Franklin Regional Retirement Board

O'Shaughnessy Market Leaders Value

O'Shaughnessy ASSET MANAGEMENT

QUARTERLY REPORT ENDING
DECEMBER 31, 2018

Our Core Investment Tenets

1. Maximizing total, risk adjusted, and consistency of returns are our touchstones
2. A stock's fundamental characteristics (or factors) are its drivers of return over time
    - So avoid those with poor factor profiles
    - Concentrate into those with the most attractive factor profiles
3. Portfolio construction is key to amplifying good stock selection
    - Weightings should be designed to deliver a strong edge in the most effective factors
    - The sell discipline should be rigorously followed to consistently safeguard this edge
    - Risk management helps avoid negative events while still maintaining a factor edge
4. Real world costs should be minimized through skilled trading and integrated tax management
5. None of this works without unyielding discipline
6. Indexes are challenged because size is not usually a good tool for stock selection or portfolio construction
7. Smart Beta is an expensive wrapper for index-like results
    - Differentiated, high conviction, high active share portfolios make more sense
    - Factors are better used to generate alpha, not tilted beta

Franklin Regional Retirement Board – Annualized Returns

(As of 12/31/18)

Relationship Summary

Market Value (12/31/18)	$8,358,614.52
Strategy:	O'Shaughnessy Market Leaders Value
Inception Date:	March 2, 2012
Custodian:	Comerica

Performance Review

(As of 12/31/18)

	Current Month	Quarter to Date	Year to Date	3-Year	5-Year	Since Inception (Annualized)	*Inception Date
Franklin Regional Retirement Board (Gross)	-10.69	-17.06	-10.75	8.87	5.73	11.10	03/02/12
Franklin Regional Retirement Board (Net)	-10.74	-17.18	-11.25	8.28	5.15	10.50	
Russell 1000 Value	-9.60	-11.72	-8.27	6.95	5.95	9.95	

Returns are in USD.

Franklin Regional Retirement Board – Calendar Returns

(As of 12/31/18)

Relationship Summary

Market Value (12/31/18)	$8,358,614.52
Strategy:	O'Shaughnessy Market Leaders Value
Inception Date:	March 2, 2012
Custodian:	Comerica

Performance Review

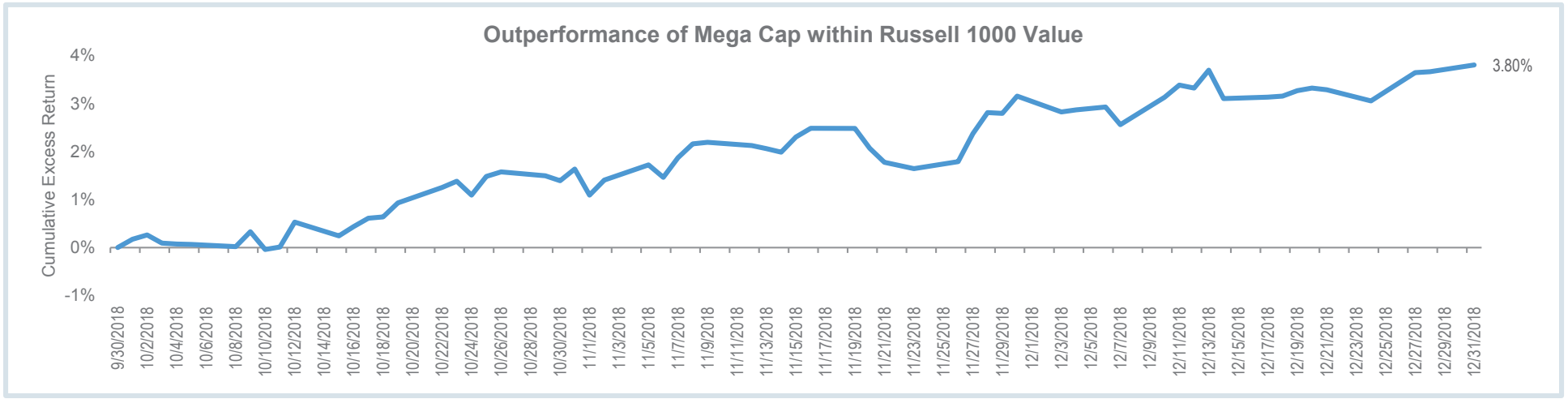
(As of 12/31/18)

		2018	2017	2016	2015	2014	2013	2012*
Franklin Regional Retirement Board	(Gross)	-10.75	24.30	16.33	-7.57	10.78	48.17	4.91
	(Net)	-11.25	23.63	15.70	-8.08	10.18	47.38	4.43
Russell 1000 Value		-8.27	13.66	17.34	-3.83	13.45	32.53	8.16

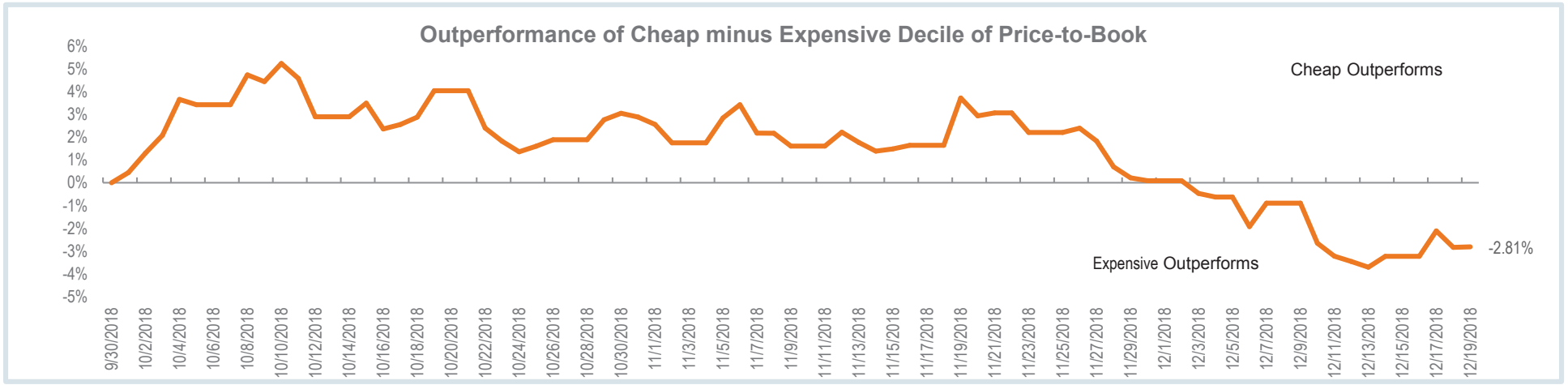
Returns are in USD.

The Russell 1000 Value Index is Constructed Based on Two Factors – Size and Price-to-Book

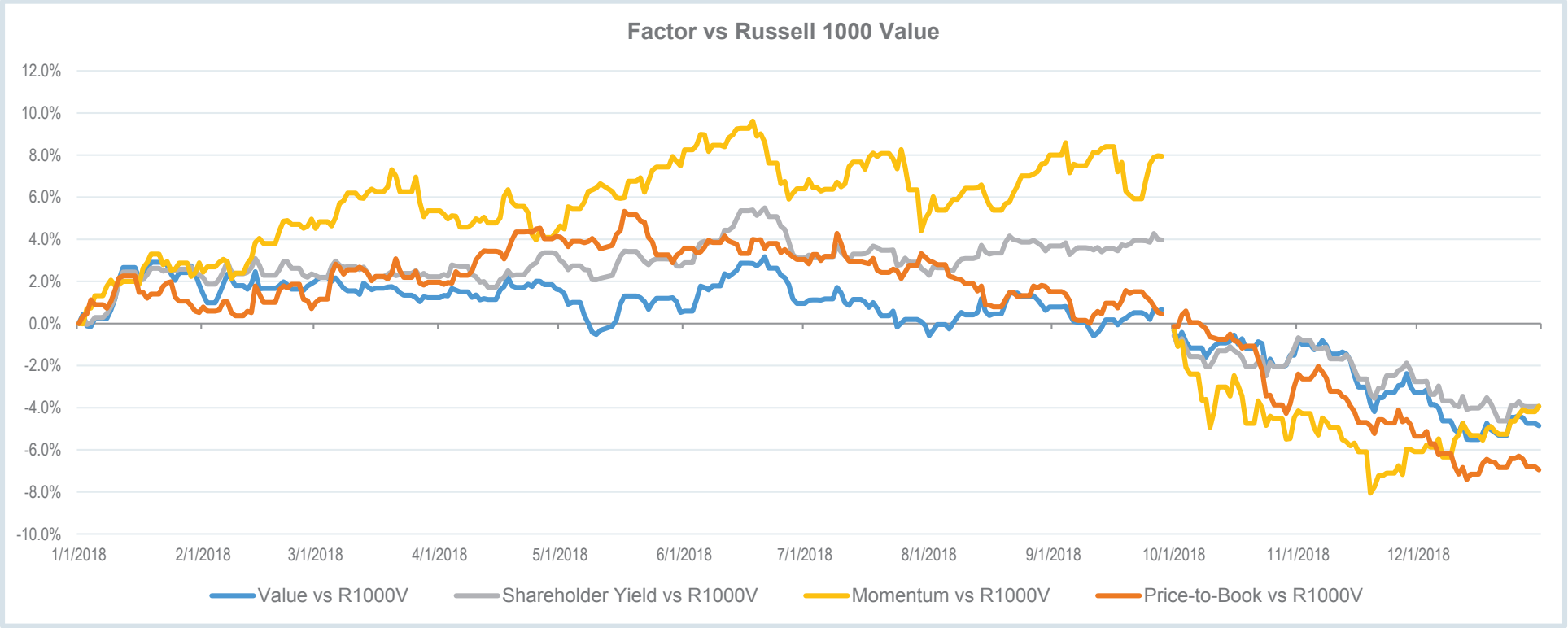
Within the index, Mega Cap stocks dominated performance…



While cheap stocks, based on Price-to-Book, actually underperformed.



Regime Change in Q4 – Tilting to the Largest Stocks Was the Dominant Driver

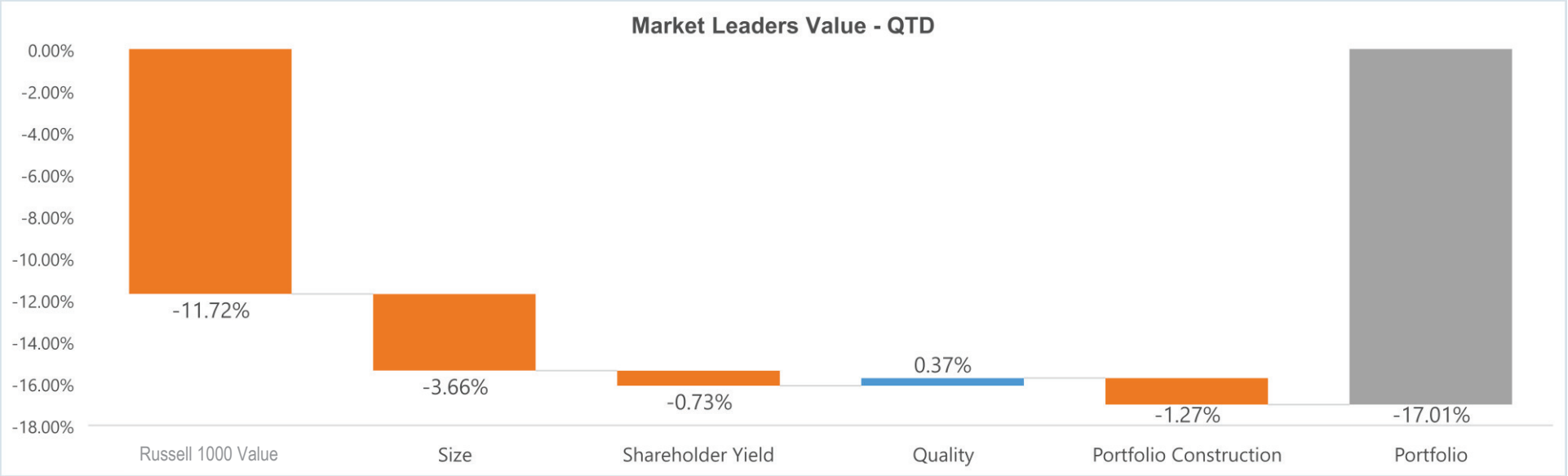


Q1-Q3: most selection factors delivered outperformance versus the cap-weighted Index.

Q4: no selection factors delivered outperformance versus the cap-weighted Index.

O'Shaughnessy Process Attribution

This analysis attributes the impacts of selection and portfolio construction decisions in a manner that is consistent with our investment process: 1) establish a benchmark-agnostic selection universe; 2) focus on stocks with the highest Shareholder Yields; 3) eliminate names not meeting our quality criteria; and 4) overweight names that qualify the most frequently, recently, and with the highest ranking overall factor profile.



Russell 1000 Value:	The benchmark delivered a -11.72% return for the quarter
Size:	Our tilt away from Mega Cap names detracted -3.66%.
Shareholder Yield:	After controlling for size, the factor contributed -0.73% to relative returns.
Quality:	Eliminating poor quality names added +0.37%.
Portfolio Construction:	Our overweights to names qualifying the most frequently, recently, and with the highest overall factor profile detracted -1.27% from relative returns.

Franklin Regional Retirement Board: Factor Attribution QTD

(As of 12/31/18)

Factors		Portfolio		Russell 1000 Value		Attribution	
	Factor Return	Average Exposure	Contribution	Average Exposure	Contribution	Average Exposure	Factor Impact
Universe	-15.65	1.02	-15.79	0.90	-13.92	0.12	-1.87
Size	1.95	-0.06	0.00	0.71	1.06	-0.76	-1.06
Value	-1.19	0.16	-0.11	-0.09	0.25	0.25	-0.36
Momentum	0.10	0.01	-0.26	-0.43	-0.36	0.44	0.10
Shareholder Yield	-0.12	0.78	-0.10	0.45	-0.06	0.33	-0.04
Earnings Quality	-1.05	-0.10	0.03	-0.17	0.22	0.07	-0.19
Financial Strength	-0.21	0.30	0.01	-0.24	-0.07	0.53	0.09
Earnings Growth	-2.30	-0.02	-0.08	-0.20	0.61	0.18	-0.70
Industry			-0.55		0.96		-1.51
Selection + Interaction			-0.30		-0.37		0.07
Total			-17.16		-11.69		-5.47

Source: Analytics are performed through OSAM Workbench, a proprietary tool. Security level data is from S&P Xpressfeed, a third-party subscription-based information service provider.

Numbers may not add up due to rounding.

Franklin Regional Retirement Board: Brinson Attribution QTD

(As of 12/31/18)

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
Communication Services	1.69	-6.85	-0.12	7.05	-5.65	-0.41	-0.31	-0.01	-0.31
Consumer Discretionary	11.14	-13.26	-1.32	5.21	-12.83	-0.65	-0.03	-0.01	-0.04
Consumer Staples	11.79	-14.27	-1.73	7.72	-4.14	-0.37	0.33	-1.22	-0.89
Energy	12.30	-27.56	-3.66	10.01	-24.54	-2.66	-0.33	-0.42	-0.75
Financials	28.94	-20.00	-5.88	22.68	-13.44	-2.98	-0.13	-2.01	-2.15
Health Care	4.12	-8.56	-0.31	15.46	-6.91	-1.06	-0.54	-0.01	-0.55
Industrials	9.48	-17.02	-1.63	7.61	-19.43	-1.53	-0.12	0.26	0.14
Information Technology	16.87	-11.86	-1.92	9.47	-12.12	-1.14	0.09	0.00	0.09
Materials	3.68	-15.65	-0.59	3.93	-14.43	-0.53	-0.04	-0.06	-0.09
Real Estate	0.00	0.00	0.00	4.80	-6.62	-0.34	-0.23	0.00	-0.23
Utilities	0.00	0.00	0.00	6.07	1.10	-0.03	-0.69	0.00	-0.69
Total	100.00	-17.16	-17.16	100.00	-11.69	-11.69	-2.00	-3.48	-5.47

Source: Analytics are performed through OSAM Workbench, a proprietary tool. Security level data is from S&P Xpressfeed, a third-party subscription-based information service provider.

Numbers may not add up due to rounding.

Franklin Regional Retirement Board: Factor Attribution YTD

(As of 12/31/18)

Factors	Factor Return	Portfolio		Russell 1000 Value		Attribution	
		Average Exposure	Contribution	Average Exposure	Contribution	Average Exposure	Factor Impact
Universe	-8.71	1.04	-8.68	0.92	-7.18	0.12	-1.50
Size	4.32	-0.15	-0.48	0.49	2.31	-0.64	-2.79
Value	-4.57	0.16	-0.49	0.05	-0.05	0.10	-0.44
Momentum	3.56	0.14	0.15	-0.12	-0.34	0.26	0.49
Shareholder Yield	-0.58	0.92	-0.41	0.43	-0.13	0.49	-0.28
Earnings Quality	-2.76	-0.15	0.28	-0.18	0.36	0.03	-0.08
Financial Strength	-0.22	0.24	0.13	-0.06	0.09	0.30	0.04
Earnings Growth	3.90	-0.12	-1.24	-0.32	-1.95	0.20	0.71
Industry			-0.66		-0.99		0.32
Selection + Interaction			0.67		-0.34		1.01
Total			-10.72		-8.21		-2.52

Source: Analytics are performed through OSAM Workbench, a proprietary tool. Security level data is from S&P Xpressfeed, a third-party subscription-based information service provider.

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Franklin Regional Retirement Board: Brinson Attribution YTD

(As of 12/31/18)

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
Communication Services	2.20	9.75	0.13	5.86	-0.85	-0.10	-0.43	0.31	-0.12
Consumer Discretionary	12.29	-0.53	0.21	5.31	-14.45	-0.72	-0.26	1.60	1.34
Consumer Staples	10.61	-16.31	-1.81	7.44	-11.38	-0.92	0.15	-0.76	-0.61
Energy	9.74	-8.23	-2.00	10.77	-17.46	-1.68	-0.52	0.41	-0.11
Financials	27.96	-18.45	-5.55	25.04	-13.95	-3.28	-0.39	-1.46	-1.85
Health Care	6.20	3.39	0.22	14.60	8.06	0.84	-1.34	-0.22	-1.56
Industrials	10.32	-7.23	-0.58	8.00	-18.91	-1.50	-0.22	1.34	1.12
Information Technology	14.46	-2.52	-0.67	9.08	-1.30	-0.21	0.31	-0.04	0.28
Materials	6.21	-17.90	-0.69	3.50	-17.58	-0.61	-0.20	0.02	-0.18
Real Estate	0.00	0.00	0.00	4.65	-4.99	-0.22	-0.15	0.00	-0.15
Utilities	0.00	0.00	0.00	5.76	4.64	0.17	-0.67	0.00	-0.67
Total	100.00	-10.72	-10.72	100.00	-8.21	-8.21	-3.71	1.19	-2.52

Source: Analytics are performed through OSAM Workbench, a proprietary tool. Security level data is from S&P Xpressfeed, 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 12/31/18)	Portfolio	Russell 1000 Value
Market Cap (Weighted Average)	**48,184**	130,347
Market Cap (Median)	**25,508**	9,370
Approximate Number of Holdings	**60**	725
Tracking Error (%)	**5.3**	—
Active Share (%)	**87.6**	—
Cash (%)	**0.8**	—

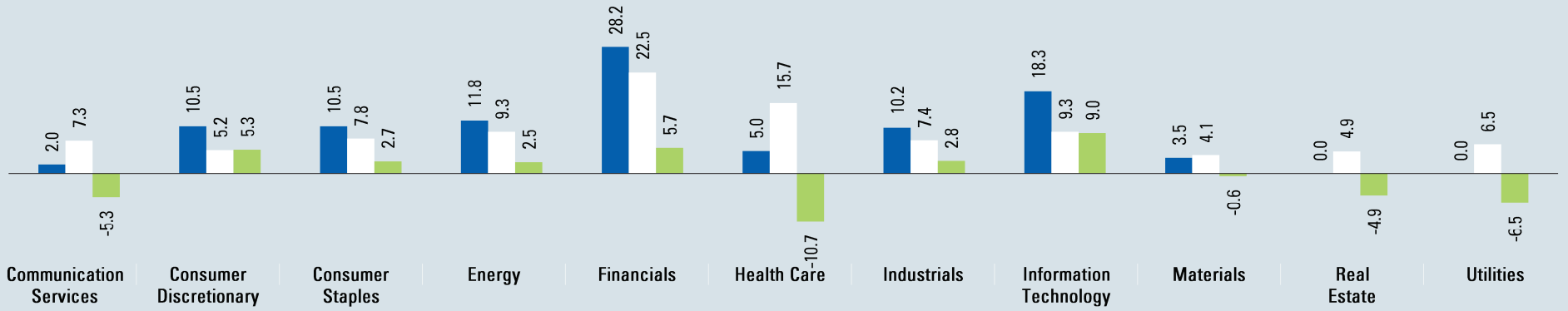
Top 10 Holdings	Percent of Portfolio	Shareholder Yield (%)	Percent of Russell 1000 Value
METLIFE INC	4.3	10.5	0.3
MARATHON PETROLEUM CORP	4.1	12.6	0.3
AMERIPRISE FINANCIAL INC	4.0	9.2	0.1
CITRIX SYSTEMS INC	3.7	12.0	0.0
CITIGROUP INC	3.6	11.1	1.1
FIFTH THIRD BANCORP	3.6	10.0	0.1
AMGEN INC	3.6	14.8	0.1
WESTERN UNION CO	3.0	7.9	0.0
CORNING INC	2.9	11.9	0.2
VOYA FINANCIAL INC	2.8	12.7	0.0
Total	**35.5**	**11.3***	2.3

* Average of top 10 holdings

			Portfolio	Russell 1000 Value	Relative Advantage
YIELD		Dividend Yield (%)	2.3	2.6	-12% Difference
		Buyback Yield (%)	6.8	0.7	871% Difference
		Shareholder Yield (%)	9.2	3.3	179% Difference
VALUE		Price/Earnings Ratio	13.9	17.6	21% Cheaper
		Price/Sales Ratio	1.0	1.7	41% Cheaper
		EBITDA/Enterprise Value	11.3	9.7	16% Higher
		Free Cash Flow/Enterprise Value	3.5	1.7	106% Higher
QUALITY	EARNINGS GROWTH	1-Year Historical EPS Growth (%)	40.6	59.0	31% Lower
		Return on Invested Capital (%)	27.5	20.3	36% Higher
	EARNINGS QUALITY	Total Accruals/Total Assets (%)	-4.3	-4.1	5% Lower
		Depreciation/CapEx (%)	1.3	1.7	24% Lower
	FINANCIAL STRENGTH	External Financing (%)	-9.8	-4.1	139% Lower
		Cash Flow-to-Debt Ratio	0.4	0.3	33% Higher

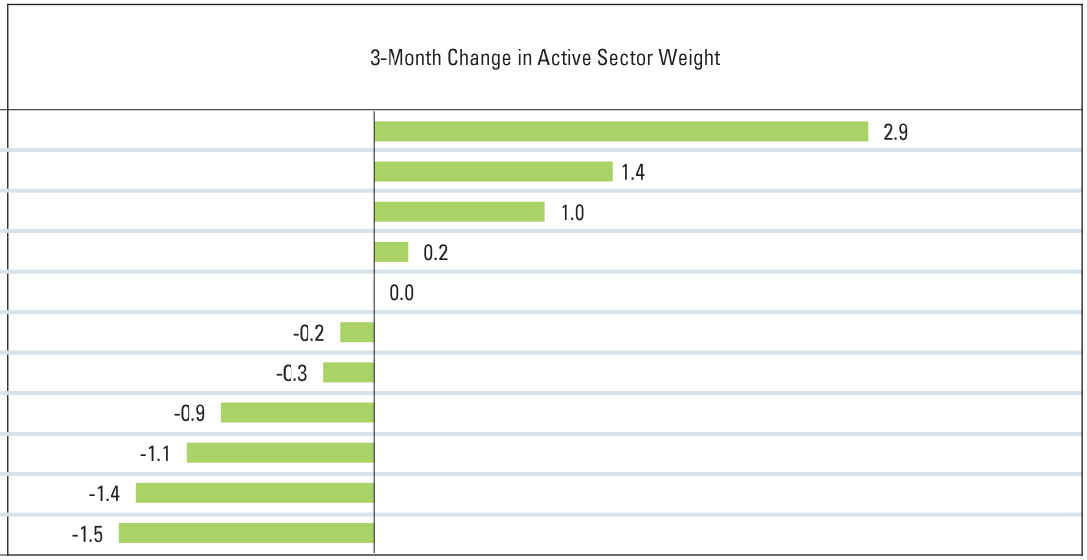
Franklin Regional Retirement Board: Portfolio Positioning

Current Sector Weightings (%)



Sector Allocations (%)

	Active Weight	
	12/31/18	09/30/18
Information Technology	9.0	6.1
Industrials	2.8	1.4
Health Care	-10.7	-11.7
Energy	2.5	2.3
Communication Services	-5.3	-5.3
Financials	5.7	5.9
Real Estate	-4.9	-4.6
Utilities	-6.5	-5.6
Materials	-0.6	0.5
Consumer Discretionary	5.3	6.7
Consumer Staples	2.7	4.2



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Past performance is no guarantee of future results. Please see important information titled "General Legal Disclosures & Hypothetical and/or Backtested Results Disclaimer" at the end of this presentation.

O'Shaughnessy Asset Management (OSAM) At A Glance

- Managing factor-based long-only equity portfolios since 1996
- Long-term leadership and investment in our strategies
  - Firm's senior leadership averages 15+ years with team
  - Every senior manager has worked at OSAM longer than anywhere else
  - 45% of employees are owners in the firm
  - All senior leaders and portfolio managers invest in our strategies
- $5.6 billion in assets (12/31/18)*
- Independent, 90% employee-owned
- Partnership with institutional and advisory clients across multiple vehicles—SMA, mutual fund, LP, and model delivery

* The AUM and AUA combined total represents $5.2 billion of O'Shaughnessy Asset Management assets under management as of 12/31/18 and $0.5 billion of assets under advisement as of 12/31/18. 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.

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

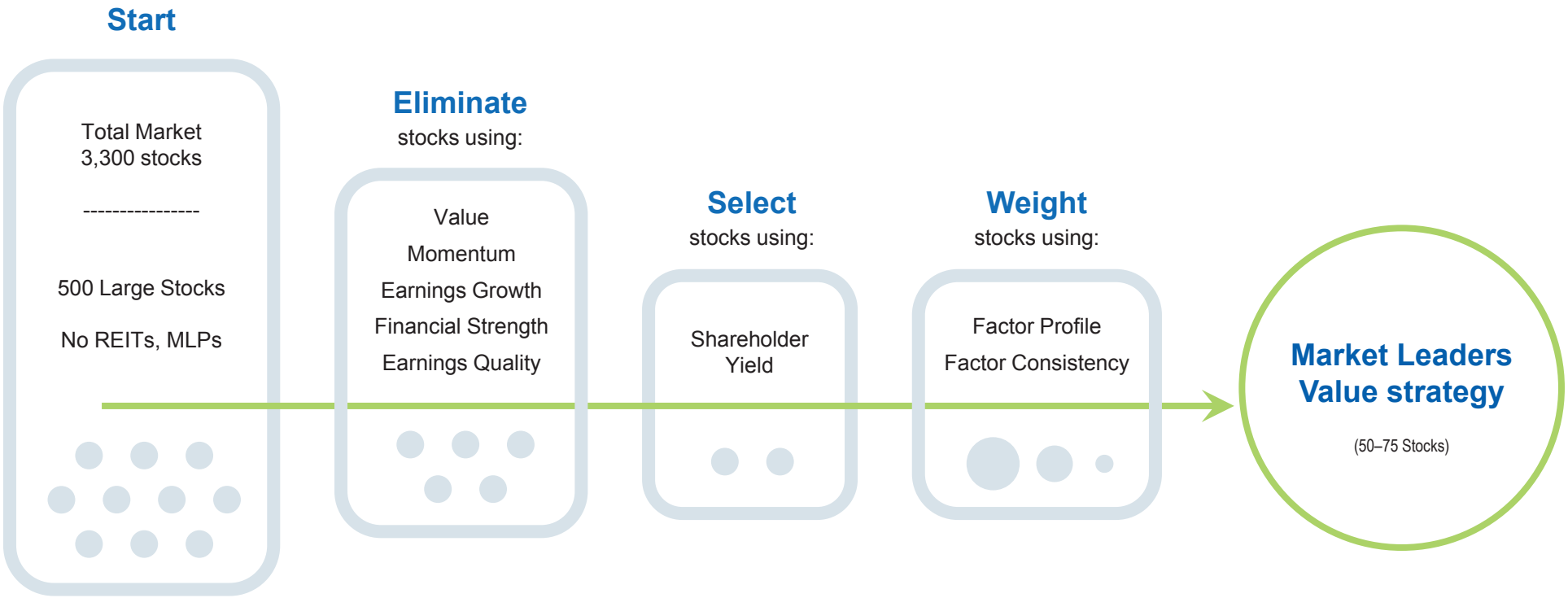
Earnings Growth
Stocks whose profitability is high and trending up

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

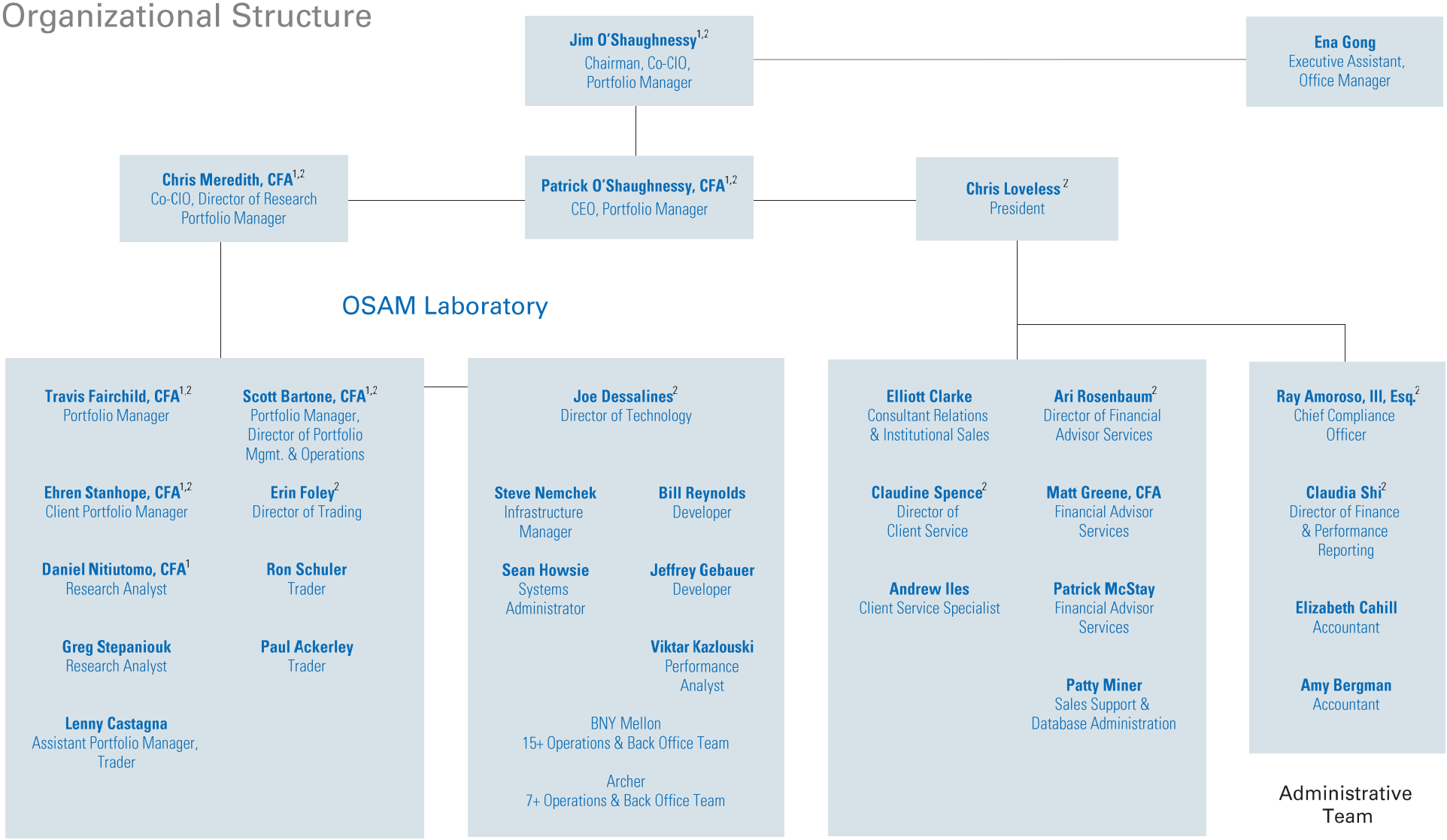
Shareholder Yield
Stocks returning high amounts of cash to shareholders through dividends and buybacks

Building Your Portfolio of Stocks with Strong Overall Factor Profiles



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

Organizational Structure



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[1] Member of the Research Team [2] Principal

General Legal Disclosures & Hypothetical and/or Backtested Results Disclaimer

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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.