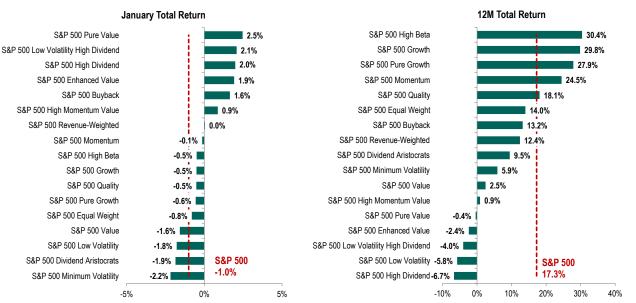
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Index Dashboard: S&P 500® Factor Indices

January 2021



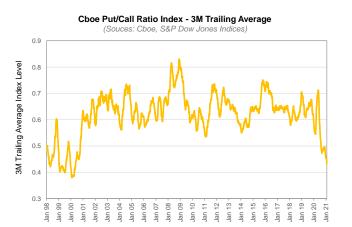


#### COMMENTARY

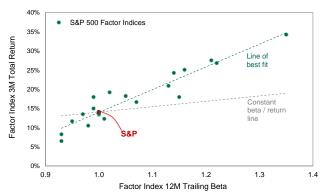
January began brightly for the S&P 500 and its factor family, as the steadily increasing number of administered COVID vaccines provided an unambiguously positive statistic. However, VIX® began to sound the alarm as the month entered its final week, and a sharp sell-off in the final trading sessions sent the benchmark to a monthly loss. Most the S&P 500's factor indices declined with it, but dividend-based strategies, and non-cap-weighted value, were among the winners. More broadly, the top-level trend reversal in S&P 500 factor trends that began in the second half of 2020 continued in January: smaller stocks outperformed larger, value outperformed growth, and riskier stocks outperformed less-volatile names.

Expanding on the last of these themes, it is unusual to see the S&P 500 High Beta Index outperform, as it did this month, in a period when the benchmark declines. But it was certainly a continuation of recent trends: over the past three months, as the first exhibit illustrates, factors with a 12-month index beta that is greater than one have had much higher returns than would be expected based on their beta alone, while factors with a lower beta had lower-than-expected returns.

The outperformance of higher-beta names may indicate an increasing demand for - and rising price premium in - stocks with an outsized short-term upside potential. Over the long term, such stocks have historically tended to offer disappointing relative returns, as investors have tended to over-pay for the prospect of a lottery-like return. However, riskier stocks may benefit from a short-term price boost if the demand for lotteries suddenly rises.



"Beta Boost" in S&P 500 Factor Returns



There is no official proxy for the balance of the market's appetite for short term glories over more stable opportunities for growth, but one candidate is the Cboe Put/Call Ratio Index, which expresses the proportion of market participants buying puts (which are often used defensively to protect against losses), to those buying calls (which have the potential for large gains in return for a relatively smaller option premium).

Over the past three months, the trailing average Put/Call Ratio has collapsed below 0.5 for the first time in nearly three decades, achieving its lowest level since the "irrational exuberance" of the late 1990s. If a broader increase in demand for lottery-like returns has driven the outsized returns to higher-beta stocks then, based on the historical trends, the past few months' relative underperformance in Low Volatility could indicate an opportunity, particularly for investors with a longer-term perspective.

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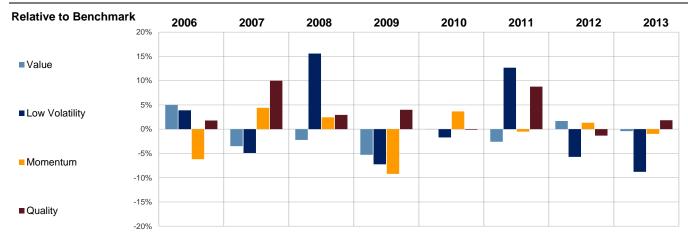
Index Dashboard: S&P 500® Factor Indices

January 2021

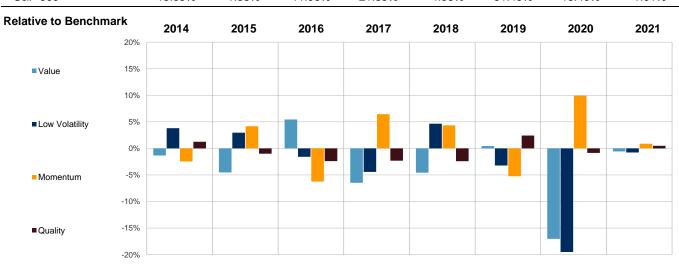
# **ANNUAL PERFORMANCE**

Core factor performance by calendar year, 2005-present:

Total Return	2006	2007	2008	2009	2010	2011	2012	2013
Value	20.80%	1.99%	-39.22%	21.18%	15.10%	-0.48%	17.68%	31.99%
Low Volatility	19.69%	0.58%	-21.41%	19.22%	13.36%	14.78%	10.30%	23.59%
Momentum	9.61%	9.89%	-34.56%	17.24%	18.72%	1.60%	17.33%	31.42%
Quality	17.59%	15.50%	-34.06%	30.46%	14.95%	10.89%	14.68%	34.24%
S&P 500	15.79%	5.49%	-37.00%	26.46%	15.06%	2.11%	16.00%	32.39%



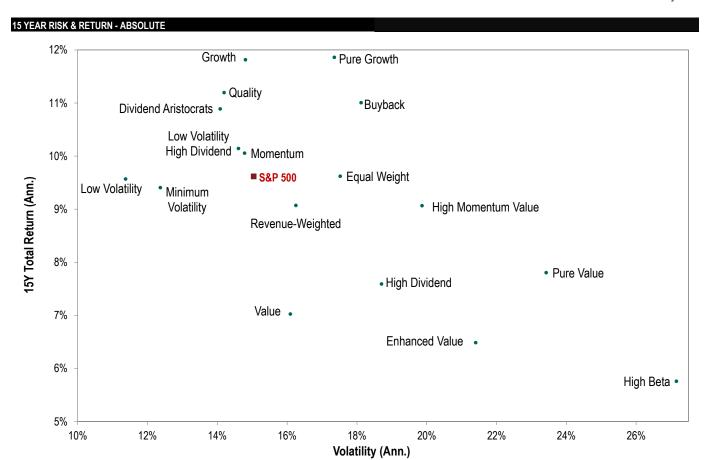
Total Return	2014	2015	2016	2017	2018	2019	2020	2021
Value	12.36%	-3.13%	17.40%	15.36%	-8.95%	31.93%	1.36%	-1.58%
Low Volatility	17.49%	4.34%	10.37%	17.41%	0.27%	28.26%	-1.11%	-1.78%
Momentum	11.23%	5.56%	5.70%	28.27%	-0.04%	26.25%	28.32%	-0.14%
Quality	14.95%	0.38%	9.56%	19.51%	-6.79%	33.91%	17.55%	-0.52%
S&P 500	13.69%	1.38%	11.96%	21.83%	-4.38%	31.49%	18.40%	-1.01%



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Index Dashboard: S&P 500® Factor Indices

January 2021



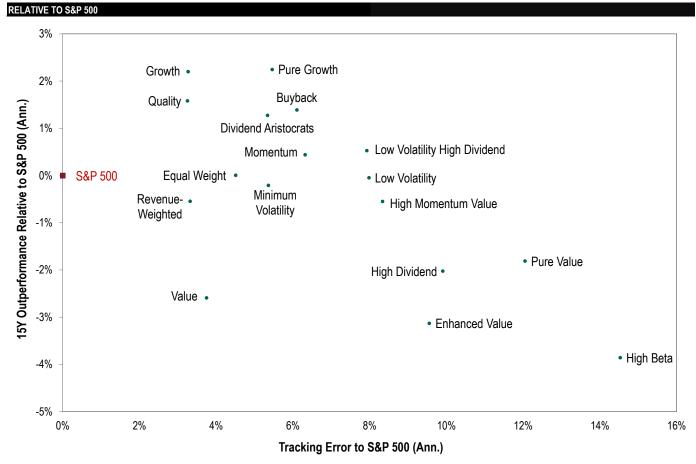
TOTAL RETURN	1M	3M	12M	3Y	5Y	10Y	15Y
S&P 500 Growth	-0.5%	13.6%	29.8%	17.5%	20.1%	16.3%	11.8%
S&P 500 Pure Growth	-0.6%	16.6%	27.9%	13.7%	17.8%	15.0%	11.9%
S&P 500 Quality	-0.5%	13.5%	18.1%	11.7%	14.9%	14.1%	11.2%
S&P 500 Dividend Aristocrats	-1.9%	11.6%	9.5%	8.5%	13.0%	13.5%	10.9%
S&P 500 Momentum	-0.1%	10.5%	24.5%	14.3%	18.1%	14.8%	10.1%
S&P 500 Buyback	1.6%	25.1%	13.2%	7.8%	15.2%	14.1%	11.0%
S&P 500 Low Volatility	-1.8%	6.5%	-5.8%	6.8%	10.5%	12.0%	9.6%
S&P 500 Minimum Volatility	-2.2%	8.3%	5.9%	9.1%	12.5%	13.4%	9.4%
S&P 500 Low Volatility High Dividend	2.1%	19.2%	-4.0%	1.5%	7.8%	10.7%	10.1%
S&P 500 Equal Weight	-0.8%	18.2%	14.0%	8.5%	14.1%	12.3%	9.6%
S&P 500 High Momentum Value	0.9%	18.0%	0.9%	-0.2%	9.4%	11.3%	9.1%
S&P 500 Revenue-Weighted	0.0%	18.0%	12.4%	7.3%	13.4%	12.4%	9.1%
S&P 500 Value	-1.6%	15.0%	2.5%	4.8%	11.3%	10.2%	7.0%
S&P 500 Pure Value	2.5%	26.8%	-0.4%	-0.4%	9.5%	10.4%	7.8%
S&P 500 High Dividend	2.0%	24.3%	-6.7%	0.8%	8.3%	10.7%	7.6%
S&P 500 Enhanced Value	1.9%	27.5%	-2.4%	0.6%	10.8%	10.4%	6.5%
S&P 500 High Beta	-0.5%	34.3%	30.4%	10.4%	19.4%	10.8%	5.8%
S&P 500	-1.0%	14.0%	17.2%	11.7%	16.2%	13.5%	9.6%
	Performa	nce figur	es for mo	re than o	ne year	are annu	ıalized.

VOLATILITY (ANN.)	12M	3Y	5Y	10Y	15Y
S&P 500 Growth	24.0%	18.4%	15.1%	13.5%	14.8%
S&P 500 Pure Growth	27.6%	20.9%	17.1%	15.6%	17.4%
S&P 500 Quality	22.1%	17.4%	14.1%	12.9%	14.2%
S&P 500 Dividend Aristocrats	23.6%	17.4%	14.5%	12.6%	14.1%
S&P 500 Momentum	21.0%	17.2%	14.2%	13.1%	14.8%
S&P 500 Buyback	31.7%	23.5%	19.3%	16.6%	18.1%
S&P 500 Low Volatility	20.1%	14.5%	12.3%	10.8%	11.4%
S&P 500 Minimum Volatility	21.2%	16.0%	13.3%	11.3%	12.4%
S&P 500 Low Volatility High Dividend	28.2%	19.8%	16.5%	13.3%	14.6%
S&P 500 Equal Weight	28.7%	21.0%	17.1%	15.2%	17.5%
S&P 500 High Momentum Value	32.3%	23.4%	19.1%	16.3%	19.9%
S&P 500 Revenue-Weighted	25.9%	19.7%	16.2%	14.4%	16.3%
S&P 500 Value	24.9%	19.1%	15.8%	14.2%	16.1%
S&P 500 Pure Value	39.4%	27.6%	22.7%	19.5%	23.4%
S&P 500 High Dividend	35.1%	23.7%	19.5%	15.3%	18.7%
S&P 500 Enhanced Value	36.7%	26.1%	21.7%	18.8%	21.4%
S&P 500 High Beta	43.1%	31.1%	26.0%	23.8%	27.2%
S&P 500	24.0%	18.3%	14.9%	13.4%	15.0%

Index Dashboard: S&P 500® Factor Indices

January 2021





RELATIVE RETURN AND TRACK	ING ER	ROR										
PERFORMANCE v S&P 500	1M	3M	1YR	3YR	5YR	10YR	15YR	TRACKING ERROR v S&P 500 (ANN.)	1YR	3YR	5YR	
S&P 500 Growth	0.5%	-0.4%	12.6%	5.8%	3.9%	2.8%	2.2%	S&P 500 Growth	4.2%	3.8%	3.7%	
S&P 500 Pure Growth	0.4%	2.6%	10.6%	2.0%	1.6%	1.5%	2.2%	S&P 500 Pure Growth	6.0%	5.5%	5.0%	
S&P 500 Quality	0.5%	-0.6%	0.8%	0.0%	-1.2%	0.6%	1.6%	S&P 500 Quality	4.5%	3.6%	3.1%	
S&P 500 Dividend Aristocrats	-0.9%	-2.4%	-7.8%	-3.2%	-3.1%	0.0%	1.3%	S&P 500 Dividend Aristocrats	5.3%	5.2%	4.8%	
S&P 500 Momentum	0.9%	-3.6%	7.2%	2.6%	2.0%	1.3%	0.4%	S&P 500 Momentum	6.9%	6.4%	5.9%	
S&P 500 Buyback	2.7%	11.0%	-4.0%	-3.9%	-1.0%	0.6%	1.4%	S&P 500 Buyback	11.8%	8.1%	7.2%	
S&P 500 Low Volatility	-0.8%	-7.6%	-23.0%	-4.9%	-5.7%	-1.5%	0.0%	S&P 500 Low Volatility	9.4%	9.1%	8.1%	8
S&P 500 Minimum Volatility	-1.2%	-5.8%	-11.4%	-2.6%	-3.6%	-0.1%	-0.2%	S&P 500 Minimum Volatility	4.5%	4.2%	4.7%	į
S&P 500 Low Volatility High Dividend	3.1%	5.1%	-21.3%	-10.2%	-8.4%	-2.8%	0.5%	S&P 500 Low Volatility High Dividend	10.9%	9.2%	8.1%	8
S&P 500 Equal Weight	0.2%	4.2%	-3.3%	-3.2%	-2.1%	-1.2%	0.0%	S&P 500 Equal Weight	7.6%	5.1%	4.4%	3
S&P 500 High Momentum Value	1.9%	3.9%	-16.4%	-11.9%	-6.7%	-2.2%	-0.5%	S&P 500 High Momentum Value	12.8%	8.9%	7.8%	(
S&P 500 Revenue-Weighted	1.0%	3.9%	-4.8%	-4.4%	-2.8%	-1.1%	-0.5%	S&P 500 Revenue-Weighted	5.8%	4.3%	3.8%	3
S&P 500 Value	-0.6%	0.9%	-14.8%	-6.9%	-4.9%	-3.3%	-2.6%	S&P 500 Value	5.8%	4.8%	4.5%	3
S&P 500 Pure Value	3.5%	12.8%	-17.7%	-12.1%	-6.7%	-3.1%	-1.8%	S&P 500 Pure Value	19.8%	13.1%	11.2%	ç
S&P 500 High Dividend	3.0%	10.2%	-23.9%	-10.9%	-7.9%	-2.8%	-2.0%	S&P 500 High Dividend	17.1%	11.9%	10.0%	9
S&P 500 Enhanced Value	2.9%	13.5%	-19.6%	-11.1%	-5.3%	-3.1%	-3.1%	S&P 500 Enhanced Value	17.4%	12.1%	10.7%	8
S&P 500 High Beta	0.5%	20.2%	13.2%	-1.3%	3.2%	-2.7%	-3.9%	S&P 500 High Beta	22.5%	15.3%	13.9%	1
F	erforma	ance figui	res for mo	re than c	ne year	are annu	ıalized.					

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Index Dashboard: S&P 500® Factor Indices

January 2021

# DEGREE OF PORTEOLIO OVERLAP AND RELATIVE RETURN CORRELATIONS

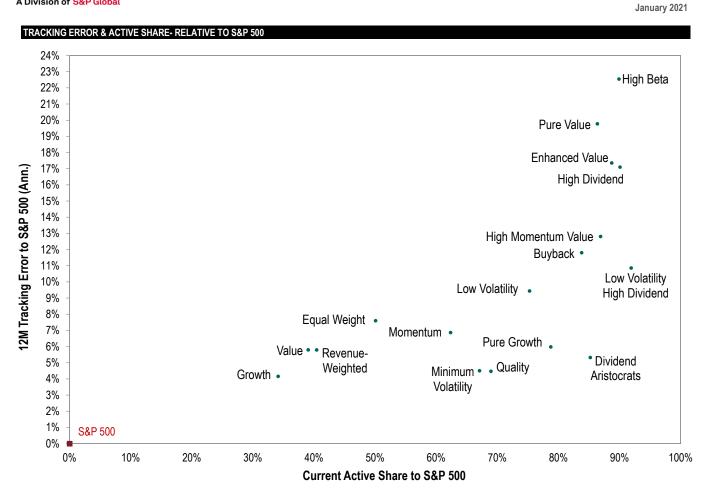
DEGREE OF PORTFOLIO OVER	RLAP AN	ID RELA	ATIVE R	ETURN	CORRE	LATION	S											
PORTFOLIO OVERLAP																		
	360 SM;.	S&P SO	Sasson	St. 500.5	580 30),	S&P 500 1.	S&P 500 P.	S&P 500 /	S&P SOUL.	S&p SOD S	S&P 300 1.	360 500 L	S&P SOF	S&P SON E	S&P SOD	\$0.00m	S&P SOOLL	5&p 500
S&P 500 Momentum	100%	57%	33%	33%	21%	20%	7%	2%	1%	19%	10%	5%	19%	1%	12%	1%	3%	38%
S&P 500 Growth	57%	100%	31%	32%	18%	24%	9%	2%	2%	32%	27%	4%	31%	0%	10%	1%	4%	66%
S&P 500 Quality	33%	31%	100%	16%	19%	24%	13%	1%	2%	17%	20%	7%	19%	3%	14%	3%	7%	31%
S&P 500 Pure Growth	33%	32%	16%	100%	15%	12%	2%	0%	0%	11%	0%	4%	14%	0%	17%	0%	9%	21%
S&P 500 Low Volatility	21%	18%	19%	15%	100%	28%	25%	7%	7%	23%	27%	18%	20%	6%	15%	7%	0%	25%
S&P 500 Minimum Volatility	20%	24%	24%	12%	28%	100%	16%	7%	6%	30%	31%	17%	18%	9%	11%	13%	2%	33%
S&P 500 Dividend Aristocrats	7%	9%	13%	2%	25%	16%	100%	20%	14%	18%	21%	8%	13%	12%	6%	11%	3%	15%
S&P 500 Low Volatility High Dividend	2%	2%	1%	0%	7%	7%	20%	100%	52%	13%	15%	16%	10%	16%	9%	15%	2%	8%
S&P 500 High Dividend	1%	2%	2%	0%	7%	6%	14%	52%	100%	16%	18%	15%	16%	37%	15%	22%	27%	10%
S&P 500 Revenue-Weighted	19%	32%	17%	11%	23%	30%	18%	13%	16%	100%	60%	31%	49%	35%	21%	35%	16%	60%
S&P 500 Value	10%	27%	20%	0%	27%	31%	21%	15%	18%	60%	100%	21%	54%	25%	17%	23%	16%	61%
S&P 500 High Momentum Value	5%	4%	7%	4%	18%	17%	8%	16%	15%	31%	21%	100%	20%	35%	21%	36%	17%	13%
S&P 500 Equal Weight	19%	31%	19%	14%	20%	18%	13%	10%	16%	49%	54%	20%	100%	24%	20%	20%	20%	50%
S&P 500 Pure Value	1%	0%	3%	0%	6%	9%	12%	16%	37%	35%	25%	35%	24%	100%	28%	58%	33%	14%
S&P 500 Buyback	12%	10%	14%	17%	15%	11%	6%	9%	15%	21%	17%	21%	20%	28%	100%	21%	21%	16%
S&P 500 Enhanced Value	1%	1%	3%	0%	7%	13%	11%	15%	22%	35%	23%	36%	20%	58%	21%	100%	21%	11%
S&P 500 High Beta	3%	4%	7%	9%	0%	2%	3%	2%	27%	16%	16%	17%	20%	33%	21%	21%	100%	10%

<sup>&</sup>quot;Portfolio Overlap" is percentage of index weights held in common between any two indices.

RELATIVE RETURN CORRELATIONS																	
RELATIVE RETURN CORRELATIONS	•	<del></del>				<del></del>							<u> </u>				,
	, 108c of	Sap 500	4mas 2005	William 1005 cts	S&D 5001	Sep 500 1	S&p 500 p.	S&p. 5001_	S&P 500 L.	Span Dividend	S&p. 500 L.	97 Julie 180 St. 180 S	S&p 500 E.	Sep 500.5	Sep 500 p.	860 500 E	Sep 30 High Ber.
S&P 500 Momentum	1.00	0.74	0.28	0.39	0.09	0.02	-0.51	-0.61	-0.66	-0.68	-0.74	-0.52	-0.59	-0.63	-0.60	-0.67	-0.55
S&P 500 Growth	0.74	1.00	0.24	0.35	-0.26	-0.28	-0.78	-0.79	-0.77	-0.84	-0.99	-0.74	-0.79	-0.76	-0.72	-0.80	-0.57
S&P 500 Quality	0.28	0.24	1.00	-0.11	-0.10	0.08	-0.04	-0.40	-0.47	-0.23	-0.24	-0.52	-0.39	-0.49	-0.42	-0.51	-0.40
S&P 500 Pure Growth	0.39	0.35	-0.11	1.00	-0.04	-0.16	-0.26	-0.21	-0.09	-0.26	-0.34	0.14	0.14	0.06	0.17	0.01	0.22
S&P 500 Low Volatility	0.09	-0.26	-0.10	-0.04	1.00	0.76	0.40	0.48	0.34	0.00	0.26	0.21	0.19	0.01	0.03	0.04	-0.26
S&P 500 Minimum Volatility	0.02	-0.28	0.08	-0.16	0.76	1.00	0.48	0.42	0.28	0.13	0.28	0.08	0.16	-0.02	-0.05	-0.02	-0.25
S&P 500 Dividend Aristocrats	-0.51	-0.78	-0.04	-0.26	0.40	0.48	1.00	0.70	0.63	0.69	0.79	0.56	0.68	0.55	0.52	0.56	0.37
S&P 500 Low Volatility High Dividend	-0.61	-0.79	-0.40	-0.21	0.48	0.42	0.70	1.00	0.94	0.67	0.80	0.74	0.81	0.73	0.68	0.74	0.53
S&P 500 High Dividend	-0.66	-0.77	-0.47	-0.09	0.34	0.28	0.63	0.94	1.00	0.71	0.79	0.82	0.86	0.85	0.78	0.85	0.67
S&P 500 Revenue-Weighted	-0.68	-0.84	-0.23	-0.26	0.00	0.13	0.69	0.67	0.71	1.00	0.85	0.67	0.75	0.78	0.68	0.80	0.63
S&P 500 Value	-0.74	-0.99	-0.24	-0.34	0.26	0.28	0.79	0.80	0.79	0.85	1.00	0.75	0.80	0.77	0.73	0.81	0.59
S&P 500 High Momentum Value	-0.52	-0.74	-0.52	0.14	0.21	0.08	0.56	0.74	0.82	0.67	0.75	1.00	0.91	0.92	0.92	0.93	0.76
S&P 500 Equal Weight	-0.59	-0.79	-0.39	0.14	0.19	0.16	0.68	0.81	0.86	0.75	0.80	0.91	1.00	0.92	0.92	0.90	0.84
S&P 500 Pure Value	-0.63	-0.76	-0.49	0.06	0.01	-0.02	0.55	0.73	0.85	0.78	0.77	0.92	0.92	1.00	0.92	0.97	0.87
S&P 500 Buyback	-0.60	-0.72	-0.42	0.17	0.03	-0.05	0.52	0.68	0.78	0.68	0.73	0.92	0.92	0.92	1.00	0.93	0.86
S&P 500 Enhanced Value	-0.67	-0.80	-0.51	0.01	0.04	-0.02	0.56	0.74	0.85	0.80	0.81	0.93	0.90	0.97	0.93	1.00	0.84
S&P 500 High Beta	-0.55	-0.57	-0.40	0.22	-0.26	-0.25	0.37	0.53	0.67	0.63	0.59	0.76	0.84	0.87	0.86	0.84	1.00
Correlation of woolds aveces total retu	/		Ol lock th														

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

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FACTOR EXPOSURE SUMMAR	Y (See follow	wing pages for fact	or details)					
INDEX	PAGE No.	LOW VOLATILITY	MOMENTUM	VALUE	HIGH BETA	DIVIDEND	QUALITY	SMALL SIZE
S&P 500 Low Volatility	7	67.1%	-9.3%	13.0%	-51.4%	20.3%	0.8%	34.7%
S&P 500 Minimum Volatility	7	25.8%	-16.3%	17.3%	-16.0%	23.8%	-10.9%	12.3%
S&P 500 Low Volatility High Dividend	8	-27.1%	-66.9%	64.7%	19.9%	86.7%	-14.0%	58.4%
S&P 500 High Dividend	8	-69.2%	-72.3%	73.2%	61.1%	84.5%	-21.0%	66.8%
S&P 500 Quality	9	8.6%	-1.9%	-8.5%	-11.9%	-2.5%	38.2%	6.7%
S&P 500 Dividend Aristocrats	9	1.1%	-32.0%	37.3%	0.5%	48.9%	-2.6%	45.2%
S&P 500 Momentum	10	7.6%	40.3%	-27.5%	-22.4%	-17.4%	5.7%	-26.0%
S&P 500 Revenue-Weighted	10	-10.0%	-22.3%	61.3%	8.0%	26.6%	-10.9%	16.7%
S&P 500 High Momentum Value	11	-20.4%	-32.0%	77.5%	30.1%	23.0%	-10.9%	60.8%
S&P 500 Growth	11	3.1%	41.3%	-28.4%	-7.8%	-25.2%	6.2%	-41.2%
S&P 500 Value	12	-9.5%	-44.5%	45.3%	14.4%	39.9%	-10.9%	25.5%
S&P 500 Pure Growth	12	-27.6%	62.4%	-35.6%	8.0%	-56.7%	-3.6%	16.7%
S&P 500 Pure Value	13	-66.8%	-69.5%	90.5%	55.9%	52.7%	-10.9%	60.8%
S&P 500 Buyback	13	-36.4%	-26.3%	48.9%	30.1%	30.7%	0.3%	44.0%
S&P 500 High Beta	14	-91.6%	-58.3%	59.9%	88.9%	30.7%	-39.3%	71.9%
S&P 500 Enhanced Value	14	-47.1%	-66.1%	90.6%	43.8%	51.0%	-13.2%	35.6%
S&P 500 Equal Weight	15	-37.5%	-24.0%	34.1%	30.8%	23.0%	-11.3%	50.2%

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Index Dashboard: S&P 500® Factor Indices

January 2021

#### S&P 500 Low Volatility

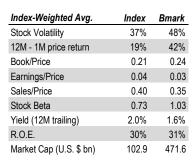
#### Description

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)	-1.8%	6.5%	-1.8%	-5.8%	6.8%	10.5%	12.0%	9.6%
Relative to Benchmark	-0.8%	-7.6%	-0.8%	-23.0%	-4.9%	-5.7%	-1.5%	0.0%
Index Volatility				20.1%	14.5%	12.3%	10.8%	11.4%
Tracking Error				9.4%	9.1%	8.1%	8.0%	8.0%

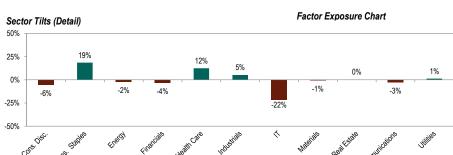
Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.93

Portfolio Statistics	Index	Bmark
Active Share (Stock)	75%	0%
Active Share (Sector)	38%	0%
Concentration (HH Index)	101.4	141.4
Correlation (stock)	0.84	0.52
Ann. Turnover (last 10 yr)	0.62	0.05



## Top Sector Tilts (versus benchmark)

Sector	Index	Bmark	Difference
Cons. Staples	25%	6%	19%
Health Care	26%	14%	12%
IT	6%	28%	22%
Cons. Disc.	7%	13%	6%



# **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 January 29, 2021 the index comprised 94 constituents.

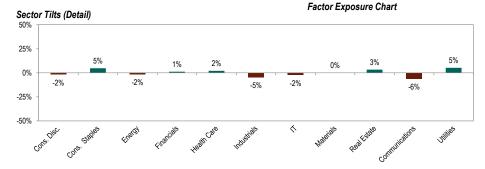
Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	-2.2%	8.3%	-2.2%	5.9%	9.1%	12.5%	13.4%	9.4%
Relative to Benchmark	-1.2%	-5.8%	-1.2%	-11.4%	-2.6%	-3.6%	-0.1%	-0.2%
Index Volatility				21.2%	16.0%	13.3%	11.3%	12.4%
Tracking Error				4.5%	4.2%	4.7%	5.0%	5.4%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.93

Portfolio Statistics	Index	Bmark
Active Share (Stock)	67%	0%
Active Share (Sector)	17%	0%
Concentration (HH Index)	168.8	141.4
Correlation (stock)	0.61	0.52
Ann. Turnover (last 10 yr)	0.41	0.05

Index-Weighted Avg.	Index	Bmark
Stock Volatility	42%	48%
12M - 1M price return	20%	42%
Book/Price	0.25	0.24
Earnings/Price	0.04	0.03
Sales/Price	0.39	0.35
Stock Beta	0.90	1.03
Yield (12M trailing)	2.1%	1.6%
R.O.E.	31%	31%
Market Cap (U.S. \$ bn)	255.6	471.6

rop Sector Hits (versus benchmark)							
Sector	Index	Bmark	Difference				
Utilities	8%	3%	5%				
Cons. Staples	11%	6%	5%				
Communications	5%	11%	6%				
Industrials	1%	8%	5%				

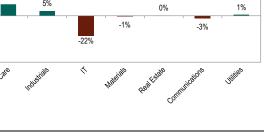


Small Size

Quality

Dividend





Low Volatility

Momentum

Value

High Beta

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January 2021

#### 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)	2.1%	19.2%	2.1%	-4.0%	1.5%	7.8%	10.7%	10.1%
Relative to Benchmark	3.1%	5.1%	3.1%	-21.3%	-10.2%	-8.4%	-2.8%	0.5%
Index Volatility				28.2%	19.8%	16.5%	13.3%	14.6%
Tracking Error				10.9%	9.2%	8.1%	8.3%	7.9%

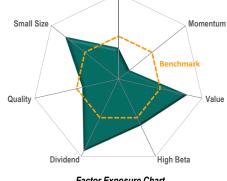
Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.02

Portfolio Statistics	Index	Bmark
Active Share (Stock)	92%	0%
Active Share (Sector)	43%	0%
Concentration (HH Index)	219.4	141.4
Correlation (stock)	0.58	0.52
Ann. Turnover (last 10 yr)	0.59	0.05

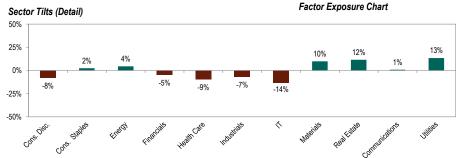
Index-Weighted Avg.	Index	Bmark
Stock Volatility	53%	48%
12M - 1M price return	-6%	42%
Book/Price	0.49	0.24
Earnings/Price	0.04	0.03
Sales/Price	0.74	0.35
Stock Beta	1.14	1.03
Yield (12M trailing)	4.9%	1.6%
R.O.E.	20%	31%
Market Cap (U.S. \$ bn)	50.3	471.6

#### Top Sector Tilts (versus benchmark) Sector Index Diff. Bmark Utilities 16% 3% Real Estate 14% 2%





Low Volatility



# S&P 500 High Dividend

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.

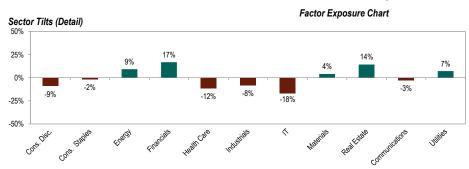
Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	2.0%	24.3%	2.0%	-6.7%	0.8%	8.3%	10.7%	7.6%
Relative to Benchmark	3.0%	10.2%	3.0%	-23.9%	-10.9%	-7.9%	-2.8%	-2.0%
Index Volatility				35.1%	23.7%	19.5%	15.3%	18.7%
Tracking Error				17.1%	11.9%	10.0%	9.0%	9.9%

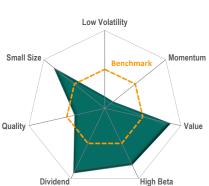
Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.14

Portfolio Statistics	Index	Bmark
Active Share (Stock)	90%	0%
Active Share (Sector)	51%	0%
Concentration (HH Index)	132.0	141.4
Correlation (stock)	0.51	0.52
Ann. Turnover (last 10 yr)	0.41	0.05

Index-Weighted Avg.	Index	Bmark
Stock Volatility	63%	48%
12M - 1M price return	-11%	42%
Book/Price	0.66	0.24
Earnings/Price	0.03	0.03
Sales/Price	0.80	0.35
Stock Beta	1.40	1.03
Yield (12M trailing)	4.7%	1.6%
R.O.E.	13%	31%
Market Cap (U.S. \$ bn)	38.0	471.6

Sector	Index	Bmark	Diff.	
Financials	27%	10%	17%	Ī
Real Estate	17%	2%	14%	
IT	10%	28%	18%	
Health Care	2%	14%	12%	





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Index Dashboard: S&P 500® Factor Indices

Low Volatility

January 2021

Momentum

#### 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)	-0.5%	13.5%	-0.5%	18.1%	11.7%	14.9%	14.1%	11.2%
Relative to Benchmark	0.5%	-0.6%	0.5%	0.8%	0.0%	-1.2%	0.6%	1.6%
Index Volatility				22.1%	17.4%	14.1%	12.9%	14.2%
Tracking Error				4.5%	3.6%	3.1%	3.0%	3.3%

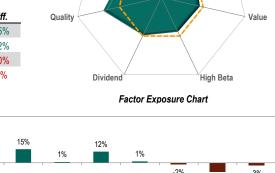
Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.97

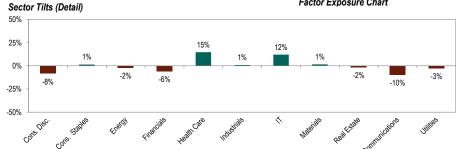
Portfolio Statistics	Index	Bmark
Active Share (Stock)	69%	0%
Active Share (Sector)	30%	0%
Concentration (HH Index)	251.1	141.4
Correlation (stock)	0.57	0.52
Ann. Turnover (last 10 yr)	0.62	0.05

Index-Weighted Avg.	Index	Bmark
Stock Volatility	45%	48%
12M - 1M price return	30%	42%
Book/Price	0.15	0.24
Earnings/Price	0.04	0.03
Sales/Price	0.23	0.35
Stock Beta	0.92	1.03
Yield (12M trailing)	1.4%	1.6%
R.O.E.	41%	31%
Market Cap (U.S. \$ bn)	358.7	471.6

# Top Sector Tilts (versus benchmark)

Sector	Index	Bmark	Diff.
Health Care	28%	14%	15%
IT	40%	28%	12%
Communications	1%	11%	10%
Cons. Disc.	4%	13%	8%





Small Size

# **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 January 29, 2021 the index comprised 65 constituents.

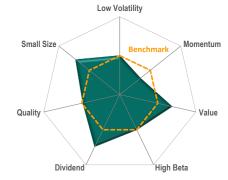
Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	-1.9%	11.6%	-1.9%	9.5%	8.5%	13.0%	13.5%	10.9%
Relative to Benchmark	-0.9%	-2.4%	-0.9%	-7.8%	-3.2%	-3.1%	0.0%	1.3%
Index Volatility				23.6%	17.4%	14.5%	12.6%	14.1%
Tracking Error				5.3%	5.2%	4.8%	4.7%	5.3%

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

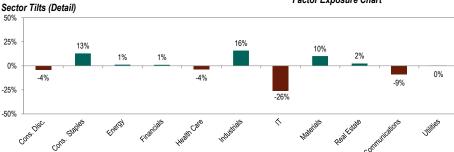
Portfolio Statistics	Index	Bmark
Active Share (Stock)	85%	0%
Active Share (Sector)	44%	0%
Concentration (HH Index)	156.1	141.4
Correlation (stock)	0.54	0.52
Ann. Turnover (last 10 yr)	0.18	0.05

Index-Weighted Avg.	Index	Bmark
Stock Volatility	48%	48%
12M - 1M price return	10%	42%
Book/Price	0.31	0.24
Earnings/Price	0.03	0.03
Sales/Price	0.56	0.35
Stock Beta	1.03	1.03
Yield (12M trailing)	2.6%	1.6%
R.O.E.	26%	31%
Market Cap (U.S. \$ bn)	76.2	471.6

Sector	Index	Bmark	Diff.
Industrials	24%	8%	16%
Cons. Staples	19%	6%	13%
IT	2%	28%	26%
Communications	2%	11%	9%



Factor Exposure Chart



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Index Dashboard: S&P 500® Factor Indices

Low Volatility

January 2021

Momentum

**Benchmark** 

#### S&P 500 Momentum

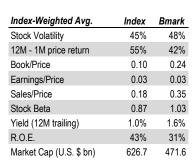
#### Description

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)	-0.1%	10.5%	-0.1%	24.5%	14.3%	18.1%	14.8%	10.1%
Relative to Benchmark	0.9%	-3.6%	0.9%	7.2%	2.6%	2.0%	1.3%	0.4%
Index Volatility				21.0%	17.2%	14.2%	13.1%	14.8%
Tracking Error				6.9%	6.4%	5.9%	5.1%	6.3%

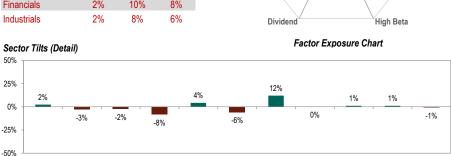
Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 0.98

Portfolio Statistics	Index	Bmark
Active Share (Stock)	62%	0%
Active Share (Sector)	21%	0%
Concentration (HH Index)	383.8	141.4
Correlation (stock)	0.59	0.52
Ann. Turnover (last 10 yr)	1.15	0.05



# Top Sector Tilts (versus benchmark)

Sector	Index	Bmark	Diff.
IT	40%	28%	12%
Health Care	18%	14%	4%
Financials	2%	10%	8%
Industrials	2%	8%	6%



Small Size

Quality

# 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.

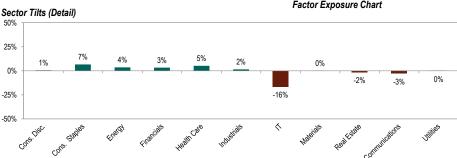
Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	0.0%	18.0%	0.0%	12.4%	7.3%	13.4%	12.4%	9.1%
Relative to Benchmark	1.0%	3.9%	1.0%	-4.8%	-4.4%	-2.8%	-1.1%	-0.5%
Index Volatility				25.9%	19.7%	16.2%	14.4%	16.3%
Tracking Error				5.8%	4.3%	3.8%	3.1%	3.3%

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

Portfolio Statistics	Index	Bmark
Active Share (Stock)	40%	0%
Active Share (Sector)	21%	0%
Concentration (HH Index)	94.5	141.4
Correlation (stock)	0.49	0.52
Ann. Turnover (last 10 yr)	0.19	0.05

Index-Weighted Avg.	Index	Bmark
Stock Volatility	50%	48%
12M - 1M price return	15%	42%
Book/Price	0.38	0.24
Earnings/Price	0.02	0.03
Sales/Price	0.96	0.35
Stock Beta	1.08	1.03
Yield (12M trailing)	2.1%	1.6%
R.O.E.	24%	31%
Market Cap (U.S. \$ bn)	248.7	471.6

Sector	Index	Bmark	Diff.
Cons. Staples	13%	6%	7%
Health Care	19%	14%	5%
IT	11%	28%	16%
Communications	8%	11%	3%





Factor Exposure Chart

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Index Dashboard: S&P 500® Factor Indices

Benchmarl

Low Volatility

January 2021

Momentum

## 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)	0.9%	18.0%	0.9%	0.9%	-0.2%	9.4%	11.3%	9.1%
Relative to Benchmark	1.9%	3.9%	1.9%	-16.4%	-11.9%	-6.7%	-2.2%	-0.5%
Index Volatility				32.3%	23.4%	19.1%	16.3%	19.9%
Tracking Error				12.8%	8.9%	7.8%	6.3%	8.3%

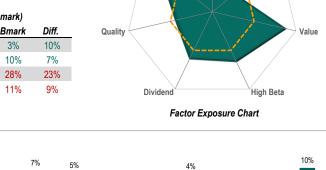
Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.15

Portfolio Statistics	Index	Bmark
Active Share (Stock)	87%	0%
Active Share (Sector)	35%	0%
Concentration (HH Index)	111.3	141.4
Correlation (stock)	0.73	0.52
Ann. Turnover (last 10 vr)	0.78	0.05

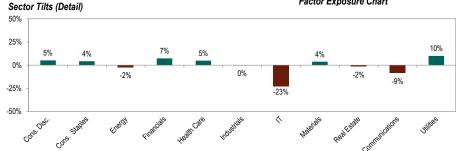
Index-Weighted Avg.	Index	Bmark
Stock Volatility	52%	48%
12M - 1M price return	12%	42%
Book/Price	0.47	0.24
Earnings/Price	0.05	0.03
Sales/Price	1.09	0.35
Stock Beta	1.18	1.03
Yield (12M trailing)	2.0%	1.6%
R.O.E.	19%	31%
Market Cap (U.S. \$ bn)	46.5	471.6

# Top Sector Tilts (versus benchmark)

Sector	Index	Bmark	Diff.
Utilities	13%	3%	10%
Financials	18%	10%	7%
IT	5%	28%	23%
Communications	2%	11%	9%



Small Size



# 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 January 29, 2021 the index comprised 232 constituents.

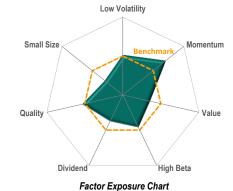
Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	-0.5%	13.6%	-0.5%	29.8%	17.5%	20.1%	16.3%	11.8%
Relative to Benchmark	0.5%	-0.4%	0.5%	12.6%	5.8%	3.9%	2.8%	2.2%
Index Volatility				24.0%	18.4%	15.1%	13.5%	14.8%
Tracking Error				4.2%	3.8%	3.7%	3.0%	3.3%

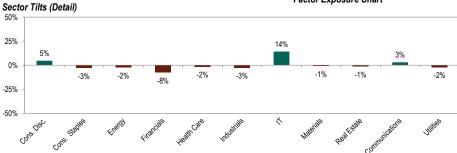
Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1

Portfolio Statistics	Index	Bmark
Active Share (Stock)	34%	0%
Active Share (Sector)	22%	0%
Concentration (HH Index)	417.4	141.4
Correlation (stock)	0.56	0.52
Ann. Turnover (last 10 yr)	0.25	0.05

Index-Weighted Avg.	Index	Bmark
Stock Volatility	47%	48%
12M - 1M price return	75%	42%
Book/Price	0.10	0.24
Earnings/Price	0.03	0.03
Sales/Price	0.17	0.35
Stock Beta	0.95	1.03
Yield (12M trailing)	0.8%	1.6%
R.O.E.	41%	31%
Market Cap (U.S. \$ bn)	765.2	471.6

Sector	Index	Bmark	Diff.	
IT	42%	28%	14%	
Cons. Disc.	18%	13%	5%	
Financials	3%	10%	8%	
Cons. Staples	3%	6%	3%	





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Index Dashboard: S&P 500® Factor Indices

January 2021

#### 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 January 29, 2021 the index comprised 437 constituents.

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	-1.6%	15.0%	-1.6%	2.5%	4.8%	11.3%	10.2%	7.0%
Relative to Benchmark	-0.6%	0.9%	-0.6%	-14.8%	-6.9%	-4.9%	-3.3%	-2.6%
Index Volatility				24.9%	19.1%	15.8%	14.2%	16.1%
Tracking Error				5.8%	4.8%	4.5%	3.6%	3.7%

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

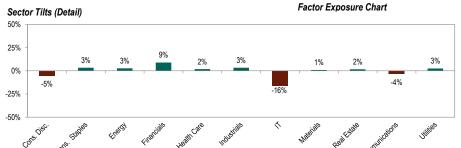
Portfolio Statistics	Index	Bmark
Active Share (Stock)	39%	0%
Active Share (Sector)	25%	0%
Concentration (HH Index)	71.1	141.4
Correlation (stock)	0.52	0.52
Ann. Turnover (last 10 yr)	0.26	0.05

Index-Weighted Avg.	Index	Bmark
Stock Volatility	50%	48%
12M - 1M price return	5%	42%
Book/Price	0.40	0.24
Earnings/Price	0.03	0.03
Sales/Price	0.55	0.35
Stock Beta	1.11	1.03
Yield (12M trailing)	2.5%	1.6%
R.O.E.	19%	31%
Market Cap (U.S. \$ bn)	135.8	471.6

## Top Sector Tilts (versus benchmark)

Sector	Index	Bmark	Diff.
Financials	19%	10%	9%
Cons. Staples	10%	6%	3%
IT	12%	28%	16%
Cons Disc	7%	13%	5%





# 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 January 29, 2021 the index comprised 68 constituents.

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	-0.6%	16.6%	-0.6%	27.9%	13.7%	17.8%	15.0%	11.9%
Relative to Benchmark	0.4%	2.6%	0.4%	10.6%	2.0%	1.6%	1.5%	2.2%
Index Volatility				27.6%	20.9%	17.1%	15.6%	17.4%
Tracking Error				6.0%	5.5%	5.0%	5.0%	5.5%

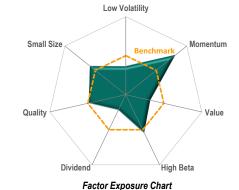
Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.07

Portfolio Statistics	Index	Bmark
Active Share (Stock)	79%	0%
Active Share (Sector)	23%	0%
Concentration (HH Index)	162.8	141.4
Correlation (stock)	0.52	0.52
Ann. Turnover (last 10 yr)	0.65	0.05

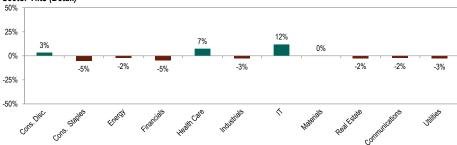
Index-Weighted Avg.	Index	Bmark
Stock Volatility	53%	48%
12M - 1M price return	102%	42%
Book/Price	0.09	0.24
Earnings/Price	0.02	0.03
Sales/Price	0.14	0.35
Stock Beta	1.07	1.03
Yield (12M trailing)	0.3%	1.6%
R.O.E.	37%	31%
Market Cap (U.S. \$ bn)	194.2	471.6

# Top Sector Tilts (versus benchmark)

Sector	Index	Bmark	Diff.
IT	40%	28%	12%
Health Care	21%	14%	7%
Cons. Staples	1%	6%	5%
Financials	6%	10%	5%



# Sector Tilts (Detail)



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# 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 January 29, 2021 the index comprised 123 constituents.

Index Statistics	1M	3M	YTD	12M	3Y	5Y	10Y	15Y
Total Return (Ann)	2.5%	26.8%	2.5%	-0.4%	-0.4%	9.5%	10.4%	7.8%
Relative to Benchmark	3.5%	12.8%	3.5%	-17.7%	-12.1%	-6.7%	-3.1%	-1.8%
Index Volatility				39.4%	27.6%	22.7%	19.5%	23.4%
Tracking Error				19.8%	13.1%	11.2%	9.1%	12.0%

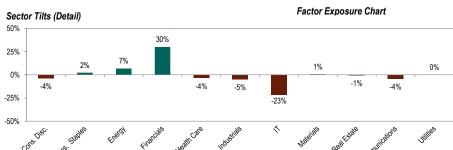
Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.22

Portfolio Statistics	Index	Bmark
Active Share (Stock)	86%	0%
Active Share (Sector)	40%	0%
Concentration (HH Index)	106.2	141.4
Correlation (stock)	0.60	0.52
Ann. Turnover (last 10 yr)	0.46	0.05

Index-Weighted Avg.	Index	Bmark
Stock Volatility	62%	48%
12M - 1M price return	-9%	42%
Book/Price	0.83	0.24
Earnings/Price	0.03	0.03
Sales/Price	1.33	0.35
Stock Beta	1.36	1.03
Yield (12M trailing)	2.9%	1.6%
R.O.E.	8%	31%
Market Cap (U.S. \$ bn)	46.3	471.6

# Top Sector Tilts (versus benchmark)

Sector	Index	Bmark	Diff.
Financials	40%	10%	30%
Energy	9%	2%	7%
IT	5%	28%	23%
Industrials	3%	8%	5%



# 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)	1.6%	25.1%	1.6%	13.2%	7.8%	15.2%	14.1%	11.0%
Relative to Benchmark	2.7%	11.0%	2.7%	-4.0%	-3.9%	-1.0%	0.6%	1.4%
Index Volatility				31.7%	23.5%	19.3%	16.6%	18.1%
Tracking Error				11.8%	8.1%	7.2%	5.8%	6.1%

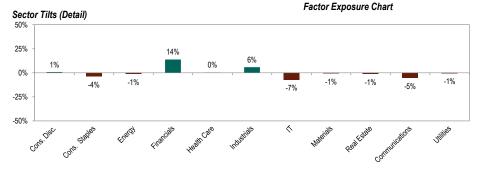
Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.16

Portfolio Statistics	Index	Bmark
Active Share (Stock)	84%	0%
Active Share (Sector)	21%	0%
Concentration (HH Index)	100.5	141.4
Correlation (stock)	0.62	0.52
Ann. Turnover (last 10 yr)	0.91	0.05

Index-Weighted Avg.	Index	Bmark
Stock Volatility	54%	48%
12M - 1M price return	14%	42%
Book/Price	0.37	0.24
Earnings/Price	0.03	0.03
Sales/Price	0.59	0.35
Stock Beta	1.18	1.03
Yield (12M trailing)	2.2%	1.6%
R.O.E.	31%	31%
Market Cap (U.S. \$ bn)	79.3	471.6

## Top Sector Tilts (versus benchmark)

Sector	Index	Bmark	Diff.	
Financials	24%	10%	14%	
Industrials	14%	8%	6%	
IT	20%	28%	7%	
Communications	5%	11%	5%	



Small Size

Quality

Dividend

# Low Volatility Small Size Benchmark Value

Dividend

Index Dashboard: S&P 500® Factor Indices

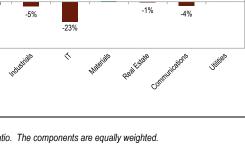
High Beta

Momentum

Value

High Beta

January 2021



Low Volatility

Benchmark

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Index Dashboard: S&P 500® Factor Indices

January 2021

#### S&P 500 High Beta

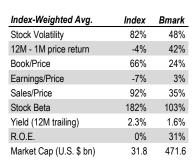
#### Description

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)	-0.5%	34.3%	-0.5%	30.4%	10.4%	19.4%	10.8%	5.8%
Relative to Benchmark	0.5%	20.2%	0.5%	13.2%	-1.3%	3.2%	-2.7%	-3.9%
Index Volatility				43.1%	31.1%	26.0%	23.8%	27.2%
Tracking Error				22.5%	15.3%	13.9%	12.8%	14.5%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.35

Portfolio Statistics	Index	Bmark
Active Share (Stock)	90%	0%
Active Share (Sector)	45%	0%
Concentration (HH Index)	104.0	141.4
Correlation (stock)	0.43	0.52
Ann. Turnover (last 10 vr)	0.88	0.05



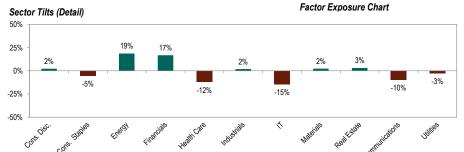
# Top Sector Tilts (versus benchmark)

Sector	Index	Bmark	Diff.
Energy	21%	2%	19%
Financials	27%	10%	17%
IT	13%	28%	15%
Health Care	2%	14%	12%



Low Volatility

Momentum



# 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)	1.9%	27.5%	1.9%	-2.4%	0.6%	10.8%	10.4%	6.5%
Relative to Benchmark	2.9%	13.5%	2.9%	-19.6%	-11.1%	-5.3%	-3.1%	-3.1%
Index Volatility				36.7%	26.1%	21.7%	18.8%	21.4%
Tracking Error				17.4%	12.1%	10.7%	8.7%	9.6%

Benchmark: S&P 500. 1 Yr trailing beta to benchmark = 1.21

Portfolio Statistics	Index	Bmark
Active Share (Stock)	89%	0%
Active Share (Sector)	41%	0%
Concentration (HH Index)	233.1	141.4
Correlation (stock)	0.71	0.52
Ann. Turnover (last 10 yr)	0.43	0.05

Index-Weighted Avg.	Index	Bmark
Stock Volatility	56%	48%
12M - 1M price return	-5%	42%
Book/Price	0.76	0.24
Earnings/Price	0.04	0.03
Sales/Price	1.33	0.35
Stock Beta	1.28	1.03
Yield (12M trailing)	2.9%	1.6%
R.O.E.	11%	31%
Market Cap (U.S. \$ bn)	98.4	471.6

# Top Sector Tilts (versus benchmark)

Sector Tilts (Detail)

25%

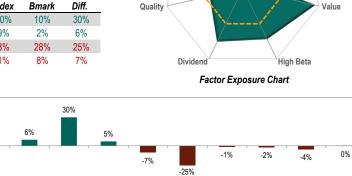
0%

-25%

-50%

Sector	Index	Bmark	Diff.
Financials	40%	10%	30%
Energy	9%	2%	6%
IT	3%	28%	25%
Industrials	1%	8%	7%

1%



Small Size

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Index Dashboard: S&P 500® Factor Indices

January 2021

#### 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)	-0.8%	18.2%	-0.8%	14.0%	8.5%	14.1%	12.3%	9.6%
Relative to Benchmark	0.2%	4.2%	0.2%	-3.3%	-3.2%	-2.1%	-1.2%	0.0%
Index Volatility				28.7%	21.0%	17.1%	15.2%	17.5%
Tracking Error				7.6%	5.1%	4.4%	3.6%	4.5%

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

Portfolio Statistics	Index	Bmark
Active Share (Stock)	50%	0%
Active Share (Sector)	20%	0%
Concentration (HH Index)	20.0	141.4
Correlation (stock)	0.49	0.52
Ann. Turnover (last 10 yr)	0.22	0.05

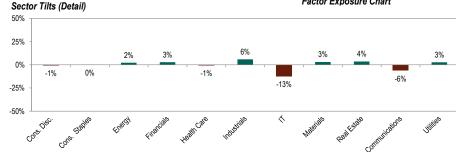
Index-Weighted Avg.	Index	Bmark
Stock Volatility	55%	48%
12M - 1M price return	16%	42%
Book/Price	0.35	0.24
Earnings/Price	0.02	0.03
Sales/Price	0.55	0.35
Stock Beta	1.20	1.03
Yield (12M trailing)	2.0%	1.6%
R.O.E.	20%	31%
Market Cap (U.S. \$ bn)	65.7	471.6

## Top Sector Tilts (versus benchmark)

Sector	Index	Bmark	Diff.
Industrials	14%	8%	6%
Real Estate	6%	2%	4%
IT	15%	28%	13%
Communications	4%	11%	6%



Factor Exposure Chart



# **More Factor Resources**



Factor Allocator is a complementary web-based tool from Optimal Asset Management that allows advisors to build and analyse simulated portfolios using S&P Factor Indices. Using 15 years of S&P factor index data, explore how individual risk factors behave together and in different market conditions to meet specific performance goals. Visit factorallocator.com/spdji.

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Index Dashboard: S&P 500® Factor Indices

January 2021

#### KEY TO FACTOR SCORINGS FOR INDICES

#### **Factor Definitions**

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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.



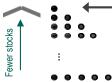
Factor	Measurement at single-stock level
Volatility	Trailing 12-month daily volatility.
Momentum	Twelve-month price change as of one month ago ("13 minus 1 momentum"), divided by the daily volatility during the twelve-month period that ended one month prior. For more details, see the <a href="S&amp;P">S&amp;P</a> <a href="Momentum">Momentum</a> methodology.
Value	The average of (normalized) earnings to price ratio, book to price ratio and sales to price ratio. For more details, see the <u>S&amp;P Value</u> 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 <a href="S&amp;P Quality">S&amp;P Quality</a> 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.



lowest-ranked stocks

0 0 Benchmark Portfolio has a factor rank defined by that of a capweighted 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	0.028	0.236	0.347	13.85%	30.88%	1.39	42.02%	3.01%
S&P 500 index-weighted standard deviation	0.044	0.286	0.432	26.27%	30.62%	1.09	104.82%	0.85%

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#### **Performance Disclosure**

The S&P 500 Buyback Index was launched November 29, 2012. The S&P 500 Enhanced Value Index was launched April 27, 2015. The S &P 500 Revenue-Weighted was launched on Dec 30, 2005. The S&P 500 Pure Value was launched December 16, 2005. The S&P 500 Quality Index was launched July 8, 2014. The S&P 500 Pure Growth was launched December 16, 2005. The S&P 500 Momentum was launched November 18, 2014. The S&P 500 High Beta Index was launched April 4, 2011. The S&P 500 Equal Weight Index was launched January 8, 2003. The S&P 500 Low Volatility High Dividend Index was launched September 17, 2012. The S&P 500 Windend Aristocrats was launched May 2, 2005. The S&P 500 High Dividend Index was launched September 21, 2015. The S&P 500 Minimum Volatility Index was launched November 9, 2012. The S&P 500 Low Volatility Index was launched April 4, 2011. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance. The back-test calculations are based on the same methodology details are available at www.spdji.com.

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