On the Interpretation and Use of Market Benchmarks

By Bob Marshalla
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The Troubles with Weighted Market Benchmarks

One of the questions I receive from clients from time to time is why we don't publish a weighted market benchmark to which we can compare our portfolio's investment performance. We do report market benchmarks for several major asset classes on your quarterly Portfolio Performance Reviews (equity, real estate, fixed income and short term money). So why not just weight each of these by your corresponding asset allocation target percentages to create a weighted market benchmark? I have thought about doing something like this from time to time, but have continued to decide against it for a number of reasons. The interpretation and uses of market benchmarks are fraught with more difficulties and subtleties than you probably imagine at first thought. Some of them are the following:

1. Changes in Targets – An investor's set of target asset class weights is not static. Even at the top level (e.g., stocks versus bonds) investor targets do change from time to time. For meaningful comparisons, we would have to change the benchmark weights at the same times that we change the investor's targets. Over longer periods, which are the most important for performance considerations, this could get complicated.
2. Benchmark Rebalancing – Investor portfolios are typically rebalanced to or towards their target asset class weights at least twice per year. Does this mean we should also periodically rebalance our market benchmarks?[1] If so, should we do this at the same time as each individual portfolio is rebalanced, or on some other regular schedule? Or should we consider rebalancing to be an active management strategy to enhance investor returns, and not apply it to our benchmarks?
3. Lack of Costs in Benchmarks – Benchmarks do not include any real world investment costs. The portfolio performance figures reported to you are always net of all such costs, which include trading commissions, bid-ask spreads, mutual fund management fees and operating expenses, and my financial advisor fees. These costs are probably on the order of 2% per year.
4. Differing Performance Measuring Methodologies (IRR versus TWR) – The personal portfolio performance figures we report to you are always computed using a methodology known as *internal rate of return (IRR).* This methodology accounts for

[1] If we take the long term performance of each of several market benchmarks and weight them by their target percentages, we will not get the same overall performance answer as if we periodically rebalance a hypothetical market benchmark portfolio. Rebalancing means systematically selling the best performing asset classes and buying the worst. But this is an active investment strategy itself, and it is questionable whether it should be incorporated into the construction of one's passive market benchmark.

the timing and size of portfolio deposits and withdrawals, and as a result computes the actual rate of return the investor earns. Benchmarks are always based on a differing methodology, called *time weighted return (TWR*), which assumes there are *no* inflows or outflows of portfolio assets during the performance period. If the no inflow or outflow assumption is true for a given portfolio, the two methodologies will generate the same results. But if there are substantial inflows or outflows, they can produce quite different results, even if the assets themselves are invested in the same securities.

5. Degree to Which Asset Allocation Is a Performance Determinant – As all MAM clients should understand, my portfolio management process is a hierarchical one. First I select the desired percentages of the various asset classes and investment styles. Only then do I select the fund managers and/or securities to fulfill the desired asset allocation. I have always said I believe the asset allocation step is the relatively more important of the two in determining long term portfolio performance. So to define benchmark weights based on the asset allocation targets I have selected would be, in effect, to exclude the effects of asset allocation on relative investment performance. Performance comparisons between one's portfolio and such a weighted benchmark would only be measuring the effects of manager and security selections within the asset class. We would be missing the effects of selecting the asset allocation in the first place, which is likely the more important performance factor.

   Of course, this statement is true to the extent that the benchmark weights are defined all the way down to the most detailed, or secondary, asset allocation decisions, such as small cap international equities, or floating rate bank loans. If the benchmark is weighted only by the higher level asset classes – such as equities versus fixed income versus real estate – then the omission of performance factors is mitigated.

   But still, this leaves open the question of how detailed we should be in defining benchmark weights. Even at the top level of asset allocation, some of the choice is based on my assessment of asset valuation, as opposed to investor goals and risk tolerance. A prime example is the decision to cut our real estate asset class targets roughly in half last year. In conclusion, there is no clear cut answer as to what is the most appropriate definition of benchmark weights.

We will continue each quarter to publish your overall portfolio's performance, plus the performances of the familiar MAM market benchmarks for equities, real estate and fixed income. And, despite the issues above, you may still want to compute your own custom weighted market benchmark, by taking the weighted sum of the MAM market benchmarks times your top level asset allocation targets[2]. This will give you a general idea of your performance relative to the markets' performance, but as the discussion above highlights there are substantial limitations and caveats that should be kept in mind. Next I will discuss some other possible ways of benchmarking your performance.

Alternative Benchmarks

So what would be the ideal, or at least a better, benchmark for comparing your portfolio's performance? A few alternatives are the following:

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[2] For alternative investments, use the fixed income benchmark.

- What you would have done without MAM – Some might say the ideal way to evaluate your portfolio's performance at MAM would be to compare it to what you would have done if not at MAM. This may have meant managing your portfolio yourself, probably in your spare time and on a sporadic basis. Or it might have meant having used other advisors. Unfortunately, while this is an interesting conceptual benchmark, it is impossible to actually construct and measure such a benchmark.

- An absolute return benchmark – Another approach would be to compare your results to an absolute return standard, such as a fixed annual rate, or the risk free rate on T-Bills or TIPS or such. But almost no one investing in the equities markets will be able to avoid being swept along to a large degree by the prevailing tides and currents of those markets. Hedge funds that pursue "market neutral" strategies may be an exception (assuming they can actually do what they claim), but our portfolios have single digit exposure to such strategies at most. Given the type of investment strategy we have all chosen, it seems that some kind of relative market comparisons are most meaningful.

- A "conventional wisdom" benchmark – Another possibility, and one which I think has some merit, would be to define a "conventional wisdom" market benchmark based on what the average or typical financial advisor might do. There is no hard and fast way to determine such a benchmark, but there are various surveys and other data points that might be used to get an approximate idea of current day conventional wisdom on asset allocation.

  One such survey is published monthly by Investment Advisor, a trade publication. It provides a "composite of results from its monthly poll of leading portfolio strategists and is designed for a balanced growth investor"[3]. For winter of 2005, the composite results of this survey show allocations with about 60% stocks, 30% bonds and 10% cash.

  The term "balanced growth investor" is not defined, but I presume it would be roughly equivalent to the "Moderate Plus" or "Moderate Minus" investor types that I defined in my recent paper about top level asset allocation. These were the second and third most aggressive of the six defined investor types. Those investor types at MAM currently have targets of 78% – 81% in equities, inclusive of REIT's[4], and only 12 – 16% in fixed income.

  A couple of major distinctions between my philosophy and conventional wisdom are immediately evident from this data. For one, I am much more aggressive about allocating to stocks than is this the conventional wisdom allocation, having roughly 20 percentage points higher equity targets. Second, I run exceptionally lean portfolios with respect to cash holdings. I generally only define a target for the broader fixed income category, rather than having separate bond and cash targets. Within fixed income, the amount that I keep in cash is generally limited only to the minimum

[3] Investment Advisor, February, 2005, p. 24.

[4] I have combined the MAM equity and REIT targets here because the Investment Advisor survey does not break real estate out separately, and technically, REIT's actually are common stocks.

needed by the individual for liquidity over the next month or two. This is usually no more than 3%, and more often is less than 1% of portfolio assets. The average 10% allocation to cash in the survey data seems enormous by comparison. Even if we go down two more levels to MAM's "Conservative Minus" investor type, the fifth most aggressive out of six, we currently have a target of 70% for equities plus REIT's, and 30% for fixed income. This is still more aggressive than the 60% - 30% - 10% survey benchmark.

I have considered publishing a conventional wisdom benchmark by using asset class weights from a source such as the Investment Advisor survey in conjunction with the regularly published MAM market benchmarks. So for example, if the MAM Equity Benchmark returned 10% for a given time period, our Fixed Income Benchmark 4% and our Short Term Money Benchmark[5] 1.5%, then a 60% – 30% – 10% conventional wisdom benchmark would yield a weighted return of 7.35%[6]. Further, if we wanted this benchmark to represent what a typical investor might actually earn, we would need to subtract another 1% or 2% or so from the weighted return above to account for real world investment costs, giving an after costs benchmark return of 5.35% to 6.35%.

At this time I am not planning to publish any alternative market benchmarks, although I may do so in the future. Still, I hope the discussion above provides you with valuable insights, both about how to interpret benchmarks and about how your MAM investment strategy differs from more conventional strategies.

Benchmarks for Individual Asset Classes

Since defining a weighted market benchmark across major asset classes is laden with so many difficulties, another approach to benchmarking performance could be to simply look at each asset class independently. In other words, we would look separately at the performance of the equity, real estate, alternative investments and fixed income sections of your portfolio. This could be of interest, although it still would be blind to any benefits associated with the selection of top level asset allocation targets.

The greatest interest would clearly be within the evaluation of equities performance. For one thing, equities are the largest piece of all of our portfolios,[7] with targets ranging from 50% to 100% of portfolio assets. Also, the variation of performance from year to year and manager to manager is larger within equities than within the other asset classes. So if there is value to be added (or subtracted), via our asset allocation, investment style and security selection, most of it will be within the equities asset class.

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[5] The MAM market benchmarks are defined on your quarterly performance reports. A fuller discussion is provided in a paper I distributed to clients in January 2003, entitled "Marshalla Asset Management Benchmarks". This paper can currently be found on the MAM website.

[6] To get the stated weighted return take 0.6 X 10% return for equity, plus 0.3X 4% return for bonds, plus 01. X 1.5% for short term money, which equals 7.35%

[7] If any of you continue to have lingering doubts about the emphasis on equities, I strongly recommend you read Professor Jeremy Siegel's book, Stocks for the Long Run. I also remind you of the need for faith and patience, since equities markets have always been plagued by periodic bear markets that can sometimes be long and nasty.

Real estate is a huge asset class overall, rivaling the stock markets in total market value., But the portion of real estate represented by REIT's is small by comparison. There are less than 200 REIT's large enough to be real candidates for the REIT mutual funds in which we might invest. I consider the percentage of funds dedicated to real estate a more important decision than which REIT mutual fund we use.[8]

Alternative investments is a motley collection of very different asset types and investment strategies. In the case of MAM portfolios, we have been using three mutual funds that each focus on a distinct strategy. There is a clearly defined commodities benchmark that is relevant to our commodities futures fund, but what to use for the other two funds is less obvious. Thus, I wouldn't try to define relative performance for our AI category overall.

There is huge performance competition amongst managers within the fixed income world. But the differences between the good and bad outcomes are tiny in comparison to those in the equities world. For example, if intermediate term bonds return 4.0% in a given year, then a manger who achieves 5.0% after expenses would be considered a star performer. In fixed income, it is not so much picking the right bonds within a class, as deciding on duration, quality, country/currency and the like. We use the Lehman Aggregate Bond index as our MAM Fixed Income Benchmark because it is a widely recognized measure of the entire taxable U.S. bond market. However, it is dominated by the performance of intermediate term investment quality U.S. bonds. Currently, MAM's portfolios are not even invested in this class of bonds. We are focused primarily on foreign bonds, TIPS and floating rate bank loans.

We do have the capability to break down your portfolio's performance by major asset class, and we have done this on occasion for some clients. For now, I will continue to do this on a case-by-case basis, but I would in the future consider doing it as part of our company-wide performance reporting if there is widespread demand for it.

Your Portfolio's Relative Performance, Past and Future

To date, most MAM portfolios have beaten the market benchmarks handily over most performance periods, whether we compare overall portfolio performance to ad hoc weighted market benchmarks or compare only equity to equity. In large part, this can be attributed to our heavy weightings to small cap and value stocks and investment styles.

Small caps and value have been the places to be the past five years. However, I remind you that in the previous five years (1995 – 99) they weren't. While we all know now that those 5 years were part of a transitory market bubble driven by large cap technology stocks, this was far from the conventional wisdom at the time. My point is that the out-performance of the asset classes that we favor cannot be expected to continue unabated. Relative performance of different asset classes and economic sectors has always gone in cycles in the stock market, and there is no reason to think it will change. No one can predict when a new cycle will start, or what the next winner will be. This is why I stick to fundamental valuation and long run market behavior as my guides to structuring our portfolios.

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[8] Having said that, I am quite happy with t the Morgan Stanley U.S. Real Estate fund, the REIT fund we have been using at MAM,. It has beaten the REIT fund category average in 6 of the past 7 years, and has beaten 87% of the competition over the past 10 years. Further, I am very much in tune with their bottom-up, net asset value driven investment approach.

In structuring our portfolios I avoid the urge to play it safe by ensuring that we will never stray too far from the market benchmarks[9]. In other words, I am not a "benchmark hugger". I do for you what I think will be the best in the long term, without regard for the risk of being out of phase with the markets in shorter periods. So far this strategy has played out for us mostly on the upside, as we have been in the right places at the right times. But I want to go on record warning you that <u>I fully expect our portfolios to under perform the market benchmarks in some quarters and some years</u>. This comes with the territory for investors who truly maintain a long term perspective and do not explicitly try to stay close to the market benchmarks. I consider education to be a part of my job. That is, I hope to provide you with education about the nature of markets and investment strategies, so that you will have the <u>faith and patience</u> it takes to stay with sound strategies when things are going bad as well as when they are good.

Summary

My purpose in writing this paper has been to help you understand and interpret market benchmarks, and what they do and do not have to do with your portfolio's performance. While we can use our asset allocation targets to create individual weighted market benchmarks, this will only provide us with a general comparison to our portfolio's performance for the reasons discussed herein. I also proposed a couple of alternative ideas for benchmarking performance. One would be to compare our portfolios to a benchmark weighted by asset allocation targets representative of what the advisor community is currently using; i.e., a "conventional wisdom" benchmark. This discussion provided us with a couple of insights about our own investment strategies. One, our MAM portfolios tend to be more aggressive in their commitment to equities, and two, they are run much leaner with respect to cash holdings, than are typical advisor portfolios. Another benchmarking idea would be to examine our investment performance by asset class rather than only at the total portfolio level. This would be most interesting for the equities asset class, because that is where the most variability is likely to be found. Finally, I commented on how my investment strategy is likely to play out relative to broad market indices, especially equity market indices. I invest our portfolios with long term returns in mind, which means ten years or more, and I do so in a way that is not likely to stay close to or "hug" the market benchmarks. For this reason, it should be fully expected that our portfolios will be short of the market benchmarks in some quarters and years. The goal is that they will perform notably better that the benchmarks, as well as better than a "benchmark hugging" strategy, over our investment horizons. Although my most tenured clients have just passed their five year anniversary this quarter, I am happy to say that the results have been good so far!

[9] Believe me, this is no straw man. Many, if not most advisors I have come in contact with fall prey to this temptation to some degree.