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OCCUPATIONAL PENSION SCHEMES SHOULD NOT NEED TO CHANGE THEIR LONG-TERM INVESTMENT STRATEGY IN ORDER TO MEET A MINIMUM SOLVENCY STANDARD

[A Debate on the above Motion held by the Institute of Actuaries, 24 October 1994]

Proposed by R. F. RUSSELL, B.Sc., F.I.A., A.P.M.I., A.S.A.
Seconded by S. F. YEO, F.I.A.
Opposed by J. S. R. RITCHIE, B.Sc., F.F.A.
Seconded by P. R. WATSON, M.A., F.I.A.

ABSTRACT OF THE DEBATE

The President (Mr C. D. Daykin, C.B., F.I.A.): In June 1994 the Government issued a White Paper on pensions entitled 'Security, Equality, Choice: The Future for Pensions'. This followed the publication on 30 September 1993 of the Report of the Pension Law Review Committee, a group set up by the Government under the Chairmanship of Professor Roy Goode, to review the framework of law and regulation within which occupational pension schemes operate.

The June White Paper contained the Government's response to the PLRC report with proposals for changes to the law relating to occupational pension schemes, both to address the issue of improving the security of members of pension schemes and to implement changes relating to the equal treatment of men and women in occupational pension schemes. There were also proposals for changes to the law regarding contracting out of the State Earnings-Related Pension Scheme.

The proposals in the White Paper contain a great many aspects which are of direct concern to actuaries, including the implementation of a minimum solvency standard, references to cash equivalent transfer values and the concept of an Appointed Scheme Actuary for all defined benefit pension schemes.

It is extremely important that we, as a profession, should have the opportunity to debate some of these issues, and this evening is designed to provide such an opportunity. Much work is being done on all these topics by the Pensions Board. All the views expressed here will be weighed carefully by the Pensions Board in its further deliberations. None of us, as yet, have seen the Pensions Bill, and it will be some time before draft regulations begin to emerge.

Mr R. F. Russell, F.I.A. (proposing the motion): The motion reads: "Occupational Pension Schemes should not need to change their long-term investment strategy in order to meet a Minimum Solvency Standard." The important word in this statement is 'should'. Limiting any disruption to investment strategy should be a primary objective of any minimum solvency standard. In this debate I address the sort of minimum solvency standard that might meet this objective. I also consider the extent of mismatching reserves that might then be required in addition to the minimum solvency standard.

Mr Yeo, who seconds the motion, intends to speak about the use of annuity buyouts as a solvency test, and the related issue of a solvency test based wholly on long-dated bond investments. He will also speak about the extent to which any solvency test may be acceptable to scheme members.

Before doing this, however, it is relevant to consider how important these issues are. The implications of adopting an inappropriate minimum solvency standard (and for the purposes of this debate I consider that any test which is based wholly on the yield on long-dated bonds is inappropriate) are serious, both in terms of funding and investment strategy.

The costings put forward in the White Paper in June 1994 showed the total cost of complying with the proposed minimum solvency requirement to be about £200m each year for the next ten years.

We may not accept this estimate; but how much greater would the cost be if the solvency standard were harsher than that proposed by the Institute and Faculty and endorsed by the White Paper? It is likely to be so great that employers will think twice about maintaining their commitment to final salary schemes. What would be the effect of pension funds, which collectively own about a third of the United Kingdom equity market, disinvesting rapidly from the market in order to align their investment strategy with such a standard?

The reason why such a cost arises is because of the fundamental difference between the long-term funding of an ongoing pension scheme and the shorter time horizons involved in a solvency test. To comply with a solvency test, we must aim to minimise relative market movements between those assets we actually hold and those which we should hold to match our solvency liabilities. This much is obvious.

However, there are two ways of minimising such relative movements. One is to take the solvency standard as sacrosanct — if this results in adverse implications for scheme investments and the wind-up of large numbers of final salary schemes, then so be it. A more constructive approach, however, is to redefine the solvency liabilities. If these are appropriately defined, then constraints on investment policy will be minimised.

I shall concentrate on two solvency tests of the type proposed in the White Paper. I emphasise that I am not talking about those *particular* tests, because we do not know what they are, but about the same *style* of test:

(1) This is based on the assets required to continue a scheme as a closed fund.

(2) This involves a buyout of all pensions in payment and the provision of cash equivalents to other members.

Although it is not central to this debate, we should recognise that the investment assumptions underlying the calculation of liability in each of those two tests will be similar. A distinction between the solvency test applied to large schemes and that applied to small schemes would therefore be both arbitrary and unhelpful. The choice between these two approaches should be left to individual boards of trustees.

For pensions which are now in course of payment, there are investments which provide a reasonably close match to the liabilities, notwithstanding the difficulties of matching Limited Price Indexation. Assuming that discretionary benefits are to be excluded from the minimum solvency standard (as I believe that they should be), I would have no quarrel with a solvency test for pensions in payment which is wholly based on the yield on appropriately dated bonds.

For employed and deferred pensioner members, however, the story is different. The benefits payable to a 25-year-old member on discontinuance of his scheme may have a mean term to payment of some 50 years. The longest-dated fixed-interest gilt now available in the U.K. market has a mean term of something like twelve years. In no sense, therefore, can we say that long bonds are a matching investment and, apart from non-profit deferred annuity contracts, there is no investment which matches this liability. In aiming to meet the expectations of that member, we must fall back on an investment which is *appropriate* to provide for his benefits. If we were advising this 25-year-old member on how to invest for his retirement, we would probably suggest a high proportion of real assets in his portfolio. This leads us, naturally, to consider a solvency test which is based, not on bonds, but on equities.

We should not assume that this necessarily means much reduced cash equivalents. At its most basic, a cash equivalent calculation will involve a discount yield that is used to put a value on the alternative benefits and a market level indicator that adjusts that value up or down in line with appropriate investment markets. It is important that the market level indicator is related to the equity market levels. I am not necessarily arguing that the discount rate underlying the calculation should be increased to reflect the greater expected returns on equities.

There must, of course, be a cut-off point between an equity-based calculation for young members and a gilt-based calculation for pensions in payment, and this will, no doubt, be a matter for further debate. At this stage, we should simply recognise that an equity-based test, which only applies at the very youngest ages, would not meet our primary objective. It would then only apply to the members with the shortest service, and therefore the smallest share of the liability. Thus, to meet our objective,

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cash equivalents need to be wholly equity-based for a large section of the deferred and active membership. This logic applies equally if we are dealing with an equity-based cash equivalent or an equity component in the investment strategy of a closed fund.

Within the framework of this sort of minimum solvency standard, it would then be theoretically possible for U.K. pension schemes to follow an investment strategy which exactly matches their solvency liabilities, albeit that it would be a very strange portfolio involving benchmark long-dated gilts and an indexed portfolio of U.K. equities, but it would contain a significant equity component. In reality, most schemes would choose to hold more equities than suggested by that test, and if that strategy is to continue substantially unchanged, then the scheme sponsor would have only two options:

(1) it could accept the risk that its pension scheme will become technically insolvent in future, and that sanctions for non-compliance would come into effect; or

(2) it could hold a mismatching reserve within the fund.

Unlike our life insurance counterparts, pension scheme actuaries do not often include an explicit mismatching reserve in their valuations of pension schemes, perhaps because of the view taken by the Pension Schemes Office with regard to unallocated surplus. Most schemes are funded using reasonably prudent actuarial assumptions. The reserves held by such a scheme (assuming it attains its own funding target on an ongoing basis) will typically exceed the minimum solvency requirement of the type we advocate. The excess will serve as a mismatching reserve. Although for all schemes such a reserve will vary with time, it will usually be significantly positive. It would, therefore, take fairly large movements of equities relative to gilts before such a scheme would jeopardise its solvency.

Significant moves between asset classes do, of course, occur over relatively short time frames, and there is a strong case for a degree of short-term smoothing in asset and liability valuations to mitigate this. Over longer periods of time, we should remember that the returns on equity and gilt markets are positively correlated. The risk to most schemes would then be of sustained out-performance of gilts over equities; not exactly a feature of the investment environment over the last few decades!

In conclusion, we would argue that it is possible to meet our objective and that it is *essential* to do so if we are to retain the support of scheme sponsors.

Mr J. S. R. Ritchie, F.F.A. (opposing the motion): The motion *could* be interpreted as a counsel of perfection. However, there is currently a very wide range of assumptions, and therefore of solvency standards, in use for defined benefit occupational pension schemes, not all of which can survive without alteration if any reasonable minimum solvency standard is going to be adopted.

My seconder and I are interpreting the motion as meaning that schemes,which currently have a high equity content in their assets, should be able to continue this investment strategy without having to concern themselves unduly about short-term solvency issues or the maturity of their liabilities.

In opposing this motion, there is a clear and short train of logic, much of which comes straight from the Goode Committee. First, you define the pensions promise. I assume this to be the statutory minimum early leaver benefit as if every active member became an early leaver on the date of valuation. (The White Paper recommends overriding the scheme rules to make the transfer value the minimum winding-up benefit. This is simply a pragmatic arrangement to bring the minimum winding-up benefits into line with the deficiency on winding-up regulations. It is not a Government statement of principle that defined benefit schemes should have money purchase benefits as their winding-up liability.)

So, for current pensioners it is the current rate of pension, with only guaranteed future increases, which should be valued for this purpose in the pensions promise. To that extent, I agree with the proposer of the motion that you should ignore discretionary increases for the purpose of statutory minimum solvency.

In defining the pensions promise, you ignore future accrual for statutory solvency purposes, because you assume that employers and employees can change the rules of the game for the future. In the real world past accrual is deferred pay, because people in the street believe that that is what is happening with their pension schemes.

Having defined the pensions promise, next you value it. In the private sector this requires assumptions based on current investment conditions. The Goode Committee initially wanted to use life office single premium non-profit deferred annuity rates for this purpose, but it was deflected by the fact that this was unrealistic in 1993 investment conditions, when the yield on long gilts was so low. The current proposals, based on transfer values excluding discretionary increases, but with gilt assumptions for older lives and equity assumptions for younger lives, are a watered-down version of what Goode originally had in mind. The link for securing winding-up defined benefits with a life office has already been lost. However, the current proposals have the merit of constituting an independent, universal and disciplined minimum funding standard. If this means that schemes need to strike a balance between deliberately creating a substantial funding cushion or re-jigging the assets, then that balance is no more than the scheme members have a right to expect.

As a pensions actuary employed by a life office, I draw a clear parallel between minimum solvency standards for a defined benefit pension scheme and DTI supervision of life offices. The accrued pension promise is like an accrued insurance policy benefit. If a life office went to the DTI and said, "Please excuse me from your normal requirements because I am too big", I can imagine what the DTI response would be; possibly something along the lines of: "On the contrary; the bigger you are, the greater the number of people who would be affected if you failed, and the more important it is that you abide by the same solvency standard as everyone else."

If a life office went to the DTI and said, "Please excuse me from your normal requirements because I like investing in equities", the DTI might say, "You should cut your cloth according to your measure. If you have sufficient surplus to justify a mis-matched investment policy, good luck to you. If not, I am sorry, but...".

If a life office went to the DTI and said, "Please excuse me from your normal requirements because I think my defined benefit policies are better than my competitors' money purchase policies", the DTI might say, "That is an issue for the market place, not for solvency standards."

Paragraph 3.1.7 of GN9 already includes the sentence: "The actuary should also comment if it is considered that the investment policy is inappropriate to the form and incidence of the liabilities". This is a clear statement that the profession believes that investment policy cannot ignore the nature of the liabilities.

There is speculation that the Government may be prepared to issue a gilt more suited to the nature of the accrued pensions promise. Students of the Goode Report will remember that there was a recommendation in it that the Government should consider issuing a gilt which has a completely different cash flow shape to any gilt that currently exists; in other words, a cash flow very similar to that of a deferred annuity. If such a gilt were to exist, then it could serve as a very useful tool for cutting out some of the excess capital which life offices have to have, and have to allow for when they quote single premium non-profit deferred annuity rates at the moment.

Mr S. F. Yeo, F.I.A. (seconding the motion): The proposer has talked of the key reasons why we support the motion, chief among these being that, for scheme sponsors to support a minimum solvency standard, it must enable them to continue to adopt long-term investment strategies which they themselves consider to be acceptable.

There are alternatives to such a minimum solvency standard, the most obvious being one that would require all schemes to be certain of being able to secure immediate and deferred annuities from insurance companies to cover discontinuance benefits in the event of a winding up. For very large schemes this is clearly a notional concept. For other schemes to have that certainty, they would need to have accrued assets that would exceed the estimated cost of such annuities, because matching assets are not available. For many schemes this would require levels of funding up to 30% higher than at present. If such a standard were to be introduced with meaningful sanctions, the consequence would be that few schemes would inject extra funds, more would cut benefits (either discretionary benefits or the rate at which guaranteed benefits accrued) and perhaps the greatest number would discontinue altogether, either not to be replaced, or to be replaced by defined contribution schemes.

You may say that this would be a healthier situation. We would have flushed out those 'dishonest' scheme sponsors who purport to offer a good scheme, yet fail to fund it appropriately. In a world where it was certain that all schemes would wind up there could be some justification for this view. However, the vast majority of members of defined benefit pension schemes do not see their schemes

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wind up, and it is surely necessary to balance the interests of this majority against those of the minority in schemes which do wind up. We would also question whether, in circumstances when a scheme does wind up, a non-profit deferred annuity would be the best investment to provide for all active members. Our training teaches us that, if held in an inflationary environment over a long period, such investments are not, in fact, risk free, as the layman may think, but do carry unacceptable risks. If you doubt this, ask someone who, 20 or 30 years ago, effected a deferred annuity maturing now, even allowing for some anticipated level of inflation. Contrast their position with that of someone who invested in equities over a similar period. If this point is conceded, it is a short step to accept that a minimum solvency standard allowing a measure of equity-based investment is appropriate.

Some of you may now agree that a minimum solvency standard should not be based on buy-out costs. However, you may not be prepared to go as far as saying that a significant equity component should be permitted. Perhaps you see a minimum solvency standard based on gilt-based cash equivalents as a reasonable compromise. However, as soon as you depart from a minimum solvency standard based on buy-out costs, you are accepting that members may not receive a guarantee of their deferred benefits. The question is where, in the spectrum of the level of protection provided by the minimum solvency standard, from buy-out costs at one end to 100% equity investment at the other, do you position yourselves?

Some press reports have suggested that the Goode Committee advocated a minimum solvency standard based on fixed-interest returns, and that the actuarial profession has cut this back. In ¶4.4.42 the Report states "The cash equivalent (to be used as the basis for minimum solvency standard) could be calculated on the same basis as is now done for transfer values." The word 'basis' has perhaps been taken to mean actuarial basis. However, Goode goes straight on to say "It would therefore be based on the member's pensionable service and earnings at the date of discontinuance, and would take account of expected price inflation between then and the scheme's normal retirement date". So, perhaps 'basis' is not a reference to the rate of return assumed, but to the other elements of the calculation.

In the early-leaving section of the Goode Report, ¶4.7.27 states, "The transfer value represents the cost of providing the preserved benefits to which the member is otherwise entitled." This could be taken to support either option. In fact, you can find no direct statement of whether the Goode Committee favoured equity-based or gilt-based cash equivalents. We all know how carefully that report was written, and I think it was no coincidence that this question was left unresolved.

Some of the gilt school are unconvinced; but if a minimum solvency standard based on cash equivalents is introduced, so that funds were obliged to hold the present value of deferred benefits based on fixed-interest returns, plus a margin, we have something that closely resembles an insurance company writing only non-profit business. Do we really want to force our high-performing low-cost pension funds into that?

Then, what do to the members want? There have been suggestions that the cash equivalent is being overworked; that we should have different quantities for the purposes of individual transfers and assessment of scheme solvency. On theoretical grounds one can see the argument for the 'right' test being used for each purpose. However, I see real benefits from having a single quantity, and that the only quantity that is acceptable for all these purposes, including scheme solvency, is one that allows a substantial equity component. If it can be explained to members that this compromise represents the best chance of keeping the present benefits in place with the support of the company, join with me and support the motion.

Mr P. R. Watson, F.I.A. (seconding the opposition to the motion): I am opposing this motion because I believe that occupational pension schemes should need to and *will* change their long-term investment strategy. Looking at the assets and liabilities of a typical current pension scheme in the U.K., I first consider the assets. The majority of pension schemes have approximately 80% to 85% of their assets in the form of equities; and the remainder are a mixture of fixed-interest, index-linked, cash and property. On the other side, the accrued liabilities of a typical pension scheme are around 50% in respect of pensions in payment, and figures of 60% or 70% are by no means uncommon.

The proposed minimum solvency standard is that schemes should have sufficient assets to be able

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to purchase annuities for pensions in payment, covering guaranteed, but not discretionary, increases, and cash equivalents for the active and deferred members, and that those cash equivalents should be gilt-based for members within ten years of pension age, and equity-based for members outside ten years from pension age. Typically, the liabilities in respect of those within ten years of pension age would be something like one quarter to one third of the total liabilities of the active and deferred pensioners. The minimum solvency standard, therefore, requires assets of the order of 60% to 70% of the total portfolio in fixed-interest investments in order to match liabilities. At the moment there is a substantial mis-match.

Over the last decade legislation has improved leavers' benefits, and there has been a shift of liabilities to pensioners. Schemes should always have paid attention to the liabilities in assessing the investment strategy, but various things are different now with the proposal of the minimum solvency standard:

(1) there has been, since 1991, leaver's revaluation on the whole of the leaver's benefit;
(2) guaranteed pension increases are now at a much higher level than they had been a few years ago;
(3) it is by no means uncommon to see press reports of schemes that are in a surplus position on an on-going basis, but are in deficit on a wind up;
(4) schemes have a greater proportion of their liabilities in respect of pensions in payment;
(5) schemes have a greater proportion of equities in their assets than ever before;
(6) the deficiency regulations are in place; and
(7) for the first time there are time limits on the elimination of a deficit. Previously, when deficits have occurred in pension schemes, employers have tried to eliminate them as quickly as can reasonably be done, but now there will be a time limit of three months if schemes fall below 90% of the minimum solvency standard or three years if they fall below 100%.

The consequences are that we now have in pension schemes smaller margins than ever before between the assets and the accrued liabilities with guaranteed increases allowed for; a greater mis-match of assets and liabilities; and, in particular, the existence of the deficiency regulations and the time limits on elimination of deficits, that means that the existence of companies is in jeopardy in a way which has not happened before. Some commentators have suggested that, if a deficit on the minimum solvency standard arises as a result of a fall in market value of assets rather than something which is self-inflicted by the scheme, such as benefit improvements for past service, the Regulator will relax the time limits for the elimination of the deficit. That may or may not be true. I think it will be very unwise on the part of trustees or finance directors to rely upon that relaxation by the Regulator if the very existence of the company is at risk.

The continuing conflict between long-term and short-term asset requirements needs to be addressed. It has always been there. To provide for short-term security costs money. In many areas companies have always been willing to ensure that short-term security has been provided, whether it is in relation to pensions or to other areas. Using a simple analogy; I do not expect my house to burn down. I do not want it to burn down. I do not plan my future on the basis that it will burn down, but I recognise that it could, and, if it did the consequences are serious. I would be facing financial ruin and I would have nowhere to live. So, I remove that risk by taking out appropriate insurance, despite the fact that that insurance costs money and, as a result, I have several hundred pounds a year less to spend on other interests.

Similarly, boards of pensions trustees do not expect or want their fund to wind up. They do not plan the future on the basis that it will wind up, but prudent trustees recognise that it could happen, and that, if it did happen, the consequences are serious, and it could take the employer out of business. So, prudent trustees may wish to organise their investment strategy to minimise that risk, despite the fact that it will cost the company money in the form of a lower return on gilt-based investments than they would otherwise achieve on equities.

Mr M. R. Slack, F.I.A.: I chair the Current Issues Sub-Committee of the Pensions Board, which currently has the role of trying to assist the Government and the Department of Social Security in setting a solvency standard; and feel that I am being pulled in several directions, as there is a very

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wide divergence of views within the profession.

The introductory speakers concentrated on the position of pension schemes in relation to their deferred pensioners and current in-service members, and ignored the position of pensioners. There are some strong views held that, even for pensioners, it would be appropriate to have some form of equity base in their minimum solvency standard. This is because one is trying to look more at the practicalities of imposing a minimum solvency standard rather than the underlying theory involved.

None of us would deny that the most secure test for members of pension schemes is one that is totally based either on gilts or on buy-out terms. However, how practical would it be for such a test to be imposed, and what would the long-term consequences of that test be? What are the alternatives? We have been looking at some possibilities of introducing an equity element into the test for pensioners. The types of models worth consideration are those that address the cash flows that are going to be paid out to beneficiaries over the future, and a model that might 'guarantee' that, whatever happens to the investment markets, the scheme will be able to pay pensions over the next ten to fifteen years. We are looking for a model whereby those payments would be secured by the proceeds from gilt investments plus some equity income, if necessary. The benefit payments that are ten, fifteen or more years deferred could sensibly and securely be met by equity proceeds. Such a model could provide a means for measuring security. What are the risks? Equities, on the whole, will give us a better return in the long run, as evidenced by most time periods in the past. There is no reason to suppose that this will not continue into the future. The problem with equities is that their market values can be volatile. Pension scheme trustees should not be forced to sell equity investments at times when the prices are depressed. If we were able to introduce some concept of a cash-matching exercise over a ten-year period, then the necessity to have to sell equity investments at inappropriate times could be avoided.

We must recognise that it is inappropriate for very big schemes to move equities substantially into gilts in order to meet a minimum solvency standard. This would cause a major disruption in both these markets. Including equities is, maybe, perceived as a less secure situation, but is it acceptably less secure, and is it the only practical solution? It is a possible alternative. We will be very interested to hear members' reactions.

The role of the profession must be to help Government in setting the appropriate minimum solvency standard. It is a political decision, not a professional one. We must ensure that it is recognised as such, but we must also point out what risks are involved with the different standards proposed, and make sure that Government is aware of these. There is no ideal solution suitable for all schemes, both large and small, and over both the short and the long term, so a compromise solution will be required. If those people who support 100% equities think the answer is wrong, and if those people who prefer 100% gilts also think the answer is wrong, then the compromise answer is probably right.

The Government could decide that it wishes to maximise the protection for members on termination of pension schemes, and thus insist on a full gilt basis. (Note that this maximises protection, not guarantees it, because, ultimately, nothing can guarantee that pensions will be paid.) Alternatively, the Government could decide that the potential long-term cost of seeking such protection is too high, both in terms of employer costs and the effect on investment markets, and they may therefore look for a test which is more in keeping with the long-term nature of pension schemes. In one extreme, it could rely totally on long-term funding objectives, possibly with 100% equity investments, and simply impose a minimum funding requirement on the long-term position. That, however, is likely to be seen as being too weak, and a middle course might thus be to try and incorporate an element of equities, both pre and post retirement. This could be achieved by the kind of model that I have described. The profession's role should be to advise on the effect of alternatives, and ultimately to put into practice whatever test the Government decides should be applied.

Miss P. M. Webster, F.I.A.: Mr Slack has injected some controversy into the debate in raising the idea of an equity element in the solvency test for pensioners; because, whatever happens, where there is no continuing employer, it is hard to see how holding equities can be an appropriate investment strategy for trustees. In my experience, even when large schemes wind up, trustees tend to run for cover, looking for security and certainty for their members. They do not want to be in the position

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of having mismatched assets and uncertain benefits payable in ten years time. However clever our modelling is, it is always going to rely on some kind of allowance for selling the equities eventually and some kind of assumption about dividend growth, which to the trustees means uncertainty and insecurity for their members. They may well then rush into a gilt portfolio, even if that results in the scaling down of benefits. So, schemes will be in the position where they have certificates showing 100% solvency, but are quite unable to meet pensioners' benefits. When that happens, the people who will be criticised are the actuaries: "Here is this scheme — only a month before the actuary certified that it was 100% solvent, and now we find that there is only 90% coverage of benefits." You can imagine the headlines that will follow.

If the Government cannot stand the heat of a gilt-based solvency test for pensioners and thinks the cost is too high, we, the members of the actuarial profession, should not allow ourselves to be the fall-guys — the people who pretend that schemes are 100% solvent when they are not.

When asked by the DSS to look for ways to reduce the cost of the solvency test, we should reply, "Here is a solvency test. We showed it to you before. That is what you actually need to guarantee benefits for pensioners. If that test is too meaty for you, go for 90% solvency or 80% solvency". Let us keep a solvency test that really means something, so that we are not misleading members into thinking that their scheme is solvent when it is not.

Mr D. J. Parsons, F.I.A.: As stated by Mr Watson, it is not unusual for pension schemes in this country, with the approval of the actuary or otherwise, to have well over 80% of their assets in equities; and this is at a time when fixed benefits — that is, pensions and deferred pensions — can represent over 50% of their liabilities. In other words, we condone the position whereby equities are used to back pension liabilities, but does it matter? Is it viable to back pensions with equities, or is it prudent?

I have looked into some of the theory of this. Many pension scheme valuations are carried out at present using an assumed rate of investment return of 9% in conjunction with an assumed dividend yield of 4.5% and a dividend growth assumption of about 4.5%. A pensioner liability of £100 valued at 9% will be matched by an actuarial value of assets of £100 which, if the dividend yield is 4.5%, will be the same as the market value. If the dividend yield was 5.0%, the £100 liability will still be backed by £100 at actuarial value, but the market value will be £90. So, having to sell these shares to buy annuities requires annuity rates to be based on an investment return of about 10% in order for the books to balance; or, if rates were based on 9%, you would have to find another £10 in cash; and so on. So what; do not share and bond markets move in line, so that there would be no problem in practice?

Past experience gives an idea of the risks involved. At all month ends over the past 26 years I have found that, if the ongoing funding level of an equity-backed pensioner liability was 100%, it would have been solvent on a wind-up basis just under 90% of the time. Also, every case of insolvency would have got back to being solvent within a year. Over the same period, a starting position of exactly 100% solvency would have deteriorated over the next 12 months in one third of the cases; in other words, if you look at it the other way round, the solvency position improves in two-thirds of the observations within a year. Others keep telling me that there have been permanent changes to the market which make looking backwards a waste of time. All I can answer is that there will be more of such permanent changes.

The main reason that I only looked back 26 years is that there was a major change in financial markets in the late 1960s, and my model did not give any favourable answers for earlier periods. The change was heralded by the onset of unprecedentedly persistent inflation. Since 1968 annual inflation has averaged over 8%. This has meant that interest rates have also been unprecedentedly high and annuity rates have been low. Over the previous 40 years annual inflation averaged about 2.5%; over the previous 100 years it was under 1.5%; and over the previous 700 years it was about 0.5%.

However, it is possible that this persistently high inflation is now a thing of the past, and that financial markets will soon come to reflect this. If this is the case, is it justifiable for actuaries to hope that any experience since 1968 can be used as a basis for deriving predictions for the future? Perhaps we should recognise that this has just been a blip in the long term. Maybe we should look more to what happened before then. We do not have to look much further back to appreciate how unstable

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the relationship between equity investments and fixed pensioner liabilities would be if we were starting from where we are now. The risk of loss is high. I have analysed this further, and, in my opinion, the only organisations that can safely risk matching pension liabilities with equities are pension funds with large surpluses and with-profits insurance companies.

The present investment strategy of many pension funds may be foolhardy, and it should not have required the introduction of new legislation to trigger a required change.

The motto of our Institute is *Certum ex Incertis*. I wonder if *Incertis ex Incertis* would better match what we appear to be advising.

Mr T. S. Shucksmith, F.I.A.: This motion raises many complex issues, for instance whether a pension scheme's investment strategy should be purely long term, but the real issue is the basis of transfer values for early leavers. A 'yes' vote will be seen as a vote for so-called equity-based cash equivalents, and a 'no' vote for gilt-based or insurance-premium-based cash equivalents.

At a recent Association of Consulting Actuaries meeting, a member asked "what is a cash equivalent?" I was struck how the wise and the good(e) on the panel were unable to answer this question; even worse, they seemed indifferent to the importance of the answer.

When Parliament introduced the right to a cash equivalent in 1986, most actuaries accepted that the cash equivalent of a member's preserved rights was a gilt-based or competitive deferred-annuity-premium-based value. What has happened since then? Many things, but no legislative amendment. Nothing has changed the meaning of cash equivalent.

I have examined all the pertinent legislation, and reconsidered the question. My opinion is that the cash equivalent is the sum which a receiving gross fund would require to provide exactly the same benefits as promised under the ceding scheme without exposing itself to significant risk, viewed as an isolated transaction. This leads to a cash equivalent which is calculated by discounting preserved benefits at the market rate of interest on the best matching gilt-edged stock, with cautious assumptions (i.e. a lower rate of interest) on reinvested income to the extent that exact matching may not be possible. To this calculated sum the costs of administering the benefit must be added. This is likely to bring out a value which is marginally, but not significantly, below an insurance market-based value, since insurance companies would be expected to provide for marketing costs and for some profit. It has to be said that the insurance market premium basis has the merit of objectivity.

What is an equity-based cash equivalent? In essence it is a funding reserve; the share of fund that a scheme would hold on the ordinary funding assumptions in respect of the deferred pensioner, assuming the scheme is exactly fully (100%) funded. If the scheme is overfunded no share of the surplus is given, but if the scheme is significantly underfunded the full funding reserve figure may be cut back. A funding reserve is the sum which is expected, on average, to be sufficient to provide the promised benefits. There is, therefore, a significant probability that a recipient scheme would incur a loss if it promised identical benefits. As the actuary of the recipient scheme, I would not be content to provide matching benefits for such a sum. It exposes the fund and/or the employer, through its contribution liability, to a significant risk, which it should not be required to take on. It does not satisfy the principle underlying the meaning of cash equivalent. In short, in my opinion, it is not a true cash equivalent.

As Mr Parsons said, to extract certainty from uncertainty is impossible, although a highly admirable aim, and also highly marketable if capable of delivery. I am concerned that, in some very important areas, actuaries tend to treat expectations as certainties, which they are not. Guaranteed benefits are more valuable than expected benefits of the same amount; more valuable to the beneficiary and more costly, in terms of direct or indirect capital, to provide. An appropriate way of measuring how much more valuable is to value by reference to best matching investments.

Mr R. B. Colbran, F.I.A.: We have come to realise rather late in the day that the proposals for pensioners create problems, and I am concerned about them. From my own experience and from published surveys, it seems that many schemes which have a high pensioner liability still also have a very high equity proportion in their assets. If, as the proposer suggested, a bond yardstick is accepted, then there will be a significant cost to employers from the proposals. This is on the assumption, postulated by Mr Yeo, that equity investment is, in the long run, more productive.

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There is also the problem that, whereas, at one time, a large element of the pensioner liability was for discretionary increases, many funds now guarantee pension increases in line with inflation up to 5%, and, as we know, there is no security which can match that. There are still no annuities on the market which reflect that liability, except ones that virtually price it at 5% or at full RPI. There is cause for considerable concern there.

My other main concern about the way things are moving is that, although it is not mentioned as such, it sounds as if the standards will take the form of something closely resembling a benchmark. Benchmarks are dangerous because they do not have flexibility, and they are liable to be changed long after the need arises. If we look at the time when exchange controls were first removed, and suppose that we had had a benchmark then, I think that there is no way it would have reflected anything like the international spread of investments that pension funds now hold.

I am opposed to changes which will limit dramatically the way in which employers and trustees run their schemes. We seem to have taken a starting point which was produced in haste and was the most difficult part of the Goode Report, and we are tinkering with it instead of looking at the fundamentals.

Mr A. C. L. Dyson, F.I.A.: It is particularly significant that all four opening speakers are quite happy with the compromise standard that has been proposed, of an equity-based cash equivalent for active members and deferred pensioners, and a gilt-linked one for pensioners. However, one thing that a minimum solvency standard *must* do is to ensure solvency so far as it is possible, and that is its sole *raison d'être*. After that one can look at other things, but, from the professional perspective, that must be the first objective of any solvency standard.

I now turn to the long-held traditional actuarial investment concept of matching. We know that equities deliver a higher return, but do we know why? The answer is because they are more volatile. The reward you get for accepting that risk is that you get a higher return. Should they cease to be more volatile, then you will cease to accrue that extra return as a result.

When we consider the solvency of companies, the very circumstances where bonds will do well and equities will do less well will generally be when there are difficult economic conditions, usually with deflation or low inflation. These are precisely the situations where companies are potentially going to become insolvent, and where the actual focus on solvency will come into play. So there is a real double risk which, as a profession, we cannot ignore.

It is very dangerous for us to focus on the past. Many things have changed, which makes the past 30 years a very unreliable period from which to predict the future. For a start, we now have index-linked gilts as assets which are quoted and are available. The significance is that that provides a live market benchmark for a risk-free real return. Therefore, whatever the factors behind the decline of gilts over many years, we now have a benchmark against which conventional gilts can be constantly tested by investment managers.

I find the concept of getting away from matching very difficult, for matching is what guaranteeing solvency implies. For pensioners, where the timescales are such that matching is feasible, the gilt link is the natural route to take. I cannot see how the profession can, in all honesty, do anything else but that. If our priority in setting investment strategy is purely return, because an investment strategy is not something that has been decided in abstract, but flows from the objectives of the fund concerned, corresponding to an objective which is purely to minimise cost or to maximise return, this leads to an investment strategy which is based on equities. We must recognise this priority and not disguise it as anything else. If we are to have an objective that recognises anything else other than maximisation of return, we must not make the mistake, as a profession, of being expedient, but instead stick to our guns.

Mr R. S. Parkin, F.I.A.: I have never been a user of particularly conservative assumptions, but I have come across a couple of examples recently which, frankly, have frightened me. These concern very large and very mature pension schemes, operated by pretty hard-nosed employers, where the surpluses that once existed have been stripped out to the point where the schemes are now very under-funded relative to the proposed standard. The sponsoring employers, no doubt under strong commercial and competitive pressures, are keen to continue with aggressive investment strategies and correspondingly weak actuarial assumptions. The actuaries, perhaps too under commercial and competitive pressures, are compliant, but, were some misfortune to befall these particular sponsors, the schemes would be unable to meet their obligations by a wide margin. That means real people would lose real money. Yet there is no evidence that the situation is being addressed with anything like enough urgency. These are pension scandals waiting to happen.

Almost the first thing you learn as a trainee actuary is that investment is for a purpose, and that the policy you then follow must have regard to the liabilities you are investing against. In the context of pension schemes, this leads to a golden rule: either you inject some prudence into the assumptions, or you hold a surplus against your winding-up liabilities — a mismatching reserve, if you like — or you match your investments. A brief reference to this rule provides a straightforward answer to the motion we are debating.

However, there are now proposals on the table to weaken the solvency test. They will have the effect of giving solvency certificates to insolvent pension schemes. We seem to be starting to think that we can break the golden rule and get away with it. We cannot, and if we try it will inevitably lead us to disaster.

Mr A. F. Wilson, F.I.A.: We have been discussing how pension funds should be invested, and how that investment should interact with the minimum solvency standard. As has already been said, to a large extent the minimum solvency standard to be set is basically a political decision, and it is for us to monitor and to apply that minimum solvency standard once it comes into place.

Our main function, at this stage, is to consider the impact in the long term on the economy of what is proposed, and what will happen if that causes fundamental changes in the way in which the pension funds are invested. Several speakers have looked at the particular, saying, "When you look at the particular, we have to match with gilts". It sounds a lovely idea: "All pension funds should move into fixed-interest gilts in full. They match their liabilities." What a lovely way to rob the pensioners of the 21st century! All you have to do is to have a certain amount of inflation. In due course it can inflate away the pension liabilities for previous generations, but those actuaries who are young now and suggest this course of action might have a shock when *they* come to retire.

Looking at the practicalities of the situation, why do we have such large proportions of pension funds in equities? Is it purely by accident, or is it simply the fact that the amounts by which equities have outperformed gilts over the years have, *perforce*, meant that the amount which was held by pension funds in equities *had* to increase? To do otherwise would have meant continual selling of equities and buying poorer-yielding gilts.

Currently, and five years ago, half of U.K. equities were owned by pension funds or life offices, 20% by individuals, 15% by investment trusts and unit trusts, whilst 12% were in overseas ownership, leaving only 8% in other ownership. There has been a subtle change, however, over the last five years, within the 50% owned by pension funds and life offices. Life offices have been selling equities in their life funds and buying gilts for their pension business. However, we are now talking about the possibility of changing matters so that the amount backing pension benefits (currently of the order of 40% of all U.K. equities), might have to go down by 10% to 30%. Who is going to pick up that extra 10% of equity investment; individuals? I very much doubt it. Will it be overseas investors? How do we manage to make them nearly double the amount that they hold in U.K. equities? Surely, only by pushing the price down far enough; what an effect of a minimum solvency standard! We would then find ourselves in the 21st century owned by the overseas market and with inflation taking away the value of our pensions!

Looking at the other side of the story, and having to sell equities with a present value of £70bn, who is going to issue £70bn of gilts, and on what terms? Can we rely on a future Government not deciding that the best way of reducing the burden of the increase is to inflate? I therefore support this motion most strongly.

Mr P. M. Greenwood, F.I.A.: Mr Wilson seems to agree that we are in a market economy, but forgets that the market economy also sets the supply of investments. Surely, if we do something which changes the balance and increases the demand for fixed-interest securities, the merchant banks will look at the capitalisation and the financing of British companies and, it is to be hoped, the

Government will respond to pressure, and companies will be able to issue fixed-interest securities on a more equitable tax basis. If that happens, all these scare stories about substantial market falls will be unfounded.

We are also looking back at a time of real equity returns when there was more fixed-interest financing. That fixed-interest financing has disappeared as the Government has cut down its PSBR, and has repayed debt. That created a shortage of demand for fixed-interest stocks, and investors moved into equities. History shows that, where equities have been bought on very low yields, they have not given those advanced returns expected by investors.

As a profession we hold a Royal Charter, which is meant to show that we represent a balance of public interest. However, much of the lobbying appears to be coming from the view of short-term commercial considerations. Should we not be providing the Government with the correct technical answer in the long term, and then saying, "That is the right answer. If there are short-term problems, let us communicate the true position to the general public, and correct that position over time"?

The letter which the Pensions Joint Standards Committee sent to the DSS was a strictly technical one, setting out several options. The Government, in the White Paper, accepted none of the options in that letter, but proposed a compromise of where an underpin of the minimum solvency standard was to be put in. The actual non-profit deferred annuity target in most deeds remains in place. Totally equity-linked minimum solvency standards will create major problems for trustees who wish to deliver a consistent investment policy against their actual wind-up liabilities under the same rules, which still remain in place if the original line of the White Paper is followed.

Those who are in the gilts camp have been portrayed as acting in Corporate U.K.'s interests. One of the influences that this minimum solvency standard will have is in how companies will fund schemes in the future, and, therefore, it becomes an element in what benefits are promised by companies for 20 or 30 years' time. Many supporting defined benefit schemes are stressing that those benefits are guaranteed. It is also assumed that final salary benefits are guaranteed; money purchase benefits are not. If we do anything actuarially that does not reflect the nature of those guarantees, we are leading Corporate U.K. to make pension promises that it cannot afford 20 or 30 years in the future. I think the profession should think seriously before it goes down that line.

Mr M. A. Pomery, F.I.A.: The CBI and the DTI are keen for the Government to weaken the proposed solvency test, and, from what Mr Slack said, we seem to be going along with this. The profession has argued that the strength or weakness of a minimum solvency test is a political decision which Government must take, and only then can we advise on a suitable basis. We are also told that DSS officials understand and accept this point, but, as we have heard, we are proposing weaker bases, designed to mollify the CBI and to allow highly mature and weakly-funded schemes to continue to invest in mismatched assets.

We should be taking a stand on this issue and stating to the CBI, to the Government and to the media, "If you want a proper minimum solvency standard — this is what it will mean and this is what it will cost. If you do not like the cost and want something easier to meet, then you should soften the conditions — in particular the requirement for a cash injection within only three months." If this is unacceptable, we should stop calling it a minimum solvency standard, because it is giving the wrong impression to the man in the street.

Mr I. M. Aitken, F.F.A.: The SIB report on transfers from occupational pension schemes to private pension arrangements is about to be published, and it is likely to highlight the extent to which people have been persuaded to transfer out of occupational pension schemes run by their employers. I have no doubt that some insurance salesmen used the argument, "Look what happened to the pensions in Maxwell, Belling and Burlington — are you sure that your pension is safe?"

The new pensions legislation is on the drawing board, and it is incumbent upon the actuarial profession to ensure that pension security is high on the agenda. To create a more matched position implies a greater proportion of assets being invested in the fixed-interest market than is the current practice. In turn, this means that the returns from this sector of assets will be some 3% or 4% less than that from the equity market. Consequently, the employer's funding rate may have to be increased — some employers will not be happy about that.

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During the past few years, many pension schemes have accumulated substantial surpluses as a consequence of the significant returns obtained in the equity market. There is always the possibility that the surplus would exceed that permitted by the surplus regulations that were introduced by the Finance Act 1986. Thus, many of us, as consultants or life office actuaries, may have advised the employer that his contribution should be reduced, or even that a contribution holiday should be taken, so as to avoid breaking the regulations.

It is absurd if, in the future, we have a narrow window within which the funding level must remain; at the lower end the minimum solvency requirement, and at the upper end surplus regulations. We want to encourage occupational pension schemes to be soundly financed and fully funded in all circumstances, without imposing too many rigid artificial restrictions.

It is accepted that some trustees may not wish to move to a more fixed-interest orientated portfolio, thus producing lower returns. They may wish to continue with their high proportion of equity assets. This is quite satisfactory if they are prepared to be more than 100% funded. Such a scenario may well imply a mismatch of assets *vis-à-vis* liabilities. However, if there is sufficient margin there to allow for a fall in stockmarket values, so be it. That should be acceptable.

Recently, the Pensions Board of the Institute and the Faculty has been giving much thought to a realistic solution to this problem. The current thinking is that there should be a portfolio apportioned between equities and gilts such that the expected pensions payments, including guaranteed increases, in the next 10 years, would be met from matched expected income from the equity portfolio, plus the income and redemption proceeds from the gilt portfolio. After 10 years it would be equal to the value of the expected pension payments of the equity portfolio. This may well be a slightly mismatched position. However, it allows the trustees to obtain a greater return from equities while, at the same time, ensuring the security of the pensions. At no time is it necessary for us to, and we should never, introduce weak economic assumptions. As a profession, we must always have strong assumptions.

Mr P. D. G. Tompkins, F.I.A.: The point has been made several times that political decisions are up to Government and the DSS. I can see the force of this argument, and also the fears that members of this profession have, but the real debate about equities and gilts and the basis of the minimum solvency requirement is not taking place on the floor of the House of Commons or in the DSS; it is taking place in meetings like this one.

The Government has left the insurance industry to regulate itself, and clearly there have been some failures. It is important that a profession with Charters, as ours has, should see itself as the upholder of the public interest, and that we should accept some responsibility. The current discussions and the conclusions we shall reach, in particular the discussion over the equity basis that has been put forward most recently, are to be put to the DSS and to ministers. It will be our profession that is looked to as the only body that is capable of suggesting the type of conclusion that is needed as to where is the best line to draw the minimum solvency requirement for the public interest.

It is worth drawing attention to the fact that we now find ourselves in a position where we have relatively little freedom to manoeuvre, given how little discretionary benefit is left to an occupational scheme to provide. We have to reflect the reality that, if individuals are not content with trustees having the continued operation of the scheme, and the provision of benefits with investments backing those being in equities, then those people have the right to take their money away — to take the value of their benefits based on what it will cost them to provide. I am very concerned at the proposal that we should be looking simply to the most practical way for the employer to provide for benefits based on equity investment, and ignoring the reality that we should be looking to a solvency requirement which matches the sum total of the individual's rights under the scheme.

I emphasise that we have a political role to play here, which is not simply for the politicians who look to us for the input.

Mr C. M. Stewart, C.B., F.I.A.: I support the motivation of the opposers, which is entirely in the direction of making accrued pensions secure. The motives of those who are proposing the motion lays too much store on investment possibilities and not enough on the security of pensions. Down that road lies disaster for the actuarial profession.

The best and cheapest way to give complete security for accrued pension rights, and yet allow

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schemes to invest 100% in equities if they wish, is to have a back-up reinsurance scheme; a properly designed scheme, not like the disastrous schemes in some other countries. The premiums required would be small, reflecting the fact that only a small proportion of schemes wind up. The Government has set its face against such a scheme, but, from a long-term economic point of view, we may have to envisage a future in which the way a generation of working age is able to establish a claim on resources after they retire will be through real investment, and not through gilts. We ought, therefore, to envisage a system in which schemes generally might invest 100% in equities. If the security for pensioners in such a scenario is not through a collective reinsurance arrangement, it has to be through solvency margins.

It would not be proper for the profession to support a system in which schemes invested in equities and left the members' pensions at risk. It is for the Government to decide on how secure accrued pensions should be. It is not for the actuarial profession to say that, if you invest 100% in equities, you must have a certain solvency margin. It seems to me that the Government is abdicating its responsibilities for making pension rights secure. Its stated ambitions go no further than 'improving' the present arrangements. It must, therefore, be for the Government to say what degree of security, for example by way of solvency margin, there should be if schemes wish to invest for their pensioners' reserves in equities. This is mainly about large schemes, because small schemes, which buy immediate annuities as a matter of course when members retire, are not in this vulnerable situation. We ought to make it our aim to provide just as much security in large schemes which wish to run their schemes more cheaply by investing in equities, by pressing the Government to include a margin in the minimum solvency standard.

Mr P. W. Thompson, F.I.A.: Current proposals for minimum solvency liabilities for a typical scheme might be two-thirds, or thereabouts, in gilt-related and one-third, or so, in equity-related. A typical scheme might be 80% invested in equities. A further assumption is that this typical scheme is 120% solvent in relation to minimum solvency liabilities — not 100%, but 120%. If you are 100% solvent at the minimum solvency level, then you have problems already, and the minimum solvency requirement will only exacerbate those. To the extent that assets and liabilities are not matched in this typical scheme, 100% solvency is reached when the equity values have fallen by about 30% in relation to fixed-interest values. To fall to 90% solvency, the 'three month top up' level that we have been talking about, equities have to drop in value by almost 50%.

There is, in practice, much flexibility here. Once you have assigned the relevant assets to the relevant liabilities, the amount of variation in asset values that a reasonably well-funded scheme can take can be brought out.

Without-profit deferred annuities are not the way forward for investment of all our clients' pension schemes, and very large, very mature insolvent pension schemes should not be 100% invested in equities.

Mr R. E. Brimblecombe, C.B.E., F.I.A.: Corporate needs have been considered in some depth, yet little attention has been given to the effect of what is proposed on individuals. A revised method of cash equivalents is proposed, not just for solvency standards, but for all purposes including individual transfer values. We have already seen figures of the effect of the proposed minimum solvency standards at the younger ages; individual transfer values may be reduced by as much as 15% (based on figures at March 1993). If you track similar bases for the period 1992 to 1994, you get reductions as high as 25%. Are we saying that individuals who leave jobs are going to have their transfer values reduced by a not immaterial proportion? If Mr Slack's suggestions about putting some equity backing for pensions in payment into the basics are followed, this will make it even worse.

The SIB review on transfers is about to appear. I suspect that, broadly, the financial services industry will argue that, as transfer values over the last five years have, by and large, been based on gilts, investment, over a reasonable period of time, of that transfer value in an equity-based personal pension — with-profits or unit-linked — is likely to do better. Yet we are proposing to reduce those transfer values quite materially. Mr Yeo says that we do not want people who leave service to be effectively tied into non-profit deferred annuities, but what is going to happen in the future if transfer values are so low that very few are going to do any better under a personal pension?

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Like it or not, we are in a period of greater mobility of labour. Up until now I have been a fully-paid-up member of the 'cash equivalent for all purposes' club. I wonder now, however, if the move to equity backing for pensions in payment is not a concession too far, but, whatever the outcome on minimum solvency standards, perhaps we should now decouple minimum solvency standards from the basis for individual transfer values.

Mr J. S. R. Ritchie, F.F.A. (the opener, summing up): The motion actually says: "Occupational pension schemes should not need to change their long-term investment strategy in order to meet a minimum solvency standard".

I quote from the *Financial Times* of 19 October 1994: "Eight out of 10 employers were not concerned that proposed minimum solvency ratios for pension funds would require additional funding, although just more than one-third said that trustees might have to revise their scheme's investment policies as a result". It sounds as if two out of ten employers do recognise that their schemes are going to require additional funding on the current proposals, and of those who do not, more than one-third are going to have to change their investment strategy.

I was very concerned about the proposal for using equity backing in retirement. I agree with one speaker who asked what was wrong with index-linked gilts. We should be considering index-linked gilts before we consider equities for people in retirement. There are index-linked gilts with maturity dates of 2030.

Mr Colbran pointed out the danger of benchmarks, referring to how they might impact on investment strategy, since they are looked at retrospectively, and may not be changed quickly enough. At some point we have to have faith in governments! If the benchmarks become unrealistic, government could act as quickly as is necessary in order to avoid any dramatic disasters.

The potential long-term cost was considered by several speakers. This should not be measured just from an employer's viewpoint. Mr Brimblecombe said we should look at this from the members' viewpoint. What is the potential long-term cost to members if schemes have to be wound up or the company goes into liquidation? They lose their employment and may also lose a fair proportion of the pension that they thought was guaranteed.

Mr Wilson engaged in some long-term forecasting about what might happen in the investment markets. As Lord Keynes once said, "In the long term we are all dead". In the *medium* term there are things we can do. We can fund to a higher standard in the medium term; and we might even be able to prevail upon the Inland Revenue to have surplus regulations based on a percentage of the statutory minimum solvency — perhaps 150% to 200%. We choose the figure and try to persuade the Revenue that it is the right one. At least it would be a percentage of statutory minimum solvency.

One of the things that management consultants tell you to do is 'imagineering'. It means that you imagine what you want to see happening at a point in time in the future; what you think the ideal would be; and then, keeping that target clearly in mind, you start from where you are, and you decide how you are going to get there. In the year 2005, my imagineering suggests that all defined benefit schemes are either matched, if they can match and they want to match, or if they cannot or do not, they hold sufficient reserves for a substantial mismatch or a balance between the two. The test for this balance is that the active members and the current pensioners know where they stand, and those who are not yet retired can plan confidently for whatever additional provision for their own retirement they think they are going to need, knowing that their expectations from the scheme are largely guaranteed — not totally guaranteed.

I suggest that we are clearly not in that position now. It is for that reason that I ask you to oppose the motion.

Mr S. F. Yeo, F.I.A. (for the proposer, summing up): The wording of the motion is, "Occupational pension schemes *should* not need to change their long-term investment strategy in order to meet *a* minimum solvency standard". It does not say that occupational pension schemes *will* not need to meet *the* minimum solvency standard. We have heard an excellent debate on this alternative topic; and I urge you to think more closely about the precise words in the motion.

In the opposer's opening remarks, he said that he and his seconder were reinterpreting the motion, as meaning that schemes with massively maturing liabilities should be able to invest 100% in equities.

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That is not what the motion says.

We do not advocate schemes holding 100% in equities on a best estimate basis. We are not defending those schemes about which Mr Parkin spoke. The most amazing thing about the debate is that some speakers *have* defended those schemes. We do not defend them, and in order to vote for the motion, you do not have to defend them, either.

As Mr Russell said in his opening, all we are asking for is a market adjustment for the equities. We are not suggesting a weaker standard than that based on gilts. We have had the spectre conjured up that some actuary may sign off his report saying that the scheme satisfies its minimum solvency requirement; and then it winds up two years later and cannot buy out its benefits on a deferred pension basis. I should like to see any actuary who is confident that his client's schemes are always able to buy out the benefits on a deferred pension or an immediate pension basis. I certainly could not say that. If you are saying that the only sensible test is one on which that test could be satisfied, so that no actuary need ever face the members of the scheme, and say, "I am sorry, your benefits cannot be satisfied", then please vote against the motion, but I do not think you are really saying that.

I am a little disappointed that some of the issues that we raised in our opening remarks have not been addressed. The issue of what investment would be appropriate to provide for younger members on a wind up has not been addressed. There was only passing reference to what is the consequence of an alternative strategy if you introduce a 100% gilts test and force people down a particular line — what would be the consequences for the economy, and what would be the consequences for scheme sponsors?

The speaker who summed it all up was Mr Thompson. He spoke about the schemes I advise that are 120% funded on *the* minimum solvency standard that we have seen discussed, and can still afford to run a strongly mismatched position. I am happy advising trustees of such schemes. I think you all would be, too. I think you should all vote for the motion.

The President (Mr C. D. Daykin, C.B., F.I.A.): It would have been unreasonable to expect a group of actuaries to say 'yes' or 'no' to a 21-word question without introducing 16 caveats and at least as many alternative forms of words. I suggest that, in order to vote on this motion, we need to set up a matching rectangle and map the actuaries present on to a two-dimensional grid which will have five grades of agreeing with the motion, and five possible amendments. This will take some time. In the interests of getting a final result, and whether it has any meaning, is for you to judge.

The motion is: "Occupational pension schemes should not need to change their long-term investment strategy in order to meet a minimum solvency standard". Those in favour of the motion, please raise your hands. Those against. The motion is drawn!

There are many technical points which have been raised. The format of this meeting was not designed to reach a consensus, but to elicit some strongly held views, and we have succeeded in doing that. The Pensions Board will be giving consideration to the very serious issues that lie behind this debate, and welcomes all contributions to those discussions — both those that have been made this evening, and any which you may feel able to put in a considered form in writing to them.

It remains for me to express my own thanks, and I am sure the thanks of all of you, to those who have worked very hard to put on this debate: Mr Russell, Mr Ritchie, Mr Yeo and Mr Watson, as well as to those members of the Pensions Board and the Sessional Meetings Committee, in particular Mr Slack, who worked hard behind the scenes to create the complexity and the difficulty of the motion.

WRITTEN CONTRIBUTION

Mr R. C. Ross, F.I.A.: My comments on the investment implications of a minimum solvency standard are predicated on the assumptions that there will be a minimum solvency standard and that, until we have further information, it will be applied in accordance with the recent White Paper proposals.

In these circumstances, I think that many pension schemes will need to pay more attention to the

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short-term consequences of their long-term investment strategies. The fact that the solvency test is likely to be applied annually, with assets valued at market value, is an important change in the rules of the game, and is likely to lead to more dynamism in investment policy.

Those funds which are close to the insolvency level with sponsoring employers who are adverse to unexpected calls on cash, face an acute short-term versus long-term dilemma. On the one hand, they will want to invest in assets offering higher expected returns to improve their long-term funding position, but, on the other hand, they will be very adverse to the short-term volatility that these assets may bring.

The result may be that funds will adjust their equity exposure according to the margin they hold above the insolvency level. Thus, as the equity market rises the risk of insolvency reduces, and they can afford to increase their equity exposure and so increase their long-term expected returns. Equally, as the market falls their tolerance for short-term volatility falls and equity exposure will accordingly be reduced. This dynamic asset allocation pattern could be the outcome of year-by-year revisions of investment policy, or it might indeed be adopted as a pre-determined 'portfolio insurance strategy'. The fact that, for perfectly justifiable reasons, some funds may be motivated to sell as the market falls could introduce more short-term volatility in the equity market. In mitigation, one would hope that those funds that do not have solvency concerns would take advantage of the long-term buying opportunity that this selling activity would provide.

Regardless of whether and how funds adjust their equity/gilt exposure, the move to testing on market values has important implications for the geographical allocation of equity exposure. U.K. pension funds, on average, have about 70% of their equity assets invested in the U.K. market (60% of total assets). When one considers that the U.K. accounts for 11% of world market capitalism and 5% of world GDP, this seems a remarkably high proportion. Whilst there is some comfort to be derived from currency matching (although investing internationally is one way of hedging sterling's *future* value), U.K. funds are taking a highly concentrated bet on their own market.

One of the reasons why this bet on U.K. equities has been sustainable is that U.K. pension plans have been protected against the true volatility of the U.K. equity market by the way in which actuaries value U.K. equities in an ongoing valuation. In an ongoing actuarial valuation, the assets are valued by projecting future income flows into the future and discounting these cash flows to a present value, on a basis that is consistent with the discounting of the liabilities. This effectively means that the actuary has set a par value for the market's dividend yield, and will adjust the market's current valuation up or down to be consistent with that par value. The common approach of valuing the fund's assets as if they were 100% invested in U.K. equities means that the reference point for measuring the volatility of assets is performance relative to U.K. dividend growth. This, of course, makes U.K. equities look very attractive relative to other asset classes. By contrast, valuing international equities, index-linked gilts and conventional gilts as if they were U.K. equities makes them look unattractive when measured in these terms.

Thus, U.K. funds have become accustomed to actuaries smoothing away most of the volatility in U.K. equity returns. International assets have not been valued in a consistent way, which has perpetuated the bias in favour of U.K. equities over international equities. In a solvency valuation it is the *market* value, not the actuary's value, that is relevant. The plan will bear the full impact of any fall in the U.K. equity market on the reporting date. In a market value environment, many plan managers will wish to review the wisdom of having 60% of their assets in a single volatile asset class.

It is widely accepted that, after allowing for withholding tax, there is no reason to *expect* U.K. and international equities to give different returns in the long term. Thus, increasing the international content from current levels can be expected to reduce the volatility of the total equity content without sacrificing expected returns. With U.K. equities and international equities valued on a level playing field, a much higher proportion of equity exposure will be invested overseas. It is demonstrably less risky to invest, say 50-60%, of a fund's equities in the U.K. than it is to invest 70%, as is the case at present.

Further reductions in volatility can be achieved by hedging currency exposure. In a well-funded plan the cost of hedging currency (albeit small) will generally outweigh the benefit of reducing asset volatility. However, for a fund close to the insolvency level, this may be a cost worth paying, if it allows the international (and total) equity content to be sustained.

I believe it is important to take account of this factor in determining the composition of the 'modified closed fund', which the profession has recommended should be adopted. The composition of the fund will undoubtedly assume significance as some form of matching strategy. I have already heard talk of this fund defining the minimum risk position against which the strategic bets, inherent in any particular investment policy, can be measured. I would contend that a modified closed fund in which the equity content is assumed to be 100% in the U.K. is *not* minimum risk. I do not think it would serve the pension fund industry at all well for this misconception to be enshrined in legislation.

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