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Active Vs Passive and Fiduciary Responsibility

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The first quarter of 2017 was another good one for the active fund managers that Frontier Asset Management uses. As a group they did exactly what we wanted them to do; they outperformed our strategies' asset allocation mixes if implemented with index funds. As you know, though, it is not common for an investment firm to be able to consistently pick "winning" funds. We have written in recent Frontier Focus articles about the pronounced trend away from active fund management and toward passive fund management. The drum beat seems to be getting louder and louder, and is now being expressed more and more in terms of fiduciary duty. Fiduciaries, which include all registered investment advisors such as Frontier Asset Management, are required by law to act in the best interests of their clients. Some say that while investing in passive index funds is "better" than investing in actively managed funds, fiduciaries should be investing exclusively in passive index funds. I am going to suggest, though, that being a fiduciary requires doing the extra hard work necessary to attempt to find active managers that can potentially outperform index funds, and that not doing so is not being a fiduciary, at all. In fact, disregarding the possibility that active fund managers can be found that outperform index funds in the future disregards a lot of evidence that suggests they can be found.

The industry trend lately has shifted toward low-cost index funds and away from actively managed funds. There are a number of reasons for this. Among them are academic theories, such as the efficient market hypothesis, that imply it is not possible to pick securities that do better than the "market" since everyone has the same information in which to select securities. Nobel Prize winner William Sharpe wrote an article, *The Arithmetic of Active Management*, published in the Financial Analysts Journal, January/February 1991 in which he states, "It must be the case that, before costs, the return on the average actively managed dollar will equal the return on the average passively managed dollar. After costs, the return on the average actively managed dollar will be less than the return on the average passively managed dollar. These assertions will hold for any time period. Moreover, they depend only on the laws of addition, subtraction, multiplication and division." I agree. Empirical studies have shown that the average of the added-value (alpha) from active fund managers is around 0% before fees, and therefore the average after-fee alpha is below 0% by about the average of the fees, thereby agreeing with Dr. Sharpe's astute observation.

We recently did our own study where we examined the performance of the Morningstar Large Blend mutual fund category over 20 calendar years from 1997 through 2016. We discovered that the category average only beat the S&P 500® in 4 of those 20 years. We also compared the performance of the Morningstar Large Blend category to its style benchmark – a better representation of how the group of funds is investing than the S&P 500® since the funds as a group tend to have smaller market capitalizations, more international stocks, and tend to hold some cash. The list of calendar years in which the category average outperformed its style benchmark is shown below:

Oops! There aren't any! There is no question that the average of actively managed funds will not do as well as index funds. No question. The solid theory is supported by the empirical evidence.

Other studies have shown that while it is possible (easy) to identify investment managers that have had above-average performance in the past, it is impossible to identify those that will provide added-value in the future. The experiences of many pension funds validate these studies since they have had a very difficult time picking fund managers that beat indexes and therefore have moved more and more of their portfolios to low-cost index funds. Even Morningstar, the creator and source of the widely-followed Morningstar Star Rating system seems to believe that picking funds based on their cost (lower is better), is preferable than using Star Ratings. Russel Kinnel, Director of Manager Research for Morningstar, wrote in a 2010 paper, *How Star Ratings and Expense Ratios Predict Success*, "Investors should make expense ratios a primary test in fund selection. They are still the most dependable predictor of performance." Taken to its logical conclusion, even Morningstar is recommending indexing.

Despite the academic papers that suggest investors would be better off using low-cost index funds, Frontier Asset Management takes a different approach. We start with the philosophy that investment managers as a group have the same characteristics as other professions: some are better than others and a few are a lot better – there is a bell curve of investment manager ability. One of the most well-known and recent academic papers on the subject, *Luck Versus Skill in the Cross Section of Mutual Fund Returns*, written by Eugene Fama (a recent Nobel Prize winner) and Ken French and published in the October 2010 Journal of Finance, finds that 1% or 2% of active fund managers are skillful enough to overcome the burden of their expenses. The difficulty is in finding them. After publishing "Luck vs Skill," Eugene Fama was quoted in a Bloomberg News interview, "The research shows that it is impossible to pick people who can beat the market." Interestingly, "Luck vs Skill" did not address the question of whether it was actually possible to pick the winners beforehand; it only said that most of the apparent top-performers were lucky, not skillful.

I will agree that using the standard approach used by pension funds, investment consultants, the large wire-house brokerage firms, and the basis for the Morningstar star ratings, which is called peer group analysis, does not help identify fund managers that will add value in the future. In peer group analysis, fund managers are ranked within a group of managers with a similar investment style, and then the highest performers over various time periods (usually 3 and 5 years) are considered to be the best, based on that criteria, and are then placed in portfolios to meet a specific asset allocation target. For example, the top-ranked U.S. large cap growth manager would be used to fill the U.S. large cap growth allocation of the overall portfolio. There is no relevant evidence that I have seen that supports the idea that using peer group analysis to pick fund managers will provide better performance than using index funds

But Frontier Asset Management does not use peer group analysis to evaluate fund managers. We start with a process called "returns-based style analysis, (or simply "style analysis") which I pioneered in 1988 concurrently with Dr. William Sharpe. The basic idea behind style analysis is that each fund manager is unique, particularly the good ones. Each fund should therefore have its own benchmark, and the alternative investment to each fund manager is a set of index funds with the same investment characteristics. Funds should be placed into portfolios based on their unique characteristics, not to fill an asset allocation slot. However, one of the most interesting aspects of Frontier's investment process is that even though most of the funds in the portfolio hold securities in more than one asset class, the entire portfolio has the asset allocation mix target. The table below is reprinted from an earlier Frontier Focus and shows how many funds in Frontier's Balanced strategy contribute to the strategy's U.S. large cap stock allocation.

Contribution to the US Large Stock Allocation in the Frontier Balanced Strategy
Using Holdings Based Analysis from Morningstar

Fund	Morningstar Category	Strategy Allocation [1]	% in US Large[2]	Fund Contribution to US Large Allocation
Sterling Capital Equity Income Instl (BEGIX)	Large Value	5.11%	70%	3.55%
Alger Spectra Z (ASPZX)	Large Growth	4.51%	78%	3.52%
PRIMECAP Odyssey Aggressive Growth (POAGX)	Mid-Cap Growth	5.34%	22%	1.17%
First Eagle Overseas I (SGOIX)	Foreign Large Blend	4.67%	1%	0.04%
Matthews Asian Growth & Inc Instl (MICSX)	Pacific/Asia ex-Japan Stk	7.86%	3%	0.26%
Vanguard Energy Adm (VGELX)	Equity Energy	4.68%	49%	2.29%
T. Rowe Price Capital Appreciation (PRWCX)	Allocation 50-70% Equity	14.07%	45%	6.37%
Castle Focus Investor (MOATX)	Large Value	5.60%	32%	1.79%
First Eagle Global I (SGIIX)	World Allocation	10.43%	28%	2.93%
PIMCO Income Instl (PIMIX)	Multi Sector Bond	9.85%	0%	0.00%
DoubleLine Total Return Bond I (DBLTX)	Intermediate-term Bond	7.73%	0%	0.00%
PIA High Yield Institutional (PHYSX)	High Yield Bond	5.36%	0%	0.00%
Fidelity L/T Tr Bd Idx Premium Class (FLBAX)	Long Government	14.74%	0%	0.00%
Money Market	Money Market	0.05%	0%	0.00%
Funds-based US Large Cap Allocation on September 30, 2016:		**100.00%**		**21.92%**
Actual Frontier Balanced US Large Cap Target for October, 2016:				**21.00%**

[1] Frontier Balanced Mutual Fund Strategy Allocation September 30, 2016

[2] Holdings-Based Analysis From Morningstar. Holdings in US Large Stocks = (% US stocks) times (% Large Stocks)

[2] Most Holdings from June 30 (some July 31, Aug. 31).

Our research into fund performance does show that the future performance of fund managers is likely to not be as good as was the past performance. Others have concluded the same thing. A study by Kosowski, Timmerman, Wermers, and White, published in the Journal of Finance December 2006 and reported in Scott D. Stewart's wonderful book, *Manager Selection*, published by the CFA Institute, found that top decile managers, on average, saw added value (alpha) decline from 4.6% before fees to 1.9% (about 40% of past alpha becomes future alpha) the next year. After-fee alpha fell from 3.6% to 1.0% but was still positive. We find that about half (approximately 50%) of a fund manager's previous before-fee alpha becomes future alpha, before fees. Fees, unfortunately do not go down with performance so the impact of fees is very important on the future performance of fund managers. Low fees are very important! Going through the mathematics, we can illustrate that fees are twice as important as a fund's alpha, since we are confident the future added value will not be as good as the past. Rather than just say that fees are bad, though, we have gone through the research and analysis to know how fund manager fees impact the future performance of the manager.

Our investment strategy construction process searches for the set of funds that as a strategy outperforms its target asset allocation as many times as possible over one-month, 3-month, and 12-month periods; consistency of good performance is therefore very important. Scott Stewart showed in his own study in 1998 and reported *Manager Selection* "ranking institutional US equity managers by historical frequencies of quarterly active returns was successful in identifying future superior managers over subsequent periods of three and five years. In contrast, there was no predictive power in ranking managers solely by active returns."

We are happy that others have done research that substantiates our own and validates our process but we also have something that most other researchers don't: real-time composite track records, exclusive of back-testing, that show that our process has added value over indices over time. The table below shows the added value from fund selection only (asset allocation added value is not included) for each of our Globally Diversified Strategies since October 2007.

Annual Added Value from Fund Selection - Globally Diversified Strategies
Through March 2017

	Global Opportunities	Long-term Growth	Growth & Income	Balanced	Conservative	Capital Preservation	Average
1 Year	-2.30%	-1.79%	-1.06%	0.64%	1.33%	1.17%	-0.33%
3 Year	-0.37%	0.76%	1.06%	1.76%	1.64%	1.59%	1.07%
5 Year	0.56%	0.91%	1.47%	1.85%	1.58%	1.14%	1.25%
Since Oct 2007*	0.44%	1.12%	0.67%	1.70%	2.16%	1.74%	1.30%

* Capital Preservation inception is July 2008.

Portfolios of index funds would show added value consistently below 0%.

Fiduciaries beware. If you believe that you are serving the best interests of your clients by investing exclusively in passive index funds, you are not. There is research supporting the idea that some fund managers can add value after fees, and additional research that shows they can be found in advance. However, as Scott Stewart summarizes, "Clearly, successfully capturing added value by selecting skillful managers is a challenge." That doesn't mean the effort should not be undertaken. On the contrary, as fiduciaries we should be seeking the best option for our clients regardless of the pressure to simply select the lowest-cost choice.

NOTES:

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Calculation of "Added Value": Manager Selection added value compares the composite performance of each strategy to the performance of the strategic asset allocation mix each month. The composite performance tracks the weighted average performance of the funds closely, but can lag slightly due to implementation of the strategy. The monthly returns are linked to calculate the returns for time periods longer than one month.

It is generally not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index therefore they do not experience frictional costs or fees.

Index	Index Description
S&P 500®	Represents US large company stocks. It is a market-value-weighted index of 500 stocks that are traded on the NYSE, AMEX, and NASDAQ

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Alpha is a measure of performance on a risk-adjusted basis. It represents the excess rate of return.

For the Mutual Funds mentioned herein, a complete description of their investment objectives, along with details of the risks and fees involved is contained in their respective prospectus and statement of additional information, which is available on their websites and should be read fully.

- Sharpe, W. (1991) *The Arithmetic of Active Management*, Financial Analysts Journal, January/February 1991.
- Kinnel, R. (2010), *How Star Ratings and Expense Ratios Predict Success*, Morningstar
- Fama, E and French, K. (2010) *Luck Versus Skill in the Cross Section of Mutual Fund Returns,* Journal of Finance, October 2010.
- Kosowski, Timmerman, Wermers, and White (2006), *Can Mutual Fund "Stars" Really Pick Stocks? New Evidence from a Bootstrap Analysis* Journal of Finance, December 2006.
- Stewart, S. (2013) *Manager Selection*, Research Foundation of CFA Institute

Frontier's performance is available on our website – www.frontierasset.com.

Frontier's ADV Brochure is available by request at info@frontierasset.com or 307.673.5675.