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FUNDING DEFINED BENEFIT PENSION SCHEMES

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ABSTRACT OF THE DISCUSSION

HELD BY THE FACULTY OF ACTUARIES

Mr C. A. Speed, F.F.A. (introducing the paper)**:** Our paper focuses on how actuaries advise on funding defined benefit (DB) schemes. We propose a better framework for actuaries to carry out their duties, in particular to communicate more clearly the funding status of DB schemes and the implications for benefit security. We believe that this will reduce the chance for misinterpretation.

I start by outlining why we feel that there is a need to update current practice. Consider the phrase 'The scheme is 100% funded on an ongoing basis'. What do these comforting words mean? As Michael Pomery, the President of the Institute of Actuaries, noted in his Presidential Address, the problem with the term 'fully funded' is that: "any member reading this would naturally deduce that their benefits are secure", when, of course, they are not. Indeed, we would propose that these words are widely misunderstood by non-actuaries. Our use of language contributes to the 'understanding gap' to which Sir Derek Morris referred. 'Ongoing funding' only means that there is continual reliance upon the sponsor to provide the benefits. However, the phrase 'the funding level on an ongoing basis' is poorly defined, as two actuaries can arrive at substantially different answers when considering the same scheme. Surely, this is unhelpful to our clients.

One of the reasons for the lack of consistency is the common practice, when setting funding targets, of using a discount rate in excess of gilts. This practice of taking advance credit for possible future excess returns, while ignoring the risk that these returns may not be delivered, is flawed.

Further, this practice of taking advance credit for future possible excess returns, while ignoring the risk, results in higher risk investment strategies being associated with lower contribution rates and a lower funding target. There is a problem here. All things being equal, to deliver the same level of security, trustees and members should demand more money for a riskier investment strategy, and not less.

The situation becomes more problematic when the lack of standard practice comes up against the pressures of operating in a commercial environment. Sponsors generally prefer to pay lower contributions, and, at the same time, want to present a positive picture of the financial health of the scheme. They are, of course, well aware that actuaries can be persuaded to help by adjusting their assumptions. This is a theme that Harvie Brown picked up in his Presidential Address, where he noted that, if "... guidance has been drawn up too widely and 'professional judgement' is used as an excuse for obtaining a wide range of financial results, then the credibility of the profession can be damaged." He also noted that, as a result, the client is encouraged to 'assumption shop'.

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The use of additions to the risk free discount rate means that insolvent funding targets are set. When insolvent funding targets are set, it should be no surprise that schemes are found to be insolvent when a sponsor fails.

It has been pointed out that pensions' promises are risky (as are all financial contracts), and that, therefore, using gilt discount rates is inappropriate, as they make no allowance for the risk that pensions will not be paid. We fully agree that pensions are risky, as members of ASW and other schemes are, sadly, only too well aware, but this observation does not undermine the use of gilt discount rates. Whenever a liability is subject to credit risk, it is crucial that it is benchmarked against the payment required to meet that liability in full, were it not subject to credit risk. For example, being told that a corporate bond yields 7% is uninformative on credit risk, unless you know the yield on the equivalent gilt. The measurement of scheme solvency is of prime importance in assessing a pension scheme's financial position.

The paper starts by asking: "Why fund DB schemes?" We find that the primary reason is benefit security, and, given this, it seems to follow that communicating clearly what security is provided is essential. Indeed, it is necessary for making informed financial decisions. Therefore, we recommend that liabilities should be measured on a solvency basis, and that pension schemes should report both upon their current and their targeted levels of solvency.

I now try to head off an area of possible misunderstanding. Although we recognise and stress the importance of solvency, we recognise the limits of an actuary's role. The targeted level of funding is properly a matter of discussion between the trustees and the sponsor (within the bounds set by legislation). We also conclude that, given the environment in which pension schemes operate, there are strong tax incentives for a creditworthy sponsor to fully fund, or even overfund, a DB scheme, and invest all assets in bonds. This obviously provides security to the members. This conclusion, which draws on the ideas from corporate finance, is not new, and has been widely discussed before. Therefore, I prefer not to focus upon that now, but welcome the opportunity to concentrate upon the standards governing actuarial advice on funding DB schemes.

Turning to two areas which have received insufficient attention; the first is the sponsor covenant, which describes the willingness and ability of the sponsor to make good any deficits. If a scheme is insolvent, it has an ongoing reliance upon the sponsor. From an economic viewpoint, the deficit is equivalent to an unsecured loan made by the scheme back to the sponsor, where the repayment terms are ill-defined. For many schemes today, this loan to the sponsor is the biggest single asset in a scheme. To the member, this represents a concentrated, highly illiquid form of self-investment in the sponsor. Such arrangements are economically inefficient.

Writing in the *Financial Times* earlier this month, John Plender described pension scheme deficits in precisely these terms, and, with understatement, noted that such self-investment is "not an asset to die for". This lack of focus on the corporate covenant appears to be changing rapidly, with the regulator encouraging trustees to act as with any other unsecured creditor.

The second area which we feel has received insufficient attention is the amortisation of scheme deficits. In the current environment, with mature, underfunded schemes, deficit contributions are often more significant than the contributions for accruing benefits. It seems to us to be an anomaly that there is detailed guidance on setting contribution rates for accruing benefits, but no guidance on the amortisation of deficits. Possibly, this lack of guidance is one of the reasons why actuaries continue the practice of re-spreading deficits at each actuarial review. This has the effect of extending the amortisation period, and, of course, it prolongs the self-investment in the sponsor.

There is an old adage: 'If it ain't broke, don't fix it', so, in this paper we set out the fix for advising on funding DB schemes. This comes in the form of ten principles. Very briefly, these principles are as follows:

(1) When referring to the value of a scheme's liabilities, actuaries should use the solvency measure.
(2) Funding advice should disclose the broad impact of priority rules on members' benefits.

These two principles are aimed at reducing the possibility that actuarial advice might mislead users about the level of security or the cost to the sponsor.

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(3) The funding objective should be well defined, so that two actuaries advising the same scheme arrive at similar answers.

This principle is aimed at achieving good governance, to ensure that actuaries are clear with their clients on the objective, before they start to give advice.

(4) Funding targets should be unambiguously described in terms of solvency.
(5) Actuaries should highlight if contributions are inadequate to maintain solvency, including priority in coverage for all members.

Principles (4) and (5) aim to prevent funding advice being misleading. Funding advice can be given using the benchmark of solvency. The benchmark need not be, necessarily, 100% solvency; an actuary could advise on a funding target which is 80% solvency. We have a clear preference for this, as, in stating that the scheme is aiming for 80% solvency, it is clear that the 80% relates to security. We feel that this is a better route than saying that a scheme is 100% funded, only for the member to find out later that this does not relate to security. Having fully funded schemes which are insolvent reflects poorly upon the profession.

(6) Reserve fully for options against the scheme.
(7) Require the party responsible for setting contributions to determine the degree upon which the company covenant can be relied.
(8) Define the amortisation period in full.

Principles (7) and (8) aim to make clear the extent to which the company is being relied upon, and over what period.

(9) Provide a risk-based assessment on the solvency position at the next review date, including the uncertainty around that. This is just basic risk management information.
(10) Do not advise on contributions beyond the next review, unless these are specified unambiguously.

This last principle is aimed at avoiding the impression that funding is being set for the long term, when, in fact, funding advice is usually only applied up until the next actuarial review.

This year of 2005 is going to be extremely busy for us. There is substantial new legislation coming into force, as well as the findings of the Morris Review. It may be tempting to say that now is not the time to reconsider how we advise upon funding. We disagree. We note that Sir Derek Morris referred specifically to pensions, saying that we ought to improve the way in which actuaries communicate with users. The Profession was also criticised for insufficient transparency in its advice. Arguably, it is more important now for the Profession to implement robust standards than ever before. We would prefer the Profession, wherever possible, to lead on the move towards transparency, and not just to co-operate with the initiatives of others. GN9 would be a great start.

We have, in the paper, made various comments about how actuaries use language. Perhaps it is apt that, in turn, our paper has been criticised by some for being too clear. I apologise if our language is overly strident and has offended anyone. That was really not our intention. We just feel strongly about the subject. Please be magnanimous enough to look past our poor prose to the underlying message — that we should provide better quality information and clearer disclosure.

After the debate at the Institute in October 2004, the Institute President, Michael Pomery, made some quite forthright statements in the press. He said: "It has become clear that the profession strongly supports reform of the way the results of valuations are described to readers ... there was unanimity of sentiment of having real and transparent disclosure of finances. We will review actuarial standards for the reporting of pension valuations" (*Financial Times*, 27 October 2004).

We hope that the Faculty has an equal appetite for better disclosure.

Mr D. F. Campbell, F.F.A. (opening the discussion)**:** The number of people at this meeting

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speaks volumes about the importance of the topic, and I congratulate the authors on their excellent paper.

The Institute's discussion of the paper identified that there is much acceptance of the arguments put forward, and that the Government has confirmed that DB promises must be guaranteed. Accordingly, I will skip over most of the analysis which has identified how we have arrived at where we are, and concentrate on where we may go from here. In doing so, I hope to pinpoint what I see as some important implications and also some aspects which I find troubling. Given their thorough and rigorous analysis, I am sure that the authors have already considered these aspects, and chose to concentrate on what they see as the important immediate priorities.

I think that this paper is aiming to answer the following questions: "How do we create a sustainable pension system in the United Kingdom, and what is the profession's role in achieving this?"

It seems to me that, for a system to be sustainable, it must be transparent, fair to all parties — members, trustees and sponsors alike — and it must be affordable. I will deal with each of these in turn.

Transparency is clearly the major theme of the paper. In Section 3 the authors put the case for the full disclosure of the scheme solvency position, so that members can evaluate the riskiness of their pension promises. Transparency features prominently in Section 5, and the authors return to this theme again in Section 7, where it forms the basis of their first principle.

The authors are correct in drawing attention to a transfer value that, from a professional viewpoint, claims to be a member's full entitlement, when, in fact, investment of the transfer value relies on the adoption of a successful high risk investment strategy to come anywhere near the benefits being given up.

Returning to the main topic, the authors' solution is a proposal that a funding objective should be related unambiguously to solvency, and, if contributions are being paid below the level necessary to maintain solvency, this should be highlighted. They also point out that solvency should be defined in such a way that different actuaries will place similar values on a scheme's liabilities.

An obvious measure of solvency is an estimate of the insurance market buyout costs for the scheme's discontinuance benefits. To gauge whether this would provide a consistent solvency measure, I have looked at my firm's internal guidance over the last six years, to determine how funding might have been disclosed on this measure. The authors have not committed themselves to such a narrow definition, and have recommended, in their conclusions, that more thought and guidance needs to be given to defining the solvency measure. I also recognise that actually obtaining insurance quotations in any particular case can produce very different solvency levels from those produced by my firm's guidance, and that other firms will have their own internal guidance, which could differ significantly. However, this analysis should enable us to infer how funding might have progressed under this particular measure.

Table D.1 shows, first, immediate pension values. This is a very crude analysis, which probably will not bear in-depth scrutiny. Having said that, it is to be hoped that it gives some sort of indication of the problems which we might have with such a measure. The value, in 1999, of an immediate pension of £1 p.a. is £18.80. In 2002 the value rises to £19.00. The increase over the period is in the region of 1%. In 2005, however, the value has risen to £25.80, an increase over the period of 36%. The deferred pension equivalent figures are £13.20 to £13.70, an increase of 4%, rising to £24.50 over the latter three-year period, giving an increase of 79%. For simplicity, I have assumed that all benefits are linked to RPI and that the matching asset class is over-five-years index-linked gilts. The details of the pensions valued are given in the technical supplement.

Table D.1

	1999 Value (£s)	2002 Value (£s)	Increase over period 1999 - 2002	2005 Value (£s)	Increase over period 2002 - 2005
Immediate pension	18.8	19.0	1%	25.8	36%
Deferred pension	13.2	13.7	4%	24.5	79%

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Table D.2

	1999 gross redemption yield (5% infl.)	2002 gross redemption yield (5% infl.)	Return over three-year period	2005 gross redemption yield (5% infl.)	Return over three-year period
Index-linked gilts	1.9%	2.3%	7%	1.5%	27%

Technical supplement:
(1) Immediate pension value per £1 p.a. based on male, aged 60, RPI annual pension increases, 50% attaching widow's pension.
(2) Deferred pension value per £1 p.a. based on male, aged 40, coming into payment at age 60, RPI annual increases before and after retirement, 50% attaching widow's pension.
(3) Longest index-linked gilt at beginning of 2002 was Treasury 4.125%, maturing 2030.

To deduce how funding would have progressed had a scheme followed a matched investment policy, Table D.2 looks at index-linked gilts over the same period. Clearly, the forward-looking valuation is dependent on the gross redemption yield, which actually rose from 1.9% to 2.3%, using my proxy, and the return on index-linked gilts was 7%. Over the three-year period to 2005, however, the gross redemption yield fell substantially to 1.5%, with a return of 27%. This indicates that there has been much change in the insurance market over the six-year period, and it can be seen that the rates for pricing DB liabilities have hardened significantly. Some of these are due to concern over mortality trends, and, no doubt, the insurance companies are reacting to the cohort effect identified in other population studies, particularly the studies carried out for insured pensioners' lives. Even though the Continuous Mortality Investigation Bureau (CMIB) has identified that occupational pension schemes' mortality is different, there is insufficient information for insurance companies to reflect this scientifically in their pricing. Other factors influencing rates will be expense allowances, capital adequacy requirements, and a lack of competition in the market.

The period between 1999 and 2002 does not appear too troublesome, but, from 2002 to 2005, it appears to throw up a major problem. If a scheme had primarily index linked the immediate pension liabilities and followed a least risk investment policy, it would not have been too badly affected, but it would still have shown a deficit on this measure because of the introduction of more conservative mortality reserving. On the other hand, any scheme with any significant non-pensioner membership would have had little chance of matching the increase in liabilities during this period. My naïve investment strategy could have distorted a true comparison. I have checked that the total return in the longest index-linked gilts still in issue over the three-year period from the beginning of 2002 to 2005 was actually 27.5% as well.

Interestingly, the only investment policy with any hope of protecting the solvency position using this measure would have been to buy out all accrued liabilities in 2002, and all subsequently accruing liabilities during the interim period, on a non-profit deferred annuity basis. Given the scepticism which greeted the Boots move, the implications for the credibility of an actuary suggesting such a move at that time will be obvious.

In the short term, I anticipate that there will be a large number of schemes not funded to the level required to provide Pension Protection Fund (PPF) level benefits. Until PPF benefit levels are attained, insurance company buyouts will not be a practical option.

I join with the authors in calling on the profession to provide guidance on a suitable solvency measure related to lower-risk investments, allied to the use of suitable mortality tables.

Moving on to fairness, the authors have identified how a lack of transparency in our current approaches creates problems for members in understanding the value and riskiness of their current pension promises. There are currently, in the authors' words in ¶5.3.1, 'informational asymmetries', which mean that employees are not obtaining appropriate compensations in pay which a fully transparent system would deliver. The introduction of a transparent approach to funding and disclosure would do much to rectify this problem, but, even then, we must recognise that some individuals drive harder bargains than others. So, inequalities may remain in the

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short term. In the long term, it will be in the interests of all parties to understand the value and riskiness attaching to pension promises, and compensate employees appropriately.

While this may satisfy the fairness criteria for employees who currently have DB promises, it highlights the inequity which exists for employees who do not now have DB promises. I recognise the limitations of the costing basis described above, but at least it provides a rough indication of the funding cost of providing future service accrual on a solvency type basis. On the buyout proxy basis, the contribution rates for 60th pension accruals are in the region of 40% of pay. Although members may contribute to a quarter of this cost, a sponsor's obligation could be in the region of 30%. When you compare this with the contributions being paid by sponsors towards pensions for members not in DB schemes, there is a major differential in the overall pension cost, which I doubt is currently reflected at all in remuneration packages. Thus, there is a major challenge to ensure that employees are truly enjoying equal pay for equal work. Unless this issue is tackled, a truly sustainable system for pension provision in the U.K. will not be delivered.

It seems to me that, to be fair to all employees, sponsors will need to draw a line under their DB promises, to identify the resources required to fund deficits from their benefits' budgets, and to redistribute the remaining resources equitably among all their employees.

I was surprised that the authors did not devote much of their analysis to the issue of affordability, as it seems to be crucial in the delivery of a sustainable system. Their perception is from a macro viewpoint; debt is already issued and a debt swap will solve the problem. While this is no doubt true on an aggregate basis, I have trouble envisaging how this may operate at the individual scheme level. To help illustrate this, I have looked at an internal survey which my firm prepares, which tracks the development of the FRS 17 liabilities of the FTSE 350 companies. Currently, we are forecasting that the aggregate FRS 17 deficits for 303 companies (that is excluding investment companies) will total approximately £70 billion. For the median company this represents 2% of the market capitalisation, which appears manageable. However, for 25% of companies in the survey deficits will represent around 10% or more. Contributions for half of the 303 companies have been paid at more than 160% of the FRS 17 service cost, and with a small number of companies paying contributions at three times that amount.

Clearly, there are some very substantial contributions being paid by companies at the current time, but it is unlikely that all companies have moved to solvency-based measures for determining their contributions to schemes. Indeed, this seems highly unlikely, and a move in the direction of the authors' approach will throw up much more significant deficits than have been recognised under FRS 17 disclosures, and much greater contribution requirements. I suspect that there will be a number of companies which have solvency deficits which are very large relative to the scale of their financial operations. It is not obvious to me how the reassignment of debt will be achieved in such circumstances.

I anticipate that many of us will have difficult discussions with a number of our clients on this issue, and the Profession may wish to consider how it can help members with these discussions.

I now consider the employer covenant and its implications for the funding deficit and the introduction of PPF. Are the authors suggesting that actuaries need to become experts at assessing employer covenant issues, or should we be encouraging clients to take independent advice on the issue? The authors' vision is for companies with strong covenants to fund pension deficits quickly, but for those with weak covenants to have already fully funded their pension promises. While this is a noble aspiration for the long term, in the short term we must deal with realities, that there will be some companies with covenants which are not strong, and do not have fully funded schemes. In that context, forcing schemes to be fully funded over short timescales is unlikely to be deliverable, and, against this background, I have difficulty in understanding how company covenant analysis will help determine spreading periods. I agree with the authors that contribution patterns should apply only until the next formal review, and that we should not convey the impression that contributions have more permanence. In this context, I had difficulty understanding why the paper placed such an emphasis on the concept of respreading the deficit beyond the first review.

Moving on to the PPF, given that many schemes will be in substantial deficit on a solvency

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measure, realistically, the initial funding target may be to fully fund at PPF benefit level. We will need to be careful in our communication with all parties — members, trustees and sponsors — that we make very clear the distinction between PPF level benefits and the full benefit levels promised under schemes.

The authors have done the Profession a service in sharing their vision of a sustainable system of pension provision for the U.K. They have given us an insight into an approach to the strengthening of standards for DB schemes, called for by Sir Derek Morris. The challenge for the Profession is to help clients move from where they are now to where we would like them to be. I would urge the Profession not to recommend the use of proxies to insurance company buyout rates as an appropriate solvency measure, but to investigate a measure defining the terms of low-risk investments which form a hedge to scheme liabilities, supplemented by appropriate guidance and suitable mortality tables. The adoption of strong standards which are consistently applied by the Profession should lead to the removal of the present inequity applying between employees with, and without, DB promises. In time, this should deliver a truly sustainable system for pension provision within the U.K.

Mr A. G. Sharp, F.F.A.: As Deputy Chairman of the Pensions Board, this occasion enables me to clarify the Board's current position on the paper and on funding guidance. The Pensions Board, as you might expect, has been giving consideration to the paper, and, in particular, to the inclusion of its principles in guidance. This consideration is ongoing, as GN9 is, in any event, in the process of a full revision in the light of current legislative changes — and we anticipated, some time ago, that major changes would be required. We are also taking into account the discussions both here and at the Institute in October 2004. Therefore, we would like this discussion to be fully representative of all views. I have to point out that this paper, although written by three actuaries who are, or were, members of the Pensions Board, is neither, automatically, the Pensions Board view, nor is it indicative of any hidden policy agenda of the Pensions Board. Indeed, had this been an official Pensions Board paper, I would not have presented the action plan in ¶9.2.1 as a list of aspirational items, but, rather more positively, as a progress report to the membership and to the wider public of significant initiatives which we already have under way.

Although there is much in this excellent paper with which I agree, it is also necessary to recognise some practical aspects — in particular, as the opener has been discussing, the affordability of the pensions promise, where Section 6.6 might be thought to be a little on the light side.

I will not comment on all of the principles themselves — although I look forward to the comments of other contributors. Our discussions in the Board to date, and informal legal discussions so far, have shown that they are not all capable of straightforward incorporation into our guidance. I make the following specific comments:

— Principles 3 and 4 require actions and decisions by the clients, not just by the actuary. It is difficult for us to dictate, if we do not have regulatory backing, and so how far we can go to accommodate these principles is, perhaps, our most challenging task. The authors recognise this in their comments on governance in ¶8.2.3.
— Whilst I would agree that Principle 6 is a prudent principle, is not necessarily a market consistent one, and more work is needed.
— Principle 9 is one which requires to be tempered with practicality, especially for smaller schemes, as, no doubt, you will hear more about this later.
— I admit to having some difficulty in fully understanding Principle 10 — each time when I think that I have grasped it, I then return to it with doubts. We will need to put this alongside trustees' statements of funding principles in the new regime, to see exactly how it can, and will, apply.

I now give you a progress report against what is set out in the authors' action plan in ¶9.2.1. Much of this was already under way before the paper was written. Indeed, we started the fourth of these actions — to lobby for disclosure of better information to members on pension scheme

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solvency — more than four years ago. The Government will include this by making amendments (some might say at long last) to the disclosure regulations.

Moreover, in 2004 we published approaches for determining pension scheme solvency — these underpin the mandatory solvency disclosure requirement which is already part of GN9. Of course, the methodology is being kept under review, and we hope to work with the Life Board to improve the methodology still further.

The third action point calls for the Actuarial Profession to influence the new Pensions Regulator on funding issues, with particular reference to solvency and taking account of the creditworthiness of the employer. The fifth action point asks the Actuarial Profession to lobby for improvements to the governance of pension schemes as it relates to trustees and advisers. We have been working closely with the Department for Work and Pensions and the Pensions Regulator for quite some time, both at the strategic level and, now, at the drafting level, on these issues. One member of the Pensions Board, in an individual capacity, has been a member of a working party helping the new regulator develop its code of practice in this and other scheme funding areas. We hope to see, as an outcome, a regulator's code of practice which will recognise the need for trustees to set funding objectives which are well defined and which take account of the employer's creditworthiness and other relevant risks — not least that of discontinuance.

The authors are mistaken to say, as they do in Section 8.5, that the Profession has overlooked the employer's covenant — although I recognise that this is a difficult area, perhaps the most difficult area, where more work is required. We released, more than a year ago, and published on the website, a discussion paper which covered, not only the employer's covenant, but also other key considerations for funding advice. Further, it should be borne in mind that the Board's public comments on policy issues are usually the tip of an iceberg of substantive discussions with the Government which are not so public. The matter of the employer's covenant has been an integral part of our discussions with the Government since 2003.

In their first action point, the authors call for the actuarial guidance note on pensions funding, GN9, to be rewritten. This is under way, and will take account of the new scheme specific funding regime which the Government is introducing, as well as full consideration of the authors' principles. Whilst I cannot make any pledge that the revised GN9 will deliver all that the authors ask, I would hope that we will be able to achieve, in guidance, the initiatives which I have just mentioned.

I believe that I and my Board colleagues, past and present, can hold our heads up and say that we have already made significant progress towards many of the authors' recommendations — but we still have some way to go towards completion. The timetable is not entirely in our own hands, because of the changing regulatory background, and the requirements of due process.

The authors are right to challenge fundamental pension issues facing the Actuarial Profession, and it is right that we are having this discussion at this time, but the discussion should not be against a background that the profession is ducking the solvency issue with trustees or hiding it from scheme members.

Historically, we have been viewed by the outside world as a conservative, indeed a prudent, profession. It was only six years ago when we were receiving considerable criticism from some well-respected commentators, including Mr Barry Riley in the *Financial Times*, for overly conservative funding assumptions. However, whether it is because we are in a more risk-averse world, or because more people are aware of financial risks, or just human nature, our past actions are being judged in today's climate.

The Pensions Board is on the case. The Actuarial Profession is acting. I thank the authors for their stimulating paper and their efforts to focus us on and to increase the pace of change of the key issues of solvency and security.

Mr G. M. Lindey, F.F.A.: Ever since the excellent and provocative paper, Exley *et al.* (1997), there has been a tendency among the proponents of the views of its authors to believe that theirs is the only true word. In my opinion, that tone infuses this paper, and it is one which I dislike.

In ¶1.1.1 the authors state that: "public confidence in pension provision is low", and that actuaries: "bear some responsibility for the current situation." Sadly, both of these statements are

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accurate. By the time when the authors reach ¶8.5.3, however, they state that they: "do not believe that the recent crises that have involved actuaries are the result of understandable oversights or the unpredictable 'perfect storm'." Indeed, they state that they: "view the current (actuarial) practice as making such events inevitable." Thus, in 29 pages, partial responsibility has become blame for the inevitable. I reject the logic and the attribution of blame.

I have spent my career in investment management, not in life or pensions practice, and, during that career, I have observed the profession being slow in reacting to a number of practices of which I, among others, have disapproved at the time. Sadly, some of these practices were the sole responsibility of actuaries. However, that is not the case with the issues discussed here. Actuaries were not responsible for the regulatory creep which the authors describe so clearly in the table in Appendix A, nor were they responsible for the withdrawal of the dividend tax credit. They were duty bound to explain the consequences of these changes to their clients, together with the effects of improving mortality and declining interest rates, and, at least in my experience, they did so.

At a conference about a year ago, an actuary told the audience that no actuary over the age of 40 can understand the thinking behind Exley *et al*. As evidence to the contrary, I would adduce an article which I wrote 30 years ago, which was published in May 1975 in the *Investment Analyst* (**41**, 13-15). This article argued, admittedly in very basic terms, that trustees of pension funds should be made aware of the 100% bond-based matched position and of the risks involved in moving away from that position. Although the editor of the *Investment Analyst* considered this as 'distinctly controversial', my point is not that I had any extraordinary foresight or was a visionary — far from it, but that actuarial colleagues were in complete agreement with what I wrote. Actuaries of my vintage were, and continue to be, aware of these issues. We were also capable of seeing both sides of an argument. In ¶4.3.5 the authors refer to a margin being: "demonstrably prudent in the light of experience." Retrospective prudence is an odd concept, but if they are referring to informed empiricism, it would appear to me that this has been the bedrock of our profession for decades. So, let us look at two practices which some consider demonstrably prudent in the light of experience.

The first concerns pension funds using bonds to match their liabilities. Unfortunately, most bonds are too short in duration. Investment bankers and others have promoted duration swaps, which allow investors to sell unneeded short-term cash flows in exchange for the purchase of long-term cash flows. Interestingly, virtually all the market participants which are doing the opposite, thereby making the duration swaps possible, are hedge funds. Interestingly also, investment bankers and others are encouraging pension funds to diversify risk by buying hedge funds, which could result in a rather odd situation where some pension funds are in the interesting position of, at least in part, selling duration to themselves and paying substantial fees to third parties for the privilege. Is this demonstrably prudent? I think not.

The second practice is the use of credit spreads, or credit default swaps, to measure the creditworthiness of the sponsor, as suggested in ¶7.3.5. I wonder if the authors are aware that hedge funds are very influential in the market for credit default swaps and the setting of prices for these instruments. Does a tightening of spreads indicate a real improvement in creditworthiness, or simply, as I would suggest, an increase in the appetite for the risk on the part of hedge funds and others? These instruments are useful indicators on a relative basis sometimes, but are they 'demonstrably prudent' as an indicator of sponsor creditworthiness? No.

I would also observe that Value at Risk is useful for traders, investment bankers again, and sponsors who have the accounting standards to follow. Indeed, a couple of funds with which I am involved use Value at Risk. For trustees, however, Value at Risk is a useful tool, but must not be the principal one. Short-run volatility is not the be-all and end-all for trustees, many of whom are rightly collecting illiquidity premia from the market, which their long duration allows them to do.

As for governance, which is an area of which I have some direct knowledge, many of the authors' comments appear to me to be misguided. There is the trivial error in ¶8.2.3, in describing the Combined Code of Corporate Governance as the FSA's. Of course it is the FRC's. Much more importantly, the combined code is about the relationship between the owners of

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companies, the shareholders, and their agents, the directors on the board. Although the trustees of a pension fund have a fiduciary duty to the members, the members are not the owners of the assets of the fund. The members own the contingent rights which the fund has been established to meet, and, although it is true that legislation has, in a sense, reduced the contingent nature of this relationship, replacing it with increasing certainty, the rights are not absolute. The relationship is very different from that between the shareholders and the directors of a quoted company. Pension fund governance needs to be considered less superficially than has been done here.

I urge the authors and their associates to pay as much heed to the views of others as others pay to their views. This discussion is of enormous value to the profession. However, these are complex matters, and they are matters which have to be explained to trustees, and trustees do go to great lengths to try to understand the issues, in my experience.

Mr D. B. Martin, **F.F.A.:** The authors should get a bouquet for the clarity of the paper, which also scores highly on reality. However, while the clarity is universal, I fear that the reality is not to be found everywhere in the paper. In ¶8.2.3 the authors state: "In broad terms, trustees have obtained the advice that they have asked for." That seems to me to be true, and reflects the client to professional adviser relationship in which we work. However, the authors, in my view, have left reality behind in ¶7.1.2, in Principle (3), by suggesting that actuaries should only advise if parties have set funding objectives expressed in solvency terms. This, to me, is rather like banning doctors from treating patients who refuse to give up smoking in a country where nearly everybody smokes. The reality is very different.

In my experience, clients — trustees as well as companies — are wedded to certain beliefs. One of these is a continuance of the sponsoring firm, despite having had it pointed out to them that schemes currently in difficulties with insolvent employers had trustees with exactly the same thoughts as they themselves now have, not so long ago. Secondly, they have a deep belief in capitalism and a long-term trust that equities outperform bonds. This is despite the fact that one has to go back nearly 20 years from now to find a period when the equity market, as a whole, outperformed gilts. So, well-informed trustees may make wrong decisions, but they do not make the errors of judgement which are attributed to them in ¶7.2.4.

The risk in U.K.plc is touched on in ¶6.5.1. Mention is made of the fact that, if pension funds all moved entirely to bonds, then the risk to them would be significantly reduced, despite the fact, as the paper says, that the total amount of risk is unaltered in the economy as a whole. I wonder about that. It means, of course, that the non-pension fund investor's risk must increase significantly. Those investors will surely notice, and are likely to wish to correct that. If so, I think that it is more likely that the outcome will be that bonds, as a whole, will become, on average, riskier, and perhaps only low grade bonds may be available to replace the equities of which pension funds would be disposing, and the pension funds' overall risk position will, therefore, be little altered. Time, of course, will tell.

Dr D. C. Bowie, F.F.A.: I think that this is a great paper, not only because I agree with just about all of it, but because it also has lists in it. Lists are fantastic, because you can go through them and check the items which are actually done, for example introduced into guidance.

I do not agree with all the detail within the stated principles. In particular, I do not agree with the one about funding objectives having to be specified in terms of solvency. I think that other externally imposed bases, particularly accounting bases, are entirely relevant in some circumstances, and using such bases may be the most efficient way in which a sponsor and trustees may arrange the financial management of the scheme to the best advantage of all stakeholders.

However, I emphasise that these alternative bases for funding objectives are typically defined by external agencies. The so-called ongoing basis has little or no relevance any more. It is of little use for financial reporting. Furthermore, we now have the technology and the modelling capability to provide actuarial advice on funding without resorting to the rather crude approximations inherent in 'ongoing' bases.

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I would appreciate it if the authors could confirm that, when they talk about a solvency measure, they are talking about the set of measures which relate to the different classes of members at all times. In some places in the paper the reference to a solvency measure appears to be to the 'average single value'. I hope that it will be clear that it is the set of solvency measures, taking wind-up priorities into account, which is the primary measure. The aggregate solvency measure is a useful summary of how much the sponsor 'owes' the scheme, but it should not supplant the set of measures which are most relevant to the members of the scheme.

Mr T. W. Keogh, F.F.A.: These comments are in my personal capacity. I have already welcomed the paper at the Institute discussion, in October 2004, so I do not intend to repeat what I said there, but what is more interesting is how much has changed since then. We no longer have to discuss whether there have been problems with conflicts of interest or whether we need more robust guidance in future. Sir Derek Morris thinks so, and I think that we have wisely decided to accept his conclusions and to move on.

Moreover, and perhaps this touches on the point made by Dr Bowie, the widespread use of solvency bases in regulatory assessment is now imminent. We might discuss how relevant solvency measures are, but it seems that the regulators are already past that. It is clear that the notifiable events regime will be a lot easier for schemes which can cover their PPF liabilities measured on a solvency basis. Almost everyone seems to think that there will be a solvency type basis to determine the PPF levy, and that there will be disclosure to members to reflect the solvency position. On the basis that trustees and sponsors have to relate their funding policies to the solvency bases, which are externally imposed and with which they have to deal, it is much less obvious why they want to make life harder for themselves, and ourselves, by maintaining additional bases, like the traditional ongoing one, which just add extra complexity.

I do not go as far as some in advocating an immediate move to 100% solvency funding. What is key is that we move on from where we are now, where the typical solvency position is about 50%, according to some of the recent surveys. What is important is that we communicate how we are getting from there to an improved position by reference to solvency. My criterion for this is that we need to get to a stage where, if you pick an average pension scheme trustee off the street, and ask him or her what their scheme deficit is, their answer is the solvency figure, and not some other number which we have invented.

I also think that the reference of the authors to the trustees obtaining insight into the employer's covenant is crucial. It is the largest single investment of most schemes, and, therefore, it should get more analysis than most of the other assets of the scheme.

I do not think that the biggest challenge now for trustees is obtaining information on employer covenants — it is what to do with that information once they have it, that is how to interpret it. I know that many in the profession feel that it is something which actuaries should formally avoid, because it is not our territory. Maybe I can accept that, as an actuary, but for those who purport to be part of the leadership of the industry — and that includes many actuaries — I think that we need to help to find some answers as to what to do with covenant information.

One of the most interesting things is that you get the impression that, when the new statutory funding regime was thought up, there was an assumption that a strong covenant could be translated into weak funding and flexible investment. It becomes less obvious to me, day by day, that that is actually logical. If there is a strong covenant, that seems like evidence that the scheme can be moved to a position of strong funding and prudent investment without substantial damage to the sponsor, at least from the point of view of the shareholder, and, maybe, that is precisely what should happen. I am even starting to wonder whether that is happening. If you look at the largest and the strongest companies, you see quite a high prevalence of significant lump sum contributions, or the provision of equivalent guarantees.

I think that this is something which the Pension Regulator will also get his head round in connection with protecting the PPF. If the Regulator does not increase the funding levels of schemes which are fundamentally insolvent, while company covenants are strong, and businesses can support these, then they are going to have to explain why they did not do so ten years

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down the track, when, in the nature of business, some of these companies will no longer look so strong.

Mr G. G. Bannerman, F.F.A. (in a written contribution that was read to the meeting)**:** As a retired actuary, I feel very much a spectator, but am appalled by the way in which those representing the Profession have not made more of an effort to defend it against the attacks made by the press, unions and others.

Some time last year I read an article in the *Guardian* newspaper, which included a short item which described the Chancellor of the Exchequer as 'Public Enemy No. 1', as far as pensions are concerned. While it based its reasoning on the removal of tax relief on equity dividends, it did not go into any detail, and certainly did not attempt to consider the knock-on effects of this action.

This action affected, not only pension funds, but also charities, as well as individuals who had, or were considering, TESSA or ISA contracts (and, in the latter case, virtually removed the attraction of equity investment for individuals not subject to higher rate tax, because of the charges made by the administrators of such contracts).

The loss of tax relief made equity investment less attractive to such investors compared with fixed interest or property, and so there was less demand for equities than before the tax change. In a free market, prices are determined by supply and demand, and so equity prices fell. This, however, is just the first step, and it is in failing to point out and to explain the resulting problems that I feel that we, as a profession, have failed both ourselves and the public.

In pension funds, the fall in dividends led to actuaries who valued on a discounted cash flow basis pointing out that higher contributions were needed — not just to provide future benefits, but also to maintain the backing for benefits already built up. Some funds had been required by the Inland Revenue to reduce or to suspend contributions, because the Treasury felt that too much was being built up on a tax-free basis and that any long-term projections should have regard to the higher interest rates then available. The savings made by limiting contributions were taxed, and it seemed appropriate to distribute them, because shareholders, quite reasonably, felt that the profits belonged to them.

When the tax rules changed and maintaining the benefits cost more, increasing the contributions reduced the income available for distribution, reducing the dividends from what they might have been, further reducing the attractiveness of equities, and so further dragging down prices. Those funds which had sought to build up a hedge against inflation by investing most in equities (and had profited from it before the tax change) were those which suffered most. Then came further legislation, which brought in market value tests for valuations, and equities, which had already suffered falls in value, were discounted still more.

Much of this has already been said, although not very loudly, but there is more to come.

Local government pensions have been operated on a funded basis. When the Chancellor of the Exchequer cut the tax relief on dividends, he claimed that he had offset this by a cut in the taxes on companies themselves. This cut does not seem to have had much effect, but it certainly does not apply to local authorities, and so increases in pension costs put up rates or Council Taxes, which affect, not only individuals directly, but also companies. Increased Council Tax further reduces profits, affects dividends, and so the spiral goes on.

I have dealt with pension funds as such so far, but we must consider the effect on insurance companies. Until the present Chancellor of the Exchequer took office, there was a convention that, when changes in taxation were made, any existing long-term contracts would be 'grandfathered'. When life assurance tax relief was abolished, it was continued for contracts in force. When mortgage interest ceased to be allowed as a charge against income, people who had mortgages continued to get relief until their mortgages were repaid (although the limits imposed seem ludicrous in the light of today's prices). When the dividend relief was cut, it affected, not only pension funds, but also the pension business of life offices, but no concessions were given. Not only did this change affect annuities in payment, but it also affected policies with guaranteed annuity rates at maturity. Obviously, this was a massive blow to the Equitable Life, although I have never seen this point brought out in all the publicity. I have a great deal of sympathy for the

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actuaries there, who, to me at least, were trying to maintain a fair balance between the endowment policyholders whose premiums had built up profits, only to see those profits channelled off to pay for the extra burden of the annuity fund.

I suspect, however, that it has been a major factor in the demise of so many mutual life offices, coupled, again, with the asset valuation rules. Business transacted in good faith has become a millstone, and the more stringent valuation rules have meant that profits cannot be distributed to those who have earned them. The change has also affected DB schemes and retirement annuity contracts, whether unit-linked or with-profits. Is this going to lead to a further round of mis-selling claims?

In the same session of Parliament as that in which the tax relief cut was imposed, MPs voted to increase the benefits in their own pension scheme. The Government is suggesting cutting back public service pensions from the final salary basis to an average salary basis. I wonder whether it will feel that what is sauce for the goose is sauce for the gander, and accept a cut in its own scheme.

Mr I. A. Farr, F.F.A.: I believe that the overall level of pension provision in the U.K. will benefit if employer sponsored occupational pension schemes retain their dominant position and if DB arrangements can once again become the cornerstone of the edifice — but probably providing benefits at a lower level, in real terms, than in the past. Many employees have, by default, assumed that their DB arrangement will provide them, in retirement, with sufficient income to maintain the standard of living to which they were accustomed in employment. The cost of pension provision is such that, in the future, DB provision by most employers is likely to be at a much more modest level, with the employee knowing that he or she has the choice of supplementing a much more basic DB pension by a money purchase arrangement, thus choosing the balance between consumption today and saving for tomorrow.

Pensions in the U.K., generally, cannot be absolutely guaranteed or have a 100% level of security, particularly in the private sector. The Government appears to have recognised this, and is in the process of establishing a framework to improve significantly the level of security for members of DB arrangements, whilst still allowing trustees, in consultation with sponsoring employers, to finance such arrangements by investment other than in Government bonds.

In my view, it is the role of the members of the actuarial profession to advise trustees, and/or employers, of the risks associated with different investment strategies. I come from the school of thought that it is quite in order for employer contribution rates to be assessed taking account of the membership profile and the investment strategy being pursued, provided that those responsible for setting the employer contribution rate do so in the knowledge of the risks being undertaken, whilst bearing in mind the solvency position.

In the private sector, a major influence on the level of security of members' benefits is the strength of the covenant with the sponsoring employer. I have been encouraged by the indications given by the Government and by the new Pensions Regulator of their recognition of this important dimension to the provision of pensions in the private sector. I hope that the statutory regulations laid by the Government and the codes of conduct issued by the Regulator will allow sufficient freedom for the provision of DB pensions to be practical and affordable.

Mr J. Hastings, F.F.A. (in a written contribution that was read to the meeting)**:** I commend the authors for this paper, which addresses an important issue — the confusion which exists between solvency and funding policy.

In much of my work as an investment consultant over the past few years, one of the most difficult issues has been explaining to trustees that their scheme's funding position is generally significantly lower than their actuary has presented, because of the expected excess return assumed in the discount rate. There is a technique for arriving at the risk adjusted value of future equity cash flows which is quite helpful. It starts and ends at the market value. Of course, we know that there is a lot of noise in the valuation of both individual equities and markets. However, even taking account of this, we cannot be certain, at any point, whether markets or stocks are under or over-priced, though we may, from time to time, have a strong sense of

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potential worth. I suspect, like many empiricists, that the difficulty which I have with the concepts voiced in this paper is not in relation to the presentation of valuation results. Instead, it is the comment in ¶1.4.5, and taking into account the assumptions made there, that the optimal pension policy is to invest all assets in low risk bonds.

I can understand an economic judgement that inflation providers are in tight supply, so that inflation linked bond yields are low. Similarly, there may be heavy demand for conventional bonds, resulting in low prevailing yields in a low interest rate environment. Nevertheless, as an investor, I do not feel aligned to the financial interests of bond issuers. Other things being equal, I expect them to have some propensity to default, perhaps not in terms of amount, but in terms of value. This extreme view is based on experience — for example the high inflation of the 1960s and 1970s — nor should we believe that this is resolved by inflation linked bonds, since many governments have been known to manipulate inflation statistics.

Of course, equities are also vulnerable to leakage of returns, as family or executives manipulate their own rewards to maximise their returns in good periods and to minimise their risks and downside when problems emerge. At least equity holders have a vote, which is valuable.

Most U.K. schemes do not have the luxury of being fully funded. The level of repair required is going to require a variety of approaches, skill; market beta; and higher contributions. We just need to ensure, as a Profession, that we do not solve one problem — misrepresentation of funding levels — by creating another and a divisive split in the profession, by assuming that a single measure identifies all of the risks and is the sole solution.

Mr A. N. Walton, F.F.A.: The whole concept of the paper is based on solvency, and, in my discussions with other actuaries, what is meant by solvency is rather indistinct. If you come from an insurance background, solvency for a pension scheme liability probably means 5% p.a. increases as a revaluation rate. That does not tend to be what is thought of as revaluation by consulting actuaries. Clearly, there is a big difference between 20 years at 5% and 20 years at 3%. So, I think that it needs to be defined by the profession. As a consequence, if it is 5%, then I question whether schemes would have been funded with gilt rates at 4.5%. Would we fund schemes with a negative real yield?

Mr A. C. Martin, F.F.A.: I speak, not just as an actuary, but also as an independent trustee of both ongoing schemes and some in wind-up. Those schemes in wind-up invariably present the very difficult situation of explaining to people why they are not getting all their benefits. That is not easy. The other difficult things include: in the future, potential Pension Protection Fund eligibility; the current farce of the protection possibly coming from the Financial Assistance Scheme; and, perhaps, the biggest farce of all is the assistance from SERPS deemed buy back (that is the protection arrangement which we have had since 1997). That difficulty has also crystallised in 2004's signing of compromise agreements, where being a responsible trustee is a lot tougher than being an advising actuary.

As an observation on the paper, I would have emphasised the Barber definition of a pension to a greater extent, that it is 'deferred pay'. People do look on their pensions as pay — "It is mine. Why have I lost it?" That is a clear focus of trustee duty.

I think that the profession missed an opportunity, but I hope that it will be corrected in future, that of explaining the cash equivalent transfer value. I think that we would have had many fewer problems if transfer values had been billed as a 50-50 bet of what could be provided in future. I disagree with the authors' emphasis on the significance of MFR. Before September 2002, when the famous 'close to untenable' phrase was used by the Chairman of the Pensions Board, MFR was, in many situations, pretty helpful. It certainly forced up the contribution rate in many small schemes, and I think that it is very sad that the Government is missing an opportunity to set a tough agenda. We may have that from Europe, we may have it from the vested interest of PPF benefit coverage, but we may not have anything as useful as MFR once was.

I would also have encouraged the authors, in ¶1.1.2, to have illustrated graphically the rise in

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liabilities over the decades. I always like to do this with a reference to history, where Ted Heath, Barbara Castle and John Major introduced contracting out, early leaver preservation, antifranking and LPI legislation over the decades, which gave rise to a gradually increasing level of liabilities. This had the effect of removing the cushion of on-going funding over discontinuance benefits. Indeed, there are comparisons with with-profits cushions, but that is another subject. Reducing inflation and increasing longevity complete the picture.

I think that independent accountancy advice will be very important in future, and that will be of great comfort to trustees.

With reference to McLeish & Stewart (1987), at the time I recall it being perceived as indicative of lower contribution rates, discontinuance funding, and a commercial advantage to achieving consultancy work, but whether that was true or not, the perception is what is important.

Concerning some general trustee or corporate finance observations, firstly, I always like to emphasise that pension promises are about recruitment and retention and the ability of people to afford to retire. This applies to both the public and the private sectors. Secondly, while most have concentrated on 11 June 2003 as being the important watershed for the provision of the original benefit promise, there is another important date, 26 April 2004, where the regulator may backdate action or attack inaction in respect of corporate transactions, moving assets safely abroad or whatever.

The important development since the paper was first issued in October 2004 is on PPF benefits. These benefits can be reduced. Increasingly, there is attention to the winners and the losers from this benefit provision. The main losers are the historic pensioners. It is not easy to explain to people why a quarter of their benefits will disappear in the PPF protection regime. That is purely and simply the absence of pre-1997 pension increases. There is another obvious area of loss in connection with high earners.

One matter which I always emphasise is the crucial aspect of what the pension scheme rules say, and throughout Government initiatives or new funding regimes, etc., I think that it is fundamental that everybody focuses on exactly what the rules say. There was a recent retailer example, where the pension fund was able to dictate a higher level of funding.

Over the coming months, we will have some interesting developments as the new Pension Regulator decides a key percentage funding, and I encourage the Profession to give input to that. I will also be keen to see what the new regulator thinks is 'reasonable' in terms of its imposition of financial support directives.

I have a suggestion concerning funding. I am fearful of funding on a solvency basis. I am fearful of funding, even on a percentage of solvency basis. I encourage it wholeheartedly for disclosure benefit purposes, but, in terms of what the country can afford and what individual companies can afford, I think that the arithmetic will increasingly show that solvency funding is not affordable. I would, therefore, like formally to suggest that the funding target should be around the accounting regime of FRS 17, not because it is the accounting standard, but because it uses an underlying bond basis of investment. I think that that is much more practical and much more achievable in future.

Mr T. M. Ross, O.B.E., F.F.A.: It is, perhaps, a reflection of the average age of the contributors to this discussion that I am not the first who will be making some remarks, at least in part, wearing the hat of a trustee of a substantial company pension fund — in my case a fund which is sponsored by a well run company with a strong balance sheet. My first observation is that companies, generally, are run responsibly, in a way which reduces the risk of them becoming insolvent. The benefits, funding and investment policies of pension schemes should be considered in this context.

I believe that the emphasis on solvency in this paper is helpful. Companies will take it into account in assessing how to manage the risk associated with operating their DB pension schemes, but they should not be enslaved by it.

I think that, for many scheme sponsors, the key change in the last few years has not been the advent of the PPF and the measures associated with it, but the announcement of June 2003,

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which basically requires companies, so long as they remain solvent, to stand behind the promises which are made in their pension funds. Also, this requirement is not restricted to the limited benefits part which the PPF will provide in the extreme circumstances of corporate insolvency. That suggests to me that companies will look at the risk associated with the funding and investment policies of their pension funds holistically, in the wider context of risk taking in their businesses, and not in isolation. A number are doing this already.

This leads me to think that the paper may lead us to some conclusions which are too narrowly based, and which will not, in all probability, come to pass. One is that equity investment for DB will become a thing of the past. I think that the risk analysis will lead some companies to future policies for stronger funding through higher contributions, accompanied by moves to de-risk the pension fund element of the overall corporate risk profile through greater bond exposure, but not in every case. I am inclined to think that we will see much more variegated approaches to investment policy, and I do not think that equity investment against DB pension obligations is going to be a thing of the past. I do not think that the authors are predicting that either, although there are some hints in the paper that it would be a desirable outcome.

There is, within the paper, and again within some contributions to this discussion, an implied desire that the Actuarial Profession, itself, should do more to mandate better funding of pension schemes. We must be very careful that we do not overestimate what we, as a profession, are capable of achieving on our own, even if we agree that this would be a good thing. We are advisers, not decision takers, and, while we can wrestle with actuarial standards, I think that there are limits to what we can deliver, based on the powers which we have. This is a matter which the Pensions Board has been considering. It is very important that we disclose the consequences of decisions which are taken, but that is quite another matter from being held to account for failures in funding which there might have been in the past.

I am sure that we are all looking forward to see how the Financial Reporting Council approaches the operation of the Actuarial Standards Board, which, no doubt, will be created following the Morris report, and, in particular, the depth of statutory backing which the FRC will see as necessary to underpin the standards which are set, among other things, for the funding of pension schemes. The work of the Accounting Standards Board, which sets standards for accounts, not for accountants, provides a useful parallel. There is a statutory underpin under the Companies Acts, that accounts are required to give a true and fair view. It is not a very long piece of legislation, but it does underpin the authority of accounting standards. If we really believe that actuarial standards can contribute effectively to better funding for pension schemes, then I think that it will be necessary for our standards in that area to be underpinned in a similar way. Indeed, those standards may also have to apply to advisers to pension funds who are not themselves actuaries. It will be very interesting to see what influence, and what requirement for statutory underpinning, the FRC may regard as necessary for an Actuarial Standards Board, particularly in relation to pension funds, where the prudential regulatory regime is less well developed than it is in life assurance.

These are very interesting times. I would take from this paper the welcome clarity of the requirement for the analysis and disclosure of risk, both to members and to sponsors. However, I think that it would be quite wrong to translate that automatically into a relatively narrow course of action, but I will not go so far as to accuse the authors of doing that. The hints are there, but I think that they were wise to pull back from that level of advocacy.

Mr. R. A. Scott, F.F.A.: I feel that we are standing at a crossroads in the profession. The authors have said that the sustainability and the credibility of the profession are at stake. It is my opinion that insisting on solvency may well worsen, rather than improve, these particular concepts.

I attended a meeting of finance directors in Scotland about a week ago, and they were exceedingly worried by the FRS 17 figures. I dread to think what some of them might make of the solvency figures. The point which I should like to concentrate on is affordability. We are now asking for money when there is little or none available with many employers. While I agree that the ideal is to ensure solvency, I hark back to earlier speakers, who said that reasonable

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assumptions combined with proper communication of risk are as good a way forward as any, because insisting on solvency will, I feel, tip many companies over the edge.

One question which I would like to ask the authors is how an onerous scheme of specific funding standards ties in with the PPF. Demanding that sort of money from employers will merely increase the rush, if there is to be one, into the PPF, rather than prevent it.

Professor R. S. Clarkson, F.F.A.: My views on the relative merits of gilts and equities are well known to most of us here, but I should like to speak in support of those earlier contributors who suggested that the emphasis on solvency is misguided.

I found that the paper was very logical until I came to ¶6.4, 'Investment'. I quote: "We take it as a given that, setting aside the risk arising from demographic factors ... appropriate bond investments are the best match for scheme liabilities ... There is still some residual debate within the Actuarial Profession, but it seems to us that the financial world and many, probably most, actuaries accept that ... high quality bonds provide the least risk portfolio."

A study of the paper by the Stochastic Valuation Working Party (Haberman *et al.*, 2003) suggests that it is far from being just a residual debate. I also refer to the paper by Carne (2004). Neither of these papers is referred to by the authors. Therefore, I do not accept that it is purely a residual debate as to whether bonds are the lowest risk asset class or otherwise.

In terms of the ten principles, the last few words of principle (1) state that assets should be taken at market value, but it is difficult to justify the very different values of the same portfolio of U.K. equities as at January 1997, before the equity market bubble had inflated, and at January 2000, just before it burst. The emphasis in the paper on assets being taken at market value is unhelpful in the extreme.

To me, principal (10) is contrary to our motto of the Faculty of Actuaries for long-term prudence, *ad finem fidelis*, 'faithful to the end'. I cannot accept that actuaries should not advise on the level of contributions extending beyond the next review.

In terms of whether equities are dead or not, I have often quoted from the Barclays Capital Equity and Gilt Study, and I now quote the headline paragraph from the 2005 issue: "We examined the rumoured demise of the cult of the equity and find it very much exaggerated. Regulatory adjustments have certainly heightened equity aversion among some categories of investor but the basic case in favour of equities for the long-term investor continues to remain robust." I also quote from last Saturday's *Financial Times*, from the back page of *FT Money*: 'Cooling bond market threatens returns'. This article was written in the context of the with-profits funds of insurance companies, and, as I have mentioned before, I am very unhappy that, as a holder of a long-term endowment policy, I was told that it was in my best interests to have a low holding in equities to reduce the risk. I am looking to long-term returns, but it is the regulatory requirements which seem to predominate. The key paragraph here is: "With-profits funds switched out of equities just at the market's nadir between 2002 and 2003 and so have had the double hit of losing money as shares fell in value and then missing out on the 1500 point rise in the FTSE 100 since then." This was written in the context of with-profits insurance funds, where the investment distributions are public knowledge, but I think that, in general, the same is the case for pension funds. I think that the recent regulatory requirements have been counter-productive in terms of the emphasis on solvency.

Therefore, I conclude that the paper, which is predicated on the assumption that bonds are the lowest risk asset class, does not seem to offer the best way forward for the Actuarial Profession.

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Mr J. G. Spain, F.I.A. (in a written contribution that was read to the meeting)**:** I have seven brief comments.

(1) *Two actuarial laws.* The first law is that we do not (or cannot) know the future, but we must make balanced, reasonable assumptions. The second is that, over time, there is no such thing as a free lunch. Everything else is merely commentary.

(2) *Confusion of ideas.* In his excellent paper (Carne, 2004), the author explained the muddled idea in ¶1.2.5, and I remember that Mr Cowling was there, and he spoke. So, the paper could have been amended, but maybe it had already been submitted in its final form. Also, the Inland Revenue would have been horrified, and would have taken action, in relation to ¶2.4.2.

(3) *Greater disclosure*. This is fine, but we do not need to stretch ¶1.3.1 any further than that. We need to retain a sense of balance.

(4) *Timeline***.** This is crucial, and I would like to have seen it at the beginning, but I only found it in ¶7.1.2 (7) and in ¶7.3.1. Maybe it is better late than never. The point is that one cannot efficiently invest the same assets short and long at the same time (products which claim to do so are expensive and dubious). The trustees and the employer should agree at the earliest opportunity. Until they take that step, neither can be sure what they want to, or should, do.

(5) *Higher returns and reduced costs.* Instead of thinking about discounted values, project into the future. Mathematically, higher returns must reduce costs. Taking account of time, could the returns be higher? In ¶6.2.2 the test should be 'reasonably likely', not just 'possible'.

(6) *Equities and bonds*. Equities are risky, but they tend to provide higher returns than bonds. This is generally denied by most financial economists, who talk about the gap being merely compensation for extra risk. However, higher returns have actually been observed over long periods, so they are real enough. Going back to ¶6.2.2, the 'reasonably likely' test would normally be satisfied. As for the last sentence of ¶6.4, there may be some agreement for the solvency position, but no more than that. At the only fairly recent debate of which I am aware, in Chester in 2002, a six to one majority of those present agreed that there could be a place for equities.

(7) *Conclusion*. The authors make some good points in relation to solvency assessment, and that is certainly a welcome contribution. However, I believe that the extent to which the paper is so directed at solvency is unbalanced. Subject to adequate disclosure, now required by GN9, I very much hope that the Actuarial Profession will not be seen to accept that approach over all others.

Mr R. S. Bowie, F.F.A. (closing the discussion)**:** In the run up to the Pension Board's introduction of full discontinuance disclosure in 2004 we encountered some considerable resistance, not just from within the profession, but also from the National Association of Pension Funds (NAPF), from pensions lawyers, and from others. It strikes me that, a year later, the mood, at least within the profession, has become much more unified, as we have heard earlier from the official statements from the President. Listening to the discussion, and reading the transcript of the corresponding discussion at the Institute, there seems to be little disagreement now that full disclosure of the discontinuance, or solvency, position is essential. There also appears to be agreement that drilling down into the different priority orders is also necessary, and, in any event, as Mr Keogh said, the regulators have latched onto this, and it forms part and parcel of many of their proposals.

Thus, we have evidence that changing professional standards can actually lead professional thinking, as well as its more normal role of simply formalising it. To me, that evidence, that changing professional standards can lead professional thinking, is the real challenge now for the profession and for the Pensions Board. Mr D. Martin provided a timely reminder that, in the real world, there is a very real need for clarity and robust standards from the user's perspective. As Mr Sharp said, it has taken a long time for the Government to latch onto this, and to enshrine the disclosure of these measures to members of the scheme. So, base camp, the disclosure of the discontinuance position, is well established, although, as the opener said, finding an investment match for it, in reality, is not a trivial matter.

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So, the question remains: "Having established base camp, how much further and how quickly should actuaries force the change in professional standards?" I agree with the authors that the present snapshot of the discontinuance position is not enough, and that we need to go further, but should the funding target be expressed in terms of the discontinuance position? In the main, speakers, including Mr D. Martin, Dr Bowie and Mr A. Martin, said that there should not be a requirement. They did not support that for a number of reasons. However, my sense was that there would be support for expressing the funding plan in terms of how it was likely to affect the discontinuance position, in all its different layers, from one valuation to the next.

How should the covenant of the employer be taken into account? Mr Keogh stressed its importance. Mr Sharp indicated that this has been a very live issue for the Pensions Board. Mr Lindey pointed out that working out what the covenant of the employer is was not a trivial matter. Anyway, even if we get that half of the work done, Mr Keogh pointed out that the other, more difficult half, is what you then do with your assessment of the covenant, once you have found out what it is.

A number of speakers spoke about tricky areas into which all of this would take us, and also philosophical issues about how much professional freedom we should be allowed. For example, should we allow two actuaries, when faced with almost identical circumstances, to come up with the range of different outcomes presently permitted? It raises issues of principle about what is for the Profession to determine and what is for society — in this case the Government or the regulators — to determine. There are legal questions, as I know that the Pensions Board is keenly aware, as to how much actuaries may actually dictate to trustees. Mr Sharp made reference to that. Mr Ross made the point that there are limits as to what we, as advisers, can achieve. There are unknown elements as to how the regulator will operate, although I, for one, am happy to work on the assumption that the Government will not renege on its promises on index-linked gilts, as one of the speakers suggested was possible.

I know from painful experience of my time on the Pensions Board, that, if these very real, practical issues are to be surmounted, then we have to compromise in order to make progress — a compromise perhaps similar to that to which Mr Lindey and Mr D. Martin were alluding.

I am delighted to hear from Mr Sharp that the Pensions Board is already building on the current disclosure. I know that it will meet the challenge laid down by the Government in the period between now and the end of September 2005. I hope that one of the outcomes of the Pensions Board's deliberations is that an actuary will be required to show how the discontinuance position is likely to develop from one valuation to the next.

Mr Farr pointed out that, in the vast majority of cases, U.K. pensions are not 100% secure, nor is there any real prospect of them being so in the foreseeable future. However, I hope that a way can be found of bringing home to the trustees and to the regulator the real uncertainty associated with future progression of most current U.K. schemes. Ideally, this would be done by stochastic modelling, but, for small schemes, it is probably not practical, and so some safe haven alternative may be required. At the moment, I know that many actuaries put something in their reports which says that, if gilt yields go up or down by this or equities go up or down by this, then the consequence for the funding level will be y, but with no indications as to the probability of equities exceeding or falling short of the assumed level, nor the probability of gilt yields or interest rates changing by significant amounts. I hope that it will be a requirement for actuaries to put more of the probabilities and the real risk rather than indicative numbers, so that the trustees and the sponsors can better understand the situation.

So, while I do not share the authors' views that defining the funding target should be solely in terms of discontinuance, I do support an approach where the liabilities have a single, defined meaning, and, on the asset side, we have the assets which are really there, the assumptions about how those assets will grow, and, as a number of speakers said, the biggest investment of all, the unsecured investment in the company. I hope that, on the asset side, actuaries will be required to indicate some of the risks associated with these three elements of liability coverage.

Mr Lindey covered the authors' reference to the combined code, as summarised in Appendix B, and he made the point that the obligations of trustees, as stewards, are different from the obligations of directors, as agents of shareholders. I hope that the new guidance note will allow

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actuaries to present the key funding issues to trustees in a form, and of a quality, appropriate to enable them to discharge their duties without them being drowned out in a sea of minutiae, which the present guidance note seems to require. In my own firm, our valuation reports are now 56 pages long, and it is hard to find the two or three pages which actually matter. That would be a good way to present a true and fair view.

I hope that the paper will be a spur to the further development of professional standards, so that, as the opener said, the Profession may lead U.K. pension schemes from where they are now to where they would be much better placed.

Mr T. J. Gordon, F.I.A. (replying)**:** During a 'Money Box' programme on BBC 2 last week, a member of the ASW scheme, which cannot provide all its members' benefits, said that, on the day when ASW went bust, the scheme was 102% funded. I suggest that there is something patently wrong with that situation.

The opener gave some statistics relating to the past six years. In the past three years, the cost of immediate annuities was rising by 36% and the cost of deferred annuities was rising by 79%. In relation to that, first, index-linked gilts are probably short on duration for actives, whichever ones you pick. One could use swaps, as was pointed out by Mr Lindey. Second, and more importantly, this exposes the need to hedge all risks, or the need at least to consider all risks, and the absence of suitable market instruments in relation to longevity. Finally, it would be wrong to ignore the message which the increase in insurance cost is sending you. Quite simply, there has been a change in the expectation of longevity — something which is now well accepted — and this is not a good reason for avoiding giving that information.

A number of speakers queried the affordability of our approach. Let me reiterate what Mr Speed said. We propose a framework for advice which is designed to be transparent. While there are strong arguments, we believe, for full funding and matching for creditworthy employers, we are not advocating funding at full solvency in all circumstances. As Mr Ross noted, and we agree, the Actuarial Profession does not, in most cases anyway, make this decision. We did not 'fall back', as Mr Ross described, but were simply acknowledging the reality of the situation.

Mr Sharp made some comments very similar to those made by Ms Beaver when our paper was presented to the Institute, which were broadly along the lines that work is already under way to address many of the points raised. These are very positive comments. I hope that external observers can detect a shift in the approach by the Pensions Board which is positive. It is a shame that it has taken external stimuli for the Actuarial Profession to require solvency disclosure in valuation reports. I stand by our statement in relation to the Profession overlooking the sponsor covenant, in the sense that it is wholly absent from our guidance. The paper to which Ms Beaver and Mr Sharp referred was a discussion paper, not formal guidance. He also raised some comments by Mr Barry Riley. My recollection is that Mr Riley welcomed the Exley *et al.* (1997) paper very positively, and he may well have been educated by reading it.

I agree with Dr Bowie that solvency should be disclosed by priority order. That is what we had in mind (see, e.g., the fourth point in the actions in ¶9.2.1).

I should like to correct one specific point, which is in relation to Mr Lindey's understanding of ¶¶1.1.1 and 8.5.1. Paragraph 1.1.1 refers to pension provision as a whole, while ¶8.5.1 refers specifically to the crisis in actuarial standard setting. In relation to his complaint about the tone of the paper, I am prepared to give some ground on that, but I would like to take issue with queries about tone. It is precisely our Profession's lack of self-criticism, our behind-the-doors broking of compromises rather than open debate, and our general bending way over backwards to achieve a consensus view that has led to vested interests within the profession being appeased. My view is that we are improving on this, but only slowly, and regrettably more in response to external events than as result of our own initiative. Still, some progress is better than none.

I should like to challenge the perception of McLeish & Stewart (1987), as referred to, for instance, by Mr A. Martin. Those authors were roundly criticised at the time, I understand, for their defined accrued benefit method. Actuaries who were around then sometimes now say that pension schemes would be even worse funded had the Profession adopted McLeish & Stewart's recommended approach. However, I think that this is a fundamental misreading of their work. In

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particular, I do not think that past over-funding is a virtue to be proclaimed, when it led directly to the notion that pension schemes had limitless resources which could be redistributed by the Government — again, as referred to by Mr A. Martin — by, for instance, the introduction of statutory revaluation and limited price indexation at no apparent cost, and, in particular, when that prudence has proved to be mostly transitory when it mattered most.

McLeish & Stewart's arguments were straightforward, well made, and ahead of their time. Proof of this is that their arguments still work — indeed, we have used them in our paper. I recommend that you read their 1992 paper (McLeish & Stewart, 1992), on the supervision and control of pension funding in the U.K., and their written response, to see how clearly they understood then the importance of the solvency measure for so-called ongoing schemes.

I take comfort from the comments which have been made in the discussion. It seems that there was substantial agreement on the need to change and on the need for increased transparency of actuarial advice. I hope that we can move forward without complacency and without giving in to Government pressure to compromise the Actuarial Profession. It is shortsighted to give in, because we will only be used as a scapegoat when things go wrong later, and the next version of 'Morris' may not be so lenient. So, let us set things at up at a governance level so that we will not end up here again. I know that we have introduced a Scrutiny Committee to review standards and an Actuarial Standards Board is in the offing, but let us not assume that these solve the problem. If we had had an Actuarial Standards Board in the past, it might simply have enshrined past bad standards and made it even more difficult to change.

I end with a plea, that we do not cherry pick and water down the important recommendations which we have made in the paper. They come as a package.

The President (Mr H. W. Brown, F.F.A.): We have had a very interesting paper and a wide ranging discussion, not just on the aspects of the paper, but on a number of related aspects as well. I have enjoyed much of what was said, and I have been given quite a bit of food for thought. I am sure that, although the Pensions Board has a number of these issues in hand, nevertheless this paper will prompt them to look again at some of the issues which are not in hand.

The Morris Review is likely to require us to do things differently and faster than before. The proposed Actuarial Standards Board will take on a much wider role than the Profession currently has. The authors have done an excellent job in producing a paper like this to give us such a lively discussion. Please join me in thanking them for their efforts.

WRITTEN CONTRIBUTION

The authors subsequently wrote: We are pleased that the principles advocated in our paper attracted such strong support. We suspect that, only a few years earlier, the views expressed in the discussion (especially by some of those suggesting that the paper would have been more useful had it been presented earlier) might have been very different. In our judgement, the actuarial profession has moved on.

Many actuaries seem to feel, in every fibre of their being, the need to fund for 100% of the 'value of the liabilities', notwithstanding that they are happy to entertain a wide range of answers as to what this 'value' might be. We suspect that this is why a number of contributors concluded that we were advocating full funding of pension schemes — in their minds, as soon as we stated that liabilities should be measured on a solvency basis, it followed that we must be advocating funding on this basis. Our perspective is precisely the opposite; someone other than the actuary (usually) sets the funding approach — the actuary's job is to explain the implications of different possible funding approaches (including whether the approaches have been properly defined) in terms that are meaningful, in particular in relation to the security of the benefits.

Mr Duval and Mr Pardoe both felt that the paper went further than simply advocating better disclosure. There is one sense in which we agree; funding and investment strategies might be constrained in practice if beneficiaries and decision makers had a clearer picture of the financial

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implications. For instance, if, instead of being able to say that a scheme is '90% funded on an ongoing basis and spreading the (small) deficit over 15 years', the actuary has to explain that:

— the scheme is 45% solvent;
— allowing for respreading, it is targeting reaching 50% solvency in 20 years' time;
— there is a one in three chance that the scheme's solvency level will have fallen to 30% in three years' time; and
— the contribution agreement does not define what sponsor contributions are payable after the next three years;

then it is conceivable that funding and investment strategies might be different. This is, of course, why disclosure matters — it helps prevent people from doing things which they would not be allowed to do if they had to tell other people about them in full. The corollary, and the reason why we wrote the paper, is that the Actuarial Profession needs to be careful that it is not complicit in the process of hiding or providing misleading information about pension scheme financing.

Ms Beaver and Mr Carne made reference to the introduction of mandatory disclosure of pension scheme solvency in actuarial valuation reports, as though this validated the past behaviour of the Profession. The change to GN9, making solvency disclosure mandatory, applies to valuations with effective dates from 20 March 2004, so, at the time when the paper was presented to the Institute, hardly any valuation reports would have been completed which were actually required to disclose this information. While we strongly endorse the change, this is surely information that should *always* have been a mandatory disclosure in actuarial valuation reports. (The key reason for GN9 being changed to require the disclosure of solvency in valuation reports was so that trustees and members would know how much benefit is at risk if the sponsor fails. It was not so that sponsors would learn for how much they are on the hook as a result of a change in legislation, as Mr Carne implies.)

Ms Morrison noted that we had not commented on the Pensions Act 2004. This was because it was in a state of flux and because its impact on funding would depend substantially on the behaviour of the Pensions Regulator. It was also because the principles which we advocated are not purely driven by legislation, but are more generally applicable. We note, though, that the Regulator's approach, to date, evidences that it is applying our recommended approach of expressing liabilities in terms of solvency and that it is giving weight to two of the points which we made strongly in the paper, but which did not figure strongly in the debate at the Institute, namely: (a) measuring the strength of the sponsor's covenant; and (b) the failure of trustee governance.

Over the period since the paper was first discussed, it seems that the world for U.K. pensions actuaries has changed substantially. Actuarial standards will be set by the FRC, there is a Pensions Regulator with real power and the Actuarial Profession's influence in pensions is generally in long-term decline. In our view, the best course of action for the profession is to demonstrate its value to society by continuing to develop high standards of professional behaviour. We believe that adopting the recommendations which we made in the paper will help to achieve this.

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