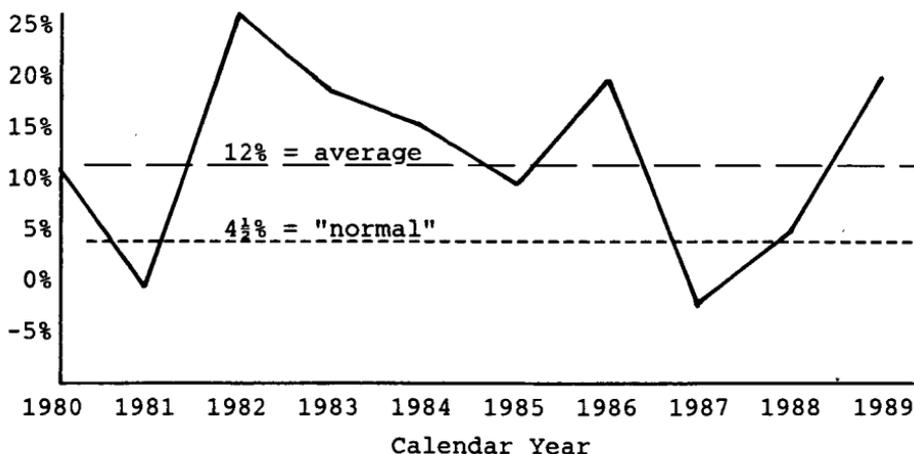

SOME THOUGHTS ON PENSION FUND SURPLUSES

by G R Alexander (UK)

In the UK in recent years more attention has been focused on pension matters than ever before. There are many reasons for this - Government action, political ideology, demographic trends and economic conditions, to name a few. It is the last of these which underlies the theme of this paper.

The last decade has seen high economic growth in the UK and other countries. In particular the real rates of investment return available to pension funds have been sustained at a higher level than ever before. The following table shows the UK experience, where the real return is defined as the excess of the median gross return achieved by (tax-exempt) UK pension funds over the rate of price inflation:

Fig.1: Real returns on UK pension funds



Over the 10-year period the average real rate of return was 12% per annum. This may be compared with a "normal" expected long-term real return in the range 4%-5% per annum as assumed by most UK actuaries at the present time (a useful benchmark in this assessment is the guaranteed real return available from UK Government index-linked gilts, which have generally traded at prices indicating a long-term return of 3½%-4% per annum in excess of price inflation).

It is therefore not surprising that most defined benefit pension funds in the UK are in a healthy financial position, having benefited from the very favourable investment conditions of recent years. There will of course have been other features of funds' experience which will have contributed to, or detracted from, the surplus, but these have tended to be relatively insignificant by comparison with investment surpluses; I will ignore these other influences for the purpose of this paper.

It is as well at this point to confirm what I mean by a "surplus". For some time in the UK it has been good practice (encouraged to some extent by Government legislation regarding "overfunding", but also ironically in an effort to provide a better understanding of the financial workings of the scheme) to report on the financial position of a defined benefit scheme in two parts: the extent to which the existing assets cover the target level of funding in relation to benefits arising from past service, and the normal ongoing cost of meeting the benefits arising from future service. A "surplus" is the amount by which the existing assets exceed the target level of funding.

The accumulation by UK pension funds of surplus assets has attracted the attention of fund trustees, sponsoring companies, beneficiaries, the media and the Government. Surpluses have become a central issue in company takeovers; "surplus-stripping" and "predator protection" have been hotly debated and there have been at least two major court cases. The Government has introduced legislation which specifies a maximum funding level, with a requirement that surplus assets in this context be removed within 5 years by reducing future contributions, improving the benefits or making a refund to the employer; further legislation is expected with regard to pension rights on takeover or other reconstruction.

Of particular interest is the debate over the "ownership" of surplus, which usually takes place against a background of beneficiaries'/trade unions'/media demands for benefit improvements, scheme sponsors' desires to reduce pension costs, and the trustees and the actuary somewhere in the middle. It is unfortunate that this debate is often ill-informed and exhibits a lack of understanding of the nature of a typical defined benefit pension scheme in the UK. The purpose of the remainder of this paper is to explore the nature of surpluses to enable a better-informed debate to take place amongst the various (non-expert) interested parties. It is likely that at least some of what follows will be self-evident and simplistic to an actuary, for which I make no apologies. The fundamentals are in danger of being forgotten.

The critical document governing the financial arrangements of a defined benefit pension scheme will be the Trust Deed. This will typically state that the future contributions payable by the sponsoring employer will be such as are necessary (on the advice of the actuary) to meet the balance of the cost of the prospective benefits after allowing for any members' contributions.

With such a "balance of cost" arrangement the members' contributions would be determined in accordance with the rules of the scheme, usually as a fixed percentage of their pensionable pay. Whatever the (uncertain) future cost of the scheme benefits turns out to be, the cost to the members is therefore guaranteed as a proportion of pensionable pay - in this way the members' contributions can be considered as the cost of insuring them against the risk of sharing in fluctuations in the future cost of the scheme benefits. This risk is instead borne by the employer, who must increase his contributions to meet the whole of any increase in the benefit costs, and will equally enjoy the benefit of any reduction in costs.

It is easy to see where this argument is leading. In theory with a "balance of cost" pension scheme there is no such thing as a "surplus" or "deficiency", only a corresponding reduction or increase in the employer's contributions. In this sense any "surplus" therefore belongs to the employer, who may choose, if he wishes, to improve the benefits of the scheme and accept a lower reduction in his contributions than would otherwise be possible.

An argument often aimed against this line of reasoning is that the employer's contributions are effectively deferred pay, so that if they are to be reduced (out of surplus) there should be a compensating improvement in some other area of the employees' remuneration package; equally, if the employer does not reduce his contributions, the surplus can be applied to improve the pension scheme benefits. The difficulty with this argument is that it inevitably leads to an unpalatable (to scheme members) solution to the situation where the employer's contribution should increase, namely that there should be a reduction in members' remuneration or a reduction in the pension scheme benefits.

Putting this another way, one cannot logically argue that surpluses should be applied to improve scheme benefits (or reduce members' contributions) or (indirectly) improve the members' remuneration package, without accepting that deficiencies must operate in exactly the opposite way. Whilst there are indeed some deferred benefit pension schemes that do reflect this logic by operating along these lines, for example by expressing the members' contributions as a fixed proportion of the employer's, these are not "balance of cost" schemes.

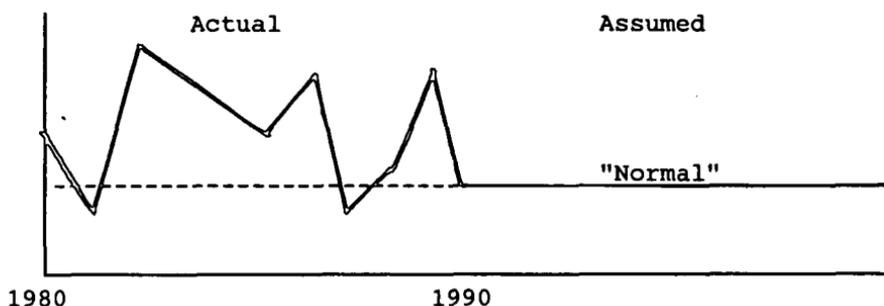
The unprecedented scale of the surpluses reported in the last few years, and the debate on their application, has prompted some employers to recall almost with affection the deficiencies of the 1970's, when at least there was no argument over the employer's liability to fund the deficiency!

Given the undoubted difficulty encountered by some employers in "managing" their pension scheme surplus, it is not uncommon to hear the suggestion that the surplus in some way arises "because the actuary's assumptions turned out to be wrong", the corollary being that there would be no surplus if the actuary had "got it right". With this in mind it is instructive to look back with the benefit of hindsight to say 1980 and ask ourselves: "knowing what was in store in the 1980's, would schemes' finances have been handled differently?".

Let us therefore consider a mature pension scheme which in 1990 (i.e. at present) has a surplus of S assessed on a future "normal" real return (of $4\frac{1}{2}\%$ p.a. or whatever), such normal future return having been determined in the light of past investment conditions, including those of the 1980's. The surplus has arisen purely as a result of the additional real returns secured since 1980.

Going back now to 1980, assume that the actuary knows the real returns in store during the 1980's. He therefore assesses the scheme's position on the real return assumptions illustrated below:

Fig.2: Real returns from 1980



What he in fact achieves in principle by "getting it right" in this way is to bring disclosure of the surplus S forward to 1980. If no action is taken on the surplus, it will remain unchanged in 1990, the real returns achieved by the scheme having been exactly those assumed by the actuary.

In 1980 in reality the actuary assumed the "normal" real return throughout the 1980's and beyond, and by "getting it wrong" delayed the emergence of the full surplus S until 1990.

Essentially therefore the actuary's assumptions determine the timing of emergence of surplus, not the quantum of surplus. The quantum of surplus is determined by the actual financial experience of the pension scheme (the real investment return, in this simplified example). Moreover, the quantum of surplus will always depend on the actuary's financial assumptions for the future (the "normal" real return in our example) - the true surplus can never be known until the last benefit has been paid in respect of the last beneficiary.

So even with perfect knowledge of the next 10 years' real returns, our actuary in 1980 is faced with a difficult decision. If he is right about conditions after 1990, the surplus of S in 1980 will be valid and can reasonably be disclosed. But what if he is wrong? What if real returns after 1990 turn out to be sub-normal - the "surplus" would prove to be illusory. Would this uncertainty not suggest that in 1980 it would be prudent to assume normal returns through the 1980's, even with foreknowledge that this would not happen, so that the surplus of S would emerge only gradually during a period when 1990 comes nearer and the post-1990 assumption can be reviewed and refined?

This leads me briefly to mention the financial assumptions currently adopted by actuaries. It is my impression that following the experience of the 1980's, these assumptions have generally become more optimistic in terms of, for example, future long-term real returns. Is this rational? Should not the 1980's suggest that a more pessimistic view now be taken of the future? How would today's post-1990 assumptions have looked to the actuary in 1980 with foreknowledge of the experience of the 1980's?

Reverting to the question posed earlier, it is not clear to me that surpluses would have been any more manageable had the actuary "got it right" and brought them forward to 1980. What is clear is that the application of surplus to adjust the employer's future contributions, particularly if this is spread over a period of several years, is a natural way to be prudent in view of the uncertainties mentioned above. It has often been said that actuarial valuations and the management of surpluses and deficiencies have much in common with navigating a ship; in that case improving the benefits out of surplus can be

likened to jamming the ship's rudder. It does not make much sense to improve a defined benefits scheme just because there is a fortuitous surplus - there should be sound business reasons for doing so.

When all is said and done the scale of current surpluses has little to do with actuaries' past assumptions, something to do with actuaries' future assumptions, and a lot to do with the extraordinary investment conditions of the last decade. These conditions have given rise to surpluses on a scale which I readily admit has undermined the theoretical arguments. When scheme members, beneficiaries, union negotiators etc see substantial and very long term pension cost savings by the employer, this is viewed as a source of profit to the business in which scheme members should share (which of course might happen in any case as the business prospers). In these circumstances the risk of economic conditions having a significantly adverse impact on pension costs in the foreseeable future is considered to be remote.

In conclusion the economic conditions of the 1980's have not surprisingly furthered the cause of defined contribution pension schemes. Less predictable have been the difficulties of implementing the cost savings in defined benefit schemes which should result from those same economic conditions. The repercussions of these difficulties could well be the subject of future papers!