/01/2016 - 07/31/2016		
Broker		Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
	Total:	6,535.20	3,812.14	4,235.71	76,136.74	41,457.46	46,063.84

Commission Recapture Payments

Currency: USD

Vendor	Service	Request Date	Payment Date	Invoice Date	Invoice #	Amount	Payment Method
Payment	Payment of June Credits	07/22/2016	07/22/2016	07/22/2016	201606	7,196.23	
Total:						7,196.23	

Donna Luti
Assistant Vice President
dmluti@statestreet.com
617-664-8367

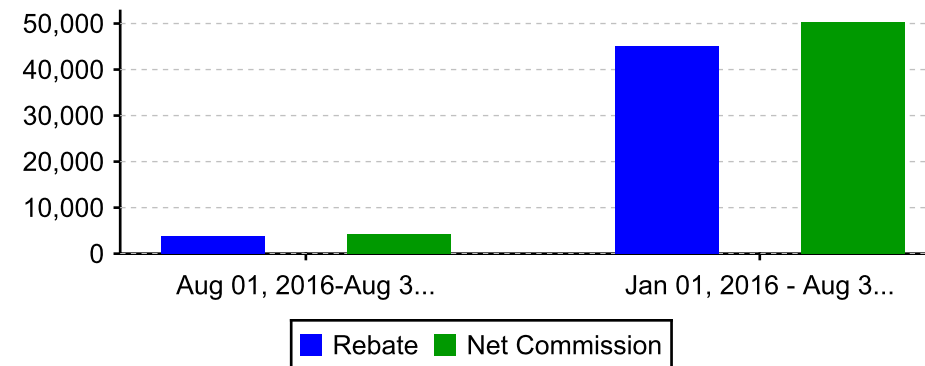
Jennifer Santaguida
Vice President
jlsantaguida@statestreet.com
617-664-0827

Jason Saucier
Assistant Vice President
jrsaucier@statestreet.com
617-664-6353

Sacramento County Employees Retirement System

Currency: USD	Aug 01, 2016- Aug 31, 2016	Jan 01, 2016- Aug 31, 2016
Opening Balance	3,812.14	6,257.54
Rebate	3,736.20	45,193.65
Payments	-3,812.14	-47,715.00
Adjustments	.00	.00
Closing Balance	3,736.20	3,736.20
Commission	6,876.79	83,013.53
Net Commission	4,151.33	50,215.17

Rebate vs Net Commission(USD)



Donna Luti
 Assistant Vice President
 dmluti@statestreet.com
 617-664-8367

Jennifer Santaguida
 Vice President
 jlsantaguida@statestreet.com
 617-664-0827

Jason Saucier
 Assistant Vice President
 jrsaucier@statestreet.com
 617-664-6353



Manager Breakout

Currency: USD

Money Manager	08/01/2016 - 08/31/2016			01/01/2016 - 08/31/2016		
	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Brown Advisory	.00	.00	.00	200.40	132.26	146.96
Dalton, Greiner, Hartman, Maher & Company	275.00	185.63	206.25	8,798.90	5,939.27	6,599.19
Eagle Capital Management	.00	.00	.00	15,355.71	8,061.76	8,957.51
Lazard Asset Management	.00	.00	.00	6,267.43	2,534.97	2,816.64
M.A. Weatherbie & Co.	3,498.00	1,731.47	1,923.86	30,984.08	15,337.00	17,041.11
UBS Global Asset Mgmt.	1,501.99	684.95	761.06	5,485.20	2,645.99	2,939.99

Donna Luti
 Assistant Vice President
 dmluti@statestreet.com
 617-664-8367

Jennifer Santaguida
 Vice President
 jlsantaguida@statestreet.com
 617-664-0827

Jason Saucier
 Assistant Vice President
 jrsaucier@statestreet.com
 617-664-6353



Currency: USD	08/01/2016 - 08/31/2016			01/01/2016 - 08/31/2016		
Money Manager	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Urdang Investment Management	1,601.80	1,134.14	1,260.16	12,918.99	8,740.71	9,711.90
Wedge Capital Mgmt	.00	.00	.00	3,002.82	1,801.69	2,001.88
Total:	6,876.79	3,736.20	4,151.33	83,013.53	45,193.65	50,215.17

Donna Luti
Assistant Vice President
dmluti@statestreet.com
617-664-8367

Jennifer Santaguida
Vice President
jlsantaguida@statestreet.com
617-664-0827

Jason Saucier
Assistant Vice President
jrsaucier@statestreet.com
617-664-6353

Broker Breakout

Currency: USD

Broker	08/01/2016 - 08/31/2016			01/01/2016 - 08/31/2016		
	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Capital Institutional Services (CAPIS)	1,876.80	1,319.77	1,466.41	37,073.60	22,741.74	25,268.60
ConvergEx Group	.00	.00	.00	200.40	132.26	146.96
HSBC Securities	.00	.00	.00	3,170.90	1,141.52	1,268.36
ITG Inc	3,498.00	1,731.47	1,923.86	30,984.08	15,337.00	17,041.11
Merrill Lynch	1,501.99	684.95	761.06	8,488.02	4,447.68	4,941.86
SG Securities	.00	.00	.00	3,096.53	1,393.45	1,548.28

 Donna Luti
 Assistant Vice President
 dmluti@statestreet.com
 617-664-8367

 Jennifer Santaguida
 Vice President
 jlsantaguida@statestreet.com
 617-664-0827

 Jason Saucier
 Assistant Vice President
 jrsaucier@statestreet.com
 617-664-6353



Currency: USD		08/01/2016 - 08/31/2016			01/01/2016 - 08/31/2016		
Broker		Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
	Total:	6,876.79	3,736.20	4,151.33	83,013.53	45,193.65	50,215.17

Commission Recapture Payments

Currency: USD

Vendor	Service	Request Date	Payment Date	Invoice Date	Invoice #	Amount	Payment Method
Payment	Payment of July Credits	08/19/2016	08/19/2016	08/19/2016	201607	3,812.14	
Total:						3,812.14	

Donna Luti
Assistant Vice President
dmluti@statestreet.com
617-664-8367

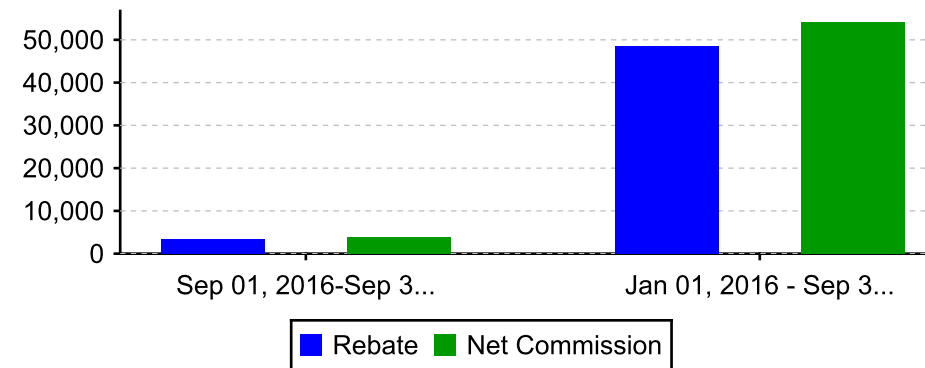
Jennifer Santaguida
Vice President
jlsantaguida@statestreet.com
617-664-0827

Jason Saucier
Assistant Vice President
jrsaucier@statestreet.com
617-664-6353

Sacramento County Employees Retirement System

Currency: USD	Sep 01, 2016- Sep 30, 2016	Jan 01, 2016- Sep 30, 2016
Opening Balance	3,736.20	6,257.54
Rebate	3,442.46	48,636.11
Payments	-3,736.20	-51,451.20
Adjustments	.00	.00
Closing Balance	3,442.46	3,442.46
Commission	6,146.75	89,160.28
Net Commission	3,824.96	54,040.13

Rebate vs Net Commission(USD)



Donna Luti
 Assistant Vice President
 dmluti@statestreet.com
 617-664-8367

Jennifer Santaguida
 Vice President
 jlsantaguida@statestreet.com
 617-664-0827

Jason Saucier
 Assistant Vice President
 jrsaucier@statestreet.com
 617-664-6353



Manager Breakout

Currency: USD

Money Manager	09/01/2016 - 09/30/2016			01/01/2016 - 09/30/2016		
	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Brown Advisory	.00	.00	.00	200.40	132.26	146.96
Dalton, Greiner, Hartman, Maher & Company	1,204.40	769.14	854.60	10,003.30	6,708.41	7,453.79
Eagle Capital Management	.00	.00	.00	15,355.71	8,061.76	8,957.51
Lazard Asset Management	.00	.00	.00	6,267.43	2,534.97	2,816.64
M.A. Weatherbie & Co.	3,136.56	1,552.60	1,725.11	34,120.64	16,889.60	18,766.22
UBS Global Asset Mgmt.	667.59	359.64	399.60	6,152.79	3,005.62	3,339.58

Donna Luti
 Assistant Vice President
 dmluti@statestreet.com
 617-664-8367

Jennifer Santaguida
 Vice President
 jlsantaguida@statestreet.com
 617-664-0827

Jason Saucier
 Assistant Vice President
 jrsaucier@statestreet.com
 617-664-6353



Currency: USD	09/01/2016 - 09/30/2016			01/01/2016 - 09/30/2016		
Money Manager	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Urdang Investment Management	983.40	668.21	742.45	13,902.39	9,408.92	10,454.35
Wedge Capital Mgmt	154.80	92.88	103.20	3,157.62	1,894.57	2,105.08
Total:	6,146.75	3,442.46	3,824.96	89,160.28	48,636.11	54,040.13

Donna Luti
Assistant Vice President
dmluti@statestreet.com
617-664-8367

Jennifer Santaguida
Vice President
jlsantaguida@statestreet.com
617-664-0827

Jason Saucier
Assistant Vice President
jrsaucier@statestreet.com
617-664-6353



Broker Breakout

Currency: USD

Broker	09/01/2016 - 09/30/2016			01/01/2016 - 09/30/2016		
	Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
Capital Institutional Services (CAPIS)	2,187.80	1,437.35	1,597.05	39,261.40	24,179.09	26,865.65
ConvergEx Group	.00	.00	.00	200.40	132.26	146.96
HSBC Securities	.00	.00	.00	3,170.90	1,141.52	1,268.36
ITG Inc	3,136.56	1,552.60	1,725.11	34,120.64	16,889.60	18,766.22
Merrill Lynch	822.39	452.52	502.80	9,310.41	4,900.19	5,444.66
SG Securities	.00	.00	.00	3,096.53	1,393.45	1,548.28

Donna Luti
Assistant Vice President
dmluti@statestreet.com
617-664-8367

Jennifer Santaguida
Vice President
jlsantaguida@statestreet.com
617-664-0827

Jason Saucier
Assistant Vice President
jrsaucier@statestreet.com
617-664-6353



Currency: USD		09/01/2016 - 09/30/2016			01/01/2016 - 09/30/2016		
Broker		Commission	Rebate	Net Commission	Commission	Rebate	Net Commission
	Total:	6,146.75	3,442.46	3,824.96	89,160.28	48,636.11	54,040.13

Commission Recapture Payments

Currency: USD

Vendor	Service	Request Date	Payment Date	Invoice Date	Invoice #	Amount	Payment Method
Payment	Payment of August	09/22/2016	09/22/2016	09/22/2016	201608	3,736.20	
Total:						3,736.20	

Donna Luti
Assistant Vice President
dmluti@statestreet.com
617-664-8367

Jennifer Santaguida
Vice President
jlsantaguida@statestreet.com
617-664-0827

Jason Saucier
Assistant Vice President
jrsaucier@statestreet.com
617-664-6353