

# Active Quantitative Equity

*A Pioneer in Quantitative and Sustainable Investing*

# Global Defensive Equity

**STATE STREET** GLOBAL ADVISORS

## Why State Street Global Advisors?

**27** global offices

**10** investment centers

**500+** investment professionals

**24-hour** trading capabilities; Traders in Boston, London and Hong Kong

## Why Benchmark Unaware?

We believe superior risk-adjusted returns can be achieved by removing benchmark-relative constraints. Rather than building portfolios around the stocks represented in the benchmark index, this approach explores the market's full opportunity set, constructing a portfolio based on stocks' total return and total risk characteristics.

## Why Active Management?

- We believe opportunities exist to systematically exploit market inefficiencies.
- Active management can deliver superior upside market participation while maintaining downside risk mitigation.

## Ways Investors Can Benefit

Strategy seeks to deliver meaningful downside risk mitigation and upside participation.

- Efficient portfolio: strong Sharpe Ratio relative to the MSCI World Index since inception (See next page for more information).
- Historically smoother return trajectory and reduced drawdowns in reaching investment objectives, compared to the MSCI World Index.
- Absolute risk controls as part of our multi-dimensional risk management.

Past performance is not a guarantee of future results.

## Investment Objective

The Global Defensive Equity strategy is a long-only approach that seeks to provide long-term returns that outperform the cap-weighted MSCI World Index by approximately 2-4% (gross of fees) on an annual basis over a 3-5 year period while reducing volatility by 20-30% compared to index over the same time frame.

The above figures are estimates based on certain assumptions and analysis made by State Street Global Advisors (SSGA). There is no guarantee that the estimates will be achieved.

Robust performance is a function of the **precision of our forecasts**, the **number of independent forecasts** we can use, and our **ability to express these** in clients' portfolios.

## Investment Process

### Research

Innovation is critical to continual process improvement. We dedicate significant resources to finding and exploiting market inefficiencies.

### Stock Selection

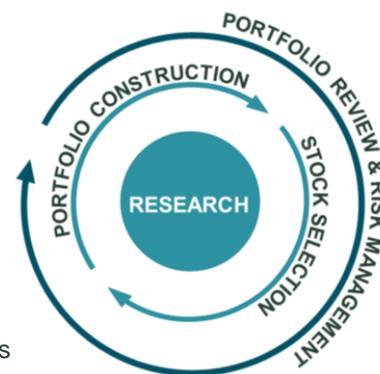
We forecast security returns by analyzing company fundamentals and the actions of market participants – from both bottom up and top down perspectives.

### Portfolio Construction

We balance return forecasts with expected risks and transaction costs to optimally reflect our investment insights in portfolio holdings.

### Portfolio Review and Risk Management

We regularly review the drivers of return and seek to take sufficient risk to achieve risk/return targets, without exposing investors to any unintended biases such as size, beta and style. Our portfolios have benefited from prudent risk limits at the security, sector and country levels.



## Invest in Promising Companies

We are seeking to systematically identify high quality businesses that are growing their earnings, supported by strong sentiment, cash flows, quality balance sheets and are attractively priced.

### Focus on Managing Total Risk

We seek to deliver a smoother pattern of returns and manage total volatility to be lower than the cap-weighted index.

### Benchmark Unaware, Long-Only Portfolio Design

The portfolio is built to maximize expected return and minimize total risk subject to transaction costs and has a high active share.

### ESG Integration

ESG is systematically integrated into the stock selection model as a component of the Quality theme, providing scores for nearly 4,000 companies worldwide.

### Potential Reward

Strong performance versus benchmark in varying market environments due to uncorrelated model themes that capture diverse sources of return.

## Global Team Highlights

as of December 31, 2018

**US\$29B** in Active Quantitative  
Equity assets under management

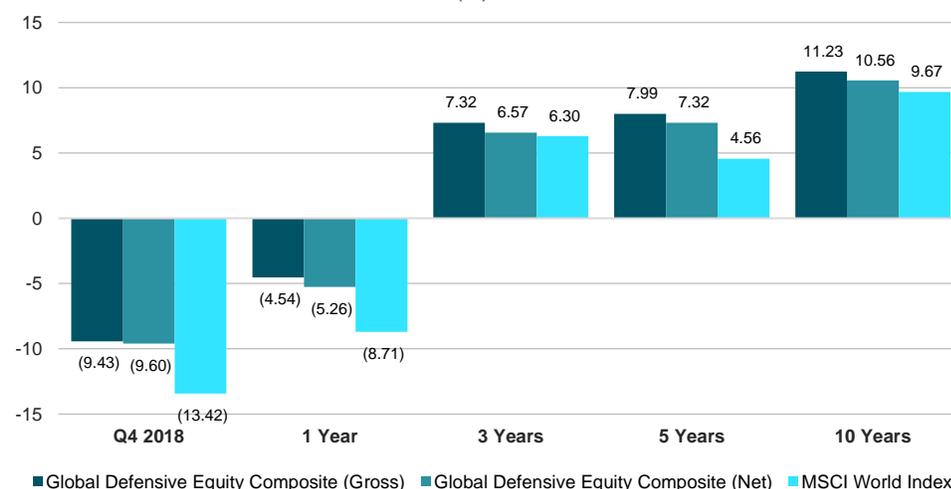
**19** portfolio managers  
Average 21 years' industry experience

**13** quantitative equity researchers  
Average 11 years' industry experience

**14** CFAs

**8** PhD designations

## Annualized Performance (%) in USD as of December 31, 2018



Global Defensive Equity strategy inception: January 2009.  
Source: SSGA. Performance returns are displayed in U.S. dollars.

Returns greater than one year are annualized. Returns represent past performance and are not a guarantee of future results. Current performance may differ from the performance shown. Returns shown are asset-weighted using Composite (as defined below) member market values, where the Composite member's return calculations are time-weighted and reflect the reinvestment of dividends and other income.

Composite Gross: These performance figures are provided gross of fees and expenses other than actual trading fees and expenses, and reflect all items of income, gain, and loss (other than unrealized gain or loss on units of the securities lending pools held by any portfolio in the Composite). The performance figures do not take account of the mark to market value of the units of the securities lending cash collateral pools held by any of the portfolios in the Composite. If they had, the performance shown would have been lower.

Composite Net: These performance figures (i) are provided net of actual trading, audit, custody, administrative and legal fees and expenses; (ii) beginning on 9/30/2014, adjusted quarterly to reflect the highest investment management fee on the actual fee schedule, inclusive of incentive fee, if any, of any account within the Composite ("Management Fee") at the relevant time; prior to 9/30/2014, adjusted for an assumed investment management fee, which is equal to or higher than the Management Fee (except in each case certain small accounts-subject to a minimum investment management fee-may have incurred an actual investment management fee higher than that fee assumed in calculating the performance shown above); and (iii) reflect all items of income, gain and loss (other than unrealized gain or loss on units of the securities lending pools held by any portfolio in the Composite). Index returns are unmanaged and do not reflect the deduction of any fees or expenses. Index returns reflect all items of income and the reinvestment of dividends (net of withholding tax rates) and other income and are calculated in U.S. dollars. It is not possible to invest directly in an index.

## Risk Statistics gross of fees, in USD as of December 31, 2018

Annualized 36 Months

|                    |      |                   |      |
|--------------------|------|-------------------|------|
| Standard Deviation | 8.32 | Sharpe Ratio      | 0.75 |
| Beta               | 0.74 | Information Ratio | 0.24 |
| Tracking Error     | 4.23 | Correlation       | 0.92 |

## Characteristics as of December 31, 2018

|  | Portfolio  | MSCI World Index |
|--|------------|------------------|
| Annual Dividend Yield (Trailing 12 Months) | 3.21%      | 2.76%            |
| Composite Assets Under Management (US\$M)  | \$1,425.75 | --               |
| Estimated 3-5 Year EPS Growth              | 8.01       | 10.94            |
| Price/Book Ratio                           | 1.93x      | 2.07x            |
| Price/Earnings (Forward 12 Months)         | 13.2x      | 14.2x            |
| Total Number of Holdings                   | 112        | 1631             |
| Weighted Average Market Cap (US\$B)        | 69.5       | 121.4            |

The Supplemental Information above (except for the Beta, Standard Deviation and Composite AUM) is that of a single representative account within the Composite, which is subject to change. The representative account was chosen because it has no material restrictions and fairly represents the investment style of the Strategy. The Supplemental Information should not be deemed to be reflective of (and could differ from) the overall Composite or any other single account within the Composite. Certain Supplemental Information may be rounded to the nearest hundredth decimal and may result in the total not adding up to 100. Characteristics are calculated using the month-end market value of holdings of the representative account, and where averages are shown these reflect the market weights of the securities in the representative account. For beta and standard deviation, if shown, these reflect Composite month-end returns. Characteristics are as of the date indicated, are subject to change, and should not be relied upon as current thereafter. Market data, prices, and dividend estimates for characteristics calculations provided by Factset Research Systems, Inc. All other portfolio data provided by State Street Global Advisors.

## Glossary

**Alpha** The excess return of a fund relative to the return of a benchmark index.

**Beta** Measures the volatility of a security or portfolio in relation to the market, for example, the S&P 500 Index. A beta of 1 indicates the security will move with the market. A beta of 1.3 means the security is expected to be 30 percent more volatile than the market, while a beta of 0.8 means the security is expected to be 20 percent less volatile than the market.

**Sharpe Ratio** Represents the average return earned in excess of the risk free rate relative to level of volatility. It is used as a measure of risk-adjusted returns.

**Standard Deviation** Quantifies how much a series of numbers vary around the mean or average value. A higher standard deviation would indicate more fluctuation.

**Tracking error** A measure of how closely a portfolio follows the index to which it is benchmarked.

**ESG** Environmental, Social and Governance criteria is used by socially-conscious investors to screen potential investments.

**MSCI World Index** A stock market index of 1,649 'world' stocks.

**Information Ratio** Represents the portfolio returns above the returns of a benchmark relative to the volatility of those returns.

**Correlation to Benchmark** Strength of the relationship of a strategy's performance and its market, as measured by the benchmark.

**Active Share** the proportion of a portfolio's holdings that differ from its relevant benchmark.

**Dividend Yield** The ratio of dividends paid in a given year relative to its stock price.

**EPS Growth** Earnings per Share Growth is the percentage change in profits divided by the number of common outstanding shares

**Price/Book Ratio** Represents a stock's market value to the net assets of the company.

**Price/Earnings Ratio** Represents a stock's market value to the net assets of the company.

**Weighted Average Market Cap** A measure of the average size of a company in a given strategy or index, calculated by weighting the market capitalization of each stock held.

## Marketing communication

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