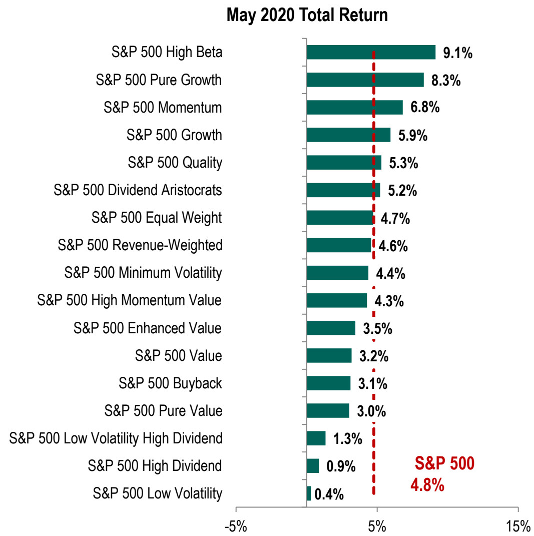
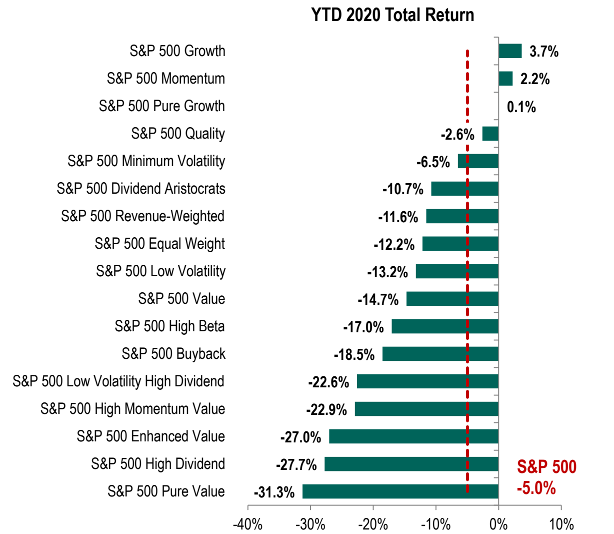
Index Dashboard: S&P 500® Factor Indices

May 2020

QUARTER AND FULL YEAR PERFORMANCE SUMMARY





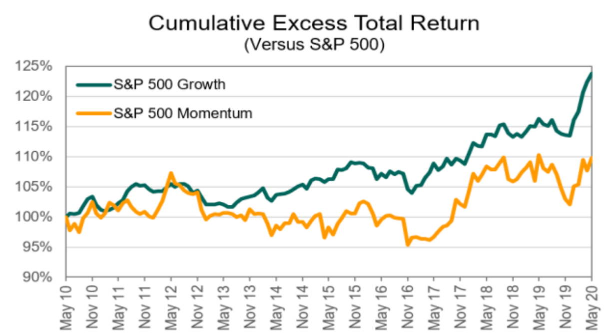
COMMENTARY

It was a moderately good month for the S&P 500 factor index suite. Every factor index gained ground, but for the eighth consecutive month, a majority of our reported indices underperformed the capitalization-weighted S&P 500.

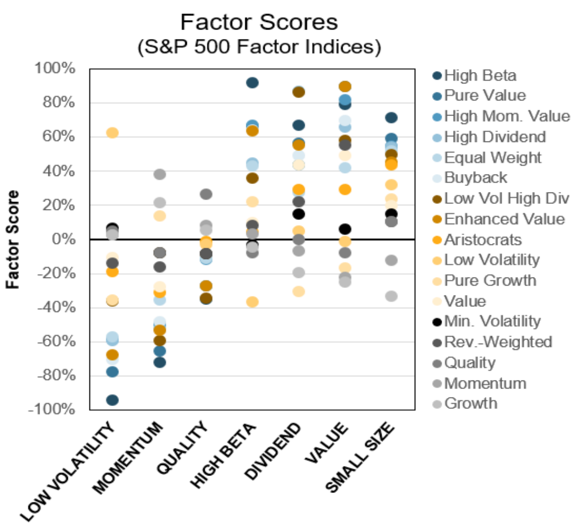
Growth and momentum – themselves particularly well-represented among the benchmark's largest stocks - continued to lead the market higher. But not all the performance came from recent winners: in what was generally a "risk on" month for equities, High Beta picked up on a resurgence in the benchmark's more market-sensitive names and topped the returns table with 9%. Quality and Dividend Aristocrats were among the few other factors to deliver market-beating performance in May.

Taking a slightly longer-term view, growth and momentum have outperformed the S&P 500 for over a decade, boasting double-digit cumulative excess total returns since May 2010.

Momentum's falter in late 2019 left it trailing growth, but their excess returns have otherwise followed a similar pattern, and both have seen a major acceleration in relative returns in the past six months.



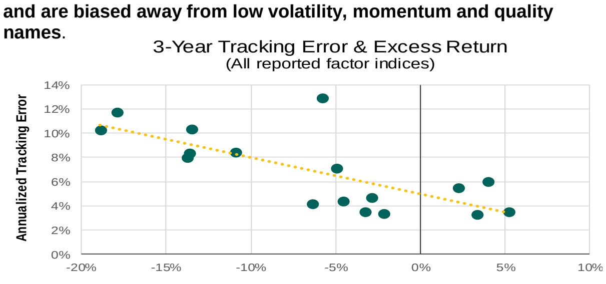
Excess Return	1M	3M	12M	3Y	5Y	10Y
S&P 500 Momentum	2%	4%	-1%	15%	12%	11%
S&P 500 Growth	1%	5%	7%	15%	18%	27%



The continued strength and increasing weights of a few mega-cap names at the top of the market - and their similar factor characteristics - has biased nearly all our factor indices in an opposite direction.

Summarizing the factor exposures of our reported indices (full details follow in the subsequent tables): compared to the S&P 500**, most factor indices are now biased towards small, high beta and value stocks, and are biased away from low volatility, momentum and quality names**.

In part because deviating from benchmark weights, all else being equal, has recently been more likely to generate tilts *away* from some of the better-performing factors, there is an an increasingly **strong negative correlation between each factor's historical tracking error** (a measure of its difference to the benchmark**) and its excess return** over the historical medium-term. The 15-year plot may be found on page 4 of this report, while the 3-year version (right) tells a similar story.

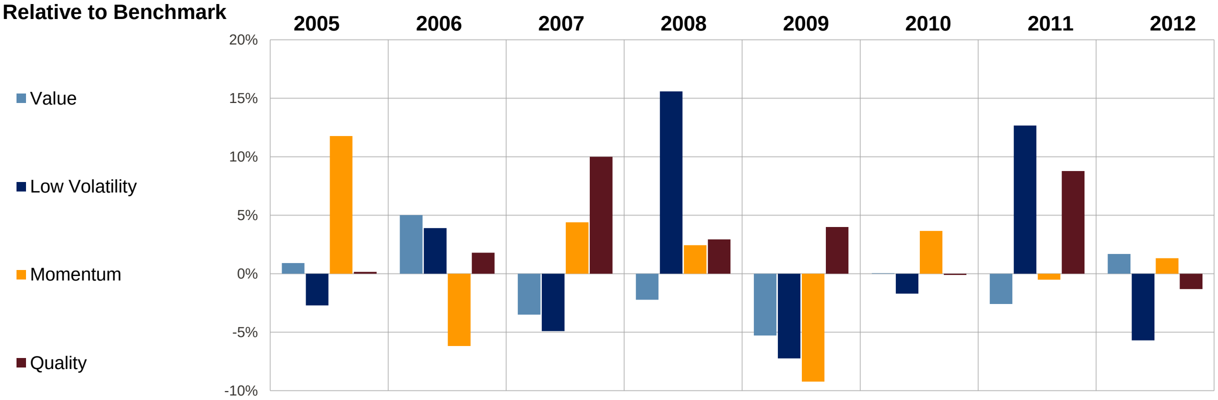


ANNUAL PERFORMANCE

Core factor performance by calendar year, 2005-present:

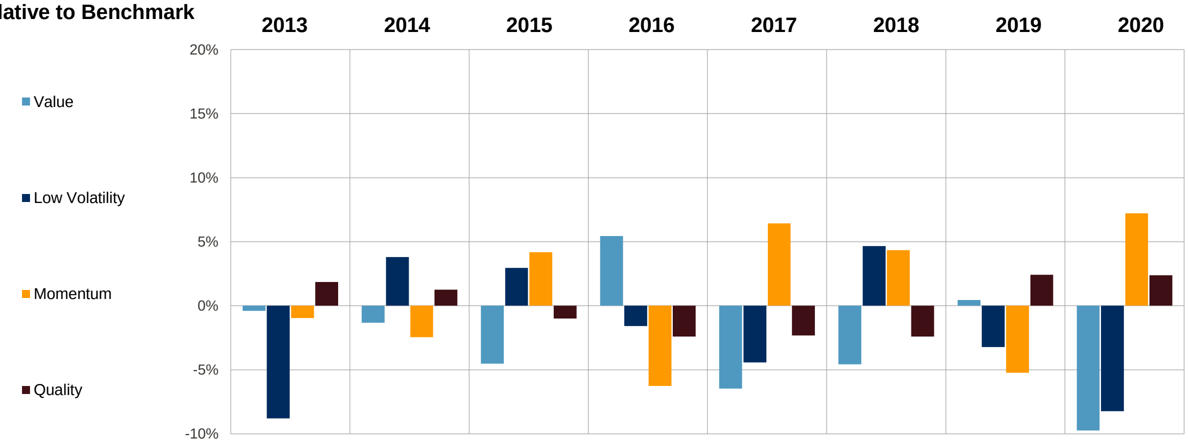
Total Return	2005	2006	2007	2008	2009	2010	2011	2012
Value	5.82%	20.80%	1.99%	-39.22%	21.18%	15.10%	-0.48%	17.68%
Low Volatility	2.20%	19.69%	0.58%	-21.41%	19.22%	13.36%	14.78%	10.30%
Momentum	16.69%	9.61%	9.89%	-34.56%	17.24%	18.72%	1.60%	17.33%
Quality	5.07%	17.59%	15.50%	-34.06%	30.46%	14.95%	10.89%	14.68%
S&P 500	4.91%	15.79%	5.49%	-37.00%	26.46%	15.06%	2.11%	16.00%

Relative to Benchmark

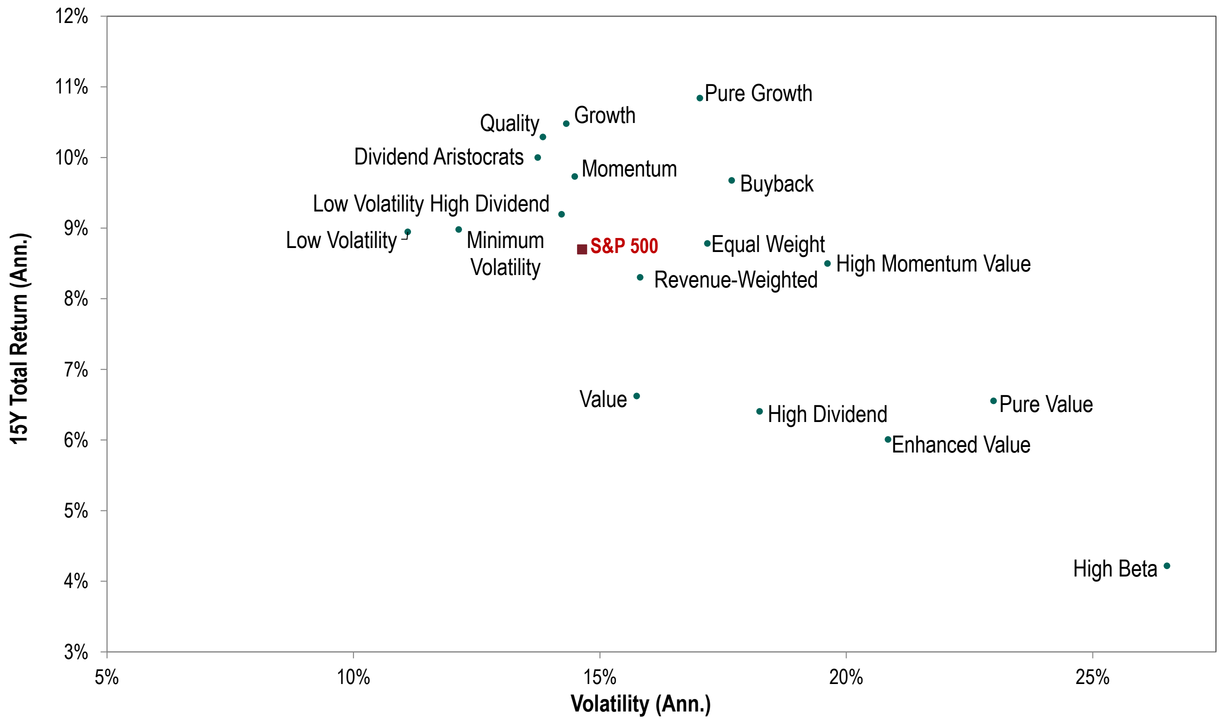


Total Return	2013	2014	2015	2016	2017	2018	2019	2020
Value	31.99%	12.36%	-3.13%	17.40%	15.36%	-8.95%	31.93%	-14.71%
Low Volatility	23.59%	17.49%	4.34%	10.37%	17.41%	0.27%	28.26%	-13.20%
Momentum	31.42%	11.23%	5.56%	5.70%	28.27%	-0.04%	26.25%	2.24%
Quality	34.24%	14.95%	0.38%	9.56%	19.51%	-6.79%	33.91%	-2.60%
S&P 500	32.39%	13.69%	1.38%	11.96%	21.83%	-4.38%	31.49%	-4.97%

Relative to Benchmark



15 YEAR RISK & RETURN - ABSOLUTE



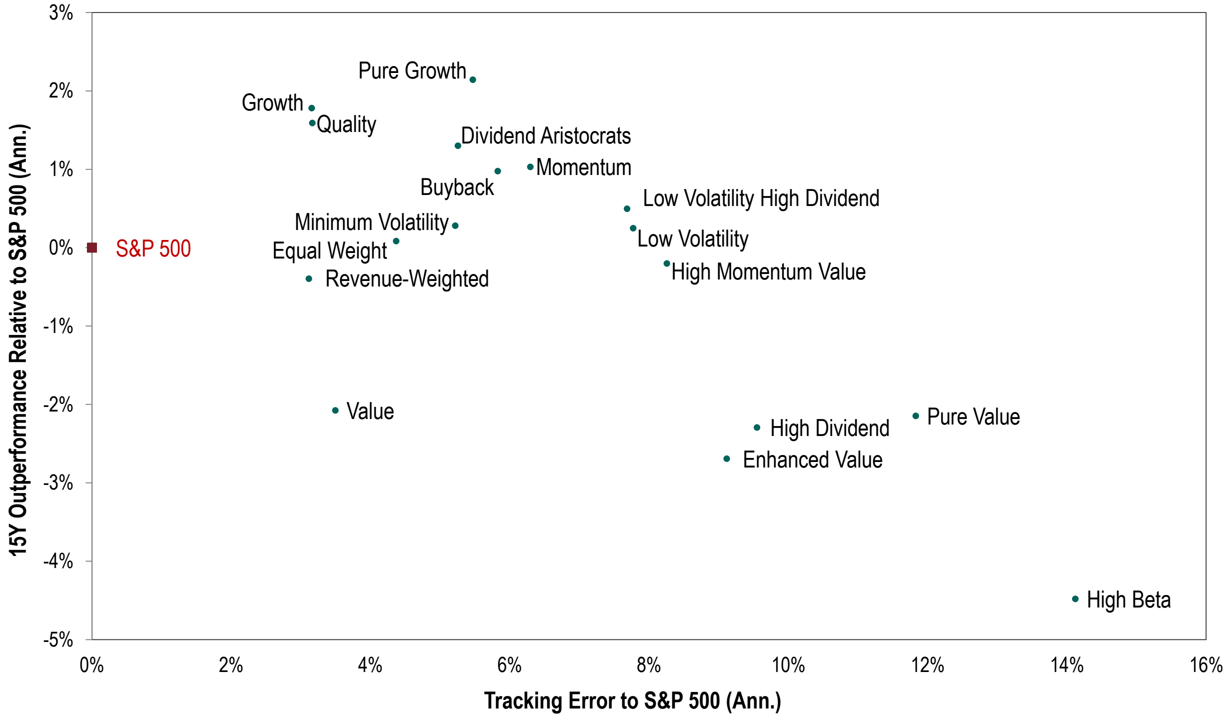
TOTAL RETURN AND VOLATILITY

TOTAL RETURN	1M	3M	12M	3Y	5Y	10Y	15Y
S&P 500 Low Volatility High Dividend	1.3%	-11.0%	-12.2%	-1.8%	4.8%	10.7%	9.2%
S&P 500 Buyback	3.1%	-6.7%	-1.8%	4.8%	5.4%	12.7%	9.7%
S&P 500 High Momentum Value	4.3%	-11.2%	-9.7%	-2.2%	2.2%	10.4%	8.5%
S&P 500 Dividend Aristocrats	5.2%	0.4%	5.6%	8.0%	8.6%	13.2%	10.0%
S&P 500 Pure Growth	8.3%	6.6%	13.9%	11.4%	9.9%	15.0%	10.8%
S&P 500 Pure Value	3.0%	-15.9%	-19.1%	-4.3%	-0.6%	8.8%	6.6%
S&P 500 Low Volatility	0.4%	-6.9%	-3.4%	6.3%	8.7%	12.3%	8.9%
S&P 500 Equal Weight	4.7%	-1.7%	2.4%	5.3%	6.3%	11.7%	8.8%
S&P 500 Growth	5.9%	9.2%	20.1%	15.0%	13.3%	15.6%	10.5%
S&P 500 Quality	5.3%	7.4%	16.1%	10.3%	9.1%	13.7%	10.3%
S&P 500 High Dividend	0.9%	-16.5%	-17.4%	-2.5%	2.8%	10.1%	6.4%
S&P 500 Revenue-Weighted	4.6%	-0.1%	5.8%	6.0%	6.6%	12.0%	8.3%
S&P 500 Minimum Volatility	4.4%	1.5%	9.5%	9.1%	9.9%	13.7%	9.0%
S&P 500 Momentum	6.8%	8.0%	12.4%	15.0%	12.3%	14.2%	9.7%
S&P 500 Enhanced Value	3.5%	-11.4%	-10.5%	-0.4%	2.8%	9.7%	6.0%
S&P 500 Value	3.2%	-3.2%	4.2%	4.7%	5.8%	10.3%	6.6%
S&P 500 High Beta	9.1%	-4.7%	0.6%	3.7%	3.9%	8.5%	4.2%
S&P 500	4.8%	3.6%	12.8%	10.2%	9.9%	13.2%	8.7%

Performance figures for more than one year are annualized.

VOLATILITY (ANN.)	12M	3Y	5Y	10Y	15Y
S&P 500 Low Volatility High Dividend	26.4%	18.1%	15.8%	13.0%	14.2%
S&P 500 Buyback	30.3%	21.6%	19.1%	16.4%	17.7%
S&P 500 High Momentum Value	31.8%	22.0%	18.8%	16.6%	19.6%
S&P 500 Dividend Aristocrats	21.9%	16.0%	14.1%	12.6%	13.7%
S&P 500 Pure Growth	25.9%	19.4%	17.0%	15.9%	17.0%
S&P 500 Pure Value	36.9%	25.4%	21.9%	19.4%	23.0%
S&P 500 Low Volatility	17.9%	13.5%	12.2%	10.6%	11.1%
S&P 500 Equal Weight	26.9%	19.2%	16.7%	15.4%	17.2%
S&P 500 Growth	20.9%	16.3%	14.8%	13.4%	14.3%
S&P 500 Quality	20.4%	15.7%	14.0%	12.8%	13.8%
S&P 500 High Dividend	32.9%	21.7%	18.3%	14.9%	18.2%
S&P 500 Revenue-Weighted	23.8%	17.7%	15.5%	14.4%	15.8%
S&P 500 Minimum Volatility	20.2%	15.1%	13.1%	11.3%	12.1%
S&P 500 Momentum	18.0%	15.9%	14.1%	13.7%	14.5%
S&P 500 Enhanced Value	34.3%	23.6%	20.7%	18.5%	20.8%
S&P 500 Value	24.2%	17.5%	15.4%	14.3%	15.7%
S&P 500 High Beta	38.5%	27.3%	24.9%	23.5%	26.5%
S&P 500	22.1%	16.5%	14.7%	13.5%	14.6%

RELATIVE TO S&P 500



RELATIVE RETURN AND TRACKING ERROR

PERFORMANCE v S&P 500	1M	QTR	1YR	3YR	5YR	10YR	15YR
S&P 500 Low Volatility High Dividend	-3.4%	-14.6%	-25.0%	-12.0%	-5.1%	-2.5%	0.5%
S&P 500 Buyback	-1.7%	-10.3%	-14.7%	-5.4%	-4.5%	-0.5%	1.0%
S&P 500 High Momentum Value	-0.5%	-14.8%	-22.5%	-12.4%	-7.7%	-2.8%	-0.2%
S&P 500 Dividend Aristocrats	0.4%	-3.1%	-7.3%	-2.3%	-1.3%	0.1%	1.3%
S&P 500 Pure Growth	3.5%	3.0%	1.1%	1.2%	0.0%	1.9%	2.1%
S&P 500 Pure Value	-1.7%	-19.5%	-32.0%	-14.5%	-10.5%	-4.3%	-2.1%
S&P 500 Low Volatility	-4.4%	-10.5%	-16.2%	-4.0%	-1.2%	-0.9%	0.2%
S&P 500 Equal Weight	-0.1%	-5.3%	-10.4%	-4.9%	-3.5%	-1.4%	0.1%
S&P 500 Growth	1.2%	5.6%	7.2%	4.8%	3.4%	2.4%	1.8%
S&P 500 Quality	0.5%	3.8%	3.3%	0.1%	-0.7%	0.6%	1.6%
S&P 500 High Dividend	-3.9%	-20.1%	-30.2%	-12.8%	-7.0%	-3.0%	-2.3%
S&P 500 Revenue-Weighted	-0.2%	-3.7%	-7.1%	-4.2%	-3.3%	-1.2%	-0.4%
S&P 500 Minimum Volatility	-0.4%	-2.1%	-3.3%	-1.1%	0.1%	0.6%	0.3%
S&P 500 Momentum	2.1%	4.4%	-0.4%	4.8%	2.5%	1.1%	1.0%
S&P 500 Enhanced Value	-1.3%	-15.0%	-23.3%	-10.6%	-7.0%	-3.4%	-2.7%
S&P 500 Value	-1.6%	-6.8%	-8.6%	-5.5%	-4.1%	-2.8%	-2.1%
S&P 500 High Beta	4.4%	-8.3%	-12.2%	-6.5%	-6.0%	-4.7%	-4.5%

Performance figures for more than one year are annualized.

TRACKING ERROR v S&P 500 (ANN.)	1YR	3YR	5YR	10YR	15YR
S&P 500 Low Volatility High Dividend	9.0%	8.1%	8.1%	8.2%	7.7%
S&P 500 Buyback	10.2%	7.2%	6.6%	5.4%	5.8%
S&P 500 High Momentum Value	11.9%	8.3%	7.3%	6.1%	8.3%
S&P 500 Dividend Aristocrats	4.0%	4.7%	4.6%	4.5%	5.3%
S&P 500 Pure Growth	6.5%	5.6%	5.1%	5.4%	5.5%
S&P 500 Pure Value	16.9%	11.8%	10.2%	8.7%	11.8%
S&P 500 Low Volatility	11.3%	8.4%	7.8%	8.1%	7.8%
S&P 500 Equal Weight	5.9%	4.3%	3.8%	3.3%	4.4%
S&P 500 Growth	4.1%	3.5%	3.4%	2.9%	3.2%
S&P 500 Quality	3.3%	3.3%	2.8%	3.1%	3.2%
S&P 500 High Dividend	14.4%	10.4%	9.3%	8.6%	9.6%
S&P 500 Revenue-Weighted	3.7%	3.5%	3.1%	2.7%	3.1%
S&P 500 Minimum Volatility	3.9%	3.4%	4.9%	5.1%	5.2%
S&P 500 Momentum	7.4%	6.1%	5.6%	5.1%	6.3%
S&P 500 Enhanced Value	14.6%	10.4%	9.4%	7.9%	9.1%
S&P 500 Value	4.8%	4.2%	3.9%	3.3%	3.5%
S&P 500 High Beta	17.7%	12.5%	12.8%	12.1%	14.1%

Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of May 29, 2020.

S&P Dow Jones Indices

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DEGREE OF PORTFOLIO OVERLAP AND RELATIVE RETURN CORRELATIONS

PORTFOLIO OVERLAP

	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 Pure Growth	S&P 500 Momentum	S&P 500 Revenue-Weighted	S&P 500 High Momentum Value	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**
S&P 500 Low Volatility	100%	28%	14%	10%	22%	15%	19%	9%	15%	26%	12%	31%	19%	6%	10%	6%	0%	27%
S&P 500 Minimum Volatility	28%	100%	16%	14%	18%	15%	23%	11%	25%	32%	13%	35%	19%	12%	8%	10%	4%	34%
S&P 500 Low Volatility High Dividend	14%	16%	100%	61%	12%	8%	1%	0%	4%	12%	18%	22%	10%	14%	5%	10%	9%	10%
S&P 500 High Dividend	10%	14%	61%	100%	13%	6%	3%	2%	4%	16%	19%	22%	13%	20%	12%	14%	20%	11%
S&P 500 Dividend Aristocrats	22%	18%	12%	13%	100%	11%	11%	4%	9%	18%	11%	22%	13%	8%	4%	6%	3%	16%
S&P 500 Quality	15%	15%	8%	6%	11%	100%	26%	13%	24%	18%	7%	23%	18%	4%	13%	4%	5%	26%
S&P 500 Growth	19%	23%	1%	3%	11%	26%	100%	36%	42%	39%	5%	28%	35%	0%	11%	1%	7%	70%
S&P 500 Pure Growth	9%	11%	0%	2%	4%	13%	36%	100%	26%	15%	9%	0%	22%	0%	18%	5%	15%	25%
S&P 500 Momentum	15%	25%	4%	4%	9%	24%	42%	26%	100%	18%	7%	16%	19%	2%	7%	4%	5%	32%
S&P 500 Revenue-Weighted	26%	32%	12%	16%	18%	18%	39%	15%	18%	100%	24%	58%	48%	30%	19%	26%	14%	62%
S&P 500 High Momentum Value	12%	13%	18%	19%	11%	7%	5%	9%	7%	24%	100%	24%	20%	35%	29%	35%	25%	15%
S&P 500 Value	31%	35%	22%	22%	22%	23%	28%	0%	16%	58%	24%	100%	47%	23%	18%	20%	13%	58%
S&P 500 Equal Weight	19%	19%	10%	13%	13%	18%	35%	22%	19%	48%	20%	47%	100%	21%	20%	19%	21%	49%
S&P 500 Pure Value	6%	12%	14%	20%	8%	4%	0%	0%	2%	30%	35%	23%	21%	100%	24%	53%	34%	12%
S&P 500 Buyback	10%	8%	5%	12%	4%	13%	11%	18%	7%	19%	29%	18%	20%	24%	100%	21%	34%	15%
S&P 500 Enhanced Value	6%	10%	10%	14%	6%	4%	1%	5%	4%	26%	35%	20%	19%	53%	21%	100%	24%	9%
S&P 500 High Beta	0%	4%	9%	20%	3%	5%	7%	15%	5%	14%	25%	13%	21%	34%	34%	24%	100%	11%

"Portfolio Overlap" is percentage of index weights held in common between any two indices.

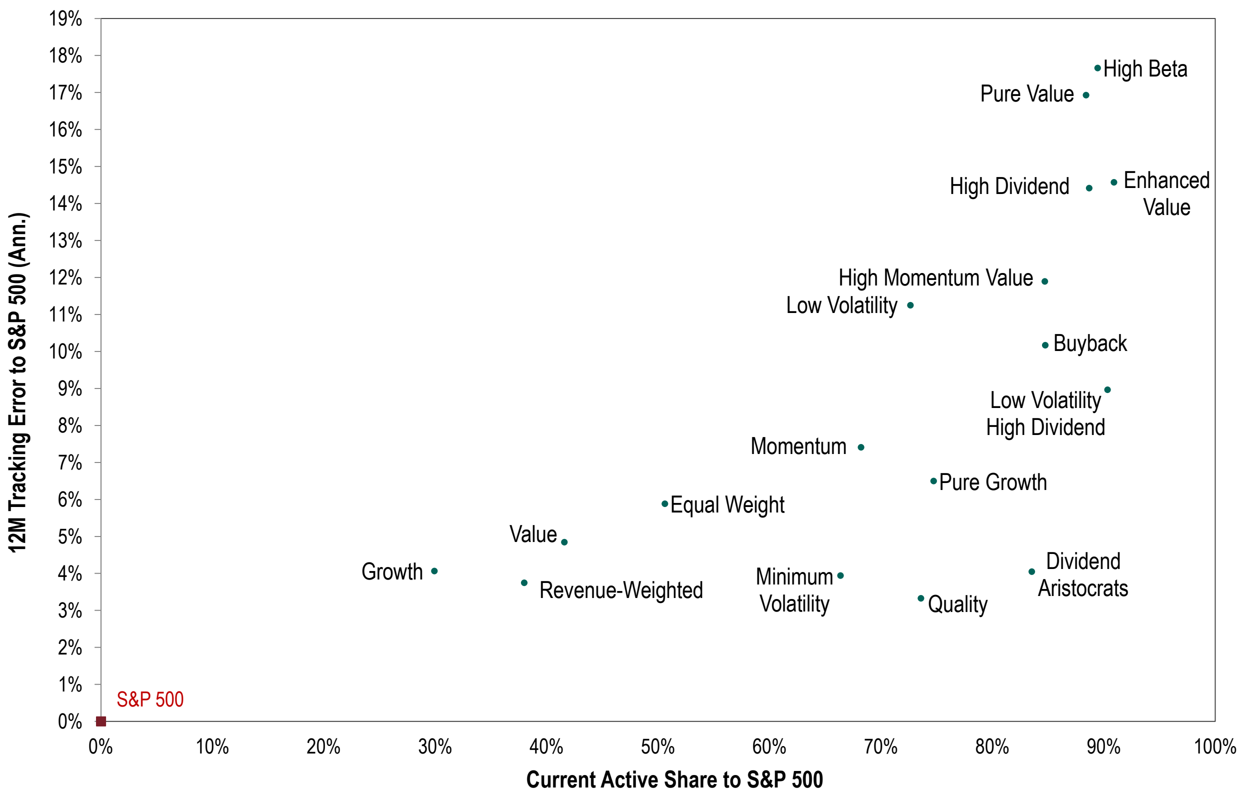
RELATIVE RETURN CORRELATIONS

	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 Pure Growth	S&P 500 Momentum	S&P 500 Revenue-Weighted	S&P 500 High Momentum Value	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	0.73	0.66	0.51	0.48	-0.16	-0.29	-0.03	0.04	-0.02	0.27	0.30	0.31	0.07	0.10	0.12	-0.26
S&P 500 Minimum Volatility	0.73	1.00	0.52	0.37	0.54	0.04	-0.20	-0.10	-0.06	0.14	0.04	0.20	0.19	-0.03	-0.06	-0.03	-0.34
S&P 500 Low Volatility High Dividend	0.66	0.52	1.00	0.93	0.56	-0.39	-0.62	-0.08	-0.43	0.42	0.61	0.62	0.71	0.57	0.50	0.57	0.21
S&P 500 High Dividend	0.51	0.37	0.93	1.00	0.46	-0.46	-0.61	0.06	-0.47	0.47	0.75	0.62	0.82	0.75	0.67	0.73	0.45
S&P 500 Dividend Aristocrats	0.48	0.54	0.56	0.46	1.00	0.04	-0.59	-0.23	-0.31	0.48	0.35	0.59	0.48	0.30	0.31	0.33	0.00
S&P 500 Quality	-0.16	0.04	-0.39	-0.46	0.04	1.00	0.23	-0.18	0.20	-0.19	-0.51	-0.24	-0.40	-0.49	-0.38	-0.51	-0.36
S&P 500 Growth	-0.29	-0.20	-0.62	-0.61	-0.59	0.23	1.00	0.39	0.48	-0.74	-0.68	-1.00	-0.64	-0.67	-0.63	-0.74	-0.36
S&P 500 Pure Growth	-0.03	-0.10	-0.08	0.06	-0.23	-0.18	0.39	1.00	0.28	-0.27	0.21	-0.37	0.31	0.18	0.28	0.11	0.47
S&P 500 Momentum	0.04	-0.06	-0.43	-0.47	-0.31	0.20	0.48	0.28	1.00	-0.42	-0.28	-0.46	-0.38	-0.38	-0.37	-0.40	-0.20
S&P 500 Revenue-Weighted	-0.02	0.14	0.42	0.47	0.48	-0.19	-0.74	-0.27	-0.42	1.00	0.54	0.73	0.56	0.66	0.56	0.69	0.35
S&P 500 High Momentum Value	0.27	0.04	0.61	0.75	0.35	-0.51	-0.68	0.21	-0.28	0.54	1.00	0.70	0.87	0.90	0.92	0.94	0.72
S&P 500 Value	0.30	0.20	0.62	0.62	0.59	-0.24	-1.00	-0.37	-0.46	0.73	0.70	1.00	0.65	0.68	0.64	0.75	0.37
S&P 500 Equal Weight	0.31	0.19	0.71	0.82	0.48	-0.40	-0.64	0.31	-0.38	0.56	0.87	0.65	1.00	0.87	0.89	0.84	0.73
S&P 500 Pure Value	0.07	-0.03	0.57	0.75	0.30	-0.49	-0.67	0.18	-0.38	0.66	0.90	0.68	0.87	1.00	0.89	0.95	0.79
S&P 500 Buyback	0.10	-0.06	0.50	0.67	0.31	-0.38	-0.63	0.28	-0.37	0.56	0.92	0.64	0.89	0.89	1.00	0.91	0.78
S&P 500 Enhanced Value	0.12	-0.03	0.57	0.73	0.33	-0.51	-0.74	0.11	-0.40	0.69	0.94	0.75	0.84	0.95	0.91	1.00	0.74
S&P 500 High Beta	-0.26	-0.34	0.21	0.45	0.00	-0.36	-0.36	0.47	-0.20	0.35	0.72	0.37	0.73	0.79	0.78	0.74	1.00

Correlation of weekly excess total returns (versus S&P 500), last three years

Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of May 29, 2020.

TRACKING ERROR & ACTIVE SHARE- RELATIVE TO S&P 500



FACTOR EXPOSURE SUMMARY (See following page for factor scoring methodology)

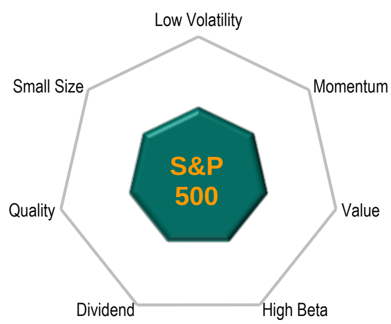
INDEX	AVERAGE	LOW VOLATILITY	MOMENTUM	VALUE	HIGH BETA	DIVIDEND	QUALITY	SMALL SIZE
S&P 500 High Momentum Value	18.4%	-58.3%	-49.4%	81.8%	67.3%	44.2%	-11.7%	54.9%
S&P 500 Buyback	15.5%	-70.3%	-48.4%	70.5%	64.6%	49.9%	-8.1%	50.2%
S&P 500 Pure Value	14.6%	-77.5%	-65.5%	89.2%	66.3%	57.3%	-27.3%	59.3%
S&P 500 High Dividend	16.3%	-59.0%	-52.1%	66.6%	44.6%	87.4%	-27.3%	54.0%
S&P 500 Enhanced Value	15.6%	-67.7%	-53.2%	90.2%	64.6%	56.5%	-27.3%	46.3%
S&P 500 Low Volatility	7.5%	62.2%	-7.6%	-1.2%	-35.3%	4.8%	-2.8%	32.0%
S&P 500 Low Volatility High Dividend	14.5%	-35.6%	-59.5%	58.6%	35.6%	86.7%	-34.4%	50.2%
S&P 500 High Beta	16.1%	-94.4%	-71.7%	79.5%	92.0%	69.5%	-34.1%	71.8%
S&P 500 Value	11.2%	-10.6%	-27.7%	49.2%	11.2%	44.2%	-8.1%	20.1%
S&P 500 Dividend Aristocrats	8.5%	-19.0%	-31.4%	30.0%	7.4%	29.7%	-0.9%	43.8%
S&P 500 Equal Weight	9.1%	-56.5%	-34.4%	42.5%	43.5%	28.5%	-11.3%	51.7%
S&P 500 Revenue-Weighted	8.4%	-13.0%	-16.1%	55.7%	7.4%	22.3%	-8.1%	10.8%
S&P 500 Minimum Volatility	3.4%	6.9%	-7.6%	5.6%	-3.0%	15.0%	-8.1%	14.8%
S&P 500 Quality	2.7%	4.8%	-7.6%	-7.5%	-7.4%	-0.1%	26.2%	10.8%
S&P 500 Momentum	1.7%	2.3%	37.7%	-21.7%	3.4%	-6.6%	8.5%	-11.8%
S&P 500	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**
S&P 500 Pure Growth	-4.6%	-36.0%	13.5%	-16.8%	20.7%	-29.1%	-8.1%	24.0%
S&P 500 Growth	-7.4%	2.6%	21.5%	-23.9%	-5.0%	-19.2%	5.4%	-32.9%

Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of May 29, 2020.

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.



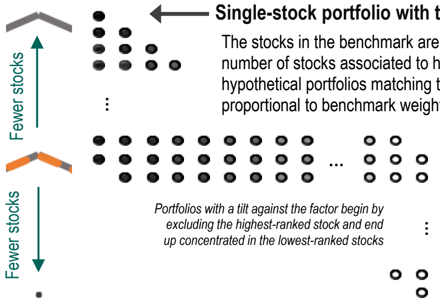
Factor	Measurement at single-stock level
Volatility	Trailing 12-month daily volatility.
Momentum	Twelve-month price change as of one month ago ("13 minus 1 momentum"), divided by the daily volatility during the twelve-month period that ended one month prior. For more details, see the S&P Momentum methodology.
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 beta of daily returns to the benchmark's returns.
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 index is provided score in each factor from -100% to +100% based on how much of the total capitalization of the benchmark must be excluded in order to provide a portfolio of stocks with similar exposure to that factor. This is done by examining a ranked series of hypothetical cap-weighted portfolios, including or excluding an increasing number of the stocks with the highest or lowest scores. An illustration of the process is below, further details 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 or excluding a varying number of stocks associated to high or lower factor scores. The score in each factor (and its level on the chart) reflects the **active share** of 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, i.e. free-float market capitalization.

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 variance of current index constituents, divided by the 1Yr trailing daily Index variance. The value approximates an average stock-to-stock correlation of index constituents, weighted proportionally to both constituent weight and constituent volatility.

Benchmark Statistics for Value, Quality and Momentum (normalization variables)

	VALUE			QUALITY			MOMENTUM	
	Earnings to Price	Book to Price	Sales to Price	Accrual Ratio	Return on Equity	Leverage Ratio	13M - 1M Return	Daily Price Volatility
S&P 500 index-weighted average	0.040	0.295	0.441	12.96%	29.84%	1.23	8.21%	2.66%
S&P 500 index-weighted standard deviation	0.039	0.356	0.568	26.15%	26.84%	1.09	25.44%	0.64%

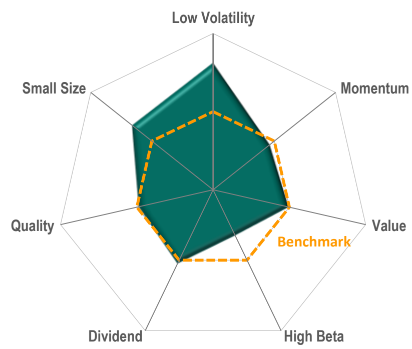
S&P 500 Low Volatility

Description

The S&P 500 Low Volatility 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	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	0.4%	-6.9%	-13.2%	-3.4%	6.3%	8.7%	12.3%	8.9%
Relative to Benchmark	-4.4%	-10.5%	-8.2%	-16.2%	-4.0%	-1.2%	-0.9%	0.2%
Index Volatility				17.9%	13.5%	12.2%	10.6%	11.1%
Tracking Error				11.3%	8.4%	7.8%	8.1%	7.8%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.95



Factor Exposure Chart

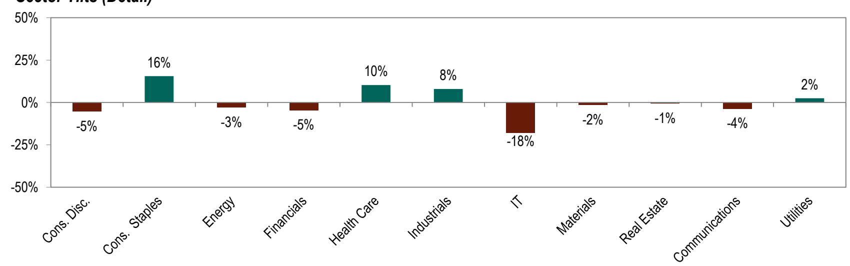
Portfolio Statistics	Index	Bmark
Active Share (Stock)	73%	0%
Active Share (Sector)	36%	0%
Concentration (HH Index)	100.7	122.0
Correlation (stock)	0.90	0.59
Ann. Turnover (last 10 yr)	0.62	0.05

Top Sector Tilts (versus benchmark)

Sector	Index	Bmark	Difference
Cons. Staples	23%	7%	16%
Health Care	26%	15%	10%
IT	8%	26%	18%
Cons. Disc.	5%	11%	5%

Index-Weighted Avg.	Index	Bmark
Stock Volatility	35%	43%
12M - 1M price return	6%	8%
Book/Price	0.24	0.29
Earnings/Price	0.04	0.04
Sales/Price	0.47	0.44
Stock Beta	0.78	0.99
Yield (12M trailing)	2.1%	2.0%
R.O.E.	30%	30%
Market Cap (U.S. $ bn)	90.9	326.5

Sector Tilts (Detail)



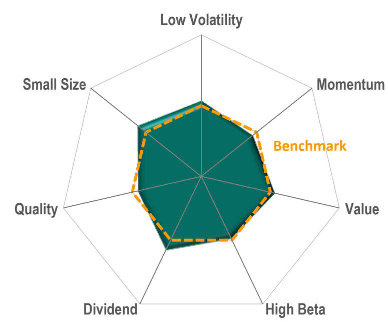
S&P 500 Minimum Volatility

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 May 29, 2020 the index comprised 103 constituents.

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	4.4%	1.5%	-6.5%	9.5%	9.1%	9.9%	13.7%	9.0%
Relative to Benchmark	-0.4%	-2.1%	-1.5%	-3.3%	-1.1%	0.1%	0.6%	0.3%
Index Volatility				20.2%	15.1%	13.1%	11.3%	12.1%
Tracking Error				3.9%	3.4%	4.9%	5.1%	5.2%

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



Factor Exposure Chart

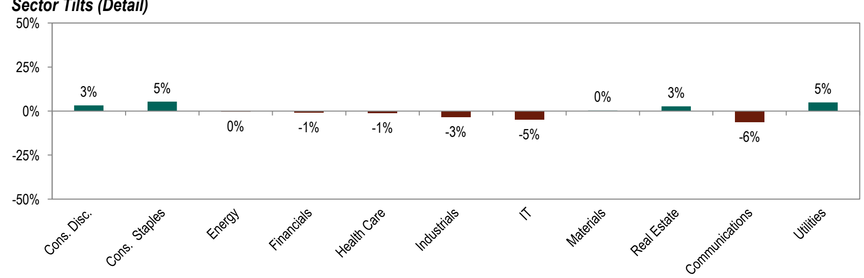
Portfolio Statistics	Index	Bmark
Active Share (Stock)	66%	0%
Active Share (Sector)	17%	0%
Concentration (HH Index)	157.9	122.0
Correlation (stock)	0.58	0.59
Ann. Turnover (last 10 yr)	0.47	0.05

Top Sector Tilts (versus benchmark)

Sector	Index	Bmark	Difference
Cons. Staples	12%	7%	5%
Utilities	8%	3%	5%
Communications	5%	11%	6%
IT	21%	26%	5%

Index-Weighted Avg.	Index	Bmark
Stock Volatility	41%	43%
12M - 1M price return	7%	8%
Book/Price	0.31	0.29
Earnings/Price	0.04	0.04
Sales/Price	0.47	0.44
Stock Beta	0.96	0.99
Yield (12M trailing)	2.3%	2.0%
R.O.E.	28%	30%
Market Cap (U.S. $ bn)	185.3	326.5

Sector Tilts (Detail)



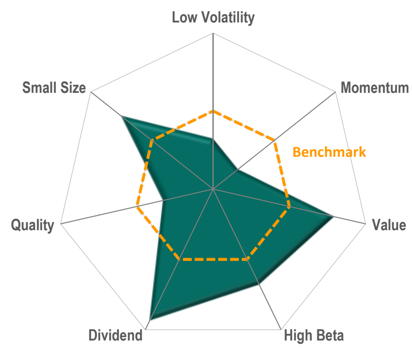
S&P 500 Low Volatility High Dividend

Description

The S&P 500 Low Volatility High Dividend 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, subject to single stock and sector constraints.

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	1.3%	-11.0%	-22.6%	-12.2%	-1.8%	4.8%	10.7%	9.2%
Relative to Benchmark	-3.4%	-14.6%	-17.6%	-25.0%	-12.0%	-5.1%	-2.5%	0.5%
Index Volatility				26.4%	18.1%	15.8%	13.0%	14.2%
Tracking Error				9.0%	8.1%	8.1%	8.2%	7.7%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.02



Factor Exposure Chart

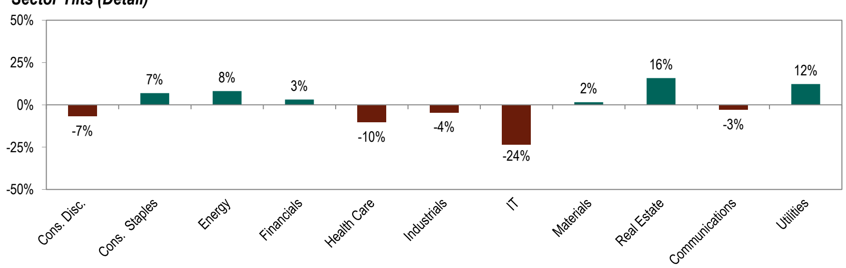
Portfolio Statistics	*Index*	*Bmark*
Active Share (Stock)	90%	0%
Active Share (Sector)	48%	0%
Concentration (HH Index)	213.2	122.0
Correlation (stock)	0.54	0.59
Ann. Turnover (last 10 yr)	0.56	0.05

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Bmark*	*Difference*
Real Estate	19%	3%	16%
Utilities	16%	3%	12%
IT	3%	26%	24%
Health Care	5%	15%	10%

Index-Weighted Avg.	*Index*	*Bmark*
Stock Volatility	48%	43%
12M - 1M price return	-17%	8%
Book/Price	0.59	0.29
Earnings/Price	0.06	0.04
Sales/Price	0.70	0.44
Stock Beta	1.18	0.99
Yield (12M trailing)	5.9%	2.0%
R.O.E.	19%	30%
Market Cap (U.S. $ bn)	54.6	326.5

Sector Tilts (Detail)



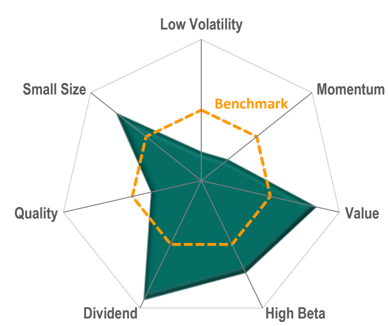
S&P 500 High Dividend

Description

The S&P 500 High Dividend 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	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	0.9%	-16.5%	-27.7%	-17.4%	-2.5%	2.8%	10.1%	6.4%
Relative to Benchmark	-3.9%	-20.1%	-22.8%	-30.2%	-12.8%	-7.0%	-3.0%	-2.3%
Index Volatility				32.9%	21.7%	18.3%	14.9%	18.2%
Tracking Error				14.4%	10.4%	9.3%	8.6%	9.6%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.15



Factor Exposure Chart

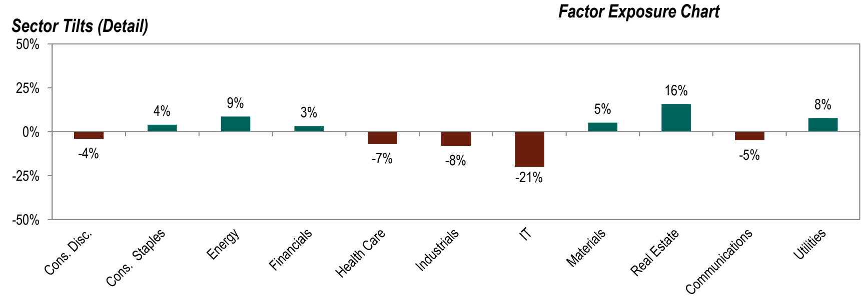
Portfolio Statistics	*Index*	*Bmark*
Active Share (Stock)	89%	0%
Active Share (Sector)	45%	0%
Concentration (HH Index)	154.3	122.0
Correlation (stock)	0.60	0.59
Ann. Turnover (last 10 yr)	0.37	0.05

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Bmark*	*Difference*
Real Estate	19%	3%	16%
Energy	12%	3%	9%
IT	5%	26%	21%
Industrials	0%	8%	8%

Index-Weighted Avg.	*Index*	*Bmark*
Stock Volatility	52%	43%
12M - 1M price return	-15%	8%
Book/Price	0.70	0.29
Earnings/Price	0.05	0.04
Sales/Price	0.99	0.44
Stock Beta	1.25	0.99
Yield (12M trailing)	6.0%	2.0%
R.O.E.	15%	30%
Market Cap (U.S. $ bn)	48.5	326.5

Sector Tilts (Detail)



Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of May 29, 2020.

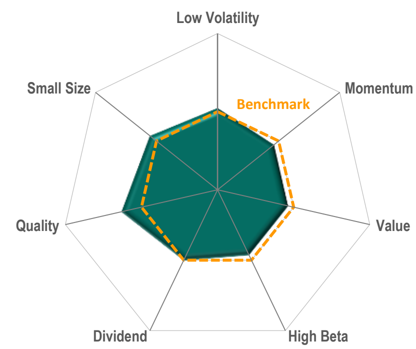
S&P 500 Quality

Description

The S&P 500 Quality 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, subject to single stock and sector constraints..

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	5.3%	7.4%	-2.6%	16.1%	10.3%	9.1%	13.7%	10.3%
Relative to Benchmark	0.5%	3.8%	2.4%	3.3%	0.1%	-0.7%	0.6%	1.6%
Index Volatility				20.4%	15.7%	14.0%	12.8%	13.8%
Tracking Error				3.3%	3.3%	2.8%	3.1%	3.2%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.98



Factor Exposure Chart

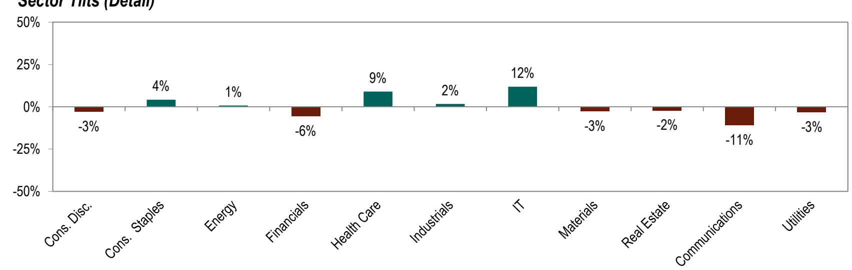
Portfolio Statistics	*Index*	*Bmark*
Active Share (Stock)	74%	0%
Active Share (Sector)	27%	0%
Concentration (HH Index)	298.3	122.0
Correlation (stock)	0.60	0.59
Ann. Turnover (last 10 yr)	0.64	0.05

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Bmark*	*Difference*
IT	38%	26%	12%
Health Care	24%	15%	9%
Communications	0%	11%	11%
Financials	5%	10%	6%

Index-Weighted Avg.	*Index*	*Bmark*
Stock Volatility	41%	43%
12M - 1M price return	7%	8%
Book/Price	0.19	0.29
Earnings/Price	0.04	0.04
Sales/Price	0.31	0.44
Stock Beta	0.92	0.99
Yield (12M trailing)	2.0%	2.0%
R.O.E.	41%	30%
Market Cap (U.S. $ bn)	239.8	326.5

Sector Tilts (Detail)



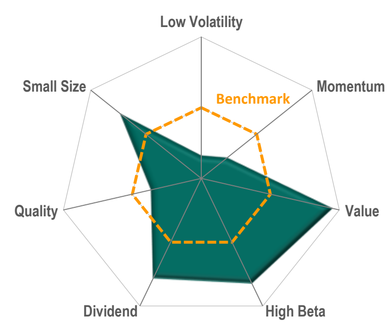
S&P 500 Enhanced Value

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	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	3.5%	-11.4%	-27.0%	-10.5%	-0.4%	2.8%	9.7%	6.0%
Relative to Benchmark	-1.3%	-15.0%	-22.1%	-23.3%	-10.6%	-7.0%	-3.4%	-2.7%
Index Volatility				34.3%	23.6%	20.7%	18.5%	20.8%
Tracking Error				14.6%	10.4%	9.4%	7.9%	9.1%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.23



Factor Exposure Chart

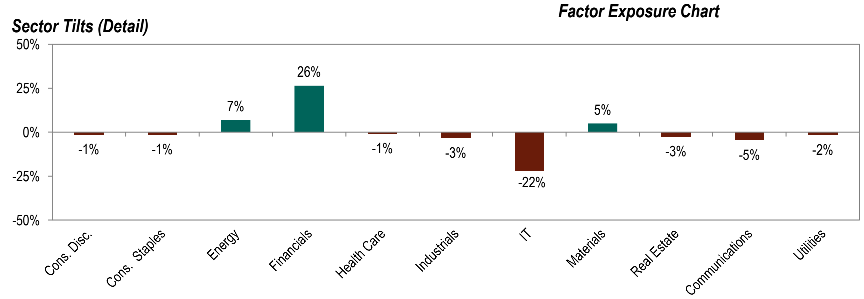
Portfolio Statistics	*Index*	*Bmark*
Active Share (Stock)	91%	0%
Active Share (Sector)	38%	0%
Concentration (HH Index)	227.4	122.0
Correlation (stock)	0.60	0.59
Ann. Turnover (last 10 yr)	0.46	0.05

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Bmark*	*Difference*
Financials	37%	10%	26%
Energy	10%	3%	7%
IT	4%	26%	22%
Communications	6%	11%	5%

Index-Weighted Avg.	*Index*	*Bmark*
Stock Volatility	54%	43%
12M - 1M price return	-15%	8%
Book/Price	1.04	0.29
Earnings/Price	0.07	0.04
Sales/Price	1.69	0.44
Stock Beta	1.39	0.99
Yield (12M trailing)	3.7%	2.0%
R.O.E.	10%	30%
Market Cap (U.S. $ bn)	60.3	326.5

Sector Tilts (Detail)



Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of May 29, 2020.

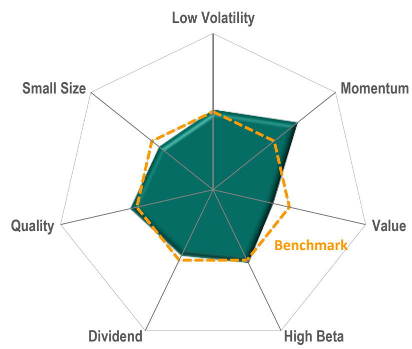
S&P 500 Momentum

Description

The S&P 500 Momentum 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, subject to single stock and sector constraints..

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	6.8%	8.0%	2.2%	12.4%	15.0%	12.3%	14.2%	9.7%
Relative to Benchmark	2.1%	4.4%	7.2%	-0.4%	4.8%	2.5%	1.1%	1.0%
Index Volatility				18.0%	15.9%	14.1%	13.7%	14.5%
Tracking Error				7.4%	6.1%	5.6%	5.1%	6.3%

Benchmark: S&P 500. *1 Yr trailing beta to benchmark = 0.96*



Factor Exposure Chart

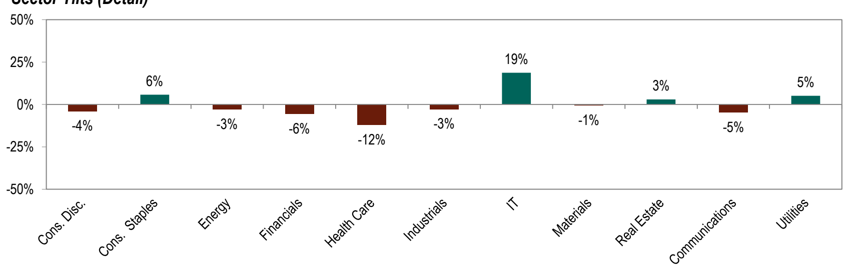
Portfolio Statistics	*Index*	*Bmark*
Active Share (Stock)	68%	0%
Active Share (Sector)	32%	0%
Concentration (HH Index)	331.9	122.0
Correlation (stock)	0.58	0.59
Ann. Turnover (last 10 yr)	1.17	0.05

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Bmark*	*Difference*
IT	45%	26%	19%
Cons. Staples	13%	7%	6%
Health Care	3%	15%	12%
Financials	5%	10%	6%

Index-Weighted Avg.	*Index*	*Bmark*
Stock Volatility	42%	43%
12M - 1M price return	25%	8%
Book/Price	0.16	0.29
Earnings/Price	0.03	0.04
Sales/Price	0.25	0.44
Stock Beta	1.02	0.99
Yield (12M trailing)	1.6%	2.0%
R.O.E.	39%	30%
Market Cap (U.S. $ bn)	368.3	326.5

Sector Tilts (Detail)



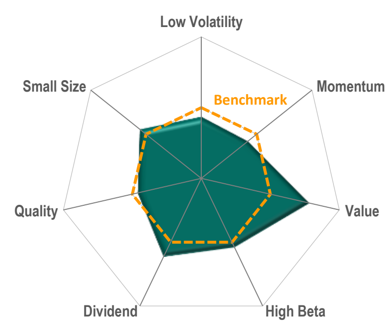
S&P 500 Revenue-Weighted

Description

The S&P 500 Revenue-Weighted comprises all the constituents of the S&P 500, weighted in proportion to revenues.

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	4.6%	-0.1%	-11.6%	5.8%	6.0%	6.6%	12.0%	8.3%
Relative to Benchmark	-0.2%	-3.7%	-6.6%	-7.1%	-4.2%	-3.3%	-1.2%	-0.4%
Index Volatility				23.8%	17.7%	15.5%	14.4%	15.8%
Tracking Error				3.7%	3.5%	3.1%	2.7%	3.1%

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



Factor Exposure Chart

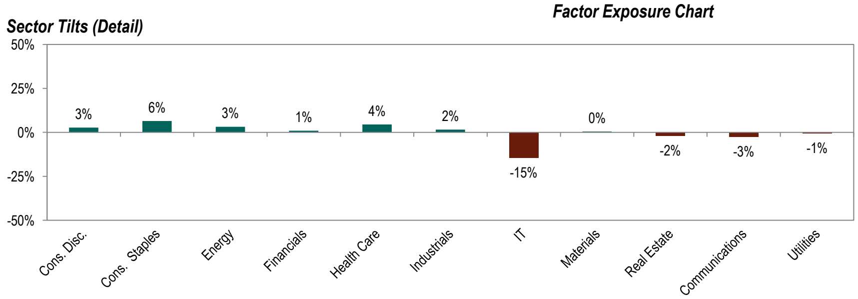
Portfolio Statistics	*Index*	*Bmark*
Active Share (Stock)	38%	0%
Active Share (Sector)	20%	0%
Concentration (HH Index)	104.5	122.0
Correlation (stock)	0.54	0.59
Ann. Turnover (last 10 yr)	0.18	0.05

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Bmark*	*Difference*
Cons. Staples	14%	7%	6%
Health Care	20%	15%	4%
IT	12%	26%	15%
Communications	8%	11%	3%

Index-Weighted Avg.	*Index*	*Bmark*
Stock Volatility	45%	43%
12M - 1M price return	1%	8%
Book/Price	0.44	0.29
Earnings/Price	0.04	0.04
Sales/Price	1.20	0.44
Stock Beta	1.03	0.99
Yield (12M trailing)	2.5%	2.0%
R.O.E.	24%	30%
Market Cap (U.S. $ bn)	209.3	326.5

Sector Tilts (Detail)



S&P Dow Jones Indices

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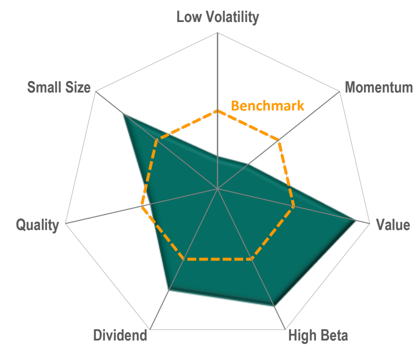
S&P 500 High Momentum Value

Description

The S&P 500 High Momentum Value is designed to measure the performance of the 100 stocks with the highest momentum selected from the 200 stocks in the S&P 500 with the highest value score, subject to turnover constraints. The weighting is proportional to the value score of each constituent.

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	4.3%	-11.2%	-22.9%	-9.7%	-2.2%	2.2%	10.4%	8.5%
Relative to Benchmark	-0.5%	-14.8%	-18.0%	-22.5%	-12.4%	-7.7%	-2.8%	-0.2%
Index Volatility				31.8%	22.0%	18.8%	16.6%	19.6%
Tracking Error				11.9%	8.3%	7.3%	6.1%	8.3%

Benchmark: S&P 500. *1 Yr trailing beta to benchmark = 1.17*



Factor Exposure Chart

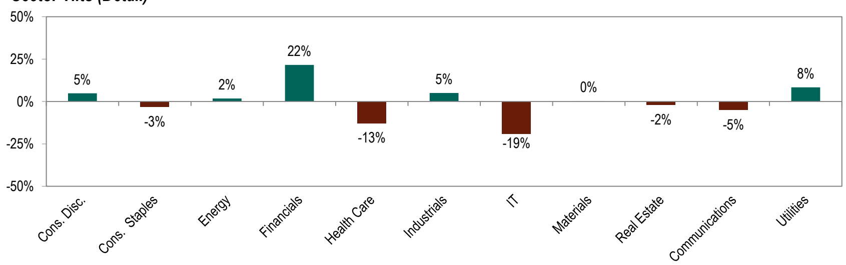
Portfolio Statistics	Index	Bmark
Active Share (Stock)	85%	0%
Active Share (Sector)	42%	0%
Concentration (HH Index)	112.3	122.0
Correlation (stock)	0.63	0.59
Ann. Turnover (last 10 yr)	0.80	0.05

Top Sector Tilts (versus benchmark)

Sector	Index	Bmark	Difference
Financials	32%	10%	22%
Utilities	12%	3%	8%
IT	7%	26%	19%
Health Care	2%	15%	13%

Index-Weighted Avg.	Index	Bmark
Stock Volatility	52%	43%
12M - 1M price return	-13%	8%
Book/Price	0.80	0.29
Earnings/Price	0.08	0.04
Sales/Price	1.21	0.44
Stock Beta	1.41	0.99
Yield (12M trailing)	3.1%	2.0%
R.O.E.	15%	30%
Market Cap (U.S. $ bn)	46.8	326.5

Sector Tilts (Detail)



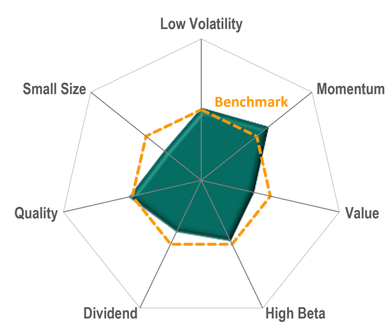
S&P 500 Growth

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 May 29, 2020 the index comprised 276 constituents.

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	5.9%	9.2%	3.7%	20.1%	15.0%	13.3%	15.6%	10.5%
Relative to Benchmark	1.2%	5.6%	8.6%	7.2%	4.8%	3.4%	2.4%	1.8%
Index Volatility				20.9%	16.3%	14.8%	13.4%	14.3%
Tracking Error				4.1%	3.5%	3.4%	2.9%	3.2%

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



Factor Exposure Chart

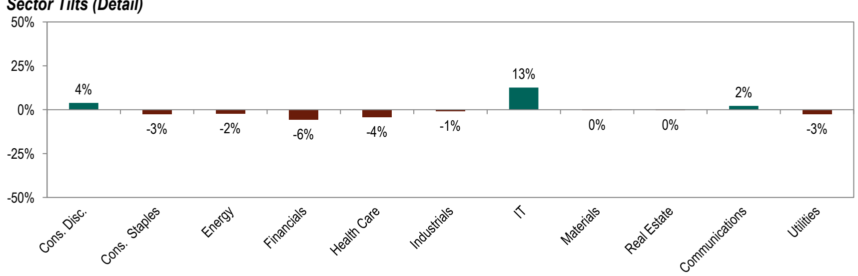
Portfolio Statistics	Index	Bmark
Active Share (Stock)	30%	0%
Active Share (Sector)	19%	0%
Concentration (HH Index)	290.6	122.0
Correlation (stock)	0.62	0.59
Ann. Turnover (last 10 yr)	0.25	0.05

Top Sector Tilts (versus benchmark)

Sector	Index	Bmark	Difference
IT	39%	26%	13%
Cons. Disc.	14%	11%	4%
Financials	5%	10%	6%
Health Care	11%	15%	4%

Index-Weighted Avg.	Index	Bmark
Stock Volatility	42%	43%
12M - 1M price return	17%	8%
Book/Price	0.14	0.29
Earnings/Price	0.03	0.04
Sales/Price	0.24	0.44
Stock Beta	0.94	0.99
Yield (12M trailing)	1.2%	2.0%
R.O.E.	36%	30%
Market Cap (U.S. $ bn)	470.3	326.5

Sector Tilts (Detail)



S&P Dow Jones Indices

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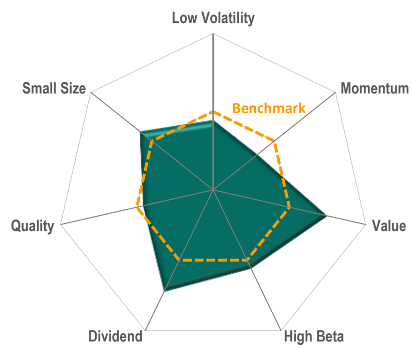
S&P 500 Value

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 May 29, 2020 the index comprised 392 constituents.

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	3.2%	-3.2%	-14.7%	4.2%	4.7%	5.8%	10.3%	6.6%
Relative to Benchmark	-1.6%	-6.8%	-9.7%	-8.6%	-5.5%	-4.1%	-2.8%	-2.1%
Index Volatility				24.2%	17.5%	15.4%	14.3%	15.7%
Tracking Error				4.8%	4.2%	3.9%	3.3%	3.5%

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



Factor Exposure Chart

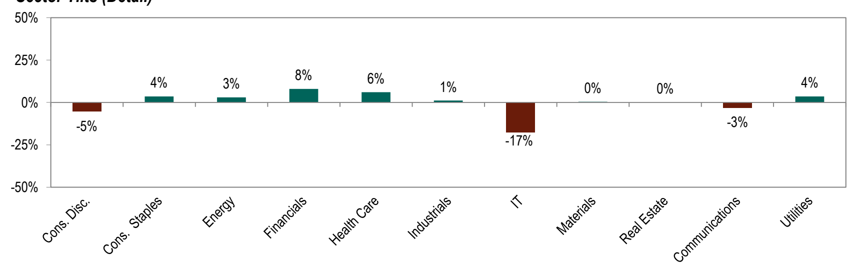
Portfolio Statistics	***Index***	***Bmark***
Active Share (Stock)	42%	0%
Active Share (Sector)	26%	0%
Concentration (HH Index)	88.3	122.0
Correlation (stock)	0.59	0.59
Ann. Turnover (last 10 yr)	0.27	0.05

Top Sector Tilts (versus benchmark)

Sector	***Index***	***Bmark***	***Difference***
Financials	18%	10%	8%
Health Care	21%	15%	6%
IT	9%	26%	17%
Cons. Disc.	5%	11%	5%

Index-Weighted Avg.	***Index***	***Bmark***
Stock Volatility	44%	43%
12M - 1M price return	-4%	8%
Book/Price	0.50	0.29
Earnings/Price	0.05	0.04
Sales/Price	0.72	0.44
Stock Beta	1.07	0.99
Yield (12M trailing)	3.1%	2.0%
R.O.E.	21%	30%
Market Cap (U.S. $ bn)	126.6	326.5

Sector Tilts (Detail)



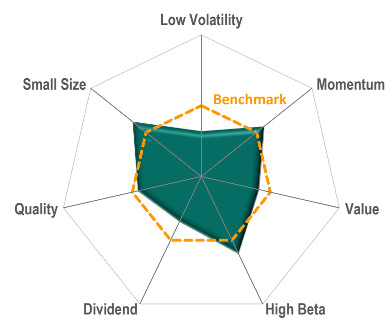
S&P 500 Pure Growth

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 May 29, 2020 the index comprised 107 constituents.

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	8.3%	6.6%	0.1%	13.9%	11.4%	9.9%	15.0%	10.8%
Relative to Benchmark	3.5%	3.0%	5.0%	1.1%	1.2%	0.0%	1.9%	2.1%
Index Volatility				25.9%	19.4%	17.0%	15.9%	17.0%
Tracking Error				6.5%	5.6%	5.1%	5.4%	5.5%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.06



Factor Exposure Chart

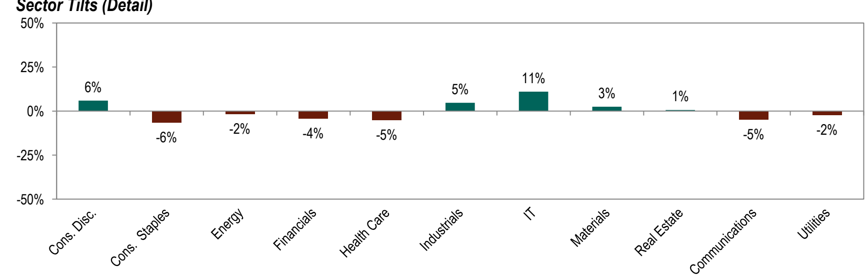
Portfolio Statistics	***Index***	***Bmark***
Active Share (Stock)	75%	0%
Active Share (Sector)	25%	0%
Concentration (HH Index)	109.9	122.0
Correlation (stock)	0.54	0.59
Ann. Turnover (last 10 yr)	0.64	0.05

Top Sector Tilts (versus benchmark)

Sector	***Index***	***Bmark***	***Difference***
IT	37%	26%	11%
Cons. Disc.	16%	11%	6%
Cons. Staples	1%	7%	6%
Health Care	10%	15%	5%

Index-Weighted Avg.	***Index***	***Bmark***
Stock Volatility	48%	43%
12M - 1M price return	17%	8%
Book/Price	0.16	0.29
Earnings/Price	0.03	0.04
Sales/Price	0.31	0.44
Stock Beta	1.12	0.99
Yield (12M trailing)	1.0%	2.0%
R.O.E.	33%	30%
Market Cap (U.S. $ bn)	113.0	326.5

Sector Tilts (Detail)



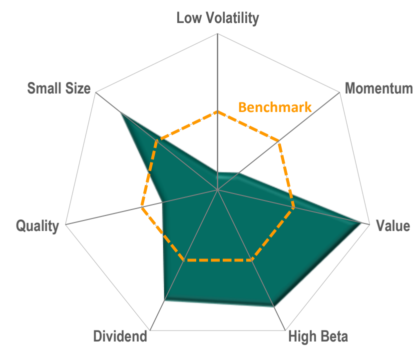
S&P 500 Pure Value

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 May 29, 2020 the index comprised 105 constituents.

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	3.0%	-15.9%	-31.3%	-19.1%	-4.3%	-0.6%	8.8%	6.6%
Relative to Benchmark	-1.7%	-19.5%	-26.3%	-32.0%	-14.5%	-10.5%	-4.3%	-2.1%
Index Volatility				36.9%	25.4%	21.9%	19.4%	23.0%
Tracking Error				16.9%	11.8%	10.2%	8.7%	11.8%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.22



Factor Exposure Chart

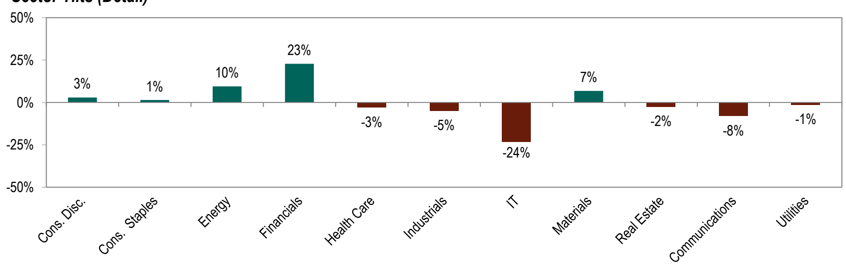
Portfolio Statistics	*Index*	*Bmark*
Active Share (Stock)	88%	0%
Active Share (Sector)	43%	0%
Concentration (HH Index)	126.5	122.0
Correlation (stock)	0.56	0.59
Ann. Turnover (last 10 yr)	0.48	0.05

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Bmark*	*Difference*
Financials	33%	10%	23%
Energy	12%	3%	10%
IT	2%	26%	24%
Communications	3%	11%	8%

Index-Weighted Avg.	*Index*	*Bmark*
Stock Volatility	58%	43%
12M - 1M price return	-24%	8%
Book/Price	1.14	0.29
Earnings/Price	0.03	0.04
Sales/Price	1.96	0.44
Stock Beta	1.41	0.99
Yield (12M trailing)	3.8%	2.0%
R.O.E.	7%	30%
Market Cap (U.S. $ bn)	40.7	326.5

Sector Tilts (Detail)



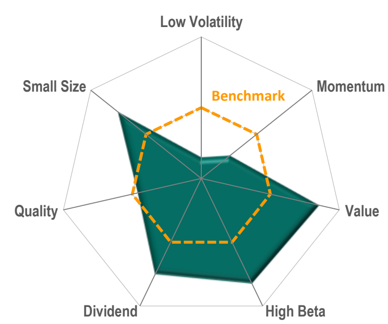
S&P 500 Buyback

Description

The S&P 500 Buyback 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	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	3.1%	-6.7%	-18.5%	-1.8%	4.8%	5.4%	12.7%	9.7%
Relative to Benchmark	-1.7%	-10.3%	-13.6%	-14.7%	-5.4%	-4.5%	-0.5%	1.0%
Index Volatility				30.3%	21.6%	19.1%	16.4%	17.7%
Tracking Error				10.2%	7.2%	6.6%	5.4%	5.8%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.17



Factor Exposure Chart

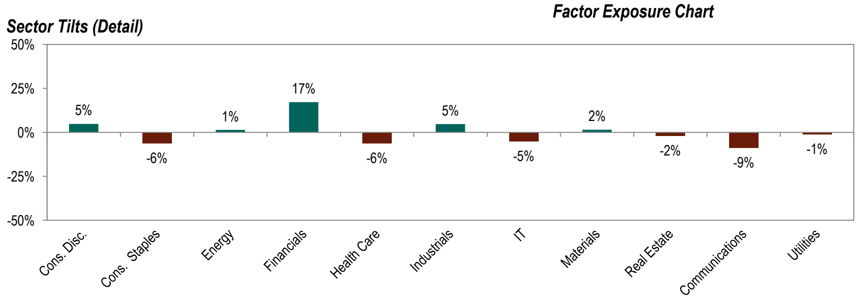
Portfolio Statistics	*Index*	*Bmark*
Active Share (Stock)	85%	0%
Active Share (Sector)	30%	0%
Concentration (HH Index)	101.2	122.0
Correlation (stock)	0.53	0.59
Ann. Turnover (last 10 yr)	0.90	0.05

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Bmark*	*Difference*
Financials	28%	10%	17%
Cons. Disc.	15%	11%	5%
Communications	2%	11%	9%
Health Care	9%	15%	6%

Index-Weighted Avg.	*Index*	*Bmark*
Stock Volatility	55%	43%
12M - 1M price return	-14%	8%
Book/Price	0.61	0.29
Earnings/Price	0.07	0.04
Sales/Price	0.99	0.44
Stock Beta	1.39	0.99
Yield (12M trailing)	3.4%	2.0%
R.O.E.	31%	30%
Market Cap (U.S. $ bn)	54.5	326.5

Sector Tilts (Detail)



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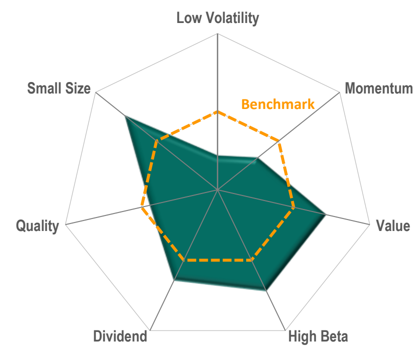
S&P 500 Equal Weight

Description

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

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	4.7%	-1.7%	-12.2%	2.4%	5.3%	6.3%	11.7%	8.8%
Relative to Benchmark	-0.1%	-5.3%	-7.2%	-10.4%	-4.9%	-3.5%	-1.4%	0.1%
Index Volatility				26.9%	19.2%	16.7%	15.4%	17.2%
Tracking Error				5.9%	4.3%	3.8%	3.3%	4.4%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.05



Factor Exposure Chart

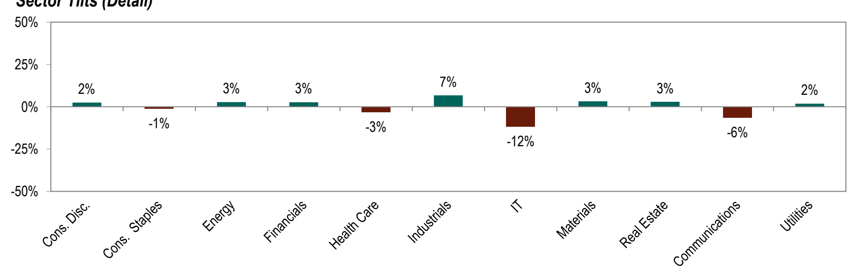
Portfolio Statistics	*Index*	*Bmark*
Active Share (Stock)	51%	0%
Active Share (Sector)	23%	0%
Concentration (HH Index)	20.1	122.0
Correlation (stock)	0.47	0.59
Ann. Turnover (last 10 yr)	0.22	0.05

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Bmark*	*Difference*
Industrials	15%	8%	7%
Materials	6%	3%	3%
IT	14%	26%	12%
Communications	5%	11%	6%

Index-Weighted Avg.	*Index*	*Bmark*
Stock Volatility	51%	43%
12M - 1M price return	-8%	8%
Book/Price	48%	29%
Earnings/Price	4%	4%
Sales/Price	77%	44%
Stock Beta	124%	99%
Yield (12M trailing)	2.7%	2.0%
R.O.E.	22%	30%
Market Cap (U.S. $ bn)	51.5	326.5

Sector Tilts (Detail)



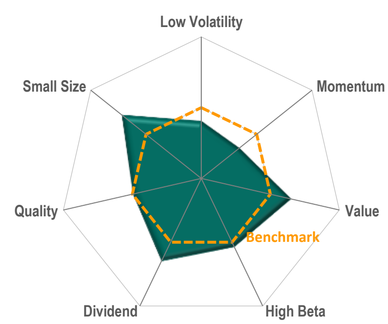
S&P 500 Dividend Aristocrats

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 May 29, 2020 the index comprised 66 constituents.

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	5.2%	0.4%	-10.7%	5.6%	8.0%	8.6%	13.2%	10.0%
Relative to Benchmark	0.4%	-3.1%	-5.8%	-7.3%	-2.3%	-1.3%	0.1%	1.3%
Index Volatility				21.9%	16.0%	14.1%	12.6%	13.7%
Tracking Error				4.0%	4.7%	4.6%	4.5%	5.3%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.96



Factor Exposure Chart

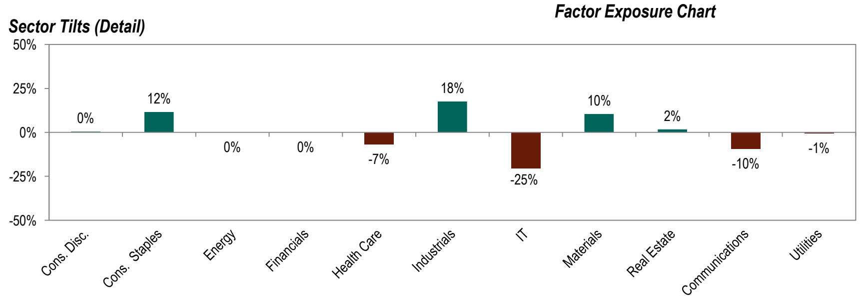
Portfolio Statistics	*Index*	*Bmark*
Active Share (Stock)	84%	0%
Active Share (Sector)	42%	0%
Concentration (HH Index)	152.8	122.0
Correlation (stock)	0.49	0.59
Ann. Turnover (last 10 yr)	0.19	0.05

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Bmark*	*Difference*
Industrials	25%	8%	18%
Cons. Staples	19%	7%	12%
IT	1%	26%	25%
Communications	1%	11%	10%

Index-Weighted Avg.	*Index*	*Bmark*
Stock Volatility	46%	43%
12M - 1M price return	-5%	8%
Book/Price	0.35	0.29
Earnings/Price	0.04	0.04
Sales/Price	0.68	0.44
Stock Beta	1.03	0.99
Yield (12M trailing)	2.8%	2.0%
R.O.E.	29%	30%
Market Cap (U.S. $ bn)	65.4	326.5

Sector Tilts (Detail)



Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of May 29, 2020.

S&P Dow Jones Indices

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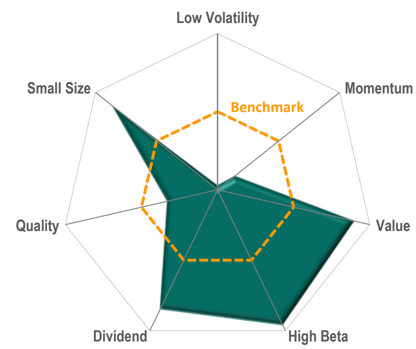
S&P 500 High Beta

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	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	9.1%	-4.7%	-17.0%	0.6%	3.7%	3.9%	8.5%	4.2%
Relative to Benchmark	4.4%	-8.3%	-12.1%	-12.2%	-6.5%	-6.0%	-4.7%	-4.5%
Index Volatility				38.5%	27.3%	24.9%	23.5%	26.5%
Tracking Error				17.7%	12.5%	12.8%	12.1%	14.1%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.33



Factor Exposure Chart

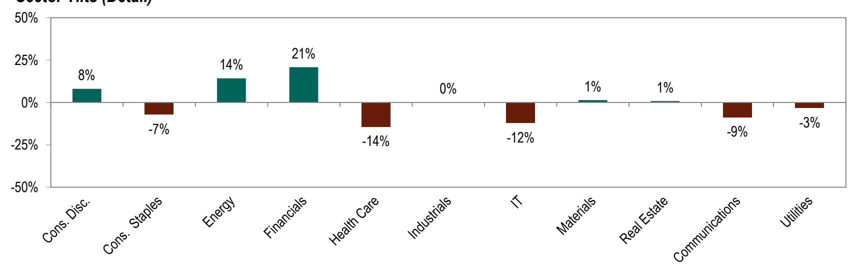
Portfolio Statistics	*Index*	*Bmark*
Active Share (Stock)	89%	0%
Active Share (Sector)	45%	0%
Concentration (HH Index)	103.4	122.0
Correlation (stock)	0.39	0.59
Ann. Turnover (last 10 yr)	0.87	0.05

Top Sector Tilts (versus benchmark)

Sector	*Index*	*Bmark*	*Difference*
Financials	31%	10%	21%
Energy	17%	3%	14%
Health Care	1%	15%	14%
IT	14%	26%	12%

Index-Weighted Avg.	*Index*	*Bmark*
Stock Volatility	73%	43%
12M - 1M price return	-33%	8%
Book/Price	0.97	0.29
Earnings/Price	0.02	0.04
Sales/Price	1.34	0.44
Stock Beta	1.85	0.99
Yield (12M trailing)	4.3%	2.0%
R.O.E.	11%	30%
Market Cap (U.S. $ bn)	27.3	326.5

Sector Tilts (Detail)



More Factor Resources

factor ALLOCATOR

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