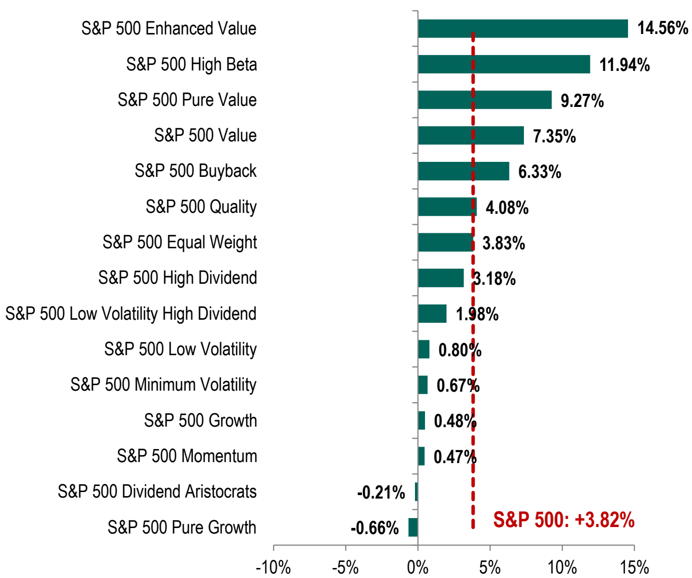
S&P Dow Jones Indices

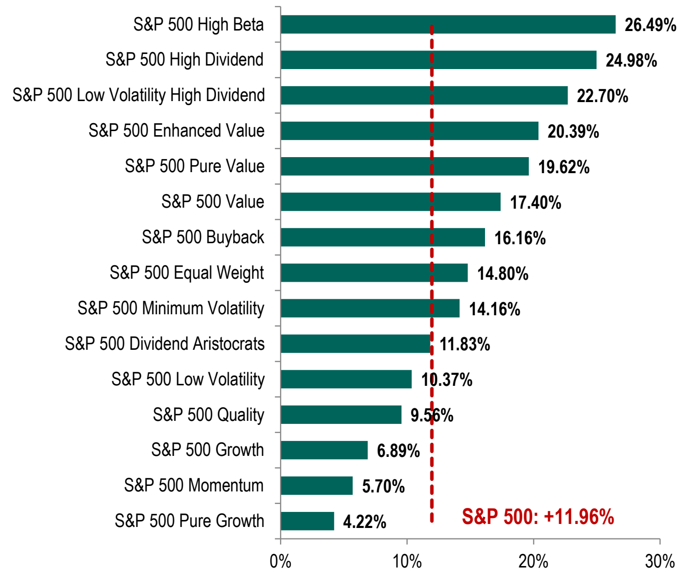
A Division of S&P Global

QUARTERLY AND 12M TRAILING PERFORMANCE SUMMARY

Q4 2016 Total Return



FY 2016 Total Return



COMMENTARY

Unsurprisingly in a year that saw double-digit gains in the broader market, an exposure to **High Beta** offered the simplest route to outperformance.

Otherwise, **Value** and **High Dividend** tilts paid off among S&P 500 equities.

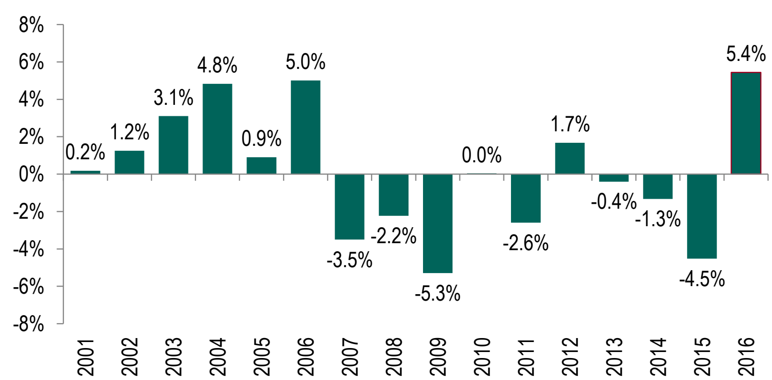
Value's return to form came after a decade of meagre pickings. In fact, **value recorded in its best annual relative performance since 2000**. This outperformance from "cheaper" stocks was in part due to a reversal of sectoral trends; energy stocks bounced back from two years of price declines, and those large U.S. financials battered by fines were boosted by the change in the regulatory outlook.

The same reversal in sectoral fortunes **disadvantaged Momentum**, which stuttered this year, materially underperforming the market.

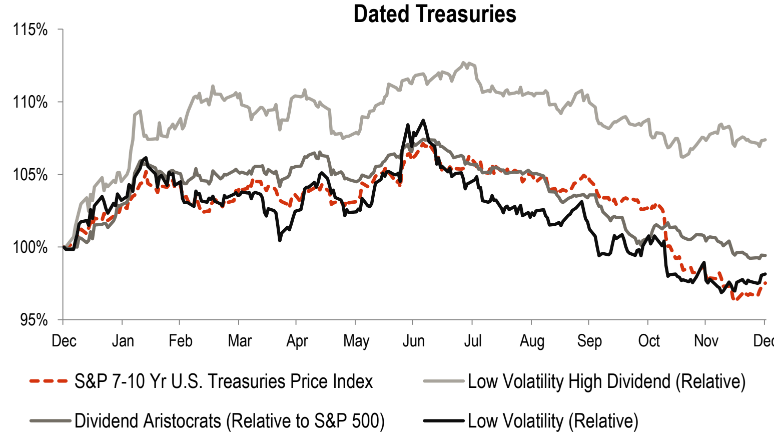
Our last report highlighted the potential consequences of a **rise in longer-dated bond yields** for investors in less volatile equities with a stable income. In the final quarter, and as 10 year benchmark U.S. Treasury yields rose by close to a full percent, **Dividend Aristocrat** and **Low Volatility** strategies underperformed.

The period emphasized the distinctions to the High Dividend Low Volatility strategy, which underperformed by a much lower margin.

S&P 500 Value: Annual Out / Underperformance



2016 Factor Performance Relative to S&P 500, versus Longer-Dated Treasuries



Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of December 30, 2016.

S&P Dow Jones Indices
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Index Dashboard: S&P 500® Factor Indices

Q4 2016

TOTAL RETURN AND VOLATILITY

TOTAL RETURN	1M	QTR	1YR	3YR	5YR	10YR	15YR
S&P 500 Buyback	0.7%	6.3%	16.2%	8.6%	17.4%	9.8%	10.9%
S&P 500 Enhanced Value	2.7%	14.6%	20.4%	8.5%	17.2%	5.9%	7.8%
S&P 500 Growth	1.4%	0.5%	6.9%	9.0%	14.5%	8.3%	6.6%
S&P 500 Pure Value	1.7%	9.3%	19.6%	7.4%	18.2%	8.2%	10.4%
S&P 500 Quality	1.9%	4.1%	9.6%	8.1%	14.2%	9.4%	9.2%
S&P 500 Pure Growth	0.3%	-0.7%	4.2%	7.0%	15.2%	9.9%	8.4%
S&P 500 Momentum	3.2%	0.5%	5.7%	7.5%	13.9%	6.9%	7.2%
S&P 500 High Beta	0.9%	11.9%	26.5%	7.7%	15.9%	3.1%	3.8%
S&P 500 Equal Weight	1.1%	3.8%	14.8%	8.7%	15.5%	8.4%	9.3%
S&P 500 Value	2.5%	7.3%	17.4%	8.5%	14.7%	5.5%	6.7%
S&P 500 Low Volatility High Dividend	2.3%	2.0%	22.7%	15.9%	15.0%	11.3%	11.6%
S&P 500 Dividend Aristocrats	1.0%	-0.2%	11.8%	9.3%	15.1%	9.7%	9.7%
S&P 500 High Dividend	0.8%	3.2%	25.0%	14.2%	16.0%	7.7%	9.6%
S&P 500 Minimum Volatility	2.0%	0.7%	14.2%	11.4%	15.2%	7.7%	9.0%
S&P 500 Low Volatility	2.6%	0.8%	10.4%	10.6%	13.0%	8.5%	9.1%
S&P 500	**2.0%**	**3.8%**	**12.0%**	**8.9%**	**14.7%**	**6.9%**	**6.7%**

Performance figures for more than one year are annualized.

VOLATILITY (ANN.)	1YR	3YR	5YR	10YR	15YR
S&P 500 Buyback	13.2%	12.8%	12.4%	17.8%	15.9%
S&P 500 Enhanced Value	15.3%	13.4%	13.8%	21.6%	19.5%
S&P 500 Growth	9.9%	11.0%	10.5%	14.7%	13.8%
S&P 500 Pure Value	14.4%	13.5%	14.0%	24.1%	21.8%
S&P 500 Quality	8.7%	10.6%	10.5%	14.3%	13.5%
S&P 500 Pure Growth	11.6%	11.6%	11.7%	17.6%	17.7%
S&P 500 Momentum	8.9%	10.4%	10.1%	15.0%	14.0%
S&P 500 High Beta	22.0%	18.1%	17.4%	27.9%	29.2%
S&P 500 Equal Weight	11.2%	11.0%	10.8%	17.9%	16.9%
S&P 500 Value	10.2%	10.6%	10.5%	16.4%	15.5%
S&P 500 Low Volatility High Dividend	10.5%	9.6%	9.4%	13.9%	13.0%
S&P 500 Dividend Aristocrats	9.5%	10.2%	9.7%	14.2%	12.8%
S&P 500 High Dividend	10.2%	9.9%	9.7%	18.6%	16.9%
S&P 500 Minimum Volatility	7.8%	8.6%	8.4%	12.1%	11.4%
S&P 500 Low Volatility	8.8%	9.3%	9.1%	11.2%	10.2%
S&P 500	**9.5%**	**10.5%**	**10.2%**	**15.2%**	**14.3%**

RELATIVE RETURN AND TRACKING ERROR

PERFORMANCE v S&P 500	1M	QTR	1YR	3YR	5YR	10YR	15YR
S&P 500 Buyback	-1.3%	2.5%	4.2%	-0.2%	2.7%	2.9%	4.2%
S&P 500 Enhanced Value	0.8%	10.7%	8.4%	-0.3%	2.6%	-1.1%	1.1%
S&P 500 Growth	-0.6%	-3.3%	-5.1%	0.2%	-0.1%	1.3%	-0.1%
S&P 500 Pure Value	-0.3%	5.5%	7.7%	-1.5%	3.5%	1.2%	3.7%
S&P 500 Quality	-0.1%	0.3%	-2.4%	-0.7%	-0.4%	2.5%	2.5%
S&P 500 Pure Growth	-1.7%	-4.5%	-7.7%	-1.9%	0.6%	2.9%	1.7%
S&P 500 Momentum	1.3%	-3.4%	-6.3%	-1.4%	-0.8%	-0.1%	0.5%
S&P 500 High Beta	-1.1%	8.1%	14.5%	-1.1%	1.2%	-3.9%	-2.9%
S&P 500 Equal Weight	-0.9%	0.0%	2.8%	-0.1%	0.9%	1.5%	2.6%
S&P 500 Value	0.6%	3.5%	5.4%	-0.4%	0.0%	-1.4%	0.0%
S&P 500 Low Volatility High Dividend	0.3%	-1.8%	10.7%	7.0%	0.4%	4.4%	5.0%
S&P 500 Dividend Aristocrats	-1.0%	-4.0%	-0.1%	0.5%	0.5%	2.8%	3.0%
S&P 500 High Dividend	-1.2%	-0.6%	13.0%	5.4%	1.4%	0.7%	2.9%
S&P 500 Minimum Volatility	0.0%	-3.2%	2.2%	2.5%	0.5%	0.8%	2.3%
S&P 500 Low Volatility	0.6%	-3.0%	-1.6%	1.7%	-1.6%	1.6%	2.4%

Performance figures for more than one year are annualized.

TRACKING ERROR v S&P 500 (ANN.)	1YR	3YR	5YR	10YR	15YR
S&P 500 Buyback	6.6%	4.7%	4.5%	5.7%	5.5%
S&P 500 Enhanced Value	8.6%	6.3%	6.9%	9.3%	8.4%
S&P 500 Growth	3.1%	2.7%	2.4%	3.1%	3.1%
S&P 500 Pure Value	7.5%	5.9%	6.8%	12.6%	11.7%
S&P 500 Quality	2.0%	2.0%	2.1%	3.2%	3.4%
S&P 500 Pure Growth	4.0%	5.0%	4.8%	5.6%	6.6%
S&P 500 Momentum	5.3%	4.9%	4.6%	6.6%	7.5%
S&P 500 High Beta	15.6%	10.9%	10.7%	15.0%	17.4%
S&P 500 Equal Weight	2.7%	2.4%	2.5%	4.5%	4.6%
S&P 500 Value	3.2%	2.9%	2.6%	3.4%	3.3%
S&P 500 Low Volatility High Dividend	7.5%	7.1%	7.5%	7.8%	7.5%
S&P 500 Dividend Aristocrats	5.6%	4.1%	4.1%	5.7%	5.6%
S&P 500 High Dividend	6.2%	7.0%	7.4%	9.9%	9.1%
S&P 500 Minimum Volatility	7.9%	5.6%	5.0%	6.0%	5.8%
S&P 500 Low Volatility	8.2%	6.8%	7.3%	8.1%	7.8%

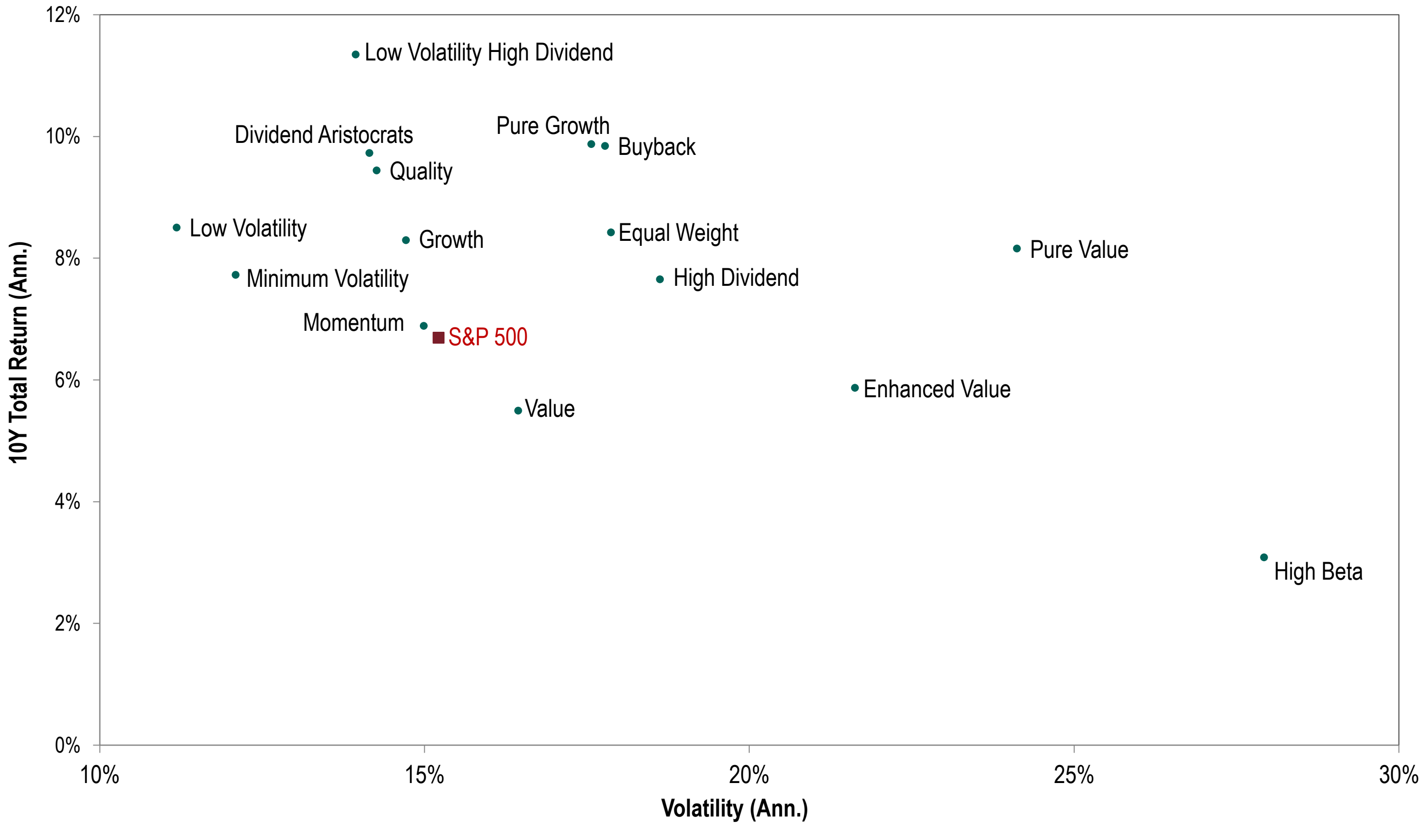
RELATIVE RETURN CORRELATIONS

	S&P 500 Low Volatility	S&P 500 Minimum Volatility	S&P 500 Low Volatility High Dividend	S&P 500 High Dividend	S&P 500 Dividend Aristocrats	S&P 500 Quality	S&P 500 Growth	S&P 500 Momentum	S&P 500 Pure Growth	S&P 500 Value	S&P 500 Equal Weight	S&P 500 Pure Value	S&P 500 Buyback	S&P 500 Enhanced Value	S&P 500 High Beta
S&P 500 Low Volatility	1.00	0.88	0.73	0.56	0.72	0.20	0.02	0.21	-0.15	-0.01	-0.10	-0.33	-0.46	-0.54	-0.68
S&P 500 Minimum Volatility	0.88	1.00	0.72	0.57	0.65	0.22	0.06	0.29	-0.11	-0.06	-0.12	-0.37	-0.47	-0.61	-0.65
S&P 500 Low Volatility High Dividend	0.73	0.72	1.00	0.89	0.62	0.03	-0.25	-0.07	-0.32	0.24	0.24	0.05	-0.20	-0.27	-0.31
S&P 500 High Dividend	0.56	0.57	0.89	1.00	0.53	-0.05	-0.39	-0.25	-0.33	0.38	0.46	0.30	0.02	-0.04	-0.03
S&P 500 Dividend Aristocrats	0.72	0.65	0.62	0.53	1.00	0.34	-0.27	0.02	-0.24	0.27	0.20	-0.04	-0.09	-0.26	-0.40
S&P 500 Quality	0.20	0.22	0.03	-0.05	0.34	1.00	0.22	0.22	0.21	-0.22	0.00	-0.27	0.08	-0.34	-0.19
S&P 500 Growth	0.02	0.06	-0.25	-0.39	-0.27	0.22	1.00	0.62	0.70	-1.00	-0.45	-0.73	-0.28	-0.68	-0.34
S&P 500 Momentum	0.21	0.29	-0.07	-0.25	0.02	0.22	0.62	1.00	0.57	-0.61	-0.28	-0.55	-0.28	-0.53	-0.41
S&P 500 Pure Growth	-0.15	-0.11	-0.32	-0.33	-0.24	0.21	0.70	0.57	1.00	-0.70	0.09	-0.31	0.13	-0.29	0.06
S&P 500 Value	-0.01	-0.06	0.24	0.38	0.27	-0.22	-1.00	-0.61	-0.70	1.00	0.45	0.72	0.28	0.68	0.32
S&P 500 Equal Weight	-0.10	-0.12	0.24	0.46	0.20	0.00	-0.45	-0.28	0.09	0.45	1.00	0.73	0.67	0.47	0.64
S&P 500 Pure Value	-0.33	-0.37	0.05	0.30	-0.04	-0.27	-0.73	-0.55	-0.31	0.72	0.73	1.00	0.58	0.82	0.71
S&P 500 Buyback	-0.46	-0.47	-0.20	0.02	-0.09	0.08	-0.28	-0.28	0.13	0.28	0.67	0.58	1.00	0.60	0.63
S&P 500 Enhanced Value	-0.54	-0.61	-0.27	-0.04	-0.26	-0.34	-0.68	-0.53	-0.29	0.68	0.47	0.82	0.60	1.00	0.67
S&P 500 High Beta	-0.68	-0.65	-0.31	-0.03	-0.40	-0.19	-0.34	-0.41	0.06	0.32	0.64	0.71	0.63	0.67	1.00

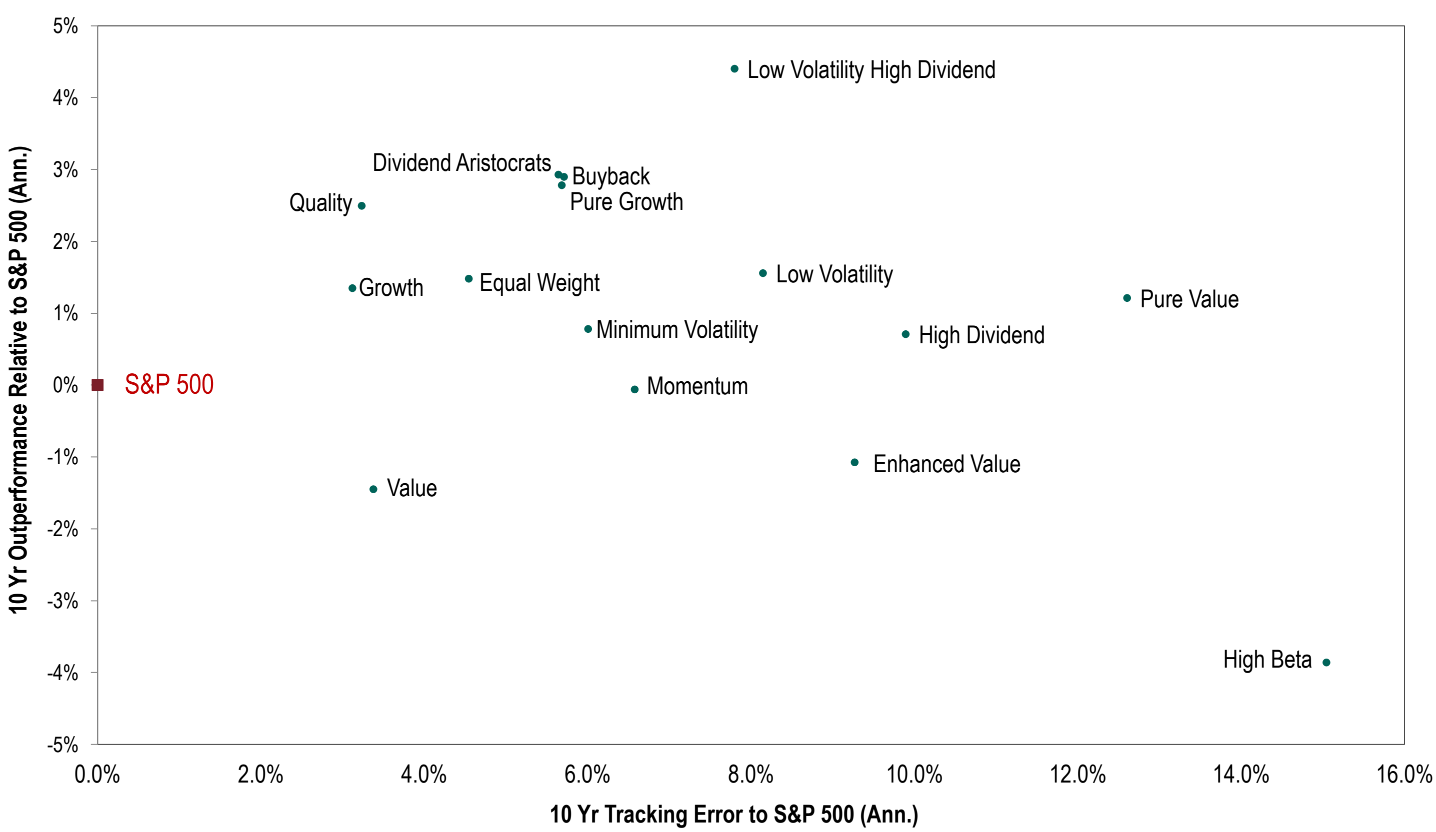
Correlation of weekly S&P 500 total return outperformance, three years to December 30th 2016

Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of December 30, 2016.

10 YEAR RISK & RETURN - ABSOLUTE



10 YEAR RISK & RETURN - RELATIVE TO S&P 500

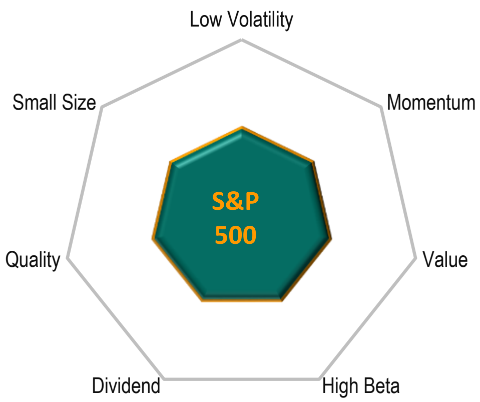


Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of December 30, 2016.

KEY TO FACTOR SCORINGS FOR INDICES

Factor Definitions

Each constituent of the S&P 500 index is provided with a factor "score" for each of Beta, Volatility, Momentum, Dividend, Size, Value and Quality.



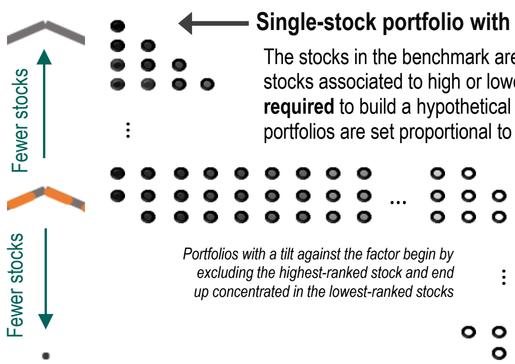
Factor	Measurement at single-stock level
Volatility	Trailing 12-month daily total return volatility
Momentum	12-month price change minus 1-month price change, divided by the daily price volatility during the eleven-month period that ended one month prior. For more details, see the S&P Momentum methodology
Value	The average of (normalized) earnings to price ratio, book to price ratio and sales to price ratio. For more details, see the S&P Value methodology.
Beta	Trailing 1 year daily total return beta to the benchmark
Dividend	Trailing 12-month dividend
Quality	The average of the (normalized) return on equity, the negative of the accruals ratio and the negative of the financial leverage ratio. For more details, see the S&P Quality methodology. Average and standard deviations for each metric follow below.
Size	Free-float market capitalization

Index Factor Ranking and Factor Diagram Scaling

Index Scores

Each factor index is then provided with an initial factor score based on the index-weighted average score of its components as of the report date. This is converted into a factor rank by making comparisons with the factor scores for hypothetical portfolios targeting or mitigating that particular factor. An illustration of the process may be found at this link.

Factor Diagram Axis



Single-stock portfolio with the highest possible factor score

The stocks in the benchmark are ranked in order from highest to lowest factor score, and we examine portfolios including vary ing numbers of stocks associated to high or lower factor scores. The rank of the **factor index** (and its size in the chart) reflects the **number of stocks required** to build a hypothetical portfolios matching the factor score of that index. The weights of stocks within the hypothetical comparison portfolios are set proportional to benchmark weights.

Benchmark Portfolio has a factor rank defined by that of a cap-weighted average score among all stocks

Weighting matters to the ranking of the index. Each the ranked portfolios of stocks is given a factor score through the capitalization-weighted average. Factor indices can use alternative weightings, which can provide higher factor exposures with fewer stocks.

Single-stock portfolio with the lowest possible factor score

Notes On Additional Index Statistics

Statistic	Notes
Active Share (Stock)	Ranging from 0 to 100%, "active share" is a measure of how much a portfolio's composition differs from that of its benchmark, and provides the amount of trading theoretically required to switch from a position in one to a position in the other. The Active Share (Stock) for each index is calculated as the absolute sum of difference between S&P 500 stock weights and Index stock weights, divided by two.
Active Share (Sector)	The Active Share (Sector) is the absolute sum of difference between S&P 500 sector weights and Index sector weights, divided by two.
Concentration (HH Index)	The Herfindahl-Hirschman ("HH") concentration measure is equal to the index constituent's percentage weights, squared. For example, the HH measure of a single-stock portfolio is 10,000 (the maximum possible). The HH measure of a 100-stock, equally weighted index is 100.
Correlation (Stock)	Calculated as the weighted-average 1Yr trailing daily volatility of current index constituents, divided by the 1Yr trailing daily Index volatility. The value approximates an average stock-to-stock correlation of index constituents, weighted proportionally to both constituent weight and constituent volatility.

SCALING VARIABLES FOR NORMALIZED SCORES

	VALUE			QUALITY			MOMENTUM	
	Earnings to Price	Book to Price	Sales to Price	Accrual Ratio	Return on Equity	Leverage Ratio	12M - 1M Return	Daily Price Volatility
S&P 500 index-weighted average	4.03%	32.8%	47.9%	8.01%	19.43%	1.22	9.45%	1.53%
S&P 500 index-weighted standard deviation	3.46%	29.6%	45.2%	22.68%	31.77%	1.35	19.18%	0.52%

Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of December 30, 2016.

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Index Dashboard: S&P 500® Factor Indices

Q4 2016

S&P 500 Low Volatility

Description

The S&P 500 Low Volatility Index is designed to measure the performance of the 100 stocks in the S&P 500 with the lowest volatility, measured on a 1-year trailing basis. The weighting of each stock is in inverse proportion to its volatility.

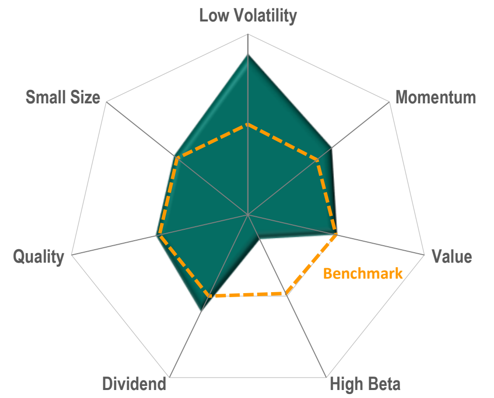
Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	2.6%	0.8%	10.4%	10.6%	13.0%	8.5%	9.1%
Relative to Benchmark	0.6%	-3.0%	-1.6%	1.7%	-1.6%	1.6%	2.4%
Index Volatility			8.82%	9.25%	9.12%	11.18%	10.24%
Tracking Error			8.20%	6.84%	7.31%	8.15%	7.84%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.68

Portfolio Statistics	
Active Share (Stock)	72%
Active Share (Sector)	38%
Concentration (HH Index)	101.1
Correlation (stock)	0.51
Average Market Cap ($ bn)	64.36

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Benchmark*	*Difference*
Utilities	23%	3%	20%
Consumer Staples	19%	9%	9%
Energy	0%	8%	-8%
Information Technology	4%	21%	-17%



S&P 500 Minimum Volatility

Description

The S&P 500 Minimum Volatility uses an optimization process to find the portfolio of S&P 500 stocks, and weights, that would have demonstrated the lowest volatility on a historical basis, subject to constraints maintaining limiting sector and factor exposures. As of December 31, 2016 the index comprised 96 constituents.

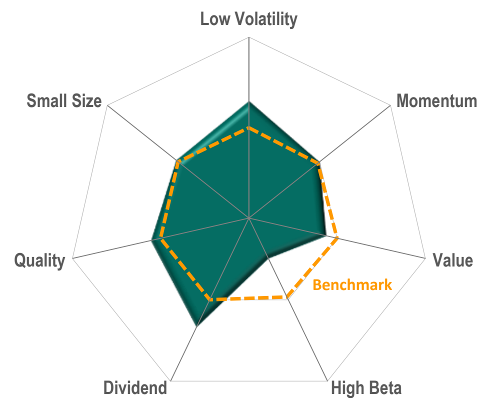
Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	2.0%	0.7%	14.2%	11.4%	15.2%	7.7%	9.0%
Relative to Benchmark	0.0%	-3.2%	2.2%	2.5%	0.5%	0.8%	2.3%
Index Volatility			7.82%	8.63%	8.41%	12.09%	11.41%
Tracking Error			7.91%	5.55%	4.95%	6.01%	5.78%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.76

Portfolio Statistics	
Active Share (Stock)	75%
Active Share (Sector)	26%
Concentration (HH Index)	156.0
Correlation (stock)	0.37
Average Market Cap ($ bn)	74.00

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Benchmark*	*Difference*
Consumer Staples	15%	9%	5%
Utilities	8%	3%	5%
Energy	2%	8%	-6%
Financials	3%	15%	-12%



S&P 500 Low Volatility High Dividend

Description

The S&P 500 Low Volatility High Dividend index measures the performance of the 50 least-volatile high dividend-yielding stocks in the S&P 500. Each component is weighted proportionally to its dividend yield.

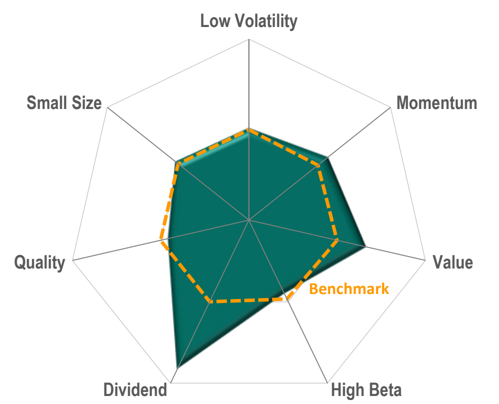
Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	2.3%	2.0%	22.7%	15.9%	15.0%	11.3%	11.6%
Relative to Benchmark	0.3%	-1.8%	10.7%	7.0%	0.4%	4.4%	5.0%
Index Volatility			10.53%	9.62%	9.41%	13.94%	13.03%
Tracking Error			7.52%	7.09%	7.52%	7.80%	7.47%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.87

Portfolio Statistics	
Active Share (Stock)	83%
Active Share (Sector)	39%
Concentration (HH Index)	208.2
Correlation (stock)	0.45
Average Market Cap ($ bn)	62.57

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Benchmark*	*Difference*
Utilities	18%	3%	15%
Real Estate	13%	3%	10%
Financials	6%	15%	-9%
Information Technology	12%	21%	-9%



S&P 500 Dividend Aristocrats

Description

The S&P 500 Dividend Aristocrats measures the performance S&P 500 companies that have increased dividends every year for the last 25 consecutive years. The Index is equally weighted at each rebalance. As of December 31, 2016 the index comprised 50 constituents.

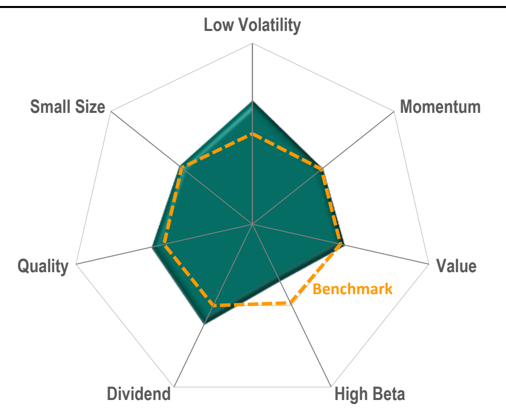
Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	1.0%	-0.2%	11.8%	9.3%	15.1%	9.7%	9.7%
Relative to Benchmark	-1.0%	-4.0%	-0.1%	0.5%	0.5%	2.8%	3.0%
Index Volatility			9.45%	10.22%	9.69%	14.15%	12.83%
Tracking Error			5.57%	4.12%	4.05%	5.68%	5.60%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.88

Portfolio Statistics	
Active Share (Stock)	83%
Active Share (Sector)	30%
Concentration (HH Index)	201.2
Correlation (stock)	0.46
Average Market Cap ($ bn)	68.15

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Benchmark*	*Difference*
Consumer Staples	25%	9%	16%
Materials	10%	3%	7%
Financials	10%	15%	-5%
Information Technology	2%	21%	-18%



Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of December 30, 2016.

Index Dashboard: S&P 500® Factor Indices

Q4 2016

S&P 500 Quality

Description

The S&P 500® Quality Index is designed to track the 100 stocks in the S&P 500 with the highest quality score, which is calculated based on return on equity, accruals ratio and financial leverage ratio. The weighting is proportional to both the quality score, and the market capitalization, of each component.

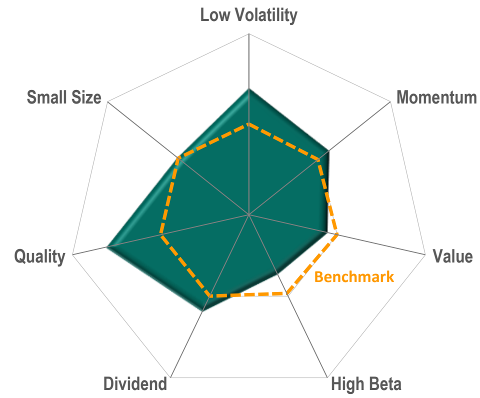
Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	1.9%	4.1%	9.6%	8.1%	14.2%	9.4%	9.2%
Relative to Benchmark	-0.1%	0.3%	-2.4%	-0.7%	-0.4%	2.5%	2.5%
Index Volatility			8.68%	10.61%	10.54%	14.26%	13.48%
Tracking Error			2.04%	2.03%	2.08%	3.23%	3.40%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.9

Portfolio Statistics	
Active Share (Stock)	81%
Active Share (Sector)	33%
Concentration (HH Index)	244.2
Correlation (stock)	0.42
Average Market Cap ($ bn)	94.49

Top Sector Tilts (versus benchmark)

Sector	Index	Benchmark	Difference
Industrials	21%	10%	11%
Consumer Staples	18%	9%	9%
Financials	6%	15%	-9%
Health Care	3%	14%	-11%



S&P 500 Value

Description

The S&P 500 Value comprises S&P 500 stocks with above-average combinations of book value-to-price, earnings-to-price, and sales-to-price. The weighting is by capitalization, although the weight of some stocks is divided between the Value and Growth indices. As of December 31, 2016 the index comprised 353 constituents.

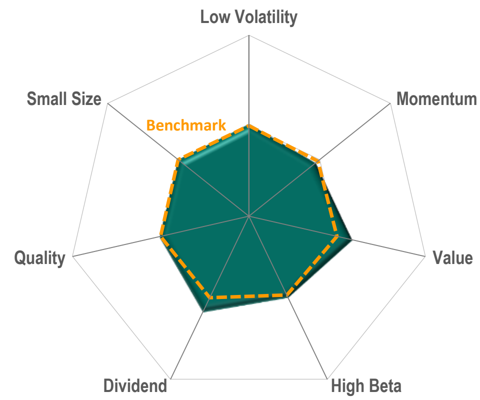
Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	2.5%	7.3%	17.4%	8.5%	14.7%	5.5%	6.7%
Relative to Benchmark	0.6%	3.5%	5.4%	-0.4%	0.0%	-1.4%	0.0%
Index Volatility			10.17%	10.59%	10.52%	16.44%	15.47%
Tracking Error			3.23%	2.95%	2.65%	3.38%	3.27%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.01

Portfolio Statistics	
Active Share (Stock)	35%
Active Share (Sector)	18%
Concentration (HH Index)	91.9
Correlation (stock)	0.43
Average Market Cap ($ bn)	121.39

Top Sector Tilts (versus benchmark)

Sector	Index	Benchmark	Difference
Financials	21%	15%	6%
Energy	11%	8%	4%
Consumer Discretionary	8%	12%	-4%
Information Technology	8%	21%	-13%



S&P 500 Enhanced Value

Description

The S&P 500 Enhanced Value is designed to measure the performance of the 100 stocks in the S&P 500® with the highest average book value-to-price, earnings-to-price, and sales-to-price. The weighting is proportional to both the value score and the market capitalization of each component.

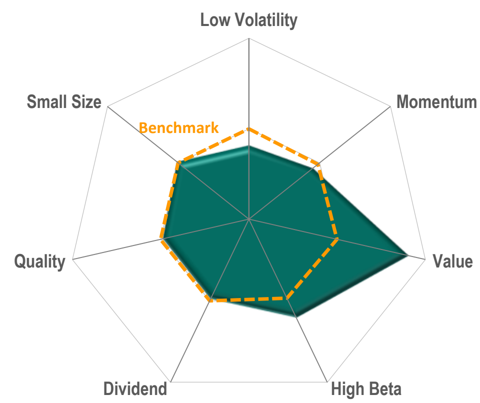
Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	2.7%	14.6%	20.4%	8.5%	17.2%	5.9%	7.8%
Relative to Benchmark	0.8%	10.7%	8.4%	-0.3%	2.6%	-1.1%	1.1%
Index Volatility			15.25%	13.39%	13.84%	21.63%	19.54%
Tracking Error			8.56%	6.30%	6.92%	9.27%	8.42%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.25

Portfolio Statistics	
Active Share (Stock)	83%
Active Share (Sector)	30%
Concentration (HH Index)	231.5
Correlation (stock)	0.56
Average Market Cap ($ bn)	96.48

Top Sector Tilts (versus benchmark)

Sector	Index	Benchmark	Difference
Financials	40%	15%	25%
Consumer Staples	14%	9%	4%
Industrials	5%	10%	-6%
Information Technology	4%	21%	-17%



S&P 500 Pure Value

Description

The S&P 500 Pure Value comprises S&P 500 stocks with 100% of their market cap in the S&P 500 Value index and a value score in the highest quartile. The weighting is proportional to the value score. As of December 31, 2016 the index comprised 117 constituents.

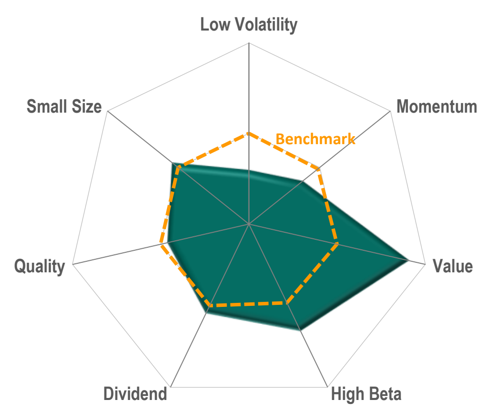
Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	1.7%	9.3%	19.6%	7.4%	18.2%	8.2%	10.4%
Relative to Benchmark	-0.3%	5.5%	7.7%	-1.5%	3.5%	1.2%	3.7%
Index Volatility			14.39%	13.49%	14.04%	24.12%	21.79%
Tracking Error			7.52%	5.93%	6.75%	12.60%	11.67%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.24

Portfolio Statistics	
Active Share (Stock)	82%
Active Share (Sector)	27%
Concentration (HH Index)	106.5
Correlation (stock)	0.47
Average Market Cap ($ bn)	40.75

Top Sector Tilts (versus benchmark)

Sector	Index	Benchmark	Difference
Financials	32%	15%	17%
Consumer Discretionary	18%	12%	6%
Industrials	7%	10%	-4%
Information Technology	5%	21%	-16%



Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of December 30, 2016.

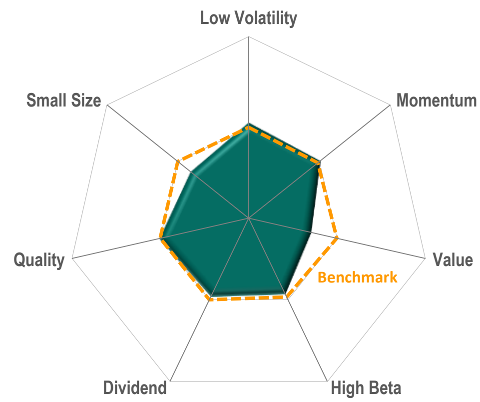
S&P Dow Jones Indices
A Division of S&P Global

Index Dashboard: S&P 500® Factor Indices
Q4 2016

S&P 500 Growth

Description

The S&P 500 Growth is comprises S&P 500 stocks with above-average combinations of the ratio of earnings growth to price, sales growth, and momentum. The weighting is by capitalization, although the weight of some stocks is divided between the Value and Growth indices. As of December 31, 2016 the index comprised 319 constituents.



Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	1.4%	0.5%	6.9%	9.0%	14.5%	8.3%	6.6%
Relative to Benchmark	-0.6%	-3.3%	-5.1%	0.2%	-0.1%	1.3%	-0.1%
Index Volatility			9.88%	11.04%	10.46%	14.71%	13.80%
Tracking Error			3.12%	2.75%	2.43%	3.12%	3.09%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.99

Portfolio Statistics	
Active Share (Stock)	32%
Active Share (Sector)	16%
Concentration (HH Index)	109.2
Correlation (stock)	0.42
Average Market Cap ($ bn)	145.86

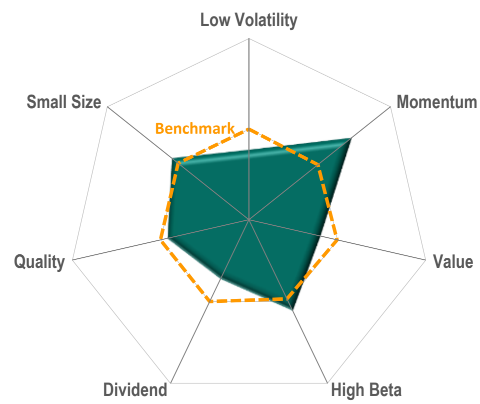
Top Sector Tilts (versus benchmark)

Sector	*Index*	*Benchmark*	*Difference*
Information Technology	28%	21%	7%
Consumer Discretionary	15%	12%	3%
Energy	4%	8%	-3%
Financials	4%	15%	-10%

S&P 500 Pure Growth

Description

The S&P 500 Pure Growth comprises those S&P 500 stocks with 100% of their market cap in the S&P 500 Growth index and a growth score in the highest quartile. The weighting is proportional to the growth score. As of December 31, 2016 the index comprised 114 constituents.



Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	0.3%	-0.7%	4.2%	7.0%	15.2%	9.9%	8.4%
Relative to Benchmark	-1.7%	-4.5%	-7.7%	-1.9%	0.6%	2.9%	1.7%
Index Volatility			11.62%	11.58%	11.71%	17.57%	17.72%
Tracking Error			3.96%	4.99%	4.81%	5.64%	6.59%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.1

Portfolio Statistics	
Active Share (Stock)	81%
Active Share (Sector)	33%
Concentration (HH Index)	104.7
Correlation (stock)	0.42
Average Market Cap ($ bn)	39.75

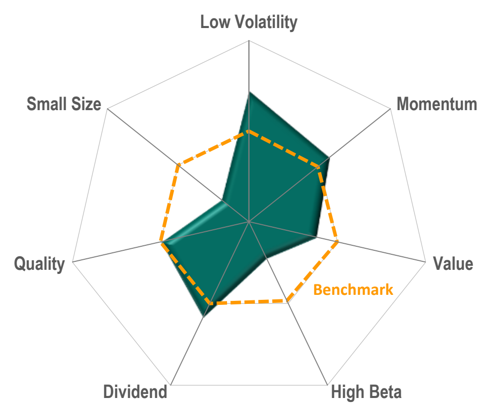
Top Sector Tilts (versus benchmark)

Sector	*Index*	*Benchmark*	*Difference*
Consumer Discretionary	24%	12%	12%
Information Technology	29%	21%	9%
Consumer Staples	1%	9%	-8%
Financials	5%	15%	-10%

S&P 500 Momentum

Description

The S&P 500 Momentum Index comprises the top 100 stocks in the S&P 500® based on 12M prior risk-adjusted performance (excluding the most recent month at the rebalance). The weighting is inversely proportional to the trailing volatility of each component.



Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	3.2%	0.5%	5.7%	7.5%	13.9%	6.9%	7.2%
Relative to Benchmark	1.3%	-3.4%	-6.3%	-1.4%	-0.8%	-0.1%	0.5%
Index Volatility			8.90%	10.42%	10.09%	14.99%	14.04%
Tracking Error			5.32%	4.94%	4.64%	6.57%	7.53%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.88

Portfolio Statistics	
Active Share (Stock)	74%
Active Share (Sector)	28%
Concentration (HH Index)	327.0
Correlation (stock)	0.44
Average Market Cap ($ bn)	172.89

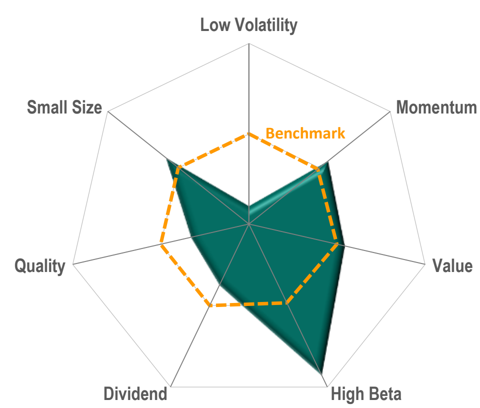
Top Sector Tilts (versus benchmark)

Sector	*Index*	*Benchmark*	*Difference*
Telecommunication Services	12%	3%	9%
Utilities	10%	3%	7%
Energy	0%	8%	-8%
Financials	1%	15%	-14%

S&P 500 High Beta

Description

The S&P 500 High Beta is designed to measure the performance of the top 100 stocks in the S&P 500® by sensitivity to market returns. The weighting is in proportional to the beta coefficient of each constituent.



Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	0.9%	11.9%	26.5%	7.7%	15.9%	3.1%	3.8%
Relative to Benchmark	-1.1%	8.1%	14.5%	-1.1%	1.2%	-3.9%	-2.9%
Index Volatility			21.97%	18.13%	17.41%	27.92%	29.16%
Tracking Error			15.64%	10.92%	10.65%	15.04%	17.37%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.67

Portfolio Statistics	
Active Share (Stock)	87%
Active Share (Sector)	40%
Concentration (HH Index)	107.3
Correlation (stock)	0.51
Average Market Cap ($ bn)	26.97

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Benchmark*	*Difference*
Energy	30%	8%	22%
Financials	31%	15%	16%
Consumer Staples	0%	9%	-9%
Information Technology	11%	21%	-10%

Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of December 30, 2016.

S&P 500 Buyback

Description

The S&P 500 Buyback index is designed to measure the performance of the top 100 stocks in the S&P 500® by buyback ratio. The components are equally weighted.

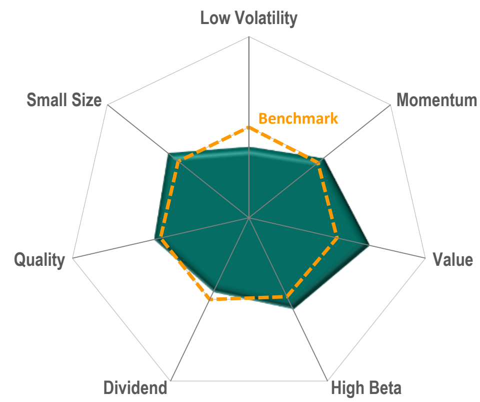
Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	0.7%	6.3%	16.2%	8.6%	17.4%	9.8%	10.9%
Relative to Benchmark	-1.3%	2.5%	4.2%	-0.2%	2.7%	2.9%	4.2%
Index Volatility			13.19%	12.82%	12.36%	17.78%	15.91%
Tracking Error			6.64%	4.68%	4.54%	5.71%	5.54%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.14

Portfolio Statistics	
Active Share (Stock)	86%
Active Share (Sector)	26%
Concentration (HH Index)	100.6
Correlation (stock)	0.47
Average Market Cap ($ bn)	30.11

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Benchmark*	*Difference*
Consumer Discretionary	23%	12%	11%
Industrials	20%	10%	10%
Energy	1%	8%	-6%
Health Care	5%	14%	-8%



S&P 500 Equal Weight

Description

The S&P 500 Equal Weight comprises all 500 stocks in the S&P 500, equally weighted.

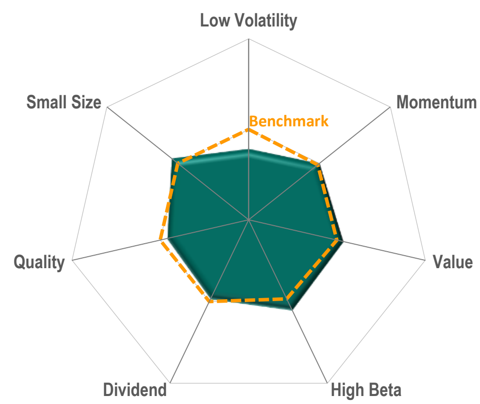
Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	1.1%	3.8%	14.8%	8.7%	15.5%	8.4%	9.3%
Relative to Benchmark	-0.9%	0.0%	2.8%	-0.1%	0.9%	1.5%	2.6%
Index Volatility			11.17%	11.03%	10.81%	17.87%	16.88%
Tracking Error			2.74%	2.42%	2.47%	4.54%	4.60%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.09

Portfolio Statistics	
Active Share (Stock)	44%
Active Share (Sector)	15%
Concentration (HH Index)	20.0
Correlation (stock)	0.40
Average Market Cap ($ bn)	40.36

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Benchmark*	*Difference*
Consumer Discretionary	16%	12%	4%
Industrials	14%	10%	3%
Financials	13%	15%	-2%
Information Technology	13%	21%	-7%



S&P 500 High Dividend

Description

The S&P 500 High Dividend Index is constructed from the 80 constituents of the S&P 500 with the highest indicated dividend yield. The index is equal weighted.

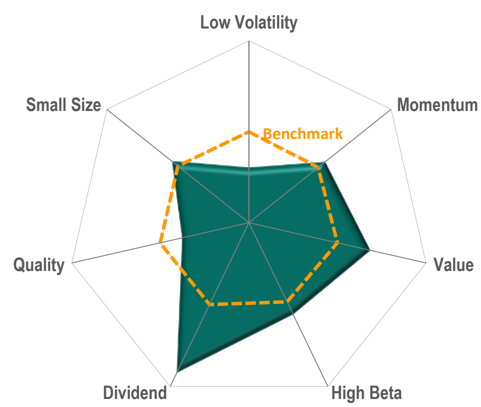
Index Statistics	1M	3M	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	0.8%	3.2%	25.0%	14.2%	16.0%	7.7%	9.6%
Relative to Benchmark	-1.2%	-0.6%	13.0%	5.4%	1.4%	0.7%	2.9%
Index Volatility			10.19%	9.90%	9.71%	18.62%	16.92%
Tracking Error			6.20%	7.00%	7.38%	9.89%	9.07%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.94

Portfolio Statistics	
Active Share (Stock)	83%
Active Share (Sector)	37%
Concentration (HH Index)	128.1
Correlation (stock)	0.34
Average Market Cap ($ bn)	41.52

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Benchmark*	*Difference*
Utilities	15%	3%	12%
Real Estate	12%	3%	9%
Health Care	4%	14%	-10%
Information Technology	8%	21%	-13%



Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of December 30, 2016.

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Another limitation of using back-tested information is that the back-tested calculation is generally prepared with the benefit of hindsight. Back-tested data and/or information reflects the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities, fixed income, or commodities markets in general which cannot be, and have not been accounted for in the preparation of the index information set forth, all of which can affect actual performance.

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taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US $5,375, and a cumulative net return of 27.2% (or US $27,200).