

# Franklin Regional Retirement Board

## O'Shaughnessy Market Leaders Value



**O'Shaughnessy**  
ASSET MANAGEMENT

QUARTERLY REPORT ENDING

JUNE 30, 2017

## What We Believe:

- ✓ **Factors drive returns.**  
Unique application of Value, Shareholder Yield, Quality, and Momentum factors results in unique holdings and returns
- ✓ **What you don't own matters.**  
Factors should be applied from the bottom up to build more concentrated, high active share portfolios, not to build "smart" indexes
- ✓ **Discipline wins.**  
Process must be consistent & repeatable
- ✓ **Risk matters.**  
Calculated stock positions mindful of risk groups

## Franklin Regional Retirement Board – Annualized Returns

(As of 06/30/17)

### Relationship Summary

Market Value (06/30/17)	\$8,281,880.74
Strategy:	O'Shaughnessy Market Leaders Value
Inception Date:	March 2, 2012
Custodian:	Comerica

### Performance Review

(As of 06/30/17)

	Current Month	Quarter to Date	Year to Date	1-Year	3-Year	5-Year	Since Inception (Annualized)	*Inception Date
Franklin Regional Retirement Board	(Gross)	2.26	4.92	8.10	24.55	6.60	15.09	13.89
	(Net)	2.22	4.78	7.80	23.88	6.02	14.46	13.27
Russell 1000 Value	1.63	1.34	4.66	15.53	7.36	13.94	13.02	03/02/12

Returns are in USD.

## Franklin Regional Retirement Board – Calendar Returns

(As of 06/30/17)

### Relationship Summary

Market Value (06/30/17)	\$8,281,880.74
Strategy:	O'Shaughnessy Market Leaders Value
Inception Date:	March 2, 2012
Custodian:	Comerica

### Performance Review

(As of 06/30/17)

		2016	2015	2014	2013	2012*
<b>Franklin Regional Retirement Board</b>	(Gross)	16.33	-7.57	10.78	48.17	4.91
	(Net)	15.70	-8.08	10.18	47.38	4.43
Russell 1000 Value		17.34	-3.83	13.45	32.53	8.16

Returns are in USD.

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## Franklin Regional Retirement Board: Factor Attribution QTD

(As of 06/30/17)

Factors	Factor Return	Portfolio		Russell 1000 Value		Attribution	
		Average Exposure	Contribution	Average Exposure	Contribution	Average Exposure	Factor Impact
Universe	3.38	1.01	3.40	0.93	3.12	0.08	0.28
Size	-0.28	-0.03	0.02	0.78	-0.23	-0.81	0.25
Value	-0.71	0.80	-0.93	0.29	-0.19	0.51	-0.74
Momentum	1.64	0.32	0.68	0.08	0.19	0.25	0.49
Shareholder Yield	-0.63	0.07	-0.02	0.02	-0.03	0.06	0.01
Earnings Quality	-1.85	0.02	-0.02	0.06	-0.13	-0.03	0.11
Financial Strength	-0.74	-0.07	0.10	-0.07	0.02	-0.01	0.08
Earnings Growth	2.43	0.12	0.29	-0.12	-0.25	0.24	0.54
Industry			1.31		-0.98		2.29
Residual			0.38		-0.18		0.56
Total			5.20		1.34		3.87

Source: Analytics are performed through OSAM Workbench, a proprietary tool. Security level data is from Thomson QAI Direct, a third-party subscription-based information service provider.

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## Franklin Regional Retirement Board: Brinson Attribution QTD

(As of 06/30/17)

Sectors	Portfolio			Russell 1000 Value			Performance Attribution		
	Average Weight	Total Return	Contribution to Return	Average Weight	Total Return	Contribution to Return	Allocation Effect	Selection + Interaction	Total Effect
Consumer Discretionary	26.11	6.39	1.71	4.95	3.12	0.18	0.37	0.86	1.22
Consumer Staples	4.12	15.60	0.80	8.63	1.16	0.10	0.05	0.70	0.75
Energy	4.28	-0.46	-0.06	11.66	-7.10	-0.89	0.68	0.25	0.93
Financials	24.16	3.80	0.93	26.39	3.79	0.94	0.04	-0.03	0.01
Health Care	5.58	2.09	0.18	11.30	6.22	0.63	-0.20	-0.17	-0.37
Industrials	15.32	8.54	1.35	9.75	3.23	0.31	0.14	0.82	0.96
Information Technology	13.16	3.44	0.44	9.90	0.82	0.11	-0.05	0.35	0.29
Materials	3.81	-6.32	-0.26	2.98	-0.35	-0.01	-0.01	-0.25	-0.26
Real Estate	0.00	0.00	0.00	4.63	1.56	0.07	-0.01	0.00	-0.01
Telecommunication Services	3.46	3.78	0.13	3.42	-7.09	-0.25	-0.01	0.39	0.38
Utilities	0.00	0.00	0.00	6.39	2.18	0.15	-0.07	0.00	-0.07
Total	100.00	5.20	5.20	100.00	1.35	1.35	0.93	2.92	3.85

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## Franklin Regional Retirement Board: Factor Attribution YTD

(As of 06/30/17)

Factors	Factor Return	Portfolio		Russell 1000 Value		Attribution	
		Average Exposure	Contribution	Average Exposure	Contribution	Average Exposure	Factor Impact
Universe	9.63	0.99	9.46	0.92	8.72	0.07	0.74
Size	-0.19	-0.05	0.21	0.72	-0.15	-0.78	0.36
Value	-2.88	0.84	-2.96	0.26	-0.80	0.58	-2.16
Momentum	2.23	0.31	0.90	0.01	0.14	0.30	0.76
Shareholder Yield	-1.23	0.12	-0.21	0.03	-0.09	0.10	-0.12
Earnings Quality	-2.21	0.04	0.00	0.07	-0.18	-0.03	0.18
Financial Strength	0.01	-0.06	0.02	-0.08	-0.14	0.02	0.16
Earnings Growth	4.89	0.11	0.53	-0.14	-0.60	0.25	1.13
Industry			0.48		-2.24		2.71
Residual			0.02		-0.01		0.03
Total			8.46		4.65		3.81

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## Franklin Regional Retirement Board: Brinson Attribution YTD

(As of 06/30/17)

Sectors	Portfolio			Russell 1000 Value			Performance Attribution		
	Average Weight	Total Return	Contribution to Return	Average Weight	Total Return	Contribution to Return	Allocation Effect	Selection + Interaction	Total Effect
Consumer Discretionary	26.41	6.41	1.71	4.87	6.16	0.33	0.30	0.02	0.32
Consumer Staples	3.94	13.57	0.76	8.44	9.40	0.76	-0.17	0.36	0.19
Energy	4.96	0.65	0.00	12.17	-13.15	-1.76	1.46	0.73	2.19
Financials	22.12	9.01	1.86	26.67	6.02	1.53	0.07	0.58	0.65
Health Care	4.78	-1.36	-0.01	10.94	16.04	1.57	-0.60	-0.70	-1.29
Industrials	16.48	12.53	2.07	9.76	6.92	0.67	0.18	0.85	1.03
Information Technology	13.73	12.16	1.68	9.80	10.78	1.04	0.26	0.15	0.41
Materials	4.11	1.09	0.15	3.00	6.63	0.20	0.08	-0.21	-0.12
Real Estate	0.00	0.00	0.00	4.58	3.45	0.16	0.06	0.00	0.06
Telecommunication Services	3.46	5.22	0.23	3.53	-9.66	-0.36	-0.01	0.62	0.61
Utilities	0.00	0.00	0.00	6.23	8.59	0.52	-0.24	0.00	-0.24
Total	100.00	8.46	8.46	100.00	4.67	4.67	1.39	2.40	3.79

Source: Analytics are performed through OSAM Workbench, a proprietary tool. Security level data is from Thomson QAI Direct, a third-party subscription-based information service provider.

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## Franklin Regional Retirement Board: Characteristics

Based on a group of representative accounts (USD, as of 06/30/17)

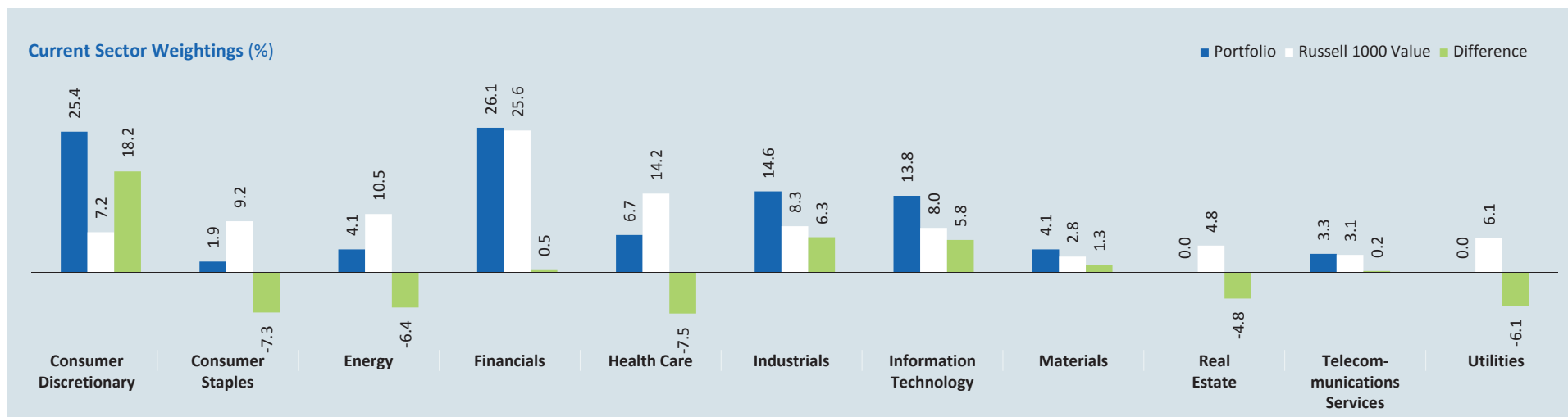
	Portfolio	Russell 1000 Value
Market Cap (Weighted Average)	<b>43,151</b>	114,609
Market Cap (Median)	<b>27,139</b>	8,765
Approximate Number of Holdings	<b>61</b>	719
Approximate Turnover (% LTM)	<b>69.6</b>	—
Tracking Error (%)	<b>5.4</b>	—
Active Share (%)	<b>89.5</b>	—
Cash (%)	<b>1.6</b>	—

Top 10 Holdings	Percent of Portfolio	Shareholder Yield (%)	Percent of Russell 1000 Value
Boeing Co	4.6	8.2	0.0
Ameriprise Finl Inc	4.4	10.9	0.0
United Continental Holdings	4.3	8.3	0.2
Mcdonalds Corp	4.1	9.6	0.0
Valero Energy Corp	4.0	9.0	0.3
Lyondellbasell Industries N	3.9	10.2	0.1
Wyndham Worldwide Corp	3.8	9.1	0.0
Gilead Sciences Inc	3.4	6.0	0.2
Te Connectivity Ltd Reg	3.4	2.7	0.0
Best Buy Inc	3.2	7.9	0.1
<b>Total</b>	<b>39.1</b>	<b>8.2*</b>	0.9

\* Average of top 10 holdings

		Portfolio	Russell 1000 Value	Relative Advantage	
<b>YIELD</b>	Dividend Yield (%)	2.4	2.4	-1.1% Difference	
	Buyback Yield (%)	5.6	-0.5	1202.1% Difference	
	Shareholder Yield (%)	8.1	1.9	324.1% Difference	
<b>VALUE</b>	Price/Earnings Ratio	13.9	18.6	25% Cheaper	
	Price/Sales Ratio	0.9	1.7	45% Cheaper	
	EBITDA/Enterprise Value	12.9	9.8	31% Higher	
	Free Cash Flow/Enterprise Value	5.1	2.2	130% Higher	
<b>QUALITY</b>	<b>EARNINGS GROWTH</b>	1-Year Historical EPS Growth (%)	15.8	24.1	35% Lower
		Return on Invested Capital (%)	34.4	21.8	58% Higher
	<b>EARNINGS QUALITY</b>	Total Accruals/Total Assets (%)	-4.2	-4.2	—
		Depreciation/CapEx (%)	1.3	1.4	5% Lower
	<b>FINANCIAL STRENGTH</b>	External Financing (%)	-5.9	-2.3	161% Lower
		Cash Flow-to-Debt Ratio	38.1	28.1	35% Higher

## Franklin Regional Retirement Board: Portfolio Positioning



### Sector Allocations (%)

Sector	Active Weight		3-Month Change in Active Sector Weight	
	06/30/17	03/31/17	Change	Value
Financials	0.5	-4.5	5.0	5.0
Information Technology	5.8	3.8	2.0	2.0
Telecommunication Services	0.2	-0.6	0.8	0.8
Energy	-6.4	-6.9	0.5	0.5
Materials	1.3	1.1	0.2	0.2
Utilities	-6.1	-6.2	0.1	0.1
Industrials	6.3	6.6	-0.3	-0.3
Real Estate	-4.8	-4.5	-0.3	-0.3
Health Care	-7.5	-6.1	-1.4	-1.4
Consumer Staples	-7.3	-4.2	-3.1	-3.1
Consumer Discretionary	18.2	21.5	-3.3	-3.3

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## Experienced Team Focused on Factor Alpha

**90% employee-owned by 12 employees**

**Managing client money since 1996**

**\$6.0 billion combined AUM & AUA\***

**Strong rolling 3-year "Batting Averages" and alpha versus our Benchmarks**

**Built for Alpha, not scale**

\* As of 06/30/17. The AUM and AUA combined total represents \$5.5 billion of O'Shaughnessy Asset Management assets under management and \$0.5 billion of assets under advisement. The information regarding AUA is supplemental, OSAM does not have control over the assets under advisement, implementation of the models, or execution of the trades.

## OSAM Laboratory: Factor Research Across History

### Researchers



7-person  
Research Team

Majority owners of OSAM

“Factor Alpha” experts

50+ whitepapers

*6 Chartered Financial Analysts,  
6 Advanced Degrees, and  
5 published books*



### Technology & Tools



6-person  
Technology Team

Proprietary software  
built in-house for every stage of  
investment and client process

*Finalist for 2015 American Financial  
Technology Awards: Best IT Team*



### Results

**Identifying what we believe are the best** stock selection factors, portfolio construction methods, and trading improvements

**Results evaluated** through the lens of return, risk, consistency and persistence, and real world costs

**Ongoing innovation without leaving core strategy**

## Six Factor Themes Make Up Each Stock's Factor Profile and Drive Returns

### **Value**

Stocks trading at large discounts to current sales, earnings, EBITDA, and Free Cash Flow

### **Momentum**

Stocks with impressive and stable recent total returns

### **Earnings Growth**

Stocks whose profitability is high and trending up

### **Financial Strength**

Stocks that use debt responsibly, and aren't overly reliant on outside financing

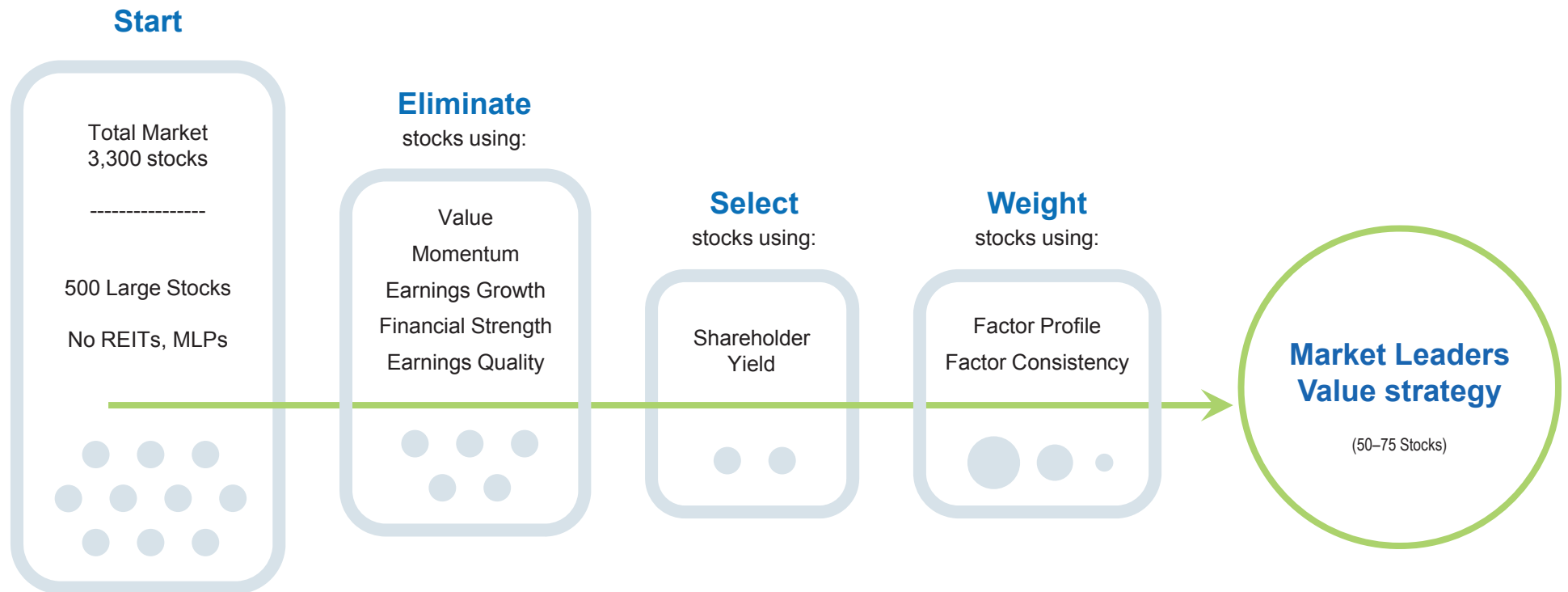
### **Earnings Quality**

Stocks with strong cash flows and conservative accounting

### **Shareholder Yield**

Stocks returning high amounts of cash to shareholders through dividends and buybacks

## Building Your Portfolio of Stocks with Strong Overall Factor Profiles



***Always considering: sector & industry exposures, transaction costs, client guidelines***

## General Legal Disclosures & Hypothetical and/or Backtested Results Disclaimer

Please remember that past performance may not be indicative of future results. Different types of investments involve varying degrees of risk, and there can be no assurance that the future performance of any specific investment, investment strategy, or product (including the investments and/or investment strategies recommended or undertaken by O'Shaughnessy Asset Management, LLC), or any non-investment related content, made reference to directly or indirectly in this piece will be profitable, equal any corresponding indicated historical performance level(s), be suitable for your portfolio or individual situation, or prove successful. Due to various factors, including changing market conditions and/or applicable laws, the content may no longer be reflective of current opinions or positions. Moreover, you should not assume that any discussion or information contained in this piece serves as the receipt of, or as a substitute for, personalized investment advice from O'Shaughnessy Asset Management, LLC. Any individual account performance information reflects the reinvestment of dividends (to the extent applicable), and is net of applicable transaction fees, O'Shaughnessy Asset Management, LLC's investment management fee (if debited directly from the account), and any other related account expenses. Account information has been compiled solely by O'Shaughnessy Asset Management, LLC, has not been independently verified, and does not reflect the impact of taxes on non-qualified accounts. In preparing this report, O'Shaughnessy Asset Management, LLC has relied upon information provided by the account custodian. Please defer to formal tax documents received from the account custodian for cost basis and tax reporting purposes. Please remember to contact O'Shaughnessy Asset Management, LLC, in writing, if there are any changes in your personal/financial situation or investment objectives for the purpose of reviewing/evaluating/revising our previous recommendations and/or services, or if you want to impose, add, or modify any reasonable restrictions to our investment advisory services. Please Note: Unless you advise, in writing, to the contrary, we will assume that there are no restrictions on our services, other than to manage the account in accordance with your designated investment objective. Please Also Note: Please compare this statement with account statements received from the account custodian. The account custodian does not verify the accuracy of the advisory fee calculation. Please advise us if you have not been receiving monthly statements from the account custodian. Historical performance results for investment indices and/or categories have been provided for general comparison purposes only, and generally do not reflect the deduction of transaction and/or custodial charges, the deduction of an investment management fee, nor the impact of taxes, the incurrence of which would have the effect of decreasing historical performance results. It should not be assumed that your account holdings correspond directly to any comparative indices. To the extent that a reader has any questions regarding the applicability of any specific issue discussed above to his/her individual situation, he/she is encouraged to consult with the professional advisor of his/her choosing. O'Shaughnessy Asset Management, LLC is neither a law firm nor a certified public accounting firm and no portion of the newsletter content should be construed as legal or accounting advice. A copy of the O'Shaughnessy Asset Management, LLC's current written disclosure statement discussing our advisory services and fees is available upon request.

The risk-free rate used in the calculation of Sortino, Sharpe, and Treynor ratios is 5%, consistently applied across time.

The universe of All Stocks consists of all securities in the Chicago Research in Security Prices (CRSP) dataset or S&P Compustat Database (or other, as noted) with inflation-adjusted market capitalization greater than \$200 million as of most recent year-end. The universe of Large Stocks consists of all securities in the Chicago Research in Security Prices (CRSP) dataset or S&P Compustat Database (or other, as noted) with inflation-adjusted market capitalization greater than the universe average as of most recent year-end. The stocks are equally weighted and generally rebalanced annually.

Hypothetical performance results shown on the preceding pages are backtested and do not represent the performance of any account managed by OSAM, but were achieved by means of the retroactive application of each of the previously referenced models, certain aspects of which may have been designed with the benefit of hindsight.

The hypothetical backtested performance does not represent the results of actual trading using client assets nor decision-making during the period and does not and is not intended to indicate the past performance or future performance of any account or investment strategy managed by OSAM. If actual accounts had been managed throughout the period, ongoing research might have resulted in changes to the strategy which might have altered returns. The performance of any account or investment strategy managed by OSAM will differ from the hypothetical backtested performance results for each factor shown herein for a number of reasons, including without limitation the following:

- Although OSAM may consider from time to time one or more of the factors noted herein in managing any account, it may not consider all or any of such factors. OSAM may (and will) from time to time consider factors in addition to those noted herein in managing any account.
- OSAM may rebalance an account more frequently or less frequently than annually and at times other than presented herein.
- OSAM may from time to time manage an account by using non-quantitative, subjective investment management methodologies in conjunction with the application of factors.
- The hypothetical backtested performance results assume full investment, whereas an account managed by OSAM may have a positive cash position upon rebalance. Had the hypothetical backtested performance results included a positive cash position, the results would have been different and generally would have been lower.
- The hypothetical backtested performance results for each factor do not reflect any transaction costs of buying and selling securities, investment management fees (including without limitation management fees and performance fees), custody and other costs, or taxes – all of which would be incurred by an investor in any account managed by OSAM. If such costs and fees were reflected, the hypothetical backtested performance results would be lower.
- The hypothetical performance does not reflect the reinvestment of dividends and distributions therefrom, interest, capital gains and withholding taxes.
- Accounts managed by OSAM are subject to additions and redemptions of assets under management, which may positively or negatively affect performance depending generally upon the timing of such events in relation to the market's direction.
- Simulated returns may be dependent on the market and economic conditions that existed during the period. Future market or economic conditions can adversely affect the returns.