MONITORING INVESTMENT PERFORMANCE FOR LONG-TERM INVESTORS

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In two previous articles in this magazine[1], I sketched out what I thought would be a useful means of assessing long-term investment performance for pension funds. This article is intended to summarise the main points, and also to illustrate them by reference to a widely-based sample of UK pension funds. Similar principles doubtless also apply to other investors subject to long-term criteria.

One of the essential features about all widely available performance measurement services is their total reliance upon "market value". For a variety of reasons, market value cannot be regarded as a reliable guide to the future. Therefore, in my view, it should not have too prominent a place when considering investment performance for long-term investors.

Instead of using market value, I have used the capitalised value of anticipated proceeds, based upon discounted cash flow techniques. Such techniques require the adoption of assumptions, which would, at first sight, imply that such an approach is extremely subjective. However, in practice, this problem has turned out to be more apparent than real.

The basic concept upon which I have tried to focus is the extent to which a level of investment return may be regarded as "locked-in" over a long period, regardless of short-term price fluctuations.

I am grateful to a number of investment managers for making available to me, on a confidential basis, data in respect of 26 UK pension funds for the six-year period 1979–84. In terms of asset values, the sample approximated to $\frac{1}{2}$% of the total of UK pension funds over that period. Further, the sample's aggregate asset distribution was fairly typical.

In other words, when taken together, the funds tested may be regarded as a fair cross-section of the universe of directly-invested UK pension funds, by good fortune rather than by design.

A variety of discounted cash flow technique asset treatments, and assumptions for growth on "equity" holdings, gave a broad range of methods. The figures arising were then statistically analysed to see if the relative results were dependent upon either fund or method.

For the avoidance of doubt, each method is applied consistently to the opening and closing fund positions for any period. Further, net new money over the period is assumed to be invested at the investment return hypothecated. The solution for the investment return is that which makes the equation balance over the period. This is what I now call the "discounted value return", or "DVR" (formerly "calculated value return").

The exercise was carried out for two three-year periods (1979–81 and 1982–84) and for the six-year period (1979–84). For each period, in terms of correlation, I found that the relative results for each fund were independent of the method used. Further, also for each period, the relative results for each method were virtually independent of the fund being monitored.

I have, therefore, concluded that the approach may reasonably be regarded as sufficiently robust for practical use.

If one contrasts the ranking of funds by market value return as against discounted value return, there were strong correlations for all methods for 1979–81. However, there were no high correlations for either 1982–84 or 1979–84. The implications are two-fold, the first being that the returns and rankings commonly published may be misleading, which should be borne in mind by pension fund trustees and finance directors. Secondly, as many of us have suspected, undue concentration upon the short-term may actually be prejudicial over the long-term.

The exercise was repeated for a wide variety of "model" funds, based upon reinvested market indices, with no net cash flow, to see if the results were unduly sensitive to asset type. It appears that this is not a grave problem.

As examples of the numbers coming out, I have extracted the six-year results, for a few funds, as follows:

Fund	"A"	"Largest"	"Smallest"	"Average"
Market Value Return (% pa)				
	23.0	20.5	20.6	20.9
Discounted Value Returns (% pa)				
My Preference	15.8	13.6	12.4	14.0
Lowest	14.8	12.8	11.3	13.1
Highest	17.6	15.5	14.3	15.9

Fund "A" is the fund featured in the first article, and my preferred method is the one used, for illustration, in that article. While none of the discounted value returns shown above exceeded the corresponding market value return, this did happen in other cases. There is no reason to suppose that the relationship must necessarily be in one direction.

It may well be asked if anything worthwhile is gained by replacing market values by discounted values. If unrealistic long-term expectations are thereby dampened, this would, in itself, be useful, but there is more.

One of the advantages of considering discounted value returns is that long-term stability is achieved, enabling the avoidance of sharp short-term fluctuations, associated with market values. Further, for a pension fund, the trustees can, over a long period, relate the assets more closely to the associated liabilities. This should enable them to understand more deeply the workings of their fund. Finally, the use of discounted value returns permits trustees, and investment managers, to focus upon the long-term, without being unduly constrained by short-term results.

Should any reader require further information, then I shall be happy to try to provide it. In the meantime, I must stress that the above represents my own views, and not necessarily those of any of my partners.

References

1. Spain, J. G. "The Long Term Analysis of Investment Performance". The Investment Analyst, 70, 1983. Spain, J. G. "Long-Term Returns Revisited". The Investment Analyst, 73, 1984;