



Combining Active and Passive Investing in a Core-Satellite Strategy

By **Alfred Lee**, CFA, DMS
Vice President & Investment Strategist
BMO Asset Management

The rise in popularity of passive investments such as exchange traded funds (ETFs) and exchange traded products (ETPs) over the last decade has sparked an intense debate between the merits of active and passive investing. This dispute has to an extent led to a division in the investment world with both the passive (“beta”) and active (“alpha”) camps developing a strong following. While we contend that there are benefits and drawbacks to both investment styles, the selection of either passive or active investments should not be one that is mutually exclusive.

In fact, we believe a properly constructed portfolio and one that is the most optimal in efficiency should include both well selected alpha and beta investments. The combination of active and passive investments, a form of core-satellite investing, has been a strategy long utilized successfully by institutional investors. Core-satellite investing involves a portfolio core as an anchor to a strategy’s strategic asset allocation while the satellite investments allow an investment strategy the potential to capture returns beyond the market and to also mitigate risk. Now with a robust selection of both alpha and beta related investments available to retail investors, they too can develop a sound portfolio using an institutional like approach. In the following chart, we quickly summarize the advantages and disadvantages of both passive and active investing. Moreover, we’ll further investigate several examples in how an investor can combine active and passive investments to properly construct an efficient portfolio.

The Advantages and Disadvantages of Active and Passive Investing

	Passive Investing (Beta)	Active Investing (Alpha)
Advantages	<ul style="list-style-type: none"> • Delivers market returns less management fees • Management fees tend to be lower • Can more efficiently access certain markets and asset classes • Rules based methodology may mitigate the emotional element of investing 	<ul style="list-style-type: none"> • Potential to outperform the market • Can provide downside protection and risk control • Flexible mandates allow managers to move in and out of stocks and sectors
Disadvantages	<ul style="list-style-type: none"> • No potential to outperform the market • May not be efficient for areas that lack liquidity and/or market breadth • May introduce concentration risk of individual holdings, depending on index weighting methodology 	<ul style="list-style-type: none"> • May underperform the market • Management fees tend to be higher • Even a talented manager can have extended periods of underperformance • Requires the ability to select those managers who can outperform

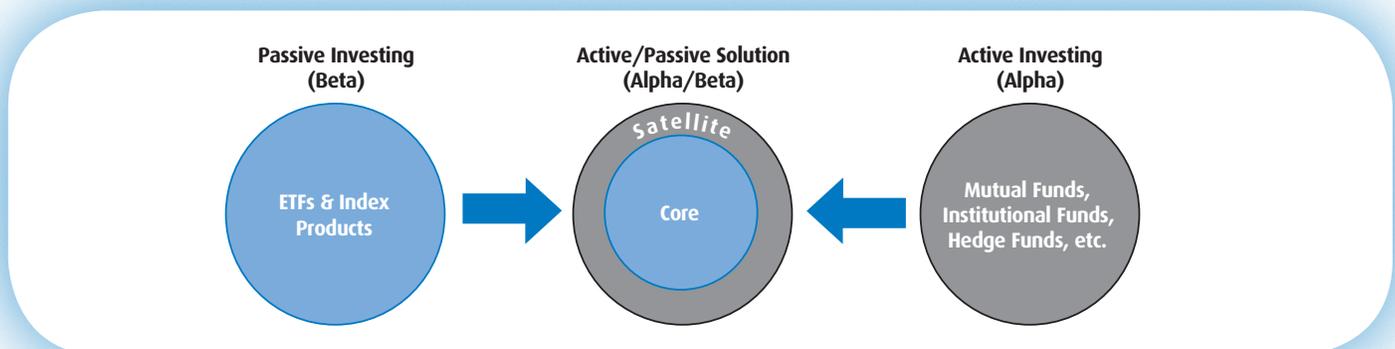
Source: BMO Asset Management Inc.

Alpha/Beta Portfolio Construction

When devising a portfolio strategy, investors are exposed to two types of risk: market (or “beta”) risk through fixed income/credit and equity market investments and also active (or “alpha”) risk. Market risk is best explained as the risk of market volatility and thus is measured by standard deviation or downside deviation. Active risk, on the other hand, is the risk that a manager will perform differently from the market or its benchmark index during both market advances and declines and is best measured as tracking error.

In theory, well selected managers on a whole will provide better than market returns during upswings and downside protection during downswings. However, as even the most talented active managers can underperform at times, the passive portion of the portfolio would anchor a portion of the returns to the market. As a result, a properly constructed portfolio utilizing active-passive mandates is a way in which investors can implement risk control and potentially increase the risk-adjusted return of an overall investment strategy.

The combinations in which investors can implement an active-passive strategy are virtually limitless, with the number of investments available to investors including ETFs, mutual funds, stocks and hedge funds to name a few. In the following pages, we outline a few simple approaches in which an investor can construct a portfolio using both active and passive investments.



Example 1:

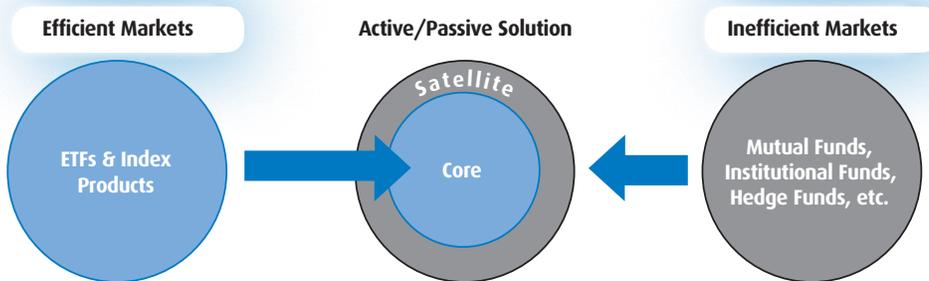
Choosing Active Managers Based on Market Efficiencies

A common approach to deciding the allocation between alpha and beta investments in a portfolio is based on the efficiencies of the underlying market. Developed markets, most

notably the U.S., are very efficient financial markets which make it more difficult for active managers to outperform. As such, for these areas, passive investments such as ETFs and index funds can be utilized to provide low cost beta exposure. Areas which are less efficient on the other hand, such as emerging

market equities or small caps as an example, can be devoted to active management, as alpha generation in these areas can be more likely.

Although technology has made information more accessible over the last decade and financial markets have become increasingly globalized, some markets still tend to be more efficient than others. As such, the active and passive management split based on the efficiency of markets is still a common approach for investors that have adopted a core-satellite approach.



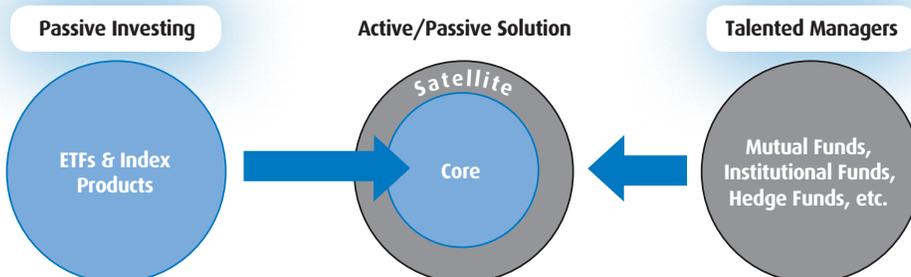
Example 2:

Choosing Active Managers Based on Talent

An alternative to deciding the alpha and beta allocation in a portfolio is allocating active risk to areas where

an investor can source talent. For example, if an investor believes a number of Canadian equity managers who can outperform the market over the long-run are readily accessible, a greater allocation to active management can be devoted to

Canadian equities. Passive management as a result, can then be left for areas in which an investor has greater difficulty in accessing talented active management.



Example 3:

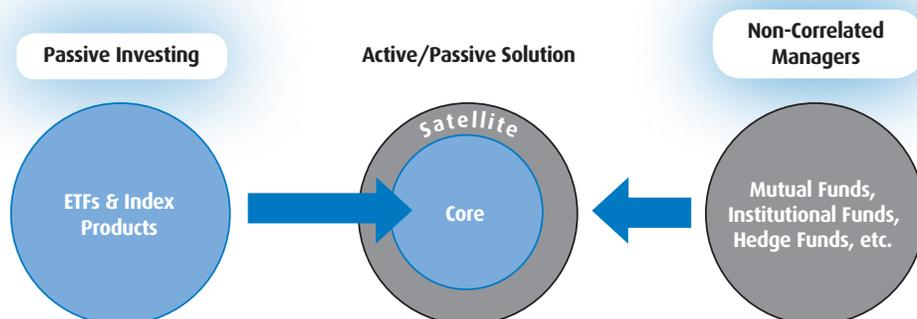
Choosing Active Managers Based on Correlation

In order for an active manager to outperform the market or to provide downside protection, the strategy utilized must differentiate itself from the market. The greater the differentiation between an active mandate and an index, the greater the potential value it can add when combined with a passive strategy. However, higher active risk also brings a greater potential for a strategy to underperform the market. Therefore managers must be carefully selected to best complement a passive strategy.

By combining non-correlated investments together, the overall investment strategy can improve its risk/return characteristics. Theoretically, at each risk level, there is a point in which expected returns can be maximized or equivalently risk minimized for a given level of expected return. Each of these points when combined forms the efficient frontier, where a theoretically optimal portfolio exists at each risk level. Therefore, the alpha and beta allocation decision can also be based on correlation, in which non-correlated investments can be combined in an active-passive investment strategy.



Financial companies continue to innovate, bringing new ideas and investment options to the market. One of the companies at the forefront of innovation is BMO Asset Management as it is prudently expanding its investment options for investors. BMO Asset Management is the only Canadian firm that advises a wide variety of Mutual Funds and Exchange Traded Funds (ETFs) for investors. BMO Asset Management's strength is being a forward thinking firm that offers financial products benefiting investors and allowing for the implementation of a core-satellite strategy.



Conclusion

We have outlined a variety of the more popular ways in which investors can effectively combine active and passive investments using a core-satellite approach. Any of the above mentioned strategies or a

combination of them can be utilized to optimally construct a portfolio. Using the combination of active and passive investing in a single portfolio can help establish an understanding of risks being taken while offering prospects for outperformance.

© Registered trade-mark of Bank of Montreal, used under licence. BMO ETFs are administered and managed by BMO Asset Management Inc., a portfolio manager and separate legal entity from Bank of Montreal. No part of this material may be reproduced in any form, or referred to any other publication, without express written permission.