# O'Shaughnessy Small Mid-Cap Growth

December 31, 2017

# **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.

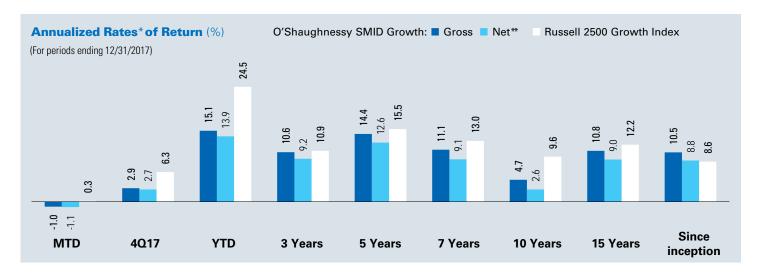
## **Investment Strategy**

Seeks to provide long-term appreciation through exposure to a portfolio of domestic, aggressive growth equities with market capitalizations between \$200 million and \$10 billion. The strategy seeks stocks that meet our quality and valuation criteria and have what we believe to be exceptional momentum. Qualifying stocks are conviction weighted and limited by broad sector and industry constraints.

Characteristics Holdings Based <sup>1</sup>	Portfolio	Russell 2500 Growth Index			
Price/Earnings Ratio	22.4	28.4			
Price/Sales Ratio	1.7	2.0			
Trailing 12-Month Price Appreciation (%)	49.9	38.7			
Market Cap (Weighted Average)	4,985	5,610			
Market Cap (Median)	2,751	1,391			
Approximate Number of Holdings	99	1,435			
Approximate Turnover (% LTM)	110.0	_			
Active Share (%)	86.1	—			
Returns Based <sup>2</sup>					
Standard Deviation (%)	19.9	22.2			
Downside Standard Deviation (%)	13.6	14.9			
Sharpe Ratio	0.42	0.29			
Beta	0.77	1.00			
Information Ratio	0.18	_			
Tracking Error (%)	11.3	_			

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

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



Annual Rates of Return (%)	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
SMID Growth (Gross)	13.2	40.7	4.7	0.4	-19.8	45.7	20.3	26.5	12.0	19.2	-46.9	9.7	30.1	-10.9	19.4	44.5	0.5	1.5	15.7	15.1
SMID Growth (Net)**	11.4	38.7	3.7	-0.5	-20.6	45.2	19.6	25.1	10.1	17.3	-48.0	7.4	26.6	-13.1	16.7	41.4	-1.6	0.0	14.3	13.9
Russell 2500 Growth Index	3.1	55.5	-16.1	-10.8	-29.1	46.3	14.6	8.2	12.3	9.7	-41.5	41.7	28.9	-1.6	16.1	40.7	7.1	-0.2	9.7	24.5

\* 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 12/31/2017, gross of fees)

Base rates are a batting average for how often a strategy beats the Russell 2500 Growth over certain rolling time periods.

Rolling Periods	Won	Lost	Base Rate	Avg. Excess Return
1-Year	137	106	56%	1.7%
3-Years	121	98	55%	1.7%
5-Years	99	96	51%	1.6%
7-Years	68	103	40%	1.1%
10-Years	58	77	43%	0.9%
15-Years	58	17	77%	1.2%

# **Top 10 Holdings**

		Percent of Portfolio	Percent of Russell 2500 Growth
NVR INC		2.7	0.5
GRACO INC		2.1	0.3
CADENCE DESIGN SYSTEM INC		2.0	0.5
TORO CO		1.9	0.3
NOVANTA INC		1.8	0.1
VARIAN MED SYS INC		1.8	0.0
THOR INDS INC		1.7	0.3
WERNER ENTERPRISES INC		1.7	0.0
PROGRESS SOFTWARE CORP		1.6	0.1
CABOT MICROELECTRONICS CORP		1.6	0.1
	Total	18.9	2.2



## 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 systems involve varying degrees of risk, that past performance is no guarantee of future results in accordance with regulatory requirements. Please remember that different types of investment survey (including the 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 Mid-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
2017	15.12	13.93	24.46	17	0.40	21.8	10.58	13.04	0.39	19.41
2016	15.70	14.27	9.73	19	0.64	22.8	11.55	14.67	0.43	20.17
2015	1.50	-0.04	-0.19	27	0.45	30.3	12.47	13.29	0.57	47.53
2014	0.50	-1.65	7.05	45	0.54	45.3	11.25	12.54	0.65	50.22
2013	44.49	41.41	40.65	172	1.11	85.0	16.54	16.48	1.32	69.06
2012	19.35	16.69	16.13	207	2.94	68.8	21.82	19.82	1.43	67.56
2011	-10.88	-13.10	-1.57	428	3.77	136.8	24.52	22.94	3.10	72.13
2010	30.11	26.64	28.86	606	4.85	220.2	29.80	27.21	4.36	84.71
2009	9.74	7.41	41.66	805	4.64	207.1	25.64	24.54	4.15	89.89
2008	-46.90	-47.99	-41.50	1287	3.06	436.0	25.36	20.93	10.19	58.69
2007	19.24	17.26	9.69	1384	5.83	894.8	16.06	12.54	8.29	52.59
2006	11.96	10.07	12.26	1129	7.37	757.6	17.82	13.44	8.19	45.11
2005	26.53	25.10	8.17	426	4.24	306.9	17.03	14.70	5.32	48.01
2004	20.26	19.64	14.59	57	3.66	144.0	19.11	19.72	5.00	15.95
2003	45.74	45.19	46.31	35	4.97	106.3	20.32	26.89	7.81	4.92
2002	-19.82	-20.56	-29.09	35	5.60	93.5	20.76	34.34	14.59	2.23
2001	0.45	-0.48	-10.83	23	6.55	22.0	20.89	35.07	4.57	N/A
2000	4.73	3.68	-16.09	24	10.28	27.5	22.91	33.83	6.24	N/A
1999	40.68	38.65	55.48	21	17.80	40.9	22.13	25.37	7.57	N/A
1998	13.24	11.44	3.10	16	6.13	24.0	N/A	N/A	6.38	N/A
1997	26.54	24.14	14.76	≤5	N/A	10.9	N/A	N/A	7.78	N/A
11/1/96-12/31/96	4.46	4.03	4.17	≤5	N/A	0.5	N/A	N/A	19.98	N/A

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 2007-2016. 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-Mid Cap Growth strategy (the "Composite") generally seeks to provide long-term appreciation through exposure to mostly small and mid capitalization domestic equities with market capitalizations that are approximately between \$200 million and \$10 billion that the manager believes have better quality, reasonable valuation, and strong momentum.

The Composite was created in December 2016 to include all wrap fee, non-wrap fees and pooled funds accounts, and represents the performance of every fee paying account managed in the SMID 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 0.65% on the first \$25 million and 0.60% on assets over \$25 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-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 by the monthly portion of the annual management expense ratio to the NAV derived monthly returns, the net of fee return data shown in this presentation represents the reduction of the calculated gross of fee returns by the monthly portion of the annual investment advisory fee. The gross-of-fee return presented for this composite is a blend of "true" gross-of-fees returns and pooled funds clients (where the actual fee paid is identifiable) and "pure" gross-of-fees returns by the monthly portion of the annual inve

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 2500<sup>®</sup> Growth Index measures the performance of the small to mid-cap growth segment of the U.S. equity universe. It includes those Russell 2500 companies with higher price-tobook ratios and higher forecasted growth values.