Rocaton

INSIGHTS

Active Management Philosophy & Implementation

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EXECUTIVE SUMMARY

* Active management has the potential to meaningfully add to portfolio compound returns over long time periods.
* Passive management is a reasonable option for investors to consider as a baseline, particularly in more efficient asset classes.
* To add value above a passive benchmark, active investment managers must have some edge; being "average" is insufficient.
* Active and passive management do not need to be mutually exclusive and, in many cases, combining active and passive strategies may result in a more efficient portfolio.
* Selecting and maintaining a diversified portfolio of active managers require investors to evaluate managers on a fundamental basis, take a long-term view, set realistic expectations and consider the portfolio implications when combining managers.
* Different investor groups, such as defined contribution plans, may have unique considerations which might impact their willingness and/or ability to invest actively. In most cases, we recommend defined contribution plans include both active and passive strategies in the list of participant investment options.
* Given that passive management is generally not available for illiquid investments (such as private equity and private real estate), this paper primarily focuses on public market asset classes.

INTRODUCTION

Investors often begin constructing portfolios with an asset allocation policy that aligns with their return objectives and risk tolerance. Assuming passive investing is available, the investor must decide between active and passive management across their portfolio. The primary objective for investors pursuing active management is most often to generate excess returns (net of fees), above a market index. We believe that consistently adding value via active management requires that an active manager possess skill and that an investor can recognize manager skill. We also believe investors must have a sufficiently long time horizon to empirically evaluate the efficacy of active management. The balance of this paper will outline:

* Rocaton's philosophical views on active management
* A framework for allocating active management risks across a diversified portfolio
* An approach to setting active management expectations

There are some easily identified differences between active and passive approaches such as fee levels and the likelihood of matching the return of an identifiable benchmark index. However, there are a variety of more nuanced considerations regarding both opportunities and risks facing investors pursuing both active and passive strategies. The issues that should be considered can vary significantly by investment category as can the relative attractiveness of either approach. Rather than presenting an exhaustive list of the specific "active vs. passive" considerations for each asset class or investment category, this paper will present Rocaton's philosophical beliefs in the context of a framework for approaching this critical decision.

PHILOSOPHICAL VIEWS OF ACTIVE MANAGEMENT

As with most investment decisions, key trade-offs must be examined when considering whether to invest passively or actively. Evaluating and appropriately balancing tradeoffs such as fees, return potential, tracking error and due diligence/monitoring efforts is critical in successfully meeting long term investment objectives and improving portfolio efficiency.

We share the widely-held view that, before costs, active investing by all market participants is a zero-sum game.[1] As William Sharpe stated in his seminal paper:[2]

If "active" and "passive" management styles are defined in sensible ways, 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 and*
* *After costs, the return on the average actively managed dollar will be less than the return on the average passively managed dollar*

While we do believe that active investing is a zero-sum game, we also believe that markets provide the opportunity for skilled active managers to succeed. In addition, the zero-sum game philosophy is most applicable in large markets where transaction costs are low and investors have similar objectives. Importantly, if a given benchmark does not adequately represent the full opportunity set, then the zero-sum game view is less applicable. For example, the Bloomberg Barclays Aggregate Index represents approximately $20 trillion of investment grade fixed income securities while the broadest definition of U.S. investment grade fixed income is closer to $35 trillion.

Given the wide variety of very different markets within which the active vs. passive decision must be applied, it is important to acknowledge that the unique nature of each market is inextricably linked to the decision. Investors should approach the decision of whether or not to deploy capital in an actively managed approach independently for each market, and may come to different conclusions on a market-by-market basis. This evaluation should include a number of critical factors including:

* The availability and quality of passive investments
* Index construction
* Strategy results, net of fees

1 This statement relies on the assumption that active managers are investing only in the universe of securities that the index holds, which of course does not always hold true. It also ignores transactions costs that both active and passive managers are exposed to.

2 "The Arithmetic of Active Management". William F. Sharpe. The Financial Analysts' Journal Vol. 47, No. 1, January/February 1991.

* Time horizon
* Governance and resource commitment
* Risk tolerance

We explore these topics in greater detail below.

Availability and Quality of Passive Investments

The most widely accepted definition of passive investing among institutional investors is investing in strategies which seek to replicate a stated asset class benchmark as closely as possible. While some asset class benchmarks are primarily "buy and hold" (such as certain public equity benchmarks), other asset class benchmarks reconstitute on a more frequent basis. For example, typical fixed income benchmarks must deal with more frequent membership changes due to maturities, credit migration, and index construction rules that typically allow newly issued bonds to enter on a monthly basis. While there is nothing inherently wrong with benchmarks that exhibit these construction differences, investors should consider the potential impact on investment results, particularly if there is reason to believe that these factors could present a persistent headwind to strategies seeking to replicate the index.

While passive strategies are available across most public equity markets, there is more limited availability across certain segments of the fixed income markets, particularly the non-investment grade markets. Further, even when available, the quality of passive strategies can vary as indexed investments in certain asset classes are likely to find it challenging to replicate the strategy's stated benchmark. This is a critical distinction which can often be overlooked. The expected return for a passive strategy is often framed as "benchmark minus fees." There are markets where this is not the case due to a variety of factors including the transaction costs associated with index turnover. The table below highlights asset classes where passive investment strategies are more (or less) easily able to replicate index exposures.

Figure 1:
Ease of Replicating Index Exposures

Easy to Replicate with Passive Investments	Difficult to Replicate with Passive Investments
U.S. Equity (Large and Small Cap)	High Yield Corporate Fixed Income
Non-U.S. Developed Equity (Large and Small Cap)	Bank Loans
Emerging Market Equity	Convertibles
Core U.S. Fixed Income	Municipal Bonds
U.S. Treasuries (Nominal and Inflation Linked)	Emerging Market Debt
Commodity Futures	

Index Construction

Beyond the availability and quality of passive investments, there are also risks associated with investing passively. In our view, the decision to invest passively is indeed an active decision. To state the obvious, passive investing does not provide any opportunity to protect capital in a difficult market environment or generate excess returns during a bull market. Conversely, when choosing to invest actively, investors may look for "defensive" managers who can protect in down markets or may look for "high beta" strategies which can outperform during rising markets.

Passive benchmarks may not provide investors with their desired exposure and/or may have concentrated positions, and large weights to companies that have performed well. For example, passive convertible bond ETFs provide a market exposure which is more equity sensitive than is ideal for investors who have significant equity allocations and are looking to convertible bonds for some measure of diversification or downside protection. Given that the characteristics of passive options for convertible bonds are not well aligned with our objectives for the asset class, we would advocate for active management in this asset class. Two additional examples are emerging market equities where the "standard" benchmarks have country concentration and large weights to state owned enterprises and U.S. small cap value benchmarks which have large weights to financials. For asset classes which have poorly constructed, non-investable, or concentrated benchmarks, Rocaton generally recommends investing actively. Before investing passively, we would encourage investors to fully understand the construction methodology and composition of the specific benchmark which they are seeking to track.

Figure 2: Assets Classes Where Rocaton Often Prefers Passive/Active Management

Prefer Passive Investments	Prefer Active Investments
U.S. Large Cap Equity	Core U.S. Fixed Income
U.S. Nominal Treasuries	High Yield Corporate Fixed Income
U.S. Inflation Linked Treasuries ("TIPS")	Bank Loans
	Convertibles
	Municipal Bonds
	Emerging Market Debt
	Non-U.S. Developed Large Cap Equity
	U.S. and Non-U.S. Developed Small Cap Equity
	Emerging Market Equity

Finally, there is a perspective that the flood of assets out of active management and into passive strategies (particularly in U.S. equities) may lead to an imbalance such that skilled active management will have greater opportunities to outperform. In other words, if the growth of assets in capitalization weighted index funds such as the S&P 500 is distorting security prices, there should be excess return opportunities available to skilled active managers. This perspective has been promoted by active managers for some time and has yet to be borne out, but one could envision an extreme environment in which prices were sufficiently skewed by asset flow into index funds such that skilled active managers could more readily identify "mispricings" and thereby generate excess returns.

Strategy Results Net of Fees

While active management fees can vary significantly by asset class, investors should expect to typically pay between 20-100 basis points in incremental fees for active management across a portfolio. Importantly, however, indexing is not "free" as passive exposures in some asset classes, such as emerging markets equity, may cost 20 basis points. Recognizing the fees associated with passive options, the fee differential between active and passive strategies should be considered when making the decision between passive or active management. Consider the example of a passive equity strategy which charges 5 basis points and an active strategy which charges 55 basis points. The "return hurdle" for the active manager should be 50 basis points gross of fees (or negative 5 basis points after fees) as this is what it would cost investors to implement passive exposure. Of course, defining success for that same active manager is a different topic which we explore later in this paper.

Time Horizon

Excess returns from active managers can be cyclical. It is extremely unlikely that even skilled managers will outperform every quarter or every year and even the most successful managers can underperform for extended periods. We would also suggest that the range of expected or acceptable outcomes should be adjusted for the time horizon over which managers are being evaluated. For a manager with a 5% tracking error, the one standard deviation event for a given year is +/- 5% versus expected excess return. If we extend the time horizon to 6 years, that range tightens to +/-2%. Barring any significant changes (i.e. portfolio manager departure, firm transaction, etc.) we would suggest that investors have a minimum time horizon of at least 3-5 years before fully evaluating an active manager's skill. Focusing on the longer-term consistency of results and looking past short-term noise that is within expectations can be a useful exercise. Investors who do not have the patience or governance structure that will enable them to take a multi-year time horizon should consider passive investing.

Governance and Resource Commitment

Selecting and monitoring active managers requires more resources than the resources required to invest 100% passively. Identifying skilled active managers is not a perfect science and requires some level of subjectivity coupled with limited empirical evidence in some cases. Even with sufficient data, it can be difficult to distinguish between luck and skill. One of the most difficult aspects of manager selection is the recognition that past performance is not necessarily an indicator of future success, and should most definitely not be considered as the sole determinant of future performance.

Too often, investors are prone to making poor decisions related to active managers on either the "buy" or the "sell." Managers are typically hired at a point when track records are superb with the full knowledge in advance that performance will likely be cyclical and that there is likely to be poor performance from this same manager at some point in the future even though nothing fundamentally changed with the team, strategy or process. Although it is often a contrarian decision, investors might want to consider hiring a manager who has had short-term underperformance, but has demonstrated the ability to add value over the long-term. Conversely, there might be a situation in which managers have delivered on expectations for extended periods of time yet something fundamentally has changed which might call into question their ability to repeat this strong performance in the future. Again, it is often unpopular to terminate a manager who has exceeded expectations, but it may be necessary. Succeeding in active management requires investors to make sound decisions when hiring, retaining and potentially terminating managers and, just as importantly, at the right time.

Further, to be successful at picking active managers, investors should be prepared to conduct extensive due diligence on their own and/or with the assistance of an advisor/consultant. The due diligence approach should logically include quantitative and qualitative assessments of the manager and its strategy. Most institutional investors seek to evaluate the manager's organization, philosophy, process and performance. The specific factors which investors might consider as part of their evaluation are too numerous to mention and beyond the scope of this paper, but is something Rocaton and its team of manager research professionals focus on extensively in our process to identify skilled managers.

After identifying appropriate strategies, investors must, on an ongoing basis, monitor performance and determine if changes are needed. For institutional investors who are governed by investment committees, additional time at committee meetings will likely be required to review active manager performance. Importantly, the time spent monitoring and reviewing active manager results should be considered relative to time spent on asset allocation and other issues. This is not to say that the incremental time requirement should prevent institutional investors from implementing actively, but rather that investors must determine the most beneficial use of their time. While we address this topic in greater detail below, we would prefer that investors spend most of their time focusing on composite (e.g. public equity, fixed income, etc.) or total portfolio level results, rather than individual manager results.

Finally, different investor groups, such as defined contribution plans, may have unique considerations which might impact their willingness and/or ability to invest actively. For example, in most cases, we recommend defined contribution plans include both active and passive strategies so as to offer participants a broader range of choices.

Risk Tolerance

Risk can and should be considered using a variety of metrics. One commonly used metric is tracking error (i.e. the standard deviation of a manager's or a portfolio's excess returns). While typical tracking error expectations can be wide-ranging at the total portfolio level, they often range from 1-3% depending on the type and amount of active management utilized.[3] At the individual strategy level, there is also a wide range of expectations for tracking error, ranging from low single digits (1-2% for enhanced index strategies, for example) to the low double-digits (10-12% for benchmark agnostic strategies). There are additional risks which need to be considered when pursing active management such as peer risk (i.e. the potential to have results that differ from peers). Further, absolute volatility is another risk which investors must consider. For example, some strategies have an objective of generating lower volatility and protecting capital during down markets. Investors who cannot tolerate high tracking error should tilt towards passive management or lower tracking error strategies.

FRAMEWORK FOR ALLOCATING ACTIVE RISK

While we believe institutional investors and consultants should be cognizant of tracking error at the manager level, we would suggest that it is equally, if not more important, for an investor to understand the active risk that is being taken at the asset class and total portfolio level. With regards to risk budgeting, institutional investors should:

* Think holistically. In other words, the combination of active and passive strategies is just as important as the selection of individual strategies.
* Determine the risk tolerance for active management not only at the strategy level (line-item risk) but also at the asset class composite and total portfolio level.
* Attempt to align active risk budgets with the perceived opportunity for skilled active managers to add value relative to passive indexes. For instance, in some cases investors may want to deemphasize active risk in more efficient asset classes such as U.S. Large Cap Equity in favor of taking active risk in Emerging Market Equity.
* Establish and adhere to rebalancing programs at the strategy level. Not only is buying low and selling high at the asset class level a useful discipline it is also relevant at the strategy level.
* Attempt to diversify the sources of active risk contributing to a portfolio from different managers and strategies.

Understanding the drivers of individual manager performance is important; however, evaluating the success of the composite is likely of greater importance. We would encourage investors to reconsider the time spent on individual line items, and instead suggest that they focus on the results of broad asset class composites and results at the total portfolio level. It is important to recognize that the time spent reviewing individual managers is generally not commensurate with the impact on the portfolio.

3 If the total portfolio benchmark is not adjusted for asset allocation decisions, the tracking error of the total portfolio may be impacted materially.

Take the example of a portfolio with five managers, each of which we believe will generate a net information ratio of 0.15 with excess returns which are independent. We would presume that each roughly has a probability of success (i.e. beating the benchmark) of 56% over the 1-year period. Figure 1, below, expands on this example by providing the estimated probabilities of a given number of managers (out of five) delivering positive excess return over one, three and five-year periods. Particularly over short-term periods it is reasonable to expect one, two, or even three skilled active managers to trail a benchmark. The table also illustrates the improved odds of beating benchmarks for a diversified portfolio of five managers relative to a single manager. Theoretically, by adding skilled managers that have diversified alpha sources, the likelihood of the composite achieving success is greater than the likelihood of an individual manager achieving success.

Figure 3: Likelihood of Individual Managers and Composite Generating Positive Excess Returns

# of Managers with Positive Excess Return	Time Horizon		
	1 Year	3 Years	5 Years
0	1.7%	1.0%	0.7%
1	10.5%	7.5%	5.8%
2	26.7%	22.8%	20.0%
3	34.0%	34.6%	34.2%
4	21.6%	26.2%	29.3%
5	5.5%	7.9%	10.0%
Likelihood of an Individual Manager Generating a Positive Return	56.0%	60.2%	63.1%
Likelihood of Composite Generating a Positive Excess Return	63.1%	71.9%	77.3%

Analysis assumes the underlying managers all have a net information ration of 0.15.

Importantly, determining the optimal level of active management is not solely a quantitative approach. It should also take into account qualitative factors. Investors should also consider:

* The percentage of the portfolio and dollar amount allocated to one firm or one strategy.
* Investment management fees. One large separate account will typically be more attractively priced than three small separate accounts or fund investments.
* Limitations of multi-manager diversification at the asset class composite level. Adding managers that simply offset the active positions of other managers could lead to the construction of an expensive index.
* The resources required to hire and monitor multiple managers.

Importantly, we believe investors would be served well by implementing active management in markets in which they believe offer the greatest opportunity for skilled investors to add alpha. Certain markets, in Rocaton's view, such as emerging market equity, tend to be less efficient and may reward skilled asset managers for having an information advantage. Spending more of a program's active risk budget in less efficient areas will likely yield better outcomes. Other asset classes which may be less efficient, and therefore offer the potential for skilled managers to add value, include U.S. and international small cap equity, bank loans, emerging market debt, and convertibles, among others (see Figure 2 earlier in the paper). As markets evolve, it is possible for asset classes to become more or less efficient, thereby impacting the potential value add from active managers.

Finally, it should be noted that asset classes are selected because of their risk/return profile and how they are expected to interact with other asset classes. To the extent that active management is employed extensively throughout a portfolio, investors should be aware that implementing actively may alter the expected risk exposures and beta of the portfolio and alter the objective of a portfolio's asset allocation philosophy. For example, using unconstrained bond strategies in place of core fixed income has, at times, led to a meaningfully different beta than the intended benchmark exposure.

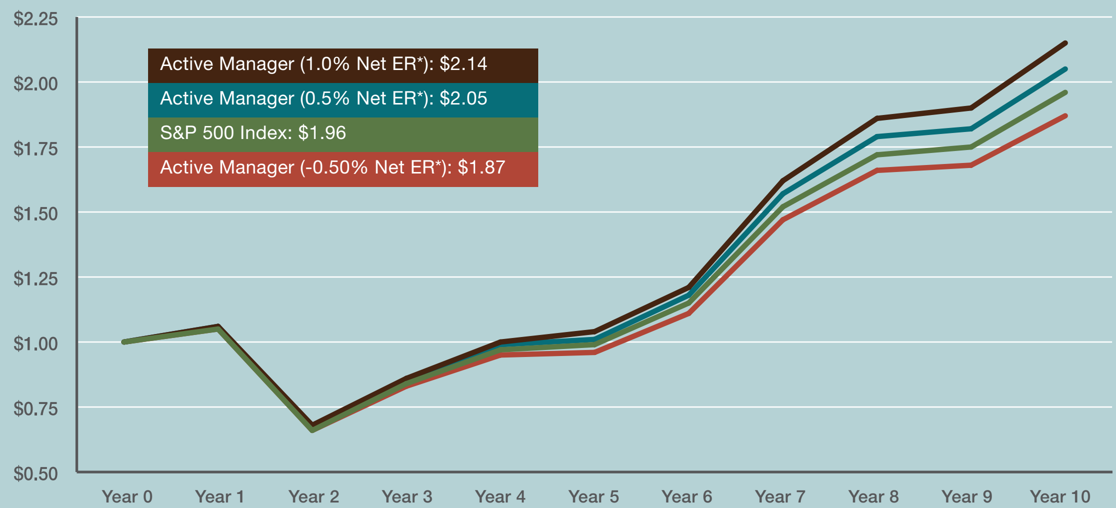
SETTING ACTIVE MANAGEMENT EXPECTATIONS

While Rocaton believes that skilled active management can add value in certain asset classes, we would submit that setting realistic active management expectations is a critically important exercise which will help:

* Evaluate manager performance more effectively.
* Avoid unwarranted manager turnover.
* Inform strategic asset allocation decisions. In other words, investors which, on an ex-ante basis, rely too heavily on active management in attempt to meet an expected return objective, may ultimately be disappointed with investment results.

The chart below, highlights how impactful skilled active management can be on cumulative returns. In this hypothetical example, we illustrate the growth of a $1 dollar over a 10-year period for the S&P 500 Index and three active managers. In this example, the S&P 500 Index returns approximately 7% per annum over the ten-year period, and the three mangers generate 1.0%, 0.5% and -0.5% in net excess returns per annum, respectively. At first glance the net expected excess returns of 100 basis points and 50 basis points may seem somewhat conservative relative to what asset managers claim they can deliver; however, over a 10-year period this results in the active managers that generated net excess returns of 1.0% and 0.5%, per annum, producing cumulative outperformance of ≈19% and ≈9% respectively.

Figure 4:
Growth of $1 –
Active Managers
with Different
Excess Returns



*Net ER=Net Excess Return.

In the table above, we illustrated how impactful skilled active management can be in terms of value creation. It's important for investors to recognize that even over longer trailing periods, some level of underperformance for skilled active managers is well within the range of expected outcomes. Further, terminating a manager has explicit and implicit costs and should be based on criteria which extend well beyond end-point specific performance.

It's important to discuss manager universes as it relates to establishing realistic performance objectives. When examining the performance of a given manager universe relative to the germane benchmark, it's imperative to recognize that universes have biases.[4]

* **Survivorship bias**: Arises when an analyst uses the performance results of a group of strategies, but excludes strategies that have dropped out of the universe, typically due to poor performance. Survivorship bias tends to distort data in only one direction, by making the universe results seem better than they actually are.
* **Incubation bias**: Strategies enter universes after achieving some level of success. The products with less attractive performance are not reported. As with survivorship bias, this typically makes the universe results seem better than they actually are.

With these biases in mind, one can't reach any conclusions with regard to active management based on universe data alone. Often, claims are made with respect to active management in general based on the performance of the median manager in a particular universe. For example, the median small cap U.S. equity manager has outperformed a market index over a 5 or 10-year period; therefore, one might conclude that active small cap managers, in general, outperform an index. While it might be true that a skilled manager can outperform an index, it may not be accurate to claim that the average manager will do so. Such claims certainly should not be arrived at based on universe data given the flaws with this data discussed earlier.

4 Other biases, such as the weighting scheme that a universe employs, will also impact performance results.

Further, focusing on excess returns alone ignores the risk taken to generate that return. There are certain manager universes in which the majority of managers have outperformed the relevant benchmark. For example, over the 5, 7, and 10-Year trailing period, ending 3/31/17, over 95% of eVestment Core Plus managers outperformed the Bloomberg Barclays Aggregate Index. While some of the excess return is attributable to the biases previously discussed and some is end-point specific, we would submit that a fair amount of the consistent outperformance can be explained by the inherent biases in the manager universe relative to the benchmark. While most core plus managers have generated positive excess returns relative to the index, most have done so by taking on more risk relative to the benchmark. In other words, the consistent overweight that core plus managers have had to higher returning spread product should not be conflated with skill. True "alpha" should be measured on a beta adjusted basis.

Conclusion

Determining the optimal level of active management in a portfolio is a complex decision that is informed by a variety of inputs. Based on the performance of our high conviction recommended list, we believe that we can identify skilled active managers across public market asset classes. However, we would also submit that passive management should be the baseline and that seeking to add value via active management over the long-term, net of fees, should be done so in the context of the points raised in this paper.

We believe investors are more likely to achieve optimal outcomes if they develop a framework for allocating active management risk across a diversified portfolio, focus on asset classes in which active management is more likely to be rewarded, appropriately set expectations for active managers and consider the six factors that we previously delineated when they are considering implementing actively:

* The availability and quality of passive investments
* Index construction
* Strategy results, net of fees
* Time horizon
* Governance and resource commitment
* Risk tolerance

Rocaton looks forward to discussing the topics presented in this paper and continuing our conversations about active management.

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Active Management Philosophy & Implementation

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