



Has Passive Won?

By: Robert Klosterman, CEO & Chief Investment Officer

Over the past few years the best way to get a heated discussion going with a group of investment geeks was to initiate a debate on the relative merits of Active versus Passive investing styles. The proponents of the active case argue the case that by selecting the best companies it only is reasonable that they will perform better over time and provide adequate excess returns over a benchmark net of fees and expenses. Makes sense...Right?

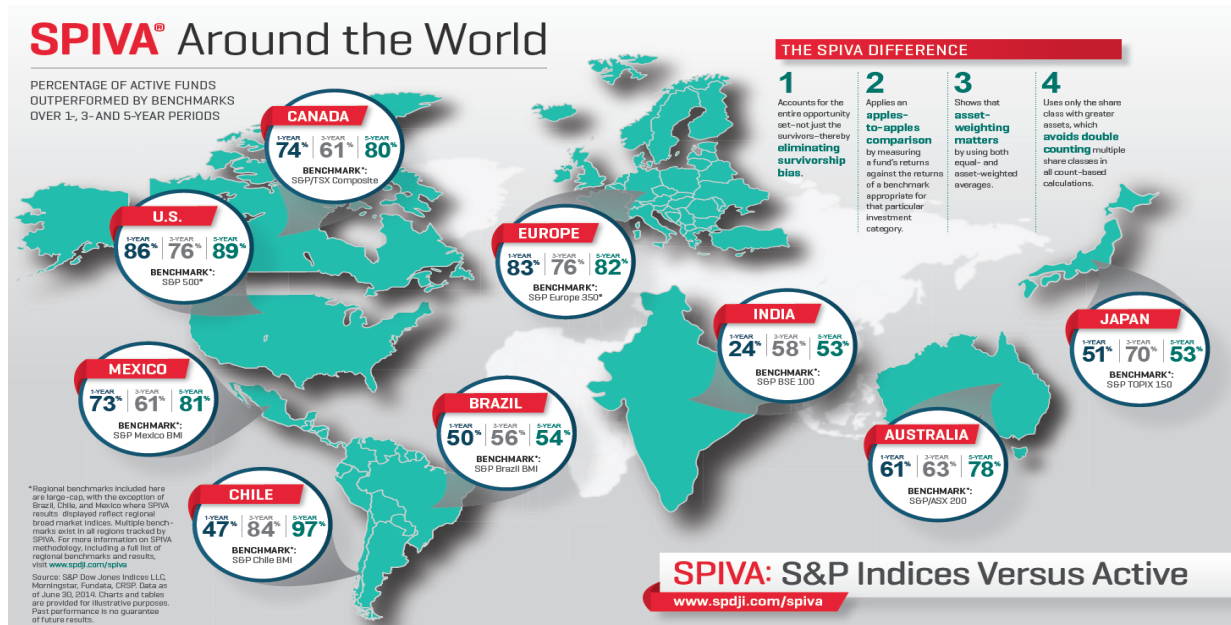


While it makes sense intuitively, the data does not bear this notion out in reality as very few active managers have outperformed over the short, medium or long term. The flow of funds towards passive index funds and ETF's over the past few years have created demand for lower quality equities that might not have existed if the amount of funds invested between active and passive styles had been neutral. Of course, much of this has occurred in a bull market environment since 2009. One can only guess at what might happen if the tide of cash inflows were to change to more money going to active managers than passive.

More money going to active strategies may take much more imagination and hope based on the current trends. New Department of Labor regulations accentuating and clarifying the fiduciary responsibilities of the trustees of retirement plans and their investment strategies, especially 401(K) plans, could likely exacerbate the flow of funds even further as more retirement plan trustees focus on lowering the cost of their employer sponsored retirement plans. The investment management costs will become increasingly visible and provide further motivation to reduce costs via indexing/passive strategies.

At the same time, it has become increasingly difficult for the active manager to deliver excess returns that would justify the additional costs their strategies need to justify the work involved to deliver the results. Despite gargantuan efforts of active managers the results show the significant headwinds active

managers face in today's world. Standard & Poor's Index Versus Active report, aka SPIVA, shows that benchmarks outperformed active strategies significantly.

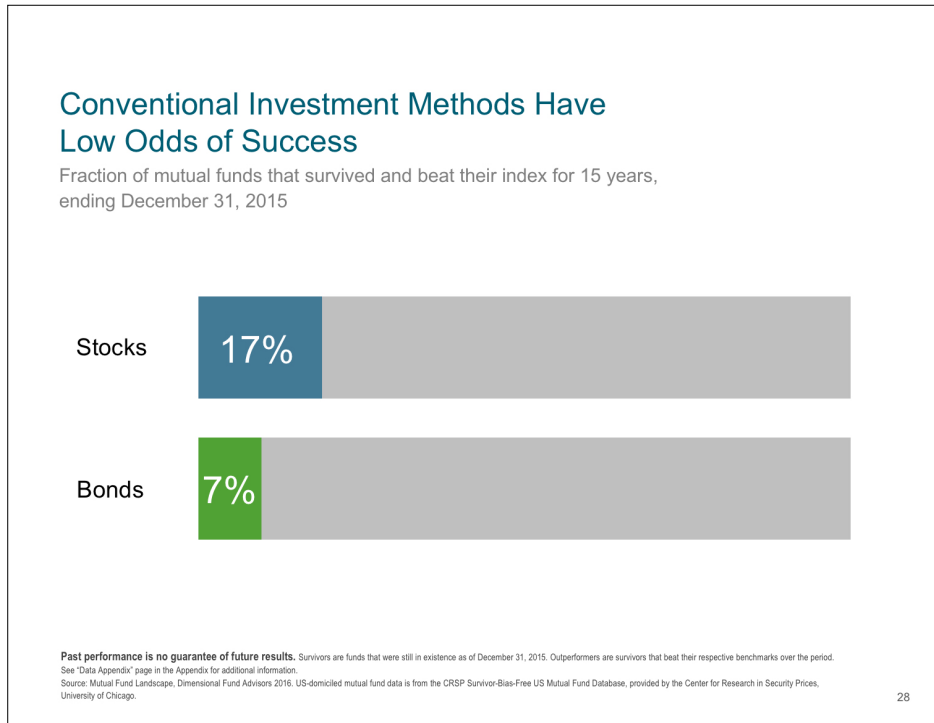


It is most pronounced in the US with benchmarks outperforming 89% of active managers over a five year time period. At the same time, it is interesting to note that outside of the US and Developed International Markets it appears that the opportunity for outperformance is greater. It would appear that the markets are, in fact, more efficient in the developed regions of the world and less efficient in the emerging markets. Yet, even in the emerging markets there is roughly a coins flip chance of an active manager outperforming over five years. The numbers are even more discouraging when looking over multiple 5 year time periods. The ability to outperform consistently drops off into the single digits percentage wise.

It would appear that the more efficient the markets are, the harder it is to find that unique special opportunity that will deliver the excess returns investors seek. It wasn't very long ago that it was commonly accepted that investing overseas offered benefits in diversification. Investment professionals pointed to the different economic cycles and the greater inefficiency of the International markets as the reason. As the overseas regions had more analysts following them the information became better, correlations became much closer and efficiency of the market increased. Another way to think of it is that every morning 400,000 really smart people (with MBA's, PhD's, etc.) wake up and look at the world universe of 30-40,000 stocks, each thinking that they will find something the other 399,999 will not find. Yes, some will find or stumble into something that will make a difference. Yet, doing it consistently is the challenge and the evidence is weak to support the notion that active management has a better than even chance of making up for the additional costs and deliver value consistently.

Survivorship Bias:

While the data above strongly suggests that active management in efficient markets has headwinds the numbers might possibly be skewed in their favor due to survivorship bias in the numbers. The concept of survivorship bias recognizes that there are some funds that simply go away over time due to mergers or simply closing due to poor performance. The numbers of funds that do "go away", while not the majority, do have a level of significance that investors should be aware of.

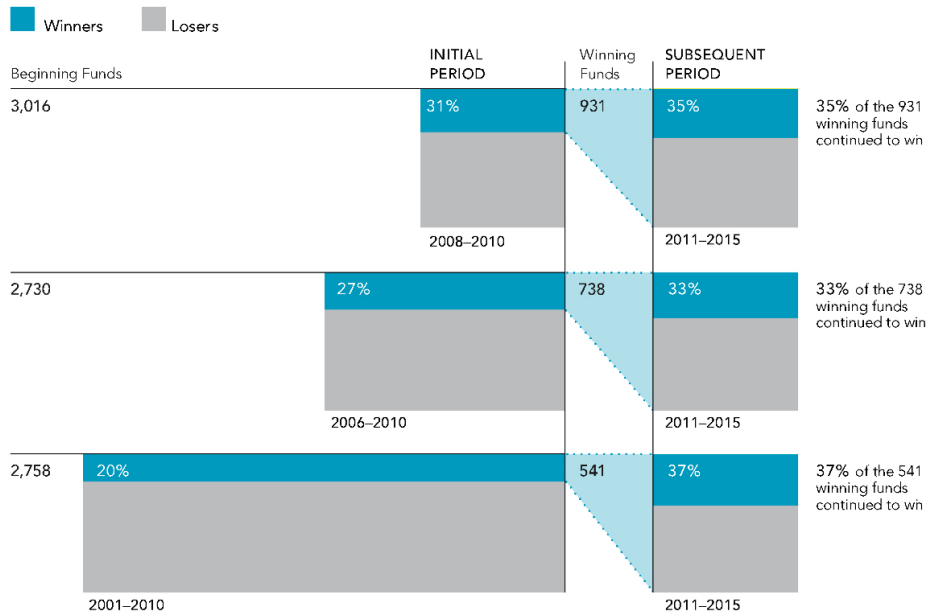


Well then. Let's just pick the winners. With modern technology the winners are easy to identify and allocate in a portfolio, right? I used to think so too. The evidence of this working both from an academic and practical application in portfolios is weak at best. As the chart below shows, even the winners have a low incidence of continuing their success over ensuing time periods. In other words, just when you have the confidence that they continue to win going forward their world changes and the probability of under-performance is 60-70% over the next 5-15 years. Not the kind of odds most would favor.

Most investors would prefer an approach with higher probability of success with evidence of working. The challenge is that the financial services industry is peppered with thousands of back-tested approaches that appear to work. Unfortunately, most do not survive the rest of time and practical application in a portfolio. Many are focused on a quantitative trading strategy that was "discovered" by testing a scenario over a period time. Using "proprietary" formulas the implication is that the firm has found the 'secret sauce' that the other 399,999 analysts will not find. In many cases, the "secret sauce" is discovered and the situation being exploited is discovered and the strategy ends up being a crowded trade and ceases to be effective.

Do Winners Keep Winning?

Past performance vs. subsequent performance—Equity Funds



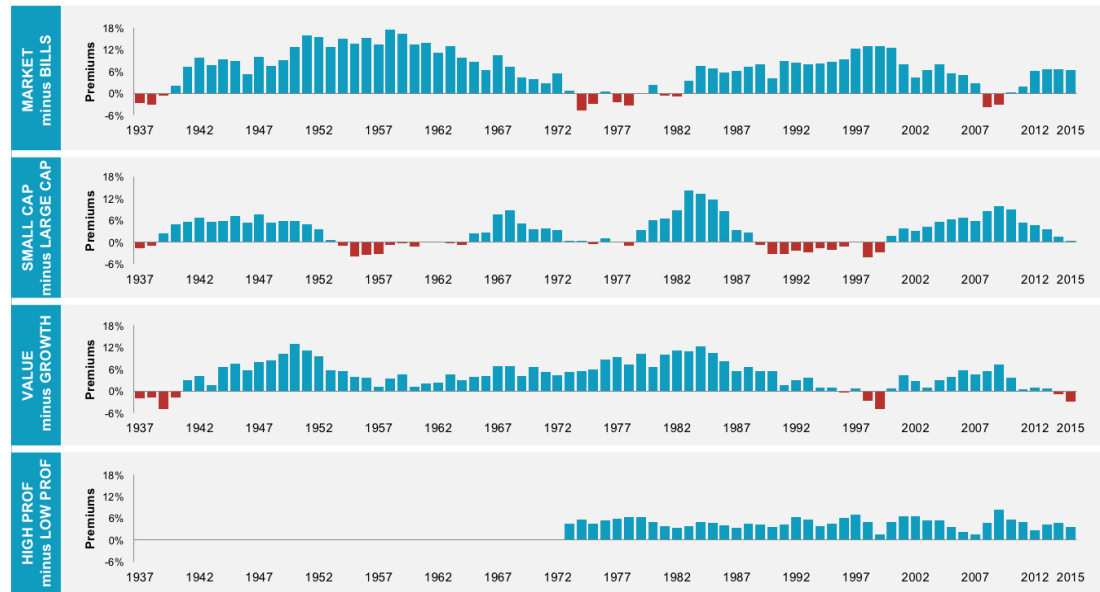
The sample includes funds at the beginning of the three-, five-, and 10-year periods, ending in December 2010. The graph shows the proportion of funds that outperformed and underperformed their respective benchmarks (i.e., winners and losers) during the initial periods. Winning funds were re-evaluated in the subsequent period from 2011 through 2015, with the graph showing the proportion of outperformance and underperformance among past winners. (Fund counts and percentages may not correspond due to rounding.) **Past performance is no guarantee of future results. See Data appendix for more information.** US-domiciled mutual fund data is from the CRSP Survivor-Bias-Free US Mutual Fund Database, provided by the Center for Research in Security Prices, University of Chicago.

42

Investors need a better way. One that has been tested and is not reliant on so called "secret sauces" but instead one that is backed by serious academic review and acceptance. The study put forth by Nobel Laureate Professor(s) Eugene Fama and Kenneth French identified three factors that exhibited consistency in explaining portfolio returns. Using stock prices back to the 1880's Fama and French observed that the mere exposure to equities explained about 70% of the returns. In other words, just being in the market puts you in a good starting spot and is consistent with the investing in the index approach to the market. The added cost of selecting individual securities was a strong headwind to overcome a simple broad-based investing strategy. The additional exposure beyond an index increased the probability of achieving desired results.

Historical Observations of 10-Year Premiums

Equity, size, relative price, and profitability: US Markets



Information provided by Dimensional Fund Advisors LP.

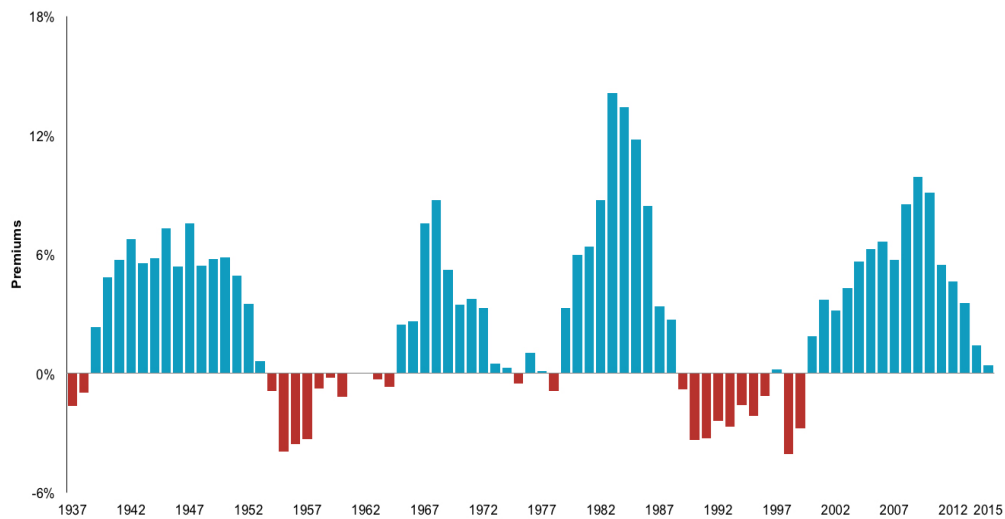
In US dollars. 10-year rolling equity premium is computed as the 10-year annualized compound return on the Fama/French Total US Market Index minus the 10-year annualized compound return of the one-month US Treasury Bill. 10-year rolling size premium is computed as the 10-year annualized compound return on the Dimensional US Small Cap Index minus the 10-year annualized compound return on the S&P 500 Index. 10-year rolling relative price premium is computed as the 10-year annualized compound return on the Fama/French US Value Index minus the 10-year annualized compound return on the Fama/French US Growth Index. The 10-year rolling profitability premium is computed as the 10-year annualized compound return on the Dimensional US High Profitability Index minus the 10-year annualized compound return on the Dimensional US Low Profitability Index. Fama/French indices provided by Ken French. The S&P data is provided by Standard & Poor's Index Services Group. Dimensional indices use CRSP and Compustat data. Index descriptions available upon request. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP. 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.

70

The second factor was that investing in smaller cap securities showed return premiums in many but not all years. This provides exposure to the next big thing that is not easily identified in advance. Few thought Google or Facebook would be successful early on. In fact they were often panned as silly ideas not worthy of investment. While many have gone by the wayside the exposure to many reduces the risk and gives investors the exposure to companies that will make a difference in our world and ultimately be rewarded.

Historical Observations of 10-Year Premiums

Small cap minus large cap: US Markets
1937–2015



Information provided by Dimensional Fund Advisors LP.

In US dollars. The 10-year rolling size premium is computed as the 10-year annualized compound return on the Dimensional US Small Cap Index minus the 10-year annualized compound return on the S&P 500 Index. Dimensional indices use CRSP and Compustat data. The S&P data is provided by Standard & Poor's Index Services Group. Index descriptions available upon request.

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.

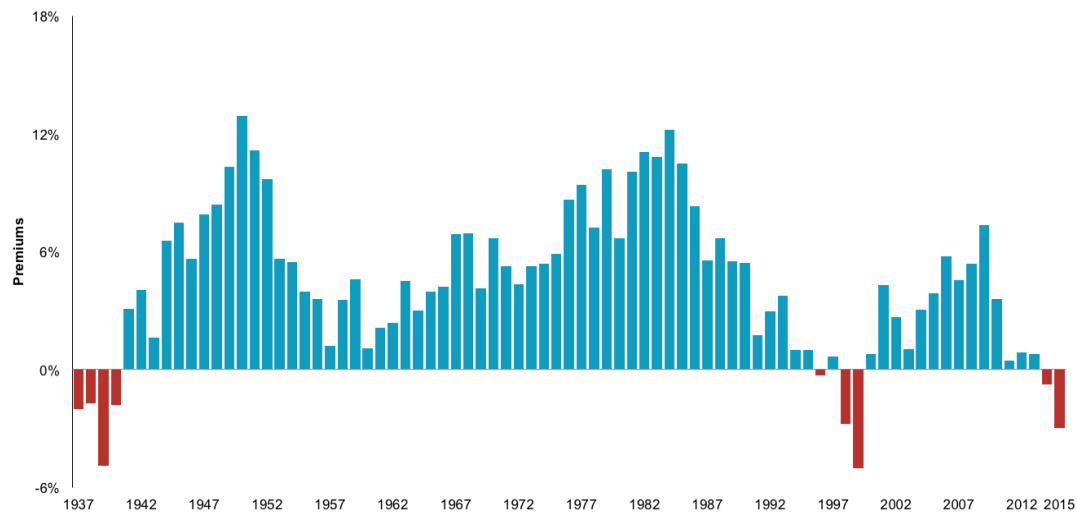
74

The third factor was a tilt towards companies that showed better value compared to others. While intuitive that under-valued companies should perform better over time some methodologies too often lead to so-called "value traps". In other words, these companies appear to be cheap but due to their circumstances should command a lower price. There are multiple valuations methodologies including Price to Earnings (P/E), Price to Cash to Cash Flow (P/CF) etc. Many can provide information to investors that give the appearance of over or under-valuation. In the Fama-French study, the methodology that was used was Price to Book Value. Book value is much less volatile to other methodologies and has been more effective in determining return premiums over a period of time.

Historical Observations of 10-Year Premiums

Value minus growth: US Markets

1937–2015



Information provided by Dimensional Fund Advisors LP.

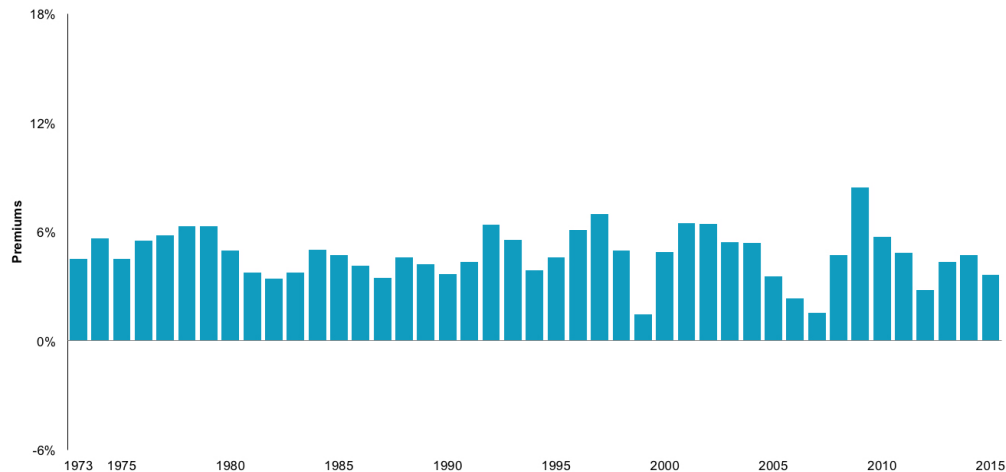
In US dollars. The 10-year rolling relative price premium is computed as the 10-year annualized compound return on the Fama/French US Value Index minus the 10-year annualized compound return on the Fama/French US Growth Index. Fama/French indices provided by Ken French. Index descriptions available upon request. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP. 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.

75

A fourth factor has been recently been added, profitability. Turns out that companies that make more money do well. Combined with the other three factors return premiums have been achieved.

Historical Observations of 10-Year Premiums

High profitability minus low profitability: US Markets
1973–2015



Information provided by Dimensional Fund Advisors LP.

In US dollars. The 10-year rolling profitability premium is computed as the 10-year annualized compound return on the Dimensional US High Profitability Index minus the 10-year annualized compound return on the Dimensional US Low Profitability Index. Dimensional indices use CRSP and Compustat data. Index descriptions available upon request.

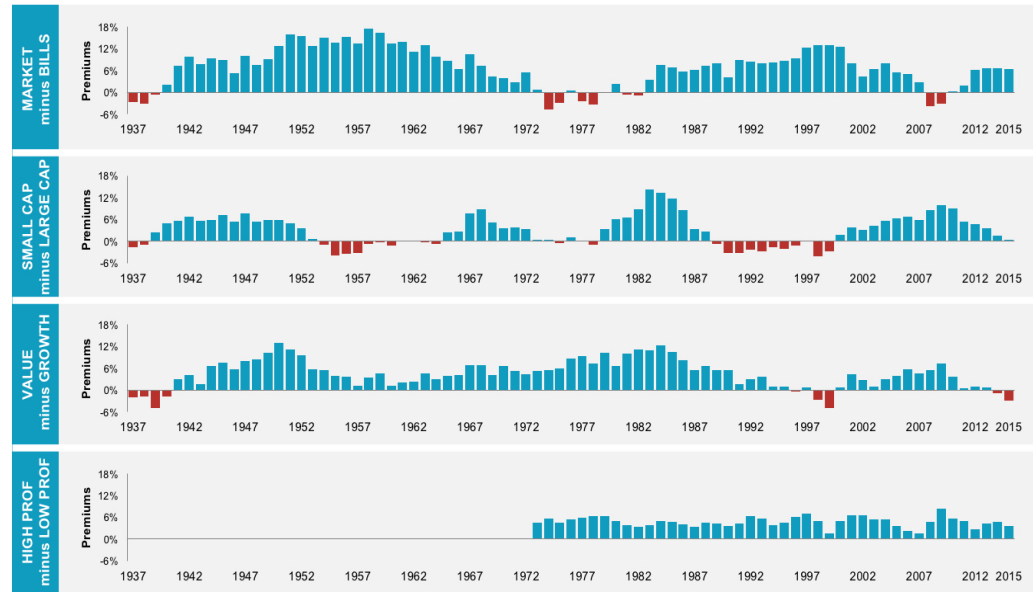
Indices are not available for direct investment. Their performance does not reflect the expenses associated with the management of an actual portfolio. Past performance is no guarantee of future results.

76

Note in the chart below that not all of these academic reviewed and accepted factors perform the same during any particular time period. Broad based diversification has proven to help reduce volatility. That being said, recent observations have shown that as the market styles have become more efficient that correlations between different asset classes have moved closer together and the diversification benefit has been muted but not altogether gone.

Historical Observations of 10-Year Premiums

Equity, size, relative price, and profitability: US Markets



Information provided by Dimensional Fund Advisors LP.

In US dollars. 10-year rolling equity premium is computed as the 10-year annualized compound return on the Fama/French Total US Market Index minus the 10-year annualized compound return of the one-month US Treasury Bill. 10-year rolling size premium is computed as the 10-year annualized compound return on the Dimensional US Small Cap Index minus the 10-year annualized compound return on the S&P 500 Index. 10-year rolling relative price premium is computed as the 10-year annualized compound return on the Fama/French US Value Index minus the 10-year annualized compound return on the Fama/French US Growth Index. The 10-year rolling profitability premium is computed as the 10-year annualized compound return on the Dimensional US High Profitability Index minus the 10-year annualized compound return on the Dimensional US Low Profitability Index. Fama/French indices provided by Ken French. The S&P data is provided by Standard & Poor's Index Services Group. Dimensional indices use CRSP and Compustat data. Index descriptions available upon request. Eugene Fama and Ken French are members of the Board of Directors for and provide consulting services to Dimensional Fund Advisors LP. 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.

70

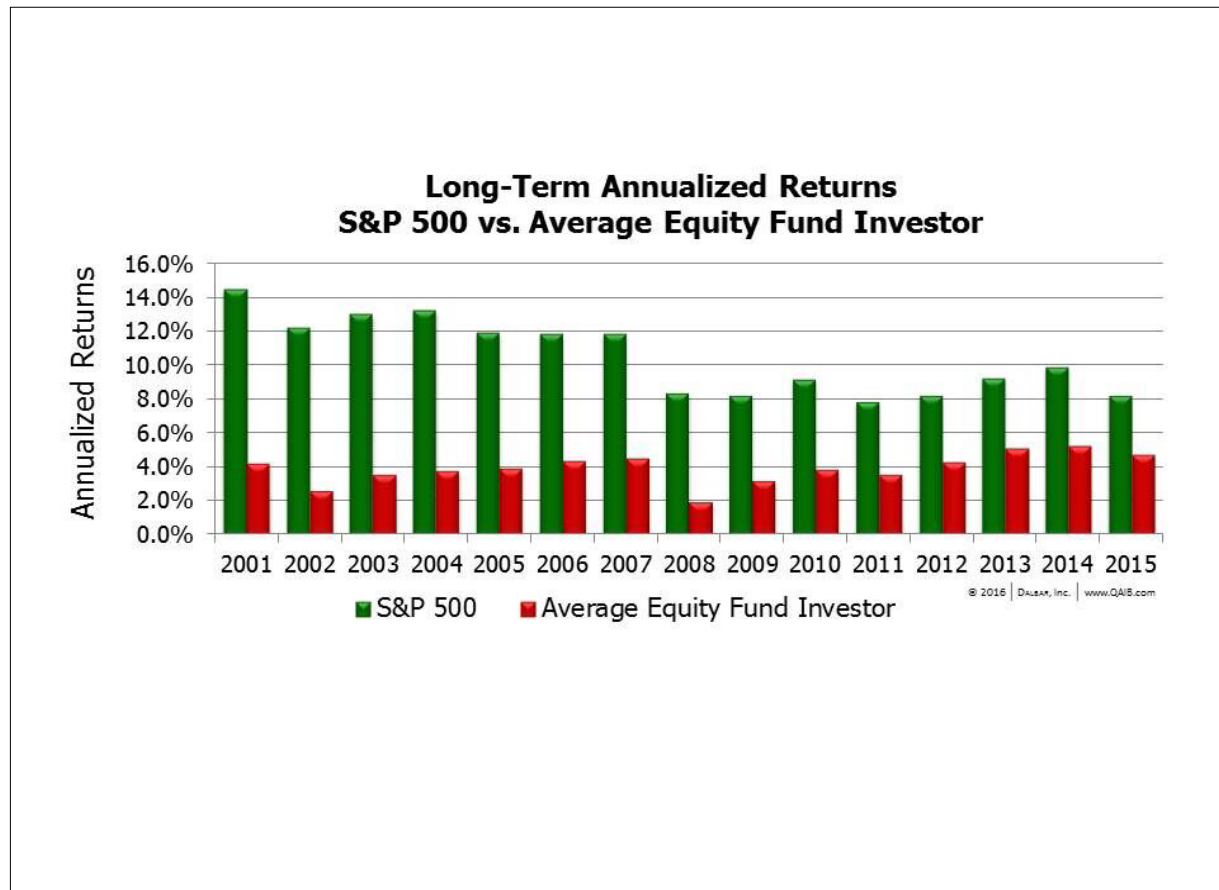
Four principles guide the design of investment portfolios. The four things that matter to investors are:

1. Inflation
2. Costs
3. Taxation
4. Volatility

The approach explored so far in this paper answers the inflation, costs and taxation issues fairly well. Exposure to equities has consistently provided returns higher than inflation. Using a broad-based strategy based on long-term factor based investing reduces turnover and consequently trading costs, taxable events and low management expenses. Sound, evidenced based principles that have been reviewed by the academic and accepted by the academic community.

What about number four, volatility? Since correlations have become closer to each other there is some benefit to the various asset classes but volatility is a major issue impacting investors in a negative

manner. Of course, no one minds upside volatility. Bring it on! Here, the emotions often kick in when the downside becomes prevalent causing investors who identify themselves as long-term investors to make short-term, often damaging, decisions.



Investor decisions have been proven over multiple time periods to be their own worst enemy. Note the gap between investor returns and index returns over time. Volatility matters a great deal in determining investor staying power. Some rely on fixed income such as CD's or bonds to avoid volatility but after a 30-year bull market in bonds and historically low interest rates this defense does little to assist against inflation and if interest rates do rise will still be exposed to volatility.

It is important to start with the notion that all investing opportunities are not limited to the stock and/or bond markets. While the stock and bond markets will make up a significant percentage of an investors allocation there are considerable opportunities in the alternative investment category.

Personally, I have struggled with the term Alternative Investments since it does not describe a particular investment or type of investment. Unfortunately, many think of hedge funds as the only alternatives available and recently they have been the target of bad news for high fees and low returns. In reality alternatives can be and are a variety of investments. For example, many hedge funds are trading strategies looking to exploit certain conditions in the public fixed income or equity markets. In today's low return environment they have faced strong headwinds in their opportunity set. That being said,

alternative investing is made up of many more opportunities than hedge funds; many that can exploit various inefficiencies in certain areas.

Above it was written that the public equity and fixed income markets have become very efficient due to the vast numbers of analysts following the publicly traded markets. Hedge funds largely play in that space and consequently are fighting a difficult battle.

Under the term of Alternative Investments exists a wide variety of strategies including private lending, private real estate, private equity, venture capital and others. These markets are not widely followed and inefficiencies exist and can be exploited. An important resource for investors considering the use of alternatives in their portfolio are the books by David Swenson entitled "Unconventional Success: A Fundamental Approach to Personal Investment" and "Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment." Swenson is the head of the Yale Foundation portfolio that has been the recipient of accolades for its superior results over time. The primary differentiator was the use of alternative investments in the portfolio.

Note the significant allocation towards alternatives (and returns!) from the annual report of the Yale Endowment Annual Report.

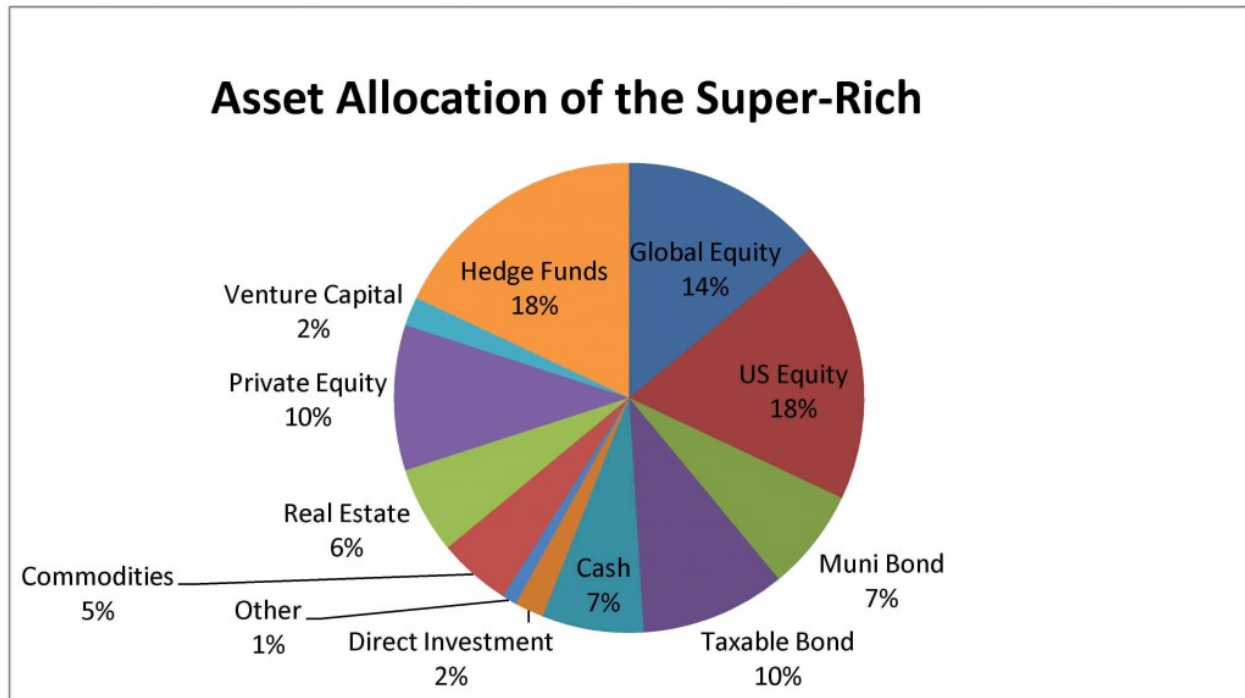
Endowment Highlights					
	Fiscal Year				
	2015	2014	2013	2012	2011
Market Value (in millions)	\$25,572.1	\$23,894.8	\$20,780.0	\$19,344.6	\$19,374.4
Return	11.5%	20.2%	12.5%	4.7%	21.9%
Spending (in millions)	\$1,082.5	\$1,041.5	\$1,024.0	\$994.2	\$986.8
Operating Budget Revenues (in millions)	\$3,297.7	\$3,116.1	\$2,968.6	\$2,847.8	\$2,681.3
Endowment Percentage	32.8%	33.4%	34.5%	34.9%	36.1%
Asset Allocation (as of June 30)					
Absolute Return	20.5%	17.4%	17.8%	14.5%	17.5 %
Domestic Equity	3.9	3.9	5.9	5.8	6.7
Fixed Income	4.9	4.9	4.9	3.9	3.9
Foreign Equity	14.7	11.5	9.8	7.8	9.0
Leveraged Buyouts	16.2	19.3	21.9	24.3	24.8
Natural Resources	6.7	8.2	7.9	8.3	8.7
Real Estate	14.0	17.6	20.2	21.7	20.2
Venture Capital	16.3	13.7	10.0	11.0	10.3
Cash	2.8	3.5	1.6	2.7	-1.1

While Swenson focuses on the institutional space, the benefits of investing beyond the conventional equity and fixed income markets can be dramatic. Note in the chart below the impact of a portfolio with a starting balance of \$2,000,000 and withdrawals of 4% of the starting balance, adjusted each year for inflation. Note in the column noted as S&P 500 how the available capital declines from \$2,000,000 to \$889,070. This is based on actual returns with no fees. Index returns only. Now, focus on the column that changes the allocation to 80% S&P 500 and 20% Barclays Aggregate Bond. Ah...the benefits of diversification for investors that use their portfolio become evident. Nearly 50% more capital retained for future use simply because when market downdrafts occurred, the portfolio had declined less and a lesser percentage of capital was removed from the portfolio.

			Portfolios		
			S&P 500	80% S&P 500 - 20% Barclays Aggregate Bond Index	Alternative Fund
		Spending			
12/31/1999			\$2,000,000	\$2,000,000	\$2,000,000
12/31/2000		\$80,000	\$1,737,893	\$1,814,147	\$1,784,905
12/31/2001		\$81,881	\$1,449,471	\$1,584,425	\$1,581,731
12/31/2002		\$84,483	\$1,044,652	\$1,238,580	\$1,359,782
12/31/2003		\$86,746	\$1,257,559	\$1,440,957	\$1,635,662
12/31/2004		\$90,264	\$1,304,107	\$1,488,147	\$1,771,093
12/31/2005		\$94,070	\$1,274,140	\$1,459,754	\$1,871,981
12/31/2006		\$97,212	\$1,377,962	\$1,558,045	\$2,110,192
12/31/2007		\$101,957	\$1,351,748	\$1,546,284	\$2,239,957
12/31/2008		\$102,867	\$745,228	\$973,015	\$1,446,367
12/31/2009		\$106,489	\$835,833	\$1,081,064	\$1,672,990
12/31/2010		\$108,933	\$852,705	\$1,115,869	\$1,767,136
12/31/2011		\$113,032	\$755,201	\$1,036,286	\$1,601,568
12/31/2012		\$115,904	\$760,080	\$1,060,661	\$1,671,835
12/31/2013		\$118,572	\$887,932	\$1,203,835	\$1,789,348
12/31/2014		\$120,417	\$889,070	\$1,229,061	\$1,761,428
Annualized Mean Return			4.19%	4.49%	4.94%
Annualized Standard Deviation			15.44%	12.32%	11.25%

The real magic occurs when we add 30% of the non-traditional investments to the mix providing even more diversification. Less portfolio volatility leaves more capital for future use during the eventual and virtually certain market volatility to the downside. Note also the negligible difference in returns. For people who withdraw from their portfolio, volatility is more important than returns. Volatility matters!

It is not just Yale that allocates beyond the traditional stock and bond markets. Note in the chart below from the membership of the Institute for Private Investors.



Source: IPI, Forbes Aug 2013

Additional due diligence is required for non-traditional investment strategies but the payoff of lower volatility can add significant effectiveness for investors that use their portfolios.

Summary:

Merriam-Webster Definition of Evidence

Full Definition of evidence:

1 a : an outward sign : indication

b : something that furnishes proof : testimony; specifically : something legally submitted to a tribunal to ascertain the truth of a matter

2 : one who bears witness; especially : one who voluntarily confesses a crime and testifies for the prosecution against his accomplices

The investment world is filled with hypothetical examples, back tests and other methods of convincing investors that a certain course of action will be appropriate for their situation. Do these hypotheticals and back-tests truly provide the same **evidence** that research on factor-based principles, reviewed and accepted by the academic community provide? We would argue not. Clearly, reducing costs and

improving tax efficiency by providing broad exposure to the public equity markets works. It tilts towards value, smaller companies and profitability work.

Expanding the investing landscape and evaluating non-traditional investments for inclusion in a portfolio, can reduce volatility without accepting zero or near zero returns and improve investing outcomes for investors, particularly those who use their portfolios.

The opening of this paper asked the question: Has Passive Won? Considering the evidence we will submit that this is the wrong question. The correct question is: Where and how should passive investing strategies be used? And further: What strategies in the active investing spectrum can add value to my portfolio?

Most serious questions in life are not answered at the extremes of one position or another. Often, the best answer is in the middle. The evidence supports the 3-factor model for the public equity markets to reduce costs, improve tax effectiveness and to have broad beta exposure to offset inflation over time. The public markets are largely efficient and will become more so as more and more "really smart people" attempt to find the differences to be exploited. In reality, there are so many in this endeavor that it has served to make the possibility even more elusive.

At the same time, there are opportunities that are less followed and value can be added through non-traditional strategies. Those who are willing to do the work or work with advisors who do can add significant real value based on the facts.

The "middle" answer considers the evidence of both to enhance their security long-term. Let the investment geeks fight over the question - which is best? It is a silly construct and the best opportunities using all the tools will provide the best solution.

About the Author

Robert Klosterman, CFP® is Founder, CEO and Chief Investment Officer of White Oaks Investment Management, Inc. and Founder of White Oaks Wealth Advisors, Inc. Bob has been a Certified Financial Planner licensee since 1989. He has a clear vision for the future having worked in financial planning since 1975, and feels a strong need to provide people with expert and independent wealth advisory services. As a Certified Financial Planner and certificate holder for Family Wealth Advising, Bob's expertise and guidance have helped to fuel the steady growth of the firm. Today, White Oaks Wealth Advisors boasts a talented staff of advisory professionals, hand-picked for their financial planning and wealth management knowledge as well as their dedication to client service.

"My mission is to serve our clients through the combined expertise of our advisory team. I want to use my experience to really impact the lives of the people who place their trust in us."

Bob's leadership within the firm's Advisory Committee regularly encourages fresh thinking and new approaches that provide clients with innovative wealth management solutions in the areas of economic and investment market analysis, stock option strategies and wealth transfer techniques.