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Interpreting Performance Attribution

Accurately measuring and analyzing portfolio performance is an important step in the investment management process. Precise performance measurement and attribution, however, are only part of the story. How these data are subsequently interpreted and acted on by investors is also critical to long-term investment results. This article attempts to address some of the pitfalls that may beset investors when interpreting performance attribution.

Accurately measuring and analyzing portfolio performance is an important step in the investment management process. Fund sponsors and investors certainly need to have a valid basis for assessing investment performance, but accurate performance measurement and attribution may also provide investment managers with an opportunity to better understand the drivers behind their own performance and how they are positioned relative to their benchmark and peers. Precise performance measurement and attribution, however, are only part of the story. How these data are subsequently interpreted and acted on by investors is also critical to the investment process and long-term investment results.

Correctly interpreting performance measurement results is a complex task, and the improper interpretation of results can lead to costly errors for the investor. Although managers are often hired because of strong historical performance, the primary goal when hiring a manager should be ensuring that the manager's asset class, investment style, and process are appropriate for the investor's long-term investment strategy. Having a thorough understanding of the manager's investment focus and process prior to entrusting the manager with one's assets is essential to successfully monitoring and assessing the manager's subsequent performance results. Performance attribution should, therefore, attempt to reveal an accurate, complete picture of the actions that a manager has taken to achieve the investment returns. This analysis will allow investors to determine whether their expectations are being met and then to formulate an appropriate response. But when interpreting performance results, investors should guard against several common pitfalls, three of which I would like to address.

First, style indices, such as the S&P 500 Growth and Value or the Russell 1000 Growth and Value indices, are frequently used to ascertain whether a manager is performing well. A growth manager, one might assume, should be able to closely track or outperform an appropriate growth index. Although returns for these style indices are reliable and readily available, this approach may be flawed. Because of the method used for rebalancing, common style indices may not be indicative of the underlying drivers that truly represent the manager's investment style. Further complicating the matter, both the S&P and Russell style indices are rebalanced only once a year, which may allow for considerable style drift to occur.

In these instances, factor performance, which isolates the performance of many individual return drivers, can provide valuable insights into a manager's performance results, as shown in **Table 1**, which compares returns on the S&P 500 style indices with factor returns derived from the same S&P 500 component stocks. It should be noted that these factor returns are based on monthly rebalancing and are long–short in nature (the stocks that rank highest based on the given factor are bought, and the bottom ranked stocks are shorted). The variance of the factor returns is thus often greater than what would be experienced in the S&P 500 style indices, which are long-only. Nevertheless, factor analysis such as this can at times be essential to correctly interpreting performance results.

Table 1. S&P 500 Style Indices vs. Factor Performance (performance as of 28 February 2011)

Style/Index	Long–Short Factor	1 Year (%)	3 Year (%)	5 Year (%)
S&P 500 Growth (TR)		22.8	4.5	4.2
S&P 500 Value (TR)		22.4	−0.3	1.4
Value	Sales/price	−0.8	31.6	21.6
Value	Trailing earnings/price	−0.2	−2.2	−0.6
Value	Book/price	5.0	27.0	9.0
Growth	Sales growth 3-year	1.3	2.2	−0.1
Growth	Estimated long-term growth	4.6	−15.1	−21.1
Growth	3-year historical growth	−5.9	−10.9	−4.6
Growth	1-year estimated EPS growth	4.3	−37.1	−31.4
Growth	12-month price momentum	−4.1	−52.0	−42.0

Sources: Morgan Stanley Quantitative and Derivative Strategies; Standard and Poor's.

Using the data in Table 1, we can see that a growth manager that looks for companies with above-average estimated EPS growth would likely have underperformed the market during the three- and five-year periods, even though the S&P 500 style indices suggest growth outperformed. Also worth noting is that the factor returns are more tightly dispersed for the one-year period than for the three- and five-year periods. This result suggests that the emphasis on a specific factor or style was less important to returns over the most recent year than had been the case in the preceding two- and four-year periods.

Second, although it is clear that poorly performing managers should be scrutinized to ensure that they are not managing the portfolio in an inappropriate manner, managers with strong performance should also be monitored closely to ensure that their performance is appropriate in the context of their mandate. Investors have a tendency to ignore a manager that is performing well, even though the manager's performance may be the result of style drift or taking on excessive risk relative to the manager's mandate or investor expectations. Even within the market, different sectors, industries, and styles will take turns leading and lagging from time to time based on a vast number of variables. Investors should expect that any investment style or asset class will outperform and underperform periodically and that subsequently any trend is likely to reverse itself at some point. It is risky, perhaps increasingly so over time, to assume that a current trend will persist into the future. Sustained outperformance almost invariably is followed by a period of underperformance, even for skilled managers.

Unfortunately, underperforming managers and asset classes are often terminated and replaced by those that have outperformed recently, only to have both subsequently reverse course, resulting in additional losses for the investor. This view is supported by Stewart, Neumann, Knittel, and Heisler in their work entitled "Absence of Value: An Analysis of Investment Allocation Decisions by Institutional Plan Sponsors."[1] The authors studied the effectiveness of rebalancing and reallocation decisions by institutional plan sponsors from 1984 to 2007 and concluded that "institutional plan sponsors do not create value through manager and asset allocation/equity-style rotation" (p. 37). Simply put, "portfolios of products to which [plan sponsors] allocate money underperform compared with the products from which assets are withdrawn" (p. 48).

Finally, plan sponsors should avoid having a shorter-term focus than what their long-term investment strategy and actuarial studies are based upon. Even the most skilled managers will underperform for periods of time when their approach is out of favor. When asked, most investors claim to be concerned chiefly with the long-term performance of their invested assets, and yet, investors are apt to extrapolate short-term performance and take actions based on the assumption that recent performance results will continue indefinitely into the future. This view of investing is troubling, primarily because market returns are both volatile and cyclical in nature. Markets do not move upward over long periods of time without an occasional consolidation or pullback. These corrections are normal and help provide for a healthy market environment and returns in the long run. Donoho, Crenian, and Scanlan note that plan sponsors, on average, tend to focus on 3-year returns when deciding whether a manager is living up to expectations when, in fact, a 5- to 10-year time horizon would be more appropriate and provide higher returns.[2] The negative impact this excessive rebalancing has on long-term value is exacerbated by the trading costs that are incurred as a result of shifting assets between managers. The key point for plan sponsors is that strong or weak investment performance should not automatically be equated with the presence or absence of investment skill, particularly for periods of less than five years.

In summary, any investor, whether an institution or individual, would benefit by carefully formulating a realistic long-term investment strategy and understanding why a particular asset class or investment manager is being employed to fulfill a role within this strategy. Once the managers are in place, attribution analysis should be conducted regularly to ensure that all appointed managers continue to fulfill their respective roles, not based solely on their returns but, more importantly, with respect to their investment style and process. An apparent deviation from the manager's role would necessitate further analysis and a follow-up conversation with the manager prior to determining whether the manager remains suitable for the investor's long-term strategy. ◆

NOTES

1. Scott D. Stewart, John J. Neumann, Christopher R. Knittel and Jeffrey Heisler, "Absence of Value: An Analysis of Investment Allocation Decisions by Institutional Plan Sponsors," *Financial Analysts Journal*, vol. 65, no. 6 (November/December 2009):34–51.
2. David L. Donoho, Robert A. Crenian, and Matthew H. Scanlan, "Is Patience a Virtue? The Unsentimental Case for the Long View in Evaluating Returns," *Journal of Portfolio Management*, vol. 37, no. 1 (Fall 2010):105–200.

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