



Asset Allocation & Financial Planning

2Q 2025 Update
As of April 1, 2025

www.arrowrootfamilyoffice.com

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2Q 2025

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Market History

Performance, Major Events, Drawdowns



Historical Asset Class Returns

Market Category	1Q 2025	6 Months	1 Year	3 Year	5 Year	10 Year
U.S. Large Cap Stocks	-4.3%	-1.9%	8.3%	9.0%	18.5%	12.4%
U.S. Large Cap Growth Stocks	-10.0%	-3.6%	7.7%	9.9%	19.9%	14.9%
U.S. Large Cap Value Stocks	2.1%	0.1%	7.0%	6.4%	16.0%	8.6%
U.S. Small Cap Stocks	-9.5%	-9.2%	-4.0%	0.4%	13.2%	6.2%
Global Stocks	-0.9%	-1.8%	7.5%	7.2%	15.2%	9.0%
Developed Market Stocks	8.1%	-1.0%	5.4%	6.6%	12.1%	5.5%
Emerging Market Stocks	4.5%	-3.1%	8.9%	1.4%	7.4%	3.1%
U.S. Taxable Bonds	2.7%	-0.5%	4.8%	0.5%	-0.4%	1.4%
U.S. Municipal Bonds	-0.5%	-1.4%	1.0%	1.4%	1.0%	1.9%
U.S. High Yield Bonds	1.2%	1.1%	7.5%	4.4%	5.9%	3.9%
REITs	2.7%	-5.2%	8.9%	-1.9%	9.4%	4.8%
Commodities	5.2%	6.0%	2.8%	-1.4%	17.3%	4.2%

2Q 2025

Disclosures: All performance data represents total returns. Performance longer than 1 year are annualized. Past performance is no guarantee of future results. Asset classes are represented by the following ETFs: U.S. Large Cap (SPY - SPDR S&P 500 ETF), U.S. Large Cap Growth (IWD - Russell 1000 Growth ETF), U.S. Large Cap Value (IWF - Russell 1000 Value ETF), U.S. Small Cap (IWM - iShares Russell 2000 ETF), Global Stocks (ACWI - iShares MSCI ACWI ETF), DM Stocks (EFA - iShares MSCI EAFE ETF), EM Stocks (EEM - iShares MSCI Emerging ETF), U.S. Taxable Bonds (AGG - iShares Core U.S. Aggregate Bond ETF), U.S. Municipal Bonds (MUB - iShares National Muni Bond ETF), U.S. High Yield Bonds (HYG - iShares iBoxx \$ High Yield Corporate ETF), Commodities (DBC - Invesco DB Commodity ETF), and REITs (VNQ - Vanguard Real Estate ETF).

Quarterly Asset Class Performance

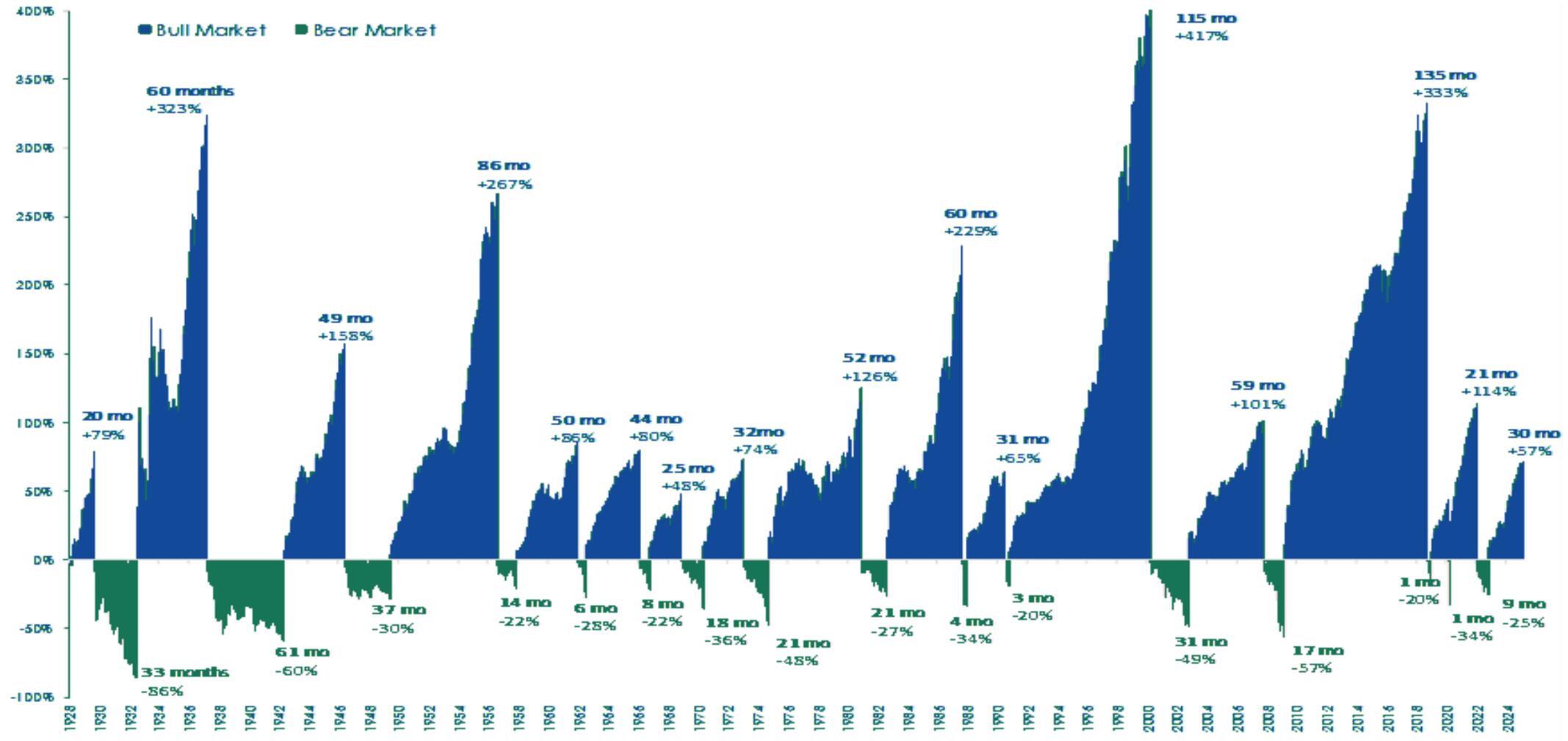
2Q 2025

2Q 2022	3Q 2022	4Q 2022	1Q 2023	2Q 2023	3Q 2023	4Q 2023	1Q 2024	2Q 2024	3Q 2024	4Q 2024	1Q 2025	1 year
Comdty 2.2%	Cash 0.4%	DM Equity 17.7%	DM Equity 9.0%	Large Caps 8.7%	Comdty 10.0%	REITs 18.2%	Large Caps 10.4%	EM Equity 4.4%	REITs 17.3%	Large Caps 2.5%	DM Equity 8.1%	REITs 8.9%
Cash 0.1%	High Yield -1.7%	EM Equity 10.3%	Large Caps 7.4%	Small Caps 5.3%	Cash 1.3%	Small Caps 14.0%	DM Equity 6.0%	Large Caps 4.4%	Small Caps 9.2%	Cash 1.2%	Comdty 5.2%	EM Equity 8.9%
Bonds -4.6%	Small Caps -2.1%	Large Caps 7.6%	60/35/5 4.6%	DM Equity 3.2%	High Yield -0.3%	Large Caps 11.6%	Small Caps 5.0%	Cash 1.3%	EM Equity 7.7%	Comdty 1.0%	EM Equity 4.5%	Large Caps 8.3%
High Yield -9.4%	Bonds -4.7%	60/35/5 6.8%	EM Equity 4.1%	60/35/5 3.0%	60/35/5 -2.9%	DM Equity 10.7%	Comdty 4.2%	Comdty 1.1%	DM Equity 6.8%	Small Caps 0.3%	Bonds 2.7%	High Yield 7.5%
EM Equity -10.4%	Large Caps -4.9%	Small Caps 6.2%	High Yield 3.7%	REITs 1.7%	Bonds -3.2%	60/35/5 8.9%	60/35/5 4.2%	60/35/5 1.0%	60/35/5 6.1%	High Yield -0.1%	REITs 2.7%	DM Equity 5.4%
60/35/5 -10.5%	60/35/5 -5.9%	High Yield 5.0%	Bonds 3.2%	Cash 1.2%	Large Caps -3.2%	EM Equity 7.9%	EM Equity 2.2%	High Yield 0.7%	Large Caps 5.7%	60/35/5 -2.0%	High Yield 1.2%	60/35/5 5.3%
DM Equity -13.1%	Comdty -10.2%	REITs 4.3%	Small Caps 2.7%	EM Equity 1.0%	EM Equity -4.1%	High Yield 7.0%	High Yield 1.5%	Bonds 0.0%	High Yield 5.6%	Bonds -3.1%	Cash 1.0%	Cash 4.8%
REITs -15.4%	DM Equity -10.4%	Comdty 3.7%	REITs 1.6%	High Yield 0.7%	DM Equity -4.9%	Bonds 6.7%	Cash 1.3%	DM Equity -0.2%	Bonds 5.3%	EM Equity -7.2%	60/35/5 0.6%	Bonds 4.8%
Large Caps -16.1%	REITs -11.0%	Bonds 1.6%	Cash 1.0%	Bonds -0.9%	Small Caps -5.2%	Cash 1.3%	Bonds -0.7%	REITs -2.0%	Cash 1.3%	REITs -7.7%	Large Caps -4.3%	Comdty 2.8%
Small Caps -17.3%	EM Equity -13.0%	Cash 0.8%	Comdty -3.7%	Comdty -4.4%	REITs -8.6%	Comdty -7.3%	REITs -1.3%	Small Caps -3.3%	Comdty -4.1%	DM Equity -8.3%	Small Caps -9.5%	Small Caps -4.0%

Disclosures: All performance data represents total returns for the stated period. Past performance is no guarantee of future results. Asset classes are represented by the following ETFs: EM Equity (EEM - iShares MSCI Emerging Markets ETF), Commodities (DBC - Invesco DB Commodity Index Tracking ETF), DM Equity (EFA - iShares MSCI EAFE ETF), REITs (VNQ - Vanguard Real Estate ETF), Large Caps (SPY - SPDR S&P 500 ETF), Small Caps (IWM - iShares Russell 2000 ETF), High Yield (HYG - iShares iBoxx \$ High Yield Corporate Bond ETF), Cash (BIL - SPDR Bloomberg Barclays 1-3 Month T-Bill ETF), Bonds (AGG - iShares Core U.S. Aggregate Bond ETF). The "60/35/5" portfolio is for illustrative purposes only and assumes the following weights: 25% Large Caps, 15% Developed Markets, 10% Small Caps, 5% Emerging Markets, 5% REITs, 25% Bonds, 5% High Yield, 5% Commodities, and 5% Cash.

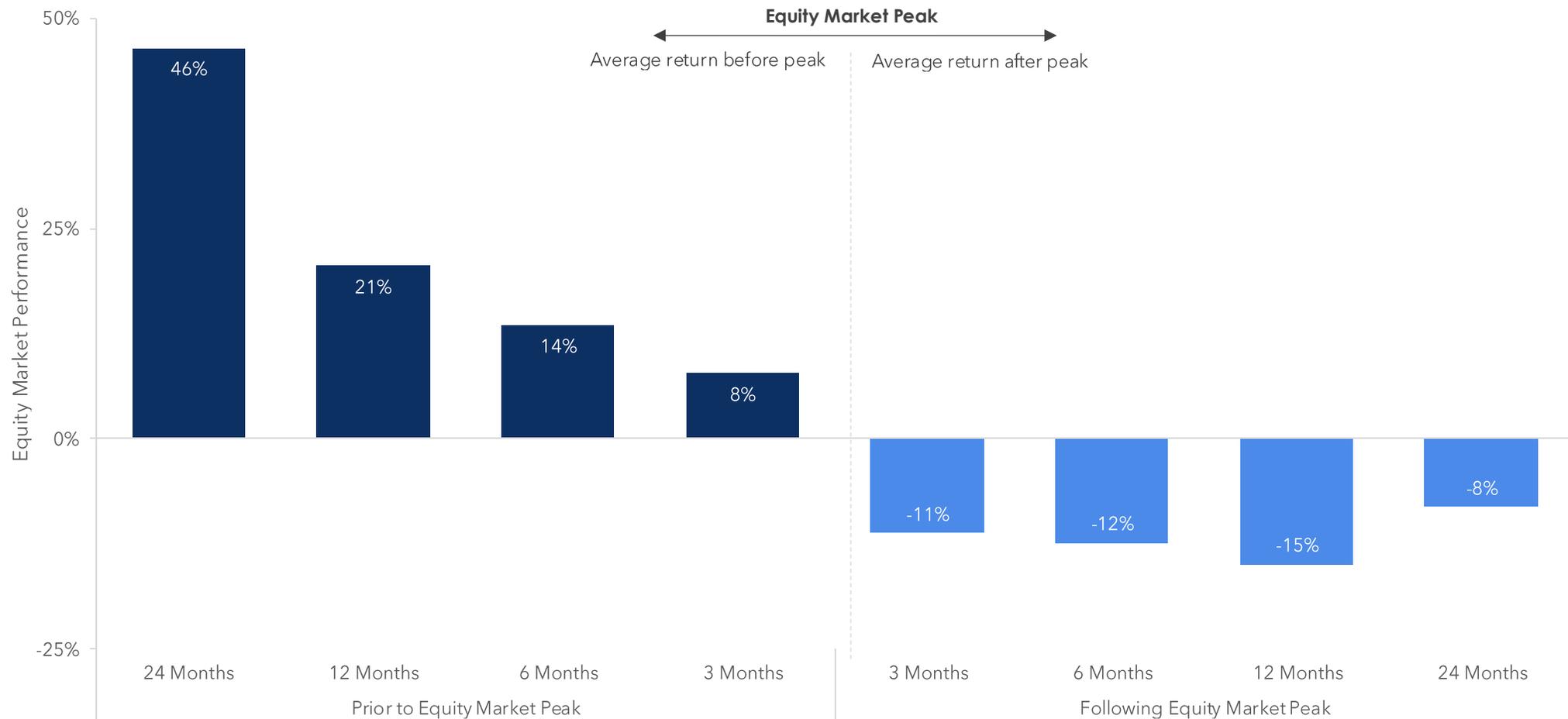
S&P 500 Bull & Bear Markets

2Q 2025



Disclosures: All performance data represents price returns of the S&P 500. Past performance is no guarantee of future results. Bear Markets are defined as a decline of at least 20% from the market's high point to its low.

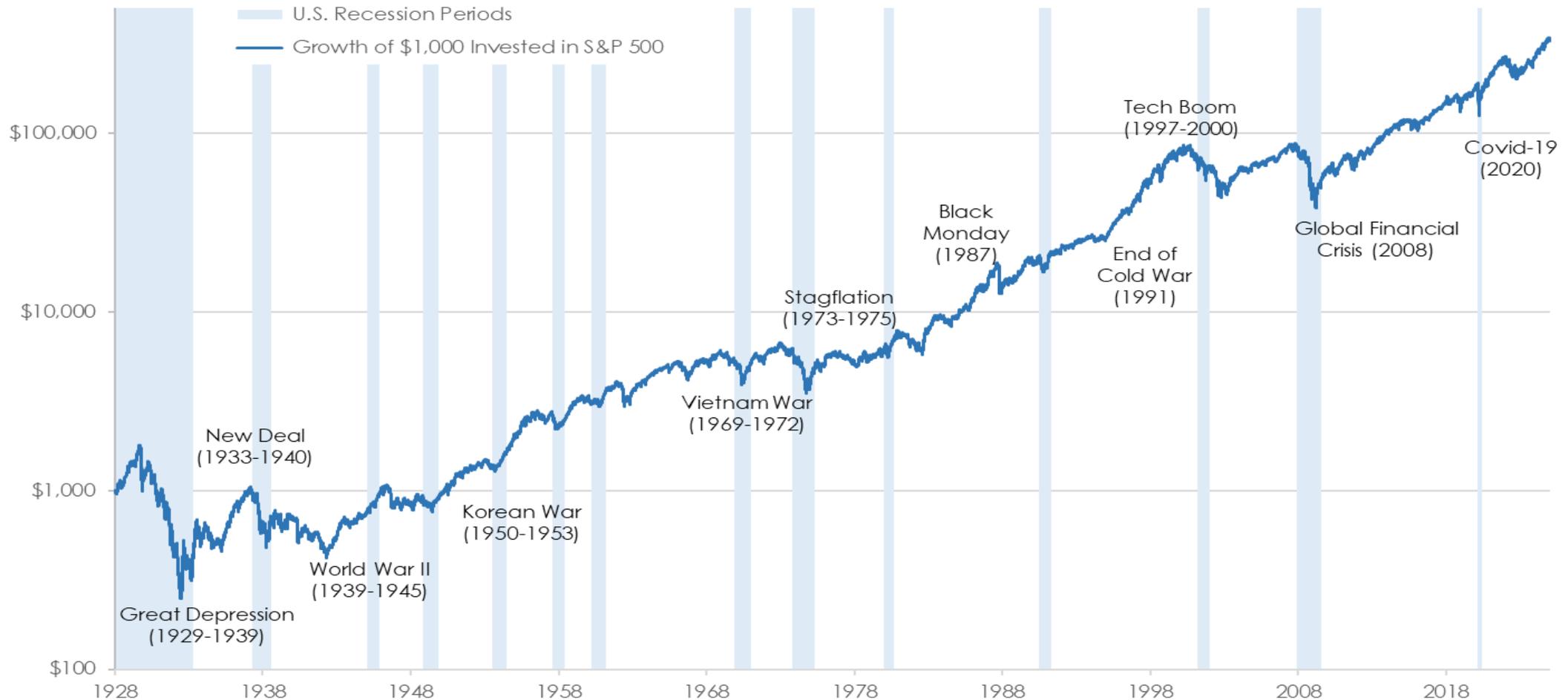
Average Returns Prior To & Following Equity Market Peaks



Disclosures: All performance data represents price returns of the S&P 500. Past performance is no guarantee of future results. The analysis is based on 14 bull/bear market cycles since 1937. Bear Markets are defined as a decline of at least 20% from the market's high point to its low.

Historic Market Events

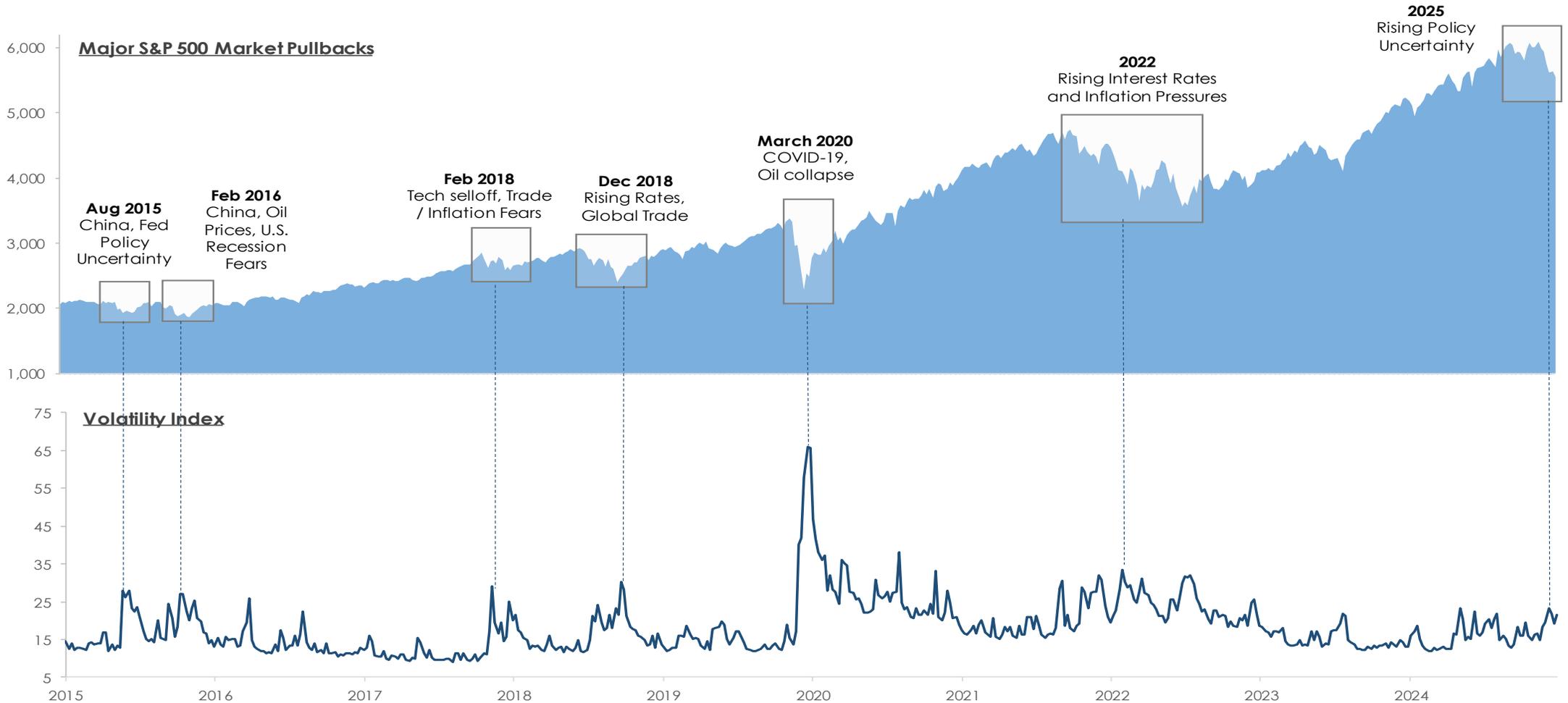
2Q 2025



Disclosures: All performance data represents price returns of the S&P 500. Past performance is no guarantee of future results. U.S. Recession dates are based on National Bureau of Economic Research (NBER).

Volatility Index

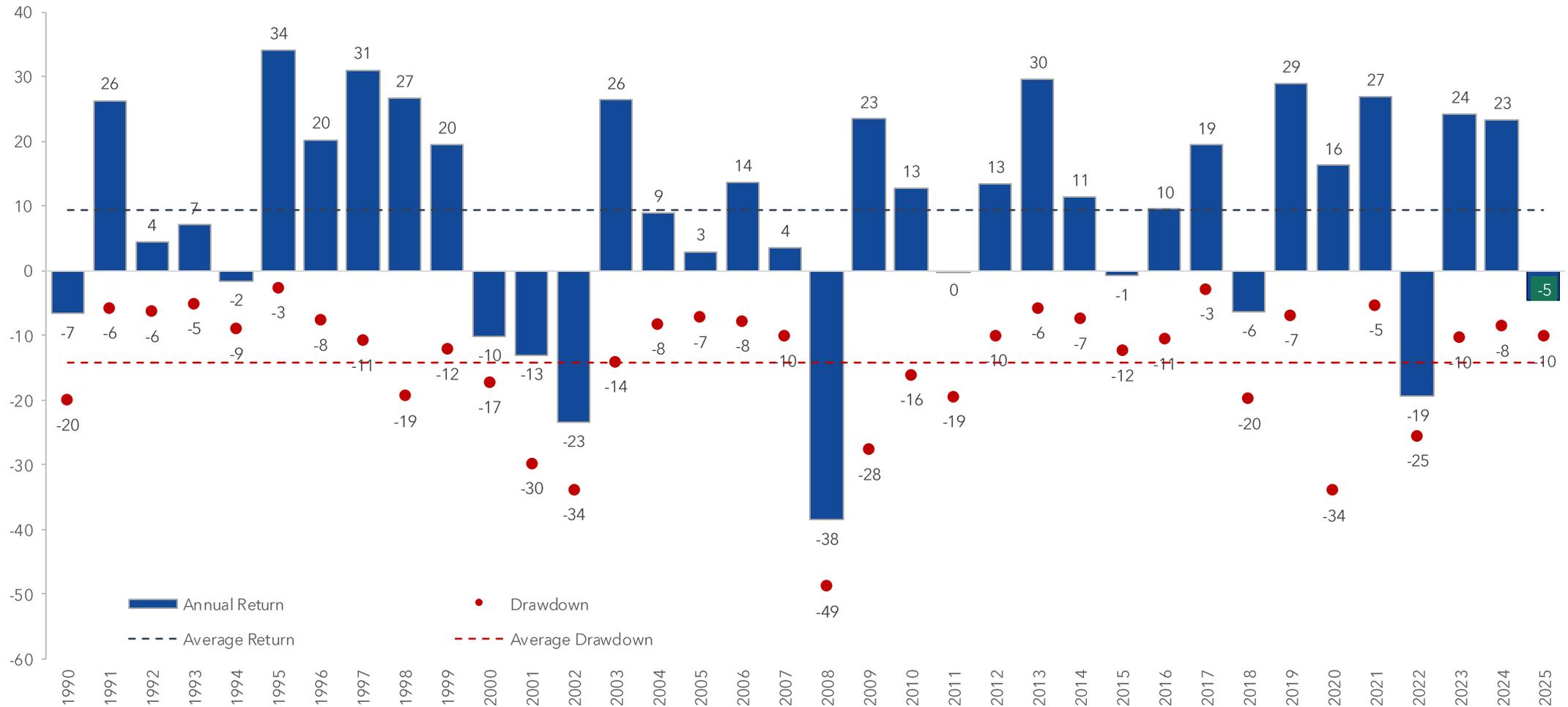
2Q 2025



Disclosures: Past performance is no guarantee of future results. All performance data represents price returns of the SPDR S&P 500 ETF Trust (SPY). The CBOE VIX measures the market's expectations of future volatility and is based on S&P 500 options activity.

History of Market Drawdowns by Year

2Q 2025



Disclosures: Past performance is no guarantee of future results. For illustrative purposes only. All performance data represents price returns and does not include dividends for the stated period. Drawdown is calculated from the intra-year peak to trough levels. Analysis is based on the State Street SPDR S&P 500 ETF (SPY).

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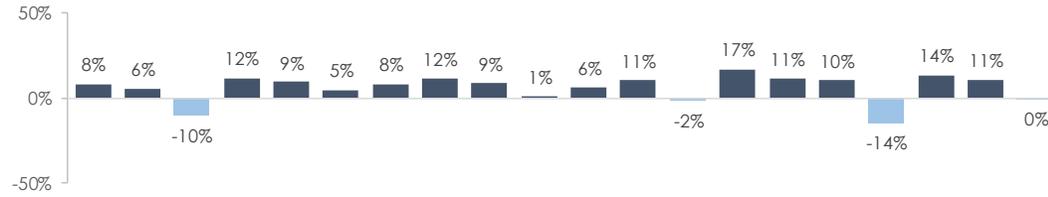
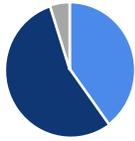
Asset Allocation

Statistics, Risk vs Reward, Asset Class Correlations

20 Years of Asset Allocation Statistics

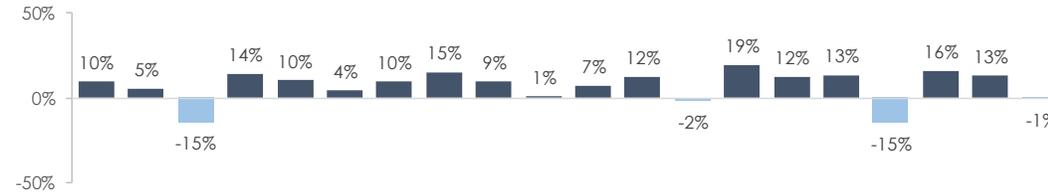
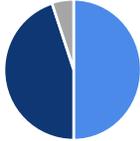
■ Equity ■ Fixed Income ■ Cash

Conservative



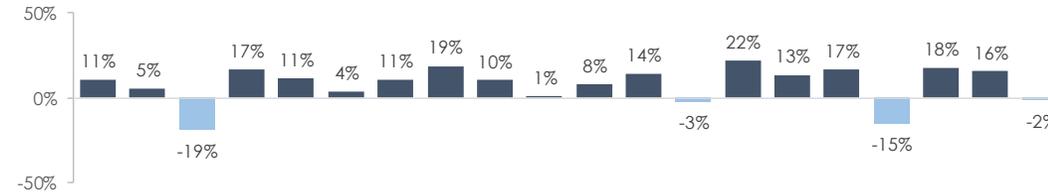
Average Annual Return	6.2%
Standard Deviation	7.9%
Highest / Lowest Return	+17% / -14%
Growth of \$100,000	\$313,207

Moderately Conservative



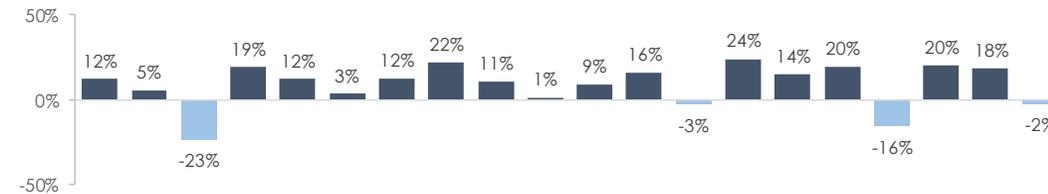
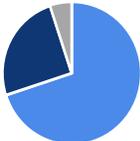
Average Annual Return	7.0%
Standard Deviation	9.3%
Highest / Lowest Return	+19% / -15%
Growth of \$100,000	\$357,643

Moderate



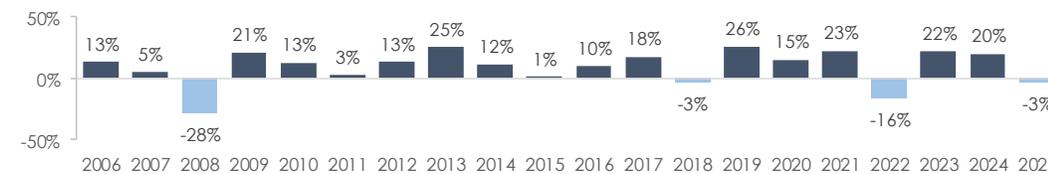
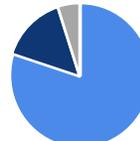
Average Annual Return	7.8%
Standard Deviation	10.9%
Highest / Lowest Return	+22% / -19%
Growth of \$100,000	\$405,665

Moderately Aggressive



Average Annual Return	8.6%
Standard Deviation	12.5%
Highest / Lowest Return	+24% / -23%
Growth of \$100,000	\$457,009

Aggressive



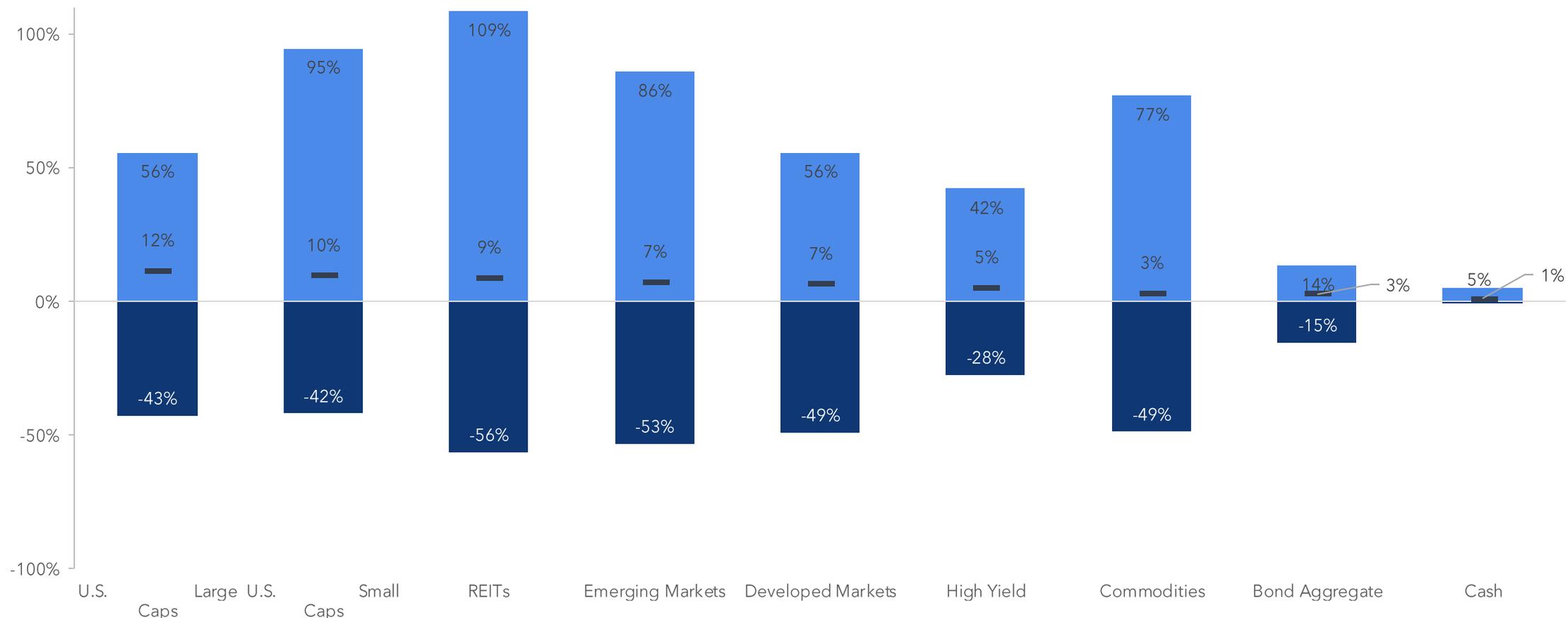
Average Annual Return	9.5%
Standard Deviation	14.1%
Highest / Lowest Return	+26% / -28%
Growth of \$100,000	\$511,250

Disclosures: Past performance is no guarantee of future results. All performance data represents total returns for the stated period. Asset allocation portfolios are rebalanced every 12 months. Asset classes are represented by the following ETFs: Equity (SPY - SPDR S&P 500 ETF), Fixed Income (AGG - iShares Core U.S. Aggregate Bond ETF), Cash (BIL - SPDR Bloomberg Barclays 1-3 Month T-Bill ETF). Equity / Fixed Income / Cash allocations as a percentage of the total portfolio: Conservative(40/55/5), Moderately Conservative(50/45/5), Moderate(60/35/5), Moderately Aggressive(70/25/5), Aggressive(80/15/5).

Asset Class Return Ranges Over 20 Years

■ Lowest 1 Year Total Return ■ Highest 1 Year Total Return – Average 1 Year Total Return

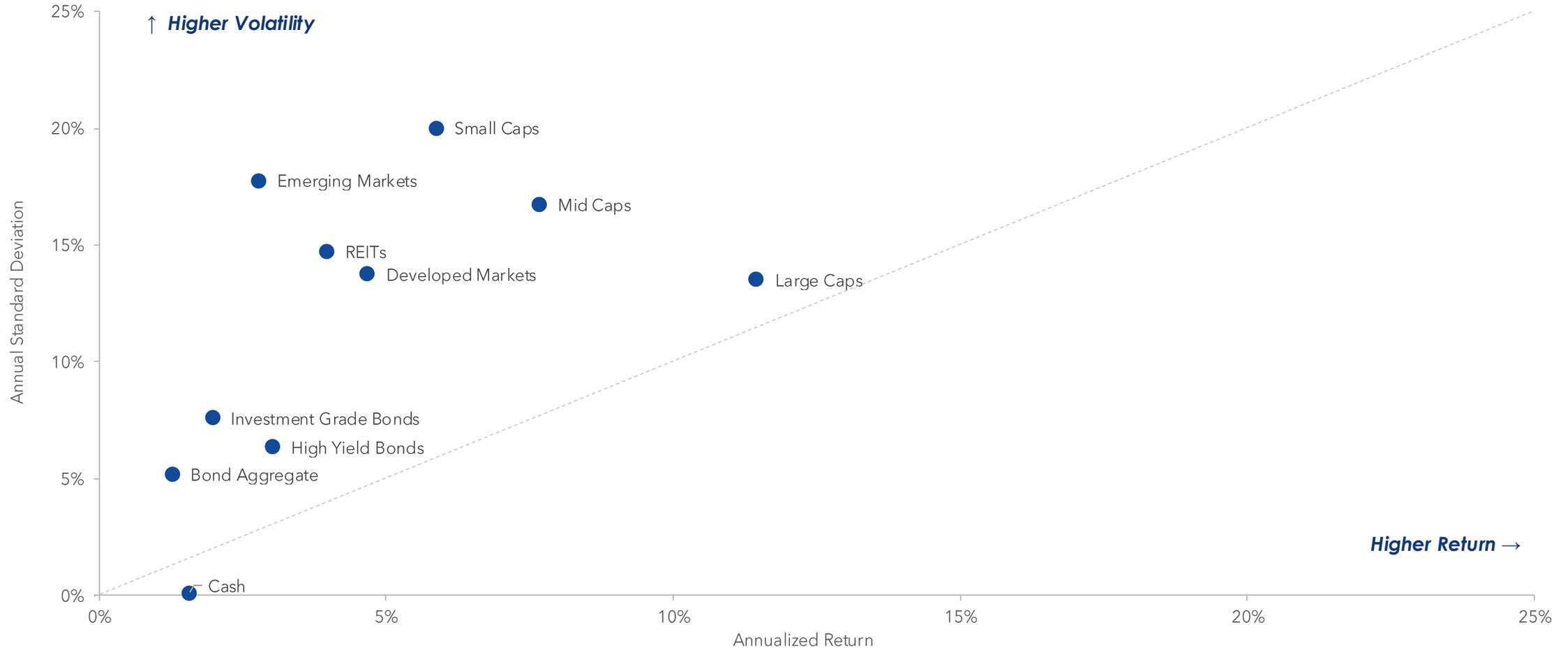
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Disclosures: Past performance is no guarantee of future results. Performance data represents total returns for a 12-month period matching the description over the last 20 years. Note: Commodity and High Yield Bond ETF price data is only available since 2006. REITs ETF price data is only available since 2004. Asset classes are represented by the following ETFs: Emerging Markets (EEM - iShares MSCI Emerging Markets ETF), Commodities (DBC - Invesco DB Commodity ETF), Developed Markets (EFA - iShares MSCI EAFE ETF), REITs (VNQ - Vanguard Real Estate ETF), U.S. Large Caps (SPY - SPDR S&P 500 ETF), U.S. Small Caps (IWM - iShares Russell 2000 ETF), High Yield (HYG - iShares iBoxx \$ High Yield Corporate Bond ETF), Cash (BIL - SPDR Bloomberg Barclays 1-3 Month T-Bill ETF), Bond Aggregate (AGG - iShares Core U.S. Aggregate Bond ETF).

Asset Class Risk vs Reward

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Disclosures: Past performance is no guarantee of future results. Annual Standard Deviation and the Annualized Return use monthly data from the past 10 years. Annualized returns are based on dividends reinvested. Asset classes are represented by the following ETFs: Cash (BIL - SPDR Bloomberg Barclays 1-3 Month T-Bill ETF), Bond Aggregate (AGG - iShares Core U.S. Aggregate Bond ETF), Investment Grade (LQD - iShares iBoxx \$ Investment Grade Corporate Bond ETF), High Yield (HYG - iShares iBoxx \$ High Yield Corporate Bond ETF), Large Caps (SPY - SPDR S&P 500 ETF), Small Caps (IWM - iShares Russell 2000 ETF), Mid Caps (MDY - SPDR S&P Midcap 400 ETF), REITs (VNQ - Vanguard Real Estate ETF), Emerging Markets (EEM - iShares MSCI Emerging Markets ETF), Developed Market (EFA - iShares MSCI EAFE ETF).

Asset Class Correlations

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	U.S. Large Caps	U.S. Small Caps	Developed Markets	Emerging Markets	Bond Aggregate	High Yield	U.S. Dollar	Comdty	U.S. Growth	U.S. Value	REITs	Gold
U.S. Large Caps	1.00	0.86	0.86	0.68	0.38	0.81	-0.35	0.38	0.96	0.93	0.78	0.09
U.S. Small Caps		1.00	0.76	0.61	0.28	0.74	-0.26	0.40	0.78	0.90	0.74	-0.05
Developed Markets			1.00	0.81	0.46	0.80	-0.58	0.46	0.76	0.87	0.72	0.18
Emerging Markets				1.00	0.41	0.68	-0.63	0.46	0.61	0.68	0.56	0.33
Bond Aggregate					1.00	0.56	-0.51	-0.12	0.41	0.31	0.57	0.40
High Yield						1.00	-0.45	0.42	0.74	0.81	0.72	0.27
U.S. Dollar							1.00	-0.29	-0.30	-0.36	-0.32	-0.53
Commodities								1.00	0.27	0.49	0.26	0.13
U.S. Growth									1.00	0.79	0.71	0.08
U.S. Value										1.00	0.79	0.08
REITs											1.00	0.16
Gold												1.00

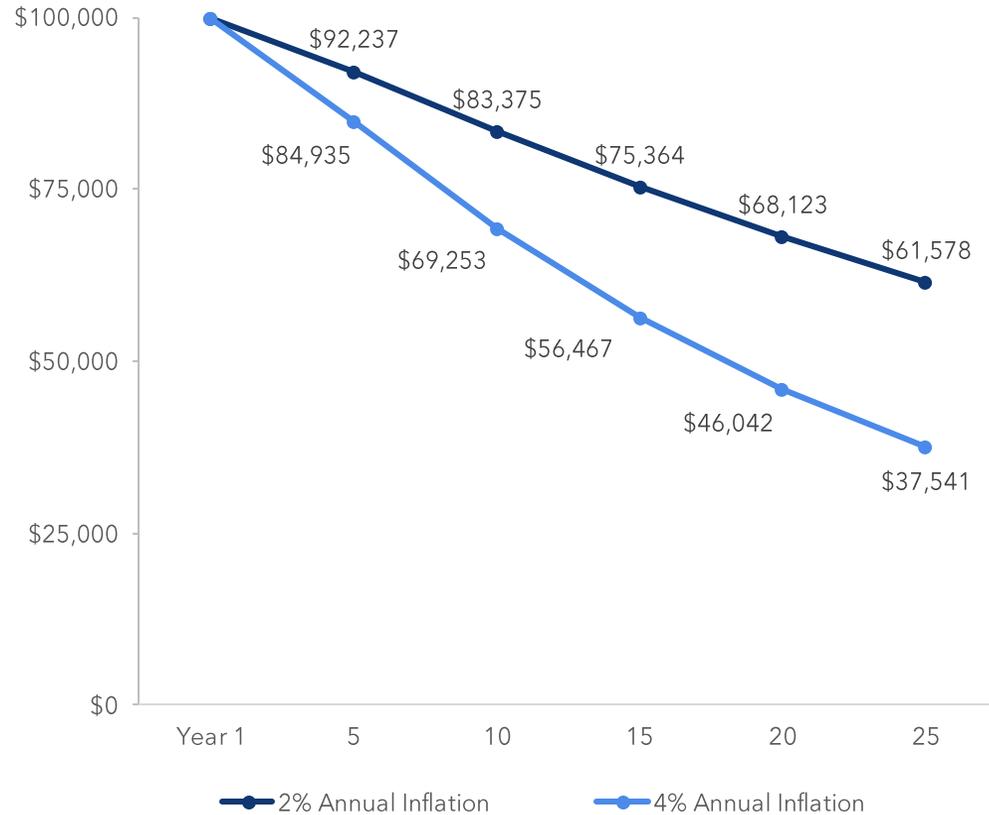
Disclosures: Past performance is no guarantee of future results. Correlations are based on 10 years of monthly total returns. Asset Classes are represented by the following ETFs: U.S. Large Caps (SPY - SPDR S&P 500 ETF), U.S. Small Caps (IWM - iShares Russell 2000 ETF), Developed Markets (EFA - iShares MSCI EAFE ETF), Emerging Markets (EEM - iShares MSCI Emerging Markets ETF), Bonds (AGG - iShares Core U.S. Aggregate Bond ETF), High Yield (HYG - iShares iBoxx \$ High Yield Corporate Bond ETF), Municipal Bonds (MUB - iShares National Muni Bond ETF), USD Index (United States Dollar Index), Emerging Market Sovereign Debt (LEMB - iShares J.P. Morgan EM Local Currency Bond ETF), Commodities (DBC - Invesco DB Commodity ETF), REITs (VNQ - Vanguard Real Estate ETF), Gold (GLD - SPDR Gold ETF).

Inflation's Impact

2Q 2025

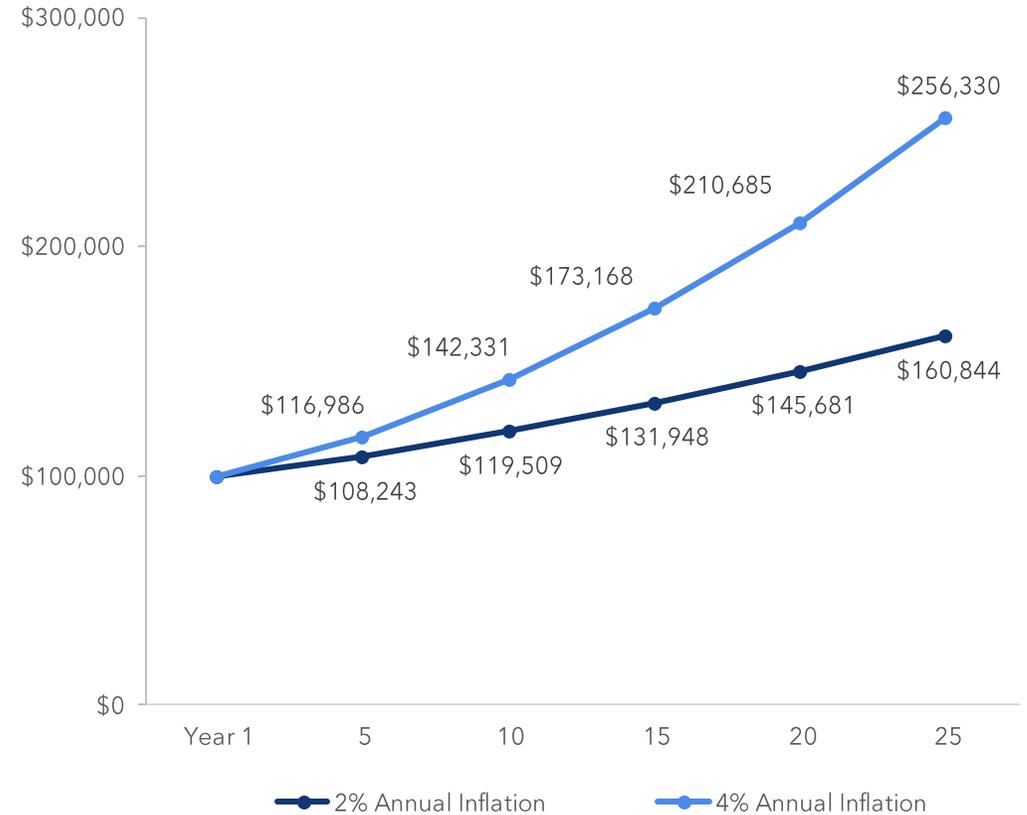
Inflation's Impact on Your Purchasing Power

Assumes constant annual inflation rates



Price Increases Based on Inflation

Assumes constant annual inflation rates



Disclosures: Past performance is no guarantee of future results. Investing involves risks, including possible loss of principal. Hypothetical illustrative examples for educational purposes only. Assumes constant annual inflation rate.

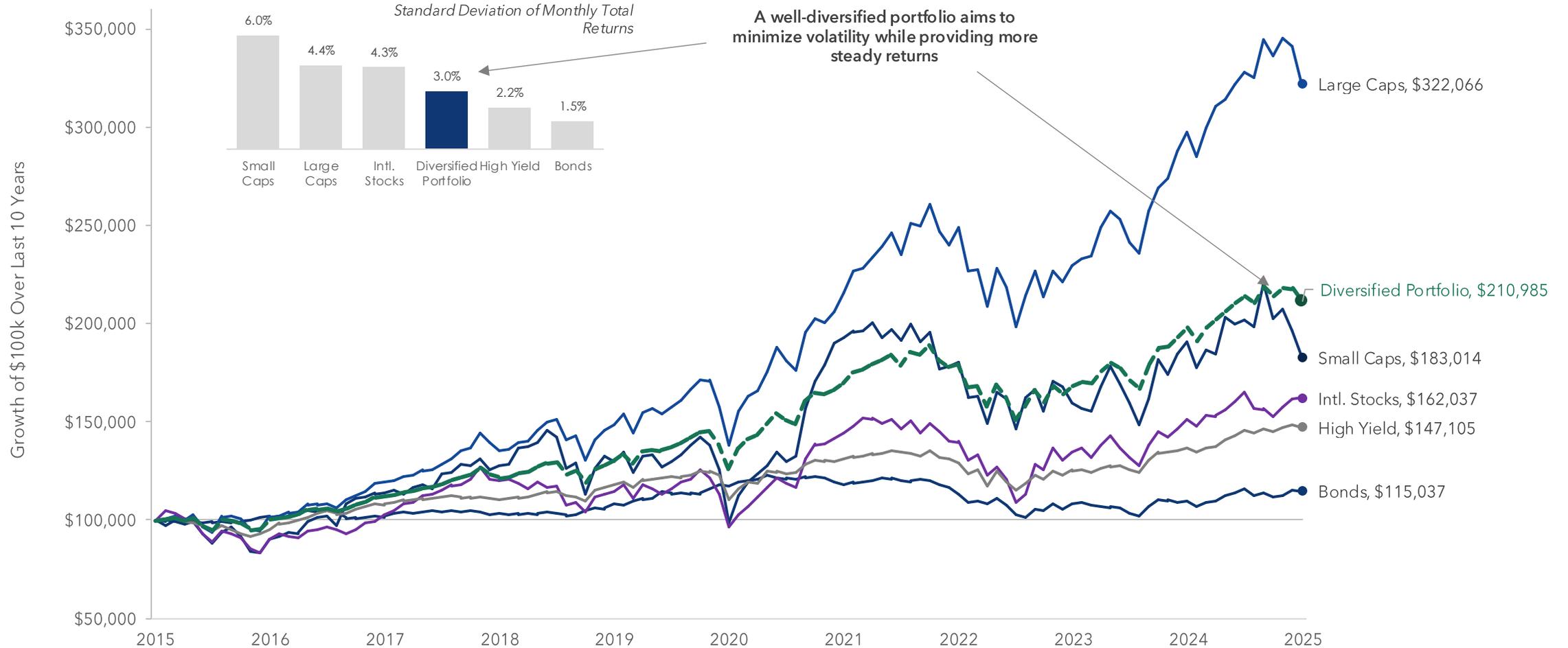
2Q 2025

Important Investing Lessons

Diversification, Market Timing, Withdrawing Capital

Importance of Diversification

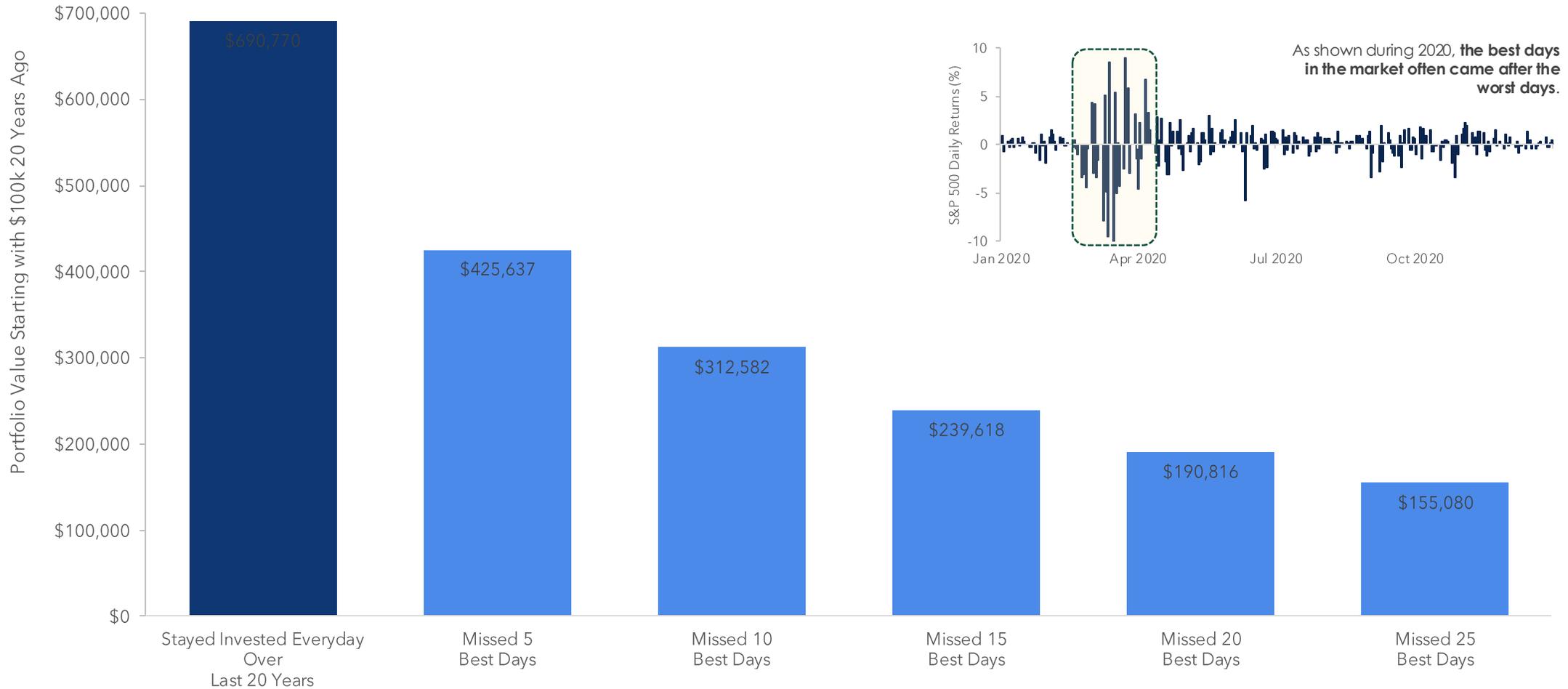
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Disclosures: Past performance is no guarantee of future results. Performance is for illustrative purposes only. Diversification does not guarantee a profit or protect against a loss in a declining market. Diversified Portfolio is represented by 40% Large Caps (SPY - SPDR S&P 500 ETF), 10% Developed Markets (EFA - iShares MSCI EAFE ETF), 5% Small Caps (IWM - iShares Russell 2000 ETF), 30% Bonds (AGG - iShares U.S. Aggregate Bond ETF), 10% High Yield (HYG - U.S. Corporate High Yield Bond ETF), and 5% Emerging Markets (EEM - iShares MSCI Emerging Markets ETF). Standard deviation is a measure of the amount of variation of each portfolio.

Time, Not Timing, is What Matters

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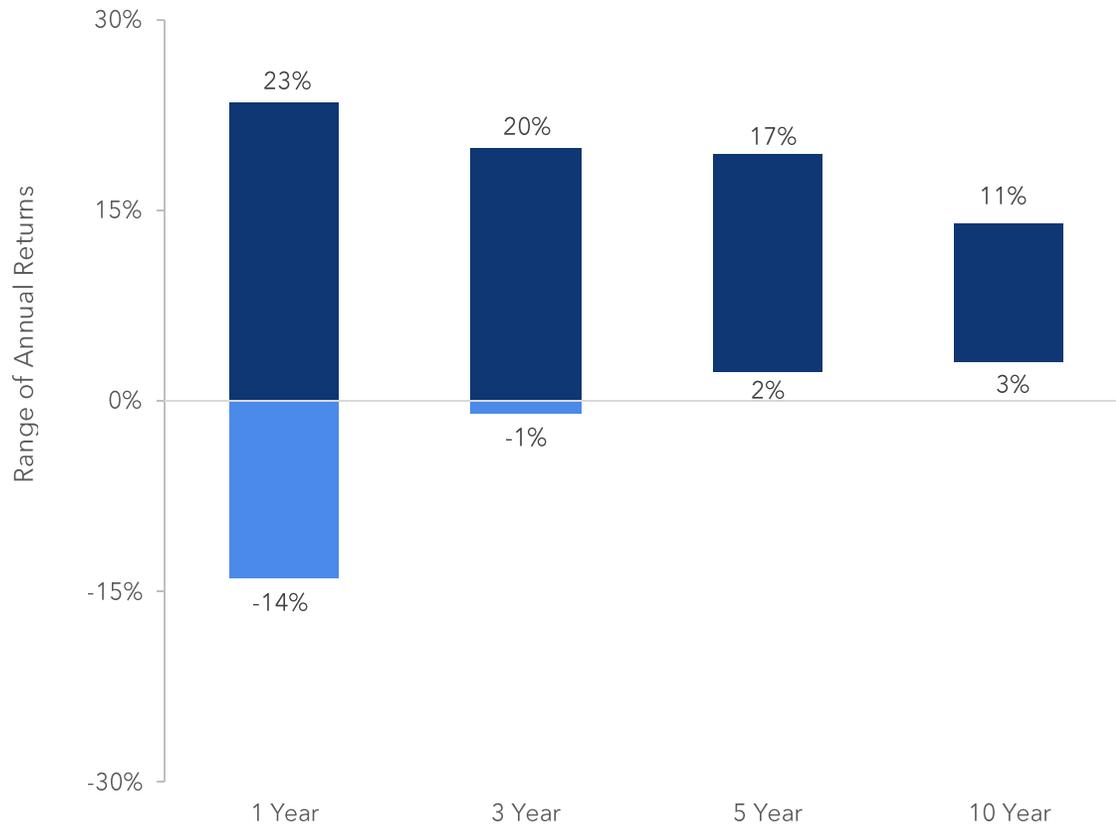


Disclosures: Past performance is no guarantee of future results. The analysis is based on 20 years of daily price return data. The portfolio value is represented by the State Street SPDR S&P 500 ETF (SPY), which represents an index of large cap stocks. The analysis does not include the impact of taxes or capital gains.

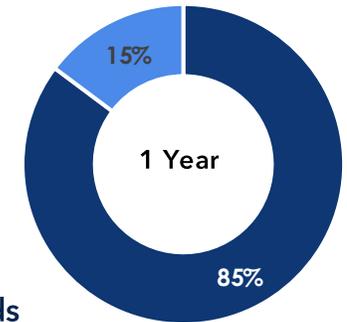
Staying Invested for the Long Term

Range of Annualized Returns for Rolling 1-, 3-, 5-, 10-Year Periods
Based on 50 Stock / 50 Bond Portfolio's Rolling Annual Returns Over Last 30 Years

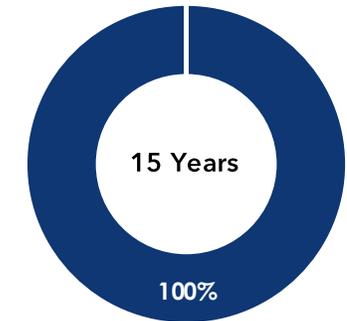
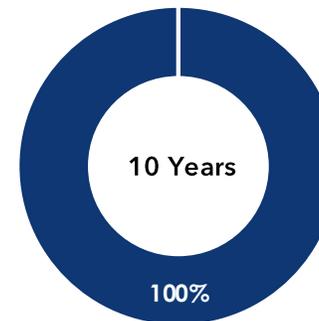
% of Time a 50 Stock / 50 Bond Portfolio was Positive / Negative
Based on Various Holding Periods Using Monthly Data From the Last 30 Years



■ % of Time You Made Money (Positive Return) ■ % of Time You Lost Money (Negative Return)

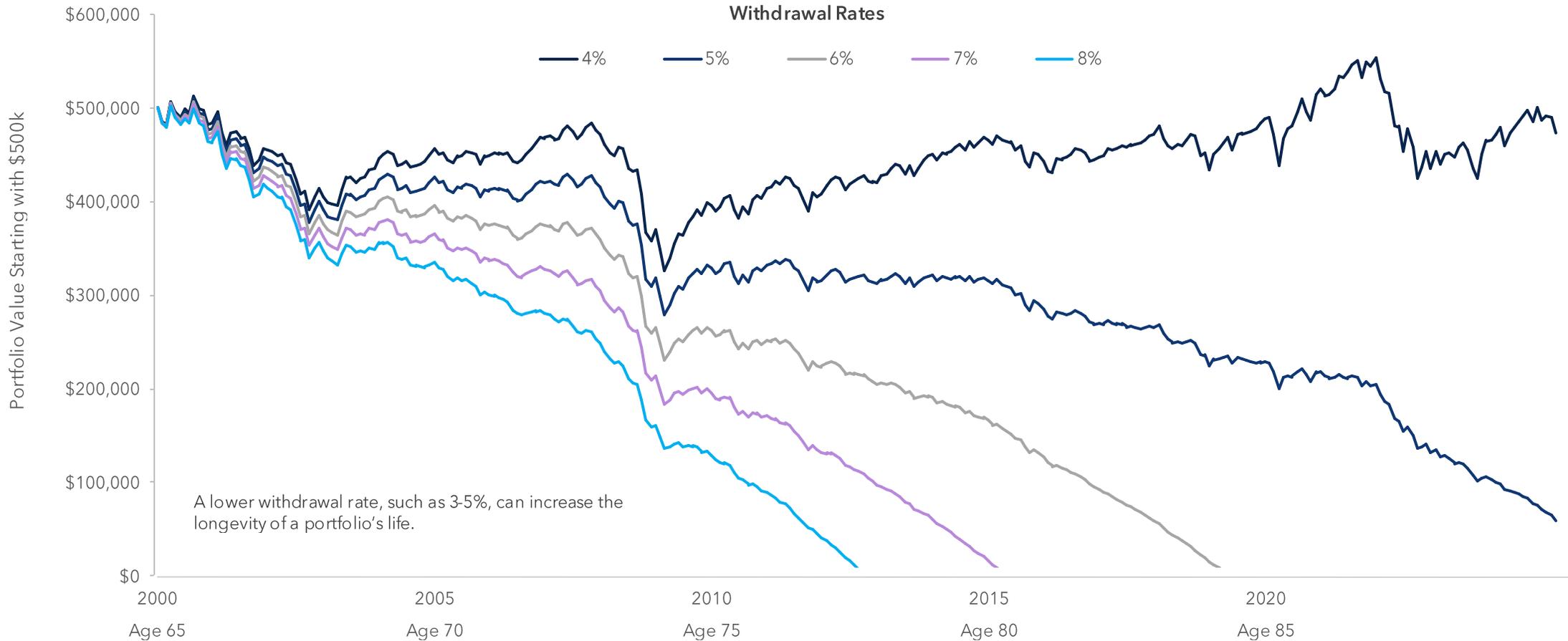


Holdings Periods



Disclosures: Past performance is no guarantee of future results. The analysis is based on the last 30 years of total return data. Returns are represented by a 50/50 allocation to equities (State Street S&P 500 ETF - SPY) and bonds (Bloomberg Bond Aggregate Index).

Impact of Various Withdrawal Rates

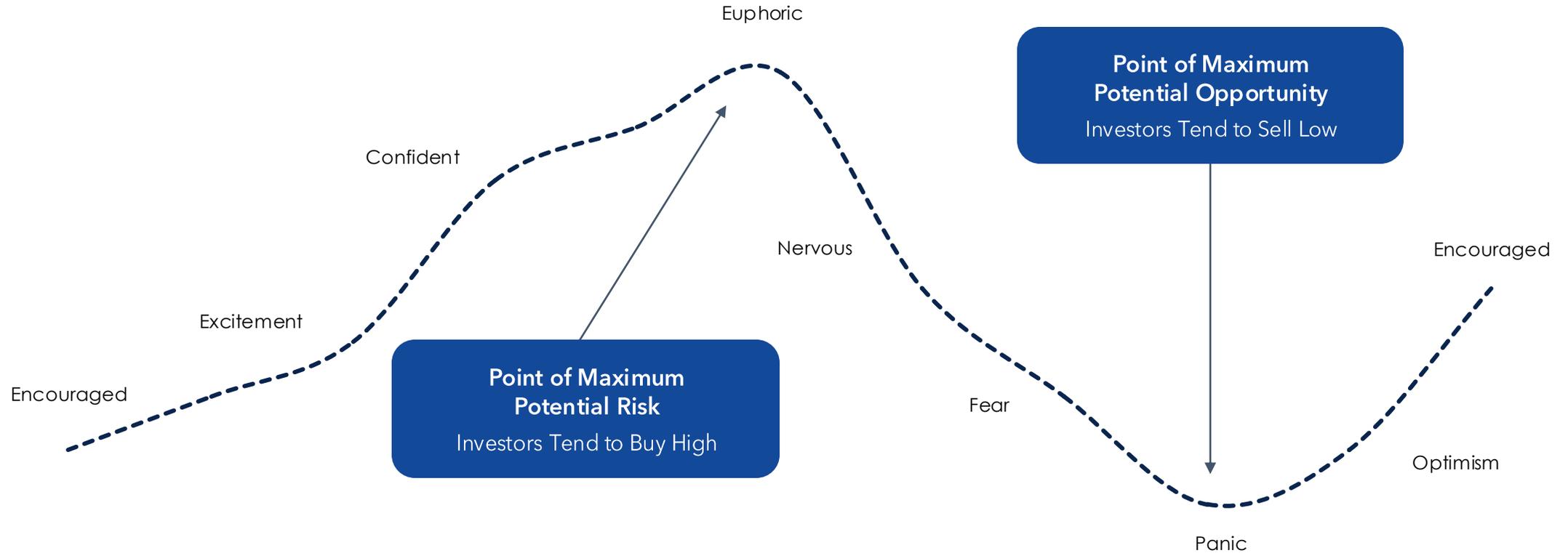


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Disclosures: Past performance is no guarantee of future results. This is a hypothetical illustration for educational purposes only and assumes a hypothetical initial portfolio balance of \$500,000 as of January 1st, 2000. The analysis looks at the impact on the portfolio based on various amounts withdrawn monthly from the portfolio throughout several market cycles. Each monthly withdrawal is adjusted annually for inflation (measured by the consumer price index) and the portfolio is rebalanced at the end of the month. This hypothetical portfolio is made up of 50% stocks represented by the State Street SPDR S&P 500 ETF (SPY) and 50% bonds represented by the Bloomberg Barclays U.S. Aggregate Bond ETF (AGG). The longevity of a portfolio can be based on the following factors: withdrawal rate, asset class mix, diversification, capital gains, fund expenses, and life expectancy. Performance is based on total returns including dividends reinvested.

The Cycle of Market Emotions

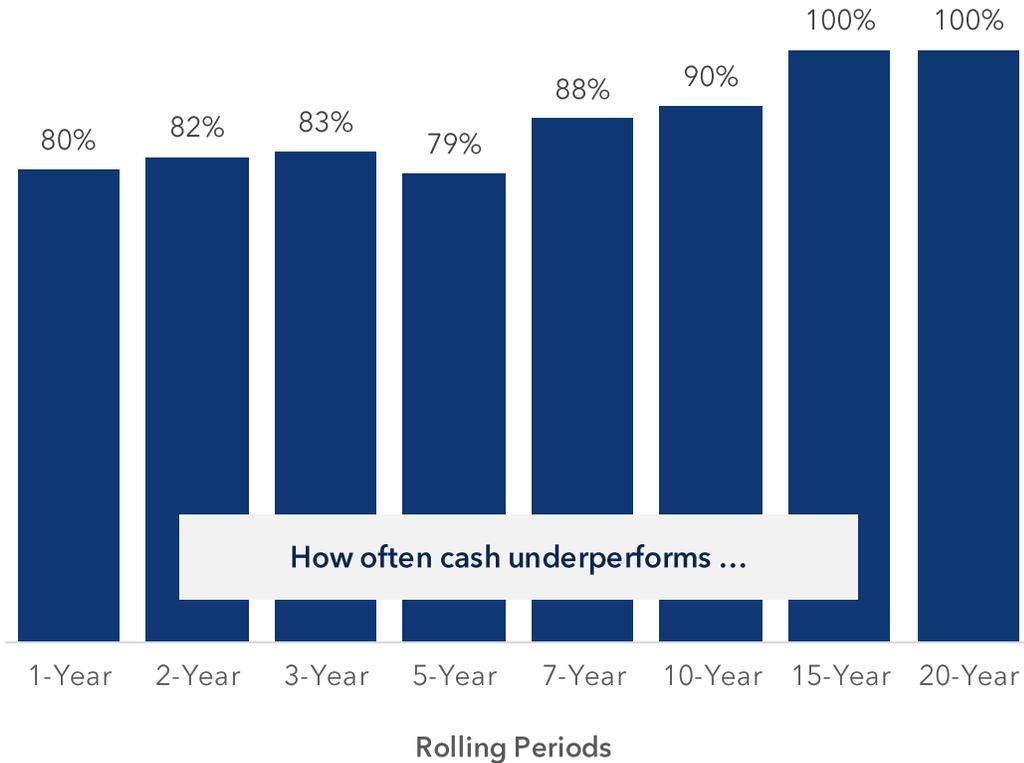
2Q 2025



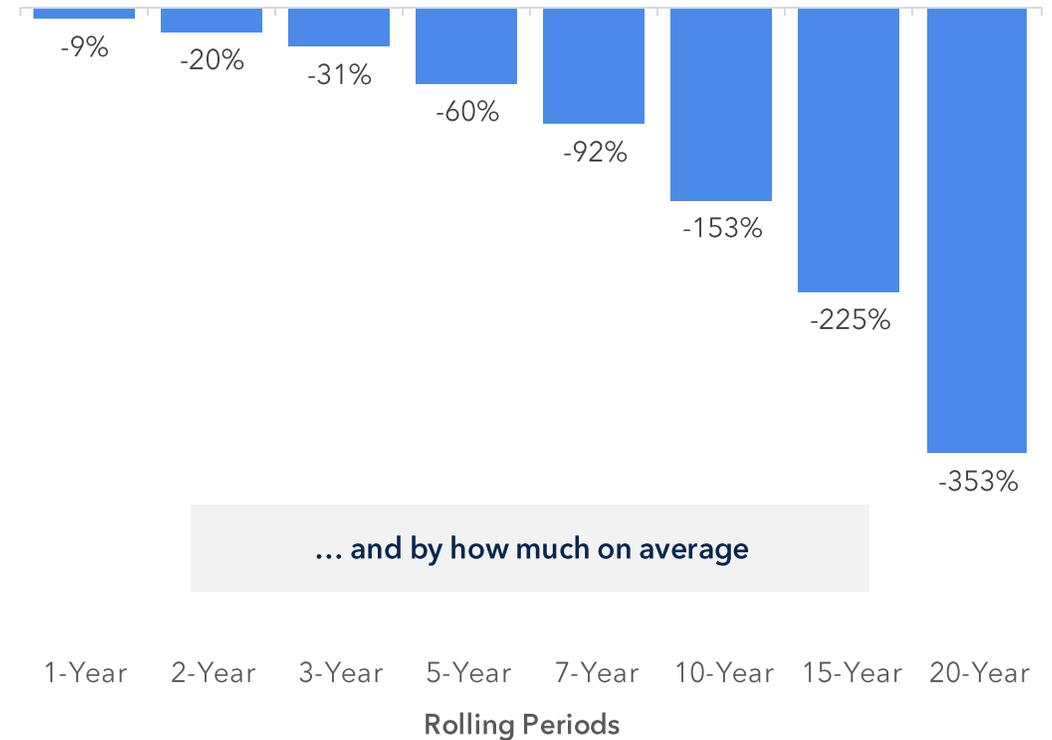
Disclosures: Strictly for illustrative and educational purposes only. This analysis is not a recommendation, offer or solicitation to buy or sell any securities or to adopt any investment strategy.

The Odds of Cash Underperforming Are High

Percentage of Times Cash Underperformed the S&P 500
Based on Total Returns for 1990-2024



Average Underperformance: Cash vs S&P 500
Relative Total Return for 1990-2024



Disclosures: Strictly for illustrative and educational purposes only. This analysis is not a recommendation, offer or solicitation to buy or sell any securities or to adopt any investment strategy. All performance data represents total returns for the stated period. Past performance is no guarantee of future results. Returns are based on monthly data points of rolling total returns with dividends and bond income reinvested. 3-Month U.S. Treasury Bills are used as a proxy for "Cash".

Definitions

Annualized Return	The rate at which an investment grows each year over the period to arrive at the final valuation.
Bear Market	A decline of at least 20% from the market's high point to its low.
Beta	A measure of how an individual asset moves when the overall stock market increases or decreases.
Correlation	A measure of the extent to which two variables are related
Dividend Yield:	The dividend yield or dividend-price ratio of a share is the dividend per share, divided by the price per share. It is also a company's total annual dividend payments divided by its market capitalization, assuming the number of shares is constant.
Developed Markets	A country that is most developed in terms of its economy and capital markets. The country must be high income, but this also includes openness to foreign ownership, ease of capital movement, and efficiency of market institutions.
Emerging Markets	A country that has some characteristics of a developed market but does not fully meet its standards. This includes markets that may become developed markets in the future or were in the past
Large Cap Stocks	Shares of publicly traded corporations with a market capitalization of \$10 billion or more
LTM	An acronym for "Last Twelve Months" or the past one year
NTM	An acronym for "Next Twelve Months" or the next one year
Price Return	The rate of return on an investment portfolio, where the return measure takes into account only the capital appreciation of the portfolio, not including income generated in the form of interest or dividends.
Total Return	Return on a portfolio of investments including capital appreciation and income received on the portfolio.
Small Cap Stocks	Shares of publicly traded corporations with a market capitalization of \$2 billion or less.
Standard Deviation	In statistics, the standard deviation is a measure of the amount of variation or dispersion of a set of values. A low standard deviation indicates the values tend to be close to the historical average of the data set, while a high standard deviation indicates the current value is outside of the historical average range.
CBOE Volatility Index (VIX)	Measures the market's expectations of future volatility and is based on S&P 500 options activity.

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