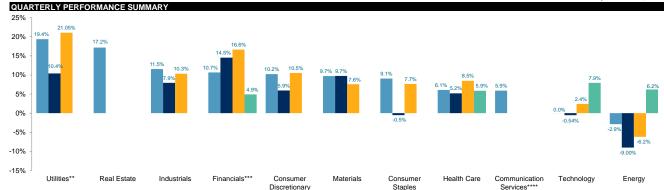
A Division of S&P Global

S&P 500 Ex Sectors

September 30, 2024



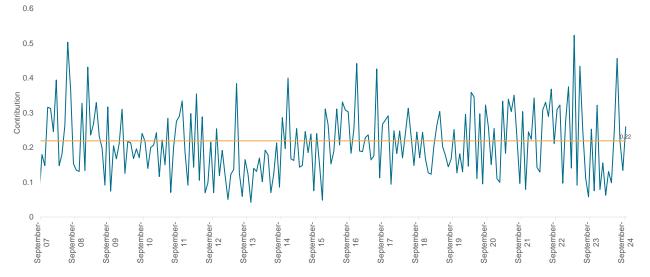
■ S&P MidCap 400 Capped Sectors

SECTOR	Select Sectors			S&P Mid(S&P MidCap 400 Capped Sectors			S&P SmallCap 600 Capped Sectors			S&P 500 Ex Sectors		
ECTOR	QTD	YTD	12M	QTD	YTD	12M	QTD	YTD	12M	QTD	YTD	12M	
Consumer Discretionary	10.22%	12.91%	25.71%	5.94%	10.34%	29.44%	10.52%	8.30%	32.74%				
Consumer Staples	9.05%	17.79%	24.23%	-0.52%	11.01%	18.65%	7.65%	0.06%	10.89%				
Energy	-2.88%	7.40%	0.58%	-9.00%	1.24%	-3.46%	-6.20%	-4.39%	-12.14%	6.20%	22.62%	38.09%	
Financials***	10.66%	21.91%	39.01%	14.53%	16.49%	34.11%	16.64%	14.67%	36.69%	4.91%	22.33%	35.95%	
Real Estate	17.17%	14.31%	35.83%	14.55%	10.49%	34.11%	10.04 %	14.07 %	30.09%				
Health Care	6.07%	14.35%	21.69%	5.19%	9.29%	15.16%	8.46%	8.12%	23.35%	5.86%	23.19%	38.59%	
Industrials	11.55%	20.20%	35.89%	7.93%	15.08%	29.32%	10.31%	14.92%	34.25%				
Materials	9.70%	14.25%	25.31%	9.75%	4.44%	19.89%	7.58%	9.64%	26.41%				
Technology	0.02%	18.03%	38.93%	-0.54%	20.96%	33.42%	2.42%	-0.41%	9.79%	7.93%	18.74%	30.16%	
Utilities**	19.37%	30.63%	41.82%	10.39%	21.89%	32.37%	21.05%	12.61%	24.28%				
Communication Services	5.91%	25.58%	39.45%	10.3370	21.09%	JZ.J1 /0	21.05%	12.0170	24.20 /0				

S&P SmallCap 600 Capped Sectors

CONTRIBUTION OF SECTORS TO S&P 500 DISPERSION*

Select Sectors



COMMENTARY

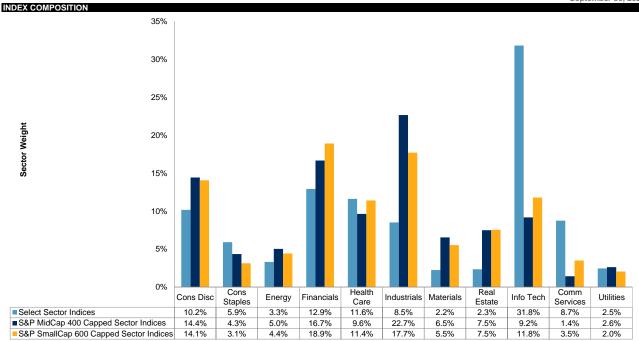
- Most Select Sectors posted gains in Q3, led by Utilities and Real Estate, consistent with the defensive sentiment observed during the quarter.
- The contribution of cross-sector effects to total S&P 500® dispersion increased slightly above its long-term average, indicating
 moderate relative rewards for sector allocation decisions.

^{*}See pages 11-13 of *Sector Effects in the S&P 500. The Role of Sectors, in Risk, Pricing, and Active Returns" for details on the strength of sector-level effects in the S&P 500.

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

^{***}Financials & Real Estate MidCap and SmallCap Capped Sectors combines constitutents of the GICS® Financials and Real Estate sectors. S&P 500 Ex-Financials & Real Estate excludes members of the GICS Financials and Real Estate sectors.

Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of September 30, 2024.



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 <u>S&P Momentum</u> 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 stock daily returns to the benchmark's return.
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 <u>S&P Quality</u> methodology.
Size	Free-float market capitalization

Index Factor Ranking and Factor Diagram Scaling

Index Scores

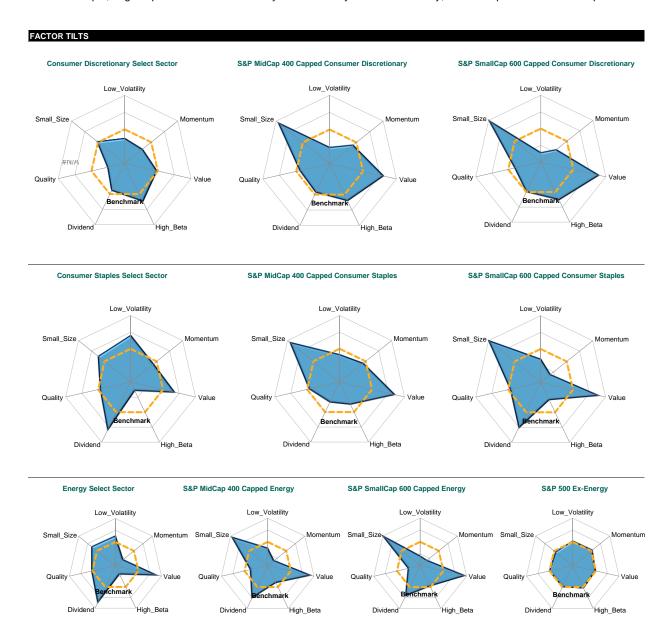
Each index is provided a score in each factor from -100% to +100% based on how much of the total capitalization of the benchmark must be excluded in order to provide a portfolio of stocks with similar exposure to that factor. This is done by examining a ranked series of hypothetical cap-weighted portfolios, 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



COMMENTARY

- The diagrams below illustrate factor exposures relative to the S&P 1500 across sectors, from large to small-caps.
- For example, large-cap Consumer Discretionary has a tilt away from Low Volatility, which deepens at the small-cap level.

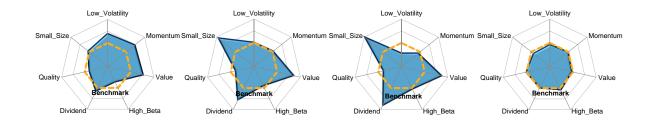


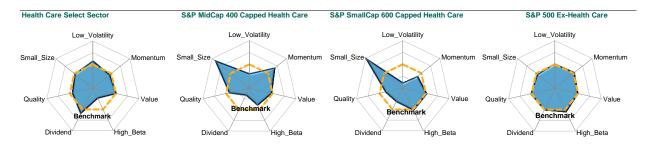
Financial Select Sector

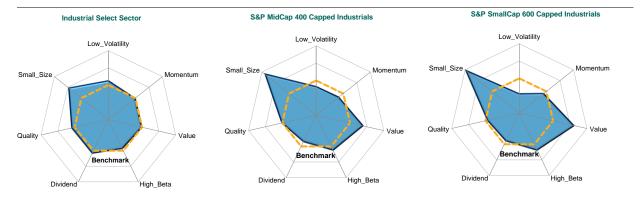
S&P MidCap 400 Capped Fin

S&P SmallCap 600 Capped Fin & Real Estate*

S&P 500 Ex-Fin & Real Estate



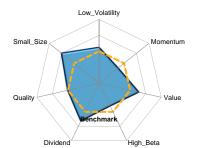


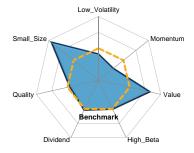


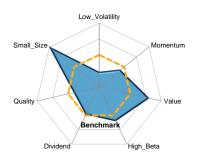


S&P MidCap 400 Capped Materials

S&P SmallCap 600 Capped Materials





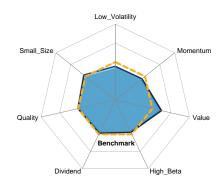


[&]quot;Financials & Real Estate SmallCap Capped Sector combines constitutents of the GICS Financials and Real Estate sectors. Source: S&P Dow Jones Indices LLC and/or its affiliates. Data as of September 30, 2024.

Real Estate Select Sector

Communication Services Select Sector



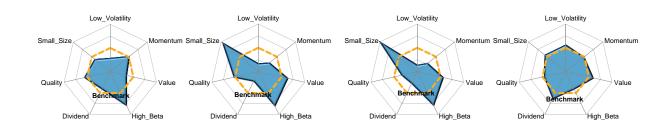


Technology Select Sector

S&P MidCap 400 Capped Info Tech

S&P SmallCap 600 Capped Info Tech

S&P 500 Ex-Info Tech

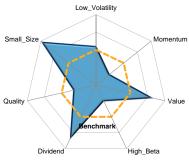


Utilities Select Sector

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

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







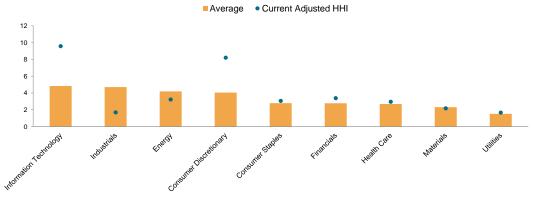
SELECTED KEY METRICS - SELECT SECTOR INDICES									
METRICS	DIV YIELD	P/E	P/B	P/S	BETA	CONSTITUENT VOLATILITY	RSI - 30 DAY	VALUE SCORE	GROWTH SCORE
Communication Services	1.2%	39.8	3.4	2.1	1.00	29.1%	63.1	0.01	0.19
Consumer Discretionary	1.0%	27.6	9.4	2.3	1.22	30.9%	66.5	-0.13	0.39
Consumer Staples	2.8%	25.2	5.4	1.4	0.33	21.2%	61.3	0.00	-0.13
Energy	3.4%	12.9	2.2	1.2	0.44	22.8%	52.1	0.20	0.34
Financials	1.6%	18.6	2.3	2.5	0.70	21.3%	63.3	0.30	0.25
Health Care	1.7%	44.3	5.4	1.9	0.52	24.2%	52.2	-0.08	0.03
Industrials	1.5%	29.5	6.5	2.6	0.90	24.9%	68.8	-0.09	0.11
Materials	2.0%	32.2	3.1	2.2	0.78	25.1%	65.5	0.05	0.06
Real Estate	3.6%	43.6	3.3	7.3	0.74	24.2%	72.4	-0.08	-0.09
Technology	0.8%	40.5	9.8	6.6	1.48	33.1%	53.0	-0.25	0.43
Utilities	3.3%	23.0	2.5	2.9	0.44	24.2%	73.5	0.10	-0.11

SELECTED KEY METRICS - S&P MIDCAP 400 CAPPED SECTORS									
METRICS	DIV YIELD	P/E	P/B	P/S	BETA	CONSTITUENT VOLATILITY	RSI - 30 DAY	VALUE SCORE	GROWTH SCORE
Consumer Discretionary	1.1%	19.5	3.8	1.0	1.20	36.1%	58.1	0.02	0.30
Consumer Staples	0.5%	26.2	3.7	0.7	0.73	29.9%	44.2	0.19	0.17
Energy	2.5%	13.7	1.4	1.3	0.79	31.2%	49.5	0.13	0.42
Financials	2.7%	17.4	1.7	1.8	0.88	27.8%	62.5	0.11	-0.03
Health Care	0.1%	134.0	3.2	2.9	0.80	37.9%	44.4	-0.17	-0.04
Industrials	0.9%	26.1	4.1	1.5	1.12	30.0%	60.6	-0.08	0.20
Information Technology	0.3%	49.8	3.8	1.6	1.56	38.7%	53.0	-0.13	0.18
Materials	1.4%	23.8	2.4	1.1	1.02	30.0%	62.4	0.10	0.12
Utilities & Comm Services**	3.1%	23.4	1.9	2.1	0.57	26.9%	71.3	0.05	-0.18

SELECTED KEY METRICS - S&P SMALLCAP 600 CAPPED SECTORS									
METRICS	DIV YIELD	P/E	P/B	P/S	BETA	CONSTITUENT VOLATILITY	RSI - 30 DAY	VALUE SCORE	GROWTH SCORE
Consumer Discretionary	1.3%	29.1	2.2	0.7	1.25	42.0%	59.7	0.16	0.26
Consumer Staples	2.3%	30.8	2.0	0.7	0.60	31.8%	59.4	0.05	0.07
Energy	2.1%	12.6	1.4	0.9	0.95	38.0%	48.6	0.07	0.49
Financials & Real Estate*	3.7%	24.3	1.4	1.9	1.05	33.0%	62.9	0.05	-0.07
Health Care	0.4%	n/m	3.1	2.0	1.03	44.7%	53.6	-0.26	0.09
Industrials	1.0%	33.9	2.2	1.1	1.18	34.4%	61.0	0.01	0.21
Information Technology	0.3%	n/m	3.1	1.7	1.50	42.4%	53.7	-0.22	0.14
Materials	1.2%	29.0	2.6	1.2	1.18	36.9%	60.2	-0.10	0.21
Utilities & Comm Services**	1.9%	n/m	1.9	1.3	0.91	36.7%	61.3	-0.05	-0.07

SELECTED KEY METRICS - S&P 500 EX SECTORS									
METRICS	DIV YIELD	P/E	P/B	P/S	BETA	CONSTITUENT	RSI - 30 DAY	VALUE SCORE	GROWTH SCORE
Ex-Energy	1.3%	30.8	5.5	3.2	1.03	27.5%	60.8	-0.09	0.27
Ex-Financials & Real Estate	1.3%	32.1	6.6	3.1	1.07	28.4%	59.2	-0.14	0.28
Ex-Health Care	1.3%	28.2	5.2	3.3	1.08	27.8%	61.2	-0.08	0.30
Ex-Information Technology	1.7%	26.0	4 1	24	0.79	25.0%	67.2	0.00	0.17

Current and Average Adjusted HHI for S&P 500 GICS Sectors***



• Utilities had the highest relative strength among large-cap sectors.

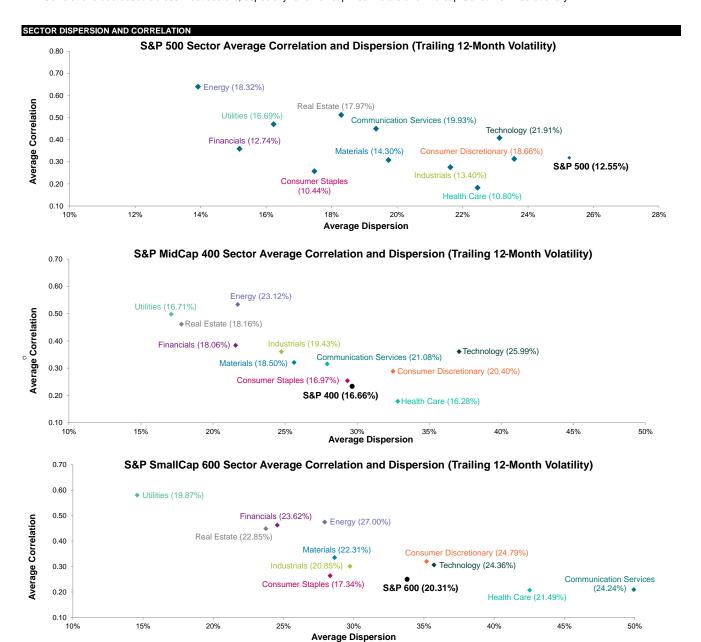
For details on definitions of fundamental metrics, please refer to the disclosure section. Value and Growth scores are rescored for the S&P Total Market Index universe annually every December. Average HHI calculated from Jan 1990 through current month.

^{*}Financials & Real Estate SmallCap Capped Sector combines constitutents of the GICS Financials and Real Estate sectors.

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

COMMENTARY

- · Dispersion decreased within most sectors, particularly for small-cap Communication Services and mid-cap Information Technology.
- · Correlations decreased across most sectors, especially for small-cap Real Estate and mid-cap Consumer Discretionary.



NOTES

- The charts above decomposed volatility into its two main components: dispersion and correlation. The 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 stock-level index-weighted dispersion over the calendar month. 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 dispersion.

General Disclaimer

© 2024 S&P Dow Jones Indices. All rights reserved. S&P, S&P 500, SPX, SPY, The 500, US500, US 30, S&P 100, S&P COMPOSITE 1500, S&P 400, S&P MIDCAP 400, S&P 600, S&P SMALLCAP 600, S&P GIVI, GLOBAL TITANS, DIVIDEND ARISTOCRATS, Select Sector, S&P MAESTRO, S&P PRISM, S&P STRIDE, GICS, SPIVA, SPDR, INDEXOLOGY, ITraxx, iBoxx, ABX, ADBI, CDX, CMBX, LCDX, MBX, MCDX, PRIMEX, TABX, HHPI, IRXX, I-SYND, SOVX, CRITS, CRITR are registered trademarks of S&P Global, Inc. ("S&P Global") or its affiliates. DOW JONES, DJIA, THE DOW and DOW JONES INDUSTRIAL AVERAGE are trademarks to for Dow Jones Trademark Holdings LLC. ("Dow Jones"). These trademarks together with others have been licensed to S&P Dow Jones Indices LLC. Redistribution or reproduction in whole or in part are prohibited without written permission of S&P Dow Jones Indices LLC. This document does not constitute an offer of services in jurisdictions where S&P Dow Jones Indices LLC, S&P Global, Dow Jones or their respective affiliates (collectively "S&P Dow Jones Indices LLC, Collectively "Certain custom index calculation services, all information provided by S&P Dow Jones Indices LLC, S&P Global, Dow Jones or their respective affiliates (collectively "S&P Dow Jones Indices LLC, Collectively "S&P Dow Jone

It is not possible to invest directly in an index. Exposure to an asset class represented by an index may be available through investable instruments based on that index. S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P Dow Jones Indices dues not search that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices and season or representation regarding the advisability of investing in any such investment during or other investment vehicle should not be made in reliance on any of the statements set forth in this document. S&P Dow Jones Indices is not an investment advisor, commodity trading advisor, commodity proportion of sacurity, commodity, crypto currency or other asset within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, commodity, crypto currency or other asset, or is it considered to be investment advice or commodity trading advisor. Closing prices for 6 bow Jones Indices from one of its third party vendors are calculated by S&P Dow Jones Indices based on the closing price of the individual constituents of the index as set by their primary exchanges. Real-time intraday prices are calculated similarly without a second verification. These materials have been prepared solely for informational purposes based upon informational purposes based upon informational purposes based on the closing price are received by S&P Dow Jones Indices does not one of its third party vendors and verified by comparing them with prices from an alternative vendor. The vendors receive the closing price from the primary exchanges. Real-time intraday prices are calculated similarly without a second verification.

These materials have been prepared solely

each analytical process

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issues of securities, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate or otherwise address.

Performance Disclosure

S&P 500 Information Technology was launched on June 28th, 1996. S&P 500 Industrials was launched on June 28th, 1996. S&P 500 En ergy was launched on June 28th, 1996. S&P 500 Consumer Discretionary was launched on June 28th, 1996. S&P 500 Consumer Staples was launched on June 28th, 1996. S&P 500 Health Care was launched on June 28th, 1996. S&P 500 Materials was launched on June 28th, 1996. S&P 500 Utilities was launched on the least launched to reflect the launch packet was launched on treflect the launch packet was launched on the flect the launch packet was la

Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations. Back-tested performance is for use with institutions only; not for use with retail investors.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate S&P DJI's ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using "Backward Data Assumption" (or pulling back) of ESG data for the calculation of back-tested historical performance. "Backward Data Assumption" is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as "product involvement") were never involved historically and similarly also assumes that companies currently involved in a specific business activity (are involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information or "Backward Data Assumption" please refer to the FAQ. The methodology and factsheets of any index that employs backward bata Assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific data points and relevant time period for which backward projected data was used.

Index returns shown do not represent the results of actual trading of investable assets/securities. S&P Dow Jones Indices maintains the index and calculates the index levels and performance shown or discussed but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US \$100,000 investment for a 12-month period (or US \$10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US \$1,650), the net return would be 8.35% (or US \$8,350) for the year. Over a three-year period, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US \$5,375, and a cumulative net return of 27.2% (or US \$27,200).

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.
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.