PLANCORP™
Your Financial Life Advocate.

Annual Investment Review - 2017

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A Framework for Making Portfolio Changes

In this newsletter:

When was the last time you made a change in your portfolio? How long did it take you to make the decision? What factored into your decision?

Most individual investors spend more time planning a vacation or choosing a refrigerator than they do making investment decisions. Unfortunately, professional money managers aren't immune from similar tendencies.

Exacerbating the problem is the investment business, which is all about selling people what's in demand. Each year approximately 1,800 new funds are launched despite the fact that there are already 27,000 mutual funds, ETFs, and hedge funds available in the United States.[1]

This isn't a new phenomenon. Whatever has done well in the recent past leads to a surge in investor demand. Wall Street is happy to create products to meet that demand and make profits for themselves.

In the 1990s it was technology funds. Following the tech bubble burst, it was market neutral hedge funds. The proliferation in gold and commodities funds came right at the peak of a commodity super cycle. In the aftermath of the Financial Crisis, liquid alternatives that are designed to be lowly correlated to traditional stock/bond portfolios became in vogue.

The investment business (as described above) is very different from the investment profession, which is all about helping people make good decisions and capture excess returns over the long run. It is our job to sort through the flood of new products, the constant noise of the news cycle, and varying updates to research on asset pricing – all to help find solutions that give our clients the best chance of realizing their goals.

When we evaluate a portfolio change, we like to think in the context of Warren Buffett's 20-slot punch card. Buffett says:

> *"I could improve your ultimate financial welfare by giving you a ticket with only twenty slots in it so that you had twenty punches – representing all the investments that you got to make in a lifetime. And once you'd punched through the card, you couldn't make any more investments at all. Under those rules, you'd really think carefully about what you did, and you'd be forced to load up on what you'd really thought about. So you'd do so much better."*

A big part of successful investing is avoiding mistakes and this framework reduces the opportunity for performance chasing or reactionary moves while highlighting only your best ideas. Equally important, this framework emphasizes a patient process and long-term mindset.

We can use any product in the world, but we rarely find a solution that is better than our own after fees and taxes. Although we don't make frequent changes to our portfolios, there is a tremendous amount of work that goes into the continuous due diligence process. ›

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Every week we are presented with a new strategy or fund provider. This is on top of regular due diligence on our existing strategies and holdings. Site visits, meetings, phone calls, and reviewing research are all part of the high level of activity that goes into building a portfolio to meet our clients' needs.

At Plancorp, we are about to make a change to our equity allocation for the first time in several years. This change was born out of a hypothesis that we could lower costs, decrease our number of holdings to enhance portfolio efficiency, and fine tune our portfolio exposures. The hypothesis had nothing to do with outsmarting the market. Similarly, the change has nothing to do with current market conditions or our view on future market movements.

We have spent nearly a full year testing our hypothesis through research, statistical analysis, interviews with academics, and more fund provider meetings than you can possibly imagine. The end result will be an even lower-cost and more efficient portfolio than before.

Stop Watching the Stock Market

The Digital Age has made access to stock market data and real-time portfolio values increasingly easy. The problem with easier access to real-time market data is that investors can lose sight of the big picture as their mental time horizons shorten to match the frequency of feedback rather than that of their planning time horizon.

Loss aversion is a behavioral bias that makes losses hurt about twice as much as a similar sized gain makes us feel good – the result is that investors tend to make poor decisions as a consequence of trying to avoid the pain of a relative or absolute loss.

Myopic loss aversion is the idea that the more we evaluate our portfolios, the higher our chance of seeing a loss and, thus, the more susceptible we are to loss aversion. Additional research[1] shows that investors who frequently check their portfolio value take a less than optimal amount of risk and earn less money.

On the other hand, investors that check their portfolios less frequently are more likely to find gains and, thus, less likely to make bad decisions stemming from loss aversion.

Using historical returns on the S&P 500, you have a 47% chance that the market will be down on any given day. However, if you were to wait longer and look at monthly returns, that percentage drops to 38%. If you only look once a year at the past 12 months of returns, the chance you will see a loss drops to 21%.

The table below shows different rolling periods and the percentage of time you would have historically experienced a positive or negative return.

Rolling Performance for the S&P 500 (1926-2016)

	Positive	Negative
Daily	53%	47%
Monthly	62%	38%
Quarterly	68%	32%
6 Months	74%	26%
1 Year	79%	21%
5 Years	88%	12%
10 Years	94%	6%
20 Years	100%	0%

Most investors have a multi-decade time horizon whether they are just beginning to save, in the middle of their careers, or currently in retirement. However, evaluating your portfolio in quarterly or even annual intervals is making an evaluation as if you have a short-term planning horizon.

We aren't suggesting that people should only look at their portfolios once every ten years – although we wouldn't discourage it – but the worst behaved investors we encounter are those that are evaluating the stock market and/or their portfolios over short time periods.

We believe stock investing requires a long-term time horizon, which we'd define as at least 10-20 years. The long-term feels like an eternity to live through in the moment, but the most basic parts of financial theory look pretty darn good when you allow them time to work.

Understanding Confirmation Bias

Traditional finance models assume that investors always make perfectly rational decisions based on all available information, but behavioral finance recognizes the mistakes we make as a result of cognitive and emotional biases.

One of the biggest biases among professional and individual investors is known as confirmation bias, which is the tendency to seek out information that supports your beliefs and ignore information that contradicts it.

To better understand how this occurs, below is a variation of a popular logic puzzle[1] that uses four cards to test a simple rule: "If the card has a vowel on one side, then it must have an even number on the other side." Which two cards would you turn over to test this rule?

Most people choose A and 4 because these are the cards capable of confirming the statement, but confirming evidence doesn't prove anything – the 4 card has no ability to invalidate the hypothesis. Flipping the 7 card, however, could provide valuable disconfirming evidence – a vowel on the other side means not all cards with vowels have an even number on the other side.

Much like in the card example above, investors tend to gather confirming evidence when making investment decisions rather than evaluate all available information. The impact of confirmation bias is even stronger with a existing belief since you are more likely to quickly accept evidence that supports that existing belief and closely scrutinize evidence that challenges it.

Investors also tend to ask questions in which a positive response would confirm our beliefs. This is problematic because these types of questions tend to be constraining in that the only way to answer them is with supporting data rather than more comprehensive data. Research has also shown[2] that simply asking confirmatory questions can lead to a false sense of confirmation.

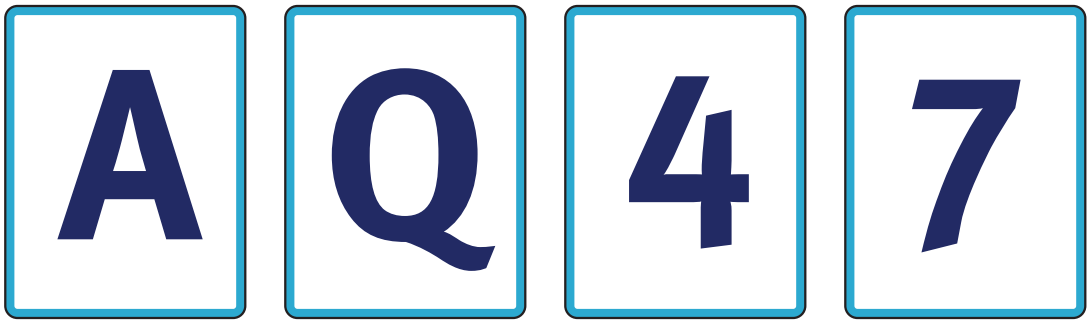
The primary reason we suffer from confirmation bias is that our biological hardwiring makes it is easier to understand confirming data, particularly when the disconfirming data is negatively framed – consider how much easier to comprehend the statement "All Greeks are mortal" versus "All non-Greeks are non-mortals."

Consequently, investors (both professionals and individuals) spend most of their time looking for strategies that "work" or evidence that supports their existing investment philosophy.

There isn't anything wrong with reviewing evidence that supports your investment philosophy, but a significant portion (if not the majority) of your efforts should be dedicated to looking for evidence that conflicts with your way of thinking. That is what a good evidence-based investment approach is all about.

We believe that a quality decision-making process requires good supporting evidence, but the presence of evidence that conflicts with your investment philosophy isn't a bad thing either. The important thing is you keep an open mind because evidence tends to cut in multiple directions and understanding all perspectives reduces the chances of error.

If the card has a vowel on one side, then it must have an even number on the other side.



Which two cards would you turn over to test the rule?

A) A, 4 B) A, 7 C) Q, 4 D) Q, 7

Disadvantages of Individual Bonds

There are some big misconceptions about the use of individual bonds versus bond funds.

Many individual bondholders believe the implications of interest rate fluctuations don't impact them because they will receive their principal value on an individual bond if it is held to maturity. Similarly, some people perceive bond funds to be riskier since they never mature and fluctuate in price every day.

It is true that holding an individual bond to maturity will result in the return of principal – assuming the bond issuer doesn't default – but those nominal dollars will be worth less with inflation and during periods of higher interest rates. Additionally, the lack of price volatility in individual bonds is an illusion. Individual bond prices fluctuate every day, even if held to maturity, but you may not notice if the bond isn't re-priced every day.

It is also true that individual bonds mature and most bond funds do not. However, most individual bonds are part of a bond portfolio that never matures as investors usually reinvest the proceeds of maturing bonds into new bonds.

In other words, a portfolio of individual bonds is actually a form of a bond fund, but with four distinct disadvantages:

1. *Higher Costs*

So, you think your individual bond portfolio is free? Think again.

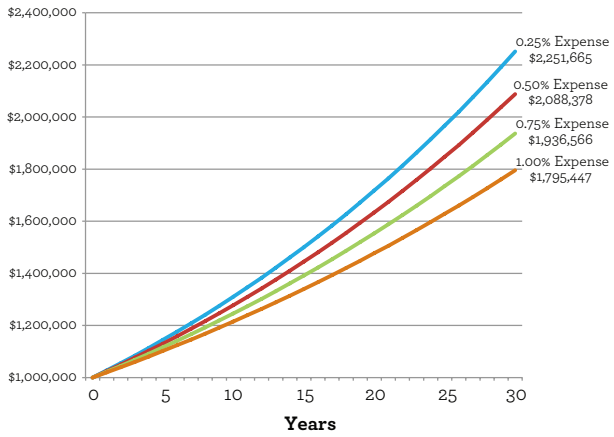
The cost of an individual bond is hidden and very difficult to measure since it is baked into the purchase price and yield. A broker makes money selling a bond to you at a "mark up," or a higher price than they paid. Unfortunately, the bond market isn't a level playing field because most investors (and many financial advisers) don't have the tools to know whether a bond is competitively priced at the time of purchase.

Investment fees matter regardless of asset class, but in a low return area such as bonds, it is arguably more important. If you are paying more than 0.50% in annual expenses for an individual bond portfolio, you are paying too much. Unfortunately a recent study published by Lawrence Harris[1], former chief economist at the Securities and Exchange Commission, estimates that individual investors paid 0.77% to buy corporate bonds.

> *"The bond market isn't a level playing field because most investors don't have the tools to know whether a bond is competitively priced at the time of purchase."*

On a low return asset, these incremental costs can make a big impact over your investing lifetime. Below shows the growth of wealth over 30 years at cost increments of 0.25 percentage points.

Impact of Expense Ratio on 3% Annualized Return Over 30 Years



2. *Cash Drag*

Let's say you own a $100,000 corporate bond yielding 2.5% with interest payments made twice a year. Every six months, that bond will generate $1,250 in interest. Since you can't buy a bond in that small of an increment, you are likely to deposit the cash in a bank and earn next to nothing. Cash drag is the opportunity cost of not being able to reinvest interest and principal on individual bonds in an efficient manner.

A bond fund, on the other hand, holds thousands of bonds with different yields, maturities, and durations.

This means that managers are able to reinvest bond proceeds on a daily basis into new bonds at current market rates. Not only does this eliminate cash drag, but it also allows bond funds to better benefit from fluctuating interest rates as it acts as a daily dollar-cost-averaging mechanism.

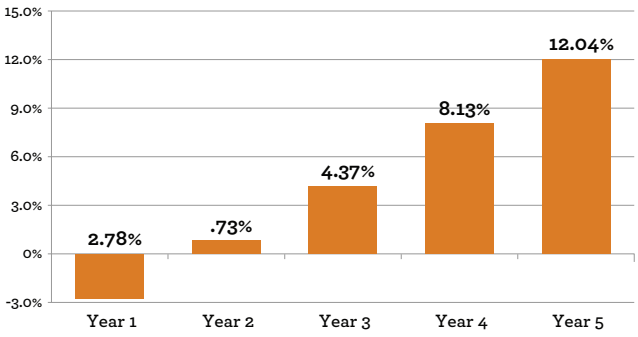
This is important because, contrary to popular belief, rising rates are a good thing for long-term investors. Although rising interest rates are a good thing for all bond investors, it is the bond funds that appreciably benefit from rising rates as they are more efficiently able to reinvest proceeds.

To understand how rising rates help long-term investors, let's assume the Barclays U.S. Aggregate Bond Market Index – which had a yield of 2.61% and duration of 5.89 as of December 31, 2016 – has a one percentage point increase in interest rates across the entire yield curve (also known as a parallel shift). Assuming we reinvest all income received, the chart below depicts the cumulative return as a result of rising rates.

The one percentage point increase in interest rates results in a loss for Year 1, but by Year 2 the cumulative return turns positive because interest and principal are being reinvested at higher rates. Over time, the cumulative return grows even more as the benefit of higher rates compounds.

The cash drag resulting from individual bonds makes it more difficult to take advantage of rising rates whereas a bond fund with thousands of holdings is able to efficiently reinvest income every day.

Cumulative Bond Returns Following One Percentage Point Increase in Interest Rates



3. *Lack of Diversification*

Basic financial theory tells us that risk and return are related, which implies that investors should be compensated for taking additional risk.

Individual bond portfolios are frequently exposed to concentrated position risk – also known as unsystematic or idiosyncratic risk – which provides no additional compensation to investors. This risk could be easily avoided through the cheap diversification that bond funds provide. For example, our typical bond portfolios hold roughly 21,000 positions with an overall expense ratio of just 0.15%.

Broad diversification isn't just about number of holdings. A properly diversified bond portfolio should use funds that contain securities with a variety of interest rates, durations, credit qualities, geographies, etc. As a general rule of thumb, it requires at least $10 million to properly manage a portfolio of individual bonds in a cost efficient, diversified manner.

4. *No Global Exposure*

Global fixed income is the biggest investable asset class and a tremendous source of diversification, but good luck having diversified global exposure using individual bonds.

Using global bonds with hedged currency exposure has historically provided a dramatic reduction in volatility because each country's yield curve is shaped differently and the factors that impact changes in yields are lowly correlated across countries. Additionally, global bonds add to the number of issuers in a portfolio and, thus, diversify among different credit risks.

The table below compares the returns of the Barclays U.S. Aggregate Bond Index to the currency hedged Barclays Global Aggregate Bond Index. As you can see, returns are very similar, but there is a 16.99% reduction in volatility over the historical data set.

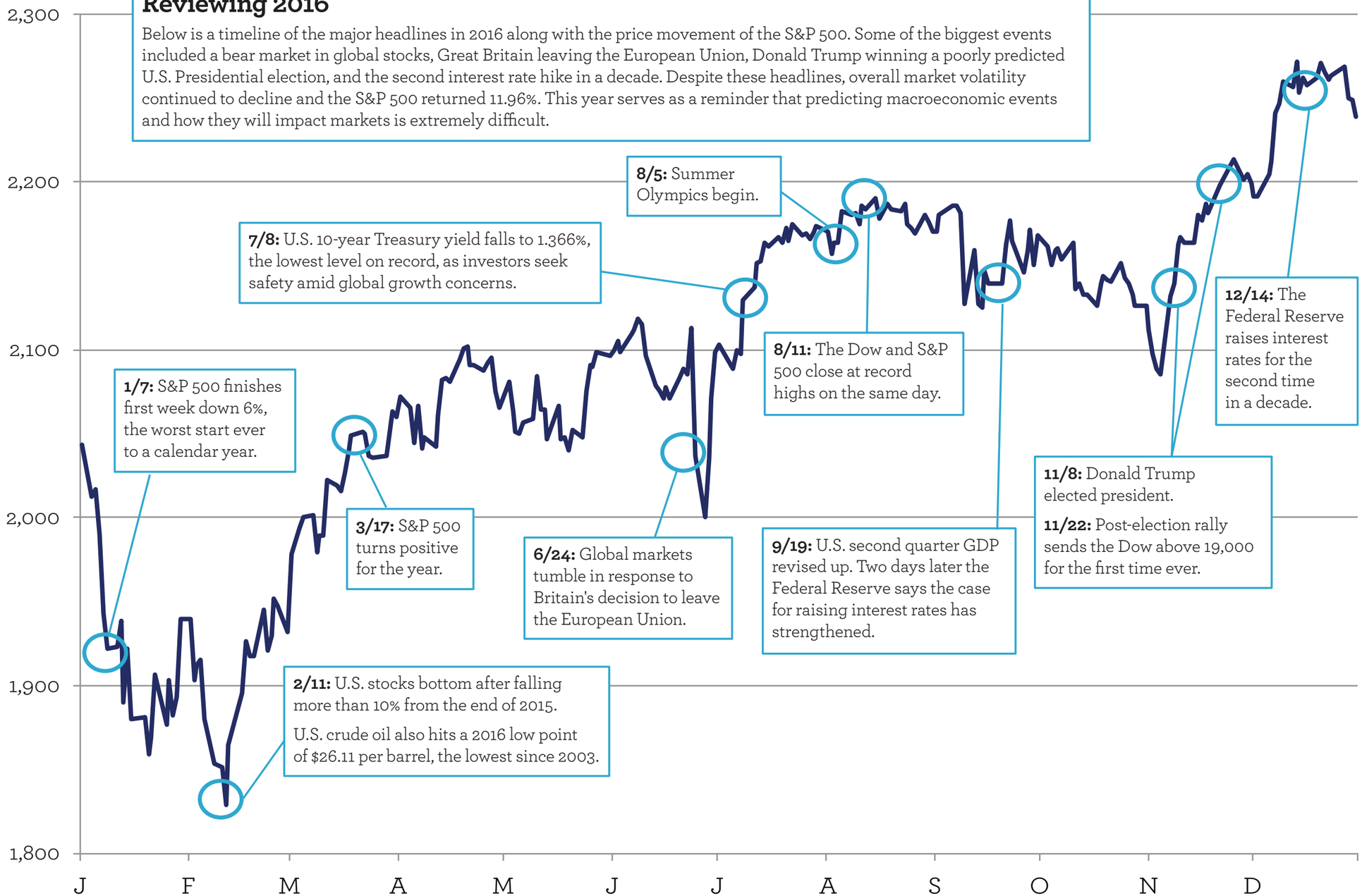
Diversification Benefits of Global Bonds (1990-2016)

	U.S. Bonds	Global Bonds
Average Return	6.12%	6.14%%
Standard Deviation	3.65%	3.03%
Reduction in Volatility		16.99%

However, to benefit from the volatility reduction of global bonds requires hedging currencies through swap transactions. Needless to say, it is extremely rare that an individual investor is able to take advantage of global diversification using individual bonds.

Reviewing 2016

Below is a timeline of the major headlines in 2016 along with the price movement of the S&P 500. Some of the biggest events included a bear market in global stocks, Great Britain leaving the European Union, Donald Trump winning a poorly predicted U.S. Presidential election, and the second interest rate hike in a decade. Despite these headlines, overall market volatility continued to decline and the S&P 500 returned 11.96%. This year serves as a reminder that predicting macroeconomic events and how they will impact markets is extremely difficult.



When Fees Destroy Diversification

Asset allocation is all about strategically diversifying across different types of investments so that all pieces of the portfolio don't rise and fall in unison. The greater the difference in movements between different asset classes, the better the diversification benefit.

The two asset classes that generally have the least similar fluctuations in prices are stocks and bonds, which explains why the broad asset allocation decision is an important one. Within both stocks and bonds, buying a mix of domestic and international securities can improve diversification. Outside of stocks and bonds, we can include additional asset classes such as real estate to further improve the level of portfolio diversification.

Diversification is said to be the only free lunch in investing, but that's not entirely true because the extra fees associated with more exotic asset classes frequently offset the benefits of otherwise attractive diversifiers.

Most people understand the importance of investment costs and accept that diversifying asset classes should have higher investment management fees, but few people understand how much of the diversification benefit fees consume. Consequently, it's common to see people build unnecessarily complex (and costly) portfolios in the name of diversification with unrealistic expectations for returns after fees and taxes.

A recent paper published in Financial Analysts Journal by William W. Jennings and Brian C. Payne[1] compares the incremental benefit of diversification with the incremental cost of such diversification for institutional investors – their results show fees absorbing a shockingly high portion of the diversification benefit.

U.S. equity market exposure explains a significant portion of the return and volatility for different asset classes, while the remaining risk-adjusted "allocation alpha" is the true benefit of an asset class outside traditional U.S. stocks, bonds and cash[2]. Because allocation alpha is independent of overall market movement and does not rely upon active management, we believe investors should only pay fees for the diversifying portion of an asset class.

The graphic on page 9 is from the Jennings and Payne article, which compares the cost of asset class exposure (in color) relative to the diversification benefit known as "allocation alpha." Since the entire pie is considered to be the diversification benefit, the tan portion can be interpreted as the after-fee diversification benefit.

As you can see, fees (in red, blue, and green) can eat up a significant portion. Exposure to allocation alpha is valuable and should come at some sort of cost; however, fees consuming more than 50% of the benefit make it difficult to justify the inclusion in a portfolio.

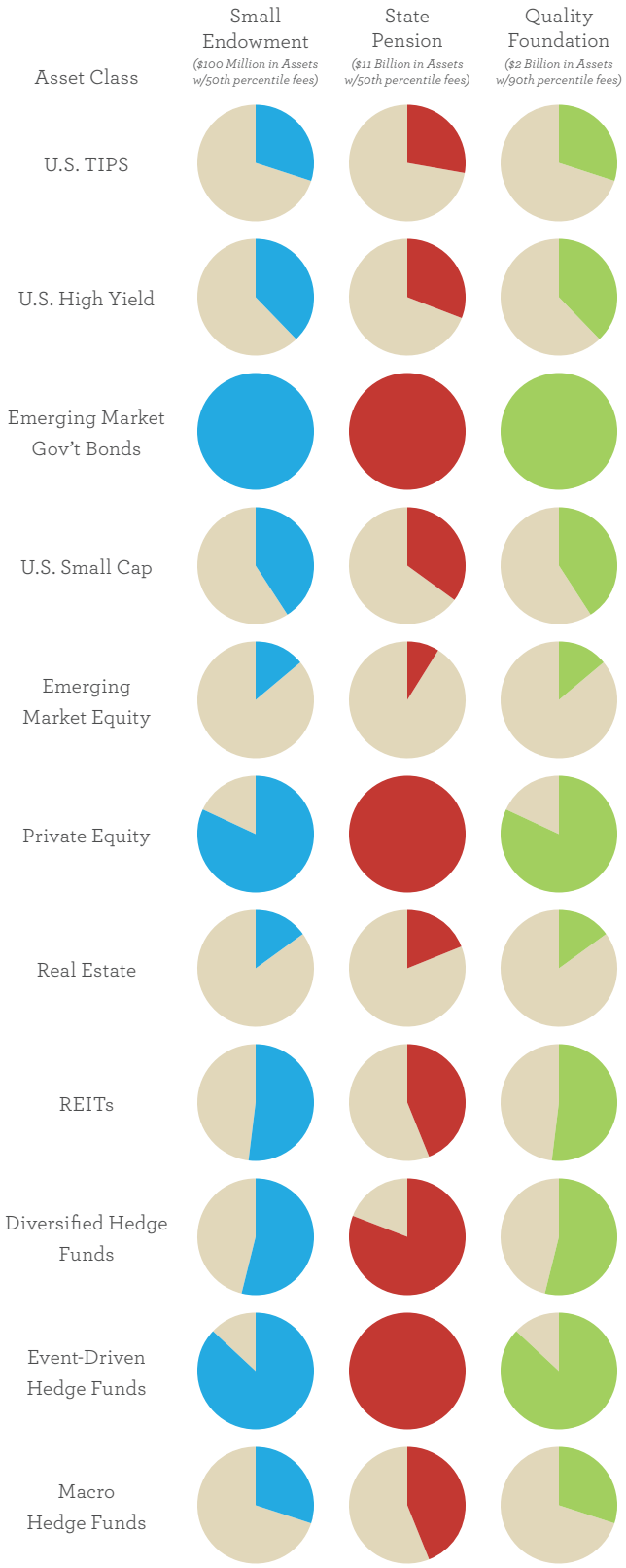
Jennings and Payne find that of the 45 asset classes in J.P. Morgan's Long-Term Capital Market Return Assumptions[3], only 27 have positive allocation alpha and fees that are below 50% of the alpha. When using the more comprehensive Fama French Five-Factor model to derive allocation alpha – adjusting for the market, size, value, term, and credit premiums – the number of acceptable asset classes shrinks to 22!

It is also important to note that this analysis focuses on institutions that don't pay taxes, but diversifying asset classes tend to be less tax-efficient. Taxes will reduce allocation alphas for individual investors, which means that fees will consume an even bigger portion of the after-tax benefit of diversification.

There are several practical implications for making investment decisions

- Don't pay fees for what can be accessed cheaply through simple equity market performance.
- Incremental diversification benefits shrink as the number asset classes increases.
- Your mix of core stocks and bonds will drive return and volatility more than diversification alpha.
- Use passive exposure to diversifying asset classes if possible.
- When the opportunity arises, consider funds that combine multiple asset classes to reduce costs and taxes.
- Avoid fund-of-fund expenses.

Fees Slice (in colors) of Allocation Alpha



Key considerations when determining suitable asset classes to include in the portfolio:

Share of allocation benefit absorbed by costs.

Diversification is properly considered only in light of its costs. In many cases, the extra fees associated with exposures to more exotic asset classes can offset the benefits of otherwise attractive diversifiers. As a baseline, we consider fees to be unreasonable if they eat up more than 50% of allocation alpha.

Exposure to return premiums.

Investors can target different levels of expected return by tilting the portfolio towards areas of the equity and fixed income markets that are shown by empirical research to lead to higher average returns over time.

Global diversification versus home bias.

Market frictions associated with investing abroad mean that some level of home country bias may make sense.

Sub-asset class risk placement.

In general, we prefer taking more risk in the equity portfolio than the fixed income portfolio. The expected returns from targeting risk premiums in the equity portfolio are much higher than that of fixed income. In other words, you get better compensated for risk taking in stocks compared to bonds.

The primary purpose of your bond allocation is the decrease the volatility of the portfolio. When stock markets experience a sharp fall, bonds act as a diversifier and reduce the overall volatility of the portfolio. This relative lack of volatility is the primary reason investors have fixed income exposure in their portfolios.

An Examination of Risk

There are many definitions of risk, but most of the conversations we have use the world "risk" to describe the volatility of returns.

When given a choice of two portfolios with identical returns, a rational investor should choose the portfolio with less risk (i.e. lower volatility). A good example is the table below that I am borrowing from The Investment Answer[1] (a quick and easy read that I highly recommend for everyone).

	Low Volatility		High Volatility	
Year	Growth of $100,000	Annual Return	Growth of $100,000	Annual Return
1	110,000	10.0%	134,000	34.0%
2	115,500	5.0%	121,940	-9.0%
3	131,670	14.0%	153,644	26.0%
4	143,520	9.0%	129,061	-16.0%
5	162,178	13.0%	169,070	31.0%
6	165,421	2.0%	167,380	-1.0%
7	185,272	12.0%	197,508	18.0%
8	214,916	16.0%	173,807	-12.0%
9	227,811	6.0%	210,306	21.0%
10	257,426	13.0%	227,313	8.0%
Average Return		**10.0%**		**10.0%**
Compound Return		**9.9%**		**8.5%**
Standard Deviation		**4.5%**		**18.6%**

The fancy statistical name for risk is ***standard deviation***, which is a measure of how much an investment's return varies from its average return. In this example, both investments have an average return of 10%, but their drastically different levels of volatility (as measured by standard deviation) lead to different compound returns and, thus, different levels of wealth.

To understand the difference between compound return and average return, let's assume you invest $100 in Year 1 and lose 50%, thus leaving you with $50. In Year 2, you earn a 50% return on your $50, which means the investment is now worth $75. The average return for the two years was zero (-50% in Year 1 and +50% in Year 2), but because of the volatility, the compound return was -25%.

Volatility isn't the enemy, it is the cost of higher returns. The more volatile an investment is expected to be, the higher the return we should expect to earn. That said, we don't want to build a portfolio that overemphasizes high risk and return investments because the resulting volatility is too harmful to compound returns – it is also unnecessarily harmful to your ability to sleep at night. This requires us to balance the tradeoff between risk and return when we build a portfolio to match your personal risk tolerance.

Measuring The Tradeoff Between Risk & Return

The problem with the example above is that we rarely compare multiple portfolios with identical returns. In order to make an apples-to-apples comparison, we must make an adjustment for risk using the ***Sharpe Ratio***. The technical description of the Sharpe Ratio is it allows us to measure risk-adjusted returns, or the amount of additional return per unit of risk.

In simpler terms, the Sharpe Ratio is a useful way to gauge the risk/return tradeoff. The higher the Sharpe Ratio, the better the risk/return tradeoff. This is useful because one portfolio may be able to achieve higher returns, but it is only a good investment if the higher returns don't come with too much additional risk.

Let's look at an example. Below we have the Sharpe Ratio equation followed by a table showing four portfolios with different returns and standard deviations. In this example, we use the Sharpe Ratio to identify the portfolio with the best risk-adjusted returns:

$$\text{Sharpe Ratio} = \frac{(\text{Average Annual Return} - \text{Benchmark Portfolio Return}^*)}{\text{Standard Deviation}}$$

** Benchmark Portfolio Return (risk-free rate) in this example is 1%.*

	Average Annual Return	Standard Deviation	Sharpe Ratio
Portfolio A	11%	10%	1.00
Portfolio B	11%	8%	1.25
Portfolio C	15%	10%	1.40
Portfolio D	22%	16%	1.31

Portfolio A and Portfolio B have identical returns, so we know to choose the fund with the lower volatility, which is Portfolio B. We would expect Portfolio B to have a higher Sharpe Ratio because it earns a higher return and has lower volatility (standard deviation). Portfolio B has a higher risk-adjusted return and, thus, is the preferred over Portfolio A.

Now let's compare Portfolio B and Portfolio C. Portfolio C offers a higher return than Portfolio B, but it is also more volatile. This is the perfect scenario to use the Sharpe Ratio. Remember: a higher Sharpe Ratio is better and indicates higher risk-adjusted returns. Portfolio B has a Sharpe Ratio of 1.25 and Portfolio C has a Sharpe Ratio of 1.40, which means that Portfolio C earns a higher risk-adjusted return than Portfolio B.

Finally, Portfolio D has the highest return and the highest volatility of the four options. Using the Sharpe Ratio, we can see that Portfolio D has a higher risk-adjusted return than Portfolio A and Portfolio B; however, the compensation for taking on additional risk assumed in Portfolio D is not as great as Portfolio C. The Sharpe Ratio indicates that Portfolio C offers the highest risk-adjusted return and is the best investment option.

"Our objective at Plancorp is to create a portfolio with an amount of risk that generates sufficient profit, but still allows you to sleep at night."

The Sharpe Ratio is one of the many tools we use internally to evaluate investment funds, strategies, and assets classes in client portfolios. A variation of the above ratio is to use a different Benchmark Portfolio, such as an index (e.g., S&P 500) instead of the risk-free rate. However, this is less useful when comparing investments across different asset classes. Another related tool we can use is the Sortino Ratio, which focuses specifically on downside volatility.

To summarize, we started our discussion of risk by explaining that an investor should select the least risky portfolio when choosing between portfolios with identical returns. Given that it is rare for all portfolios to have the exact same returns, our goal is to generate the best risk-adjusted return. Volatility is the cost of higher returns and the Sharpe Ratio helps us ensure we get the most bang for our buck.

The next piece of the puzzle is understanding your personal risk tolerance. Even if a high-risk investment earns a enough return to justify the volatility, some investors are unable or unwilling to take such risk. Our objective at Plancorp is to create a portfolio with an amount of risk that generates sufficient profit, but still allows you to sleep at night.

Assessing Risk Tolerance

An investor's risk tolerance is primarily determined by their willingness and ability to take risk. Self-assessing risk tolerance is difficult for individuals because of the emotions that are intertwined with investing. Even the most self-aware individuals could benefit from having an outside source assess their risk profile.

Ability To Take Risk

Measuring an investor's ability to take risk is an objective process. The goal is to determine how much volatility a portfolio can withstand and still meet the investor's goals. Ability to take risk is driven by time horizon, liquidity needs, size of human capital, and goal/lifestyle flexibility.

Investors with a short time horizon have less ability to take risk because they have less time to recover from poor short-term performance. Longer time horizons allow a portfolio value to fluctuate more because the investor doesn't need to withdraw money in a down market. All else equal, as time horizon increases, the investor's ability to take risk increases.

Liquidity needs are measured by the size of expenditures relative to the size of the portfolio. For example consider two investors that both are beginning retirement at age 65 with a $5 million portfolio. Investor A requires $300,000 per year from the portfolio to meet annual living expenses while Investor B requires only $150,000.

An investor requiring an annual withdrawal rate of 2% is able to take more risk than someone requiring an annual withdrawal rate of 5%. Having high liquidity needs relative to the size of the portfolio reduces the amount of loss the portfolio can sustain and still continue to meet expenditures.

An investor's human capital can be viewed as their future earnings potential. An investor that is approaching retirement has relatively low human ›

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capital whereas a younger investor with multiple decades of work remaining is said to have high human capital. The greater an investor's human capital, the greater their ability to take risk. An investor with high human capital can offset the portfolio losses and volatility with their future earnings. In retirement, an investor has little to no human capital because he/she frequently does not have earnings outside of the portfolio.

Finally, lifestyle flexibility can modestly increase the ability to tolerate risk. The difficulty with relying on lifestyle flexibility is that most investors believe it will be easier to cut back on their lifestyles than it really is. There are a two steps that can help increase and define lifestyle flexibility. First, financial advisors can model for higher retirement spending levels than the investor currently uses. This allows for some additional cushion to protect the investor's comforts in a down market. Secondly, investors should rank the importance of their goals and draw a line between those that are critical and those that are considered a luxury.

Willingness To Take Risk

Gauging willingness to take risk is difficult to accurately assess on your own. An unbiased investment professional can be a big help here. Because measuring an investor's willingness to take is risk is a subjective process, there are fewer hard and fast rules available.

For a financial advisor, the process starts with listening to an investor's statements regarding their willingness to take risk. These statements must be taken with a grain of salt since risk means different things to different people. For example, one person might consider the ability to withstand a 15% portfolio loss as a high risk tolerance whereas another person considers the ability to withstand a 40% portfolio loss as high risk tolerance. Other people simply believe that they have a high risk tolerance because they own of stocks. In my experience, the more than someone talks about risk, the more risk averse they tend to be, regardless of their self-assessed risk tolerance.

Reviewing past investment statements can provide some clues about an investor's willingness to take risk. Was the investor buying or selling in early 2009? Does the investor trade heavily in volatile markets? What has the typical stock/bond allocation been over time?

The investor's profession can offer a glimpse into their experience with risk taking. For example, a tenured professor with a steady salary probably has less experience taking risk than a business owner that has to take regular financial risks as part of their daily lives. This isn't a one-size-fits-all approach, but it can provide some useful hints for determining willingness to take risk.

There are lots of versions of risk tolerance questionnaires, but these can provide flawed results if investors are biased by the wording of the question or order of answers. They aren't completely without merit, but shouldn't be the sole way of measuring willingness to take risk. Frequently, the most important questions are asked when going through the financial planning process.

SOURCES AND DISCLOSURES:

S&P 500 Index is widely regarded as the best single gauge of the U.S. equities market, this market-capitalization-weighted index includes a representative sample of 500 leading companies in the foremost industries of the U.S. economy and provides over 80% coverage of U.S. equities.

The Barclays U.S. Aggregate Bond Index® covers the USD denominated, investment-grade, fixed-rate, and taxable areas of the bond market. This is the broadest measure of the taxable U.S. bond market, including most Treasury, agency, corporate, mortgage-backed, asset-backed, and international dollar-denominated issues, all with maturities of one year or more.

The Currency-Hedged Barclays Global Aggregate Bond Index® is a flagship measure of global investment grade debt from twenty-four local currency markets. This currency-hedged benchmark includes treasury, government-related, corporate and securitized fixed-rate bonds from both developed and emerging markets issuers, all with maturities of one year or more.

Index performance returns do not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index.

PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS. Investing involves risk. It should not be assumed that recommendations made in the future will be profitable or will equal the performance shown. Investment returns and principal value of an investment will fluctuate and losses may occur. Diversification does not ensure a profit or guarantee against a loss.

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