Evidence Based Investing

Our Strategy to Help You Reach Your Goals

by Jeff Buckner, CFP®, AIF®

PLANCORP®
Your Financial Life Advocate.

Contents

"Our investment strategy is informed by a combination of tested academic research and deep financial planning expertise."

Introduction to Evidence-Based Investing

Over the past decade, the U.S. stock market has risen from the ashes of the Global Financial Crisis. During the Crisis, U.S. stock prices plummeted by more than 50% to multi-decade lows in March 2009, a time when the Dow Jones Industrial Average (DJII) dipped below 7,000 points. Investors have since experienced a Bull Market that has brought indexes to a new all-time high, with the DJII recently tripling from the 2009 low to surpass the 21,000 mark.

The upward rise of markets has prompted excitement, fear, and endless speculation about what the future may hold. Whether you've enjoyed watching your portfolio during the rise or sat on the sidelines up to this point, the question remains, *"How should I invest moving forward?"*

Is it time to invest, to take gains, or to sit on your hands? In our view, the best path forward requires a research-driven investment strategy designed to help you reach your goals. At Plancorp, we are laser focused on helping you discover your goals, create a plan, and take action toward reaching them through prudent investing. Investing is simply the tool for executing your plan and achieving your goals.

After all, the objective of investing is not just to pile up money without purpose, or pursue great gains regardless of risk. A good investment strategy manages risk and potential rewards to give the highest probability of reaching your goals through all market environments.

Our investment strategy is informed by a combination of tested academic research and deep financial planning expertise. The backbone for our investment strategy is supported by Nobel prize winning research implemented by advisors with over 30 years of experience. Here are a few of the tenets we embrace when building client portfolios:

Embrace Market Pricing

While studying the movements of markets in the 1960s, Professor and Nobel Laureate Eugene Fama posited the ›

Efficient Market Hypothesis. His research identified that professional investors had a poor track record of actually "beating the market" through stock picking. After subtracting costs of trading and management, they rarely did better than the market. He hypothesized the underperformance was because markets price information efficiently, thereby driving prices of stocks and bonds to fair market value.

How does this happen? Every day millions of participants buy and sell securities in the global markets. The real-time information they bring to trading floors helps set prices. The market is an effective information-processing machine, made even more effective in the Internet Age through recent advances in information delivery, machine learning, and trading technologies. In 2015 world stock markets processed an average of 98.6 million trades *per day,* with an average volume of $447.3 billion dollars trading hands.[1]

While no one person or organization can see into a crystal ball and predict the future of the markets, stock prices tend to reflect all information available to traders on any given day. As news becomes public, a flurry of trading activity quickly absorbs information and prices it into the market.

World Equity Trading in 2015

	NUMBER OF TRADES	DOLLAR VOLUME
DAILY AVERAGE	98.6 MILLION	$447.3 BILLION

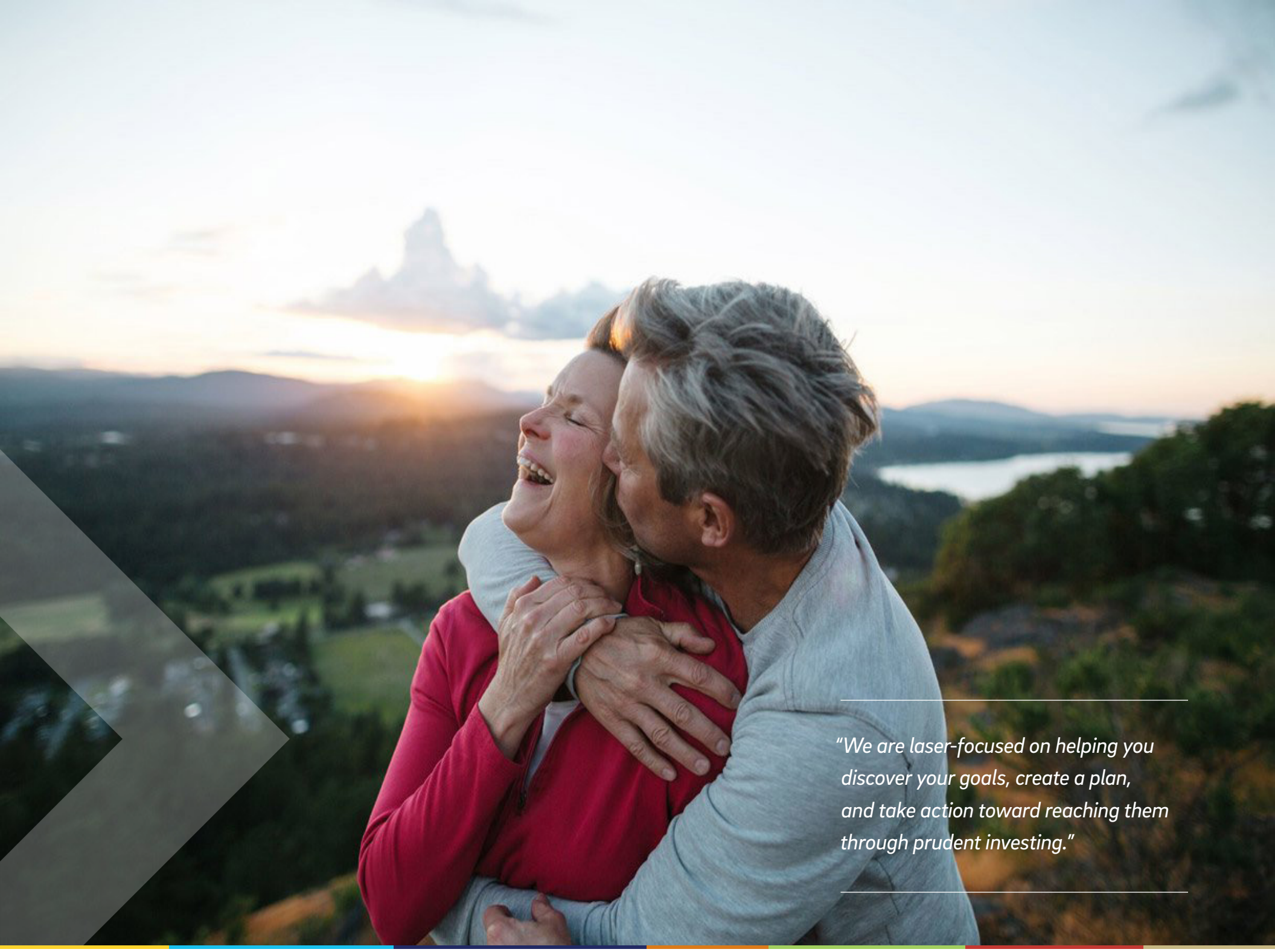
The most profound conclusion from the Efficient Market Hypothesis is that the average investor cannot profit from attempts to "beat the market" through stock picking. If Fama's hypothesis is valid and indeed the market quickly absorbs all pricing information, then attempting to buy mispriced stocks for easy gains is a fool's game.

Trying to pick a set of stocks or bonds that will beat their benchmark ("outperform") over the long haul is an extremely difficult task for any investor. Picking the wrong set of stocks can end in tears, as a failed company wipes out the investments of those who held the stock (Enron, Bear Stearns, anyone?). But what about the winners? As you'll see below, often those who are able to beat the market in one season fail to do so in the next season. The lack of consistency leads many to believe that luck, rather than skill, explained the temporary success.

Instead of gambling your money on the latest "sure bet" touted on CNBC, we believe in investing broadly (diversifying) across many markets for the long haul.

We discussed the Efficient Market Hypothesis. The EMH leads us to embrace market pricing. Research shows that attempting to beat the market through stock picking is unwise, a gambler's game rather than a skill to master. In the next section, we include a case study of mutual fund managers to reinforce this point, encouraging investors to avoid trying to outguess the market.

Continue to Part 2: ***Don't Try to Outguess the Market***



"We are laser-focused on helping you discover your goals, create a plan, and take action toward reaching them through prudent investing."

Don't Try to Outguess the Market

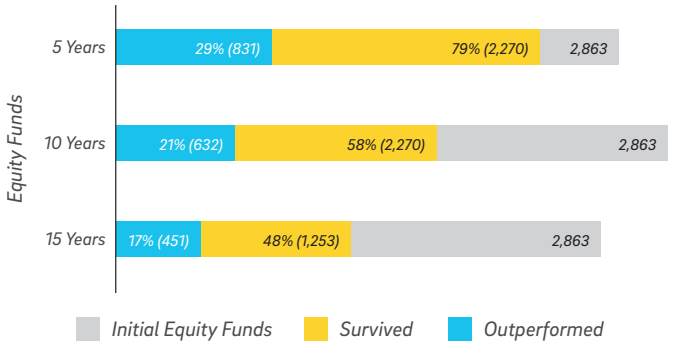
If you're convinced you have what it takes to beat the market, consider the track record of some of the best equipped traders in the market: active mutual fund managers. The efficient market hypothesis holds that the stock market's pricing power works against mutual fund managers who try to outsmart other market participants through stock picking or market timing. Study after study has shown that after factoring in the expenses of running a fund, these managers are unable to consistently achieve market-beating returns.[2]

A 2017 report by Dimensional Funds Advisors (DFA), studied the performance of 2,587 actively traded mutual funds from 2001-2016, tracking each manager's performance against the broader market.[3]

The chart on this page shows the results. After 15 years only 48% of the original funds had survived, with the majority being liquidated or merged with other funds during the 15 years. Even fewer funds could beat the market. Over the time period only 17% of US equity (stock) mutual funds outperformed their benchmarks. Fewer than one in five!

Few Mutual Funds Have Survived and Outperformed

Performance periods ending December 31, 2016



As you look at the chart, remember that these managers:

Have More Training than You: *Mutual fund managers have spent a lifetime making a study of the market, reading* ›

company research reports, analyzing earnings statements, speaking to company representatives, and sleuthing out investment stories. On average, they still can't outsmart the market.

Have More Time than You: *While you likely spend most of your time employed elsewhere, making investment decisions is their full-time job.*

Have More Help than You: *Unless you're managing your own private equity fund, you likely don't have a team of analysts to help you make your financial decisions. Fund managers do.*

Have More to Win (and Lose!) than You: *The stakes are high for mutual fund managers. A winning fund can make you a rock star among investors. Stringing together winning years can mean millions more in bonuses for the manager, tens of millions more invested into the fund, and greater career opportunities in the future. The converse is also true. As the chart above shows, each year hundreds of poorly performing funds are merged or liquidated. The managers that run them are moved back to the Minor Leagues.*

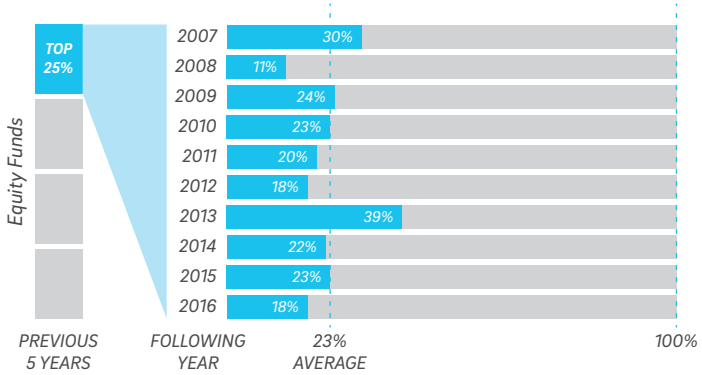
If these fund managers with more training, time, resources, and incentives than you *still* can't beat the market, what makes you think you can? Which brings us to our third tenet.

Resist Chasing Past Performance

Some investors will have temporary success at beating the market. You may be thinking, "What about those 17% of managers who beat the market! I'll just invest my money with them." That would make a lot of sense if past performance could guarantee future results. But if you've read any investment disclaimer you know that just isn't the case, "Past performance does not guarantee future results." The research shows the same.

The issue is the *persistence problem*. **Persistence** is the ability of a successful manager to consistently outperform. Unfortunately, this is notoriously difficult to do. For instance, in the study cited above DFA broke out the results between fund managers over the 10 years from 2001 to 2010.[4]

They identified the top 25% performers in the ten-year period and continued to study their performance for the following five years from 2007-2016. Did outperformance persist? Could they remain the cream of the crop? ›



The tables show the percentage of funds in the top quartile (25%) of five-year performance that ranked in the top quartile of one-year performance in the following year Example: For 2007, only 30% of equity funds in the top quartile of previous five-year returns through the end of 2006 maintained a top-quartile ranking for one-year returns in 2007.

Nope. As you can see from the chart, this exhibit shows that among funds ranked in the top quartile (25%) based on previous five-year returns, a minority also ranked in the top quartile of one-year returns in the following year.

Mutual fund managers may have the hot hand for a while, prompting opportunistic investors to pump money into the fund. But just like a lucky gambler in Vegas, eventually the hot hand gets cold, the house wins, and the crowd disperses to find the next lucky winner.

So what should an intelligent investor do? We think the evidence is clear. Don't try to outguess the market. Resist chasing past performance. And as you'll see in the next section, build wealth by letting the market work for you.

*Continue to Part 3: **Let the Markets Work for You***

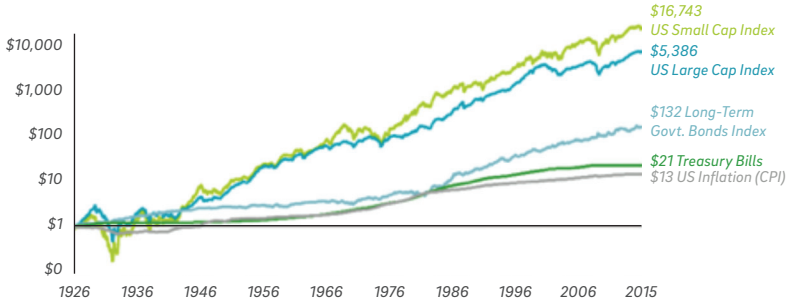
"Through a passive investing strategy, you can invest in whole markets, gaining massive diversification at minimal costs."

Let the Markets Work for You

The alternative to an active trading strategy, informed by our belief in efficient markets, is letting markets work for you through passively investing. Rather than trying to guess the perfect fund manager who can beat the market, through a passive investing strategy you can invest in whole markets, gaining massive diversification at minimal costs.

Fewer costs leaves more money in your accounts to compound over time. Historically, markets have rewarded long term investors with a buy and hold strategy. See the chart below to track the growth of one dollar invested in various indexes over the past 90 years. Notice how U.S. Stocks in particular have created immense wealth for investors willing to hold on for the long haul. The lesson from the Efficient Market Hypothesis is simple: if you can't beat the market, join it!

Growth of a Dollar, 1926-2015 (Compounded monthly)



Increasing numbers of investors are embracing market pricing and letting the market work for them. According to research from Morningstar, in 2016 a record $263.8 billion flowed out of U.S. active equity strategies, which are designed to beat the market. Much of this money flowed into passively managed U.S. equity funds, which took in $236.7 billion. We applaud this half a trillion dollar shift and see it accelerating moving forward. back to the Minor Leagues.

In the next section, we take a look at how we build portfolios and what is inside.

*Continue to Part 4: **The Smart Way To Fund Your Future***

In US dollars. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio Large Cap Index; Long-Tern Government Bonds Index is 20-year US Government Bond; Treasury Bills are One-Month US Treasury bills; Inflation is the Consumer Price Index. Fama/French data provided by Fama/French. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional fund Advisors LP. Bonds, T-bills, and inflation data © Stocks, Bonds, Bills, and Inflation Yearbook ™, Ibbotson Associates, Chicago (annually updated work by Roger G. Ibbotson and Rex A. Siquefield). Past performance is no guarantee of future results.

"Fourteen years from now, you hope to send your child to college—but in six years you want to put a down-payment on a vacation home. Each goal requires a unique strategy."

The Smart Way to Fund Your Future

So you're convinced that markets price securities efficiently. You know active management is an expensive investment strategy with an inferior performance record. You have goals, they cost money, and you want to let markets work for you to build wealth. A massive question remains, "How should I construct my portfolio?" This post outlines our answer to that question.

Imagine trying to build the perfect mix of investments for your life plan. Fourteen years from now you hope to send your child to college, but in six years you want to put a down-payment on a vacation home. In twenty-five years you plan to retire, but the idea of starting a company has always inspired you. Each goal has a different timeline and requires a unique strategy.

How can you flex your finances to save for these various goals? What growth will you need and how much risk can you take while investing toward each? Could your plan pivot along the way with an unexpected expense, windfall, or move in the markets? The math required to build specialized strategies for each of these plans is daunting. Unfortunately, most people don't have a plan, and end up compromising their goals.

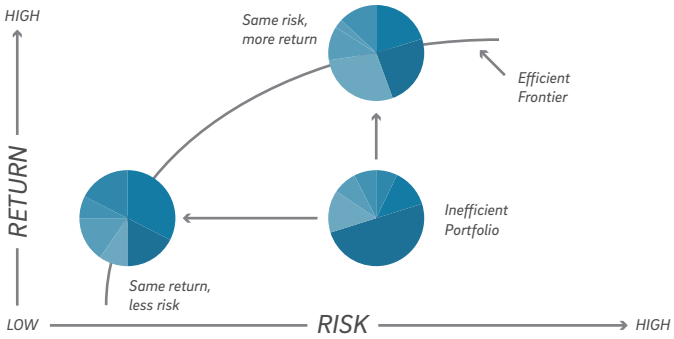
What is Modern Portfolio Theory?

In 1952, Nobel Prize winner Harry Markowitz published a groundbreaking paper in the Journal of Finance entitled "Portfolio Selection." In the paper he introduced the concepts of Modern Portfolio Theory ("MPT"). MPT upset traditional portfolio selection theories of the time that focused on striking it rich by carefully selecting a few winning investments.

Markowitz rightly observed that focused portfolios could offer high returns, but also carried a lot of risk. Limiting holdings to a few strategic bets effectively meant putting all of your eggs in one basket. He wanted to help people to be investors, not merely speculators. That meant considering both returns and risk.

Instead of just focusing on individual investments within a portfolio, Markowitz took a panoramic view of how entire portfolios fit together. He suggested that not all returns are created equally. ›

To construct the ideal investment mix, he argued, both the expected returns and the overall risk of the entire portfolio should be calculated.[5] The best portfolios would offer the highest potential returns for a given level of risk. And there was even better news: for inefficient portfolios, overall risk could be reduced without significant cuts to returns, or returns could potentially be improved without adding greater risk.



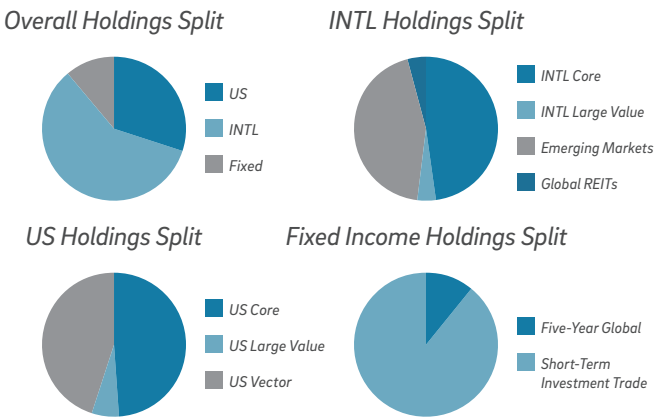
Practice Smart Diversification

Markowitz suggested risk could be reduced in portfolios by using "the "right kind" of diversification for the "right reasons." The right kind of diversification means looking beyond the number of holdings in a portfolio, drilling down instead into the types of holdings in the portfolio.

For instance, holding 30 highflying tech stocks prior to the Dot-com crash in 2000 just meant investors had 30 eggs in the same basket, not 30 different baskets. Pseudo-diversification meant when the Tech Bubble popped, that nest egg looked more like a scrambled egg.[6]

Building a truly diversified portfolio requires access to a broad range of holdings within any given asset class (or group of investments). Stocks are a core asset class in many portfolios and can be diversified among various sectors (e.g. utilities, healthcare, financials, or technology), company sizes (small vs. large cap companies), and countries (U.S., foreign developed, or emerging markets).

Diversifying between sectors, sizes, and countries in your portfolio can reduce the risks associated with being overly concentrated in one area. Broad diversification also offers the upside of capturing the returns of top performing markets and sectors around the world. Below are the Plancorp Holdings Split showing how we diversify within our portfolios.[7]



One More Layer of Diversification

Smart diversification spreads out investments within a specific asset class, like the stock example above, and goes further by ›

dividing a portfolio among various asset classes. The technical term for this is "asset allocation." Even though it has a weird name, the way you divvy up your portfolio is one of the most important investment decisions you will ever make.

At the most basic level, we diversify our portfolios across a global mix of equities (stocks) and fixed income (bonds). Generally, the primary purpose for the equity allocation is capital growth (return generation). The primary purpose for the fixed income allocation is capital preservation (reducing risk).

As Harry Markowitz learned, risk and return are closely related. The compensation for taking on increased levels of risk is the potential to earn greater returns. See the chart below for a simplified view of how different mixes of stocks and bonds impact risk and return.

As you can see, the all stock portfolio offers the highest return but will also experience greater fluctuations over the course of a year. Stocks are the roller coaster of asset classes. As you introduce bonds to the portfolio, the potential return decreases, but volatility smooths out as well. Volatility isn't the enemy, it's the cost of higher returns.

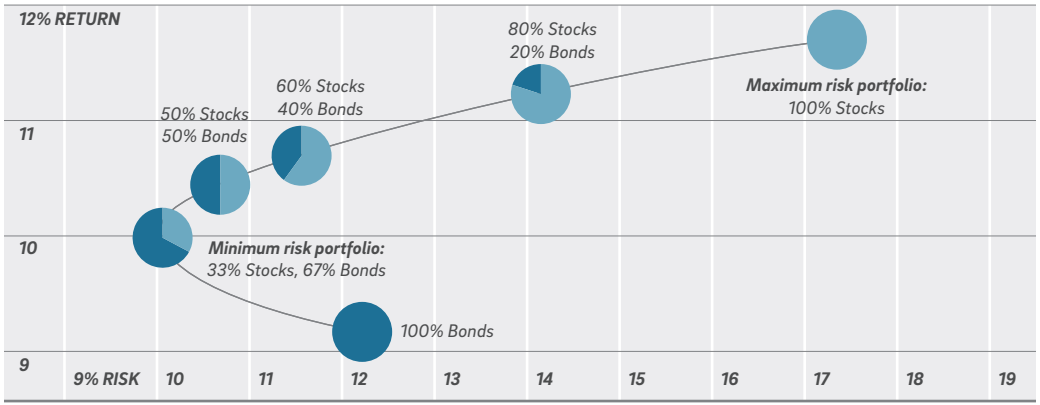
So how can you apply the wisdom of diversification to your situation? For an investor with a high-risk tolerance and a distant goal, like saving for retirement, a higher proportion of the portfolio could be allocated to riskier assets, such as equities. With a near term goal like an upcoming home purchase, a protective portfolio of bonds and cash can give greater stability and less stress.

There is no "one size fits all" approach to asset allocation. Modern Portfolio Theory is beautifully versatile! Using MPT, Plancorp portfolios provide an ideal mixture of assets for *each of your goals based on your risk tolerance and financial situation.*

Diversify to Reach Your Goals

We never forget the point of investing. Our aim is to help you fund your future. We diversify portfolios because markets are unpredictable, knowing that smart diversification within and among asset classes maximizes the likelihood of reaching your goals. We help you build an investment plan, so you can just plan for life.

Stocks and Bonds: Risk Versus Return
1970-2015



Past performance is no guarantee of future results. *Risk and return are measured by standard deviation and arithmetic mean, respectively. This is for illustrative purposes only and not indicative of any investment. An investment cannot be made directly in an index.*

A few very important decisions remain, and we cover them in the final part of our evidence-based investing series, Focus On What You Can Control.

*Continue to Part 5: **Three Critical Choices for Successful Investing***

"In investing, as in life, increased power comes when we narrow our attention to the elements we can control."

Three Critical Choices for Successful Investing

Much to my chagrin, I can't control many things in life. I can't control the weather, traffic on my way to work, or most diabolical of all, cats. I wish I could control gas prices, the movements of my investment portfolio, and whether Steph Curry hits the game-winning shot by yelling at my TV. Sadly, issuing commands to a screen is only a reliable predictor of my wife laughing at me.

This may sound backwards, but acknowledging the things I can't control gives me power. Focusing on situations that are out of my control leads to frustration and disappointment. Naming what I can't control helps me to focus on the things I can control. In investing, as in life, increased power comes when we narrow our attention to the elements we can control.

Focus on What You Can Control

If you followed the advice of our previous evidence-based investing posts, a few major obstacles to building wealth have been cleared. You've stopped trying to trade your way to wealth and removed many of the frictional costs incurred for buying and selling stocks. Then, you decided not to trust active investment managers to help you to reach your goals. You know these managers often charge high fees for worse performance.

Finally, you learned that by diversifying broadly you can invest to reach your goals at a comfortable level of risk. You're crushing it! But there's still a problem with your plan. That problem is… you. While we've addressed some of the issues that keep investors from building wealth and reaching their goals, some issues remain and only you can solve them.

Following are three specific decisions you can make, the variables you can control. If you fail to consider them your plan will be in jeopardy. However, committing to these few decisions can give you a huge head-start toward building wealth.

Choice #1 - "I will avoid market timing." — Market timers attempt to predict the future by buying investments when ›

prices are low, and then selling when prices are high. Like any attempt to predict the future, market timing is notoriously difficult, and the success rate is typically low. Really low.

John Bogle, the founder of Vanguard and longtime champion of passive investing said it best, "I do not know of anybody who has done market timing successfully and consistently. I don't even know anybody who knows anybody who has done it successfully and consistently."[8]

The chart below[9] ranks the performance of various asset classes between 2006 and 2016. As you can see, the winner one year was rarely the winner the next. The checkerboard look of the chart demonstrates just how difficult it is to predict winners year after year.

The Randomness of Returns

Annual Return (%)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Higher Return	36.0	39.8	8.8	79.0	28.1	9.4	18.6	38.8	32.0	4.5	21.3
	32.6	8.2	6.6	28.5	26.9	3.4	17.1	32.4	13.7	1.4	12.0
	18.4	6.3	4.7	27.2	19.2	2.3	16.3	1.2	4.9	1.0	10.9
	15.8	5.9	-33.8	26.5	15.1	2.1	16.0	0.6	1.9	0.9	6.7
	4.3	5.5	-37.0	2.3	3.7	0.6	2.1	0.3	1.2	0.2	1.5
	4.1	-1.6	-39.2	0.8	2.0	-4.2	0.9	-0.1	0.2	-4.4	1.0
Lower Return	3.8	-17.6	-53.2	0.2	0.8	-18.2	0.2	-2.3	-1.8	-14.6	0.8

U.S. Large Cap
U.S. Small Cap
U.S. Real Estate
Emerging Markets
1 Year U.S. Government Bonds
5 Year U.S. Government Bonds
5 Year Global Bonds

Don't focus on trying to time the market; instead, build a plan that suits your needs and stick with it. Historically a disciplined, diversified, buy and hold investor has been rewarded. By committing to a good financial plan, you let markets work for you and follow the old adage: It's not timing the market, but time in the market that counts.

Choice #2 - "I will not invest based on emotions." — Money is intricately tied to our emotions. Remember the pride you felt when receiving your first paycheck or the rush of joy from an unexpected bonus? What about the sinking feeling when you heard the cost of replacing your car's transmission or when you opened a major medical bill?

While emotions may serve as useful guides for life, emotional decision making is downright dangerous when it comes to investing. The ups and downs of stocks take investors on an emotional rollercoaster. Some even argue that market peaks and pits are exaggerated by emotional decision making as traders panic sell in times of fear and aggressively buy during times of irrational exuberance.

Emotional investors often succeed at the opposite of market timing. They lock in losses at the worst times (the lows) and buy up shares after markets rise just to watch them plummet. The research firm Dalbar shows with their annual study of investor behavior just how much emotional investing can cost.

The 2016 report found over the previous twenty year period the S&P 500 had returned 8.19%, but the average investor only captured returns of 4.67%! (10) While some of the difference can be accounted for by high fees (see choice #3 below) and mutual fund under performance, the study clearly states the main factor,

> *"Investment results are more dependent on investor behavior than on fund performance... If one looks at the returns of the average investor against the returns of the overall market, it is clear that the consequence of this investor behavior is serious and detrimental to long-term financial goals."*[11]

While we can't control your emotions, we can coach you to make thoughtful decisions about your money. Our philosophy can help you with:

- ***Building a solid investment plan to reach your goals***
- ***Diversifying to manage risk***
- ***Investing for the long term, not the short term***
- ***Counteracting emotionally-charged market commentary***
- ***Rebalancing when your portfolio mix materially changes***

Committing to a goal-based investment plan gives you a defense against irrational choices. With a personalized plan guiding your decisions you gain confidence to stay the course, even when the market corrects. When you feel stressed you won't have to speculate; you'll know from a glance at your goal dashboard whether you are on track to reach each of your goals.

If you do fall off track, clear data-driven advice will advise you on how you can get back on target. These are just a few of the ways we will coach you to manage your emotions and find success where the average investor fails.

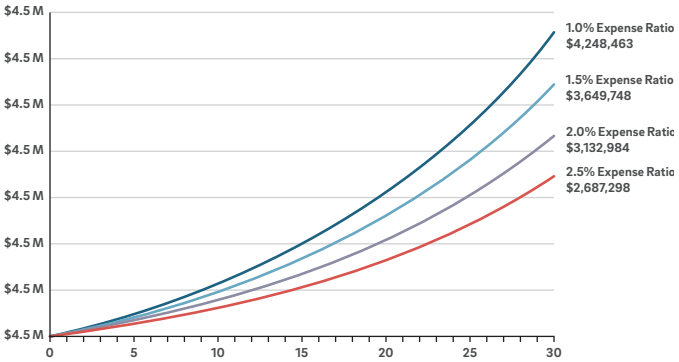
Choice #3 - "I will reduce my investment costs." — If you're riding shotgun in high fee investment vehicles, you're driving toward your goals with a flat tire.

Fees matter. And unlike with unpredictable investment returns, you have considerable control over the fees you pay. Every layer of fees you avoid means more money in your account to grow as long as possible. Conversely, each dollar paid to a mutual fund manager, in trading commissions, or toward taxes loses its growth potential forever.

While a one or two percent annual fee may not sound like much, the cost of fees compounds over time. The chart below shows the wealth-destroying impact of various levels of fees over time on a hypothetical portfolio earning 6% annually.

Investment Fees Reduce Overall Returns

6% Annual Returns Over 30 Years (assuming initial deposit of $1m)



"But" you may be thinking, "I'm paying extra in fees in order to get better returns! My manager makes up for his fees many times over." That is likely what you've been told, especially by financial salespeople incentivized to sell higher fee products. But high fees don't always lead to superior returns.

Russel Kinnel, the head of manager research at Morningstar, found the opposite in a 2016 study. Over a five-year time period his research found that mutual funds with the lowest fees had the best net performance. His conclusion: "The expense ratio is the most proven predictor of future fund returns."

Think of it this way: the higher a manager's fees relative to peers, the bigger the hurdle he must overcome to beat them. On the other hand, his paycheck and his firm's profits depend on those same fees, so they're unlikely to go down as long as investors continue to overlook the expenses.

While you have many goals, I doubt the list includes enriching portfolio managers. Passively managed portfolios have historically offered better returns by minimizing fees and taxes.

It's time to look at your investment accounts and start asking the hard questions. What fees are you paying? Are the investment vehicles you're using taking you where you want to go? Fix that flat tire and accelerate toward your goals!

It's Time to Take Control

While you still can't control cats, you now know some key financial decisions to give you greater control. Focus on what you can control: avoid market timing, invest based on reason, and reduce investment costs. By doing so you're positioned to be an evidence-based investor and, more importantly, to reach your financial goals.

"For more information on Plancorp or our investment philosophy, please contact us at plancorp.com/contact-us."

Sources

(1) In US dollars. Global electronic order book (largest 60 exchanges). Source: World Federation of Exchanges.

(2) The Standard and Poors Index vs. Active (SPIVA) Scorecard measures performance of actively managed funds against benchmark index funds every 6 months. For further evidence of active underperformance see this year's SPIVA scorecard.

(3)(4) Dimensional Mutual Fund Landscape 2017 US-domiciled open-end mutual fund data is from Morningstar and Center for Research in Security Prices (CRSP) from the University of Chicago.

(5) Modern Portfolio Theorists use Mean-Variance Optimization (MVO) to calculate the "efficient frontier" of best portfolios. Don't let the name intimidate you. Statisticians calculate the Mean of past growth in an asset class to represent the return, and the Variance as a statistical measure of risk. Put them together and bam! You can mathematically quantify risk and return. This allows you to measure one portfolio against another.

(6) Diversification can reduce risk but cannot completely eliminate risk. Markowitz later differentiated between systematic (or market) risk, and diversifiable (or specific) risk. Specific risk is the risk associated with one company, such as slowing earnings due to competition, a strike by workers, or a product recall. This risk can be reduced by diversification. Systematic risk cannot be diversified away, it is common to all securities. Systematic risks include recession, inflation, or wars.

(7) This data was taken from the Plancorp Holdings Split as of 2018.

(8) Bogle, John C. Common Sense On Mutual Funds. 10th ed. Hoboken, N.J.: Wiley, 2010. Print.

(9) In US dollars. US Large Cap is the S&P 500 Index, provided by Standard & Poor's Index Services Group. US Small Cap is the Russell 2000 Index. Frank Russell Company is the source and owner of the trademarks, service marks, and copyrights related to the Russell Indexes. US Real Estate is the Dow Jones US Select REIT Index, provided by Dow Jones indices. Emerging Markets is the MSCI Emerging Markets Index (gross dividends). MSCI data copyright MSCI 2017, all rights reserved. One-Year US Fixed is the BofA Merrill Lynch One-Year US Treasury Note Index; copyright 2017 Merrill Lynch, Pierce, Fenner & Smith Incorporated; all rights reserved. Five-Year US Government Fixed is the Bloomberg Barclays Treasury Bond Index 1–5 Years. Bloomberg Barclays data provided by Bloomberg. Five-Year Global Fixed is the Citi World Government Bond Index 1–5 Years (hedged), copyright 2017 by Citigroup. Indexes are not available for direct investment. Index performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is not a guarantee of future results.

(10) The method used for computing the Dalbar analysis of investor behavior has been challenged. But even if the study exaggerates poor investor behavior, the same phenomenon can be seen when comparing mutual fund total returns to investor returns. Morningstar includes data on investor returns for most mutual funds and this article summarizes the gap well.

Disclosures

(1) For educational purposes only and should not be used as investment advice. All investing involves risk. Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is no guarantee of future results. Diversification does not ensure a profit or guarantee against a loss.