

THE INVESTMENT OF PENSION FUNDS

PAUL HAINES

ABSTRACT

World-wide interest in occupational pension schemes has never been higher, at least in part because newly developed investment techniques have allowed greater control to be exerted over investment policy. These techniques have been derived from highly detailed quantitative analysis and actuaries have played a leading role in their development. However, it is necessary to place such techniques in the overall context of the investment process as a whole. This paper seeks to put forward, albeit on a simplified basis, a coherent approach to pension fund investment policy: perhaps more importantly, the paper aims to provoke discussion, via a series of discussion points, on areas where further work is still required before we can truly say that we have a thoroughly modern and totally coherent approach to pension fund investment.

1. INTRODUCTION

Interest in occupational pension funds has reached an all-time high around the world: this was the case even before the Maxwell affair focussed attention on UK pension funds in particular. There are three main reasons for this:

- a) The huge amounts of money now invested through pension funds.
- b) The increasing concern amongst governments as to how they will fund state pension benefits.
- c) An ever-increasing array of investment techniques, which in theory has allowed far greater control over investment policy.

With regard to the third point, various aspects of the investment process are increasingly being controlled through actuarially-based techniques: large volumes of assets are now being invested on the back of procedures derived from highly detailed quantitative analysis.

However, it is always necessary to put these individual aspects into the context of the investment process as a whole, and this is the object of this paper. Further, the author has sought to highlight those areas

where further discussion and analysis is needed before we can truly say that we have a thoroughly modern and totally coherent approach to pension fund investment.

Whilst this paper has been prepared predominantly from the viewpoint of UK pension funds, the author believes that much of the analysis is applicable to pension funds around the world. However, several of the discussion points implicitly acknowledge the different approaches that have been adopted, and seek responses as to whether there is or is not a standard approach that should be universally incorporated.

2. WHY HAVE A PENSION FUND?

It is such common practice within the UK to fund future liabilities via a separately identifiable pool of assets that it is almost accepted that this is the correct state of affairs. Yet pension benefits could be funded in other ways. Indeed, within the UK, the state pension is based on the so-called "pay-as-you-go" system: pensions promised to people today will be paid out of taxation tomorrow. An internal book reserve could be established, effectively investing pension contributions in the parent company: this approach is quite common in, for example, Germany.

If there are alternatives, why has the funded approach proved so popular? There are four basic reasons.

The first is security. A pool of assets held outside of the parent company means that money should be available to pay benefits even if the company itself goes into liquidation.

The second reason is the taxation regime. Providing the pension arrangements meet requirements laid down by the Inland Revenue, significant tax concessions can be obtained. One of the conditions is that the pension scheme is established under a trust which must, by definition, be independent of the sponsoring company and have its own separately identifiable pool of assets. This tax concession is the only direct financial benefit of funded arrangements.

The third argument is that by collecting contributions from and in respect of members over the lifetime of their membership, one succeeds in spreading the cost, and in achieving some broad level of equity between different generations of members. This regular collection suggests that the assets should be invested separately, as the contributions are collected.

The fourth and final reason is more nebulous than the others. The

UK has a relatively poor record of employer/employee relations, but the pension scheme has generally been an exception. Many would argue that the establishment of a separate pool of assets has created a degree of credibility with employees, and has helped to convince them that the promise to pay benefits in the future is genuine. This credibility is especially important when the employees themselves are being asked to contribute.

Discussion point 1:

Should pension fund assets be segregated from those of the sponsoring company? Is the UK approach the model for other countries, or is this merely the result of the tax concessions? Should the increasing sums arising under pension funds be held within the balance sheet of the sponsoring company, if necessary backed by some form of government insurance?

3. TYPES OF INVESTMENT

The majority of UK pension funds have almost total freedom of investment. Assets have invariably been passed across to a professional investment manager who has invested on behalf of the fund. Typically, the investment classes that have been used are:

- (a) *Equities*: These are the shares in companies which are usually, for the purpose of pension fund investment, quoted on a stock exchange, although some unquoted companies may also be held. They have produced an overall long-term rate of return which has exceeded inflation: this is extremely attractive to pension funds, as the majority of their liabilities are likely to be related to inflation, either through the promise to provide benefits related to salaries at retirement or through the desire to provide some degree of inflation protection for pensions in payment. Investment has been undertaken not only in equities in the UK but also in foreign countries. This increases diversification by giving the opportunity to invest in areas unavailable in the UK, and can also enhance performance by investment in economies growing faster than the UK.
- (b) *Fixed Interest*: In essence, these securities are loans either to a government or to a company. Whilst the price of the security itself may, and invariably does, fluctuate, the fixed amount of the "loan"

is repaid on a set date, with interest payments being paid at regular, known intervals. The cost of this stability as regards interest and capital repayment is that the return will not necessarily keep up with inflation.

- (c) *Index-Linked Securities*: This is a relatively new investment class, being introduced by the UK government in late 1981. In common with fixed interest securities, they have a nominal face value, although this is not the repayment value: this is dependent upon the increase in the retail price index over the period since issue, hence the term "index-linked". Income is also related to the movement in the retail price index.
- (d) *Property*: For larger pension funds, this invariably means the purchase of individual properties or land. However, for smaller funds a unitised vehicle would be used which in itself holds a portfolio of properties/land. Like equities, property tends to track inflation but there are some disadvantages, such as the cost of maintenance and illiquidity, which can make property relatively unattractive.
- (e) *Cash*: Representing money on deposit, this has usually been the residual item following investment in all other areas. However, it can form part of an investment portfolio as it is the most liquid and stable of all of the asset classes. Due to the level of certainty, the return is usually lower than on any of the other investment classes.
- (f) *Venture Capital, Commodities, Futures and Options*: None of these classes have been used as major areas of investment. They should only be incorporated after in-depth discussion with the investment manager to determine the level and aims of investment in these areas.

Discussion point 2:

Compared to other countries, UK pension funds have generally held high weightings in equities, including overseas equities. Has the UK been too aggressive, or have other countries been too cautious? Should emphasis continue to be placed on investment in the indigenous country, or should greater account be taken of world-wide market capitalisations? If investment is placed overseas for reasons of diversification, should this diversification be measured? Indeed, is it capable of measurement? Should pension funds have a greater exposure to venture capital?

4. THE INVESTMENT DECISION PROCESS

There are several stages Trustees should go through before an investment policy can be fully implemented: these stages are reviewed below.

(a) *Deciding Between Investment Media - Internal, Insured, Pooled or Segregated?*

Investment can be split into insured and direct arrangements, with direct investment then being divided into in-house managers, unitised vehicles and segregated portfolios using external managers.

The essence of insured contracts is a guarantee. Investors have a known minimum level of return, with additional gains depending on investment performance. Short-term guarantees mean a lower long-term rate of return. However, such short-term guarantees are not of direct relevance to most final salary funds. This is a major disadvantage.

The use of an in-house manager for large funds is usually justified on the grounds of cost savings. In reviewing such an arrangement the following should be considered:

- i) Any savings in cost are unlikely to be great.
- ii) It is difficult to change an in-house manager.
- iii) Without the back-up of the large department that institutions take for granted, performance may suffer.

In unitised vehicles, the assets of many different pension funds are pooled. Contributions result in the purchase of so many units in the overall pool. The main advantage is the larger amount to be invested within a single portfolio. This means better access to investment markets and a broader spread of investments. The aggregation of assets means that investment fees are usually less.

Amongst potential disadvantages are that changes to investment policy may be implemented relatively slowly, and that there is often a tendency to adopt a "middle-of-the-road" strategy. There is also likely to be a bid/offer spread.

In a segregated portfolio the assets are directly invested in the underlying securities. With segregated portfolios, investment houses generally appoint a fund manager, responsible for day-to-day management, and a fund director, with overall responsibility for the account and for ensuring that the fund manager is implementing house policy. The fund manager's degree of freedom varies between investment houses, and in some cases can be so little that all port-

folios in effect follow a single house policy. If this happens, the differences between segregated and unitised arrangements will be more apparent than real.

Segregated management also means that it is easier for Trustees to implement their own investment policy, reflecting their aims and objectives. If the Trustees have a particular requirement, such as to meet specific liabilities or large cash outflows, these can be explicitly incorporated into the investment strategy.

Discussion point 3:

Conventional wisdom has it that insured contracts are only applicable to the very smallest of funds, with the largest funds opting for the segregated route, leaving full vehicles for the medium sized funds and for specialist situations, such as property or venture capital. Is this conventional wisdom correct?

(b) *Portfolio Construction and the Relationship Between Assets and Liabilities*

Various studies have shown that for a pension fund the greatest impact on the absolute return - as opposed to the return relative to other funds - is its long-term, or strategic, asset allocation.

The basic investment principles for pension funds are well known. The liabilities are essentially long-term, directly related to inflation, and benefits are generally payable in the indigenous currency.

This analysis cannot be faulted, but it does not actually answer the fundamental question of what the long-term asset allocation should be: it does not say how much should be put into UK or overseas equities. Furthermore, it does not allow for the differences that can occur between pension funds, both in terms of their liability profiles and their financial health as measured by the latest actuarial valuation.

Lacking any way of determining a scheme-specific strategic policy, many Trustees concentrated on assessing their returns against other funds via a performance monitoring service. This resulted in many funds adopting the typical asset distribution as their long-term asset allocation policy. This was not a conscious decision, but a logical consequence of assessing managers on their performance relative to the median fund.

This state of affairs, which meant that the majority of pension funds were treated as being the same, and which assumed that the

consensus position was the correct starting point for portfolio construction, was less than satisfactory. This problem could be resolved once cheap computer power and advances in actuarial science made asset/liability studies possible.

The characteristics of asset/liability models vary, but they share a common approach. They assess the impact of different investment strategies upon the financial status of the fund under a variety of future investment scenarios: in doing this, they take explicit account of the fund's liability profile and financial status. This allows Trustees to choose the appropriate long-term policy.

There are some potential drawbacks to asset/liability studies, not least of which is the practical problem of implementing a scheme-specific asset allocation strategy. This does require more involvement by the Trustees, and for this reason may not be particularly appropriate for smaller pension funds. It is also important that the investment managers of a scheme which has its own investment strategy understand what is required of them.

Discussion point 4:

Are asset/liability studies indispensable? Should all pension funds be using them? Such studies depend on the set of assumptions used: should this be the province of the actuary, concerned with the liabilities and the long-term development of the fund, or should the investment manager also be involved? Is it always right to reject the median as the benchmark, or are there some circumstances where the consensus position is actually correct?

(c) Investment Structure

Vertical and horizontal splits; core/satellite approaches; specialisation; index management. Modern approaches to portfolio construction come with their own jargon: but what do these expressions mean?

These approaches grew out of perceived weaknesses within traditional balanced management, as briefly discussed below:

- i) Analysis of managers' overall performance demonstrated that they generally had at least one area of weakness.
- ii) Returns over periods of five years or more showed that equity returns were often below the relevant index.
- iii) Analysis of the indigenous equity portfolio revealed that many managers were doing little more than tracking the index.

- iv) Investigations into managers' short-term asset allocation decisions showed that they generally lost money.

In an effort to overcome these weaknesses, different approaches have been developed.

Index funds are designed to match, rather than exceed, the performance on a given index.

Index funds are often used in so-called "core/satellite" arrangements. Most of the portfolio is invested in an index fund, which gives a "safe" return in line with the index: this is coupled with a smaller proportion of assets which is more aggressively invested with the aim of adding, say, 2% p.a. over and above the index return.

A "vertical split" effectively means appointing managers who will concentrate on a limited number of asset classes e.g. a UK equity specialist. Two problems are often put forward in response to this proposal:

- i) A large number of managers would be inconvenient and expensive.
- ii) Who is responsible in such an arrangement for the overall asset allocation?

Discussion point 5:

This is all fine as regards background information, but it does not address the fundamental question of how one actually constructs the portfolio. Does one adopt a core/satellite approach, or go for a full vertical split? If a core/satellite approach is adopted, how much goes in the core and how much in the satellite? What proportion of assets should be invested in index funds? And how many managers should be used, and how much of the portfolio should each have?

(d) *Selecting the Investment Manager*

No aspect of pension fund investment has received as much attention over the past ten years as investment manager selection.

Many Trustees have been disappointed by the results of manager selection exercises. This is one of the reasons why it has been argued that more of the decisions concerning investment strategy need to be taken by the Trustees and sponsoring company officials themselves, so that the success or otherwise of the investment policy does not depend solely on the performance of the appointed managers.

How should selection exercises be undertaken? The following is a brief step-by-step guide:

- i) Decide what you want. Is it a safe, conservative balanced manager, or a high-performance/high-risk manager?
- ii) Decide what you don't want: e.g. remove managers who may be too small to handle your account, or so large that your account won't be important enough to them.
- iii) Short-list those managers who you believe can achieve what you want in the future. This would be easy if we had the proverbial crystal ball, and a proxy that is usually taken is the manager's track record.

But an assessment should be made of potential managers over and above the performance statistics. This area of investment manager research is very much dominated by the professional investment consultants.

- iv) Select the manager. The traditional approach is the "beauty parade", whereby the selected managers each have a fixed period of time to present to the Trustees. A more recent development has been that Trustees visit the offices of the short-listed managers, undertaking a more in-depth investigation.

One item not included in this list of factors is the level of fees. These are generally not a deciding factor in the choice of managers as they are not significant compared to the variation in performance between managers.

Discussion point 6:

Is too much emphasis placed on the performance record? Some consultants now seem to be claiming that they will pay no attention to the performance record whatsoever: is this the way forward for the pension fund industry? Consultants claim that their research picks out the good and bad managers: is there any evidence for this? Should the level of fees be a relevant factor, and do fund managers charge too much? Why don't we index everything, and pay permanently low fees for the management of pension funds?

(e) Setting Objectives for Managers and Monitoring the Investment Arrangement

There has been considerable debate over the subject of short-termism. Managers have suggested that the production of quarterly performance statistics has encouraged Trustees to assess them over

too short a time period. Trustees have cited managers who have turned over entire equity portfolios within one year, and who have appeared all too eager to accept the next takeover bid.

In addition, outside attention has been focused on pension funds as one of the main sources of finance for industry; an excessively short-term view has, it is claimed, been to the detriment of research and development within US and UK companies.

Part of the problem would seem to lie in recognising that different time horizons should apply for judging the success of a pension fund's overall investment policy and for assessing the effectiveness of the investment manager. When a manager has all of the investment decisions delegated to him, it is difficult to separate these two items; almost inevitably the time horizon for investment policy becomes the same as for manager assessment, typically a 3-5 year period. If, however, the Trustees establish the long-term strategy that they wish to adopt, the role of the manager is then to implement certain aspects of that strategy: by separating these disparate functions, the appropriate time horizons can be incorporated.

Performance monitoring has itself attracted criticism: much of this would seem to have been due to a failure to agree in advance what the objectives for the manager will be. Trustees should have a clear idea of what they want before managers are appointed.

Items which would need to be covered include:

i) *The performance benchmark:*

This was traditionally derived from a performance universe. Increasingly, benchmarks are based on the long-term asset allocation deemed appropriate for the individual pension fund, with performance within individual asset classes being based on index returns.

ii) *The target level of out-performance:*

By how much is the manager expected to out-perform the given benchmark? The target should reflect the particular market: it is easier to out-perform in equities than it is in bonds.

iii) *Acceptable levels of volatility:*

Is the manager to achieve the target each and every year, or two years out of three, or three years out of five? Is the manager to be within a certain range of the target performance on a year-by-year basis?

iv) *Time Periods:*

It should be clearly stated over what time period the manager is to be assessed.

Overall, these objectives should give clear guidelines to the manager as to what is expected of him so that he is then free to manage the portfolio in the way that he thinks will best enable the objectives to be met.

Performance monitoring must then be tailored to fit in with the objectives: performance monitoring must be the servant of investment management, not its master. Performance numbers are, by themselves, merely pieces of information. Like all information they can be misinterpreted, but much of the suspicion surrounding the provision of performance figures should be removed by the establishment of clear objectives. Quarterly performance statistics should, in the main, be seen as merely providing an update on how things are progressing.

Investment managers should be given the opportunity to explain their performance record. It is important that Trustees understand how investment managers have managed the portfolio, how they have reacted to economic and political changes, and the specific reasons for under- or over-performance: this should help them in assessing the investment manager and deciding whether he should be retained. In the same vein, investment managers should see it as being in their interests to explain their historic numbers, and if necessary provide reassurance: after all, most investment managers are replaced not because of what they have achieved in the past, but because the Trustees have lost faith in them achieving what is required in the future.

Discussion point 7:

Have pension funds become too short-term in their outlook, and if so is this the responsibility of performance monitoring? How can we always reconcile the essentially long-term nature of pension funds, and the short-term requirement to monitor the managers and replace them if they're underperforming? Do performance targets themselves encourage managers to perform better, or will managers produce the same return whatever targets are set for them? In the above, the emphasis has been on investment management and not on the back office functions of custody and administration: are they important, or should

they merely be seen as add-ons with no value to be added to the investment process?

5. SHOULD PENSION FUND INVESTMENT BE REGULATED?

The recent performance record of the UK pension fund industry has been excellent. The typical fund over the last decade has returned around 16% per annum, nearly 8 percentage points above the rate of wage inflation. Many pension funds have thus seen their financial health improve, and as a result have been able to improve benefits or reduce contributions, the latter helping to keep industry's costs down. Studies have shown that the relative performance of pension funds in other countries has not been as good, leading some to suggest that UK pension fund managers are amongst the best in the world.

This performance record has been achieved in a regime which has placed very few restrictions on what can and cannot be held within the assets of the pension fund. This is in contrast to many other countries where limits have been placed on the amounts that can be invested in stocks other than government debt, or in overseas markets. Without going into specifics, the recent trend in other countries has been for restrictions on investment to be reduced, and therefore it might perhaps seem odd to question whether further restrictions should be placed on UK pension funds.

In fact, there are some restrictions in place already:

- i) Pension funds are required to invest and not to trade if they wish to retain their tax-exempt status.
- ii) Buying and selling stock to take advantage of the tax which other investors have to pay on income is not explicitly banned, but gives rise to a tax liability. Similarly, income from stock lending is taxable, and it would seem that the same would apply to underwriting commission where there is no intention to hold the stock.
- iii) General investment policy is governed by Trust Law, which in turn governs UK pension funds as a whole. Under this, Trustees have a broad requirement to act prudently, to take professional advice where necessary, and to invest the assets in an appropriate fashion given the liabilities and terms of the Trust Deed.

Whilst the general provisions under Trust Law may not seem particularly onerous, in fact they have meant that the vast majority of pension funds within the UK have run well diversified portfolios, investing predominantly in real assets in order to match the general nature of

their liabilities, and have avoided putting more than a limited amount into "riskier" investment areas such as venture capital.

However, there has been a concern for some time, undoubtedly exacerbated by the Maxwell affair, over the level of self-investment that some funds have undertaken. The main argument against self-investment is that, should the sponsoring company falter, the security of the pension fund might be jeopardised at precisely the same time as the company would no longer be in a position to provide further funding.

Legislation has now been enacted to limit the degree of self-investment, although it has not gone as far as some would have wished: at least one influential group within the UK has called for a total ban on all forms of self-investment, even when the parent company's assets are held on a passive basis within an index tracking fund.

The general prudence requirement has meant that many Trustees have limited the proportions of the portfolio that can be directed towards an individual share or property, or the total amount of equity that can be held in a single company.

A more contentious area has been the suggestion that pension funds should direct part of their investments towards socially beneficial projects, and avoid those opportunities which are deemed to be ethically unsound. However valid an individual group of Trustees might see these aspects, the general view would seem to be that the Trustees are there to represent the members and as such cannot take such decisions. There are though arguments to suggest, that on a long-term view, such investments might perform relatively well: for instance, avoiding companies which produce hazardous waste might be beneficial since greater taxes may be imposed on the products of such companies to meet the cost of safely disposing of the waste.

Discussion point 8:

Should limits be placed on pension fund investment? The latest version of the EC Pension Fund Directive states that "...the Commission should encourage pension funds to invest at least 50% of such funds within the European Community in order to simulate growth, reduce unemployment and assist regions in decline...": is this the right approach, or should the members of the scheme be the prime, and indeed only, consideration?

