

# O'Shaughnessy Small Cap Growth

June 30, 2018

## Investment Philosophy

We believe in applying empirical, fundamental research to uncover strong quantitative equity strategies. We have conducted research covering more than 50 years of market data to identify the characteristics that historically have led to strong stock selection. This research forms the basis of each of our strategies. Our process is generally transparent. We select stocks in a logical, unemotional way, appealing to common sense. We do not allow short-term market events to distract us from our discipline.

## Investment Strategy

Generally seeks to provide long-term appreciation by creating a portfolio of small cap companies with reasonable valuations and outstanding momentum. We first identify companies with market capitalizations between \$200 million and \$2 billion. We then screen for the stocks that score in the top two-thirds according to our Value Composite; greater than average Financial Strength, Earnings Quality, and Earnings Growth Composite scores; and positive 3- and 6-month relative strength. From the remaining securities, we select stocks with the highest Momentum Composite scores.

## Characteristics

Holdings Based <sup>1</sup>	Portfolio	Russell 2000 Growth Index
Price/Earnings Ratio	32.1	27.5
Price/Sales Ratio	1.7	1.9
1-Year Historical Earnings Growth Rate (%)	142.6	40.7
Trailing 12-Month Price Appreciation (%)	81.2	43.7
Market Cap (Weighted Average)	2,569	2,456
Market Cap (Median)	1,781	1,026
Approximate Number of Holdings	102	1,225
Approximate Turnover (% LTM)	102.8	—
Active Share (%)	87.2	—
Returns Based <sup>2</sup>		
Standard Deviation (%)	20.9	22.6
Downside Standard Deviation (%)	14.1	15.4
Sharpe Ratio	0.35	0.24
Beta	0.76	1.00
Information Ratio	0.15	—
Tracking Error (%)	13.3	—

<sup>1</sup> Based on the O'Shaughnessy Small Cap Growth Advisor Composite.

<sup>2</sup> Since inception: November 1, 1996.



**Annual Rates of Return (%)**

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	YTD 2018
Small Cap Growth (Gross)	38.4	2.8	-10.0	-14.6	68.6	11.9	17.6	15.4	-3.3	-40.2	10.5	23.6	-9.4	18.7	44.2	-2.3	-1.9	19.5	12.1	15.1
Small Cap Growth (Net)**	35.2	1.3	-10.8	-15.9	66.2	10.4	15.9	13.3	-5.0	-41.5	8.6	21.2	-11.0	16.6	41.7	-4.2	-4.5	16.0	8.8	13.4
Russell 2000 Growth Index	43.1	-22.4	-9.2	-30.3	48.5	14.3	4.2	13.3	7.0	-38.5	34.5	29.1	-2.9	14.6	43.3	5.6	-1.4	11.3	22.2	9.7

\* Any time period longer than one year is annualized.

\*\* For composite presentation, returns are net at 3% annually, which reflects the highest applicable "wrap" fee charged by any sponsor across our distribution channel. Actual fees may vary account by account.

Investment characteristics and performance are based on O'Shaughnessy Asset Management's Separately Managed Accounts. Should OSAM have another product or investment vehicle with a similar name, investment characteristics and performance may differ.

Stocks with small and mid-sized market capitalizations (those defined by OSAM as less than \$10 billion) may have greater risk and volatility than those with larger market capitalizations.

**Past performance is no guarantee of future results.** Please see important information at the end of this presentation.

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## Base Rates (11/01/1996 to 06/30/2018, gross of fees)

Base rates are a batting average for how often a strategy beats the Russell 2000 Growth over certain rolling time periods.

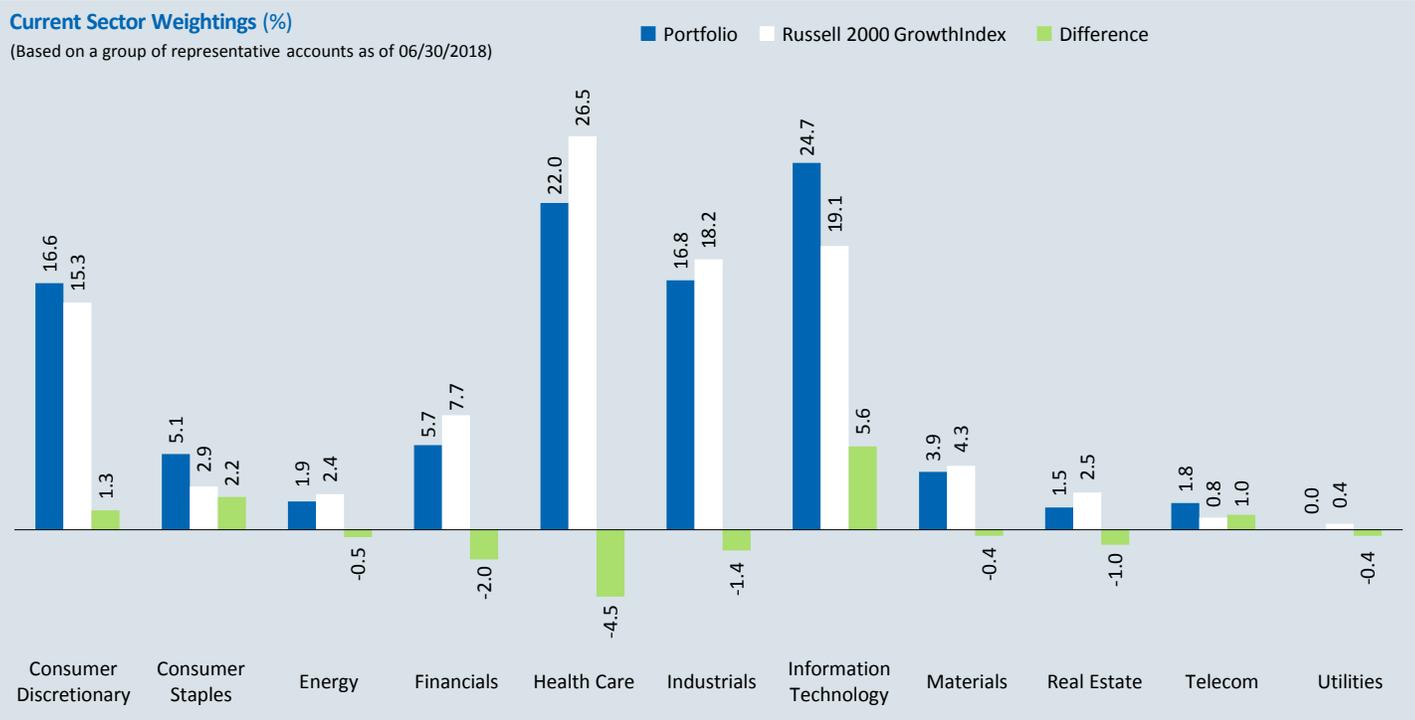
Rolling Periods	Won	Lost	Base Rate	Avg. Excess Return
1-Year	118	130	48%	1.8%
3-Years	107	117	48%	1.6%
5-Years	94	106	47%	1.3%
7-Years	66	110	38%	0.7%
10-Years	58	82	41%	0.1%
15-Years	55	25	69%	0.8%

## Top 10 Holdings

	Percent of Portfolio	Percent of Russell 2000 Growth
ENANTA PHARMACEUTICALS INC	2.8	0.2
MEDIFAST INC	2.7	0.2
NEW YORK TIMES CO -CL A	2.2	0.3
TECHTARGET INC	2.2	0.1
ASPEN TECHNOLOGY INC	2.0	0.0
INOGEN INC	1.9	0.3
CABOT MICROELECTRONICS CORP	1.9	0.2
CHEMED CORP	1.9	0.0
CONMED CORP	1.8	0.1
BLUCORA INC	1.8	0.1
Total	21.2	1.5

## Current Sector Weightings (%)

(Based on a group of representative accounts as of 06/30/2018)



## About O'Shaughnessy Asset Management

O'Shaughnessy Asset Management (OSAM) is a Stamford, Connecticut-based quantitative money management firm. We deliver a broad range of equity portfolios, from small cap to large cap and growth to value. Our clients are individual investors, institutional investors, and the high-net-worth clients of financial advisors. The firm's investment strategies are based on the research of James P. O'Shaughnessy, widely regarded as a pioneer in quantitative equity analysis. This research spans more than five decades, and Mr. O'Shaughnessy has been managing money based on its results since 1996.

For more information, please contact O'Shaughnessy Asset Management, LLC  
Six Suburban Avenue, Stamford, CT 06901 | 203.975.3333 | osam.com

Numbers may not add up due to rounding.

It should not be assumed that your account holdings correspond directly to any comparative indices. Individual accounts may experience greater dispersion than the composite level dispersion (which is an asset weighted standard deviation of the accounts in the composite for the full measurement period). This is due a variety of factors, including but not limited to, the fresh start investment approach that OSAM employs and the fact that each account has its own customized re-balance frequency. Over time, dispersion should stabilize and track more closely to the composite level dispersion. Gross of fee performance computations are reflected prior to OSAM's investment advisory fee (as described in OSAM's written disclosure statement), the application of which will have the effect of decreasing the composite performance results (for example: an advisory fee of 1% compounded over a 10 year period would reduce a 10% return to an 8.9% annual return). Portfolios are managed to a target weight of 3% cash. Account information has been compiled by OSAM derived from information provided by the portfolio account systems maintained by the account custodian(s), and has not been independently verified. In calculating historical asset class performance, OSAM has relied upon information provided by the account custodian or other sources which OSAM believes to be reliable. OSAM maintains information supporting the performance results in accordance with regulatory requirements. Please remember that different types of investments involve varying degrees of risk, that past performance is no guarantee of future results, and there can be no assurance that any specific investment or investment strategy (including the investments purchased and/or investment strategies devised and/or implemented by OSAM) will be either suitable or profitable for a prospective client's portfolio. OSAM is a registered investment adviser with the SEC and a copy of our current written disclosure statement discussing our advisory services and fees continues to remain available for your review upon request.

## O'Shaughnessy Small Cap Growth: Composite Performance Summary

Time Period	"Blended" Gross Rate of Return (%)	Net Rate of Return* (%)	Primary Index Return (%)	Number of Portfolios	Internal Dispersion	Composite Assets (\$ mil)	3-Yr Annual Std Dev	3-Yr Annual Std Dev Primary Index	Composite Assets as a % of Firm's Assets	Wrap Accounts as a % of Composite Accounts
1H18	15.13	13.45	9.70	≤5	N/A	10.7	12.53	14.36	0.17	100.00
2017	12.13	8.85	22.17	≤5	N/A	9.3	11.88	14.59	0.17	100.00
2016	19.49	16.04	11.32	≤5	N/A	8.6	13.63	16.67	0.16	100.00
2015	-1.87	-4.49	-1.38	≤5	N/A	4.8	13.58	14.95	0.09	100.00
2014	-2.27	-4.19	5.60	7	0.75	9.3	12.19	13.82	0.13	61.36
2013	44.25	41.72	43.30	16	1.30	16.3	19.79	17.27	0.25	61.82
2012	18.67	16.57	14.59	16	2.41	9.6	24.36	20.72	0.20	59.68
2011	-9.39	-10.98	-2.91	32	3.21	17.1	26.55	24.31	0.39	34.21
2010	23.59	21.23	29.09	66	5.53	32.6	26.50	27.70	0.64	50.96
2009	10.53	8.61	34.47	95	5.12	36.0	22.17	24.85	0.72	50.78
2008	-40.21	-41.45	-38.54	295	3.48	95.9	21.54	21.26	2.24	42.19
2007	-3.33	-5.04	7.05	628	7.98	296.9	16.60	14.23	2.75	49.92
2006	15.37	13.30	13.35	999	6.81	406.1	18.26	15.57	4.39	55.40
2005	17.60	15.87	4.15	376	6.75	176.9	19.63	16.51	3.07	50.51
2004	11.91	10.40	14.31	107	15.20	43.7	21.33	21.40	1.52	67.07
2003	68.62	66.22	48.54	51	20.01	29.3	20.02	27.00	2.16	56.99
2002	-14.62	-15.87	-30.26	22	7.99	4.5	21.33	33.33	0.70	62.90
2001	-9.95	-10.78	-9.23	12	15.97	2.1	22.19	33.58	0.44	33.81
2000	2.82	1.28	-22.43	11	16.26	4.2	27.64	33.28	0.94	7.61
1999	38.42	35.25	43.09	16	16.05	162.0	26.57	26.31	30.02	0.13
1998	4.83	2.45	1.23	26	6.49	127.7	N/A	N/A	33.93	N/A
1997	33.31	30.08	12.95	≤5	N/A	54.4	N/A	N/A	38.76	N/A
11/1/96-12/31/96	0.99	0.57	4.78	≤5	N/A	1.1	N/A	N/A	45.35	N/A

"Blended" gross returns are a combination of "true" gross and "pure" gross and are presented as supplemental information.

\*For composite presentation, returns for wrap accounts are net at 3% annually, which reflects the highest applicable "wrap" fee charged by any sponsor across our distribution channel. Non-wrap accounts are net of the actual management fee.

### Basis of Presentation:

O'Shaughnessy Asset Management, LLC ("OSAM"), founded in 2007, is a Stamford, CT based quantitative money management firm and an SEC Registered Investment Advisor. We deliver a broad range of equity strategies, from micro cap to large cap, and growth to value. Our clients are individual investors, institutional investors, and the high-net-worth clients of financial advisors. James O'Shaughnessy and his team left Bear Stearns to form OSAM in July 2007. All the GIPS® rules of portability were met. Jim maintained continuous management of all accounts during the transition from BSAM to OSAM, which was completed in March 2008. The performance of a past firm or affiliation is being attributed to the performance of the current firm for all the periods starting 1996.

OSAM claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. OSAM has been independently verified for the periods of 2007-2017. BSAM was independently verified in compliance with GIPS 2005-2006 and AIMR-PPS for the periods of 2002 - 2004. The verification reports are available upon request. Verification assesses whether (1) the firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. Verification does not ensure the accuracy of any specific composite presentation.

A complete list of OSAM's composite descriptions is available upon request.

The O'Shaughnessy Small Cap Growth strategy (the "Composite") generally seeks to provide long-term appreciation through exposure to mostly small capitalization domestic equities with market capitalizations that are approximately between \$200 million and \$2 billion that the manager believes have better quality, reasonable valuation, and strong momentum.

The Composite was created in August 2008 to include both wrap fee and non wrap fee accounts, and represents the performance of every fee paying account managed in the Small Cap Growth strategy, regardless of asset size. The investment advisory fee charged for the management of accounts in the strategy varies. Institutional separate accounts are charged an annual investment advisory fee of 0.85% on the first \$25 million, 0.75% on the next \$75 million, and 0.60% on assets over \$100 million. Wrap clients are charged the "wrap" fee set by the sponsor, and fees can vary by sponsor platform. Wrap fees include charges for trading costs, portfolio management, custody, and other administrative fees. For composite performance presentation purposes, wrap fee account returns are net at 3% annually, which reflects the highest applicable "wrap" fee charged by any sponsor across our distribution channel. Non-wrap fee account returns are net of the actual advisory fees. Additionally, gross-of-fees returns for wrap fee accounts are "pure" gross returns. "Pure" gross-of-fees returns do not reflect the deduction of any expenses, including transaction costs. "Pure" gross-of-fees returns are supplemental to net returns. A traditional (or "true") gross-of-fees return reflects performance after the reduction of transaction costs but before the reduction of the investment advisory fee. Since wrap fee accounts experience "bundled" pricing, it is often impossible to unbundle the transaction portion to calculate a gross-of-fees return and hence "pure" gross-of-fees returns are made available. The gross-of-fee return presented for this composite is a blend of "true" gross-of-fees returns for non wrap clients (where the actual fee paid is identifiable) and "pure" gross-of-fees returns for wrap clients (for the reasons stated above).

Internal dispersion is calculated using the equal weighted standard deviation of annual gross returns of those portfolios that were included in the composite for the entire year. AUM data is presented from December 31, 2007 forward, consistent with the inception of our firm, and N/A is shown for prior periods. N/A is shown in the "3 Yr Ann Std Dev" field where 36 months of composite performance is not available. All investments are in U.S. equities and all returns are stated in U.S. Dollars. Policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

The Russell 2000® Growth Index is a subset of the Russell 2000® Index, which measures the stocks of small domestic companies, based on market capitalization. The Russell 2000® Growth Index invests in those Russell 2000® Index companies with higher price-to-book ratios and higher relative forecasted growth rates.

Due to ongoing research, the manager may from time to time adjust the model by changing certain factors or screens which comprise the model without prior notice. OSAM may determine it appropriate to rebalance at times other than the regularly scheduled rebalance without prior notice. Style allocations are approximate. They may change over time and vary by account.