

COMMENTARY						
	Select Sectors	S&P MidCap 400 Capped Sectors	S&P SmallCap 600 Capped Sectors			
	MTD QTD YTD	MTD QTD YTD	MTD QTD YTD			
Consumer Discretionary	-8.0% -15.2% 1.8%	-12.0% -18.2% -17.9%	-9.8% -19.5% -8.1%			
Consumer Staples	-9.1% -5.0% -8.0%	-7.4% -7.2% -5.1%	-12.9% -16.4% -6.0%			
Communication Services****	-8.1% -15.5% -6.9%	N/A N/A N/A	N/A N/A N/A			
Energy	-12.5% -23.7% -18.1%	-22.1% -41.7% -29.7%	-23.6% -45.8% -42.8%			
Financials***	-11.3% -13.1% -13.0%	-11.7% -15.8% -16.0%	-11.4% -13.4% -7.5%			
Health Care	-8.6% -8.7% 6.4%	-13.6% -19.9% 6.5%	-16.1% -23.1% 9.9%			
Industrials	-10.7% -17.3% -13.0%	-12.3% -18.6% -14.9%	-11.9% -23.3% -12.1%			
Materials	-7.0% -12.2% -14.8%	-10.1% -19.5% -20.4%	-13.6% -26.5% -22.3%			
Real Estate	-7.4% -3.8% -2.2%	N/A N/A N/A	N/A N/A N/A			
Technology*	-8.5% -17.3% -1.4%	-9.7% -16.8% -5.5%	-9.4% -17.7% -8.9%			
Utilities**	-4.0% 1.4% 4.1%	-6.0% -3.7% 4.8%	-11.6% -14.2% -4.5%			

- · Health Care was the top performing sector across the cap spectrum, and one of the only large-cap sectors to post gains along with Utilities and Consumer Discretionary.
- In mid-caps, Health Care along with Utilities were the only sectors to post gains.
- Energy was the worst performing sector across the cap spectrum, driven by the decline in oil prices.

^{*}The Technology Select Sector combines constitutents of the GICS Information Technology and Communication Services sectors.

^{**}Utilities MidCap and SmallCap Capped Sectors include constituents of the GICS Utilities and Communication Services sectors.

***Financials & Real Estate SmallCap Capped Sector combines constituents of the GICS Financials and Real Estate sectors.

^{****}Communication Services Select Sector Index, launched April 30, 2018, no longer overlaps with some constituents of the Technology Select Sector and Consumer Discretionary Select Sector Index. indices became mutually exclusive as of Sept. 24, 2018, coincident with the change in GICS methodology. Performance prior to April 30, 2018 is backtested. Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of Dec. 31, 2018.

KEY TO FACTOR SCORINGS FOR INDICES

Factor Definitions

Each constituent of the S&P 1500 index is provided with a factor "score" for each of Beta, Volatility, Momentum, Dividend, Size, Value and Quality.



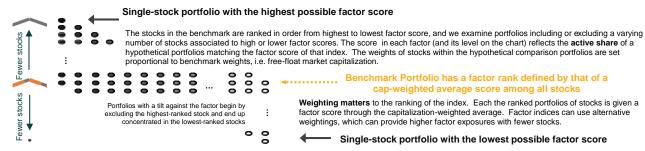
Factor	Measurement at single-stock level
Volatility	Trailing 12-month daily return volatility
Momentum	Twelve-month price change as of one month ago ("13 minus 1 momentum"), divided by the daily volatility during the twelve-month period that ended one month ago. For more details, see the S&P Momentum methodology
Value	The average of (normalized) earnings to price ratio, book to price ratio and sales to price ratio. For more details, see the <u>S&P Value</u> methodology.
Beta	Trailing 1 year beta of stock daily returns to the benchmark's return.
Dividend	Trailing 12-month dividend
Quality	The average of the (normalized) return on equity, the accruals ratio and the financial leverage ratio. For more details, see the S&P Quality methodology.
Size	Free-float market capitalization

Index Factor Ranking and Factor Diagram Scaling

Index Scores

Each index is provided a score in each factor from -100% to +100% based on how much of the total capitalization of the benchmark would 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 may be found at this link.

Factor Diagram Axis

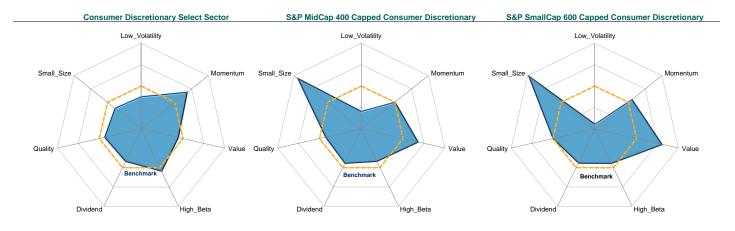


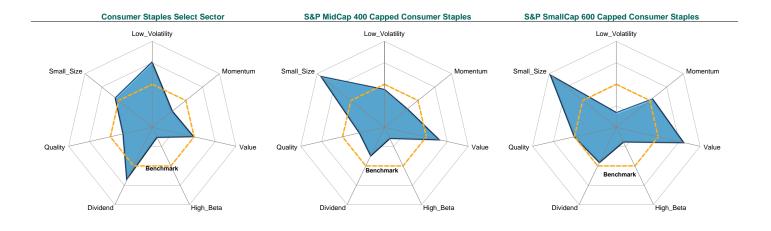
Notes On Additional Index Statistics

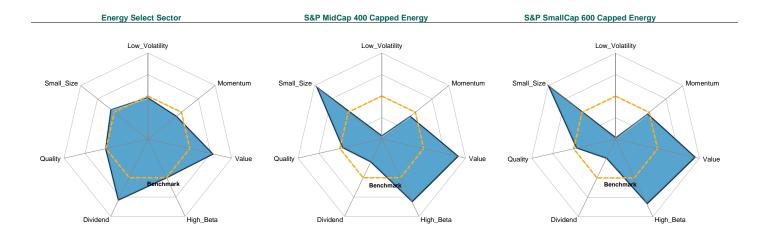
Statistic	Notes
Price/Earnings (P/E)	Price per share as of observation date divided by earnings per share, calculated by adding the last twelve calendar months' quarterly reported earnings per share.
Price/Book (P/B)	Price per share as of observation date divided by latest annual reported book value per share.
Price/Sales (P/S)	Price per share as of observation date divided by sales per share, calculated by adding twelve calendar months' quarterly reported sales per share.
Return on Equity (ROE%)	Earnings per share divided by latest annual reported book value per share.
Financial Leverage Ratio	A company's total debt divided by its latest annual reported book value, calculated as book value per share multiplied by common outstanding shares. Debt, book value per share, and common outstanding shares are latest annual reported values.
RSI - 30 Day	RSI is an indicator of the speed and change of price movements and oscillates between zero and 100. RSI is considered overbought when above 70 and oversold when below 30. RS is the average gain divided by average loss over the past 30 days. Then RSI is equal to 100 minus 100 divided by 1+RS.

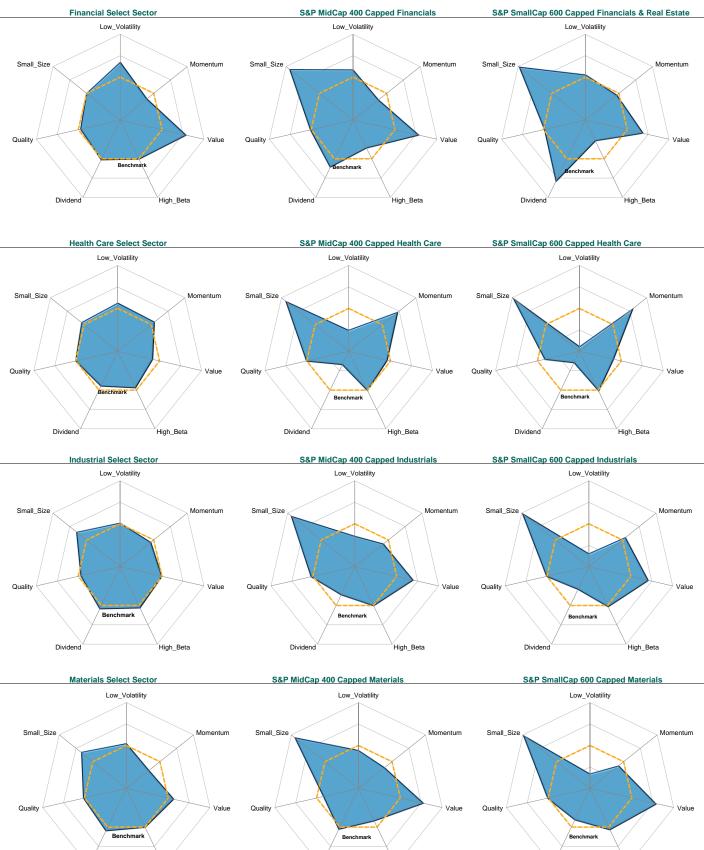
COMMENTARY

- The diagrams below illustrate factor exposures relative to the S&P 1500 across sectors, from large to small-caps.
- For example, Consumer Discretionary starts out with more volatility than the S&P 1500, and becomes relatively more volatile at the mid and small-cap levels.









High_Beta

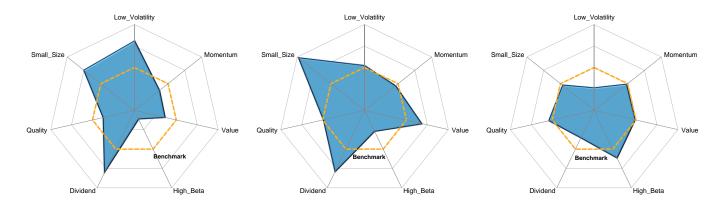
Dividend

High_Beta

Dividend

High_Beta

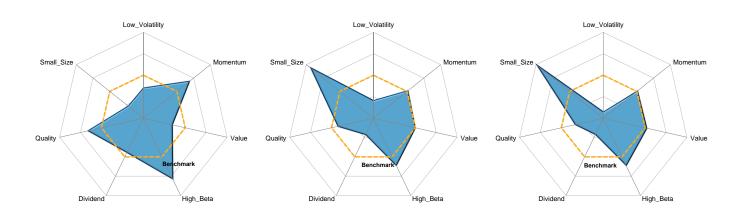
Dividend



Technology Select Sector*

S&P MidCap 400 Capped Information Technology

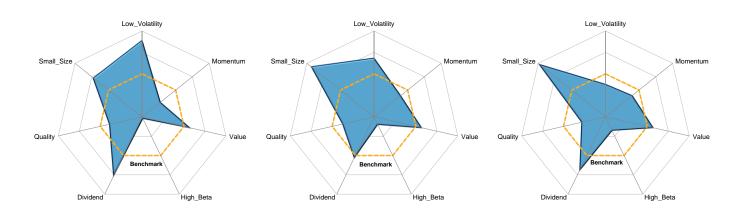
S&P SmallCap 600 Capped Information Technology



Utilities Select Sector

S&P MidCap 400 Capped Utilities & Comm Services **

S&P SmallCap 600 Capped Utilities & Comm Services **



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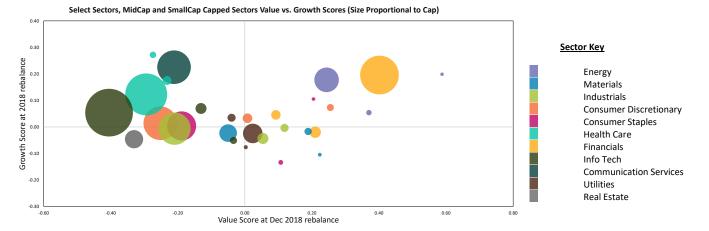
^{**}Utilities MidCap and SmallCap Capped Sectors include constituents of the GICS Utilities and Communication Services sectors.

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SELECTED KEY METRICS -	SELECT SECT	JR INDIC	-8									
						FINANCIAL		CONSTITUENT	DOMESTIC % OF		VALUE	
METRICS	DIV YIELD	P/E	P/B	P/S	ROE (%)	LEVERAGE	BETA	VOLATILITY	SALES	RSI - 30 DAY	SCORE	GROWTH SCORE
Communication Services***	1.3%	16.3	3.4	2.7	20.8%	0.9	1.13	31.9%	74.0%	40.3	-0.21	0.23
Consumer Discretionary	1.6%	24.5	6.2	1.4	25.2%	1.9	1.06	29.3%	73.7%	41.7	-0.25	0.01
Consumer Staples	3.1%	19.0	4.6	1.3	24.4%	1.1	0.57	21.8%	70.0%	33.8	-0.19	0.00
Energy	3.6%	14.1	1.6	1.1	11.2%	0.5	0.99	27.4%	57.1%	37.7	0.24	0.18
Financials	2.2%	12.2	1.3	1.9	10.8%	1.3	0.99	23.3%	78.4%	37.0	0.40	0.20
Health Care	1.7%	30.8	4.1	1.7	13.5%	0.8	0.95	25.3%	76.1%	44.8	-0.29	0.12
Industrials	2.3%	22.4	4.0	1.5	17.9%	1.3	1.04	26.6%	61.7%	38.7	-0.21	-0.01
Materials	2.4%	17.9	2.4	1.6	13.5%	0.7	1.00	26.1%	50.6%	42.8	-0.05	-0.02
Real Estate	3.8%	33.4	3.1	6.0	9.3%	1.2	0.52	21.1%	82.0%	41.0	-0.33	-0.05
Technology*	1.7%	22.6	6.2	3.6	27.4%	0.8	1.30	29.8%	39.1%	43.6	-0.41	0.05
Utilities	3.5%	20.0	2.0	2.1	10.0%	1.6	0.22	19.8%	96.0%	45.8	0.02	-0.02

SELECTED KEY METRICS - S&P MIDCAP 400 CAPPED SECTORS												
METRICS	DIV YIELD	P/E	P/B	P/S	ROE (%)	FINANCIAL LEVERAGE	BETA	CONSTITUENT VOLATILITY	DOMESTIC % OF SALES	RSI - 30 DAY	VALUE SCORE	GROWTH SCORE
Consumer Discretionary	1.7%	17.9	3.7	0.8	20.6%	1.6	0.89	33.2%	82.6%	35.8	0.01	0.03
Consumer Staples	1.4%	21.2	2.4	0.9	11.3%	1.0	0.58	28.1%	80.7%	31.1	0.11	-0.13
Energy	1.1%	191.2	0.6	0.5	0.3%	0.7	1.33	45.9%	71.1%	29.7	0.37	0.05
Financials Health Care Industrials	2.7% 0.4% 1.4%	12.0 21.9 15.0	1.3 3.2 2.4	1.8 1.7 1.0	10.6% 14.4% 16.2%	1.1 1.1 0.8	0.83 1.00 1.00	24.6% 32.1% 29.6%	83.1% 83.2% 66.3%	37.6 39.2 38.6	0.21 -0.23 0.05	-0.02 0.18 -0.04
Information Technology	0.7%	38.7	3.0	1.0	7.7%	0.7	1.13	33.3%	47.1%	43.4	-0.13	0.07
Materials Utilities & Comm Services**	2.3% 2.3%	12.6 17.0	2.2 2.4	0.8 1.8	17.8% 14.1%	1.0 1.1	0.89 0.49	28.1% 23.1%	63.1% 87.4%	35.6 40.3	0.19 -0.04	-0.02 0.03

SELECTED KEY METRICS - S&P SMALLCAP 600 CAPPED SECTORS												
METRICS	DIV YIELD	P/E	P/B	P/S	ROE (%)	FINANCIAL LEVERAGE	BETA	CONSTITUENT VOLATILITY	DOMESTIC % OF SALES	RSI - 30 DAY	VALUE SCORE	GROWTH SCORE
Consumer Discretionary	1.7%	23.5	2.0	0.5	8.5%	0.8	0.92	43.0%	85.0%	35.5	0.25	0.07
Consumer Staples	1.8%	16.7	2.0	0.4	12.0%	1.0	0.65	34.2%	80.8%	30.5	0.20	0.11
Energy	0.8%	66.2	0.6	0.6	0.9%	0.9	1.36	49.9%	82.5%	27.4	0.59	0.20
Financials & Real Estate Health Care Industrials	3.7% 0.2% 1.0%	17.3 n/m 20.5	1.4 3.2 2.2	1.7 1.1 0.8	8.0% -13.1% 10.7%	1.5 1.6 0.7	0.74 1.01 1.02	26.0% 42.0% 35.2%	67.9% 92.5% 77.3%	37.5 39.1 36.5	0.09 -0.27 0.12	0.05 0.27 0.00
Information Technology Materials Utilities & Comm Services**	0.7% 1.5% 3.1%	121.9 15.2 n/m	2.3 2.0 1.6	1.1 0.6 0.9	1.9% 13.4% -9.6%	0.5 1.2 2.5	1.13 1.05 0.63	40.0% 34.5% 29.2%	49.0% 73.8% 94.6%	43.2 32.8 34.5	-0.03 0.22 0.00	-0.05 -0.10 -0.08



- Utilities held the highest technical position for large caps, given the sector's recent strong relative performance.
- Value and growth scores were reset after the December rebalance, and among large-caps, Communication Services has the highest growth score while Financials has the highest value score.
- The Communication Services Select Sector is the most volatile sector in large-caps. Meanwhile, Energy continues to be the most volatile sector in mid and small-caps.

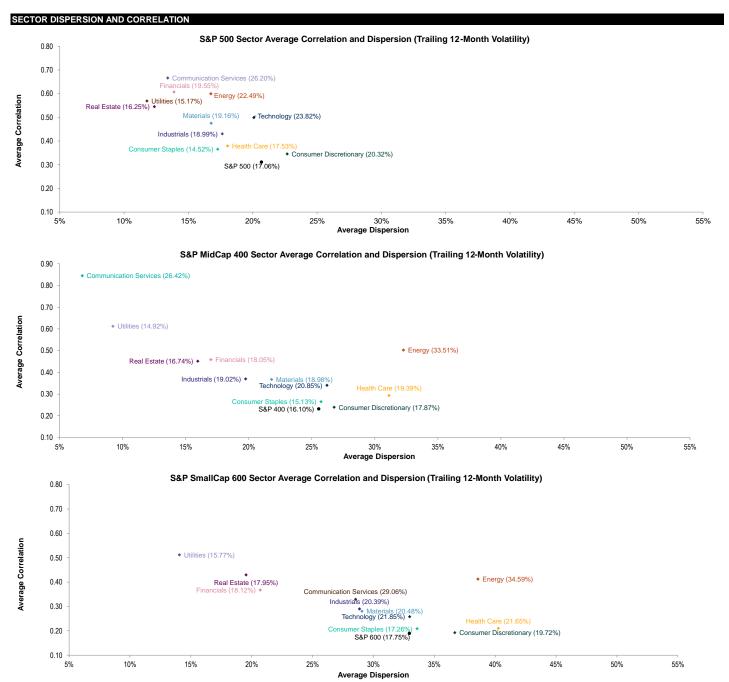
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COMMENTARY

- Dispersion decreased across most sectors, particularly in large-cap Utilities, small-cap Materials and small-cap Health Care.
- Correlations increased across all sectors, especially in large-cap Utilities along with mid and small-cap Real Estate.



NOTES

- The charts above decomposed volatility into its two main components: dispersion and correlation. The dispersion and correlation data points are each sector's average monthly value over the trailing 12 months. Trailing annualized volatility is included in parentheses. Index dispersions shown based on calendar month stock-level index-weighted dispersion. Index correlation based on single stock daily total returns during each calendar month. See "Implications of Sector Dispersion" for more information.
- See "At the Intersection of Diversification, Volatility and Correlation" for details on the relationship between correlation and dispersion.
- See "Dispersion: Measuring Market Opportunity" for the definition of index dispersion and more information on the uses of dispers ion.

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