

# Merrill Lynch Wealth Management

Presented To: **American Maritime Officers Plans**

Presented By: **Liam Finn**

Date: **May 8, 2020**

Investment products, insurance and annuity products:

<b>Are Not FDIC Insured</b>	<b>Are Not Bank Guaranteed</b>	<b>May Lose Value</b>
<b>Are Not Deposits</b>	<b>Are Not Insured by Any Federal Government Agency</b>	<b>Are Not a Condition to Any Banking Service or Activity</b>

# Behavioral Finance

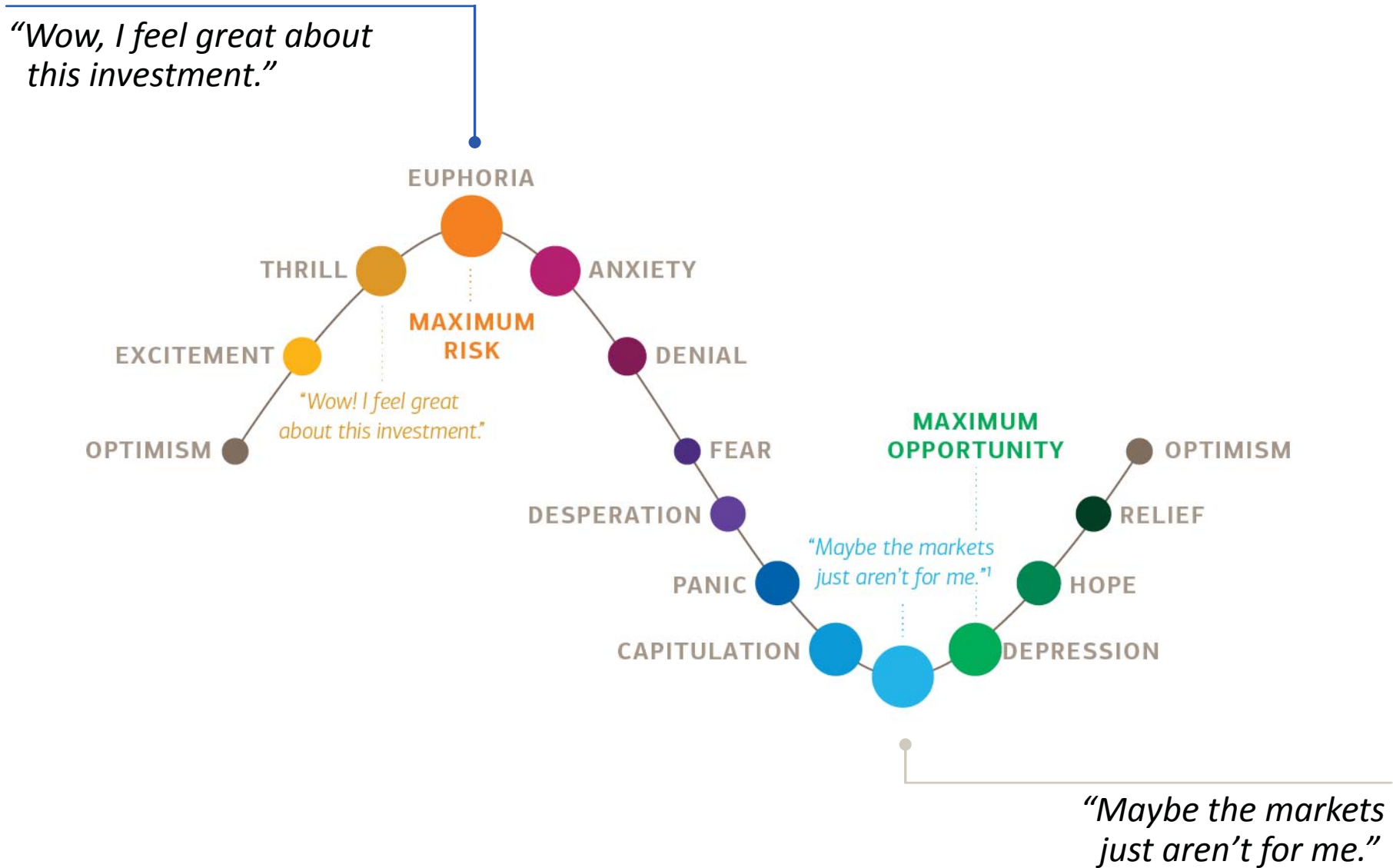
Behavioral finance is the beginning of a holistic, goals-based financial approach



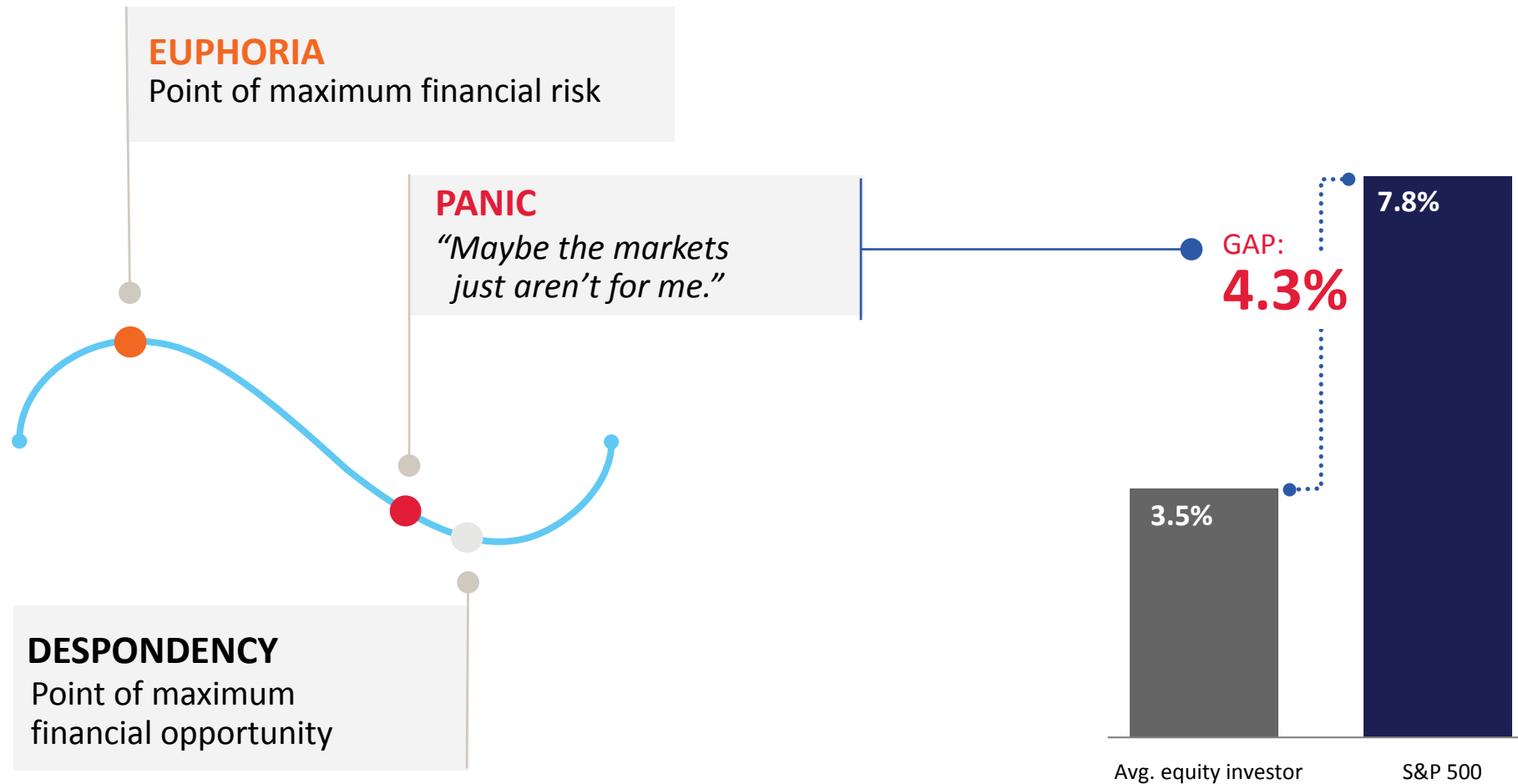
A key component of understanding your life is **uncovering your mindset** as an investor

- What do you want to accomplish with your money; why are you investing?
- Do your reactions to market events negatively affect your progress to goals?

# Emotions can affect your investment decisions



# Letting emotions take over can lead to lagging results



<sup>1</sup> Annualized Returns 1992–2011. DALBAR: Quantitative Analysis of Investor Behavior, 2011.

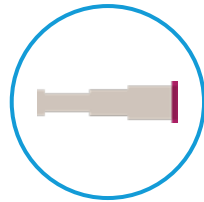
S&P 500 Index: Widely regarded as the best single gauge of the U.S. equities market, this world-renowned index includes a representative sample of 500 leading companies in leading industries of the U.S. economy. Although the S&P 500 focuses on the large-cap segment of the market, with approximately 75% coverage of U.S. equities, it is also an ideal proxy for the total market. An investor cannot invest directly in an index.

# Investors react to market movements in predictable ways



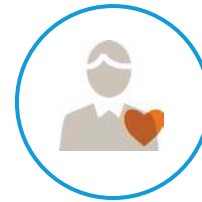
## Overconfidence

- Extreme confidence in investment abilities
- Linked to overtrading and diminished returns due to higher transaction costs



## Recency

- Predicting future performance from past
- Linked to being invested during the worst days and not being invested during the best days



## Emotions

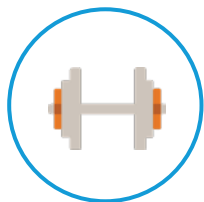
- Impulsive, reactive decision making
- Linked to “buy high, sell low” behavior due to exuberance at market highs (buy) and anxiety at market lows (sell)



## Herd behavior

- Following others' investment strategies
- Linked to being a late mover—in terms of both entering and exiting markets

# Does your investment approach match your objectives and goals?



## Barbell approach

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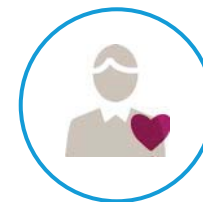
- Heavily weighted toward conservative investments
- Small proportion in risky, opportunistic investments
- Inflation, longevity risks



## Attachment approach

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- Desire to hold on to all assets
- Especially difficult to let go of “losing” assets
- Cash flow, illiquidity risks



## Emotional approach

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- Invest based on “gut”
- Classic “buy high, sell low” investor
- “Churn and burn” risks

# Determining your investment personality and defining your goals can help you pursue success



## Volatility may cause premature exit

### Assessing your investment personality

- Acknowledge that objective considerations are not all that matters
- Incorporate your style and beliefs into the investment strategy

**Example:** Reducing volatility to avoid an untimely exit



## Setting up a strategy can help you stay the course

### Defining your goals and developing a strategy

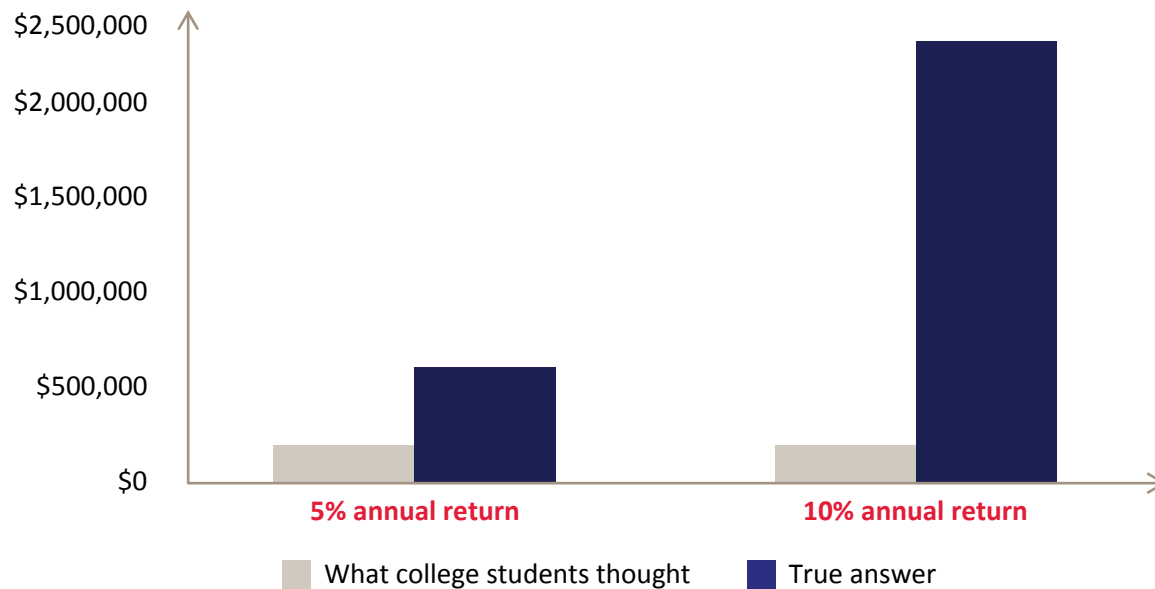
- Many potential goals
- Identify goals and prioritize/recognize trade-offs

**Example:** You may want to balance a variety of goals, such as sending your children to school, purchasing a home or funding your retirement.



# People dramatically underestimate the power of compounding growth

How much you could have if you invested \$400 a month over 40 years?



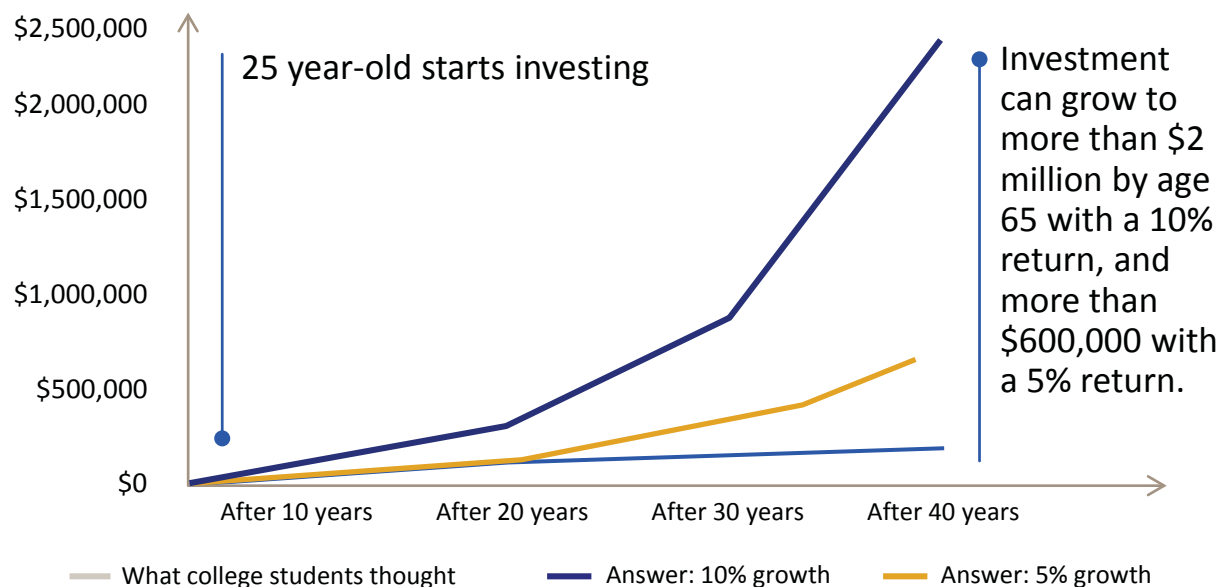
- Regardless of the rate of return, the most common response hovered around \$200,000
- For a 5% annual return over 40 years, the answer is \$600,000
- For a 10% return over 40 years, the answer is nearly \$2.5 million

Source: Craig McKenzie, University of California, and Michael Liersch, Merrill Lynch Investment Management & Guidance, "Misunderstanding Savings Growth: Implications for Retirement Saving Behavior," *Journal of Marketing Research*, Vol. 48, Special Issue, Nov. 2011.

Hypothetical example for illustrative purposes only. It does not reflect an actual investment, nor does it account for the effects of taxes, any investment expenses or withdrawals. Returns are not guaranteed and results will vary. Investment returns cannot be predicted and will fluctuate. Investor results may be more or less.

# Compound interest grows at an exponential rate— an impactful but non-intuitive principle of investing

How young people think \$400 invested every month at a 5% or 10% annual rate of return will grow over time versus how the investments would actually grow



- Many people think that money increases in straight lines, growing in value at the same rate over identical periods
- A majority of students believed the money would grow by \$52,800 every decade
- In reality, the money would grow exponentially

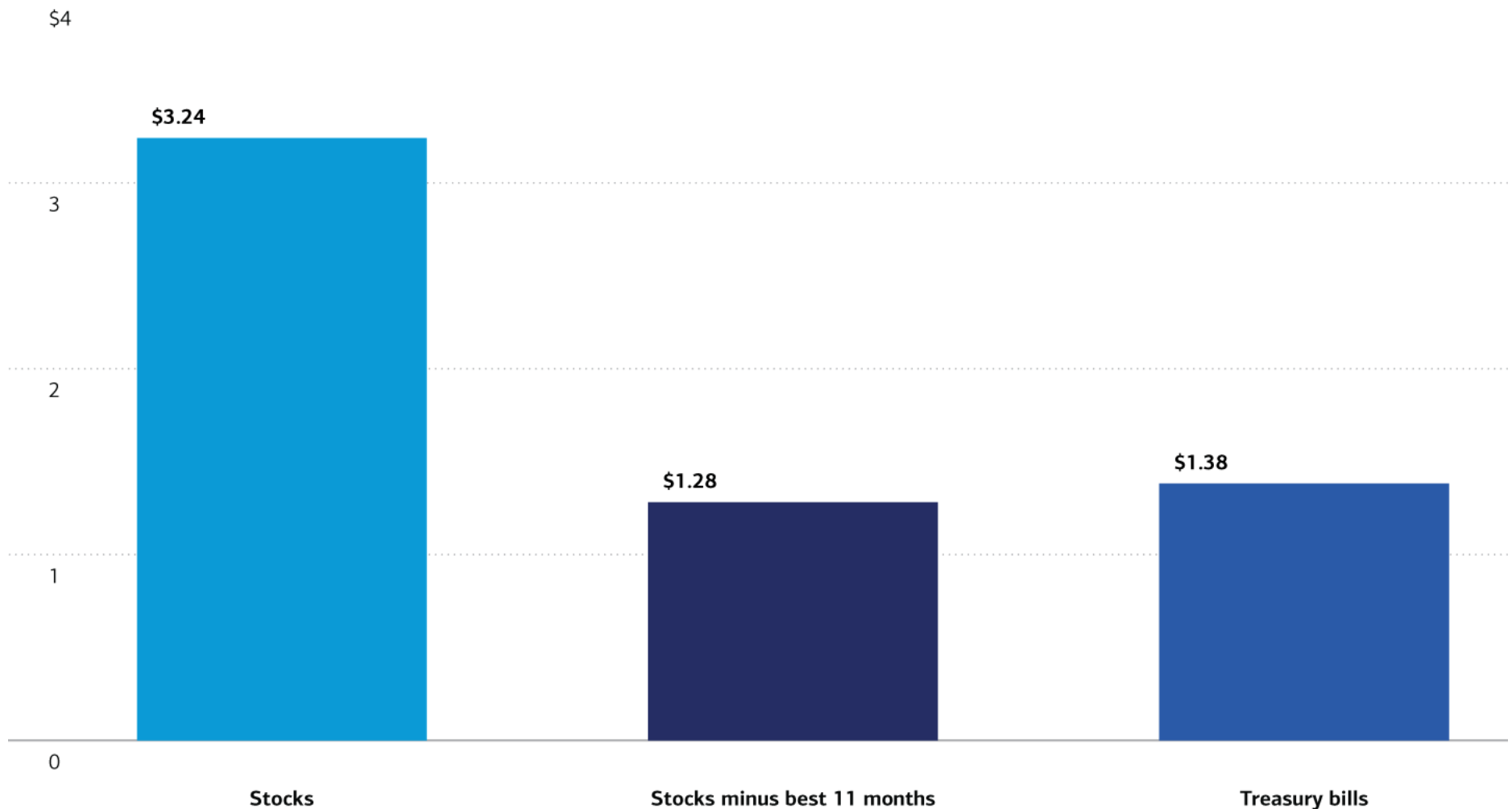
Source: Craig McKenzie, University of California, and Michael Liersch, Merrill Lynch Investment Management & Guidance, "Misunderstanding Savings Growth: Implications for Retirement Saving Behavior," *Journal of Marketing Research*, Vol. 48, Special Issue, Nov. 2011.

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# Investing Fundamentals and Market Data

# Dangers of market-timing

## Hypothetical value of \$1 invested from 2000–2019



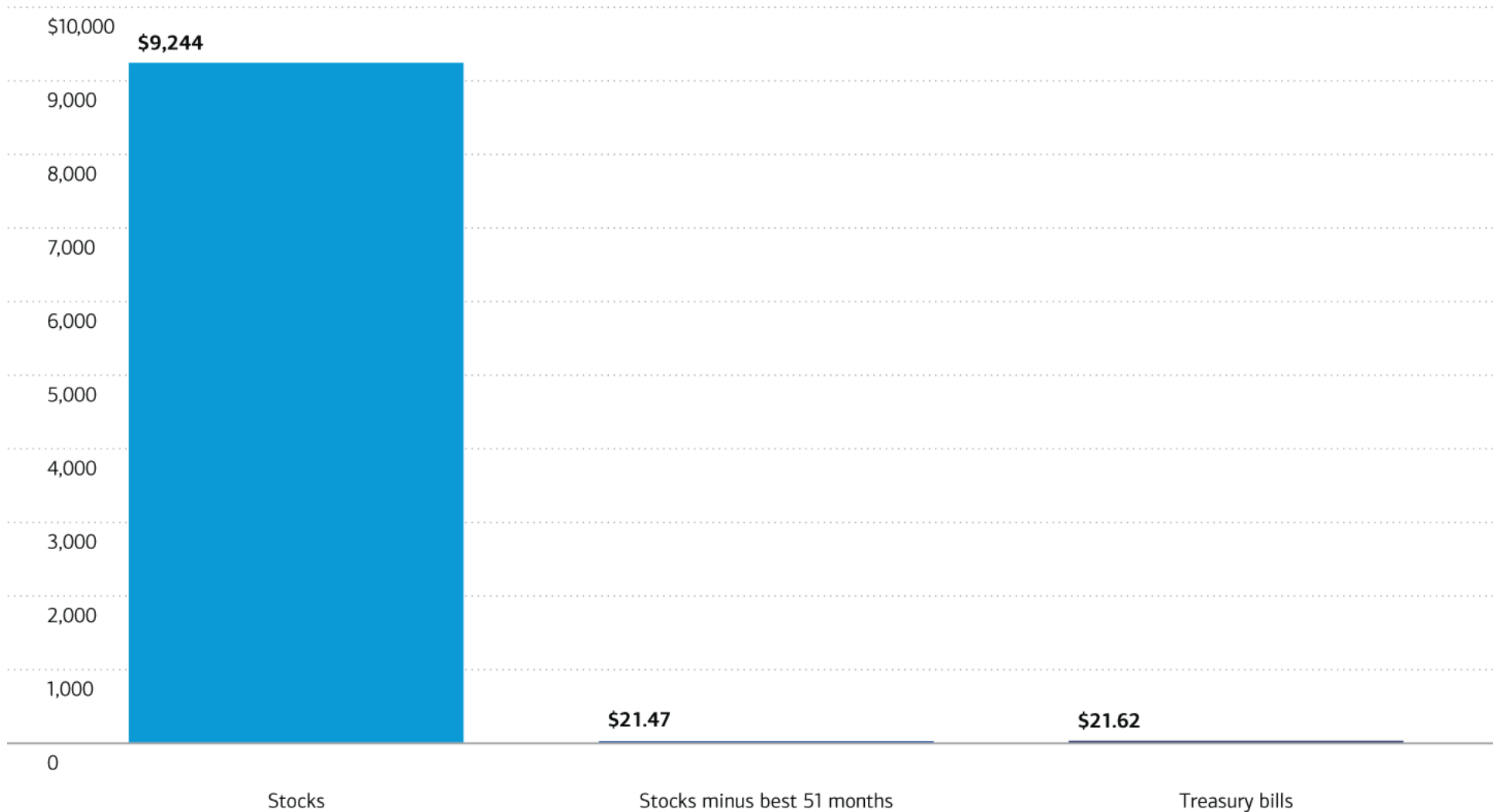
### About the data

Stocks are represented by the Ibbotson® Large Company Stock Index. Treasury bills are represented by the 30-day U.S. Treasury bill. An investment cannot be made directly in an index. The data assumes reinvestment of income and does not account for taxes or transaction costs.

**Past performance is no guarantee of future results.** This is for illustrative purposes only and not indicative of any investment. © Morningstar. All Rights Reserved.

# Long-term dangers of market-timing

## Hypothetical value of \$1 invested from 1926–2019



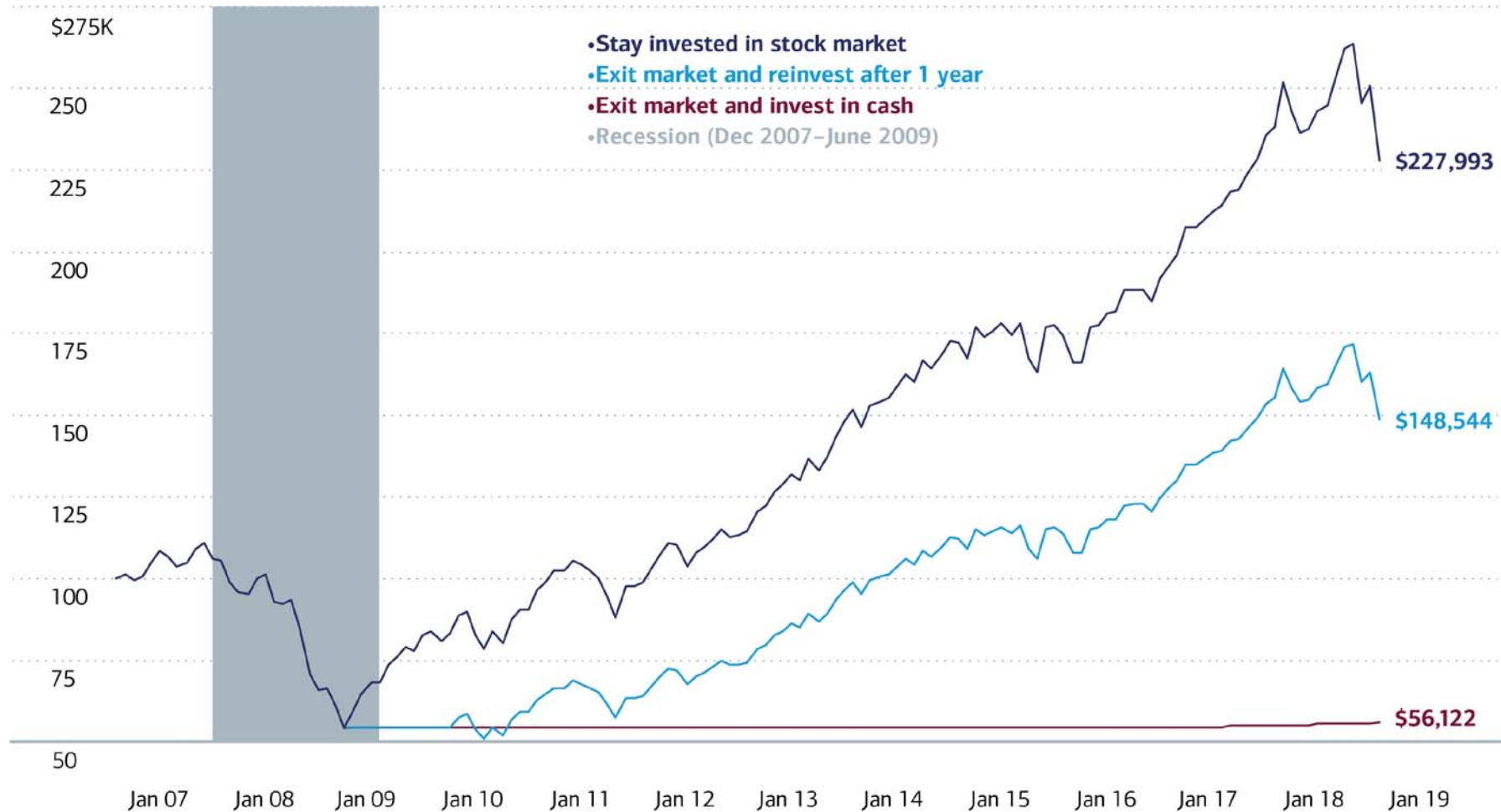
**About the data**

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# The importance of staying invested

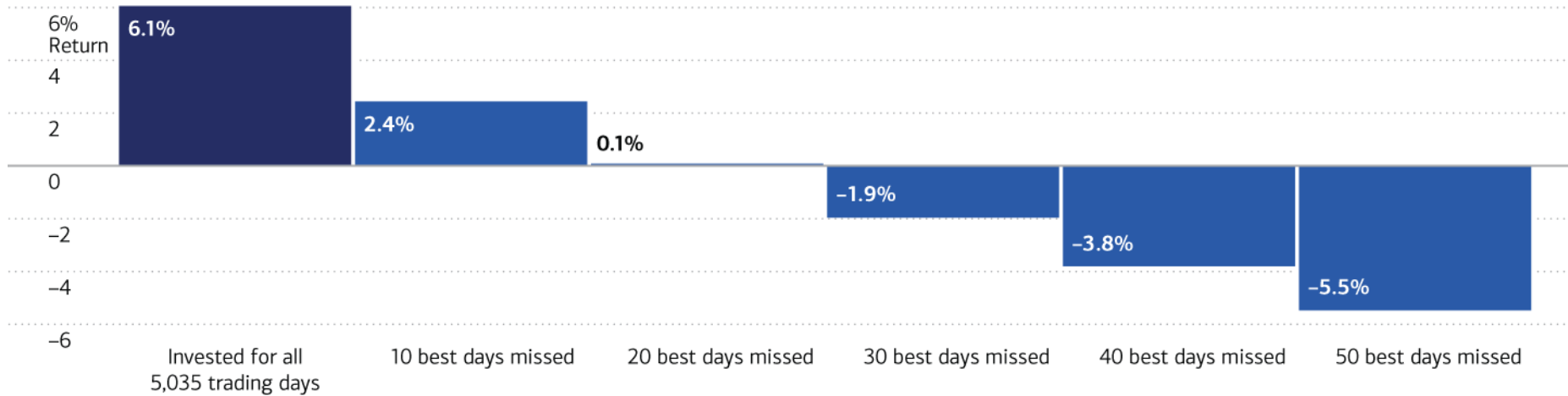
## Ending wealth values after a market decline



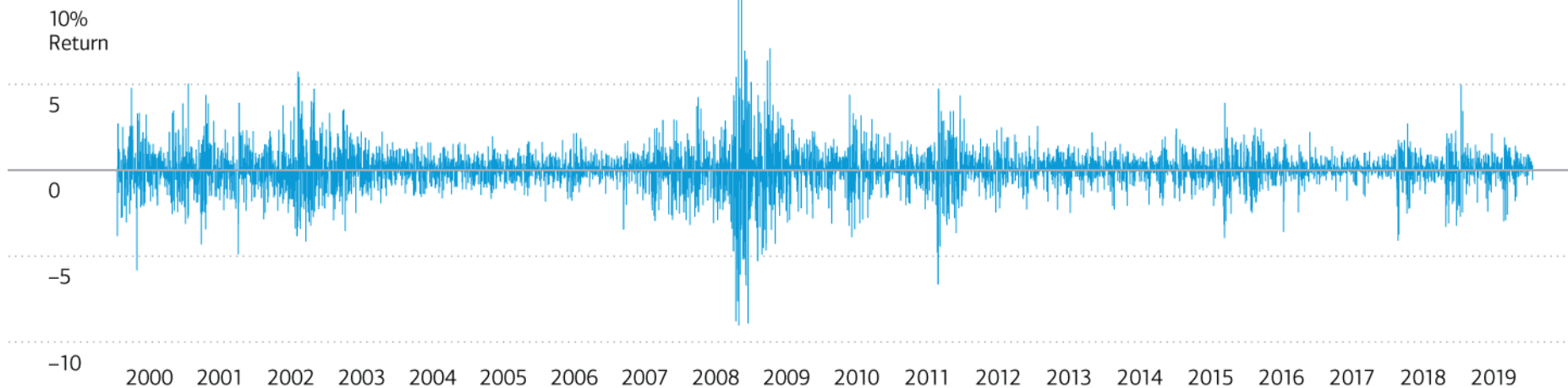
**Past performance is no guarantee of future results.** This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index. © Morningstar. All Rights Reserved.

# The cost of market-timing

## The risk of missing the best days in the market, 2000–2019



## Daily returns for all 5,035 trading days



### About the data

Stocks in this example are represented by the Ibbotson® Large Company Stock Index. An investment cannot be made directly in an index. The data assumes reinvestment of income and does not account for taxes or transaction costs.

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# Asset Allocation - Risk and Reward

Hypothetical Illustration, Monthly Returns (1926-2019)

Allocation		Return (2019)	Risk and Return (1926-2019)		Largest Negative (1926-2019)			Largest Positive (1926-2019)			Percentage Of (1926-2019)		
Stocks	Bonds	Annual	Annual Return (Arithmetic Avg)	Annual Risk (Standard Deviation)	12-Month Return	12-Month Ending	Average Negative Return	12-Month Return	12-Month Ending	Average Positive Return	Negative Years	Positive Years	Returns Greater than Inflation
100%	0%	31.5%	11.5%	18.6%	-67.6%	Jun-32	-14.1%	162.9%	Jun-33	20.9%	24.6%	75.4%	70.5%
90%	10%	29.1%	10.8%	16.8%	-63.1%	Jun-32	-12.7%	144.9%	Jun-33	19.1%	23.7%	76.3%	70.9%
80%	20%	26.8%	10.2%	15.0%	-58.3%	Jun-32	-11.1%	127.3%	Jun-33	17.4%	22.9%	77.1%	71.3%
70%	30%	24.5%	9.6%	13.2%	-52.9%	Jun-32	-9.7%	110.3%	Jun-33	15.6%	21.6%	78.4%	71.4%
60%	40%	22.2%	9.0%	11.5%	-47.1%	Jun-32	-8.6%	93.8%	Jun-33	13.8%	19.4%	80.6%	71.3%
50%	50%	19.9%	8.4%	9.8%	-40.7%	Jun-32	-7.3%	77.8%	Jun-33	12.1%	17.5%	82.5%	71.2%
40%	60%	17.6%	7.7%	8.2%	-33.7%	Jun-32	-5.7%	62.5%	Jun-33	10.6%	15.8%	84.2%	71.4%
30%	70%	15.4%	7.1%	6.6%	-26.1%	Jun-32	-4.4%	47.9%	Jun-33	9.2%	13.1%	86.9%	73.2%
20%	80%	13.1%	6.5%	5.4%	-17.8%	Jun-32	-3.3%	36.1%	Jun-83	7.8%	9.8%	90.2%	74.4%
10%	90%	10.9%	5.9%	4.5%	-10.2%	May-32	-2.1%	33.8%	Feb-83	6.7%	7.7%	92.3%	72.3%
0%	100%	8.7%	5.2%	4.3%	-9.2%	Mar-80	-1.6%	35.2%	Sep-82	6.1%	8.8%	91.2%	67.0%

Source: Morningstar, ISG Chief Investment Office. **It is not possible to invest directly in an Index.** The following proxy indices were selected for this illustration: Stocks – S&P500 Total Return Index; Bonds – IA SBBI US Intermediate Government Total Return Index from Jan 1926 to Dec 1975 and Bloomberg Barclays US Aggregate Bond Total Return Index from Jan 1976 to Dec 2019; Inflation - IA SBBI US Inflation. The analysis uses monthly returns starting in 1926 up until December 2019 with fixed allocation weights. The asset allocations between stocks and bonds used in the analysis are for illustrative purposes only. Diversification does not protect against loss. It is important to remember that there are risks inherent in any investment and there is no assurance that any asset class or index will provide positive performance over time. See column definitions, index definitions and important disclosure integral to this chart in the Appendix. Past performance is no guarantee of future results.



# Column and Index Definitions

## Column Definitions

**Allocation to Stocks and Bonds** – The fixed percent allocation to the index proxy for stocks and bonds used for the statistics calculation.

**Return** – The annual arithmetic average return over the entire period considered.

**Risk** – The annual standard deviation over the entire period considered. It measures the average deviation of a return series from its mean and is often used as a measure of risk.

**Largest Negative (Positive) Return** – The largest negative (positive) return of all possible 12-month rolling period returns.

**Largest Negative (Positive) Month Ending** – The last month of the 12-month period used to compute the largest negative (positive) return

**Average Negative (Positive) Return** – The average of all 12-month rolling period returns less (greater or equal) than zero.

**Percent of Negative (Positive) Years** – The percentage of all 12-month rolling period returns less (greater or equal) than zero.

**Percent of Returns Greater than Inflation** – The percentage of all 12-month rolling period returns greater than inflation.

## Index Definitions

**S&P 500 Total Return** – Standard and Poor's 500 Index is a capitalization-weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries. The index was developed with a base level of 10 for the 1941-43 base period.

**IA SBBI US Intermediate Government Total Return** – The Ibbotson Associates SBBI US Intermediate Government Total Return index measures the performance of a single issue of outstanding US Treasury note with a maturity term of around 5.5 years. It is calculated by Morningstar and the raw data is from Wall Street Journal.

**Bloomberg Barclays US Aggregate Bond Total Return** – The Bloomberg Barclays Capital U.S. Aggregate Bond Index represents securities that are U.S. domestic, 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. These major sectors are subdivided into more specific indexes that are calculated and reported on a regular basis.

**IA SBBI US Inflation** – The Consumer Price Index for All Urban Consumers, or CPI-U, is used by Ibbotson Associates SBBI to measure inflation, which is the rate of change of consumer goods prices. All inflation measures are constructed by the U.S. Department of Labor, Bureau of Labor Statistics, Washington.

# Asset Class Proxies

Asset Class	Index	Description
Cash	ICE BofA U.S. Treasury Bill 3 months	The ICE BofA US 3-Month Treasury Bill Index is comprised of a single issue purchased at the beginning of the month and held for a full month. At the end of the month that issue is sold and rolled into a newly selected issue. The issue selected at each month-end rebalancing is the outstanding Treasury Bill that matures closest to, but not beyond, three months from the rebalancing date. To qualify for selection, an issue must have settled on or before the month-end rebalancing date.
Commodities	Bloomberg Commodity TR	The Bloomberg Commodity Index is calculated on an excess return basis and composed of futures contracts on 22 physical commodities. It reflects the return of underlying commodity futures price movements.
Hedge Funds	Hedge Fund Research HFRI Fund Weighted Composite	The HFRI Fund Weighted Composite Index is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of \$50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.
MSCI World Ex US	MSCI Daily TR Net World Ex USA USD	The MSCI World ex USA Index captures large and mid cap representation across 22 of 23 Developed Markets (DM) countries – excluding the United States. The index covers approximately 85% of the free float-adjusted market capitalization in each country.
MSCI EM	MSCI Daily TR Net EM USD	The MSCI Emerging Markets (EM) Index captures large and mid cap representation across 23 Emerging Markets countries and targets coverage of approximately 85% of the free float adjusted market capitalization in each country.
MSCI World	MSCI ACWI Index	MSCI ACWI Indexes offer a modern, seamless, and fully integrated approach to measuring the full equity opportunity set with no gaps or overlaps. MSCI ACWI represents the Modern Index Strategy and captures all sources of equity returns in 23 developed and 24 emerging markets.
Private Equity	Merrill Lynch Small Cap Research Private Equity/ Micro Cap & Russell Microcap TR	Merrill Lynch Small Cap Research Private Equity/Micro Cap Index is a customized proprietary market capitalization weighted index provided by Bank of America Merrill Lynch Global Research with security market capitalization ranging from \$101 Million to \$779 Million. After July2016 we use; The Russell Microcap Index measures the performance of the microcap segment of the U.S. equity market. It makes up less than 3% of the U.S. equity market. It includes 1000 of the smallest securities in the small-cap Russell2000® Index based on a combination of their market cap and current index membership and it includes the next 1,000 securities.
Private Real Estate	50/50 NCREIF Property / NCREIF Transaction Based	Produced quarterly, the NCREIF Property Index (NPI) shows real estate performance returns using data submitted by its Data Contributing Members. The NPI is used as an industry benchmark to compare an investor's own returns against the industry average. (ii) The NCREIF Transaction-Based Index (TBI) is an index based on properties that were in the NCREIF Property Index and were sold that quarter. The index does not replace the NPI. It is a complementary index to the appraisal-based NPI. A transaction-based index is often considered to be more comparable to stock and bond indexes that are transaction-based.
REITS	S&P 500 Sec/Real Estate TR	The S&P 500 Real Estate comprises stocks included in the S&P 500 that are classified as members of the GICS real estate sector.
S&P 500	S&P 500 TR	Standard and Poor's 500 Index is a capitalization-weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries. The index was developed with a base level of 10 for the 1941-43 base period.
US Fixed Inc	ICE BofA U.S. Broad Market	The ICE BofA US Broad Market Index is a market-value-weighted index that tracks the performance of US dollar denominated investment grade debt (based on an average of Moody's, S&P and Fitch ratings) publicly issued in the US domestic market, including US Treasury, quasi-government, corporate, securitized and collateralized securities.
US Treasuries	ICE BofA AAA U.S. Treasury/Agency Master	The ICE BofA US Treasury & Agency Index tracks the performance of US dollar denominated US Treasury and non subordinated US agency debt issued in the US domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch). In addition, qualifying securities must have at least one year remaining term to final maturity, at least 18 months to maturity at time of issuance, a fixed coupon schedule and a minimum amount outstanding of \$1 billion for sovereigns and \$250 million for agencies.

# Important Disclosure

This analysis illustrates past performance of market benchmarks over the selected time period and in no way should be considered representative of the past performance of any actual investment product or predictive of future investment expectations and performance for these benchmarks or any actual investment products. Past performance is no guarantee of future results. Different benchmarks, methods and economic periods will produce different results. The results for individual portfolios may vary depending on market conditions and the composition of the portfolio. These index returns include reinvestment of income but do not reflect fees, taxes or transaction costs that would reduce performance in an actual account. All indices are unmanaged and unavailable for direct investment. Hypothetical Portfolios are rebalanced at the beginning of each 12- month rolling period. The analysis contained herein is based on numerous assumptions. Different assumptions could result in materially different results.

Hypothetical examples are shown for illustrative and educational purposes only. This information should not be construed as specific tax, legal, financial planning or investment advice. Information was obtained from third party sources believed to be reliable, are not necessarily all inclusive and are not guaranteed as to accuracy.

Because economic and market conditions change, recommended allocations may vary in the future. Strategic allocations are hypothetical and are not intended to indicate specific investment recommendations or advice. Asset allocation cannot eliminate the risk of fluctuating prices and uncertain returns.

Asset allocation, diversification, dollar cost averaging, and rebalancing do not ensure a profit or protect against loss in declining markets. All asset classes are not suitable for all investors. Each investor should select the asset classes for them based on their goals, time horizon, liquidity needs, and risk tolerance. Diversification does not ensure a profit or protect against loss in declining markets.

The allocations of the hypothetical investment are for illustration only and do not constitute investment advice. They are being shown to illustrate how a portfolio changes over time. You should consider the number of years until you retire, your goals and risk tolerance. The stock and bond fund allocations will vary for each portfolio depending on the number of years both before and after the planned retirement. Asset allocation cannot eliminate the risk of fluctuating prices and uncertain returns.

All sector and asset allocation recommendations must be considered in the context of an individual investor's goals, time horizon, liquidity needs, and risk tolerance. Not all recommendations will be suitable for all investors.

# Index Definition

Index	Description
<b>Russell Top 200 Total Return Index</b>	Russell Top 200 Total Return Index measures the performance of the largest cap segment of the U.S. equity universe. The Russell Top 200 Index is a subset of the Russell 3000 Index. It includes approximately 200 of the largest securities based on a combination of their market cap and current index membership and represents approximately 65% of the U.S. market. The Russell Top 200 Index is constructed to provide a comprehensive and unbiased barometer for this very large cap segment and is completely reconstituted annually to ensure new and growing equities are reflected.
<b>Russell 2000 Index</b>	Russell 2000 Index® measures the performance of the 2,000 smallest companies in the Russell 3000 Index.
<b>ICE BofA U.S. Broad Market Index</b>	ICE BofA U.S. Broad Market Index tracks the performance of U.S. dollar-denominated Investment Grade government and corporate public debt issued in the U.S. domestic bond market, including collateralized products such as mortgage pass-through and asset-backed securities.
<b>S&amp;P 500 Index</b>	Standard and Poor's 500 Index is a capitalization-weighted index of 500 stocks. The index is designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries. The index was developed with a base level of 10 for the 1941-43 base period.
<b>S&amp;P 500 Information Technology Index</b>	S&P 500 Information Technology Index comprises those companies included in the S&P 500 that are classified as members of the GICS® information technology sector.
<b>S&amp;P 500 Utilities Index</b>	S&P 500 Utilities Index comprises of those companies included in the S&P 500 that are classified as members of the GICS® utilities sector.
<b>S&amp;P 500 Communication Services Index</b>	S&P 500 Communication Services Index comprises of those companies included in the S&P 500 that are classified as members of the GICS® communication services sector.
<b>S&amp;P 500 Real Estate Index</b>	S&P 500 Real Estate Index comprises of those companies included in the S&P 500 that are classified as members of the GICS® real estate sector.
<b>S&amp;P 500 Materials Index</b>	S&P 500 Materials Index comprises of those companies included in the S&P 500 that are classified as members of the GICS® materials sector.
<b>S&amp;P 500 Industrials Index</b>	S&P 500 Industrials Index comprises of those companies included in the S&P 500 that are classified as members of the GICS® industrials sector.
<b>S&amp;P 500 Health Care Index</b>	S&P 500 Health Care Index comprises of those companies included in the S&P 500 that are classified as members of the GICS® health care sector.
<b>S&amp;P 500 Financials Index</b>	S&P 500 Financials Index comprises of those companies included in the S&P 500 that are classified as members of the GICS® financials sector.
<b>S&amp;P 500 Energy Index</b>	S&P 500 Energy Index comprises of those companies included in the S&P 500 that are classified as members of the GICS® energy sector.
<b>S&amp;P 500 Consumer Staples Index</b>	S&P 500 Consumer Staples Index comprises of those companies included in the S&P 500 that are classified as members of the GICS® consumer staples sector.
<b>S&amp;P 500 Consumer Discretionary Index</b>	S&P 500 Consumer Discretionary Index comprises of those companies included in the S&P 500 that are classified as members of the GICS® consumer discretionary sector.
<b>MSCI ACWI ex. USA Information Technology Index</b>	The MSCI ACWI ex USA Information Technology Index includes large and mid cap securities across 22 of 23 Developed Markets (DM) countries (excluding the US) and 24 Emerging Markets (EM) countries. All securities in the index are classified in the Information Technology sector as per the Global Industry Classification Standard (GICS®).
<b>MSCI ACWI ex. USA Materials Index</b>	The MSCI ACWI ex USA Materials Index includes large and mid cap securities across 22 of 23 Developed Markets countries (excluding the US) and 24 Emerging Markets (EM) countries. All securities in the index are classified in the Materials as per the Global Industry Classification Standard (GICS®).
<b>MSCI ACWI ex. USA Consumer Discretionary Index</b>	The MSCI ACWI ex USA Consumer Discretionary Index includes large and mid cap securities across 22 of 23 Developed Markets (DM) countries (excluding the US) and 24 Emerging Markets (EM) countries. All securities in the index are classified in the Consumer Discretionary according to the Global Industry Classification Standard (GICS®).
<b>MSCI ACWI ex. USA Industrials Index</b>	The MSCI ACWI ex USA Industrials Index includes large and mid cap securities across 22 of 23 Developed Markets countries (excluding the US) and 24 Emerging Markets (EM) countries. All securities in the index are classified in the Industrials sector as per the Global Industry Classification Standard (GICS®).
<b>MSCI ACWI ex. USA Financials Index</b>	The MSCI ACWI ex USA Financials Index includes large and mid cap securities across 22 of 23 Developed Markets (DM) countries (excluding the US) and 24 Emerging Markets (EM) countries. All securities in the index are classified in the Financials as per the Global Industry Classification Standard (GICS®).
<b>MSCI ACWI ex. USA Utilities Index</b>	The MSCI ACWI ex USA Utilities Index includes large and mid cap securities across 22 of 23 Developed Markets countries (excluding the US) and 24 Emerging Markets (EM) countries. All securities in the index are classified in the Utilities as per the Global Industry Classification Standard (GICS®).

# Index Definition(Continued)

Index	Description
<b>MSCI ACWI ex. USA Energy Index</b>	The MSCI ACWI ex USA Energy Index includes large and mid cap securities across 22 of 23 Developed Markets (DM) countries (excluding the US) and 24 Emerging Markets (EM) countries. All securities in the index are classified in the Energy as per the Global Industry Classification Standard (GICS®).
<b>MSCI ACWI ex. USA Healthcare Index</b>	The MSCI ACWI ex USA Health Care Index includes large and mid cap securities across 22 of 23 Developed Markets (DM) countries (excluding the US) and 24 Emerging Markets (EM) countries. All securities in the index are classified in the Health Care sector as per the Global Industry Classification Standard (GICS®).
<b>MSCI ACWI ex. USA Consumer Staples Index</b>	The MSCI ACWI ex USA Consumer Staples Sector Index includes large and mid cap securities across 22 of 23 Developed Markets (DM) countries (excluding the US) and 24 Emerging Markets (EM) countries. All securities in the index are classified in the Consumer Staples as per the Global Industry Classification Standard (GICS®).
<b>MSCI ACWI ex. USA Communication Services Index</b>	The MSCI ACWI ex USA Communication Services Index includes large and mid cap securities across 22 of 23 Developed Markets (DM) countries (excluding the US) and 24 Emerging Markets (EM) countries. All securities in the index are classified in the Communication Services as per the Global Industry Classification Standard (GICS®).