SHOULD I USE ACTIVE OR PASSIVE MANAGEMENT?

THE SHORT ANSWER: YES

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KEY POINTS

- Both actively managed and passive index funds can be used as tools for putting together effective objective-based portfolios
- **High Quality Fixed Income** - Use both depending on market conditions
- **Credit** - Always use active
- **Global Stocks** - Use both in combination
- **Real Assets** - Use both depending on the sub-asset class

INTRODUCTION

There is an ongoing debate between "active" vs. "passive" management with strong opinions on either side. Over recent years, practitioners and the financial news media have been heavily focused on trying to figure out which side "wins" the debate. Is there really a winner? At The Joseph Group, we would argue that both active and passive managers have a place in our asset allocation strategies.

DEFINING ACTIVE AND PASSIVE

A passive manager's goal is to closely track a market index in the cheapest way possible. In other words, if Company A is 5% in an index, Company A will be 5% in a passive manager's portfolio. The objective is to mirror the same risk and return characteristics as the index.

An active manager has multiple goals, one of which is to outperform an index. If Company A is 5% of an index but the active manager dislikes this particular company, the manager could own a smaller percentage or simply altogether avoid owning it in their portfolio. The objective is to provide an investor with returns over and above an index, net of all fees and expenses.

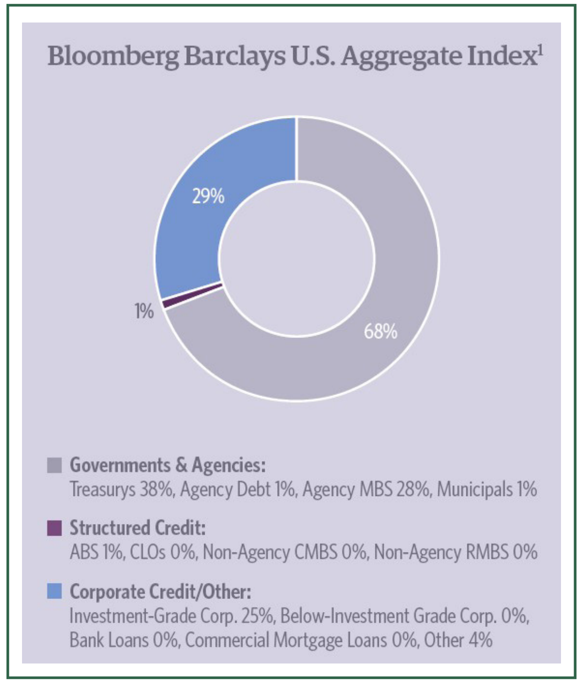
ASSET CLASSES

At The Joseph Group, whether or not we use an active or passive manager depends on the asset class or prevailing market conditions. As a reminder, we look at the universe in five asset classes: High Quality Fixed Income, Credit, Global Stocks, Real Assets, and Dynamic. The following paper will walk through each of the first four asset classes; by definition, any funds in our Dynamic allocation will typically be actively managed.

High Quality Fixed Income (Bonds)

We believe using both active and passive management in High Quality Bonds depending on the prevailing market environment.

One of the most popular bond indexes is the Bloomberg Barclays U.S. Aggregate Bond Index, known as "The Agg." The Agg owns bonds with high credit ratings, such as U.S. Treasury, mortgage-backed, and corporate bonds. The chart below from Guggenheim shows the index is made up of different types of bonds, but approximately 69% of the bonds in the index are government-related.



Source: Guggenheim

A bond's total return comes from two primary sources: interest income and changes to the current bond price. An active manager has the ability to add value by taking advantage of both. First, the active manager can own a higher allocation to non-government sectors, such as corporate bonds. This generates additional income for investors, which can be a driver of outperformance in many market environments. Second, the manager can actively shift their portfolio's duration, or the underlying bond price's sensitivity to interest rates. Remember, bond prices move in the opposite direction of interest rates. By changing the duration of the portfolio, the active manager can either protect from rising interest rates or take advantage of falling interest rates.

We think it makes sense to have active managers in High Quality Bonds when market interest rates are either steady or increasing in a normal market environment. Since most active managers own less U.S. Treasuries than the index, their portfolios tend to pay investors a higher rate of income, which drives outperformance when market interest rates are stable. Additionally, active managers typically make small duration changes, adding additional sources of outperformance when markets are functioning normally.

We think it makes sense to have passive managers in High Quality Bonds when market interest rates are falling in a declining economy and stock market. In a period of stress, we ultimately want the highest quality bonds possible, such as government bonds. We believe gaining government bond exposure in the cheapest way possible, i.e. through an index fund, is the best way to position a High Quality Bond allocation in such an environment.

Credit

We believe using active management in Credit almost always makes the most sense for client portfolios.

There are several Credit, or "high yield," indexes available for investors, but one of the broadest is the Bank of America Merrill Lynch High Yield Master Index. Unlike The Agg, the bonds in this index focus on corporate rather than government bonds, and these corporate bonds have low credit ratings, otherwise known as below investment-grade or "junk bonds."

There are two primary reasons we want to be active in Credit.

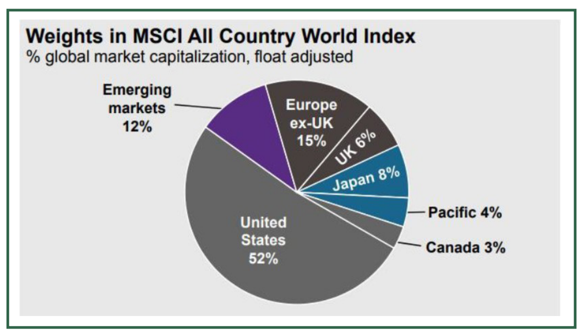
- **Index Construction** – Most Credit indexes give the highest weight to the companies with the largest amount of debt outstanding. When talking about passive management in Credit, we will often ask our clients: do you want the highest weight in your portflio to be the most indebted company, simply because that company has borrowed the most? (The correct answer is no!)
- **Can You Really Be Passive?** – Even the most popular indexes in this asset class are very difficult to fully replicate and track performance – i.e., the purpose of passive management. Some of the largest passive index mutual funds and exchange trade funds (ETFs) have underperformed the Bank of America Merrill Lynch High Yield Master Index…the very index they were designed to track!

Credit tends to be a place where active management does extremely well relative to passive management. An active manager has the ability to ignore the inefficient construction of a high yield index and still generate attractive returns. An active manager can buy the most credit-worthy companies, while a passive manager will simply buy bonds from the companies who have issued the most debt.

Global Stocks

We believe using both active and passive management in Global Stocks makes sense for client portfolios.

One of the most popular global stock market indexes is the MSCI All Country World Index (ACWI). The MSCI ACWI gives investors a broad-based representation of large and mid-sized companies all around the world. A pie-chart from JPMorgan Asset Management shows the United States currently representing a little more than half of the index. Other developed markets, such as Europe and Japan, and emerging markets, such as China and India, represent the other half.



Source: JPMorgan Asset Management

According to our research, active manager outperformance is cyclical. Passive management is always low cost, but we have found three key environments where active management has been able to overcome the cost hurdle.

1. **Smaller vs. Larger** – The largest company in the index often attracts the most attention from the investing public, which makes it difficult for an active manager to gain unique insight into the company. This forces most active managers to hunt for smaller, more overlooked companies within an index. In an environment where smaller companies perform better than larger companies, active managers benefit.
2. **Cheap vs. Expensive** – Whether a growth or value investor, most active managers tend to pay attention to valuations. In other words, when comparing a company's price-to-earnings (P/E) ratio, most active managers favor lower P/E ratios to higher ones. In an environment where lower P/E stocks ("cheap") outperform higher P/E stocks ("expensive"), active managers also tend to benefit.
3. **Down vs. Up Markets** – by definition, a passive manager seeks to remain fully invested and will capture all of the upside and all of the downside of an index. Active managers, on the other hand, almost always have some level of cash in their portfolios. This cash can protect capital in a down market environment while potentially giving the manager the opportunity to "buy low" in periods of market stress.

We think it makes sense to use active management in Global Stocks in two environments. First, we want active in times when market valuations look expensive. An active manager has the ability to find companies with more attractive valuations and potentially avoid those which look expensive. Second, we would favor active when looking to "play defense" and want downside protection. We would rely on a strong active manager to leverage their flexibility to protect capital for our clients.

We use passive management when we want full exposure to the market as cheaply as possible. Using passive managers gives us portfolio flexibility. First, passive index funds and ETFs often have much lower costs than active managers. By using some cheaper index funds in certain places, we can then "pay up" for good active management in other places while keeping total portfolio costs low. Second, using index funds is a great way to be tactical and "play offense" in portfolios. While active managers have the ability to protect on the downside, they may give up some upside potential to do so. By definition, a passive manager should capture all of the market's upside.

Real Assets

When we allocate to Real Assets across our portfolios, we divide the asset class into three sub-categories:

- **Commodities**
- **Global Real Estate**
- **Global Infrastructure**

Being an active or passive manager in Real Assets really depends on the composition of these three sub-asset classes. Each has different indexes associated with them, so making the decision to be active or passive is more complex. Before deciding whether or not to be active or passive in any of these sub-asset classes, choosing the correct benchmark is very important.

We believe using active management in Commodities makes sense for client portfolios.

There are multiple commodity indexes available to investors, but all of them have different weighting methodologies. Additionally, there is no agreed upon benchmark amongst the investment community. The actual commodities market is also very inefficient relative to other markets.

Some commodities managers buy physical commodities (imagine a portfolio manager collecting and storing physical gold coins or bushels of wheat), while others use derivative markets to gain desired exposure to a particular commodity (a portfolio manager may not own an oil rig, but they can buy oil derivative contracts which will move like the price of oil.) As a result of these structural challenges, it is difficult to be truly passive in this market, and we believe active management makes more sense.

We believe using active or passive management in Global Real Estate makes sense for client portfolios.

We invest in global real estate securities through Real Estate Investment Trusts (REITs), which are traded on public stock exchanges like a regular stock. As a result, the same rules apply to the global real estate market as they do Global Stocks. In other words, performance of active and passive can be cyclical and using both can make sense for client portfolios depending on the objective.

We believe using active or passive management in Global Infrastructure makes sense for client portfolios.

Like commodities, there can be multiple definitions for global infrastructure, so choosing an index can be a complicated process. In the table below, Morgan Stanley Investment Management displays some of the most popular global infrastructure indexes, and how they differ from one another. We often see global infrastructure indexes with a high concentration in a particular sector, such as utilities or energy, while others may have a higher weight to a particular region in the world.

INDEX	DOW JONES BROOKFIELD GLOBAL INFRASTRUCTURE INDEX	S&P GLOBAL INFRASTRUCTURE INDEX	MSCI ACWI INFRASTRUCTURE INDEX	MACQUARIE GLOBAL INFRASTRUCTURE 100 INDEX	FTSE GLOBAL CORE INFRASTRUCTURE 50/50 INDEX
Components	95	75	260	100	218
Market Cap (Free-Float Adjusted)	$712B	$880B	$2,747B	$1,273B	$1,502B
Selection Criteria	Pure-play approach that evaluates cash flows of companies (Infrastructure operations must account for greater than 70%).	Stocks are clustered across three sectors (combination of GICS sectors). 15 stocks come from Energy with their weight capped at 20%. 30 each come from Transportation and Utilities, with their total weights capped at 40% each.	Infrastructure companies that fall into one of five groups (combination of GICS sectors): Telecommunications, Utilities, Energy, Transportation, and Social.	Based on revenue analysis by Macquarie (over 50% must come from infrastructure operations).	Stocks are grouped across three sectors (combination of ICB subsectors): 50% from Utilities, 30% from Transportation, and 20% from Other.
Focus	Pure-play core infrastructure	Broad-based infrastructure exposure	Broad-based infrastructure exposure and related businesses	100 largest constituents and heavily weighted towards Utilities	Broad-based, Utilities-centric exposure
Regional Exposure	Americas: 59.4% EMEA: 26.4% Asia: 8.6% Australia: 5.6%	Americas: 43.9% EMEA: 34.6% Asia: 10.8% Australia: 10.6%	Americas: 46.6% EMEA: 30.0% Asia: 20.2% Australia: 3.1%	Americas: 58.5% EMEA: 27.6% Asia: 10.7% Australia: 3.3%	Americas: 57.1% EMEA: 18.8% Asia: 17.1% Australia: 7.0%

Source: Morgan Stanley Investment Management

Regardless of the index, active vs. passive performance within Global Infrastructure exhibits cyclicality. We believe an active or passive manager can make sense for a client depending on the objective.

CONCLUSION

Overall, we strongly believe active and passive management have the ability to complement each other in a diversified portfolio. Rather than making it an either/or decision, we look at both active and passive as effective tools to help our clients reach their objectives. To summarize:

- **High Quality Fixed Income** - Use both depending on market conditions
- **Credit** - Always use active
- **Global Stocks** - Use both in combination
- **Real Assets** - Use both depending on the sub-asset class

Before we even start with selecting an active or passive manager, we have to first start with defining our thesis. Are we playing defense? Offense? Is this a short-term move or a long-term move? What are the costs of using this active or passive manager?

Additionally, we also must keep the purpose of our portfolios in mind when thinking about using active or passive managers. We may not come to the same conclusion in one strategy vs. another when we factor in the objective of the strategy.

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The Joseph Group
CAPITAL MANAGEMENT

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