

Importance of the Benchmark selected and the value added by Fund Managers when managing their Balanced Funds

Introduction

In this article we review two related issues, the importance of the benchmark selected and the issue of whether fund managers do or do not add value. In order to best illustrate the concepts considered we have chosen not to identify each manager but just to refer to them on an anonymous basis.

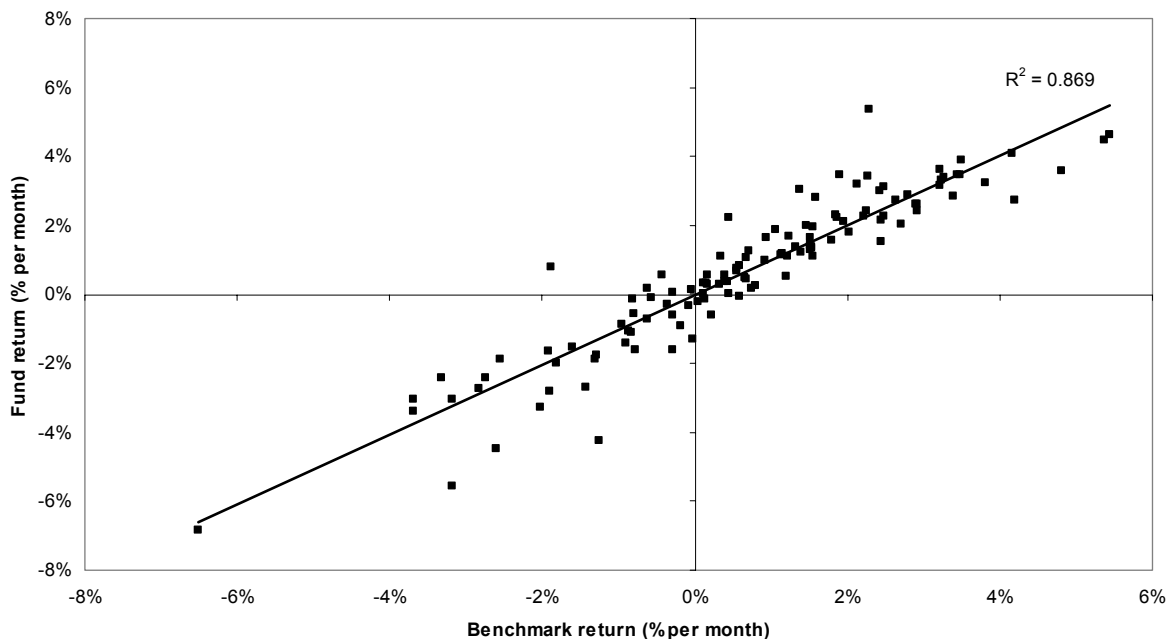
1. Importance of the Benchmark selected

Methodology and results

The fact that the benchmark is important is emphasised by the often quoted statistic that the strategic asset allocation explains 80% to 90% of the variance of the return a Trust achieves over time. This statistic came out in a seminal paper published in the Financial Analysts Journal (July/August 1986) entitled “Determinants of Portfolio Performance” by Brinson, Hood and Beebower.

We decided to explore this statistic, to see if we could reproduce the results on the data we hold for New Zealand fund managers. While the Melville Jessup Weaver survey currently includes eleven managers’ balanced funds over a 5 year time horizon, we have extended the analysis back 10 years and thus restricted it to the five managers we hold complete data for over the period. We note in some instances the benchmark index we apply may differ slightly from the index that the managers use internally.

The table below plots the results for the first fund manager (FM1).



The results shown in the table are the monthly returns gross of tax and fees, and the graph shows that the results closely track the benchmark result. The extent to which the variation in actual performance can be explained by the benchmark can be expressed by the “r-squared” statistic, which in this case is 86.9%.

The results for all the fund managers are summarised in the table below, which shows that on average the benchmark explains 91.3% of the return variation achieved by the five managers.

Table 1 - Performance variation explained by benchmark

Manager	R Squared %
FM1	86.9
FM2	95.2
FM3	95.2
FM4	86.5
FM5	92.5
Average	91.3

Performance variation explained by other factors

The other two key performance effects arise from tactical asset allocation and stock selection.

Table 2 - Breakdown of performance variation explanation

Manager	Proportion of return explained by:				Total %
	Strategic Asset Allocation %	Tactical Asset Allocation %	Stock Selection %	Other %	
FM1	86.9	0.4	11.7	1.1	100.0
FM2	95.2	0.0	1.7	3.1	100.0
FM3	95.2	0.7	1.6	2.5	100.0
FM4	86.5	0.5	12.1	0.9	100.0
FM5	92.5	0.1	6.3	1.1	100.0
Average	91.3	0.3	6.7	1.8	100.0

The “*stock selection*” effect was determined as the performance that was due to the manager investing away from the selected index and within the benchmark asset allocation. Similarly the “*tactical asset allocation*” effect is the performance assuming the manager achieved a return for each asset class equal to the index return, then allowing for the actual investment position away from the benchmark asset allocation. The “*other*” effect represents interaction effects and the approximate nature of the analysis.

The results show FM1 and FM4 are very active managers within the asset sectors, but the related issue of whether or not they add value requires the further analysis that is given in section 2 of this article. As expected, as FM2 and FM3 have large passive share holdings, they have low stock selection effects.

Summation

The results are very similar to the Brinson study results, which is that the strategic asset allocation explains 80% to 90% of the variation of the return that a Trust achieves **over time**. Another study by Ibbotson and Kaplan (FAJ Jan/Feb 2000) which extended the Brinson work, looked at the question of how much of the variation in results **between managers** was due to the different benchmarks they had. We attempted some analysis of this effect, but with only 5 funds no meaningful result was possible. The result for the Ibbotson study was that 40% of the performance variation **between managers** was due to the difference in their benchmarks.

2. Value added by managers when managing their balanced funds

The total performance results and the overall value added results are:

Table 3 - Value added

Manager	Actual %pa	Index %pa	Value added %pa
FM1	8.1	8.3	-0.2
FM2	8.3	7.9	0.4
FM3	8.5	8.8	-0.3
FM4	9.6	8.1	1.5
FM5	9.8	8.2	1.6
Average	8.8	8.2	0.6

So on average the managers did add value and where they lost value the difference was small. Of interest is that if the manager with the highest benchmark return had added the same level of value as the best value add manager, they would have outperformed the average benchmark by 2.2%.

But breaking the results into two separate periods shows very different outcomes. Firstly the two periods produced very different absolute levels of return. While not shown, a major factor to the different results will be the success or otherwise of the manager in the overseas share sector. The results for all the managers are very different, except for the one manager who added 0.6% in the first 5 years and 0.3% in the second 5 years.

Table 4 - Value added - by subperiods

Manager	5 years to June 2000			5 years to June 2005		
	Actual %pa	Index %pa	Value added %pa	Actual %pa	Index %pa	Value added %pa
FM1	13.2	12.4	0.8	3.3	4.4	-1.2
FM2	13.2	12.6	0.6	3.6	3.3	0.3
FM3	13.7	13.3	0.4	3.4	4.4	-0.9
FM4	14.8	12.1	2.7	4.6	4.2	0.4
FM5	13.2	12.7	0.5	6.5	3.9	2.6
Average	13.6	12.6	1.0	4.3	4.0	0.2

The results are also very manager specific. One of the managers dominated each of the 5 year periods, with FM4 adding most value in the first 5 years while FM5 did this in the second 5 years.

Breaking down the results

The table below splits the value added returns by tactical asset allocation and stock selection, again split for the two periods.

Table 5 - Value added - by components

Manager	5 years to June 2000				5 years to June 2005			
	TAA %pa	SS %pa	Other %pa	Total %pa	TAA %pa	SS %pa	Other %pa	Total %pa
FM1	0.3	0.7	-0.2	0.8	-0.2	-0.1	-0.9	-1.2
FM2	0.0	1.1	-0.5	0.6	0.2	-1.3	1.4	0.3
FM3	0.3	0.9	-0.8	0.4	0.2	-0.6	-0.6	-0.9
FM4	0.9	2.8	-1.0	2.7	0.6	-0.3	0.1	0.4
FM5	0.6	-0.2	0.2	0.5	0.5	3.0	-0.8	2.6
Average	0.4	1.1	-0.5	1.0	0.3	0.1	-0.2	0.2

The breakdown shows that for each of the two periods some value was added by tactical asset allocation decisions, but not much. FM5's performance was consistent across the two periods. Where a manager did add significant value it was achieved by stock selection.

Further comment on tactical asset allocation

Intuitively it always seems surprising that tactical asset allocation decisions add such little value over time, as surely the managers can pick when markets will move up or down. The question therefore becomes whether this is partly due to managers taking few tactical asset allocation decisions. We therefore had a look to determine for each manager the average asset allocation variation away from the benchmark for every asset class. The results are shown in the table below.

Table 6 - Average asset class deviation from benchmark

Manager	Average: Entire 10 years %	Average: 5 years to June 2000 %	Average: 5 years to June 2005 %
FM1	2.4	3.0	1.8
FM2	2.9	3.8	2.0
FM3	1.6	2.1	1.1
FM4	3.8	4.1	3.4
FM5	2.6	3.6	1.5
Average	2.6	3.3	2.0

Of interest is that the managers have all significantly reduced the level of the tactical positions in the last 5 years, with the exception of FM4 which has remained with a relatively aggressive position.

We comment that we have not considered in which asset classes the managers add value. Separate analysis shows this to be primarily in the NZ and overseas share sectors.

3. What conclusions can be drawn from the analysis

- Confirmation that the benchmark asset allocation is the main driver of actual performance outcomes.
- As might be expected, some managers make more stock selection decisions, which play a much greater part in performance than tactical asset allocation decisions. But the outcome of the more active decisions around stock selection can be both positive and negative for value added.
- On average managers do add value to their balanced funds, but the overall positive result shown in the survey depends heavily on the results from two individual managers.
- That an asset consultant who assists trustees decide on their strategic asset allocation also needs to determine the "better" fund manager in each asset class, if they are to add significant value.
- Finally, that the automatic rebalancing tactical asset allocation approach is a valid option

The background comments on each manager are:

- **FM1** A manager who makes active decisions for both stock selection and tactical asset allocation. But to date they have not added value from these decisions.
- **FM2** A manager with a consistent and relatively passive style. While they did make significant tactical asset allocation decisions during the first 5 year period these decisions did detract from their performance.
- **FM3** A manager who remained relatively close to the benchmark, but the decisions made have added value.
- **FM4** A manager who has made significant decisions on stock selection, but these have only added significant value in the first 5 years. But has added consistent value through tactical asset allocation decisions.
- **FM5** A manager who did add significant value through stock selection in the second 5 year period, even though the benchmark explains most of the performance variation.

We comment that the results in this analysis need to be considered with care, as they are only looking at the results for 5 managers, and then only for a 10 year period. We do have survivorship bias as no "bad" managers who did not survive the period are included in the analysis. Further we note that the past results may not be indicative of the future results, particularly if the personnel and style of the manager has changed. However, our analysis does confirm the work published in the Brinson paper.