The Manager Search, Selection and Evaluation Process

CONTENTS

1 Introduction

1 Historical Perspective on Manager Performance

2 Manager Search, Selection and Monitoring Process

2 Qualitative Factors in Evaluating Investment Managers

4 Qualitative Factors in Evaluating Manager Performance

5 The Significance of Tracking Error and Information Ratio

6 Due Diligence Process

7 Determining if a Manager Change is Appropriate

8 Conclusion

Introduction

For successful financial advisors who use active management for client portfolios, it is essential to have a consistent, disciplined strategy for selecting managers and for monitoring their performance. A well-conceived roadmap to guide the process can help advisors hire appropriate managers and protect against the risk of poor hiring decisions and untimely firing on the basis of short-term performance. This report addresses several important considerations in the manager search, selection and evaluation process and identifies circumstances where changing existing managers may or may not be appropriate.

Historical Perspective on Manager Performance

The decision to select a manager often hinges simply on the basis of recent performance without paying appropriate attention to other important facets of the manager selection process. However, hiring a manager with strong short-term performance and replacing managers with poor short-term performance may yield less than desirable results. Consider the findings of a survey of mutual funds conducted by Standard & Poor's[1] during a recent three- and five-year reporting period, which illustrates how difficult it is to consistently maintain top quartile and top half performance over a long period of time. As illustrated in the chart on the next page:

- For the three years ended March 2016, 30.36% of large-cap funds, 24.04% of mid-cap funds and 19.18% of small-cap funds maintained a top-half ranking over three consecutive 12-month periods.
- Out of the 641 funds that were in the top quartile as of March 2014, only 7.33% managed to stay there by the end of March 2016.
- 8.5% of the large-cap funds, 3.26% of the mid-cap funds and 0.68% of the small-cap funds remain in the top quartile.

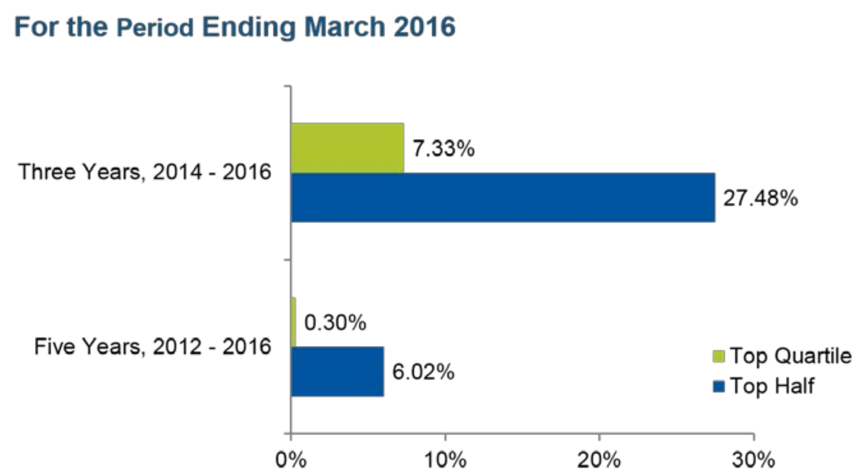
Despite this evidence, many advisors still cling to the misconception that past performance will be predictive of future success.

Due to the unpredictability of market cycles, a manager who stays true to its investment approach and discipline will inevitably incur periods of relative underperformance. Manager performance by itself is not predictive or informative, but is often merely the result of the qualitative components of the manager's approach. For this reason, advisors should be hesitant to fire

[1] Standard and Poor's, "Does Past Performance Matter? The Persistence Scorecard" August 2016.

managers who have poor absolute performance during an unfavorable portion of the market cycle if their relative results fall within the range of acceptable performance expectations.

Mutual Funds with Consistent Performance



Source: Standard and Poor's. Chart is for illustrative purposes only. Past performance is no guarantee of future results.

Manager Search, Selection, and Monitoring Process

The objective of the manager search and selection process is to "hire" managers who will:

- Effectively implement the asset allocation strategy of the client.
- Effectively execute the day-to-day investment process.
- Consistently achieve objectives on a risk-adjusted basis.

While manager performance may provide initial screening criteria, to accurately assess an investment manager, appropriate consideration must be given to the qualitative criteria in the manager evaluation process as outlined next. The primary goal of the search and selection process is to find the managers who have outperformed the market, and will continue to outperform in the future.

Qualitative Factors in Evaluation Investment Managers

Investment Philosophy and Process

An important consideration in evaluating a manger is the overall philosophy behind the manager's approach, including how the firm views the market and how it proposes to add value. It is imperative to gain a thorough understanding of the manager's strategy and execution methods to perform an effective evaluation. The manager's stated process must support the philosophy. Among the questions to be answered are: does the manager's philosophy make sense, has it been tested in all types of market environments and how has it changed over time? The following are additional considerations regarding the decision making process:

- **What are the research capabilities of the analyst team? Inquiry could include:**
  - What research resources are available (is it only third party research or do the analysts develop their own research; do they have access to management; are they considered generalists or sector specialists)
  - What is their screening process (is it a bottom up or top down approach)
  - How do the analysts maintain coverage of securities that become part of the portfolio
- **What are the disciplines of the portfolio management team? Inquiry could include:**
  - What is the process for adding or removing securities from the portfolio
  - What is their buy/sell discipline and can they provide examples of how this discipline is enforced
  - What are the exceptions to the investment philosophy and process, and how are they managed (when is it appropriate to include a large cap in a mid-cap portfolio, or when is it appropriate to continue to hold a security after it reaches its initial sell target)
  - What is the portfolio turnover
  - How is the portfolio constructed (asset allocation process and discipline)
  - What tax efficiency considerations are employed
  - What are the proxy voting policies and procedures

Finally, managers should maintain positions consistent with the asset size and style by which they define themselves. Drifting away from the style for which the manager was originally hired (e.g. a large-cap growth manager buying small-cap value stocks) could negatively impact the client's asset allocation strategy.

People

One of the most critical components of the manager selection process is a thorough analysis of the individuals responsible for managing the assets. An experienced, diverse, well-educated management team often has a tremendous impact on the quality and longevity of a manager. Questions to ask about the manager include the tenure of the lead portfolio managers and their experience during both up and down cycles in the market. Also important are the qualifications of the analysts and how they are recruited. Personal meetings with the portfolio managers and analysts can be instrumental in "getting to know" the manager beyond its formal stated strategies and procedures.

It's also extremely important to monitor any personnel changes in a manager's organization. A recent Cerulli study indicates that investment team expertise and manager tenure is the most important manager attribute according to research and due diligence groups.[2]

The impact of investment manager turnover can be a significant problem for the predictability of returns. Strong depth of the team managing a portfolio can help alleviate potential problems arising from personnel turnover. Small organizations with limited depth are extremely vulnerable to return unpredictability if one or two experienced managers leave the firm.

[2] Cerulli Associates, The Cerulli Edge, Managed Accounts Edition, Second Quarter 2009

Acquisitions of a manager by a larger company can also present potential problems. For instance, the new owner may want to shift the investment style or place greater restrictions on the manager. Significant manager turnover due to an acquisition could warrant a change in managers.

Parent

Inspecting the parent company is a necessary component of the evaluation process. It should be evident that the organization as a whole has the ability to attract and retain talented personnel. This can generally be determined by the stability and financial strength of the organization. The regulatory process is also important; the corporation should be investment-based as opposed to focusing solely on short-term sales. Additionally, an organization without a stable and cohesive culture may be an indication of looming stagnant growth, lack of motivation and inefficiencies. A cohesive corporate culture can unify team members, while improving efficiency and promoting productivity.

Quantitative Factors in Evaluating Manager Performance

Performance

Active managers are hired to add value by meeting or exceeding their respective benchmarks on a risk-adjusted basis (alpha) over a specified time period. Simply measuring the absolute return of the manager over its benchmark (excess return) is not an accurate quantitative evaluation tool unless the volatility of the manager is equal to that of the benchmark. In addition, poor short-term absolute or risk-adjusted performance is usually not reason enough to fire a manager.

Poor short-term performance could be due to an out of favor style and may not accurately reflect the true skill level of the manager. Conversely, consistent underperformance over a longer rolling time period can justify a manager switch. To avoid costly mistakes, advisors should also take into account the risk and return measures described below, to see if these metrics lie outside a standard range for a given manager.

- **Batting Average** — Batting average measures the manager's ability to meet or beat their benchmark consistently. It is calculated by dividing the number of quarters (or months) in which the manager beats or matches the index by the total number of quarters (or months) in the period. A manager who outperforms the market three-quarters of the time will have a statistical batting average of 0.75. This measure is more statistically significant over a longer time period.
- **Alpha** — Alpha is often viewed as a measurement of the value added or subtracted by a manager. It measures the incremental difference between a manager's actual returns and expected performance, given the level of risk. A positive alpha figure indicates the manager has produced returns above the expected level at the same level of risk. A negative alpha suggests the portfolio underperformed given the level of risk assumed.
- **Beta** — Beta is a measure of sensitivity to the market benchmark, or how volatile a portfolio is relative to the whole market. A portfolio with a beta higher than 1.0 has historically been more volatile than the benchmark, while a portfolio with a beta lower than 1.0 has been less volatile. The accuracy of the beta is dependent on R-Squared.
- **R-Squared** — R-squared (R^2) is used to select an appropriate benchmark. It helps to identify the percentage of a manager's return that is specifically attributable to underlying benchmark volatility. Many research professionals agree that an R-squared above 0.70

indicates a "good fit" between the manager and benchmark, validating that the benchmark is suitable. A strong R-squared also indicates the alpha and beta of the portfolio are fairly accurate. Generally, highly diversified portfolios have higher R^2 percentages.

- **Standard Deviation** — Standard deviation indicates the consistency of a manager's returns. It is a measure of total risk, both systematic (market-related) and nonsystematic (security specific). It is important to note that standard deviation measures the expected variance of future returns on *either side* of the average and does not differentiate between returns above or below the mean.
- **Downside Risk** — Downside risk is a measurement of the variability of returns that fall *below* the minimum acceptable return, which could be defined as the average of the manager, the risk-free rate or even zero.
- **Sharpe Ratio** — The Sharpe ratio measures the efficiency of a portfolio. It quantifies the return received in exchange for the risk assumed and is often referred to as risk-adjusted performance. This metric can help determine if the portfolio manager is reaching the goal of maximizing returns while controlling risk.
- **Tracking Error** — Tracking error measures active risk, or the variability of a manager's return against the benchmark. It is calculated as the standard deviation of the active return or excess return over the benchmark. This provides a historical measure of the variability of the manager's returns relative to the benchmark.
- **Active Share** – Active Share measures the percentage of the manager's portfolio holdings that are different from the benchmark. It is calculated using the weight of each stock held by the manager relative to the weight of each stock in the benchmark. For a manager that never shorts stock and never buys on margin, Active Share will be between 0% and 100%.
- **Information Ratio** — Information ratio is considered by some to be a more sophisticated Sharpe ratio. A higher information ratio is desirable as it is calculated by the excess return in the numerator divided by the tracking error, or consistency of excess return, in the denominator. Information ratios can be used to compare managers across asset classes.

The Significance of Tracking Error and Information Ratio

Analyzing manager performance over shorter time periods may inadvertently cause good managers to be rejected. Unfortunately, manager skill cannot be statistically evaluated with three- or five-year performance data. According to a study conducted by Zurich Scudder,[3] a manager's performance evaluation by-the-numbers is statistically unreliable in the normal investment evaluation period, which is generally less than five years. The study shows that the timeframes for statistical significance is a minimum of sixteen years of performance data for certain asset classes, and as many as 157 years of performance data for U.S. equities.

Based on this information, how can performance data provide any real evidence of manager skill? By using performance data to calculate the manager's tracking error (the volatility of the manager's performance against its benchmark) the study shows that lower tracking error creates

[3] "Manager Selection and Retention: Putting the Odds in Your Favor," Bruce Curwood, MBA, CIMA, CFA, *The Journal of Investment Consulting*, Volume 6, No. 2, Winter 2003/2004

a higher probability of success and out performance. This study assumes that, over a given time horizon, there is a constant manager alpha, and active returns are normally distributed.

The chart below, which looks at the probability of a skilled manager underperforming (assuming skill is measured by 1% alpha), demonstrates this more clearly. Looking at 1-, 5- and 10-year time periods, the lower a manager's tracking error, assuming a constant 1% alpha, the lower the probability the manager will underperform. With a moderate estimated tracking error of 4%, and a 5-year horizon, there is a 30% chance that a skilled manager with 1% alpha will underperform. Conversely, there is a 70% probability that this manager will successfully outperform.

Probability of a Skilled Manager (1% Alpha) Underperforming

		Tracking Error	
	2%	4%	8%
1 Year	31%	41%	47%
5 Years	14%	30%	43%
10 Years	6%	23%	40%

Source: Zurich Scudder Research

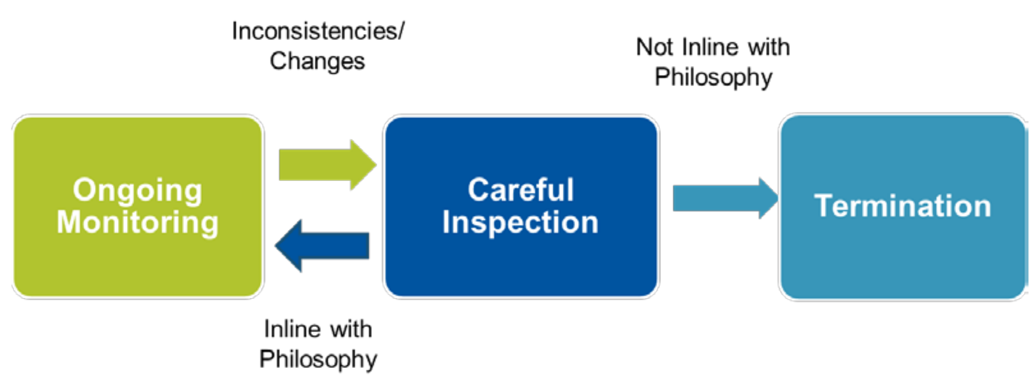
Because tracking error is used to calculate information ratio (IR = Return of the Portfolio minus the return of the benchmark, divided by the tracking error), it can be assumed that high-information-ratio managers (managers with the highest alpha for every one percent of tracking error) achieve more consistent results, and the probability that those managers will experience returns below zero is decreased.

Due Diligence Process

Ongoing Monitoring

For financial advisors who use active management for client portfolios, manger evaluation and selection is only a portion of the overall process. To successfully maintain an investor's portfolio, the amount of effort appropriate to ongoing due diligence should be the same as the manger selection and evaluation process. Any inconsistencies or changes that occur in the investment philosophy or process should result in a meticulous reexamination of the manager and process. A thorough evaluation is required to determine if the manager should be retained or terminated.

Sample Ongoing Due Diligence Process



The list below, which is by no means exhaustive, describes investment manager dynamics an advisor should have under constant surveillance:

- **Performance and/or cost changes** — How is this relative to the stated benchmark? Compared to peers?
- **Organizational changes** – What are these changes? Is this a result of growth or other factors? How will this affect the overall process?
- **Team modifications** — If new members are hired, who are they? Do they complement existing members and the overall strategy? If the let members go, why? How will this affect the investment policy?
- **New funds selected** – What are expected fund flows, assets, capacity? What role do these funds play in the portfolio?
- **Strategy and/or style drift** – Is this still in line with your understanding of the manager's process?

Due Diligence Implementation

Just as various metrics are used to evaluate *potential* investment managers, *elected* managers' performance must be quantitatively assessed as well. Below are examples of analytical tools that can be utilized for ongoing monitoring:

- **Attribution analysis** – A performance-evaluation tool used to analyze the abilities of portfolio or fund managers. Attribution analysis uncovers the impact of the manager's investment decisions with regard to overall investment policy, asset allocation, security selection and activity.
- **Holdings-based style analysis** — Holdings-based style tools classify portfolios based on the characteristics of the underlying securities.
- **Returns-based style analysis** — compares the portfolio's total returns (usually three to five years of monthly returns) to the total returns of various style-based indexes (usually four to 12 indexes) and makes inferences about style based on how closely the portfolio returns resemble those of different indexes
- **Performance analysis** – Techniques that performance analysts use to explain why a portfolio's performance differed from the benchmark. Can be used to ensure the portfolio is actively managed.

Determing if a Manager Change is Appropriate

Often during the due diligence process, changes or inconsistencies within the process or philosophy are evident. Prior to determining if it is appropriate to sever ties with a manager, the following parameters should be established:

- **Well-founded reasons to consider a change of managers include:**
  - The manager is no longer suitable for the client. The objectives of both the manager and the client should be reviewed regularly to ensure the manager remains an appropriate fit to the client's portfolio. If either the client's risk tolerance changes relative to the manager's style or the manager's approach is no longer suited for the client's time horizon, a change should be strongly considered. Changing managers is certainly an

appropriate consideration if the assets managed no longer serve the allocation to the asset class it was originally intended.

- The manager is exhibiting underperformance over rolling time periods.
- The manager is experiencing significant turnover or a change in management.

■ **Unfounded reasons to consider a change of managers include:**

- Poor absolute or short-term performance. Managers may underperform for a number of valid reasons including their style is out of favor, short-term performance may be skewed by a random event or a manager may recognize the value of a stock ahead of the market.
- Reaction to a specific or isolated event.
- Short-term performance of another manager was better than a current manager (also known as "chasing the hot dot").

Conclusion

The most accessible and comprehensible information on a money manager is past performance, which is not predictive of future events. For investors, further analysis, including thoroughly evaluating the qualitative and quantitative components of the manager selection process, can be quite challenging. This defines the need for financial advisor guidance. Manager performance varies over time, and in order to ensure a balanced overall picture, advisors must recognize that individual managers may underperform benchmarks for prolonged periods, yet be extremely skilled. By making hasty firing decisions, clients may miss the chance to participate in future favorable performance and also incur search fees and transaction costs. There is also no guarantee that rapid hiring decisions will reap greater returns.

Quantitative analysis is often weighted more heavily given the ease with which performance data can be obtained. In using this information, it is essential that data for longer, rolling time periods be considered in order to remove end-point sensitivity.

Implementing a consistent, disciplined process, in addition to creating a well-diversified portfolio with a formalized rebalancing strategy, can be instrumental in achieving more stable investment results and long term financial goals. By focusing on the quality of research, specific performance metrics and details of the portfolio construction process, advisors should be better able to search for, select and evaluate managers.

About Nuveen Wealth Management Services

Nuveen Wealth Management Services is focused on delivering wealth management education and practice development guidance to successful financial advisors who have a relationship with our firm. Please contact us directly at 312-920-6955 to arrange an engagement for this topic or inquire about our other wealth management services.

22151-ADV-Y-01/18

Disclosure

The statements contained herein are the opinions of Nuveen Wealth Management Services. All opinions and views constitute our judgments as of the date of writing and are subject to change at any time without notice. Hypothetical examples are shown for illustrative and educational purposes only.