WHOSE SURPLUS IS IT, ANYWAY?

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Background

1. Pension fund surpluses have received considerable publicity in the United Kingdom recently. Opinions differ about who should get the benefit of them. This paper discusses in simple terms what seem to me to be the issues.

2. This paper is concerned with defined benefit schemes and not defined contribution schemes, since in the latter a surplus or deficiency in the ordinary sense cannot arise. In the United Kingdom, the usual form of defined benefit scheme is the so-called final salary scheme, in which a member's pension is calculated by reference to his pensionable service and his pensionable salary at or near retirement. The benefit relates to an unknown future salary.

3. Economic conditions affecting pension funds in the United Kingdom over the last two decades have roughly fallen into two phases. In the 1970s, conditions were generally unfavourable. Price inflation and the inflation of salaries and wages were high and rates of investment return had difficulty in keeping up with price inflation. Real rates of investment return (relative to retail prices) were low throughout the decade.

4. The second phase, the 1980s, has seen a marked change in the situation. Economic conditions have become generally favourable to pension funds; price inflation and inflation of salaries and wages have both been considerably lower, though the margin between them was roughly the same (real increase in salaries about 2 per cent compared with prices), but rates of investment have not declined. Thus, real rates of investment return (compared with prices) have been very much increased in the second phase compared with the first. An actuary carrying out a
valuation of a pension fund in, say, 1975 would have found it hard to believe that real rates of investment return would be so much higher ten years later.

5. During the first phase, defined benefits schemes required substantial contributions from employers to maintain adequate funding. During the second phase, the favourable conditions have frequently brought about the emergence of substantial surpluses. This represented a new problem for those responsible for pension funds. Over the last twenty years, many funds have grown to maturity, with assets representing substantial past service liabilities. Before 1970 most funds were relatively immature while during the 1970s conditions were generally not conducive to surpluses. The large surpluses frequently emerging in the 1980s are thus a new experience.

6. There is nothing new about pension funds producing modest surpluses from time to time, but those of recent years have been of such magnitude that they could not easily be absorbed. Previously, minor benefit improvements or small reductions in contribution rates were usually enough to deal with any surplus which appeared. The scale of recent surpluses calls for something more. Before looking at the options open to an employer in these circumstances, it may be as well to consider the nature of surplus.

The nature of surplus

7. A textbook definition of surplus in a pension fund is the amount by which the actuarial value of the assets exceeds the actuarial value of the liabilities. In making a valuation, the actuary may concentrate on the liabilities which arise from service already completed, the so-called accrued liabilities, and compare these with the value of the investments already held by the fund, or he may take into account the total liabilities, in respect of both past and future service, and include in the assets the discounted value of future contributions, the latter being calculated to fit in with funding plan adopted. It is probably fair to say that
where a surplus is disclosed as a result of taking account of future contributions, additional care needs to be taken in interpreting the results. I have a strong personal preference for wanting to know how much of the accrued liabilities are covered by the investments already held by the fund. It is not unknown for an unjustifiably high rate of contribution to be taken into account in some actuarial valuations, which has the effect of masking the inadequacy of the assets already accumulated in the fund.

8. In making a valuation of a pension fund, the actuary will make assumptions about all the economic and statistical factors which bear on the progress of the liabilities and assets. The importance of these assumptions is fairly obvious to the layman. No less important is the valuation method adopted, which is no mere technical matter but is bound up with the funding plan. The funding plan is concerned with the rate at which assets should be built up, having regard to the overall liabilities of the fund.

9. It is tempting to discuss at length funding plans and valuation methods, but in a paper concerned with the disposal of surplus this would be inappropriate. The subject is one which has had a detailed airing in actuarial papers and discussions in recent years, revealing strongly-held and sometimes tendentious opinions. One or two observations are, however, relevant to the theme of this paper.

10. In making a valuation of a client's pension fund and in advising him generally, the actuary in the United Kingdom has considerable freedom. The trust deeds and rules governing the conduct of the fund usually leave a great deal to the actuary's judgement. He may be well able to cope with the responsibility laid upon him, but it behoves him to make it clear to his client, beyond peradventure, what he proposes to do in making the valuation and his underlying reasons. A formal paper to the client from time to time on funding philosophy is a must; the client should
understand what the actuary is recommending and if he does not agree with it, the actuary should not be stiff-necked about it. A range of possible funding plans can legitimately be explored. The actuary can only feel satisfied when a policy has been hammered out which both he and his client recognise as reasonable. There should certainly be no area affecting the pension fund where the client is kept in the dark by the actuary. Not only does openness assist in the relationship but it has the added advantage that it nullifies the possible effect on the client of a predatory would-be adviser telling him he is putting more into his fund than he need.

11. A whole range of funding plans exists, of varying strengths: At the lowest extreme is the so-called 'pay-as-you-go' method, under which contributions are paid which just match the current outgo. Any assets held by the fund which are not required immediately to meet benefit payments could be regarded as surplus. This funding method (if such it can be called) could only have any kind of justification if there is no doubt about the employer's ability to pay whatever contributions are required in the future, as in theory is the case where the Government is the employer.

12. To constitute a genuine funding plan, assets have to be accumulated in the fund to meet future benefits. Whether or not it is considered appropriate to regard a member's pension as deferred pay, it is difficult to deny the proposition that the cost of the deferred benefits which arise from a particular year's service should properly be a charge on the employer's operation in that year. The benefits payable in the future which arise out of pensionable service already completed are the 'accrued' benefits. Consider a pension scheme member who is entitled to a pension of one-sixtieth of his final salary for each year of pensionable service when he retires at the normal pension age of 65; he is now aged 42 and has completed 12 years' pensionable service: what is his accrued pension? He has total potential pensionable service to age 65 of 35 years. He has already
accrued a pension fraction of 12/60ths, but in calculating the actuarial value of his accrued normal retirement pension (together with such ancillary benefits, for example dependant's pension, death in service benefits, and so on, as are promised by the scheme) what salary should this fraction be applied to? If it is applied to his present salary, the accrued liability in respect of his normal retirement pension would be of the form:

\[(\frac{12}{60} \times \text{present salary} \times \text{annuity factor at age 65} \times \text{probability of member aged 42 retiring at 65} \times \text{discounting factor})\]

This would leave the cost of the effect of future salary increases on the 12/60ths already accrued as a future liability. There may be some justification for this, but it seems to me that if all the other elements and assumptions in the valuation are projected on as realistic a basis as possible, it is inconsistent not to project the salary also. For example, one would expect to use a discounting factor for the 23 years at the full assumed rate of investment return.

13. The actuarial method involves making estimates based on a whole family of economic and statistical assumptions. All the potential events and their attendant benefits (apart from that noted below) need to be covered. The assumptions should be as realistic and consistent as possible. Why, then, distort the results by going behind the assumptions in one particular, namely the projection of salaries? It may be seen as financially desirable but, in my view, it is a corruption of the actuarial method. My preference for the valuation of the past service liabilities is the accrued benefits based on service to date and projected final salary. I would regard as desirable a funding plan which sought to build up the assets of the fund to a value equal to the past service liabilities calculated in this manner and for contributions to be paid year by year which maintained this level of funding. It seems to me that to recommend a lower level of funding in the long term is to deny the efficacy of the actuarial method.
14. One of the potential events which does not admit of the actuarial method is discontinuance of the entire scheme; if it occurs, it affects the whole membership at once. Usually this eventuality does not figure in an actuarial valuation, although there is a minority school of thought that would relate the funding level to the discontinuance benefits alone.

15. Whatever funding plan is adopted by the employer, the actuary should ensure that all its implications are understood and, in turn, the employer and the actuary should see that the members have the opportunity of learning what is being done. A report to the members which describes the valuation assumptions but which says nothing about the funding philosophy which underlies the valuation is not satisfactory.

16. No mention has yet been made of the value at which investments held by a pension fund should be brought into an actuarial valuation. To obtain a valid comparison between liabilities and assets, the latter should be taken into account on a basis consistent with the value placed on the liabilities. As the latter are treated as future cash flows out of the fund, valued by discounting these to present values, it is appropriate to value the investments as a series of estimated future cash flows into the fund. In times of high market values, this treatment may well bring out a value of the investments at a substantially reduced figure. If the valuation of the fund as a whole produces a substantial surplus, a proportion of which is to be paid out of the fund in cash, the amount paid out must, of course, relate to the realisable value of the investments rather than the actuarial value.

Disposal of surplus

17. When the valuation of a pension scheme discloses a surplus, there are a number of courses open to the employer. If the surplus is relatively small, it can be carried forward until the next valuation. Leaving this possibility aside, however, there are four choices available. If the surplus is large, a combination of
two or more of these may be desirable. The choices are:

(i) Future contributions can be reduced or even cancelled completely for a period - a so-called contribution holiday. In the case of a scheme to which the members contribute, the reduction would not normally apply to members' contributions.

(ii) Strengthen the valuation assumptions and/or the valuation method. A change in the latter must be accompanied by a similar change in the funding plan.

(iii) Improve the benefits.

(iv) Make a payment out of the fund to the employer.

18. Although the choice of valuation assumptions and valuation method is a matter for agreement between the actuary and the employer, there are statutory limits on the extent to which surplus can be 'hidden' by adopting an artificially strong valuation basis. In a pension scheme which has been approved for tax relief purposes, the Finance Act 1986 prevents the building up of a tax-free fund which is regarded as excessive. A 'prescribed basis' is laid down for determining whether or not a scheme is excessively overfunded for the purposes of the legislation. If it is, it is necessary to reduce the surplus by one or more of the methods referred to above within a prescribed period. Failing this, the scheme will lose part of its tax exemption. The prescribed valuation assumptions are fairly strong and the prescribed valuation method is the projected accrued benefit, that is to say, the past service liability on the basis of current salaries and projected final salaries. The actuary may have to carry out a special valuation on the prescribed basis in order to certify the funding position on this basis. In many cases, however, this will not be necessary since the normal basis used by the actuary will be such that he can give a certificate without further calculation.

19. In the normal course, the actuary will be concerned with surplus arising in an ongoing scheme. The disposal of surplus when a
scheme is being discontinued in a takeover situation presents particular problems, not least because most trust deeds and rules of schemes are lamentably imprecise on members' rights in these circumstances. The legal profession in the United Kingdom has, in drafting scheme documents, seemed to assume that the actuary should be almost omniscient in such matters as discontinuance and winding-up benefits. Whatever his skill and experience, it seems to me particularly inappropriate that the actuary should be expected to make judgements in circumstances where, because of a takeover situation, there may well be a conflict of interests. The members need all the protection they can be given in a discontinuation, certainly more than that afforded by many scheme deeds and rules. In a final salary scheme, it seems to me fatuous to expect the members, when they are most vulnerable, to be content with winding-up benefits not based on projected salaries. It is difficult to define such benefits. One possibility might be to lay down the funding plan in the rules of the scheme and for the whole of the surplus on winding-up to be applied as of right for the benefit of the members, subject only to Inland Revenue limitations on benefits. The weakness of the members' position on discontinuance is rarely realised by them until it is too late. I do not believe an employer should be encouraged to promise pension and ancillary benefits which are greater than his operation can support, but I regard it as immoral to promise splendid benefits on retirement - if the employer as well as the member survives until then - but wholly inconsistent benefits on winding-up. I would distinguish between winding-up benefits and those on leaving service voluntarily. It is not too surprising if employees who recognise their vulnerability on winding-up opt for a defined contribution scheme instead of joining the employer's final salary scheme.

20. As has already been indicated, the large surpluses thrown up by many pension funds in the United Kingdom in recent years have
given rise to considerable publicity. In general, the media have assumed that the members of the schemes concerned should receive the benefit. The remainder of this paper considers why this should not necessarily be the case.

21. In a defined contribution scheme, the members are entitled to whatever benefits are secured by the payment of specified contributions. In unfavourable circumstances, the members suffer. It is the members who have to take up the slack, one way or the other. In a defined benefit scheme, where the ultimate benefit is based on unknown future salaries, the employer normally undertakes to pay the balance of cost - or the whole cost in a non-contributory scheme. The employer has to take up the slack and the members are protected against adverse conditions. Thus, in the 1970s employers were being asked to pay high levels of contribution to maintain funding levels, that is to say, to protect the members against the adverse conditions. Where the members make a contribution, this is pre-determined, usually as a percentage of salary from time to time. It was not unusual for members to pay 3 per cent or 5 per cent of salary, but the employer to pay 15 per cent or more, sometimes much more, in the 1970s. The economic conditions were dire and the dramatic improvement in the 1980s could not have been anticipated. Employers had the choice of paying a high contribution rate or of asking the actuary to weaken the funding basis. For those who opted for the former course, which obviously depended on their ability to pay, it would be hard indeed if they could not reap the benefit when conditions became more favourable, since those who chose the weaker course and left the pension scheme members in a more exposed position had already benefited.

22. In her paper on pension fund surplus to the 11th IACA Conference, Helen James indicated that some members or Unions take the view that if times are bad the pension scheme might be stopped or members' contributions raised and that this leads...
to pressure for surplus to be shared. In the schemes of which I had knowledge in the 1970s it was unusual for such steps to be taken. If they were, I would agree that it would be improper to regard subsequent surplus as belonging wholly to the employer.

23. If surpluses arising in good times are seen as available to be applied for the benefit of members, it seems undeniable that there would be a tendency towards weaker valuation bases. This would not be in the interests of members. Although in the case of the two decades I have been considering, the bad times were followed by the good times, there is no reason why bad times should not be followed by more bad times. If that happened, a poorly funded scheme might well get into an impossible position. Weaker bases cannot be in the interests of members.

24. Some media reports have suggested the members of a final salary scheme should be inalienably entitled to whatever is in the fund. This confuses defined benefits and defined contribution schemes; it would effectively place the employer in a 'heads you win, tails I lose' situation. Where the benefits promised by a scheme are inferior compared with the schemes of other comparable employers, there may be a case for improving them out of surplus. There will however be an ongoing additional cost in respect of future service, which the employer must be prepared to meet.

25. Over the years, many employers have steadily increased the scale of benefits in their schemes, so that nowadays they are not far short of those of Government employees, whose maximum benefits have been adopted by the Inland Revenue as the upper limit for occupational schemes generally.

26. Two benefit areas exist in which many employers' schemes are deficient. One has been referred to already, namely winding-up benefits. Since, however, winding-up is not a potential event normally brought into an actuarial valuation, improvement of winding-up benefits would not in the normal sense be a cost to
be met out of surplus. The other area is the increases made to pensions during payment. A recent survey indicates that, notwithstanding the comparative containment of price increases in the 1980s and the marked rise in the real rate of investment return, many employers have made only limited increases in pensions in payment, often substantially below the rate of price increases. I would regard increases to pensions in payment and the improvement of the advance provision for future increases as a wholly justifiable application of surplus.

27. Aside from using surplus as suggested above, I suggest that an employer who maintained the proper funding of his scheme in the bad times is entitled to have surplus used to benefit himself and his shareholders by a reduction or a holiday in his contributions. The further step of having a payment made to him out of the fund presents difficulties, both from the tax point of view and because of the problem of justifying it in the light of the trust deed and rules. If there is not a specific power to make such a payment in the deed and rules, there may be a danger of breaching the trusts of the scheme.