This guide strives to help you achieve better long-term financial outcomes.

Its main message is that doing so is more about setting the right goals and controlling your own behavior than it is “beating the market.”

We provide plenty of historical perspective on markets, but only in the service of confronting our natural tendencies to make poor decisions about money. Nowadays, those decisions have become even harder in light of overwhelming information and choices.

We strongly advocate for the need for education, planning, and advice across an investor's lifetime.
THE INVESTOR’S DILEMMA

Investing in the capital markets gives us a fighting chance to enjoy a comfortable life and a dignified retirement. But we are faced with a dilemma. We must take risk to meet our financial needs, yet we are psychologically ill-equipped to do so. Our brains have developed over eons with features that can impede good decision making. Ironically, our ancient and powerful survival instincts can sometimes drive poor outcomes in the modern world.

“The investor’s chief problem — and even his worst enemy — is likely to be himself.”

Benjamin Graham

▶ Investor behavior trumps market savvy in driving long-term outcomes.
IT’S NOT AS EASY AS IT LOOKS

Investors are often told to “invest for the long run.” Instructions like “buy and hold,” “ignore the noise,” and “stick to the plan” sound great, but fail to recognize that market volatility disrupts even the best laid plans.

Growth of $1,000 Invested in the S&P 500® Index
Monthly Data 12/31/1925-12/31/2020 (Log Scale)

From a bird’s eye view, markets have steadily trended higher. However, even small troughs represent large losses that are tough to stomach.

“Invest for the long run” is the right advice, but it ignores basic human nature.

Past performance is not indicative of future results. Source: Ned Davis Research. © 2021 Ned Davis Research, Inc. See full Ned Davis Research disclosure on page 18. The S&P 500® Index is a free-float market capitalization-weighted index of 500 of the largest U.S. companies. The index is calculated on a total return basis with dividends reinvested. It is unmanaged and not available for direct investment.
THE IMPORTANCE OF BEHAVIOR

**Overconfidence**
We think we know more than we do and are better at tasks than we actually are.

**Pattern seeking**
We see order where there is only randomness.

**Availability bias**
We use the most easily accessible information to make decisions, even when that might not be the most important information.

**Confirmation bias**
We seek out information that corroborates what we already believe. We find ways to prove that we are right.

**Anchoring**
We stubbornly rely on a small amount of available information to make a decision rather than considering other facts.

**Hindsight**
We believe we knew what an outcome would have been, even though before the fact, we didn’t. We are “Monday morning quarterbacks.”

► We’re not irrational. We’re human.
THE BEHAVIOR GAP

The first rule of investing is to “buy low, sell high.” However, when markets grow choppy and valuations improve, we tend not to buy more and will often sell. When markets are calm, we grow more confident in our portfolios. It’s at those times we’re likely to invest more.

20-Year Average Index vs. Investor Returns

Period ended 12/31/20.

Investors have underperformed the market by a considerable margin.

The fear and greed cycle leads investors to buy high and sell low.

Setting Realistic Expectations

Conventional wisdom says that stocks return “about 10% per year.” There’s a grain of truth to that, but it doesn’t account for what investors really experience in the market. Stocks can be very volatile in the short term, producing large performance swings. It’s only over multi-year periods that the distribution of stock market outcomes narrows and we approach long-term historical averages.

Rolling Returns of the S&P 500® Index
12/31/1926–12/31/2020

Over shorter periods, market returns have “fat tails,” or a very wide range of results.

Over longer time periods, outcomes tend to center around long-term averages.

Maintain realistic expectations for how markets actually behave over time.

THE SHAPE OF MARKETS

Stock markets trend up over time, when measured in decades or centuries. Over shorter periods, however, investing can feel like a roller coaster. When markets decline 20%, 30%, or even 50%, it becomes very difficult to maintain a long-term mindset.

As the image shows, bull markets tend to climb slowly over time, while bear markets occur abruptly and without warning. Even long run investors must be prepared to endure significant market declines.

History of U.S. Bull and Bear Markets
Based on S&P 500® Index Returns 12/31/1925-12/31/2020 (Log Scale)

Past performance is not indicative of future results. Source: S&P Dow Jones Indices Ned Davis Research. © 2021 Ned Davis Research, Inc. Bull markets are defined from the lowest close reached after the market has fallen 20% or more to the next market high. Bear markets are defined from the last market high prior to the market closing down at least 20% to the lowest close after it’s down 20% or more.
Calendar year market returns are random. Often up, sometimes down, we almost never experience an “average” year. As the chart shows, rarely a year goes by when there’s not a meaningful drawdown. In years when there’s only a shallow drawdown, it becomes easy to quickly forget the emotional angst associated with market declines.

Big drawdowns in the stock market have been a common occurrence.

Past performance is not indicative of future results. Source: Ned Davis Research. © 2021 Ned Davis Research, Inc. 60-year period used to illustrate multiple market cycles.
The direction of interest rates has a strong influence on bond prices. As rates decline, prices tend to go up, and vice versa. The interest rate and bond market environment has been remarkable in recent decades. As rates declined from high teens to low single digits, bonds earned historically unprecedented returns. History is not likely to repeat itself in the decades to come because starting yields have been a strong predictor of long-term returns, as shown below.

**A Bond’s Starting Yield Has Historically Been a Good Predictor of Its Total Return**
10-Year Treasury Returns and Starting Yields 12/31/1980–12/31/2010

Have grounded expectations for future bond market returns.


Smart investing requires the right mindset and the right plan. A combination of steady investing, occasional rebalancing, and enjoying the benefits of positive compounding are likely to stand investors in good stead.

**Dollar Cost Averaging**

A plan to make regular investments, in both climbing and falling markets, provides the opportunity to take advantage of market volatility and create a sound long-term discipline.

**Rebalancing**

Periodically take stock of your investments as market movements can sometimes cause imbalances. Adjust to stay in line with your financial plan.

**Compounding**

Einstein once referred to compounding as the most powerful force in the universe. Allowing something to grow organically, including our investments, can produce great results.

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Dollar Cost Averaging: Periodic investment plans do not assure a profit and do not protect against investment loss in declining markets. As dollar cost averaging involves continuous investment in securities, regardless of fluctuating price levels of those securities, the investor should consider his or her financial ability to continue purchasing through periods of low price levels.
DIVERSIFICATION IS IMPORTANT

Don’t put all your eggs in one basket. This common sense notion of spreading your bets underlies diversification, the most important principle we have for building robust portfolios. The alternative is a much riskier proposition: We can take large bets on specific securities, markets, or themes. But if we’re wrong, our long-term finances can be imperiled. Thus, because we can’t predict the future, we diversify.

Asset Class Performance 2010-2020

Source: Virtus Performance Analytics. Past performance is not indicative of future results. Diversification does not assure a profit or protect against losses. See page 18 for index definitions and important risk considerations.
DIVERSIFICATION IS HARD

True diversification means holding underperforming assets. If everything is “working,” it means you’re not actually diversified. Because of the behavioral bias of loss aversion, we find losses more painful than gains pleasing. The math behind diversification makes sense, but its psychology is troubling.

“In investing, what is comfortable is rarely profitable.”

Rob Arnott

Every year has a different diversification “experience.” In some years, like 2012, the spread among asset classes is tight, lessening the stress of pursuing diversification.

In other years, like 2013, for example, small-cap growth stocks outperformed emerging markets by more than 40%. Investors sometimes feel regret when they own a weak corner of the market, while preferring exposure to recent winners.

“Diversification feels lousy.”

Source: Virtus Performance Analytics. Past performance is not indicative of future results. Diversification does not assure a profit or protect against losses. See page 18 for index definitions and important risk considerations.
Sometimes it’s better to be lucky than good. Some generations are enriched by strong market tailwinds. Others endure long periods of lackluster returns.

### 20-Year Stock Market Returns, Ranked from Best to Worst

<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>%Gain / Year</th>
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<tbody>
<tr>
<td>1980</td>
<td>1999</td>
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<td>1938</td>
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<td>12.85</td>
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<table>
<thead>
<tr>
<th>Start Date</th>
<th>End Date</th>
<th>%Gain / Year</th>
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<tbody>
<tr>
<td>1983</td>
<td>2002</td>
<td>12.60</td>
</tr>
<tr>
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<td>1985</td>
<td>8.52</td>
</tr>
<tr>
<td>1989</td>
<td>2008</td>
<td>8.34</td>
</tr>
</tbody>
</table>

Your timing in history matters.

The idea that investors can participate in good markets and sidestep the bad has a long history. Unfortunately, it’s mostly a history of poor decisions and weak results.

The stock market is too unpredictable to duck in and out with accuracy. As these data show, investors need consistent exposure to the market. Missing only a small number of the market’s best days has produced extreme underperformance.

"Our track record in figuring out significant rare events is not close to zero; it is zero."

Nassim Taleb

**Average Annual Return of the S&P 500® Index**

Periods ended 12/31/20

<table>
<thead>
<tr>
<th>Period</th>
<th>GAIN PER ANNUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 10 years</td>
<td>-5.68%</td>
</tr>
<tr>
<td>Over 20 years</td>
<td>-6.91%</td>
</tr>
<tr>
<td>Over 30 years</td>
<td>-0.40%</td>
</tr>
</tbody>
</table>

- Excluding 50 Best Days

Market timing doesn’t work.

In investing, like in other walks of life, the early bird gets the worm. One of the easiest, most proven ways to accumulate wealth is to start investing as early as possible.

In this basic example, assuming a 7% rate of return, John invested a smaller sum earlier in life and reached the same level as his friend Sally, who started later in life, and had to invest much more.

John invested $27,900 to achieve the result; Sally invested $92,122 to reach the same place.

PROGNOSTICATION IS FOR SHOW

The investment industry is influenced by financial and economic prognostication. Soothsayers, unfortunately, are never consistently correct. Speculation can be fun, but should not substitute for sound planning.

<table>
<thead>
<tr>
<th>The Predictions</th>
<th>What Actually Happened</th>
</tr>
</thead>
</table>
| “The Death of Equities”  
BusinessWeek  
August 1979 | Over the next 20 years,  
the S&P 500® Index rose nearly 2,400%. |
| “Drowning in Oil”  
The Economist  
February 1999 | Despite concerns of massive over-supply, the price of oil climbed more than 600% over the next decade. |
| “Everyone’s Getting Rich But Me!”  
Newsweek  
July 1999 | Investors who jumped into the tech-heavy Nasdaq saw their investment fall by nearly 50% over the next three years. |
| “The New Hard Times”  
TIME Magazine  
October 2008 | Following the great market crash of 2008-09, stocks rallied more than 300% over the next eight years. |

Prepare. Don’t predict.
A SOUND RETIREMENT REQUIRES INVESTING

Inflation is a quiet but dangerous enemy of long-term wealth creation. It erodes your purchasing power slowly but surely, even when the figures sound small.

- **At 3% inflation, after 25 years, your capital has less than half the purchasing power than it does today.**

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**Effect of Inflation**

$50,000 Portfolio over a 25-Year Period

- **$50,000 Portfolio**
- **$30,173 “Real” Value in 25 Years**
- **$30,173**
- **$23,349**
- **$18,020**

**2% Inflation**

**3% Inflation**

**4% Inflation**

**PORTFOLIO**

**INCOME**

**PERIOD (YEARS)**

*Past performance is not indicative of future results.* Source: Virtus Performance Analytics. For illustrative purposes only. Calculations based on hypothetical inflation rates of 2%, 3%, and 4% to demonstrate the impact of inflation over time. Actual inflation rates will vary and may be more or less than shown.
Too many investors focus on “beating the market” or hot investment trends because it’s easier to focus on daily market activity than on long-term goals. Planning requires us to look far into the future, make decisions about the life we want to lead, and then step back to allow for the plan to work. Thinking long-term and doing nothing are not easy! Beating an arbitrary index or outpacing other investors is not relevant to achieving the things that really matter to us—a new home, a college education, or a comfortable retirement.

WHAT REALLY MATTERS

Stay focused on what matters. And enjoy the ride.
Virtus Investment Partners is committed to delivering educational content to help clients understand changing markets and make better investment decisions.

To learn more about our insights and tools, please contact us at 800-243-4361 or visit virtus.com.

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DALBAR

Average stock investor performance results are based on a DALBAR study, “Quantitative Analysis of Investor Behavior (QAIB), 2021.” DALBAR is an independent financial research firm. Using monthly fund data supplied by the Investment Company Institute, QAIB calculates investor returns as the change in assets after excluding sales, redemptions, and exchanges. This method of calculation captures realized and unrealized capital gains, dividends, interest, trading costs, sales charges, fees, expenses, and any other costs. After calculating investor returns in dollar terms, two percentages are calculated for the period examined: Total investor return rate and annualized investor return rate. Total return rate is determined by calculating the investor return dollars as a percentage of the net of the sales, redemptions, and exchanges for the period. The equity market is represented by the Standard & Poor's 500 Index. 20-year period ended 12/31/20.

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Maximum Drawdown: The peak to trough decline for an investment during a time period.

Pages 10-11

Fixed Income is represented by the Bloomberg Barclays Capital U.S. Aggregate Index which measures the U.S. investment grade fixed rate bond market.

REITs are represented by the FTSE Nareit Equity REITs Index, a free-float market capitalization-weighted index which measures equity tax-qualified REITs that meet minimum size and liquidity criteria and are listed on the New York Stock Exchange, the American Stock Exchange, and the Nasdaq National Market System.

International is represented by the MSCI EAFE® Index, a free float-adjusted market capitalization index that measures developed foreign market equity performance, excluding the U.S. and Canada.

Emerging Markets are represented by the MSCI Emerging Markets Index (net), a free float-adjusted market capitalization-weighted index designed to measure equity market performance in the global emerging markets.

Large-Cap Growth is represented by the Russell 1000® Growth Index, a market capitalization-weighted index of growth-oriented stocks of the 1,000 largest companies in the Russell Universe, which comprises the 3,000 largest U.S. companies.

Large-Cap Value is represented by the Russell 1000® Value Index, a market capitalization-weighted index of value-oriented stocks of the 1,000 largest companies in the Russell Universe, which comprises the 3,000 largest U.S. companies.

Small-Cap Growth is represented by the Russell 2000® Growth Index, a market capitalization-weighted index of growth-oriented stocks of the smallest 2,000 companies in the Russell Universe, which comprises the 3,000 largest U.S. companies.

Small-Cap Value is represented by the Russell 2000® Value Index, a market capitalization-weighted index of value-oriented stocks of the smallest 2,000 companies in the Russell Universe, which comprises the 3,000 largest U.S. companies.

Mid-Cap Growth is represented by the Russell Midcap® Growth Index, a market capitalization-weighted index of medium capitalization, growth-oriented stocks of U.S. companies.

Mid-Cap Value is represented by the Russell Midcap® Value Index, a market capitalization-weighted index of medium-capitalization, value-oriented stocks of U.S. companies.

Indexes are unmanaged, their returns do not reflect any fees, expenses, or sales charges, and are not available for direct investment.

Important Asset Class Risk Considerations: Credit & Interest: Debt securities are subject to various risks, the most prominent of which are credit and interest rate risk. The issuer of a debt security may fail to make interest and/or principal payments. Values of debt securities may rise or fall in response to changes in interest rates, and this risk may be enhanced with longer-term maturities. Equity Securities: The market price of equity securities may be adversely affected by financial market, industry, or issuer-specific events. Focus on a particular style or on small- or medium-sized companies may enhance that risk. Foreign & Emerging Markets: Investing internationally, especially in emerging markets, involves additional risks such as currency, political, accounting, economic, and market risk. Real Estate Investments: Investing in real estate investment trusts (REITs) may be negatively affected by factors specific to the real estate market, including interest rates, leverage, property, and management.