

# O'Shaughnessy International Equity

December 31, 2019

## 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 international equities across market capitalization ranges outside of North America. The strategy selects stocks the manager believes have better quality, valuation, momentum and yield. Stocks are selected and weighted based on conviction and are broadly constrained by region, sector and industry. Currency exposure is unhedged.

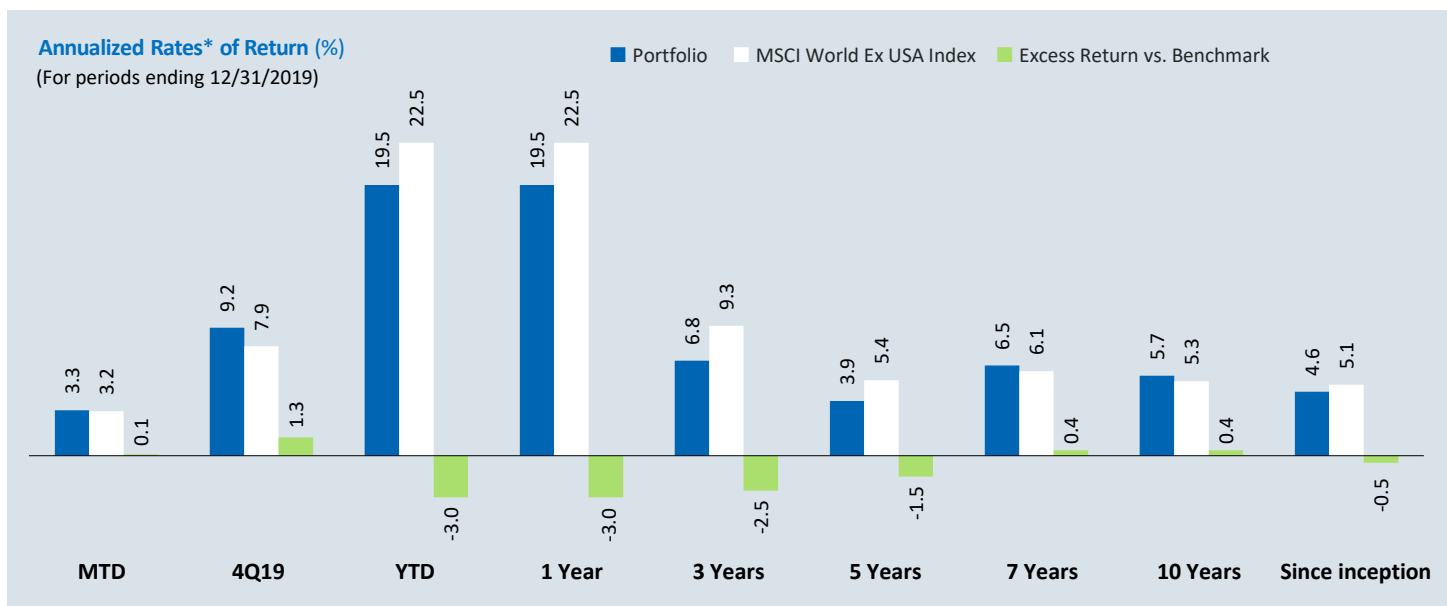
Due to ongoing research, the manager may from time to time adjust the model by changing certain factors or screens which comprise the model without prior notice. OSAM may determine it appropriate to rebalance at times other than the regularly scheduled rebalance without prior notice. Style allocations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

## Characteristics

Holdings Based <sup>1</sup>	Portfolio	MSCI World Ex USA Index	Relative Advantage
Price/Earnings Ratio	12.2	17.2	29% Cheaper
Price/Sales Ratio	0.8	1.3	38% Cheaper
Trailing 9-Month Total Return (%)	19.1	12.6	52% Higher
Dividend Yield	3.7	3.1	19% Difference
Market Cap (Weighted Average)	28,756	64,979	—
Market Cap (Median)	4,628	11,158	—
Approximate Number of Holdings	169	1,008	—
Approximate Turnover (% LTM)	64.2	—	—
Active Share (%)	90.1	—	—
Cash (%)	1.3	—	—
<b>Returns Based<sup>2</sup></b>			
Standard Deviation (%)	17.6	16.4	—
Sharpe Ratio	0.19	0.23	—
Beta	1.03	1.00	—
Information Ratio	-0.10	—	—
5 Year Tracking Error (%)	3.9	—	—
Downside Capture (%)	101.7	100.0	—
Upside Capture (%)	99.7	100.0	—

<sup>1</sup> Based on the O'Shaughnessy International Equity Composite.

<sup>2</sup> Since inception: February 1, 2005.



Returns are in USD. MSCI is net of withholding taxes.

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

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

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## Base Rates (02/01/2005 to 12/31/2019, gross of fees)

Base rates are a batting average for how often a strategy beats the MSCI World Ex USA over certain rolling time periods.

Rolling Periods	Won	Lost	Base Rate	Avg. Excess Return
1-Year	73	94	44%	-0.09%
3-Years	72	71	50%	-0.34%
5-Years	59	60	50%	0.02%
7-Years	49	46	52%	0.14%
10-Years	25	34	42%	-0.08%

## Top 10 Holdings

	Percent of Portfolio	Percent of MSCI World Ex USA
ASTELLAS PHARMA INC	3.5	0.2
ROCHE HOLDING AG	2.4	0.0
SOCIETE GENERALE GROUP	2.4	0.2
RIO TINTO GROUP	2.3	0.4
BNP PARIBAS	2.2	0.4
OMV AG	2.1	0.1
KONINKLIJKE AHOLD DELHAIZE	2.0	0.2
PEUGEOT SA	2.0	0.1
NTT DOCOMO INC	2.0	0.2
BARCLAYS PLC	1.9	0.3
<b>Total</b>	<b>22.8</b>	<b>2.1</b>

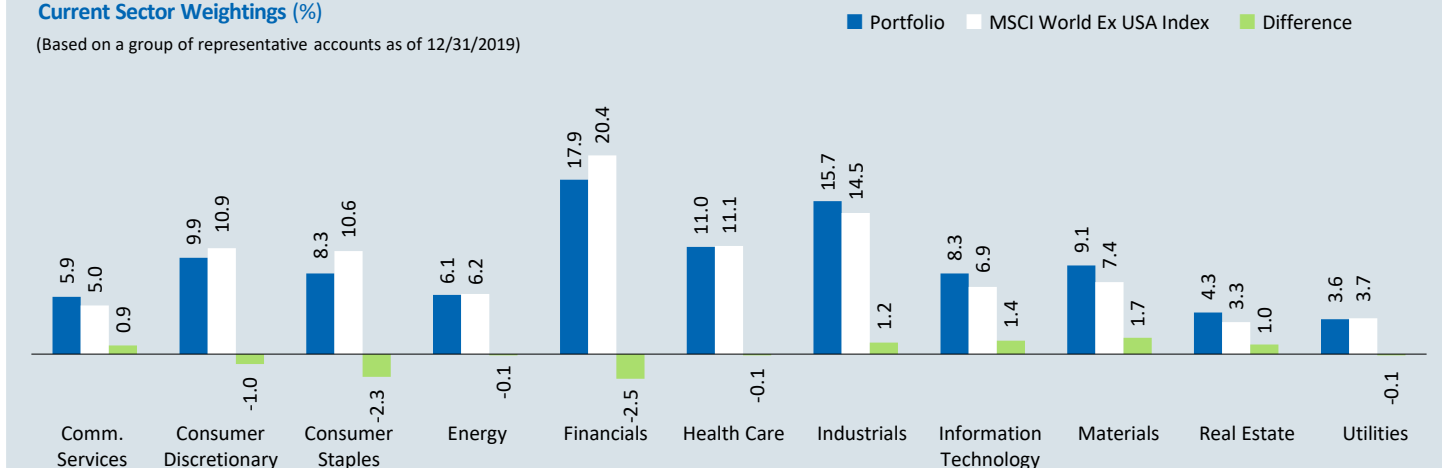
## Current Country Weightings (%)

(Based on a representative account as of 12/31/2019)

	Australia	Austria	Belgium	Denmark	Finland	France	Germany	Hong Kong	Israel	Italy	Japan	Netherlands	New Zealand	Norway	Portugal	Singapore	Spain	Sweden	Switzerland	United Kingdom
Portfolio	11.2	2.5	2.1	2.3	0.8	8.7	5.0	1.3	1.8	4.7	23.9	6.9	1.1	0.7	0.6	0.4	3.0	3.9	4.1	15.0
MSCI World Ex USA Index	6.3	0.2	0.9	1.7	0.9	10.3	7.8	3.2	0.5	2.1	22.3	4.0	0.3	0.6	0.1	1.2	2.6	2.4	8.6	14.3
Difference	4.9	2.3	1.2	0.6	-0.1	-1.6	-2.8	-1.9	1.3	2.6	1.6	2.9	0.8	0.1	0.5	-0.8	0.4	1.5	-4.5	0.7

## Current Sector Weightings (%)

(Based on a group of representative accounts as of 12/31/2019)



## 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  
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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.

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## Composite Performance Summary

Time Period	"Blended"		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
	Gross Rate of Return (%)	Net Rate of Return* (%)								
2019	19.47	18.47	22.49	≤5	N/A	210.3	11.62	10.80	3.69	N/A
2018	-18.71	-19.37	-14.09	≤5	N/A	316.4	11.60	11.06	6.16	N/A
2017	25.54	24.55	24.21	≤5	N/A	427.5	10.62	11.65	7.55	N/A
2016	0.16	-0.67	2.75	≤5	N/A	390.9	11.75	12.34	7.34	N/A
2015	-0.65	-1.46	-3.04	≤5	N/A	399.2	13.03	12.28	7.49	N/A
2014	-2.94	-3.76	-4.32	≤5	N/A	459.7	13.54	12.75	6.64	N/A
2013	31.90	30.81	21.20	≤5	N/A	443.5	16.92	15.97	6.87	N/A
2012	15.26	14.30	16.44	≤5	N/A	376.7	21.15	19.02	7.84	N/A
2011	-14.50	-15.24	-12.19	≤5	N/A	454.0	24.79	22.31	10.29	N/A
2010	14.24	13.28	9.06	≤5	N/A	674.0	28.44	26.28	13.33	N/A
2009	26.03	24.97	33.79	≤5	N/A	768.2	24.92	23.87	15.40	N/A
2008	-47.94	-48.40	-43.53	≤5	N/A	558.6	21.06	19.45	13.06	N/A
2007	12.04	11.09	12.39	≤5	N/A	1,607.3	N/A	N/A	14.90	0.25
2006	26.10	25.05	25.82	≤5	N/A	1,018.1	N/A	N/A	11.00	0.07
2/1/05-12/31/05	20.74	19.82	16.71	≤5	N/A	294.6	N/A	N/A	5.11	N/A

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

### 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 2007-2018. 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 International Equity strategy (the "Composite") generally seeks to provide long-term appreciation through exposure to non-U.S. equities that the manager believes have better quality, valuation, momentum and yield across market capitalization ranges.

The Composite was created in January 2018 and represents performance of all fee paying, non-wrap separately managed accounts and pooled funds invested in the International Equity strategy, regardless of asset size. For separately managed accounts, the net of fee return data shown in this presentation represents the reduction of the actual OSAM investment management fee charged. Institutional separate accounts are charged an annual investment advisory fee of 0.70%. For pooled funds, gross of fee returns are calculated by adding back 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. Pooled funds expenses information is available upon request.

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 MSCI World ex USA Index captures large and mid cap representation across 22 of 23 Developed Markets (DM) countries, excluding the United States. The index covers approximately 85% of the free float-adjusted market capitalization in each country. This index is net of withholding taxes.

The Dividend Yield is the annual percentage of return earned by an investor on a common or preferred stock. The yield is calculated by dividing the amount of dividends paid per share over the past twelve months by the current market price per share of the stock. Holdings-based valuation metrics are derived from actual holdings utilizing OSAM Workbench, a proprietary analytics tool. The dividend yield is a gross indicated yield. There is no guarantee that the rate of dividend payment will continue and the income derived is subject to taxes and expenses which will impact the actual yield experience of each investor.