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Integrity in Investing
Protecting Planning from Financial Propaganda

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"The most important quality for an investor is temperament, not intellect."
– **Warren Buffett,** CEO Berkshire Hathaway

This is part of a series exploring integrity in professional wealth planning

Key takeaways:

- The financial media produces financial propaganda to attract investors' attention
- Distracted investors act on media misinformation and consequently make poor choices
- Disciplined investors ignore the media noise and stick with an informed planning strategy
- Investors with a disciplined temperament will diversify and allocate, and ignore media noise

"A stock-trading dupe is born every minute," a successful hedge fund manager once wrote, echoing the opinion of a famous showman. Mixing pump-and-dump schemes with credulous investors is an age-old activity.[1]

Most bad investing choices occur not due to the "opportunity," but due to the investor's temperament. Overconfident, those people don't know what they don't know. They haven't distinguished what can be controlled from what is important. These investors begin with money, seeking quick gains; they end with an experience they regret. Enduring wealth results from making informed choices and staying disciplined.

Lacking a clear vision to prioritize their planning, people chance to try their luck with randomly occurring "opportunities," hoping that their next choice proves better. And sometimes it does, at least for a while. Many young would-be investors have been induced through social media groups to buy FAANG stocks, Meme stocks, and even cryptocurrencies, often funded by multiple government handouts. Stocks that soared and later declined proved to be only metaverse wealth.

The main product produced by the financial services industry and their allies in the financial media world is not what's in your portfolio; it's *propaganda*. Propaganda proliferates through unending and endless marketing promotions of daily emails, news media, commentary, social media, monthly mags, daily papers and hourly broadcasts showing people happily making money while trading at home or from cell phones. Sampling bias, cherry picking, false causality, data dredging, survivorship bias, publication bias, and regression toward the mean are all exploited by advertisers to capture your attention and your money choices as you are driven to distraction by what is actually *disinformation*—half-true information.

The media's financial propaganda campaigns distract attention from what can be controlled and is important for a successful financial experience. Distraction is "the process of interrupting attention" and "a stimulus or task that draws attention away from the task of primary interest," according to the *APA Dictionary of Psychology.* That is, distractions take your attention away from choices that are in your best interest, whether it's completing tasks at work, enjoying time with family, or exploring options for finding the financial advice that best fits your unique needs, hopes, and dreams.

Prognostications and speculations by commentators and talking media heads about market movements or somebody's success are financial propaganda. Social tweets and

cellphone chatter with investing opinions are disinformation causing bad choices for investors. The story that an unsolicited email offer will endow you access to fantastic profits for the price of their new book or subscription service, is only pulp fiction.[2] If they truly had the great insights claimed, why would they *ever share any potential profits with you?*

Wealth Planning Anti-Disinformation Matrix

Daily portfolio check-ups are not important for controlling outcomes of your lifetime wealth planning. The more often the portfolio gets your attention when you're distracted by some media propaganda, the more stressed you will feel in bad market times. Your 20-year investment planning strategy mentally reduces to a day. Consider **Exhibit 1**, the Wealth Planning Anti-Disinformation Matrix.[3] Financial propaganda falls in *Quadrant 4*, what you can't control and is not important for your wealth planning. *Quadrant 3* consists of what distractions or what things will cause you to become distracted and then distressed.

Quadrant 2 covers rising inflation, rising interest rates, nasty market volatility, the crazy ways those politicians spend money, and the horror of an evil invasion, but it's all nothing you can control. The media's depiction of bloody images or sexy pictures are not to inform you, but to disturb or distract you long enough to waste your time viewing ads that keep them in business.

Financial "news" takes advantage of sampling bias. The three-year surge of the broad U.S. stock market that doubled since the beginning of 2019 and the end of 2021 has been broken, but so what? And what happened since? Well, we all know that markets go up and at times they go down. What matters for planning ahead is that the last time U.S. stocks doubled in only three years was 1997 through 1999, and then markets fell roughly 40% in a Tech bust. Factual context like that is important but old news.

Quadrant 1 is about all that matters and what you can control: Yourself. That markets decline after a couple great years is not surprising. What matters most to you is that your portfolio declines were mitigated as we planned, only regular rebalancing is needed right now, and that *you* stay disciplined with your planning moving forward.

Bearing Uncertainty Requires Discipline

Investors are risk averse with their own money. Given an expected return, they prefer lower risk; for a specified risk level, they prefer a higher expected return. Investors like the idea of a high expected return because the expected wealth that would be available to spend or give away increases. On the other hand, investors, being risk adverse, prefer less uncertainty about their future wealth. Unfortunately, an investment's expected return can only be our best guess of what the realized return will turn out to be. Investors must choose what level of uncertainty in outcomes they can accept.

The ideal risk-return tradeoff would provide the greatest utility for planning uncertain lifetime consumption goals. Choosing an investing strategy means choosing among a set of tradeoffs that best fits a client's particular risk preferences, their risk capacity (how large the portfolio and reliable outside income sources are, and how much income must be withdrawn), and their temperament—ability to ignore media distractions and stay focused on choosing to do what most matters for achieving their essential planning

Exhibit 1: Wealth Planning Anti-Disinformation Matrix

	Can Control	Can't Control
Important	**1** 1. Diversification 2. Systematic asset allocation 3. Tax efficiency & asset location 4. Time of assets in the market 5. Spending level & savings rate 6. Clarity for key lifetime goals	**2** 1. Inflation 2. Long-term returns & volatility 3. Rising interest rates 4. Increasing taxes & tax rates 5. Government waste & rising debt 6. Wars, conflicts and crises
Not Important	**3** 1. Portfolio checking 2. Market index watching 3. Market timing 4. Tactical asset allocation 5. Stressing dividends or yields 6. Complexity of implementation	**4** 1. Daily news & social media 2. Short-term returns & volatility 3. Forecasting or predictions 4. Popular investing fads 5. Fantasy backtested models 6. Unverifiable claims by relatives

For illustrative purposes only.

goals, despite market, economic, social, political and personal circumstances.

We define risk as uncertainty about lifetime consumption. That's why an investor's temperament is critical to success. Volatile markets set up a battle between your present self and your future self. When media news broadcasts distract your attention, your present self may suffer anxiety and distress, and dread watching your portfolio move downward. The more your attention is drawn to troubling events, uncertainty increases. As market volatility increases, fear of losing money naturally increases.

Behavioral scientists like Hal Hershfield study how time affects investor's choices. Hershfield observes that "Our distant future selves feel like different people from who we are now. It can become especially difficult to keep those distant selves in mind when there's so many emotions here in the present—in the form of temptation or fear."[4] The natural impulse in troubling times is to react, and "do something."

Present Self vs. Future Self

In utility theory for financial planning, what investors *should* care about is their lifetime **level of wealth**. That is, not only how much money they have at any point, but how likely it is to last, if sensibly saved and spent. Instead, what investors *do* care about is caused by short-term **changes in wealth**: how much they perceive as gained or lost. Your happiness about having $1 million today is relative: it depends largely on whether you had (say) $100,000 or $1.9 million last week. If you gained $900,000, having $1 million is thrilling. If you just lost $900,000, having only $1 million may make you sick.

This is bred through the evolution of our survival instincts. Changes, rather than states of wealth, mattered a lot to our hunter-gatherer ancestors daily at risk of going hungry or starvation. Even a slight shrinkage in food stores would have spurred the clan into action. No wonder recent bad events or possibilities immediately override logical thinking. Emotionally bad outcomes loom larger in our minds and are remembered longer than good ones.[5] The media love showing "bad news" for a good reason, and will shamelessly exploit the worst almost pornographically to distract your attention.

If you have more decades of living ahead, then your future self is likely to be annoyed—or could be materially impaired—by sudden emotional moves that you choose to make today. If you're retired or soon to retire, your future self may be glad you resisted taking more risk or even scaled back as markets kept rising if stocks later seriously dropped. That would be the case if you chose to strongly rebalance the year before 2008-09 or 2000-2003. Then choosing to buy back after a big drop would be an option.

When you convey money from your present self to your future self, it's like driving on an unfamiliar road hundred miles long, full of potholes and icy patches and twisting passes. You could easily skid off unless you drive slowly and carefully. It's better to be too conservative and end up with a few dollars less or work longer before you choose to retire, than to overestimate your tolerance for risk and end up panicking and selling at what you realize afterward was near the bottom.

Again, risk is best understood as uncertainty about consumption over your lifetime and a legacy for others. Loving your future self as well as your present self means necessarily embracing a certain level of uncertainty.[6] By historical standards, stocks are not cheap at 40 times their ten-year average earnings according to data from Nobel laureate economist Robert Shiller.[7] That's nearly the highest in the last 140 years of the historical sampling. But by Shiller's valuation, stocks have been significantly overvalued for most of the past 30 years. Had you exchanged entirely out of stocks for bonds in 1992 and stayed out ever since, you would have missed an average of roughly 11% annually for the last three decades.[8]

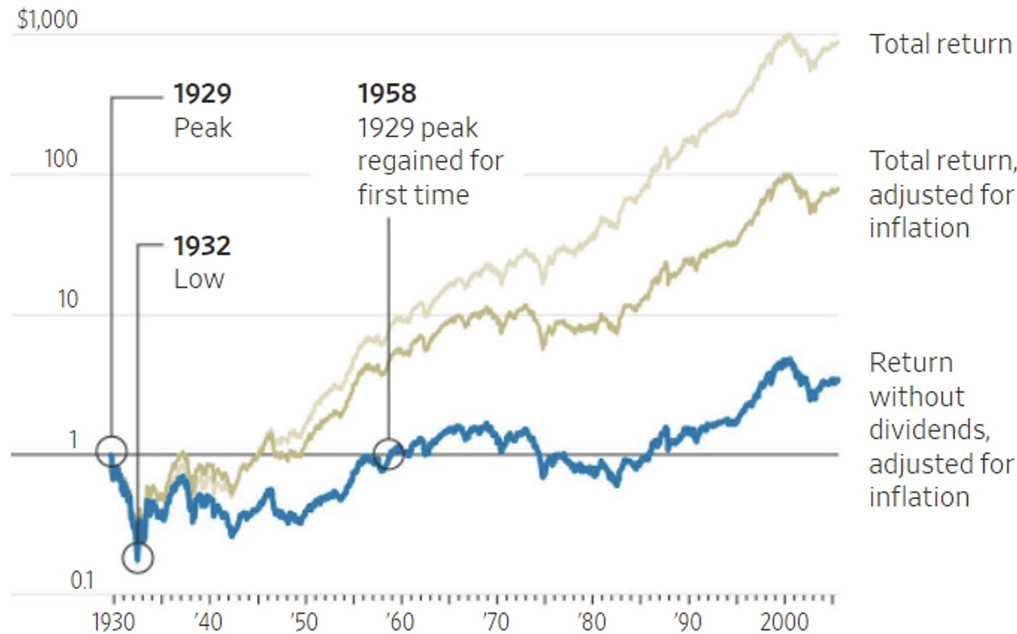
Bearing Uncertainty is a Long-term Choice

One reason U.S. stocks have exhibited high returns for so long is to compensate investors for the ever-present risk of losing half their money or more in the short run—and possibly for a very long time. Apart from preferences, you must know whether you have the capacity to bear very long run uncertainty. **Exhibit 2**, adjusts for inflation and reinvested dividends for what is now the S&P 500 index of large U.S. stock, often used as a popular index fund. Investors owning that index of American stocks wouldn't have recovered their 1929 high until the end of 1936—nor fully recovered without inflation until 1949.[9]

To plow dividends proportionately back into a basket of stocks representing the S&P 500 index before index funds were available, ignoring high trading costs for most of that time, investors would have required super-human endurance. That also suggests why asset allocation with fixed income (bonds), together with holding equities (stocks) comprised of several asset classes, is essential when planning a lifetime income strategy, where the years in

Exhibit 2: Stocks for the Very Long Run in Real Terms

S&P 500 (and equivalent) growth of a dollar with inflation adjustments. September 1929 to December 2020.



Note: Monthly returns plotted on logarithmic scale. **Source:** Edward McQuarrie, Santa Clara University.

Past performance is no guarantee of future results. Investing risks include loss of principal and fluctuating value. There is no guarantee an investment strategy will be successful. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio.

retirement could well exceed the years you've worked.

Lucky timing could make all the difference. For investors beginning *after* the biggest declines of the early Depression had occurred, systematic dollar-cost averaging would have treated them very well—if they had the temperament to invest. But Jack Bogle didn't invent the index mutual fund until 1976. And without our access to decades of financial economic research, it would have taken enormous courage that few of those living through and surviving the Great Depression and World War II could afford.

If you believe that a prolonged period of poor stock market performance is not possible here in the U.S., consider the Japanese stock market. In 1990 Japan was the second largest economy in the world. That market is still recovering after forty years. Additionally, Japanese interest rates have been close to zero for most of those years. Despite trillions of government spending, that stock market still disappoints.

Realized Returns Cause Distractions

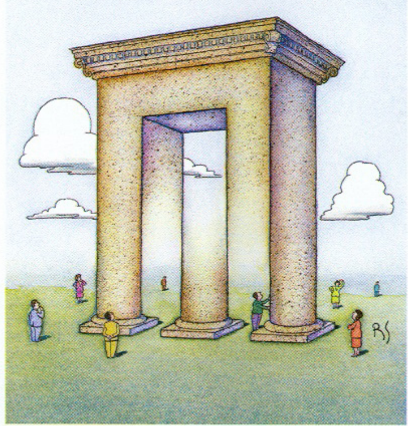
Our minds are hard-wired to see patterns. The problem investors have is that they see patterns that do not exist. Investing becomes a challenge for many since modern portfolio design and management is based on statistical models. Human evolution has not prepared our minds to think statistically or probabilistically. What worked for throwing spears at deer does not apply to picking stocks with darts.

Who hasn't seen a ship in the clouds or human figures in a dirty window? Perhaps because the high evolutionary cost of false *negatives*—failing to see real patterns in the jungle or the savanna—compared to the cost of false *positives*, people are "hardwired" to identify patterns, whether real or not.[10] Given the human inclination to identify patterns and the importance of investing in our lives, it is not surprising that investors and later researchers have found patterns in asset prices and returns and continue to do so. It also is not surprising that a substantial fraction of the investing patterns identified are false positives.

The goal of financial economists who study stock returns is to predict the future, not to describe the past. Researchers understand that an asset's return can be split into its *expected return*, which is our best guess of what will happen based on all currently available information, and its *unexpected return*, which is the surprise—the difference between the realized return and the unrealized expected return:

R = E(R) + U(R) or **R = E(R) + Surprise!**

Researchers, both academic and in the financial industry, want to identify persistent differences in expected returns



that are pervasive across asset classes or subclasses. Literally hundreds of so-called "factors" have been published in the academic literature, and thousands more found by investment company researchers. Fame and fortune are the reward. The great success of the Fama-French multi-factor model implemented by Dimensional Fund Advisors over 30 years ago set off a gold rush.[11]

Incentives to identify new patterns in stock returns or enhance existing patterns are strong: degrees are awarded, papers are published, tenure is granted, and new investment products are marketed. The set of data that might be tested is huge as research expands and computational power multiplies. There are thousands of stocks, an almost unlimited list of attributes, and many ways to combine the candidates. With a good search algorithm and enough time, a clever empiricist can find patterns in any sensible sample. Often evidence questioning the new pattern does not arrive before the empiricist is rewarded.

A small positive return is expected every day. Realized returns experienced in a portfolio, positive or negative, are mostly chance occurrences. Even over intermediate or even long horizons for planning strategies—five, ten, even 20 years or more—realized returns are typically dominated by U(R), the random "noise" of the unexpected component. Nowadays most of the new differences identified in the cross-section of expected returns are very small relative to the huge volatility of *unexpected* returns.

Realized Returns Can Be Disinformation

Typically, most investor inferences of securities or assets from technically analyzed patterns of realized daily, monthly and annual returns are "false positives"—that is, the information inferred from price patterns for choosing to buy, sell or hold securities for various active management approaches, such as marketing timing, is **not** a statistically reliable prediction of expected outcomes for the future.

How important patterns of unexpected returns can be in motivating massive investor behavior is exemplified by FAANG stock performance—primarily Facebook, Amazon, Apple, Netflix, and Google—from 2012 to 2021. The value-weighted 2012-2021 average annual return of these five stocks was 30.1%; the ten-year return cumulative return 1166%.[12] A huge influx of investor money chasing past performance cascaded to drive those stocks ever higher. Should we expect 1166% over the following decade? No. *The expected value of future unexpected returns statistically is zero.* Strong unexpected returns are a better economic explanation. The huge 61.5% return in 2021 could have been anticipated only by a crystal ball forecasting COVID-19 and a consequential huge demand in FAANG services. Those predicting continuing high returns in coming years almost certainly will be disappointed.

Differences found in unexpected returns are easily misinterpreted as differences in expected returns. When reviewing proposed factors, Nobel laureate Eugene Fama and Professor Kenneth French, both Dimensional consultants, initially assume a chance (null) hypothesis for patterns of realized returns being proposed. When testing the chance hypothesis, they look for (i) a compelling story that predicts that pattern in expected returns, (ii) strong in-sample persistent evidence that the pattern is more than noise, and (iii) robust out-of-sample evidence that reinforces that conclusion that it is pervasive. Much so-called "research" of the financial services industry does not begin to match academic standards, and what pretends to be "research" for investors all too often is a type of disinformation.

Disinformation from Active Management

Nobel laureate and Professor Bill Sharpe in "The Arithmetic of Active Management" made the simple point back in 1991[13] that the average dollar invested in an active-trading approach *must lose* to a passively invested dollar in a value-weighted market portfolio —what would now be termed an "index fund." Active investors pay higher management fees, higher transactions costs due to frequency and immediacy costs and incur additional expenses that reduce net returns. An indexing approach must consistently out-perform over a sensible planning horizon simply because its costs will be lower.

Morningstar's research service in its early years reported that actively managed funds, as a group, out-performed index funds. It was propaganda based on disinformation to justify their costly service. Eventually research databases became available that included return histories of actively managed funds that had closed over the years.

Evidently Morningstar's own service had been systematically excluding the poor performance of the closed funds. Morningstar's restated reporting of their comparison then showed that index funds outperformed, corresponding to the empirical evidence.

Nowadays, there is no serious disagreement. The annual SPIVA Scorecard research from S&P Dow Jones reports on the percentage of actively managed U.S. equity funds underperforming various S&P indexes. For example, in the latest 2021 report of the S&P 1500 larger U.S. stocks as of year-end:[14]

- 75% underperformed for the 5-year period *(81% on a risk adjusted basis)*
- 90% underperformed for the 20-year period *(95% on a risk-adjusted basis)*

Over the last 20-year period, nearly 70% of those funds in business in January 2002 had been merged or closed. Research continues to suggest that surviving firms longevity is likely due to luck, not skill. Attempts to predict funds that will both survive and out-perform is not a profitable strategy for an investor, although services that sell advice on selecting which funds to invest in, and when, continue.

The Persistence of Propaganda

It is important to remember that the average dollar invested is holding the market. So why does a negative sum game like active management persist? Most likely due to a toxic combination of investor overconfidence and the fog of volatility.[15] Given the high volatility of unexpected returns, most actively managed funds can produce almost as many good monthly returns as bad ones.

Most investors, just like almost every automobile driver or private pilot, believes they are above average. New investors with the wrong temperament, unaware of economics and history enter the marketplace daily, encouraged by the media's relentless propaganda. Likely due to ignorance (not knowing what they don't know), many are confident they are smarter even than the professionals and can profitably sort "winners" from the "losers" while avoiding investment risk as they over-focus on short-term outcomes. Early lucky bets, as well as selective personal accounting, reinforce such beliefs. This leads to confused investor choices, buying and selling, until they are hit with a devastating loss.[16] Admittedly, the idea of making fast money from trading stocks and funds is seductive. How difficult can it be to select among "winning" actively managed funds to choose who will be the big winner? Suppose that after fees and expenses, the expected outperformance or "alpha" of the world's best hedge fund manager is 5% per year *in excess* of the market's expected return. If his fund has stock market-like volatility of only 20% per year, how long should we expect to wait before confidently inferring (with a 95% t-statistic of 2.0 or greater) that his alpha is *at least* positive and not zero?

The answer is 64 years.[17] That is, two investment lifetimes! By then either the manager has retired, died or his methods are outmoded. Why so long? First, even a great fund manager's skill is obscured by the highly volatile unexpected returns of high-performing active managers. They appear to outperform for awhile either due to a lucky start date or a lucky selection of securities. Second, hedge funds rarely track or can be tracked against index benchmarks, so that 100% of the return is unexpected. Also, mutual fund families routinely start a dozen or so funds each year, and quickly close unlucky ones. So the race for returns is confused, and telling the difference is made difficult by media disinformation.

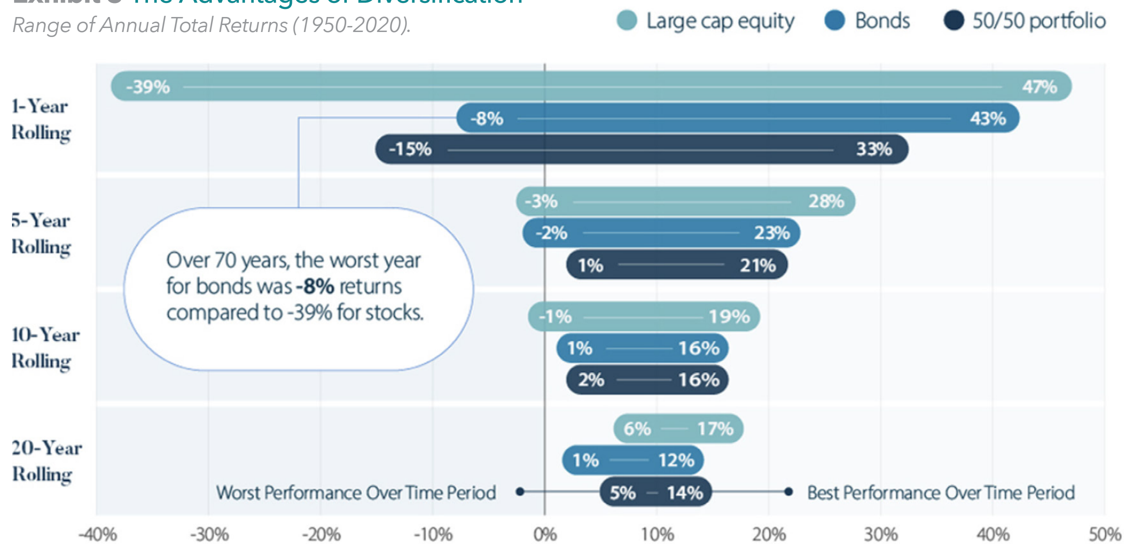
Indexing Better Controls Discipline

Index funds are easy to evaluate because each fund's target index is a perfect benchmark, providing direct evidence of whether the fund is delivering as promised. The choice for the investor is reduced to which combination of benchmarks should be selected to construct a portfolio best corresponding with their risk preferences and temperament, and which fund family has the best fit at the lowest cost. Active equity mutual funds are easier than hedge funds to evaluate but harder than index funds. They invite intemperate investors to chase winners. But as we showed, it can still take decades to prove whether an active fund's under- or overperformance is the result of luck, skill, or a failed model. Also, markets are complex adaptive systems with smarter competitors emerging with every generation.

Investor overconfidence due to incorrectly comparing funds promotes unprofitable returns chasing, with huge amounts of investor money flowing into and eventually out of a high performing funds after returns disappoint, only to flow into another (temporarily) high-performing fund. Even institutional investors practice of returns chasing due to a practice of applying a comparison methodology of three to five years as a routine assessment period for active managed funds. Underperforming managers are fired at the end of a review cycle. However, random unexpected returns confuse what is skill. Studies made of manager performance after termination, relative to the replacement manager, show an average performance cost to the plan and its participant of

Exhibit 3 The Advantages of Diversification

Range of Annual Total Returns (1950-2020).



Source: Bloomberg Finance LP, FactSet, J.P. Morgan Asset Management; Robert Shiller, Strategas/Ibbotson, US Federal Reserve (2021) Large-cap equity is represented by the S&P 500 Shiller Composite Index. Bonds are represented by the Strategas/Ibbotson Index for periods from 1950 to 2010 and the Bloomberg Aggregate Index thereafter. Past performance is no guarantee of future results. An investment cannot be made directly into an index. Diversification cannot assure profit or protect against loss in a declining market.

between 1% and 2% a year. Financial incentives have an impact—if the consultants don't seem to "do" anything, then their jobs are at risk.[18]

Notably, an investor's temperament to continue holding a market index position (or the equivalent with Dimensional Fund Advisors funds) through good and bad market cycles—that as a matter of course would include the best days and the best stocks of the entire holding period—will make all the difference between capturing the full market return or, at worst, provide a risk-free return or less.

For 15 years from 2007 to 2021, the U.S. large market index return was 10.7% annualized. If you happened to miss the best 1 percent (or only 30 trading days), your return would be reduced to a negative -1.2%.[19] Other research suggests that only about 4 percent of stocks explain the entire net gain of the stock market over a long-term period. One other study showed from 1989 to 2015 when the S&P 500 gained almost 1,200%, 50 percent of those stocks generated less than a cash return and only about 20 percent produced all the gain.[20] Regardless of a high average equity holding, wrong bets that miss the right times or miss the right stocks reduces market outcomes dramatically. Being intemperate is costly.

Diversification Controls Temperament

Investors should diversify their portfolios as a best practice. A few great stock pickers could be harmed, but they don't pay attention to academic advice. Diversification is a powerful tool for the rest of us. When markets are volatile, diversification tempers market price volatility for the level of risk you choose to bear as an investor. An investor should be concerned with their security of principal as well as a fair return, rather than take risks that could lose it all. Don't let yourself get distracted by financial propaganda.

Exhibit 3 illustrates how long-term diversification applies with a range of model index allocations. The 70-year time frame is broken down into rolling 5-, 10-, and 20-year periods. This shows how time in the market (rather than trying to time the markets) reduces the downside returns and improves the average median return. Notably, without involving factor strategies, an equal combination of stocks and bonds never produces a negative return across even 5-year rolling periods. A 20-year rolling period never shows less than five percent. The median 20-year rolling return would out-perform most actively managed portfolios, based on the results of several studies, and serve the needs of most investors with good temperament.

Sufficiently broad diversification, preferably on a global basis, allows disciplined investors to weather most any market storm. The knowledge of how much downside risk you can tolerate and a philosophy of investing you can stick with informs your temperament. However, for intemperate investors, media propaganda easily distracts them by promoting those funds with high unexpected returns that happen to be out-performing this year—especially when, say index funds, don't appear to be doing well enough for them compared to "hot" opportunities.

Conclusion

Propaganda with big numbers, cloaked in a lot of jargon, can hit like general anesthesia: You just drift off to sleep while so-called "financial professionals" surgically remove your money telling their stories. When choosing financial advisors, remember their fees pay for the fancy offices and media advertising.

The problem investors face, with many growth asset classes near all-time highs, is that future returns will be lower across the board for all investment management strategies. The more highly valued a class of stocks, the lower their expected return. As always, the firm's cost of capital is the investor's return.

High returns of recent years will naturally incline intemperate investors to extrapolate past returns into the future and make that their performance benchmark as they evaluate prospective funds and manager. They likely will be disappointed with returns they get, and continue their distraction chasing a plethora of opportunities promising the large returns. One disappointment will follow another.

This should not mean disappointment for clients of Professional Financial. Our conservative planning has attempted to integrate sensible expected returns that minimize uncertainty about your lifetime consumption. Our portfolios integrate systematic strategies grounded in theoretical and empirical financial science as a driving force of your targeted expected returns from your investment policy, and multiple trade-off considerations have been individually balanced for each client situation

Life is not determined by what we want. Life is determined by the choices we make. If you choose to be disciplined and avoid media distractions in the challenging times that we expect, Professional Financial can offer you confidence and peace of mind for your family through a informed and transparent process backed by decades of research that empowers our entire financial planning and wealth management.

For thirty years we have made a positive impact in so many lives, allowing families to live better now and in the future—as you make informed choices so that your goals, hopes and dreams may be realized.

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