Measuring Performance

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It has been my experience that most investors do a fairly poor job of evaluating their portfolio's performance over time. Investors know if their portfolio is growing or shrinking, but often have little insight as to whether it is doing so at a rate one should expect given their level of risk and the performance of the overall markets. To fully understand whether their portfolio is performing as expected and as required, investors need to look at how they have done relative to a proper benchmark, accounting for cash flows in and out of the portfolio along the way and net of all investment costs, including taxes.

The first question that should come to mind for any investor trying to measure his/her portfolio's performance is, "relative to what?" If a market is down 20% and the portfolio is fully exposed to that market but is only down 10%, then the investment decisions guiding that portfolio were likely appropriate (or just lucky) over that particular time period even though no one likes a 10% loss. Conversely, if a market is up 20% and the portfolio is exposed to those same risks but only up 10%, one should conclude that the investment decisions were poor (or they were unlucky). Nevertheless, most investors are quite happy with a 10% gain and do not consider what they could have done better to make up for their relative underperformance.

In order to determine relative performance and answer the question, "relative to what", you need to choose a proper benchmark. This benchmark should be an accurate yet broad depiction of your portfolio's risk exposures, and will likely consist of two or more indices that fully represent the asset classes in which your portfolio is invested. Simply select the proper indices to combine into a single benchmark portfolio and weight each according to your actual portfolio's general risk characteristics. Then, when you compare your portfolio to this custom benchmark you can easily determine if any of your decisions to stray from this benchmark portfolio have added value or not (by increasing return, reducing risk, or ideally both).

As a simple example, if you are invested in a portfolio that includes a wide array of global stocks and bonds (either via mutual funds or individual securities), you should use a benchmark that blends a global stock index with a global bond index, such as the MSCI World and the Barclays Capital Global Aggregate Bond indices, respectively. Make sure to use the total return performance of those indices so that all dividends and interest are included – price-only returns will result in lower benchmark performance and therefore a lower hurdle to clear for your own portfolio. Also, be sure to combine the two indices in the same proportions as those asset classes exist in your own portfolio (60%/40%, 75%/25%, etc.) so that the risk component is accurate. Then, over time, you can compare your/your manager's investment choices to see if they improved performance over the benchmark. If your/your manager's decisions, over a reasonably long period, do not add value over a similarly risky portfolio made up of market indices, you can and should reevaluate your investment approach. Selection of and comparison to a properly blended benchmark is the first part of performance measurement and is, unfortunately, what most investors (or their investment managers) do improperly or not at all.

While no or improper benchmark comparisons are crucial pitfalls to avoid, there are others worth mentioning. They include:

- *Misaligned/insufficient time periods*

  Make sure the time-periods of each portfolio and benchmark you are comparing are perfectly aligned, since the difference of just a few days or weeks can have a significant effect and render your comparison useless. For example, the S&P 500 was up 3.35% in just the first two weeks of February this year, and in just one day in October 1987 it lost over 20% (Black Monday, its biggest single-day loss ever). Were you to run a comparison over those timeframes and somehow not include those brief periods, it would be impossible to make any meaningful comparisons. Also, make sure not to draw too many conclusions from periods less than a year, and ideally use three years or more for any major asset allocation decisions. If you must make a comparison over a relatively short time-period, understand the increased likelihood that your conclusions may be incorrect.

- *Cash flows in and out of the portfolio are not properly accounted for*

  Assume you invested $100,000 on January 1 and it goes up 10% through June. Then, you add $900,000 on July 1 and the portfolio stays flat the rest of the year. It looks like you earned $10,000 on a million dollars invested for a 1% return over the year. In actuality you earned 10% if you properly time-weight the cash flows (10% return in the first half and 0% in the second is a 10% return for the year – the number of dollars invested in each period is irrelevant when evaluating investment decisions apart from timing effects). Proper performance measurement accounts for cash flows on a daily basis, so be sure whoever is doing the calculation does so, too.

- *All costs are not incorporated in the final performance figure*

  Be sure to account for all costs in the performance number you are using for comparison. Costs are the same as earning a negative return of the same amount. If using dollars in the portfolio as the measurement vehicle, most costs are in there since commissions, fees, etc. get deducted along the way. But if you are combining various performance numbers of the individual holdings, you'll need to double-check that everything is accounted for: mutual fund loads, platform fees (custodial/overlay/UMA, etc.), transaction fees, commissions on trades, and of course advisory fees. And *do not* forget to incorporate the tax footprint of your strategy. High turnover strategies are likely to have a lot of short term capital gains, taxed as income, that eat up a good chunk of returns. Hedge funds are prime examples of this shortcoming – their returns sometimes look reasonably good, but if you account for taxes you might find that the after-tax performance an investor realizes is half of what is represented, drawing the conclusion of many academics that you'd be better off investing in an S&P 500 index fund!

Performance measurement can get extremely complex and there are numerous ways to do it incorrectly or even fraudulently if someone wants to misrepresent how they have done. Brokerage firms tend to report overall beginning-of-period and end-of-period dollar amounts in client portfolios and avoid performance reporting altogether. Or, if they do report performance, it's broken out by platform or strategy in a way that doesn't account for your specific cash flows into/out of the strategy. Aggregation of various strategies to the portfolio level is also quite rare at those firms. Other firms may simply show a generic benchmark such as the S&P 500 (large cap US equities) for all their clients, regardless of how they're actually invested. Or they may make the common mistake of showing the MSCI World index as an equity benchmark for a global portfolio that includes emerging markets (the MSCI World index does not include emerging markets and is therefore an improper benchmark for such a portfolio). An improper benchmark will make your portfolio look exceptionally good some of the time and exceptionally bad at other times, but what is most important is that you never really know if it is doing what it should given the amount of risk you are taking. It is an interesting question to consider whether it's better to have no information about relative performance or misleading information. I'm inclined to say the former.

The Chartered Financial Analyst Institute has created guidelines for the investment industry to follow called Global Investment Performance Standards (GIPS). Since brokerage firms do not really offer performance measurement, many financial advisors are unaware of what GIPS even are, let alone how to properly measure their clients' performance. But for other investment firms, they should be very aware of GIPS and following those guidelines. Always ask if your investment firm follows GIPS and if not, have that firm explain why they think their methodology is superior to that which is the accepted industry standard.

As difficult and frustrating as performance measurement can be, it is crucial get it right and to do it regularly if you intend to responsibly manage your or another's assets. For more information on this topic, or any other investment related issue, please contact Frontier Advisors at (703) 634-9556 or at info@frontieradvisorsllc.com.