Evidence-Based Decisions Are Good Medicine for Your Company

Prove the Benefits, Then Act

By Karen Wells and Andrew Coupe

The best investment decisions are made using evidence-based analysis that requires proof of the benefits of corporate action and reduces the chance that a strong personality will advance potentially damaging ideas.

We have all been in the situation where the most forceful personality pushes a favored decision forward. At the board or investment committee levels, the results can damage an organization. For members of the C-suite, it can also be difficult to champion an alternative decision without quantitative backing and nearly impossible to introduce evidence supporting a different decision after the fact. We recommend having an investment decision-making process in place to avoid such a possibility.

The process outlined in Figure 1 assumes that an overall investment strategy is in place. The process for setting the overall investment strategy is different, although it also works with the concept of a quantitative foundation customized using company-specific criteria. In the medical field, this is known as evidence-based medicine. In other words, you cannot take action unless there is some proof that the action will benefit the patient, in this case, your company.

This decision-making process creates an unbiased quantitative foundation and then considers other factors that can include the size of the investment as well as the organization’s regulatory environment and organizational culture. The quantitative foundation helps to mitigate the impact of a personality that is overly forceful.

As an example, we will use the active/passive decision since every investment committee, and therefore every management group we have worked with, inevitably faces the question of whether to use an active or a passive (i.e., indexed) investment strategy. Typically, the question is posed in the context of a specific asset class, such as large-cap equities. Unfortunately, at some organizations, the way the question is answered is not particularly rigorous. This lack of rigor holds true for both personal and professional decision making, and can allow personal biases and strong personalities to overwhelm the corporate decision-making process.

In this example, we have limited the active-versus-passive question to large-cap U.S. equities. The quantitative foundation begins by analyzing active management excess return and the persistency of performance over various time periods.

At a high level, the analysis is very straightforward: We compare the excess returns of the universe of active managers to the passive alternative. This comparison is made against a measure of how actively each of the funds is managed. From this information, we can learn if active management works (i.e., produces excess return) and if more active management produces greater excess return.

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Our measure of active management is the tracking error of the fund. Tracking error is defined as the variability of a fund’s returns versus the index’s returns. If the manager takes small active positions in the portfolio, there will be a low tracking error and small excess returns would be expected. But if a portfolio manager takes large bets relative to the index, the fund will have an outsized level of tracking error and the potential for large excess returns (or large amounts of underperformance).

In the real world, different style biases skew the results of measuring the excess return of a fund against the core equity index. For instance, a manager that has a growth bias will tend to outperform the core large-cap index when growth outperforms, and the reverse will be true when value stocks outperform. Without adjustment for this effect, value added by the manager will be lost in the noise associated with style performance.

Our analysis neutralizes style and market-cap biases by building a customized benchmark for each fund. To develop a customized benchmark for each fund, the analysis finds optimal weights for each of the four style and cap indices (Russell 1000 Value, 1000 Growth, 2000 Value and 2000 Growth). These weights are used with the individual monthly Russell returns to create a more precise, tailor-made, benchmark return for each fund.

The analysis also examines whether funds perform better during different phases of the market cycle. For instance, since funds typically hold a portion of the portfolio in cash, this will have a positive effect on fund performance relative to the benchmark in down markets and the reverse in up markets. Since this may skew a conventional excess return measure, in which alpha is calculated over a five- or 10-year window, the analysis looks to measure fund performance during bull and bear markets.

On average, over the full time period analyzed, large-cap funds had negative returns relative to their custom benchmark at –0.35%. Although there were some managers that posted exceptional returns to compensate for their higher tracking error, the majority of the fund universe did not generate adequate returns to compensate for the additional risk.

As Figures 2 and 3 indicate, actively managed large-cap funds, on average, underperformed the custom Russell benchmark during all but the fourth time segment measured. Active management ineffectiveness is also highlighted by the fact that only 0.35% of the fund universe beat the index during all five time periods (Figure 2).
It is interesting that the within-period results tend to support the notion that managers are better able to outperform in bear markets. Both periods 2 and 4 show clearly better results than in bull markets. This bear market positive alpha, whether or not it is due to holding excess cash, is clearly a factor when reviewing fund performance over an extended period of time. Nearly 24% of all funds beat the benchmark during both bear market time periods, while only 7.3% of funds beat the index during both bull market periods.

The quintile tables in Figure 3 show the relatively volatile excess returns of actively managed large-cap funds during bull markets. As is evident in the bull market table, top-performing managers in period 1 had no advantage in the second or third bull market period. On the other hand, consistency in bear markets does seem to persist in other bear markets, especially in the upper quintiles.

This analysis tells us that large-cap equity managers do not provide consistent excess returns. But active managers do provide periodic excess returns that can benefit your organization. To take advantage of the excess return, your organization must be able to actively monitor and redirect equity dollars as illustrated in Figure 4.

**Broader Applications**

With practice, evidence-based decision making can move from investment decisions to other areas of your organization. Ultimately, this will encourage healthy growth and risk control based on data, not personalities.

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**Criteria to Consider**

**Governance:** Is the investment structure in place to make active decisions? Typically, the quarterly board or committee meeting structure is not sufficient. If so, an active mandate may add value. If not, you may want to create such an option or use a passive strategy.

**Tax status:** Is your organization a taxpayer? If so, an index structure may be more tax efficient. If not, an active strategy has an additional advantage.

**Regulatory:** Does your regulatory structure involve Other Than Temporary Impairment (OTTI) language? If so, an active mandate will require OTTI monitoring, reporting and potential write-downs that typically take more effort than the passive mandate. If not, or if your organization is structured to absorb the additional workload, an active strategy may be appropriate.

**Risk tolerance:** Does your organization have the risk tolerance to absorb both beta and alpha volatility? If so, active strategies are appropriate. If not, passive strategies will provide the asset class benefits without the excess return volatility.