

Monthly Insights

What You Need To Know

In 2017, stocks have been on a tear, with the S&P 500 ending October up nearly 17% while the Dow is up nearly 21% and the Nasdaq is up over 24%. Over the 12-month period, the returns are even more impressive, with the S&P 500 up over 31%. This market performance is remarkable under any circumstances, but it is especially notable coming in the ninth year of a bull market, and during a year in which the politics in Washington have never seemed more dysfunctional—at least in the post-WWII period.

This imposing market run has been accompanied by a period of unusually low volatility in the markets. Market pundits often point to a measure of investors’ fear, the CBOE Volatility index—commonly referred to as the VIX, or the “fear index.” In a simplified definition, the VIX provides a measure of how much the market thinks the S&P 500 index will fluctuate over the next 12 months. A low VIX indicates that market participants expect that markets will remain calm and, therefore, most likely upward-trending. The all-time high of the VIX was reached in 2008 at 89.53, and this month, on October 5, the VIX hit an all-time low of just 9.19.

It is prudent to point out that the VIX also fell below 10 in January of 2007, less than nine months before the beginning of one of the worst market meltdowns in the post-WWII period. And while the current market picture looks rosy, it can change quickly and unexpectedly. The Tactical strategies have done well this year by staying fully invested, but if volatility in the market rises, these strategies are designed to lower overall exposure.

Our Response

Given the persistent low level of volatility throughout the month, the tactical strategies stayed fully invested in October.

// **This market...is especially impressive coming in the ninth year of a bull market...** //

We seek to deliver the returns investors need with the investment experience they want.

Our strategies aim to reduce the likelihood of large losses in turbulent markets while also participating in the returns offered in stable and rising markets.

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Conservative Global Growth Strategy

Seeks to pursue return opportunities from around the globe while actively managing risk. Potentially offers long-term outperformance relative to a global 40/60 portfolio of stocks and bonds.

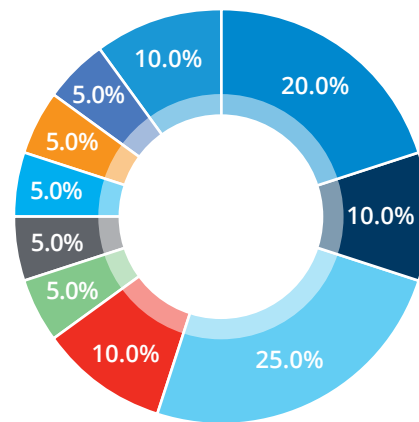
- Asian markets were among the best performers over the month, which aided in the performance of the globally allocated Conservative Growth strategy. In particular, the developed Asian markets rallied with the strategy's allocation to Japan (EWJ) and Asia ex-Japan (AAX), up 5.28% and 4.28% respectively. These markets benefited in part from positive trade data as US retailers begin to build inventories for the holiday shopping season.
- Interest-rate-sensitive securities were weaker, which weighed on the performance of the Conservative Global Growth strategy as the investment-grade corporate bond ETF (LQD) was up a modest 0.19% and the emerging market bond ETF (PCY) was down 0.11%.
- For the month, the Conservative Global Growth strategy trounced its benchmark with a return of 1.27% versus a return of 0.52%. The strategy benefits from having a relatively small position to low-risk and low-return fixed-income securities relative to the benchmark. Low-risk fixed-income securities are often used in traditionally managed strategies to control risk—one of the benefits of the tactical methodology is the ability to manage risk without relying on a permanent allocation to low returning bonds.

	1 Month	QTD	YTD	1 Year	Since Inception (1/31/2007)
Conservative Global Growth ⁽¹⁾	1.27%	1.27%	14.15%	17.34%	6.81%
Russell 3000 / MSCI ACWI ex-US / JPM GABI (20/20/60)	0.52%	0.52%	11.22%	9.92%	5.11%

⁽¹⁾ Assumes management fee of 30bps.

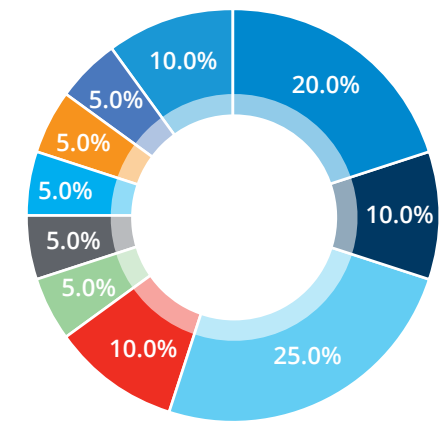
	Sharpe Ratio	Sortino Ratio	Max Drawdown
Conservative Global Growth	0.78%	1.09%	-14.6%
Russell 3000 / MSCI ACWI ex-US / JPM GABI (20/20/60)	0.54%	0.77%	-27.5%

Strategic Asset Allocations



- US large & mid cap (SCHX)
- US small cap (SCHA)
- International small cap (SCZ)
- US investment-grade corporates (LQD)
- European large & mid-cap eqty (VGK)
- Asian ex-Japanese large & mid-cap eqty (AAX)

Actual Average Allocations October 2017



- Japanese large & mid-cap eqty (EWJ)
- International small cap (SCZ)
- Emerging-mkt eqty (IEMG)
- US REITs (SCHH)
- Emerging-mkt bonds (PCY)
- Cash

Actual allocations may not total to 100.0% due to rounding.

Performance

Asset Class	October	YTD
US large & mid cap (SCHX)	2.30%	16.88%
US small cap (SCHA)	0.89%	11.50%
US investment-grade corporates (LQD)	0.19%	5.90%
European large- & mid-cap eqty (VGK)	0.46%	25.13%
Asian ex-Japanese large- & mid-cap eqty (AAX)	4.28%	37.69%
Japanese large- & mid-cap eqty (EWJ)	5.28%	20.81%
International small cap (SCZ)	1.68%	28.20%
Emerging-mkt eqty (IEMG)	3.26%	32.36%
US REITs (SCHH)	-1.14%	0.50%
Emerging-mkt bonds (PCY)	-0.11%	9.26%
Cash	0.10%	0.81%
Benchmark: R3 / MSCI ACWI ex-US / JPM GABI (20/20/60)	0.52%	11.22%

Global Growth Strategy

Seeks to aggressively pursue return opportunities from around the globe while actively managing risk. Potentially offers long-term outperformance relative to a global 55/45 portfolio of stocks and bonds.

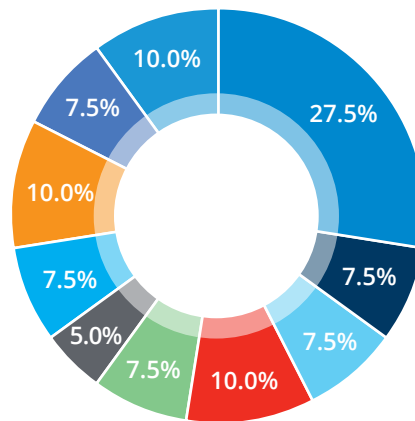
- While small-cap equities (IJR) were the best-performing asset class back in September, with IJR up nearly 8%, they lagged in October. For the year, small-cap stocks have struggled relative to large-caps stocks (IVV), with a year-to-date return differential between IJR and IVV of 6.76%.
- The source of positive international returns has moved back and forth over the past several months. While European equities drove returns last month on the strength of VGK and SCZ, this month's strength has again come from developed Asian markets (EWJ and AAXJ) as well as the developing markets that are heavily dominated by Asian emerging countries (IEMG).
- The Global Growth strategy was up 1.83% in October and is the best-performing strategy over the 12-month period with a return of 21.85%—outperforming its benchmark, which is only up 13.32% over the same period. While the strategy has outperformed its benchmark since inception, it has done so while realizing nearly the same level of volatility.

	1 Month	QTD	YTD	1 Year	Since Inception (1/31/2007)
Global Growth ⁽¹⁾	1.83%	1.83%	17.33%	21.85%	7.16%
Russell 3000 / MSCI ACWI ex-US / JPM GABI 35/20/45	0.97%	0.97%	12.96%	13.41%	5.80%

⁽¹⁾ Assumes management fee of 30bps.

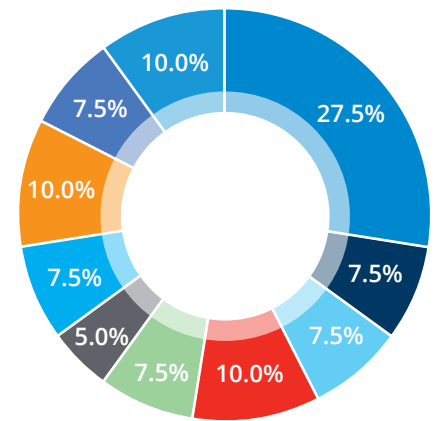
	Sharpe Ratio	Sortino Ratio	Max Drawdown
Global Growth	0.62%	0.85%	-17.6%
Russell 3000 / MSCI ACWI ex-US / JPM GABI 35/20/45	0.49%	0.67%	-34.5%

Strategic Asset Allocations



- US large cap (IVV)
- US mid cap (IJH)
- US small cap (IJR)
- European large & mid-cap eqty (VGK)
- Asian ex-Japanese large & mid-cap eqty (AAXJ)

Actual Average Allocations October 2017



- Japanese large & mid-cap eqty (EWJ)
- International small cap (SCZ)
- Emerging-mkt eqty (IEMG)
- US REITs (SCHH)
- Emerging-mkt bonds (PCY)
- Cash

Actual allocations may not total to 100.0% due to rounding.

Performance

Asset Class	October	YTD
US large cap (IVV)	2.32%	16.66%
US mid cap (IJH)	2.27%	11.79%
US small cap (IJR)	0.86%	9.90%
European large- & mid-cap eqty (VGK)	0.46%	25.13%
Asian ex-Japanese large- & mid-cap eqty (AAXJ)	4.28%	37.69%
Japanese large- & mid-cap eqty (EWJ)	5.28%	20.81%
International small cap (SCZ)	1.68%	28.20%
Emerging-mkt eqty (IEMG)	3.26%	32.36%
US REITs (SCHH)	-1.14%	0.50%
Emerging-mkt bonds (PCY)	-0.11%	9.26%
Cash	0.10%	0.81%
Benchmark: R3 / MSCI ACWI ex-US / JPM GABI (35/20/45)	0.97%	12.96%

US-Focused Global Growth Strategy

Seeks to aggressively pursue return opportunities both at home and around the globe while actively managing risk. Potentially offers long-term outperformance relative to a US-biased global 55/45 portfolio of stocks and bonds.

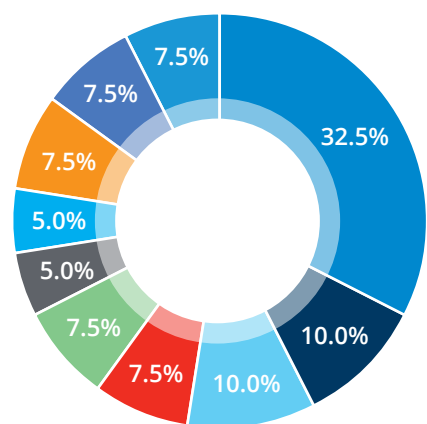
- Over the long term, small-cap stocks have outperformed large caps—but in any period, performance is often driven by investors' optimism or pessimism about the global economy relative to the domestic economy. When investors are more optimistic about the global economy, larger-cap companies tend to outperform—this is what we've seen this month with large-cap (IVW), mid-cap (IJH), and small-cap (IJR) stocks up 2.32%, 2.27%, and 0.86% respectively.
- Equities were positive across all asset classes in the US-Focused strategy this month except real estate (SCHH, -1.14%). Real estate has been struggling all year and has missed out on the 2017 bull market as SCHH is only up 0.50% for the year. Real estate has been beset by several factors, including weakness in the retail sector as the "Amazon effect" has resulted in the shuttering of more and more brick-and-mortar stores.
- The US-Focused Global Growth strategy has nearly kept pace with the S&P 500 index over the year-to-date period—lagging the index by a modest 0.77% while outperforming its diversified benchmark by 3.96%. While the strategy has done well in this year's bull market by remaining invested, its methodology of managing risk means that it is likely to provide some important downside protection when volatility picks up and the market rally wanes.

	1 Month	QTD	YTD	1 Year	Since Inception (1/31/2007)
US-Focused Global Growth ⁽¹⁾	1.90%	1.90%	16.14%	21.73%	7.93%
Russell 3000 / MSCI ACWI ex-US / JPM GABI 45/10/45	1.00%	1.00%	12.30%	13.45%	6.29%

⁽¹⁾ Assumes management fee of 30bps.

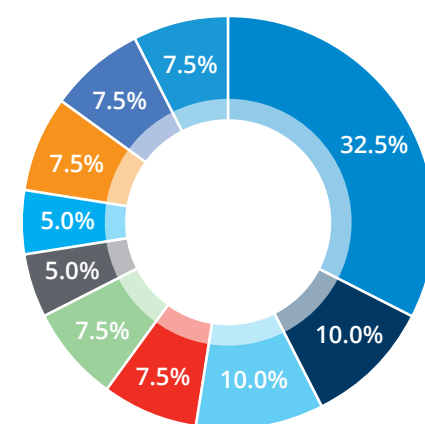
	Sharpe Ratio	Sortino Ratio	Max Drawdown
US-Focused Global Growth	0.67%	0.94%	-19.4%
Russell 3000 / MSCI ACWI ex-US / JPM GABI 45/10/45	0.51%	0.71%	-33.7%

Strategic Asset Allocations



- US large cap (IVW)
- US mid cap (IJH)
- US small cap (IJR)
- European large & mid-cap eqty (VGK)
- Asian ex-Japanese large & mid-cap eqty (AAX)
- Japanese large & mid-cap eqty (EWJ)
- International small cap (SCZ)
- Emerging-mkt eqty (IEMG)
- US REITs (SCHH)
- Cash

Actual Average Allocations October 2017



- Japanese large & mid-cap eqty (EWJ)
- International small cap (SCZ)
- Emerging-mkt eqty (IEMG)
- US REITs (SCHH)
- Emerging-mkt bonds (PCY)
- Cash

Actual allocations may not total to 100.0% due to rounding.

Performance

Asset Class	October	YTD
US large cap (IVW)	2.32%	16.66%
US mid cap (IJH)	2.27%	11.79%
US small cap (IJR)	0.86%	9.90%
European large- & mid-cap eqty (VGK)	0.46%	25.13%
Asian ex-Japanese large- & mid-cap eqty (AAX)	4.28%	37.69%
Japanese large- & mid-cap eqty (EWJ)	5.28%	20.81%
International small cap (SCZ)	1.68%	28.20%
Emerging-mkt eqty (IEMG)	3.26%	32.36%
US REITs (SCHH)	-1.14%	0.50%
Emerging-mkt bonds (PCY)	-0.11%	9.26%
Cash	0.10%	0.81%
Benchmark: R3 / MSCI ACWI ex-US / JPM GABI (45/10/45)	1.00%	12.30%

US Large-Cap Ten-Sector Strategy

Seeks to access the return opportunities of large-cap US equities through sector exposure while actively managing risk. Potentially offers long-term outperformance relative to the S&P 500 Total Return Index on a risk-adjusted basis.

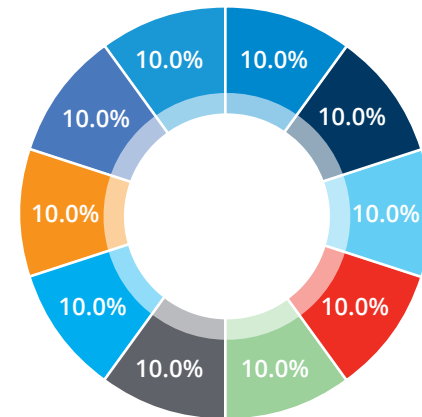
- The US Large-Cap Ten-Sector strategy once again struggled for the month, marking the fourth month in a row that the strategy has lagged the S&P 500. The performance differential is almost completely the result of the weighting difference between the strategy (which allocates an equal 10% to each of the ten S&P 500 sectors) and the S&P 500 index (which weights to each sector based on the relative market capitalizations of the sector). This weighting differential results in periods of underperformance and outperformance that are purely happenstance.
- The one significant contributor to this month's performance lag was the nearly 16% underweight in the strategy to technology, which was the best-performing sector in the S&P 500—with an October return of 7.78%.
- Given the historically low level of volatility in October, there were no trades in the strategy during the month. While the strategy has lagged in recent periods, it has still outperformed since inception and has provided a much lower risk profile based both on volatility (standard deviation) and drawdowns—the strategy's worst peak-to-trough drawdown since inception has been -19.2% versus the S&P 500 index at -55.3%.

	1 Month	QTD	YTD	1 Year	Since Inception (2/27/2004)
US Large-Cap Ten-Sector Strategy ⁽¹⁾	1.63%	1.63%	11.48%	16.68%	9.55%
Benchmark: S&P 500 Total Return Index	2.33%	2.33%	16.91%	23.63%	8.32%
Benchmark: S&P 500 TR / BBG Barc US Aggregate Bond Index (60/40)	1.42%	1.42%	11.29%	14.09%	7.11%

⁽¹⁾ Assumes management fee of 30bps.

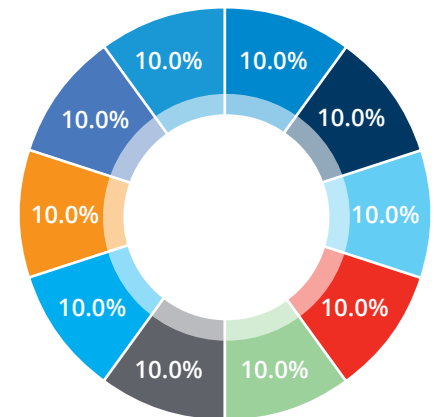
	Sharpe Ratio	Sortino Ratio	Max Drawdown
US Large-Cap Ten-Sector Strategy	0.69%	0.97%	-19.2%
Benchmark: S&P 500 Total Return Index	0.37%	0.51%	-55.3%
Benchmark: S&P 500 TR / BBG Barc US Aggregate Bond Index (60/40)	0.52%	0.73%	-34.8%

Strategic Asset Allocations



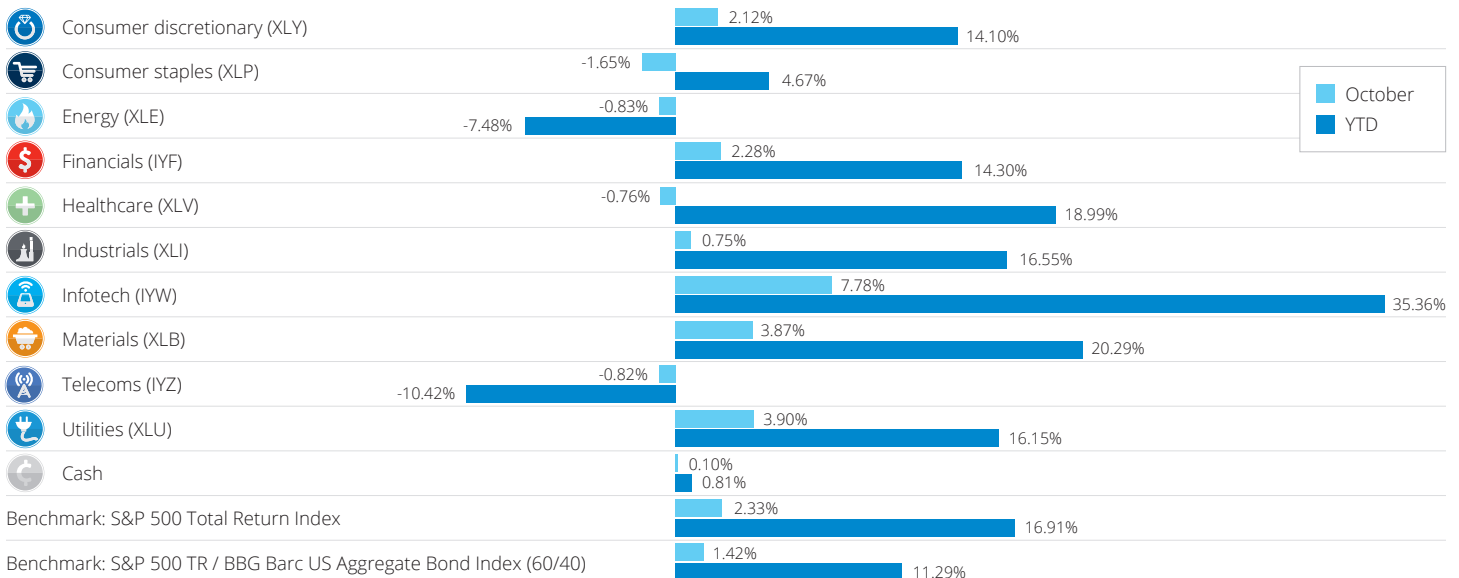
- 👤 Consumer discretionary (XLY)
- 🛒 Consumer staples (XLP)
- 🔥 Energy (XLE)
- 💰 Financials (IYF)
- ⚕️ Healthcare (XLV)
- 🏭 Industrials (XLI)
- 📡 Infotech (IYW)
- 🏠 Materials (XLB)
- 📶 Telecoms (IYZ)
- ⚡ Utilities (XLU)
- 🏠 Cash

Actual Average Allocations October 2017



Actual allocations may not total to 100.0% due to rounding.

Performance



Statistics Definitions

Sharpe Ratio: The annualized excess return over the risk-free rate divided by the annualized standard deviation of these excess returns. The higher the ratio, the better the risk-adjusted return.

Sortino Ratio: A modification of the Sharpe Ratio that differentiates between overall volatility and downside volatility (downside deviation). Calculated by dividing the annualized excess return over the risk-free rate by the annualized downside deviation of these excess returns. The Sortino Ratio is particularly suited for measuring the risk-adjusted returns of strategies that aim to control for downside risk. The higher the ratio, the better the risk-adjusted return.

Max Drawdown: The maximum loss from peak to trough of a portfolio, before a new peak is attained. Maximum Drawdown is an indicator of downside risk over a specified time period.

Max Drawdown = (Trough Value – Peak Value) / Peak Value

MAR Ratio: The ratio between the annualized excess return over the risk-free rate and the maximum drawdown of these excess returns. The higher the ratio, the better the risk-adjusted return; this ratio is particularly suited for strategies that aim to control for downside risk.

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The S&P 500® Index is a commonly recognized, free float-adjusted, market capitalization-weighted index of securities of 500 widely held companies, designed to measure the performance of US large-cap stocks. The Russell 3000® Index is a free float-adjusted, market-capitalization-weighted index which measures the performance of the largest 3,000 US companies representing approximately 98% of the investable US equity market. The MSCI ACWI™ is a designed to measure the performance of the global equity market and is a free float-adjusted, market-capitalization-weighted index composed of large- and mid-cap stocks of companies located in developed and emerging countries throughout the world. The MSCI ACWI ex USA Index is designed to measure the performance of the global equity market excluding the US component and is a free float-adjusted, market-capitalization-weighted index composed of large- and mid-cap stocks of companies located in developed and emerging countries throughout the world. The Bloomberg Barclays U.S. Aggregate Bond Index provides a broad-based measure of the fixed-rate US investment-grade debt market; we occasionally refer to this index as the Bloomberg Barclays Aggregate Bond Index or the BBG Barc Agg. The Bloomberg Barclays Global Aggregate Bond Index provides a measure of global investment grade, fixed-rate debt from both developed and emerging markets; we may refer to this index as BBG Barc Global Agg. The J.P. Morgan Global Aggregate Bond Index (JPM GABI) provides a broad-based measure of the global fixed-rate, investment-grade debt markets. The JPM GABI is a U.S. dollar denominated index with asset classes from developed and emerging markets. Cash refers to overnight Fed funds.

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Exchange-traded funds (ETFs) are subject to risks similar to those of stocks, such as market, interest rate, foreign exchange, and liquidity risks. An investor in ETFs may bear indirect fees and expenses charged by the ETFs in addition to their direct fees and expenses, and is subject to the risk of loss of principal. ETF sponsors may suspend trading in ETFs and may not honor redemption requests. ETFs may trade at a discount or premium to their net asset value and are subject to the market fluctuations of their underlying investments. When considering investing in an ETF, you should consult your financial advisor and accountant on how investing in the fund will affect your taxes.

Before investing in an ETF, you should read both its summary prospectus and its full prospectus, which provide detailed information on the ETF's investment objective, principal investment strategies, risks, costs, and historical performance (if any). The SEC's EDGAR system, as well as Internet search engines, can help you locate a specific ETF prospectus. You can also find prospectuses on the websites of the financial firms that sponsor a particular ETF, as well as through your broker.

Past performance is no guarantee of future results of any ETF.

Back-Tested Performance Results and Caveats

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The results for simulated or hypothetical trading should also be considered with the understanding that a back-tested strategy is designed with the benefit of hindsight, and it is therefore likely that any actual strategy or program, had it existed during the period for which results are shown in CMM Content, would have been different from the assumed strategy. No representation is being made that any account will, or is likely to, achieve profits or losses similar to these being shown.

Inherent in all simulated historical return calculations is the fact that unequal growth in the values of a portfolio's components will cause the asset-weights to differ from their assumed theoretical weights. To counteract this effect would require daily adjustments and the net impact on the simulated returns would be either a small incremental gain or loss. Similarly, the same effect applies to constant weight performance indices such as the traditional 60% equity/40% fixed income benchmark. We do not model this effect for either our simulated strategy return or the performance indices.

Past performance is not a guarantee of future performance, and simulated hypothetical returns likewise have no bearing on potential future actual returns. Investment decisions based on any strategy presented in CMM Content may generate losses, potentially large losses, the sizes of which it is not possible to estimate.

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