

Market Review

Index Performance for the Period Ended November 30, 2024

Data as of 11.30.2024	1 Month	3 Month	YTD	1 Year	3 Year ¹	5 Year ¹	10 Year ¹
Equity							
Russell 3000 [®] Index	6.65%	8.06%	27.71%	34.49%	10.54%	15.23%	12.89%
Russell Top 200 [®] Index	5.76%	7.19%	29.43%	34.71%	11.95%	16.83%	14.16%
Russell Top 200 [®] Growth Index	5.69%	8.01%	32.81%	38.08%	11.93%	20.97%	17.73%
Russell Top 200 [®] Value Index	5.85%	5.95%	23.27%	28.52%	11.23%	10.75%	9.47%
Russell 2000 [®] Index	10.97%	10.13%	21.58%	36.43%	4.96%	9.90%	9.05%
Russell 2000 [®] Growth Index	12.26%	12.24%	25.42%	40.44%	3.25%	9.19%	9.34%
Russell 2000 [®] Value Index	9.65%	8.00%	17.88%	32.55%	6.35%	9.93%	8.37%
Russell Mid Cap [®] Index	8.82%	10.64%	24.07%	33.66%	7.77%	12.05%	10.45%
Russell Mid Cap [®] Growth Index	13.33%	19.15%	30.20%	40.07%	6.41%	13.18%	12.22%
Russell Mid Cap [®] Value Index	7.36%	8.01%	22.00%	31.50%	8.73%	10.92%	9.01%
MSCI World ex-USA IMI Index	0.26%	-3.68%	7.31%	13.42%	3.80%	6.05%	5.24%
MSCI World ex-USA Growth Index	0.50%	-4.79%	6.25%	12.28%	0.17%	5.55%	5.73%
MSCI World ex-USA Value Index	-0.02%	-2.84%	8.99%	14.70%	8.92%	6.71%	4.40%
MSCI World ex-USA Small Cap Index	0.36%	-2.82%	5.53%	13.07%	-0.54%	4.36%	5.69%
MSCI Emerging Markets IMI Index	-3.39%	-1.88%	7.38%	11.65%	-0.60%	4.02%	3.46%
Fixed Income							
Bloomberg U.S. Aggregate Bond Index	1.06%	-0.13%	2.93%	6.88%	-1.95%	-0.01%	1.52%
Bloomberg U.S. TIPS Index	0.48%	0.16%	3.47%	6.26%	-1.67%	2.27%	2.29%
Bloomberg U.S. Corporate High Yield Index	1.15%	2.23%	8.66%	12.71%	3.70%	4.72%	5.06%
Bloomberg Global Treasury ex-U.S. Hedged Index	1.30%	1.67%	4.43%	7.29%	0.20%	0.57%	2.37%
Bloomberg Emerging Markets Aggregate Index	1.11%	1.48%	7.86%	12.39%	0.23%	1.18%	3.06%

¹Annualized. Source: Morningstar. The performance presented represents the returns of the listed index. The volatility of an index varies greatly and investments cannot be made directly in an index. Market conditions vary from year to year and can result in a decline in market value due to a material change in market or economic conditions. The performance is past performance and is not a guarantee for future results.

Sterling Capital Advisory Solutions Monthly Update

December 2024

Equity Market Highlights	Fixed Income Market Highlights
<ul style="list-style-type: none"> Global equities, as defined by the MSCI ACWI IMI, returned +3.90% in November, which was driven by post- election gains in U.S. equities. The U.S. (Russell 3000® Index +6.65%) outperformed international markets (MSCI ACWI ex USA IMI -0.84%) by roughly 750 basis points (bps) during the month, which represented the largest monthly outperformance for U.S. equities versus international since September 1998. Within the U.S., small-caps (Russell 2000® Index +10.97%) and mid-caps (Russell Midcap® Index +8.82%) outperformed large-caps (Russell Top 200® Index +5.76%). Emerging markets (MSCI EM IMI -3.39%) fell during the month, driven by declines in China, South Korea, and Brazil. Growth (MSCI ACWI Growth +4.33%) outperformed value (MSCI ACWI Value +3.13%), driven partially by strong results in U.S. mid-cap growth (Russell Midcap® Growth Index +13.33%). In aggregate, actively-managed U.S. small-cap strategies have generated outperformance year-to-date while active managers in the U.S. large-cap, mid-cap, and emerging markets segments have underperformed. On a rolling five-year basis, U.S. growth outperformance relative to value decreased slightly from the previous month. Rolling five-year growth returns have consistently been ahead of value returns since 2017. 	<ul style="list-style-type: none"> The broad bond market, as represented by the Bloomberg U.S. Aggregate Bond Index, returned +1.06% during the month of November, with all sub-sectors producing positive returns. Within the opportunity set, agency mortgage-backed securities delivered the top return, up 1.33%, followed by Global Treasuries ex.-U.S. (+1.30%) and U.S. investment grade credit (+1.27%). While still positive, the lowest performing sectors were U.S. TIPS (+0.48%), U.S. Governments (+0.77%) and emerging market debt (+1.11%). 10-year government bond yields of select countries were lower month-over-month by more than 10 bps. 10-year yields in Italy were lower by 40 bps, followed by Germany down 31 bps. 10-year rates in the U.K. and France also saw a decline by 24 bps and 23 bps, respectively. In the U.S., 10-year rates declined by 11 bps, from 4.28% to 4.17%. Municipal/Treasury ratios moved lower in November, with ratios across the curve declining. 10-year ratios saw the biggest decline by more than 400 bps, while 5-year ratios saw the least change during the month, moving lower by 70 bps. Ratios remain below 5-year averages.

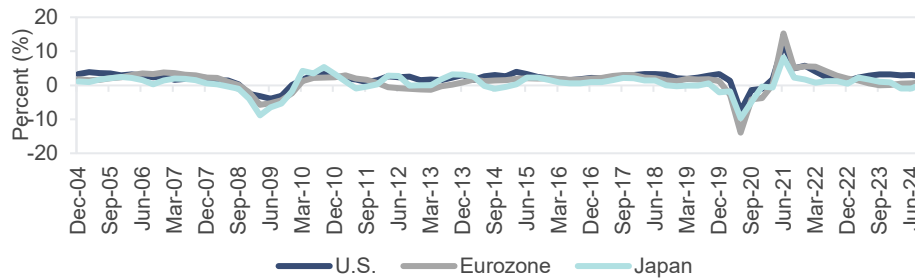
Stock Indices YTD		Bond Indices YTD		Other Indices YTD		U.S. Treasury Yields		Rates/Commodities	
MSCI ACWI IMI	19.59%	Bloomberg US Aggregate	2.93%	US Fund Multialternative	6.06%	6-month	4.44%	Prime Rate	7.75%
Russell 3000	27.71%	Bloomberg Gbl Treas xUS Hdg	4.43%	DJ Equity All REIT	13.99%	1-year	4.28%	LIBOR (3 Mo)	4.85%
S&P 500	28.07%	Bloomberg US TIPS	3.47%	Bloomberg Commodity	4.32%	3-year	4.09%	Oil Price (\$/barrel)	\$68.00
MSCI EAFE	6.24%	Bloomberg US High Yield	8.66%			5-year	4.06%	Gold (\$/t oz)	\$2,650.35
MSCI EM	7.65%	Bloomberg EM Aggregate	7.86%			10-year	4.17%		
						30-year	4.36%		

Data is as of 11.30.2024. Sources: Morningstar; FactSet; Russell Investments; Bloomberg L.P.; U.S. Department of Treasury. Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets. For illustrative purposes only. The views expressed represent the opinions of Sterling Capital Management. Any type of investing involves risk and there are no guarantees that these methods will be successful. Past performance is no guarantee of future results.



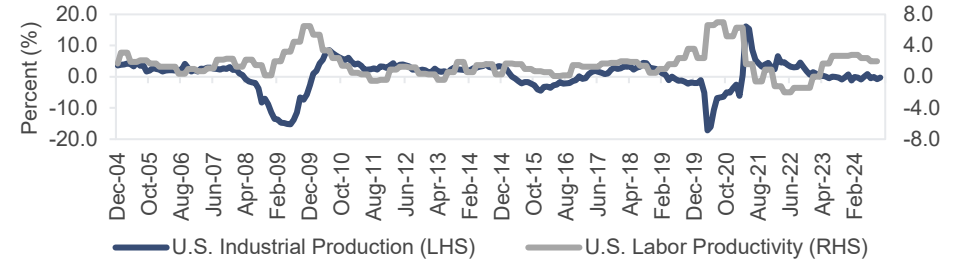
Global Economic Snapshot

YOY Real GDP Growth (\$U.S.)



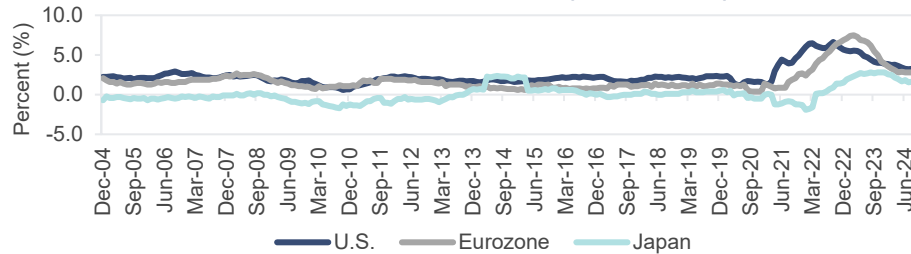
U.S., Japan and Eurozone data as of 09.30.2024. Source: FactSet.

YoY U.S. Industrial Production and Productivity



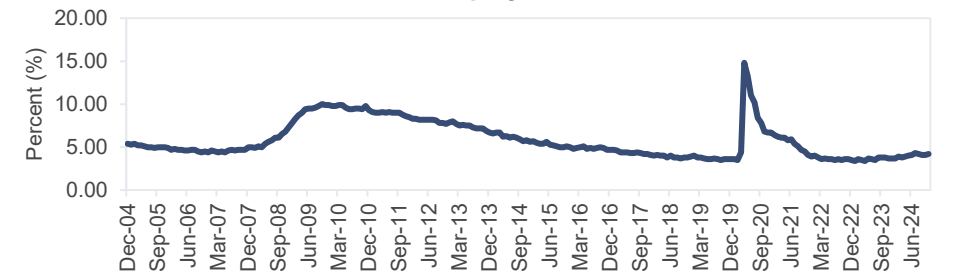
Industrial Production as of 10.31.2024. Industrial Productivity data as of 09.30.2024. Source: FactSet.

Core Consumer Price Index (YoY Growth)



U.S., and Japan data is as of 10.31.2024. Eurozone data as of 11.30.2024. Source: FactSet. The sudden increase in Japan CPI growth in 2014 coincided with an increase in national sales tax that impacted final price levels.

U.S. - Unemployment Rate



Data is as of 11.30.2024. Source: FactSet.

- U.S. economic growth remained solid in the third quarter according to initial GDP estimates. Year-over-year growth, however, declined to 2.66% as strong third quarter growth from the prior year rolled off. Growth in Europe continues to improve slowly but lags the U.S. significantly. Growth in Japan has rebounded into positive territory but remains low.
- U.S. unemployment ticked higher in November but remains low.
- Year-over-year U.S. core inflation turned slightly higher last month and remains above Federal Reserve targets following three-consecutive months of elevated monthly rates. Inflation in Europe has leveled off at a reduced but still above average level, while inflation in Japan is relatively low.
- U.S. industrial production growth remained negative in October, and year-over-year U.S. labor productivity growth has declined to 2% following moderate third quarter growth.

Please see the Appendix for important definitions. For illustrative purposes only. The views expressed represent the opinions of Sterling Capital Management. Any type of investing involves risk and there are no guarantees that these methods will be successful. Past performance is no guarantee of future results.



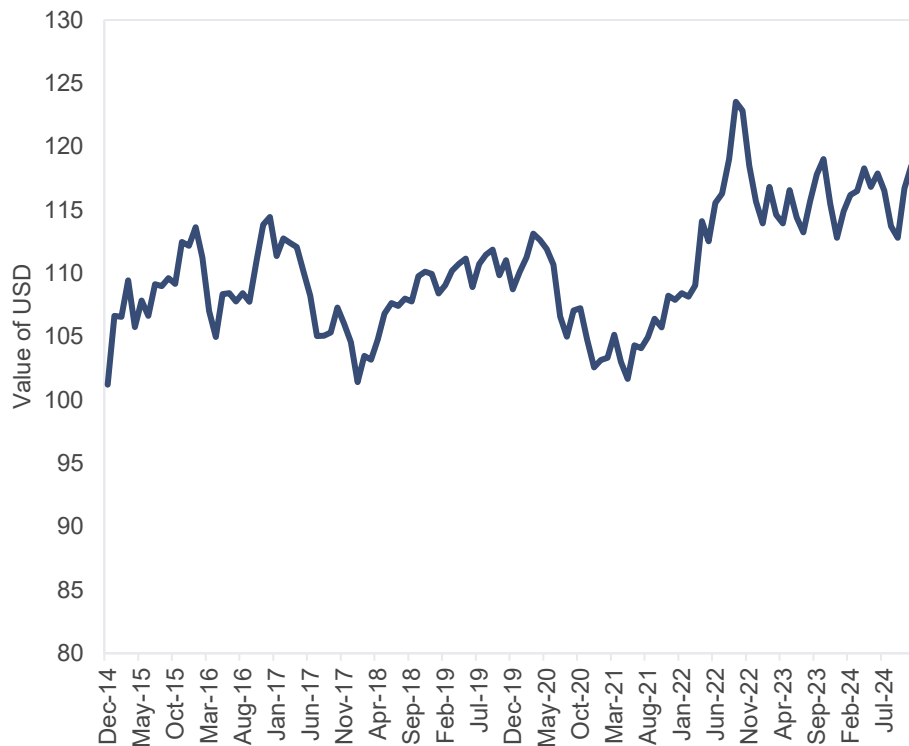
U.S. Economic Indicators

Leading	Initial Jobless Claims	<ul style="list-style-type: none"> In the week ending 11.29.24 the four-week moving average of Initial Jobless Claims was 218,250 an increase of 750 from the previous week's revised average.
	Manufacturing	<ul style="list-style-type: none"> ISM Manufacturing registered 48.4% in November, a 1.9% increase over the previous reading. A reading below 50.0% indicates contraction. ISM Manufacturing New Orders registered 50.4% in November, up 3.3% over the previous reading. ISM Non-Manufacturing registered 52.1% in November, a -3.9% decrease from the previous reading.
	Housing/Construction	<ul style="list-style-type: none"> Building permits were down -0.42% in October and have decreased -7.5% over the past year.
Coincident	Consumer Confidence	<ul style="list-style-type: none"> The Consumer Confidence Index increased to 111.7 compared to 109.6 in the previous month.
	Nonfarm Payrolls	<ul style="list-style-type: none"> Total Nonfarm Payroll employment increased by 36,000 in October while the unemployment rate was flat at 4.1%.
	Industrial Production	<ul style="list-style-type: none"> Industrial Production was flat in October and decreased -0.29% over the past year.
	Personal Income	<ul style="list-style-type: none"> Real Disposable Personal Income increased 0.42% in October and increased 2.73% over the past year..
Lagging	Ratio of Consumer Installment Credit to Personal Income	<ul style="list-style-type: none"> Real Disposable Personal Income decreased -0.4% in October and decreased -2.9% over the past year. Consumer borrowing tends to lag improvements in personal income by many months because people tend to remain hesitant to take on new debt until they are sure that their improved income level is sustainable.
	Inflation	<ul style="list-style-type: none"> CPI (All Items) increased 0.24% in October and increased 2.58% over the past year. CPI (Core) increased 0.28% in October and increased 3.3% over the past year.

Source: Factset. For illustrative purposes only. Past performance is no guarantee of future results.

Currency

Nominal Trade-Weighted U.S. Dollar Major Currencies



Euro per U.S. Dollar



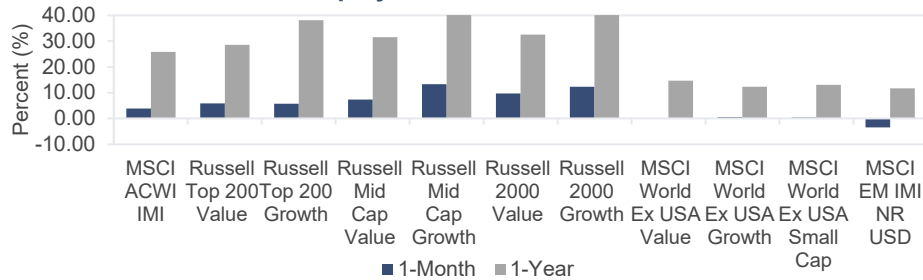
- The Trade-Weighted U.S. Dollar Index (Major Currencies) increased 1.5% in November and increased 5% year-to-date. The dollar was up 2.8% versus the Euro in November.

Data is as of 11.30.2024. Source: FactSet. For illustrative purposes only. The views expressed represent the opinions of Sterling Capital Management. Any type of investing involves risk and there are no guarantees that these methods will be successful. Past performance is no guarantee of future results.



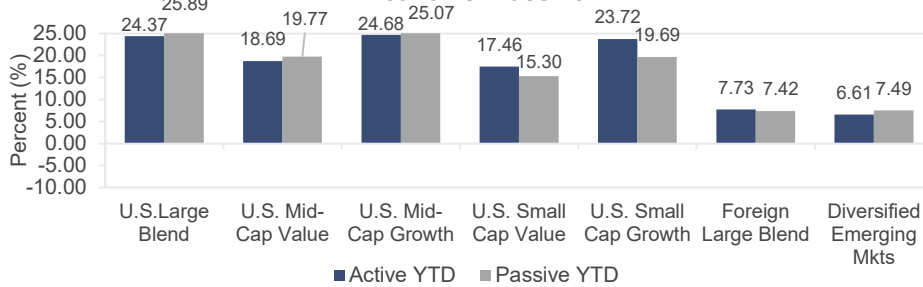
Global Equity Markets

Equity Market Performance



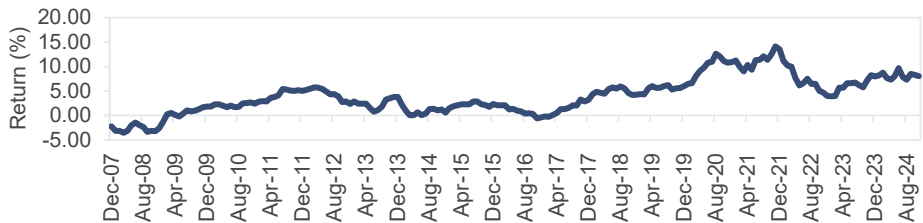
Data is as of 11.30.2024. Sources: Morningstar; Russell Investments.

Active vs. Passive



Data is as of 11.30.2024. Sources: Morningstar, Russell Investments. Median return of Morningstar open-end fund category (institutional share class). Russell return of U.S. categories.

**Rolling 5-Year Return Differential
Russell 3000 Growth minus Russell 3000 Value**



Data is as of 11.30.2024. Source: Morningstar.

- Global equities, as defined by the MSCI ACWI IMI, returned +3.90% in November, which was driven by post-election gains in U.S. equities. The U.S. (Russell 3000® Index +6.65%) outperformed international markets (MSCI ACWI ex USA IMI -0.84%) by roughly 750 basis points (bps) during the month, which represented the largest monthly outperformance for U.S. equities versus international since September 1998. Within the U.S., small-caps (Russell 2000® Index +10.97%) and mid-caps (Russell Midcap® Index +8.82%) outperformed large-caps (Russell Top 200® Index +5.76%). Emerging markets (MSCI EM IMI -3.39%) fell during the month, driven by declines in China, South Korea, and Brazil. Growth (MSCI ACWI Growth +4.33%) outperformed value (MSCI ACWI Value +3.13%), driven partially by strong results in U.S. mid-cap growth (Russell Midcap® Growth Index +13.33%).

- In aggregate, actively-managed U.S. small-cap strategies have generated outperformance year-to-date while active managers in the U.S. large-cap, mid-cap, and emerging markets segments have underperformed.

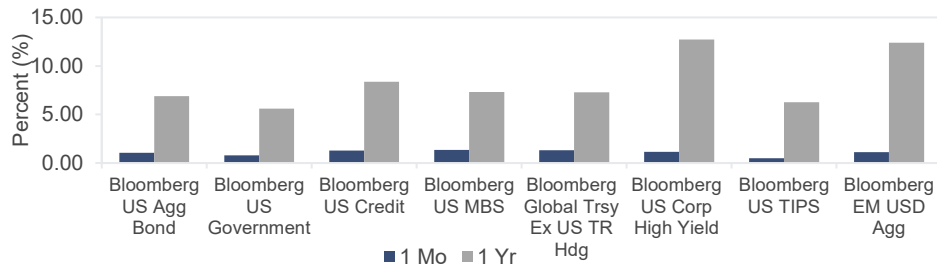
- On a rolling five-year basis, U.S. growth outperformance relative to value decreased slightly from the previous month. Rolling five-year growth returns have consistently been ahead of value returns since 2017.

For illustrative purposes only. The views expressed represent the opinions of Sterling Capital Management. Any type of investing involves risk and there are no guarantees that these methods will be successful. Past performance is no guarantee of future results.



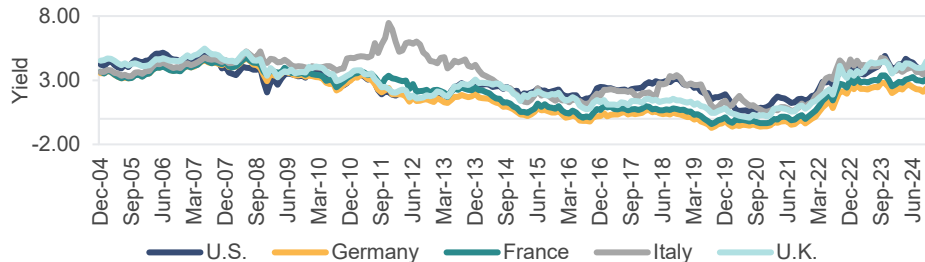
Fixed Income Markets

Bond Market Performance



Data is as of 11.30.2024. Sources: Morningstar; Bloomberg L.P.

10-Year Government Bond Yields



Data is as of 11.30.2024. Sources: FactSet; U.S. Department of Treasury.

Municipal/Treasury Yield Ratios Over The Last 5 Years



Data is as of 11.30.2024. Sources: Thompson Reuters; Sterling Capital Management Analytics.

- The broad bond market, as represented by the Bloomberg U.S. Aggregate Bond Index, returned +1.06% during the month of November, with all sub-sectors producing positive returns. Within the opportunity set, agency mortgage-backed securities delivered the top return, up 1.33%, followed by Global Treasuries ex.-U.S. (+1.30%) and U.S. investment grade credit (+1.27%). While still positive, the lowest performing sectors were U.S. TIPS (+0.48%), U.S. Governments (+0.77%) and emerging market debt (+1.11%).

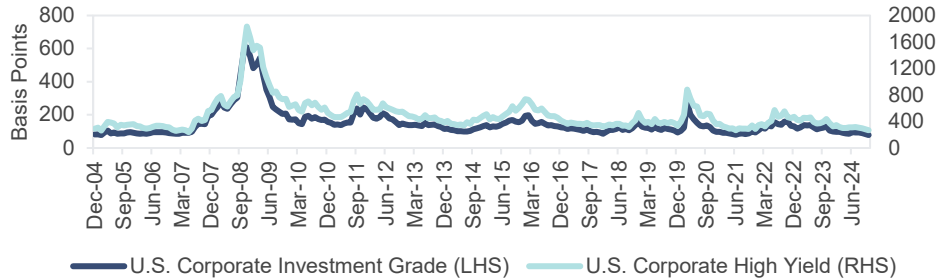
- 10-year government bond yields of select countries were lower month-over-month by more than 10 bps. 10-year yields in Italy were lower by 40 bps, while German 10-years were down by 31 bps. 10-year rates in the U.K. and France also saw a decline by 24 bps and 23 bps, respectively. In the U.S., 10-year rates declined by 11 bps, from 4.28% to 4.17%.

- Municipal/Treasury ratios moved lower in November, with ratios across the curve declining. 10-year ratios saw the biggest decline by more than 400 bps, while 5-year ratios saw the least change during the month, moving lower by 70 bps. Ratios remain below 5-year averages.

For illustrative purposes only. The views expressed represent the opinions of Sterling Capital Management. Any type of investing involves risk and there are no guarantees that these methods will be successful. Past performance is no guarantee of future results.

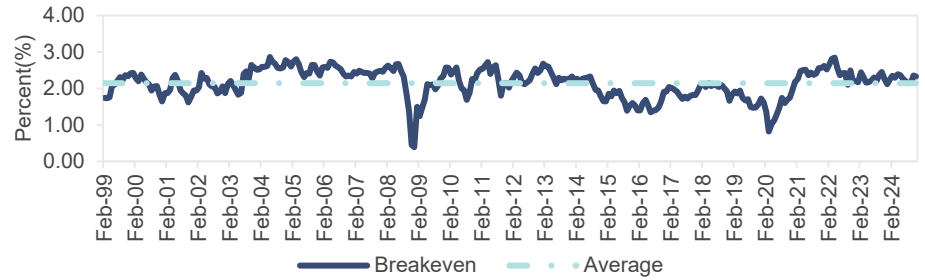
Fixed Income Spreads and TIPS Breakeven

20-Year U.S. Corporate OAS



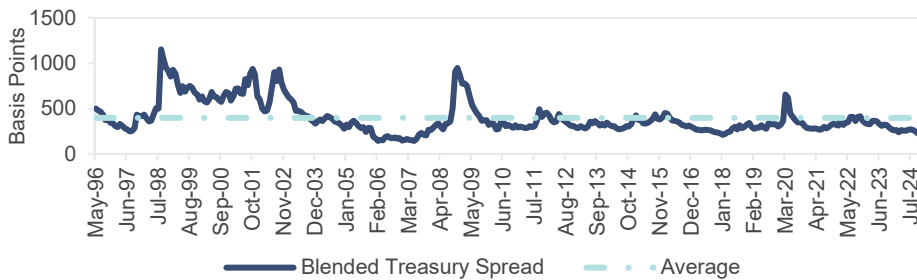
Data is as of 11.30.2024. Source: FactSet.

10-Year TIPS Breakeven



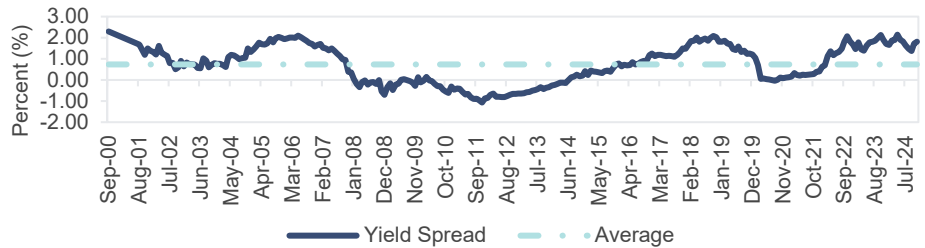
Data is as of 11.30.2024. Source: Federal Reserve Board of Governors.

EM Debt OAS



Data is as of 11.30.2024. Source: Bloomberg L.P.

Yield Spread of Bloomberg U.S. Treasury Index to Global Ex-U.S. Treasury Index



Data is as of 11.30.2024. Source: Bloomberg L.P.

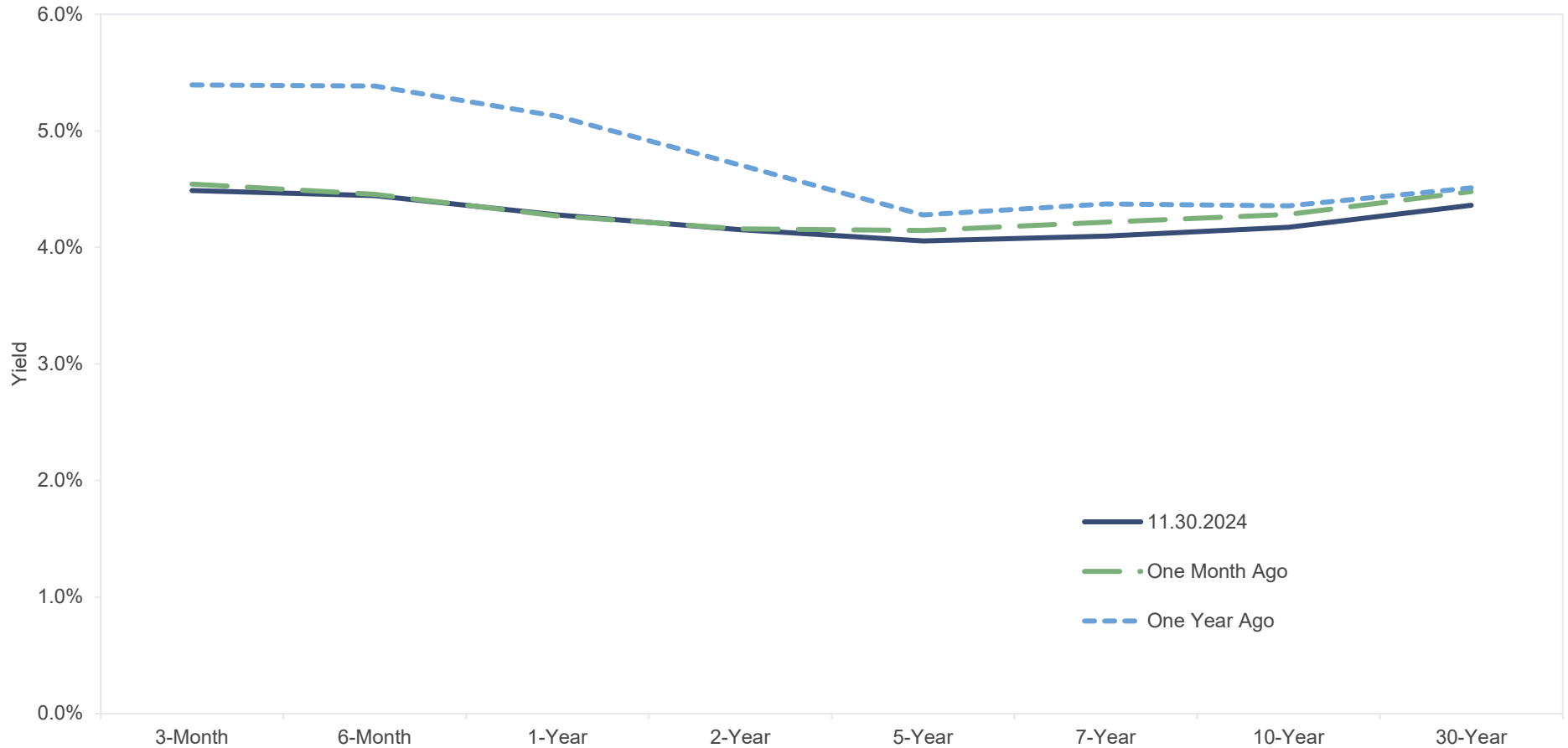
- Investment-grade and high-yield corporate bond spreads continued to move lower in November, further below long-run averages.
- 10-year TIPS breakeven rates declined mildly in November and are close to the long-run average.
- Emerging Market (EM) debt credit spreads were unchanged in November and remain well below the historical average. The yield spread of U.S. to Global Treasuries increased in November and remains above the historical average.

TIPS = Treasury Inflation-Protected Securities.

Please see the Appendix for important definitions. For illustrative purposes only. The views expressed represent the opinions of Sterling Capital Management. Any type of investing involves risk and there are no guarantees that these methods will be successful. Past performance is no guarantee of future results.



U.S. Treasury Yield Curve

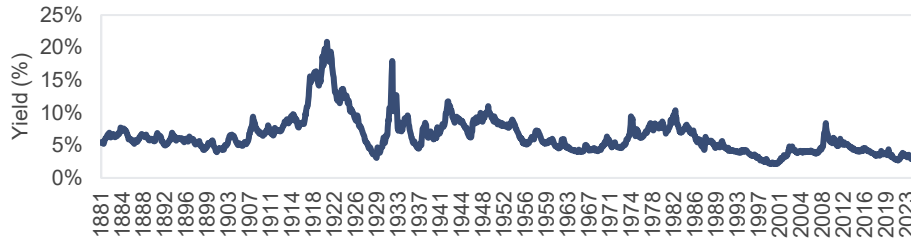


- Municipal/Treasury ratios moved lower in November, with ratios across the curve declining. 10-year ratios saw the biggest decline by more than 400 bps, while 5-year ratios saw the least change during the month, moving lower by 70 bps. Ratios remain below 5-year averages.

Data is as of 11.30.2024. Source: FactSet. For illustrative purposes only. The views expressed represent the opinions of Sterling Capital Management. Any type of investing involves risk and there are no guarantees that these methods will be successful. Past performance is no guarantee of future results.

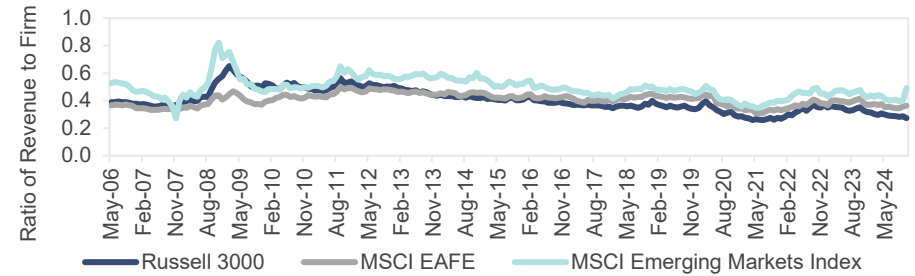
Global Equity Market Fundamentals and Indicators

U.S. Cyclically-Adjusted Earnings Yield



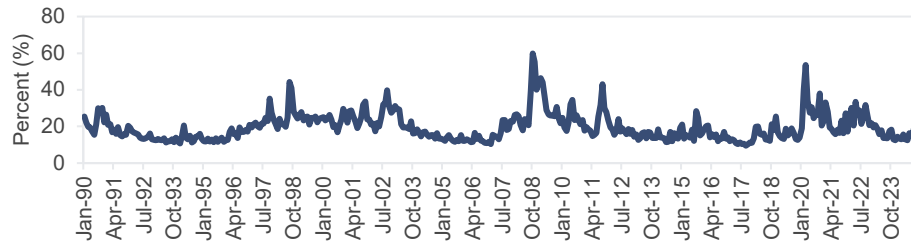
Data is as of 11.30.2024. Sources: Bloomberg L.P.; Robert Shiller "U.S. Stock Markets 1871 - Present and CAPE Ratio."

Revenue to Firm Value



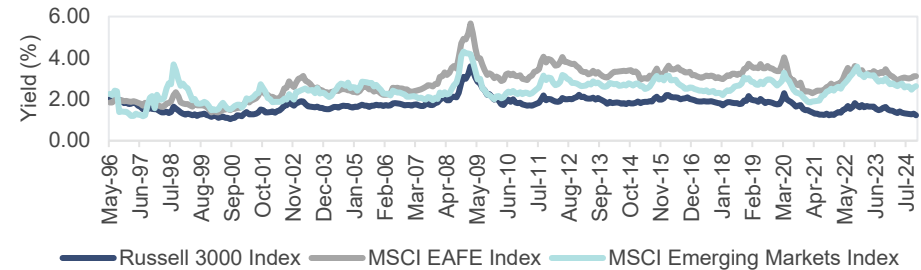
Data is as of 11.30.2024. Sources: FactSet; Russell; MSCI.

VIX Index



Data is as of 11.30.2024. Sources: FactSet; Russell; Bureau of Labor Statistics; Sterling Capital Management Analytics.

Dividend Yield



Data is as of 11.30.2024. Sources: FactSet; Russell; MSCI.

- The U.S. cyclically-adjusted earnings yield declined in November and remains low relative to history.
- US revenue-to-firm value ratios and dividend yields declined in November and remain well below international market levels.
- Emerging Market (EM) revenue-to-firm value ratios and dividend yields increased in November following declines in EM equity prices.
- The Volatility Index (VIX), a measure of market expected equity volatility, declined significantly in November to historically low levels. Lower VIX levels may be indicative of lower equity risk premiums.

Please see Appendix for important definitions. For illustrative purposes only. The views expressed represent the opinions of Sterling Capital Management. Any type of investing involves risk and there are no guarantees that these methods will be successful. Past performance is no guarantee of future results.



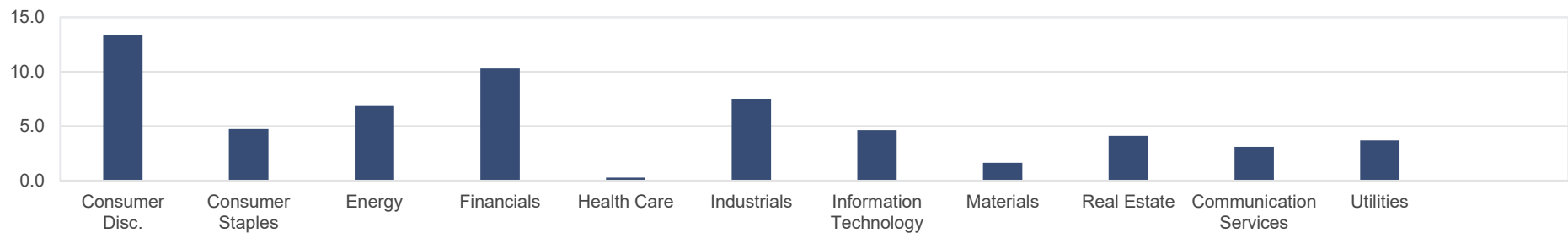
U.S. Equity Market Style and Sector Returns

S&P 1500 by Capitalization & Style¹

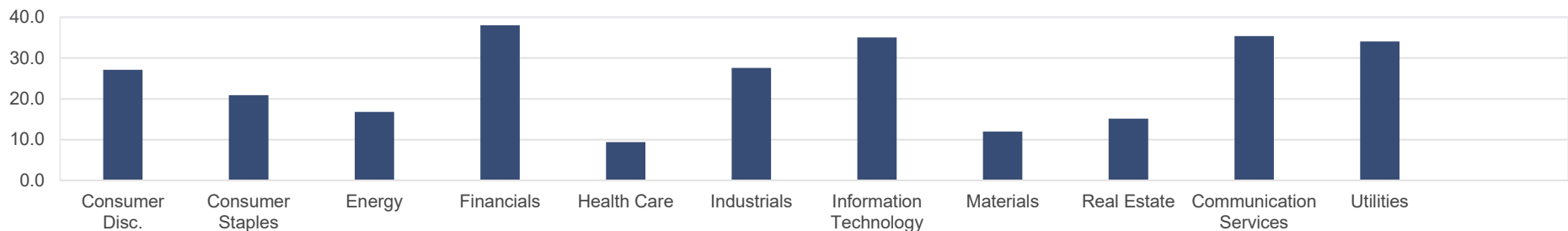
1-Month				YTD		
Value	Blend	Growth		Value	Blend	Growth
5.78%	5.87%	5.77%	Large	20.48%	28.07%	34.71%
8.85%	8.81%	8.77%	Mid	19.69%	22.67%	25.42%
10.69%	10.94%	11.19%	Small	15.37%	18.09%	20.68%

S&P 500 Sector Returns (%)

1-Month



YTD



¹Style boxes are derived from the components of the S&P 1500[®] Index. Please refer to the appendix for further information about capitalization/style returns. Data is as of 11.30.2024. Source: FactSet. For illustrative purposes only. The views expressed represent the opinions of Sterling Capital Management. Any type of investing involves risk and there are no guarantees that these methods will be successful. Past performance is no guarantee of future results.



Appendix

Important Information

Disclosures & Technical Terms

Past performance is not indicative of future results. Any type of investing involves risk and there are no guarantees that these methods will be successful. Economic charts are provided for illustrative purposes only. The information provided herein is subject to market conditions and is therefore expected to fluctuate.

The opinions contained in this presentation reflect those of Sterling Capital Management LLC (SCM), are for general information only, and are educational in nature. The opinions expressed are as of the date of publication and are subject to change without notice. These opinions are not meant to be predictions and do not constitute an offer of individual or personalized investment advice. They are not intended as an offer or solicitation with respect to the purchase or sale of any security. This information and these opinions are subject to change without notice. All opinions and information herein have been obtained or derived from sources believed to be reliable. SCM does not assume liability for any loss which may result from the reliance by any person upon such information or opinions.

Investment advisory services are available through SCM, an investment adviser registered with the U.S. Securities & Exchange Commission and an indirect, wholly-owned subsidiary of Guardian Capital Group Limited. SCM manages customized investment portfolios, provides asset allocation analysis, and offers other investment-related services to affluent individuals and businesses.

SCM does not provide tax or legal advice. You should consult with your individual tax or legal professional before taking any action that may have tax or legal implications.

Core Consumer Price Index (CPI): a measure of the aggregate price level in an economy, excluding certain volatile items.

Consumer Confidence Index (CCI): measures what consumers are feeling about their expected financial situation, whether that's optimistic or pessimistic.

Option Adjusted Spread (OAS): A bond's yield spread over comparable maturity government bonds, adjusted for any embedded options.

Real Disposable Personal Income: the amount of money that an individual or household has to spend or save after federal, state, and local taxes and other mandatory charges are deducted.

Real GDP: Real gross domestic product (GDP) is an inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year, expressed in base-year prices.

Nonfarm payroll refers to the number of jobs in the private sector and government agencies. It excludes farm workers, private household employees, proprietors, non-profit employees, and actively serving military.

Revenue-to-Firm Value: Total Index Revenues of the past 12 months divided by the sum of equity market value and the value of total debt. This is a measure of total sales generated on the total value (debt plus equity) of firms in the index.

TIPS Breakeven: The inflation rate implied by the spread in yield between U.S. TIPS (Treasury Inflation Protected Securities) and nominal U.S. Government Bonds of equal maturity.

U.S. 3-Year Real Revenue Growth, Russell 3000 Non-Financials: For the Russell 3000 excluding financial firms, the percentage change in trailing 12-month inflation adjusted revenue over 12-month inflation adjusted revenue three years prior.

U.S. Cyclically Adjusted Earnings Yield: The 10-year average of annual, inflation adjusted earnings divided by the current inflation adjusted price of the S&P 500 index. This measure is the inverse of the Shiller CAPE Ratio.

YOY U.S. Productivity Growth: The year-over-year growth in real U.S. output produced per hour worked for non-farm workers.

CAPE Ratio: is a valuation measure that uses real earnings per share (EPS) over a 10-year period to smooth out fluctuations in corporate profits that occur over different periods of a business cycle.

Dividend Risk: refers to the risk of a stock's dividend being cut or eliminated, or to the risk to an option when a dividend is paid.

Dividend Yields: is a financial ratio that shows how much a company pays out in dividends each year relative to its stock price.

Eurozone: consists of those Member States of the European Union that have adopted the euro as their currency.

Capitalization/Style Returns: Capitalization/Style returns are based on the S&P Indexes. All values are cumulative total return for stated period including the reinvestment of dividends. The indexes used from left to right, top to bottom are as follows: S&P 500 Value Index, S&P 500 Index, S&P 500 Growth Index, S&P Mid Cap 400 Value Index, S&P Mid Cap 400 Index, S&P Mid Cap 400 Growth Index, S&P Small Cap 600 Value Index, S&P Small Cap 600 Index, S&P Small Cap 600 Growth Index. The S&P 500[®] Index is a readily available, carefully constructed, market-value-weighted benchmark of common stock performance. Currently, the S&P[®] Composite includes 500 of the largest stocks (in terms of stock market value) in the United States; prior to March 1957 it consisted of 90 of the largest stocks. The S&P Midcap 400 is designed to measure the performance of the middle capitalization sector of the U.S. equities market. This market capitalization weighted index was created in June of 1991 and consists of 400 domestic stocks from the NYSE, NASDAQ, and AMEX chosen for market size, liquidity and industry group representation. The S&P SmallCap 600 is designed to measure the performance of the small capitalization sector of the U.S. equities market. This index consists of 600 domestic stocks chosen for market size, liquidity, (bid-asked spread, ownership, share turnover and number of no trade days) and industry group representation. The S&P Style indices measure growth and value along two separate dimensions, with three factors each used to measure growth and value. The Growth factors are 3 Year Change in Earnings per Share over Price per Share, 3 Year Sales per Share Growth Rate, and Momentum. The Value factors are Book Value to price Ratio, Earnings to Price Ratio, and Sales to Price Ratio.



Important Information

Index Definitions & Disclosures

A Note on Indices: The volatility of an index varies greatly; all indices are unmanaged and investments cannot be made directly in an index. Indices are shown for illustrative purposes only and do not represent the performance of any specific investment. The indices selected by Sterling Capital Management to measure performance are representative of broad asset classes. Sterling Capital Management retains the right to change representative indices at any time.

The **Bloomberg Emerging Markets Hard Currency Aggregate Index** is a flagship hard currency Emerging Markets debt benchmark that includes USD-denominated debt from sovereign, quasi-sovereign, and corporate EM issuers.

The **Bloomberg Global Treasury Ex U.S. Hedged Index** is comprised of securities issued by developed ex. U.S. and emerging market governments. The index is hedged against constituent currencies versus the U.S. dollar.

The **Bloomberg U.S. Aggregate Bond Index** is an unmanaged index composed of securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities. It is not possible to invest in the Bloomberg U.S. Aggregate Bond Index, which is unmanaged and does not incur fees and charges.

The **Bloomberg U.S. Corporate High Yield Index** measures the U.S. corporate market of non-investment grade, fixed-rate corporate bonds. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below.

The **Bloomberg U.S. Credit Index** measures the investment grade, U.S. dollar-denominated, fixed-rate, taxable corporate and government related bond markets. It is composed of the U.S. Corporate Index and a non-corporate component that includes foreign agencies, sovereigns, supranationals and local authorities.

The **Bloomberg U.S. Government Index** is comprised of securities issued by the U.S. government and its agencies with at least one year until final maturity.

The **Bloomberg U.S. MBS Index** covers the mortgage-backed pass-through securities of Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC). It is formed by grouping the universe of individual fixed rate MBS pools into generic aggregates.

The **Bloomberg U.S. Treasury Inflation-Linked Bond Index (Series-L)** measures the performance of the U.S. Treasury Inflation Protected Securities (TIPS) market. Federal Reserve holdings of U.S. TIPS are not index eligible and are excluded from the face amount outstanding of each bond in the index.

The **Bloomberg Commodity Index** and related sub-indices are composed of futures contracts on physical commodities and represents 22 separate commodities traded on U.S. exchanges, with the exception of aluminum, nickel and zinc.

Bloomberg L.P.: "Bloomberg®" and the Bloomberg indices are service marks of Bloomberg Finance L.P. and its affiliates, including Bloomberg Index Services Limited ("BISL"), the administrator of the index (collectively, "Bloomberg") and have been licensed for use for certain purposes by Sterling Capital Management LLC and its affiliates. Bloomberg is not affiliated with Sterling Capital Management LLC or its affiliates, and Bloomberg does not approve, endorse, review, or recommend the product(s) presented herein. Bloomberg does not guarantee the timeliness, accurateness, or completeness of any data or information relating to the product(s) presented herein.

The **Dow Jones Equity All REIT Index** is designed to measure all publicly traded real estate investment trusts in the Dow Jones U.S. stock universe classified as equity REITs according to the S&P Dow Jones Indices REIT Industry Classification Hierarchy. These companies are REITs that primarily own and operate income-producing real estate.

The **MSCI ACWI Investable Market Index (IMI)** captures large, mid and small cap representation across 23 Developed Markets (DM) and 26 Emerging Markets (EM) countries. With 8,768 constituents, the index is comprehensive, covering approximately 99% of the global equity investment opportunity set. DM countries include: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the U.K. and the U.S. EM countries include: Argentina, Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, Saudi Arabia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates.

The **MSCI EAFE Index** is a free float-adjusted market capitalization index that is designed to measure the equity market performance of developed markets, excluding the U.S. and Canada.

The **MSCI Emerging Markets Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets.

The **MSCI Emerging Markets Growth Index** captures large and mid cap securities exhibiting overall growth style characteristics across 26 Emerging Markets (EM) countries. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend.

The **MSCI Emerging Markets Investable Market Index (IMI)** is a stock market index that measures the performance of large, mid, and small-cap companies in emerging markets.



Important Information

Index Definitions & Disclosures

A Note on Indices: The volatility of an index varies greatly; all indices are unmanaged and investments cannot be made directly in an index. Indices are shown for illustrative purposes only and do not represent the performance of any specific investment. The indices selected by Sterling Capital Management to measure performance are representative of broad asset classes. Sterling Capital Management retains the right to change representative indices at any time.

The **MSCI Emerging Markets Value Index** captures large and mid cap securities exhibiting overall value style characteristics across 26 Emerging Markets (EM) countries. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield.

The **MSCI ACWI Value Index** captures large and mid cap securities exhibiting overall value style characteristics across 23 Developed Markets countries and 24 Emerging Markets (EM) countries. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield.

The **MSCI ACWI Growth Index** captures large and mid cap securities exhibiting overall growth style characteristics across 23 Developed Markets (DM) countries and 24 Emerging Markets (EM) countries. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend.

The **MSCI ACWI ex USA Growth Index** captures large and mid cap securities exhibiting overall growth style characteristics across 22 Developed Markets (DM) countries and 26 Emerging Markets (EM) countries.

The **MSCI ACWI ex USA Small Cap Index** captures small cap representation across 22 of 23 Developed Markets (DM) countries (excluding the US) and 24 Emerging Markets (EM) countries. With 4,372 constituents, the index covers approximately 14% of the global equity opportunity set outside the US.

The **MSCI ACWI ex USA Large Cap Index** captures large cap representation across 22 of 23 Developed Markets (DM) countries (excluding the US) and 24 Emerging Markets (EM) countries. With 982 constituents, the index covers approximately 70% of the free float-adjusted market capitalization in each country.

The **MSCI ACWI ex USA Mid Cap Index** captures mid cap representation across 22 Developed Markets (DM) and 24 Emerging Markets (EM) countries. With 1,280 constituents, the index covers approximately 15% of the free float-adjusted market capitalization in each country.

The **MSCI World ex USA Value Index** captures large and mid cap securities exhibiting overall value style characteristics across 22 of 23 Developed Markets countries.

The **MSCI World ex USA Small Cap Index** captures small cap representation across 22 of 23 Developed Markets (DM) countries (excluding the United States). With 2,529 constituents, the index covers approximately 14% of the free float-adjusted market capitalization in each country.

The **Russell Midcap® Index** measures the performance of the mid-cap segment of the U.S. equity universe. The Russell Midcap® Index is a subset of the Russell 1000® Index. It includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The Russell Midcap® Index represents approximately 31% of the total market capitalization of the Russell 1000® companies. The Russell Midcap® Index is constructed to provide a comprehensive and unbiased barometer for the mid-cap segment. The index is completely reconstituted annually to ensure larger stocks do not distort the performance and characteristics of the true mid-cap opportunity set.

The **Russell 2000® Index** measures the performance of the small-cap segment of the U.S. equity universe. The Russell 2000® Index is a subset of the Russell 3000® Index representing approximately 10% of the total market capitalization of that index. It includes approximately 2,000 of the smallest securities based on a combination of their market cap and current index membership. The Russell 2000® is constructed to provide a comprehensive and unbiased small-cap barometer and is completely reconstituted annually to ensure larger stocks do not distort the performance and characteristics of the true small-cap opportunity set.

The **MSCI World ex USA Investable Market Index (IMI)** captures large, mid and small cap representation across 22 of 23 Developed Markets (DM) countries--excluding the United States. With 3,540 constituents, the index covers approximately 99% of the free float-adjusted market capitalization in each country.

The **Russell 2000® Growth Index** measures the performance of growth style of investing in small cap U.S. stocks. The Growth Index contains those Russell 2000 securities with greater-than-average growth orientation.

The **Russell 2000® Value Index** measures the performance of value style of investing in small cap U.S. stocks. The Value Index contains those Russell 2000 securities with less-than-average growth orientation. Securities in the Value Index generally have lower price-to-book and price-to-earnings ratios than those in the Growth Index.

The **Russell 3000® Index** measures the performance of the 3,000 largest U.S. companies based on total market capitalization.

The **Russell 3000® Growth Index** is an unmanaged index comprised of those Russell 3000 companies with higher price-to-book ratios and higher forecasted growth values.

The **Russell 3000® Value Index** measures the performance of the broad value segment of the US equity value universe.

The **Russell 200® Value Index** measures the performance of the especially large cap segment of the US equity universe represented by stocks in the largest 200 by market cap that exhibit value characteristics.

The **Volatility Index (VIX)** is a real-time market index representing the market's expectations for volatility over the coming 30 days.



Important Information

Index Definitions & Disclosures

A Note on Indices: The volatility of an index varies greatly; all indices are unmanaged and investments cannot be made directly in an index. Indices are shown for illustrative purposes only and do not represent the performance of any specific investment. The indices selected by Sterling Capital Management to measure performance are representative of broad asset classes. Sterling Capital Management retains the right to change representative indices at any time.

The **Russell Midcap® Growth Index** measures the performance of growth styles of investing in Mid Cap U.S. stocks. The Growth Index contains those Russell Mid Cap securities with greater-than-average growth orientation.

The **Russell Midcap® Value Index** measures the performance of value style of investing in Mid Cap U.S. stocks. The Value Index contains those Russell Mid Cap securities with less-than-average growth orientation. Securities in the Value Index generally have lower price-to-book and price-to-earnings ratios than those in the Growth Index.

The **Russell Top 200® Growth Index** offers measures the performance of the especially large cap segment of the U.S. equity universe represented by stocks in the largest 200 by market cap. It includes Russell Top 200® Index companies with higher growth earning potential as defined by Russell's leading style methodology.

The **Russell Top 200® Index** is an index of the largest 200 companies in the Russell 3000 index. It is commonly used as a benchmark index for U.S.-based ultra large-cap (mega-cap) stocks with the average member commanding a market capitalization of upwards of \$200 billion.

The **S&P® 500 Index** is an unmanaged capitalization-weighted index of 500 U.S. stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.

The **CBOE Volatility Index (VIX)** is a real-time market index representing the market's expectations for volatility over the coming 30 days.

The **S&P Small Cap 600® Index:** The S&P SmallCap 600® Index is designed to measure the performance of the small capitalization sector of the U.S. equities market. This index consists of 600 domestic stocks chosen for market size, liquidity, (bid-asked spread, ownership, share turnover and number of no trade days) and industry group representation.

The **S&P Mid Cap 400® Index:** The S&P MidCap 400® Index is designed to measure the performance of the mid capitalization sector of the U.S. equities market. This index consists of 400 domestic stocks chosen for market size, liquidity, (bid-asked spread, ownership, share turnover and number of no trade days) and industry group representation.

The **S&P 1500:** An investable U.S. equity benchmark, the S&P Composite 1500 combines three leading indices, the S&P 500®, the S&P MidCap 400, and the S&P SmallCap 600 to cover approximately 90% of the U.S. market capitalization. It is designed for investors seeking to replicate the performance of the U.S. equity market or benchmark against a representative universe of tradable stocks.

The **Trade-Weighted U.S. Dollar Index**, also known as the broad index, is a measure of the value of the United States dollar relative to other world currencies. It is a trade weighted index that improves on the older U.S. Dollar Index by using more currencies and the updating the weights yearly.

The **ISM Manufacturing Index** is a monthly indicator of U.S. economic activity based on a survey of purchasing managers at manufacturing firms nationwide.