

THE ANNUITY BULK BUY-OUT MARKET

A DISCUSSION MEETING

[Held by the Faculty of Actuaries, 18 February 2008]

INTRODUCTION

This Sessional Meeting takes the form of a panel discussion, asking the question: “Managing defined benefit risk management: is buy-out the future?”

The following are subjects for discussion:

- What is driving the increased interest in buy-out and other risk transfer solutions?
- Will it last?
- Who are the players in this market? Is there room for everyone? Is there enough capital?
- What impact will current economic conditions have on decisions which trustees make?
- What is the role of the Regulator, and how is regulation evolving?
- Are products evolving to meet market needs?
- What are the implications for actuarial pension consultants of the growing buy-out market?

ABSTRACT OF THE DISCUSSION

The President (Mr J. S. R. Ritchie, O.B.E., F.F.A.): The subject of the meeting is the annuity bulk buy-out market. There will be a short presentation followed by a panel discussion. We have four speakers to talk to us on this subject.

Mr Speed is the Investment Director of Paternoster. He is an expert in liability-driven investment, and pioneered the use of derivative overlay strategies in pension schemes in his previous job at Hewitt Bacon & Woodrow. Mr Clarke is Executive Director of Financial Risk at the Pension Protection Fund. He is a Cambridge educated mathematician, actuary and Harvard Business School alumnus. Previously, he was in retail financial services with the Co-operative Insurance Society, which he joined in 1977.

Mr Bowie is the senior partner of Hymans Robertson, and is a Member of the Board and of the Executive Committee of Abelica Global, the international actuarial consultancy organisation, of which Hymans Robertson is a member.

Mr Hawkins is Principal, Financial Strategy Group, at Mercer. In this role he supports consultants in advising companies on the management of pension risks and costs. His particular interests include the practical issues of using derivatives in pension schemes, contingent assets, new structures for risk mitigation, credit risk of all types, and pension risk within the context of enterprise risk management.

Mr C. A. Speed, F.F.A. (Panel member): The subject for the discussion is about managing defined benefit risk — is buy out the future? It sounds absolute. It is like saying that buy out is

the truth, the whole truth and nothing but the truth. I do not think that we can be that absolute. I think that buy out will probably be a very important part of the future of risk management in pension schemes. This comes back to the wider arena; that actuaries are, effectively, risk managers.

If we look back over the history of risk management within pension schemes, the big story in recent years has been liability-driven investment (LDI). However, LDI focused on the investment side, but it had very little to say about demographic risk, regulatory risk or some of the other risks to which we know pension schemes are exposed. The big story in the years to come is going to be the transfer of risk from pension schemes into other vehicles. I deliberately say 'other vehicles', because I think that there is a wide range of solutions.

I think that the distinction between pensions and insurance is, to a certain degree, fallacious, because we have two economic entities which are essentially doing the same thing. They are trying to pay pensions, as promised, to people with a very high degree of certainty.

From a very simple high-level viewpoint, there are only three aspects to this. First, there are the demographic assumptions; how you project forward the cash flows. Secondly, there are the values which you put upon the cash flows; how you discount. Thirdly, there are expenses. It is the first two which have had the most emphasis in recent years.

Today the Pensions Regulator announced how he is going to review mortality assumptions. What we are seeing is a levelling of the playing field between insurance and pension schemes, where the sets of assumptions used become more aligned. In the next couple of years we are going to see developments in the analysis of the expenses. The outcome of this analysis could well tell us that, in the vast majority of cases, insurance is actually a cheaper route for delivering pensions promises. I think that we may see a flip from the hitherto conventional wisdom of insurance being considered as an expensive vehicle to insurance being seen as a cheaper vehicle, because of the economies of scale which can be delivered. That is a prediction. Maybe it is a bit foolhardy, but let us throw it out and see what response that gets.

I suppose that the other element, as we see this great change, is what does this mean for the advisers; the consultancies? To me, this seems like a classic example of a case study which you might be given at university in a business studies course. We have a new segment of the market, which is growing very rapidly. We see new players, we see the rules changing, and we see great product innovation. How do you respond? All that business analysis tells us is that those who succeed will be those who embrace, invest, are flexible, and deal with this. We have already seen a very wide range of responses from the consultancies, which are driving many of the insurance companies very hard, and have been responsible for a great deal of the innovation. This challenge can be an opportunity, and many consultancies have already realised that.

Mr M. G. Clarke, F.I.A. (Panel member): I will say a few words from the perspective of the Pension Protection Fund (PPF). As you can imagine, being the compulsory insurer of pension funds, the fact that private capital is available in this market is seen by the PPF to be a welcome contribution to reducing the overall level of risk. We have seen the players in the market rise from, perhaps, only two, a year or so ago, to an ever increasing number.

On the basis of our own analysis, the impact of the new players has been to harden prices. Last week we produced our PPF views on the actuarial basis commonly being applied in the private market, as part of our considerations about revising what we call the Section 143 basis — the test used to determine whether or not a scheme enters the PPF. That shows an increase in competitiveness, depending on the size of the scheme, of about 5% or 6% in just over 12 months.

So, the advent of private capital has improved the perspective in terms of narrowing the perceived gap. I take the point made by Mr Speed entirely, that it is a question of both sides of the divide there, the pension fund and the insurance company, when two worlds collide, coming to common views on the risk in such a way as to make an adult conversation about exchanging risk worth while.

Whilst the regulatory perspective, generally, is to welcome this, from a PPF perspective in particular, it poses some problems. Potentially, the risks which the PPF covers become a self-selected group of risks.

That can happen in two ways. One is where there is adverse selection, so that a better risk finds an alternative solution. The other is just the scale of the residual schemes being covered by the PPF. As schemes buy out liabilities, this reduces the residual schemes paying levies to fund the remaining potential PPF deficits.

Looking at the regulatory side of things more generally, some of the solutions are very imaginative, and some of the solutions are so imaginative that they represent potential dangers. The Pensions Regulator is concerned that some solutions proposed may amount to abandonment, in terms of the way in which the pension schemes are dealing with their liabilities, and there are various examples which we might consider later. Does a particular risk transfer weaken the covenant or have an asymmetric risk/reward profile for members versus the new sponsor? Various other issues have emerged with some of the proposals which have been put forward. Nevertheless, for there to be such interest in risk transfer, in a market where risk management had been left to the future promises of British industry, is to be welcomed.

I shall be interested to hear where we see the business developing. Mr Speed mentioned that cost has been an arbitrage and an advantage in the marketplace. So, much of the gap between the present value, as seen from a pension fund perspective, and what you might regard as the insured value, from the insurance company's perspective, is about different assumptions. Reconciling those differences and repairing the deficits is something which will happen, no doubt, over time.

One can see a situation where, once the risk — and Mr Speed mentioned LDI — has been managed so far as the pension scheme sponsor is concerned, then the trade-off is more about where that risk is best placed. It may, indeed, involve the consideration of the diversification benefits, either in the corporate or in the insurance company. It will reflect, also, the appetite for risk. One can see a finance director saying: "Given the premium to be charged, I would rather keep that risk on my books, manage it myself, and get whatever profit and upside there is to be gained from it."

On the other hand, administration costs must be considered. Future proofing against legislation is another. I can see this issue being more finely developed or balanced in future. It is less about finding a bolthole for a perceived volatility in pension funds, as might be the case now, and more about where the risk is best placed, whether it is on the corporate's balance sheet through its liability on the pensions side, or whether it is worth paying a premium to divest into an insurance company.

Mr R. S. Bowie, F.F.A. (Panel member): I have been doing the job of a pensions consultant for nearly 30 years. I have never known such boardroom and finance director interest in pensions, nor have I ever been to so many full board meetings as in the past three or four years. Occasionally I have been told that I and all other actuaries are an entire waste of space, and that it is we who got them into this mess, but, more usually, to be invited to discuss how to manage the risks.

Why is this so prominent? Typically, the liabilities of pension schemes are now large compared to the size of many of the companies. I cannot overstate the impact of FRS 17 on bringing this to boardroom attention, nor, although it is not so obvious, of the change in the nature of the liabilities which happened a few years ago as part of the Pensions Act.

Also, finance directors and boards have been taken aback by how many unexpected shocks and unknowns there have been. They thought that they had it 'sussed' when they took 10% or 15% out of equities, but still had the bulk of the scheme's assets invested in equities. They saw equities go up, and they thought that that would make things better, only to find that falling interest rates have had a much bigger impact, or that something else which they could not have figured out has increased the liabilities. For example, the difference between the yield on fixed-interest and index-linked gilts, which, typically, actuaries will use as the expected future rate of inflation, has widened, or longevity has increased.

Every time when they think that they have got a handle on it, the actuary comes along with another: "Ah, but ...", to explain to them why it has not actually improved as they thought that it would. I suspect that the next in the long list of such events will be as they prepare their

accounting numbers, to assume that, because the accounting numbers are pretty much the same as they were last year, then the valuation results will be the same, only to find that, because of the widening credit spreads, the trustees' actuaries tell them that it has got a whole lot worse than they thought from the accounts. All this goes to say that this is a real issue, and that it is likely to remain a real issue; something which demands attention at the highest level in the company.

As Mr Clarke said, until a couple of years ago it was just too expensive to buy out liabilities. By our reckoning, a couple of years ago the Prudential and Legal & General were using a yield of the gilt yield minus $\frac{3}{4}\%$, and a strong (by the then standard) assumption for longevity. The discount spread between what you could buy it out at and what you are actually funding at was, maybe, 2%, and then you had to find some more for longevity. Today that spread is down to under 1%, and a number of insurers seem happy to use longevity assumptions which are less than those which the Regulator and the PPF want you to use.

We have clients where the ongoing liability, as calculated by the Scheme Actuary, is more than Mr Speed would buy it out at. As a result, you can buy it out and make a profit — for some schemes, at least. I think that we have a very interesting situation where, as Mr Clarke said, this is now a legitimate part of the toolkit of trustees, companies and advisers.

Therefore, I expect that this will be a popular and sustained topic for the future. It will doubtless get more sophisticated. I am not sure that all the current players will survive. We have four different camps of providers: the traditionalists, of which we can count about a dozen; credit insurance, of which we think that there are maybe one or two, but we are not sure that they are going to get off the ground; people who will hedge away the finance or the mortality risk; and, lastly, the scavengers, who are people looking for companies with ripe pension schemes, with which they can do unspeakable things, and make a profit, into the bargain. Whether they will all survive remains to be seen. There is much to do. The good news for all the consultants is that there is much for consultants to do, both on the evaluation of the tools and on how they can best be used.

Our concern, as Mr Clarke said, is that some of the terms are too good to be true. We noticed with interest, today, that the Prudential appears to have at least announced a temporary withdrawal from what they regard as unsustainable pricing. I think that there are issues about whether the credit worthiness of the new provider is better or worse than the combined credit worthiness of the PPF and the plan sponsor. There is some work which people will doubtless want to do to evaluate credit worthiness. I do not think that the tools are particularly well-honed in that analysis so far. So, there is much to do, but there are still things to develop.

Mr J. Hawkins (Panel member, a visitor): I agree with almost everything that has been said thus far. Although I work for Mercer, I spent 25 years working as a corporate treasurer, so, the majority of my comments are from the perspective of the Chief Finance Officer (CFO) and the treasurer, rather than from the perspective of the consultant.

There is absolutely no doubt that the responsibility for pensions in most companies has been transferred to the finance department. As such, the CFO and the treasurer are going to be applying the same rules to pensions as they do to other commercial decisions. That is basically the efficient allocation of capital and the avoidance of surprises. We have already heard that there have been many surprises over the past few years, and the more that they can be avoided in the future, the better.

Typically, as a treasurer, if you are evaluating an investment or some other form of corporate activity, you try, as a treasurer, to keep within three constraints. First, you try to do something which looks sensible economically. There is no point in wasting money if it is going to reduce the value of the firm. Then, once that is done, it is nice if it also looks good from an accounting point of view. That is not always the case, but it is desirable. Thirdly, it has to make sense from a tax perspective.

Even without the recent pronouncements from the Actuarial Standards Board (ASB) and the Pensions Regulator, competition in the buy-out market has pushed the alternative to a level where it makes sense, certainly from an economic point of view, in many cases, and also, now, from an accounting point view, and it is likely to make more sense in the future.

I certainly believe that buy out is part of the future, not all of it. There will be those companies which are large enough to manage extended LDI strategies as they think fit.

The President (Mr J. S. R. Ritchie, O.B.E., F.F.A.): What is driving the increased interest in the buy-out market? Is it going to last?

Mr Speed: I think that there are many drivers, and we have already had some mentioned. We are seeing changes to accounting standards, and, even though they may not be implemented in the foreseeable future, the writing is very much on the wall as to which direction that is going. There have been pronouncements from the Pensions Regulator, and the standards set by the PPF are a clear indicator of how pension schemes are going to be regulated and run, and how they need to contain their risk. There is also a great deal from the regulatory reporting point of view. Add to that the responsibilities from the Pensions Act 2004, both upon the trustees and, given the greater transparency, feeding through to the finance director and the company. There is now the situation where the pension scheme is, from the finance director's viewpoint, akin to giving your credit card to someone to go to buy your groceries. They might come back and deliver to you just the groceries which you want, but there is always the risk that they might come back with nothing but whisky and lipstick. Whisky and lipstick are great products, but they may not be what you need for your weekly shopping. This is the strange governance which we have around pension schemes, where the corporate is responsible for the deficits, but has comparatively little control over the investment strategy which drives the risks and the unknowns which have been mentioned.

This background is driving corporates to look for how they can remove the risk and get to a more complete solution. The levelling of the playing field, where we may see situations where you can transfer the risk and realise surplus, is going to make this very much in a 'no-brainer' in many people's books.

Mr Hawkins: I think that there is a test which CFO's apply in situations like buy out, which is: "Will the market reward me for what I am doing?" In the short term, that reward is the share price.

I think that it is right for some companies not to buy out their pension funds. If you look at the recent transactions involving Emap and P&O, there does not seem to me to be any evidence that those transactions were viewed adversely by the market. I think that this is going to be what we will tend to see more of in future; firms thinking carefully about whether it makes sense for them and their shareholders. If that test is passed, then move on and look very carefully at what you can do and how quickly you can do it.

Mr T. M. Ross, F.F.A.: I agree with Mr Bowie that, for a number of reasons, the future for consultants is very bright. I am no longer a consultant, but I do chair the trustee boards of two substantial pension funds, and, from that experience, I should like to make a couple of comments which essentially endorse some of the things which have already been said in this discussion.

I should like to drill down a little further into how the buy-out market may develop. It is plain to me that the awareness of pension risk within companies has increased enormously over the past five to ten years. I go further, and say that the way in which companies, themselves, manage risk has changed — not just in relation to pensions, but very much more widely. This is not just in the sorts of institutions for which we have all worked, life assurance companies, and so on, but in all manner of industrial and commercial businesses, the risk management function is becoming almost as important as the finance function. This helps to explain the shift towards finance which we have seen in the corporate responsibility for pension funds.

I am interested in the response to the question by the President about the driver for this. One word was not mentioned, which I think is important, and that is 'competition'. The competition for business is very substantial, and it seems to me not just for smallish pension funds, either. My prediction would be that very substantial amounts of money are going to be transferred in this way if the terms remain around the best that they are today.

Newcomers into this market have to win business, and, as long as there are new people coming in, provided that they have adequate capital backing to cover the risks involved, they will be prepared to price annuities at yields somewhere between gilts and high grade corporate bonds. By contrast, until recently pricing reflected gilt yields minus a significant margin. So, there are bargains to be had, from a trustee's point of view. So long as the market continues to attract new capital, I can see this trend continuing for quite some time. What will be interesting is whether the established participants will fight to maintain their market share.

Drilling down further, though, it strikes me that there are some quite important issues which need to be addressed by those who are providing the products. For example, if you bid for a buy out of pensioners, or a proportion of pensioners in a large scheme, what sort of rules do you put around the packaging, or selection, of the pensions which you are taking on?

It would probably be unrealistic, in a very large fund, to contemplate that you would insure all of the pensioners. What controls might we see which would effectively prevent trustees from 'cherry picking'? For example, could the trustees insure all the pensioners from Dorset, but make sure that they keep all the ones from Glasgow (bearing in mind what the statistics tell us), or insure the large pensions and keep the small ones (as the poor die younger).

Perhaps further, when you buy out you are effectively 'guaranteeing' the benefits, and you are providing 100% of the pensions for the segment which is bought out. At some point in the future it is possible that the scheme might wind up, either into the PPF or even, if it is not that badly off, still not providing full benefits for all the other people whom you have not bought out.

So, what mechanisms can there be, and what investment issues are there, in unwinding those buy outs in the future, in order to level things off for the membership as a whole? I should be interested in comments from those who, no doubt, are wrestling with these matters as to what the implications are, and the potential costs of what amounts to an option to unravel the initial deal at some point in the future. It is possible, of course, that the insurance company could itself become insolvent. In that case, the current equivalent of the old Policyholders' Protection Act would kick in, and its terms are not identical to those of the PPF. How are these differences allowed for?

Let me reiterate that I do think that the key drivers to this are competition and the availability of capital. Both of these things are driving down prices to levels where many finance and risk managers of corporates will see merit in trading off a lump of the risk and uncertainty and concentrating their own risk-taking in their core businesses.

Mr Clarke: The Policyholders Protection Act is now called the Financial Services Compensation Scheme (FSCS). To a certain extent, there is a degree of arbitrage between the companies regulated by the Financial Services Authority (FSA), which therefore fall under the FSCS, and the protection which is offered to pension schemes through the PPF. That is not to say that one is better or worse than the other. However, there are differences between the two levels of benefits. That is something which ought to be somehow smoothed out of the system or reconciled.

The PPF, for example, gives 100% of pensions in payment. It is not necessarily the case for large pensions under the FSCS regime. There is a benefit design issue between the two forms of protection. Broadly speaking, one would want to have equivalence.

Mr Ross was right about cherry picking. That is a regulatory concern. Whether it is a real case or a mythical one, the trustee group which buys out the pensions in payment of a scheme which is underfunded, at the expense of the deferred members who are left with the residual risk, is a threat of which the Regulator is very conscious. Again, there is a role for trustees backed by the Regulator as well.

I said at the start that there are new solutions of all manners and of all kinds, very individual, as result of competition in the marketplace. Tracking where the risk gets transferred, tracking where the upside and the downside are, reflecting that in both the regulatory regime and in the compensation regime, is quite a challenge. Some of them are non-starters. Others pose some technical problems.

Mr Hawkins: Concerning one aspect of the comments of Mr Ross, it should, I suppose, be no surprise to us that risk is taken so importantly these days. This is an international phenomenon. The Turnbull guidelines came out in the late 1990s. When they came out they had almost no impact on pensions. Today, it would be incomprehensible for a listed company to try to comply with Turnbull without demonstrating that it had thought about the risks associated with its pension scheme.

There is something similar in the United States of America — the Sarbanes-Oxley Act was passed a few years ago. It did not immediately have any impact on pensions' risk management in the U.S.A. However, I expect that it will do over the next year or two.

In Germany, with the 'transparency' legislation which they had in the late 1990s, the growth in contractual trust arrangements is no coincidence. Throughout the world you are going to be seeing this. It is not just a United Kingdom phenomenon. It is an international one.

Mr Speed: One very good point raised by Mr Ross concerned what happens at wind up if the uninsured benefits are not fully covered. One approach which my company has used in numerous cases is that you write the bulk policy so that it can be surrendered — so that the benefits bought can be redistributed among any pool of membership on exactly the same terms as was the original purchase. It is an option which trustees continue to hold to redistribute assets to meet benefit claims, however they see fit, in the event of a wind up, so that they have control on exactly the same terms as an ongoing pension scheme has.

That is just one example of the innovation which we have seen over the past 12 months. There are going to be many other examples of how the challenges which exist within pensions will lead to new solutions. Some things previously believed to be 'written in stone' are not actually 'written in stone'. Opportunities exist to unpack risks, and to deliver something which works and to deliver the benefits promised.

Mr Bowie: In response to the point just made by Mr Speed, I would say that we have some concerns about that kind of innovation. Whilst it may be packaged in a particular way at outset, circumstances can change, and what seemed like a good idea at the start may no longer be appropriate. The key is to ensure that everything is in the same currency. For example, if you need some hard cash to pay expenses or to do something else (particularly after the widening of credit spreads), and you come to unpick the package, in reality you can find that you do not have as much money as you expected. You need to be very careful; whilst that innovative idea may be very seductive and can be very helpful, it is not necessarily a panacea for everything.

It has long been a frustration of mine, in the tax regime for pensions, that the risks and the rewards for sponsoring companies are asymmetric, in that the companies have all the risk. If the pension scheme invests in equities, and equities go down, they have to make up the difference, but if equities do well, it is very difficult for them to get their hands on the gains.

It seems to me that one of the things which is happening and which is drawing this capital into the market is to allow the providers, who are putting up capital, and then are running it as an insurance company, to enjoy the upside of that risk and reward relationship. One of the things which will cause this market to run on and be sustained in the long term is the inequality or the anomaly that the regime for a sponsoring company is asymmetric on the bad side, and that, whilst the same risk is out there for the providers, at least, if the upside works out, they and the shareholders get the benefit. There is, therefore, a bias in favour of those providers, which is likely to allow them to continue to take a larger and larger share of what is happening.

Mr A. G. Sharp, F.F.A.: This contribution is in my personal capacity rather than in my Pensions Board capacity.

Many years ago I was fortunate enough to study life insurance rather than pensions. Something which I remember was that life insurance companies always insured a spread of risk. Yet we have the buy-out providers, and, indeed, some of the other solutions which are not buy out, which appear to be very much mono-line, and there is not a spread of different kinds of risk within these companies. Despite all the capital backing, I wonder, looking forward, whether it is risk

from the provider's angle rather than from the corporate finance angle at which we should look.

I wonder whether the panel might be able to say anything to the ordinary pensions actuary, or, more likely, the ordinary pensions trustee, who is asking: "It is all very well putting these new providers in front of me, but how do I judge whether they are the right places for me to pass the money to with my fiduciary duties, as opposed to the finance officer who is saying 'get the risk off the table'?"

It is difficult for trustees to look forward. As Mr Clarke alluded, it is not obvious that the FSCS is necessarily the right backing, because it does not provide as good a backstop for some members as the PPF does.

Mr Speed: Considering the mono-line/multi-line angle, this is something on which everyone has to come to their own point of view. Within insurance there are certain areas, such as hurricane and aviation, which have traditionally been dominated by mono-line.

The argument for multi-line is that you have other areas of the business to support in case something goes wrong. If they are there to support when something goes wrong, you can also flip that round and they can be the source of the problem. For example, I do not think that, at the moment, Société Générale's retail banking arm is boasting too much about its equity derivatives business being a diversifier.

You have to consider each insurance company separately. In the area in which it is insuring, does it bring the expertise, the resources, the skills, to handle those risks? Can it do the job which it is being asked to do? This goes to the heart of what we have been asked about brand. What is it that we mean when we talk about brand? It is really those elements of the expertise, the resources, the skills and the financial strengths, to deliver upon the promises which count.

From my point of view, I would have thought that, within a mono-line, you have a position where that is the one thing upon which you are focused. That has 100% management expertise and focus, and that is all which you are going to do, and, therefore, there is no risk that it is going to be the project for this month, or this quarter, and then something else is going to be the main focus of business. It is something to which there is not a right nor a wrong answer. It is something which everyone has to assess and to come with their own point of view.

Mr Hawkins: I have a slightly different perspective on this, in that, in many cases where consideration is being given to having a buy out with either a mono-line or one of the traditional more diversified players, what the trustee has to look at is the deal which is on the table. The deal on the table might have a number of different facets to it, not just the creditworthiness of the company to which you are going, but it might be more money being put in to allow the buy out to take place. If it does occur, it is not just going to be the creditworthiness of the buy-out company, but the fact that the risks have been reduced to the extent that you are taking interest rate risk, inflation risk and various other risks off the table.

It is very seldom going to be just a direct look at the creditworthiness of the buy-out company. It is going to be a comparison of what you end up with compared with what you are giving up. In many cases, that is not such a difficult question to answer as the simple question: "Is any particular company going to be there in 30 or 40 years' time?"

Mr Bowie: To respond to that same point, I can only speak for the cases for which my own firm has advised, but where the company has failed or where they are at the end of the road. Then trustees are generally very happy to pass the whole thing over to a provider and then get the terms right.

Our own experience has been that, where a scheme is carrying on in some capacity, we find it quite difficult to bring ourselves to buy out a chunk of pensioners without getting rid of the whole thing, for the reasons which Mr Clarke said earlier. You do not know whether, in fact, you have heightened the risk for the members who are left behind. Therefore, having an insurance policy with one of the buyers as an asset of the scheme, ideally in a form which can be unpicked

if things go wrong, although you are hoping you are not going to do that, seems to us to be a safer option for trustees in those circumstances.

Mr Clarke: I would have thought that the buy-out companies can have diversification if they diversify with the investment risk which they take. I am not sure of the extent to which that underlies their pricing.

I think that there are limits from the insurance regulator as to the investment vehicles which can be used, if you are domiciled in the U.K., in terms of getting the advantage of some of the diversification.

Mr D. C. E. Wilson, F.I.A.: What I am about to say is in a personal capacity, rather than in my Finance, Investment and Risk Management (FIRM) Board capacity.

The question comes down to the sustainability of the pricing which we are currently seeing. A subsidiary question on that would be about mono-line versus multi-line. We are hearing that one company apparently thinks that its shareholders do not want it to write business at the current price when there seem to be plenty of people prepared to invest equity in mono-line insurers. That suggests to me that there must be something about this asymmetry of risk which is driving that thinking. If that is good news for the shareholders, it may not be such good news for the people actually doing the buy outs.

Mr Speed: Competition is a very fair point. I think, now, that there is a good chance that people may look back in two or three years' time and say: "My goodness, there was a great opportunity at that time!" As we have already pointed out, there has been a great deal of capital pushed into this market. Many people are keen to get a foot in the door of what they see as a potentially good growth area. There may well be an element of buying market share.

Over the coming years, we are going to see a levelling of the playing field, so, whereas, currently, people may be saying: "There is a bit of a step up to get to the insurance price", that will not be an issue in the future, but maybe the insurance rate will be commensurately somewhat higher in a couple of years' time, as the market becomes more established. We went through this earlier, and we listed 20 players or potential players in the market, excluding my company, which are trying to write business in some sort of capacity. I would be surprised if all those 20 players are still writing business in three or four years' time. I think that there will be some consolidation, but I do think that there is room for a great variety of offerings, and, maybe, even the majority of those will still be around writing business in some form.

I think that there is a great opportunity, and I think that much of the money put up to be invested was put up two or three years ago. It was a great time to be raising capital in the City, and capital was raised on very favourable terms. Also, I think that people wanted to invest in these businesses because they saw the growth potential.

If some of the predictions which we made when we were setting up our company, in terms of the alignment of the accounting and the regulatory aspects, come true, as seems to be happening, then there is good reason why the business may take off, and that it may still provide a very sensible investment, even at comparatively low rates of return for equity investors, to participate in a large market.

Mr J. Goford, F.I.A.: On the mono-line issue, if you look at the shareholders of the new players, they are well aware that they are buying mono-line risks; they are seeking longevity risk, which they will then diversify within their own portfolios.

The question then arises: "When mono-lines go for an initial public offering (IPO) or go to the market, will the newer investors understand how mono-line the investment which they are buying is?" I think that there is an understanding at the moment, and if you want to buy longevity risk, then you can do so through these vehicles.

I draw the distinction that, if you want to invest in a widget manufacturer at the moment, you are actually also obliged to invest in the equity market through its pension fund.

The President (Mr J. S. R. Ritchie, O.B.E., F.F.A.): I should like to ask a question about trustees' decision making in the current economic conditions: To what extent are trustees' decisions being affected by the gloomy outlook, certainly according to the Bank of England? Is this affecting the way in which trustees are feeling about the buy-out market?

Mr Speed: I think that there is great uncertainty. We have seen a significant fall in equity values, which, traditionally, has been very painful to pension funds. Many pension funds have gone along the path of de-risking; some have substantially invested in the bond market already. Risk transfer is almost the next logical stage, in passing those risks off and in making sure that the trustee's job and the sponsor's job is complete in terms of delivering promises to their members.

I think that Mr Bowie and Mr Hawkins are probably better placed to see how trustees are responding to the uncertainty, but, in some ways, I think that, after the incredibly benign conditions which we had from 2003 up to 2007, the very strong equity markets, stable yields, with people thinking that it seems to be quite a good idea to be taking risks in pension schemes, maybe the volatility which we have now seen will cause a reawakening of just how much risk is being carried in pension funds. That might push trustees to start looking at the next stages in their risk management programmes.

Mr Ross: Again, as a trustee, my own experience in response to your specific question, President, is 'no', I do not think that the current uncertain outlook is either encouraging or discouraging trustees from looking at this possibility.

I think that the volatile markets which we are seeing have made trustee boards sit back and look at their own organisations and the mechanisms through which they take decisions. These are notoriously slow compared with many, including the businesses whose employees or ex-employees are members of their schemes.

For example, if you look at the equity/gilt combination over the past few years, you will see that, some time in July 2007, there was a golden opportunity to sell your equities, and to get into a buy out, as long as you caught it in a relatively short space of time, when equities moved the right way and bond yields moved the right way. However, very few, if any, pension schemes, I suspect, or pension scheme trustees, were fleet of foot enough to act on it at that time. Of course, as we know now, that horse has bolted, as they say, at least for the moment.

One consequence of this may be that we will see trustee boards getting themselves better organised to operate in a way which is other than just taking decisions every quarter, which I think is fairly typical still, to being more continuously involved in the process, possibly through a series of subcommittees or in some other way; in other words, so that they can operate more like a quasi-executive board. In the life assurance sector, for example, which faces similar issues and opportunities, such questions are monitored on virtually a daily basis. This may also suggest that the composition of trustee boards will also need to have more of a bias towards professional expertise, and away from lay membership.

Mr Hawkins: I am a trustee of a very small scheme. My overwhelming feeling, wearing that particular hat, is that it is a bit like being a punch bag, over the last few years, with all of the acts, regulations and changes.

However, raising one's head from the canvas yet again and looking around, I think that, if I were choosing an area to worry about in all of this, it would be credit risk in all its facets. It has been quite popular over the past year or two to look at sponsor credit risk, of course. Most of the companies with which we have worked have done covenant assessments.

What I am identifying today is that people are going beyond the reports from their accountants, and are looking to see what the market is saying about the company. Is its share price tanking? Is its credit default swap (CDS) price going out into the stratosphere? Are the bond spreads widening? What is happening to the Standard and Poor's (S&P) rating, or whatever? We are beginning to detect trustees asking many more questions about that rather than just the internal questions on sponsor credit risk, and also the counterparty risk.

Again, I think that, at some time during the next 12 months, somebody somewhere in the

world is going to have a major problem when the collateral which they think is securing all their derivatives does not exist in quite the amount which they thought it did. You are going to see some major issues here. It might be a pension fund; it might be a bank; it might be an insurance company. If any trustees have any spare time, I would be looking at making sure that my collateral arrangements were in order on my LDI strategies.

I do not feel under any particular pressure as a trustee to be looking at buy out. I think that these markets come and go. I think that you will get the combination of interest rates and equity market levels which will permit you to do it in the future. I would not be worried about that. My worries would be elsewhere at the moment.

Mr Clarke: The attitude to the risk profile of pension schemes, is quite complex and apparently counter-intuitive to someone like me with an insurance background owing to the tripartite and unaligned interests in the scheme from the trustees, beneficiaries and sponsors. Whereas in an insurance company, the greater the capital backing the greater the risk appetite, in a pension scheme, the higher the funding, the lower the risk appetite.

I also have a question about whether current market conditions encourage trustees to migrate towards the buy-out market, as opposed, possibly, to some of the other options available to reduce risk. We are in the process of doing a review of our risk process at the PPF, which is how we charge for the risk, with a view to becoming somewhat 'fairer' in the future. One of these aspects is taking account of the risk strategies which pension schemes and their sponsors have adopted, so that, in future, we can reflect that in our pricing.

In the past two or three months, we have, therefore, been doing some informal research. The outcome of that research is quite interesting. The conclusions are that, despite their ready availability, two things are happening, but very slowly. First, there is the take-up of LDI in its fullest sense; and secondly, there is a migration of asset allocation away from equities into bonds.

The National Association of Pension Funds (NAPF) reported some findings in their annual survey, which showed a very slight migration from equities into bonds. Our own research, which we have not released yet, is showing very little appetite for bolting down the risk, and worse, in terms of the prospective view (and this is coming from the pension scheme managers), is a lack of appetite for even considering it in the very near future.

To think that trustees have got a buy-out solution at the top of their agenda would not appear to be justified from the way in which they are behaving, in terms of their appetite for carrying investment risk. I do not offer that in any sense of condemning anybody. My job is to price this, not to tell people how to manage it. It just occurred to me that it would be useful to share that information, because it appears to be, as I said, a counterintuitive finding to set against an apparent appetite for pursuing buy-out solutions.

Mr Bowie: I agree with Mr Ross that I think that one of the things which will happen is that people will look back at those moments in July and October 2007, when they were nearly 100% funded, and it was gone in seconds. It has caused a number of trustees to think, prompted by the sponsor, about ways of being a bit sharper and of being ready to take action the next time an opportunity like that comes.

Although I said that the terms have got a lot better, and, for some funds, buy out is a prospect, I think that the reason for Mr Clarke's survey results is that there are many schemes which are a long way from buy out — where they are still 15% to 25% short of what would be needed. For most of those, buy out is not really an option. They are still in the traditional game of having to pursue returns in order to close the gap.

Mr A. C. Martin, F.F.A.: I ask the Profession to emphasise, in talking about pension PPF benefits, that they are not really protection in the normal sense, but they are compensation. The Department of Work and Pensions (DWP) lawyers have been very careful, and it is only compensation which is provided. It can be reduced or, indeed, removed in future. Perhaps we should just compromise, and call it the 'PPPF' because it is only a partial pension protection fund.

There are funds which were paid up in the late 1990s, perhaps with expensive pension increases, perhaps also with highly paid executives who might have only 40% or 50% of their benefits protected. So, it is important to consider that it is only compensation.

I also thank Mr Speed for his initial comment on expenses. It is very important, and I would encourage all consultants in their reports on risks in concentration, etc., to capitalise over the next 50 or 60 years the exact, or realistic, cost of their time cost remuneration in terms of running the scheme. It is a very scary capitalised figure of running on a scheme, and would, indeed, make buy out very attractive, particularly for smaller entities.

Coupled with that, perhaps it would also be useful, in considering the difference between buy out and running on, to have a realistic assessment of how much it costs either to get into the PPF or to get to a position of buy out. My experience of wind up is two to three years, in which time 3%, 4%, 5%, or sometimes 10%, of the fund can easily be spent on expenses.

Data cleansing is a huge issue. I am not sure of the experience of the PPF so far, but some statistics from them might assist in the realistic expenses, as I call them. Deals with large providers can be done at very attractive headline rates, but if you then add on the time-cost-related items: when a phone is answered; when a 't' is crossed; or when an 'i' is dotted; you get a different picture.

Next, I consider the return on funds, where Mr Hawkins's comment on the efficient use of capital is very relevant, and general returns on funds of capital employed in companies, in my experience, will be something above 10%, rarely above 20%, but certainly a very high return on the capital invested, and, in comparison, gilt, bond or even equity investments seem to be a pretty poor use of capital.

This is very relevant, and also brings in what I think is key — the other risks involved. If you can sell the three parts of your publishing empire for more than you can with bits of defined benefit schemes attached, even if you could apportion them between the three bits, then there is obviously another angle to the return. Perhaps some of the life offices represented might comment on their own return on capital, and how that compares with their annuity business, to speculate as to whether their staff pension funds would be bought out in the future.

The accounting standards moving to gilts, possibly, and the recent pronouncements on medium cohort with a floor from the PPF, and long cohort from the Regulator, I think will catapult several players into the buy-out market. I suspect that it is more likely to be a minority than a majority; most will still be struggling with their recovery plans over the next ten years or beyond.

For the Regulator, I hope that pensions' repackaging does not take place in a similar way to the mortgages repackaging of recent years.

Mr Clarke: The job of providing compulsory insurance far into the future is not one which could be undertaken by a commercial entity with a cast iron guarantee. I think that most people acknowledge that. It is interesting to look at what has happened in the European Court of Justice and the way in which the Government has tackled the Financial Assistance Scheme; the extent to which, in some unforeseen circumstances in the future, whether the Government would let the PPF reduce its benefits if that were the only option commercially available to it at the time. However, we can only speculate about that.

The point about the costs of wind up is interesting. Certainly we encounter, from the other side of the fence, the pain and the problems associated with making sure that there are sufficient, clean data ready to pass into our hands. The thought of being able to do some decomposition of that to the benefit of other participants in the marketplace is something which I will take away.

The Regulator is doing some benchmarking of administrative costs and services in general. Maybe that is covered by what they are looking at.

Certainly, standards of record keeping and data quality within the schemes which pass through our hands is not something which one would necessarily be proud of if one were providing that service.

From my own history, I do not think that it is any different from where insurance was many

years ago. I think that the commercial world has moved on a lot further in insurance than it has within pension funds.

Mr Speed: I fully agree about expenses. I think that it is an area where greater transparency is needed to work out what is the true cost of running a pension scheme. It is something from which we should not shy away, as actuaries.

I think that Lord Myners did us a great favour when he did his analysis of what the costs are. Although total expenses may be large, the amount which actually goes on actuarial advice (which is probably the most specialist and important area) is still quite a small part. There are ways of dealing with this. For example, in the transaction which was referred to by Mr Hawkins earlier (the Emap transaction), we, as the insurance company, took data risk. Paternoster carried out due diligence, and the risk inherent within those data was passed across. If there are errors and problems in the data, then these fall to the company. So, it was an innovation in insurance, something which was previously considered uninsurable is now insurable.

In fact, going back to the start of the Emap transaction, I remember sitting down with the parties involved, and they said: "We want to do this in this time scale and take these risks." Our reaction was: "That is interesting!" which they thought was quite good, because everybody else had told them: "No, it does not work like that." I think that it shows how quickly markets are moving. Something which was considered to be impossible a few months ago is now considered to be a template for how deals should be done in the future.

This can be the case in mergers and acquisitions, in particular where a deal needs to happen quickly. This comes back to releasing value. Also, consideration of the point made by Mr Hawkins is required, namely: "Will I be rewarded by the market for doing it?"

There are many cases where a company with the pension scheme risk attached is seen as too big a risk. The actual business is very attractive, and a better price can be secured for the business, even after allowing for putting money into the pension scheme to enable it to be passed into the insurance sector. In these areas, we are going to see some very focused, very intense, activity. There is a massive opportunity for actuaries to step in and to deliver the product in a timely and accurate manner, so as to allow transactions to proceed.

Dr L. M. Pryor, F.I.A.: We have heard some interesting things about the types of risks which are being transferred, and it seems to me that what I am hearing is that, in some of these buy outs, more risks have been bundled together than was previously possible.

Do the panel have any views on whether the opposite is likely to happen; whether, instead of buying out all the risks for a group of members, trustees are likely to want to buy out one particular type of risk for all the members? I am thinking here especially of longevity risk unbundled from any other risks, although I would be interested in other types of risks, too.

Mr Hawkins: I will offer, again, a very specialist comment on this. I think that, when firms sit down and do the analysis, looking at the comparison between a buy out and other forms of de-risking, including longevity, interest rates and inflation, often you can get to quite a fine balance about whether it makes economic sense to do the buy out.

One particular unknown is future tax treatments. Our current Prime Minister, when he was Chancellor of the Exchequer, did some dreadful things to the pension tax system. There is an assumption that this will never happen again, and let us hope that our assumption is correct, but it is not necessarily so. From a corporate point of view, being able to pass that risk on to an insurance company can be very attractive.

We have also talked about expenses. Clearly the level, the present value, and the variability of expenses are important things to try to understand. We have seen unexpected inflation levels and particular costs associated with pensions, and I can quite see, in the future, that, in order to achieve the levels of data integrity which the Pension Regulator and the PPF would like to see, much more has to be invested in that than companies have done hitherto. So, I think that there will be very few companies which are getting those expense projections right at the moment.

On longevity, in particular, we are regularly getting quotes on longevity swaps with all sorts

of counterparties, some of them the sort of people who you would take home to introduce to your mother, and some who you probably would not. Assessing the credit risk on some of these latter ones is quite difficult, even if you allow for over-collateralisation. So, I think that it is fair game when it comes to analysing longevity risk, although I would draw the distinction between trustees looking at it and sponsors looking at it. Many of the cases which we see are very much based on the sponsor driving it rather than the trustee.

Mr Bowie: There is already some evidence of specialisation; picking and choosing among the big companies, which, perhaps, have their own in-house treasury expertise and feel that they can actually manage a number of the financial risks themselves. They may, indeed, wish to take some financial risk, have it controlled and have it seen holistically, as part of all the different risks which the corporate entity is taking.

I agree with Mr Hawkins that there is a lot of interest. The one thing which they cannot manage is longevity risk. That is one thing where they have no in-house expertise. I am sure that we will have an increasing number of longevity indices and other benchmarks around which these products can develop. If we were having this meeting in three years' time, we might well look and see the growth in longevity hedging as the biggest single thing which has happened over the three years from 2008 to 2011.

Mr Speed: I very much agree; from a personal perspective I expect the market development to be the unbundling of risk. Historically we have seen: "You want a bulk buyout? There you are. Take it or leave it."

That does not have to be the case. As has rightly been pointed out, there is no economic reason why you cannot unparcel these risks, and can look at pricing them separately, to see which ones you are best suited to keep, and which ones you are best suited to pass across — back to the idea of specialisation and playing to your strengths.

We are seeing a huge amount of interest in longevity swaps at the moment. That will continue, but there is one quite severe brake upon this. It comes back to the point made by Mr Ross earlier, about the known unknowns and the unknown unknowns. I think that there has been a bit of a reaction to mortality improvements. That was the most recent unknown unknown which came to bite us. Yes, you can insure against that, and we will see some large deals happening this year. There will always be a question mark about what other assumptions we may not have dealt with. What are we going to be sitting down regretting next year?

Maybe it is not surprising that, instead of seeing the unbundled risk, we have seen interest in going even further towards wrapping up more risk and passing it all across to insurers. Essentially, this is a lot to do with the ultimate aim of both the sponsor and the trustees being able to stand up in front of the members and to say, "I have done my job. I fully delivered on all which I promised you." The quick route to that is risk transfer.

Mr Hawkins: On a slightly different point, as a fully paid up member of the Association of Corporate Treasurers, I think that I am entitled to say a bit about treasurers.

They have all failed at something. Anybody who is a treasurer has got there because they have failed at something else. It was stockbroking in my case. Nobody ever goes through college or university and wants to become a treasurer. You do it because you do not pass the accountancy examinations, your bank goes bust, or something. So, you have to treat treasurers with a bit of scepticism. They are normally very good at documentation. They understand it and do it in their sleep, and that is fine. Because most foreign exchange and, indeed, most swaps which treasurers do are very short dated, very few of them are knowledgeable about credit support annexes and collateral. So, you often come across treasurers who think that they know what they are doing, but actually they do not.

The other thing which treasurers love to do is to get competitive quotes for everything. If you are dealing in short-term foreign exchange or interest rates, that is fine. You can do it. You have a bank of phones or one phone with a couple of switches. However, when it comes to a 50-year inflation swap, it does not work quite like that. Again, treasurers need some education

on this. They have skills, and I am quite proud to be one, but you must not assume that they all know about what they are doing all the time.

Mr C. W. F. Low, F.F.A.: I have two questions for the panel. Thinking a little further out, in the next six to eight weeks the European Commission is due to issue a call for advice on the applicability of Solvency II to pension funds. While, in the U.K., we may laugh that this is such a daft idea that it could not possibly happen, I must say that I am not at all complacent on this. However much we defend this with the existence of the PPF and the sponsor covenant, we could end up with Solvency II applying to the PPF, and then, when you look at the resultant PPF levies, would not buy out look cheap? So, this is question one to the panel: "Do they see this scenario as a probability?"

Question two is on the use of longevity derivatives. I was very glad to hear Mr Hawkins speaking about counterparty risk and about looking at the detail of the documentation, something which the Pensions Regulator certainly worries about when trustees get into the derivatives market directly. However, we did hear at two conferences in London last week that some longevity deals have been done. The other counterparties are not life offices, but are sometimes hedge funds, and sometimes investment players on a five-year look.

There is a weight of money out there waiting to do lots of that. The market was quoted last week as being somewhere between medium and long cohort. It seems to me that, perhaps, there might be a market there for new life players actually to be buying these derivatives rather than selling them.

Mr Speed: I start by replying to the second question. I think that longevity derivatives is a fascinating topic. It is something at which we have looked very closely, and we will continue so to do. If you can lay off the longevity risk elsewhere, that is one less thing for which you have to reserve, so that you can run your business more efficiently. However, the big thing about longevity is that it is non-trivial. It takes a lot of effort, a lot of knowledge, a lot of data research, to understand. To have a truly efficient liquid market, you need to have many players who have equality of information. That does not sound to me like longevity.

The real risk with a longevity market is that you set up a longevity swap, and someone comes along and says: "Actually, I know quite a lot about this. I am quite happy to put my money where my mouth is." As Mr Goford rightly pointed out, many of the investors in the new players in bulk annuity are very much about taking on longevity risk. If someone offers a product where I can take longevity risk directly and pit the expertise at my disposal, which is in short supply, against someone else, that sounds like an attractive proposition to me.

I think that there is a real barrier to the development of longevity derivatives and trading from becoming a really big liquid market. I think that there will be many attempts at it, because the prize is so big. If and when it does develop, I expect it to be, essentially, an institutionalised over-the-counter market, because most people do not have the resources, time, effort and expertise, to research and to fully understand the implications.

If there are hedge funds willing to put up large amounts of money, I would very much prefer to be the investor who had someone like Richard Willets, our longevity director, saying which way to bet than those running the hedge fund, who are probably at an informational disadvantage.

Turning to the applicability of Solvency II; I certainly do not dismiss it. I am not close enough to assign a probability to it applying to pension schemes, but I can see that there is a great attraction of clarity. There has been a lot of discussion about the employer's covenant, how to measure it, and how to quantify it. I think that Solvency II may provide a quantification. If the employer's covenant is really worth x , demonstrate it. Why do you not raise x amount of capital and put it in an escrow account, so that we can see the reserves just as an insurance company does? After all, we are looking at the same economic entity, you just have to put a different label on the top.

That is perhaps over-simplified, but I think that it is a very hard argument to refute. If Solvency II is not going to apply, then there is going to have to be some very serious thinking.

This could be a re-run of when we first looked at accountancy standards, and the Actuarial Profession said: "You can take into account equity returns in the long run, because that is how we fund." After being asked many times how the Profession does this, we could not come up with a robust answer. As a result, we ended up with AA-rated bonds, and now it looks as if we might go to risk free.

Mr Bowie: I agree with Mr Speed on the longevity point. Very few people know very much about this subject. Until many more people know more about the subject, it will be a restricted market, in which there will be a few people with a lot of knowledge betting against a large number of people with a little knowledge. You will certainly want to be one of the few rather than one of the many.

On the Solvency II point, I think that we are going to end up with something like Solvency II anyway, whether it be through Solvency II, or whether it be through changes in the accounting standards. We are headed down a road, and it seems to me, inevitably, that pensions will be valued in the old-fashioned sense, according to something pretty close to risk free, and that capital will need to be demonstrated from somewhere either formally or informally. Solvency II will take a long time, but it is a place on a road down which we are heading anyway. The only issue will be how quickly we get there.

Mr Clarke: I have to be careful of what I say about Solvency II, so I will talk personally, rather than in my current role.

The personal experience was going through the introduction of the FSA's current capital assessment regime for insurance entities, coming on the back of the realisation that longevity, and also low interest rates and guaranteed annuities, guaranteed benefits, could all become unravelling at one and the same time. The traditional risk measurement techniques, even as recently as the late 1990s, did not fully prepare us for the consequences of that.

My professional revelation was when managing an insurance business, seeing for the first time numbers set against all the risks which were involved in the business. As a manager responsible for the bottom line, the clarity which that gave, and the quantification which you could ascribe to every possible strategy, was quite a revelation.

It is a shame that it was driven by the regulators. Nevertheless, the insurance industry got there. There are some parallels with pensions, where the two worlds are beginning to come together. Much talk and much noise about Solvency II, in terms of its potential impact on occupational pension schemes, is the influence which it might have on investment strategies, such as a mass migration out of equities into bonds.

What Mr Speed said, in my view, was quite true. We have this mysterious entity called a sponsor covenant for final salary defined benefit schemes. Would it not be a good idea if we actually put a number to it? In a sense, in my professional life now that is what I do. I put a number against every pension scheme, all 7,800 of them, in terms of what the value of the covenant is, because that is, effectively, part of the risk which you represent to the PPF.

So, I can see the attractions and the advantages of it. In terms of whether it influences behaviour, if that fairly significant change does change behaviour, then it is not saying that the rules have changed therefore we have to adopt different strategies, but what it is actually saying is that we have had a revelation about the risk which is there, and that is now the motivating factor for changing behaviour.

So, I do not see it as being, necessarily, something which is likely to happen, because I think that the U.K. is such a special case, when it comes to pensions, having, obviously, a different set of laws, including having the PPF underpin. I think that the political debate has yet to roll on.

In terms of the potential for getting clarity and quantification about risks being run by pension schemes and their sponsors, I think that there is a lot in there to commend it.

In terms of the PPF's own measurement of risk, I alluded to the fact that we take (in the macro sense) a view about the capital required to support the risk. Although we do not have the capital, the capital is contingent; it sits on somebody else's balance sheet, and we extract it gradually by way of a levy.

Nevertheless, in terms of measuring the overall view of risk, the techniques which we adopt are similar to those which you would find in an insurance company which had to post the capital. I think that what Mr Low was alluding to in his question is that, if we had to charge up to the amount to provide the absolute security, then the model would be broken, and we would be charging you far too much because we start off without any capital. So, we would have to build up the capital and charge you for it. That would make the propositions of some of the companies about which we are speaking in this discussion a lot more compelling as an alternative to the PPF.

I can see the merits and the advantages of being open and honest about the measurement of risk. I do not think that it will happen in the way which we might fear as result of the political activity going on at the present time.

On longevity, I think that it would be great for the market if longevity swaps developed. I think that the visibility and the fair price, fair trade, for these things would be fantastic for risk managers. I just do not think that there is enough supply to meet the demand. I think that it will be a long time before the market balances itself out.

Mr Hawkins: Concerning derivative counterparties, I have a little vignette of something which we saw recently, where a trustee board was offered the opportunity to enter into a longevity swap, and different counterparties wanted to do it in different ways. Two of them wanted it to be on the basis of an International Swaps and Derivatives Association (ISDA) contract, which is fine, because that is commercial law and everybody understands commercial law. At least one of the others wanted to do it on the basis of an insurance contract. I am sure that many people here know more about insurance law than I do, and I can guarantee that you know a lot more about insurance law than the average trustee does. What they completely failed to understand is that you have an absolute responsibility to disclose everything material to the insurance contract, and, in a longevity situation, that includes disclosing to the counterparty everything which you know about the longevity trends of the population which you are trying to insure, assuming that you are doing it against the population rather than against the index. This point was completely lost on the trustees.

When it was pointed out to the insurance counterparty that they were really not playing in the spirit of the game, they eventually reluctantly agreed to do it on the basis of an ISDA contract. That is something on which you might want to keep an eye.

Mr A. M. Slater, F.I.A.: I work for a company which is a fairly new addition to the list of companies providing insurance solutions. I want to speak about the current way of describing an actuary as a risk manager.

It seems as if we have a long way to go to justify that claim. We seem to think that risk management means who can produce the longest list of known unknowns and unknown unknowns. We are at risk of putting the word 'risk' in front of everything. So I will take it to the logical extreme — and ask: What is risk risk?"

Mr Speed mentioned the question of whether pensions are the same thing as insurance. This comes back to points recently made on the application of Solvency II, and current discussions in Europe. Pensions are not the same as insurance. The difference, if we cannot see it, is the fact that pensions have a sponsor, insurance does not. That is the key risk in pensions; what happens when the sponsor fails. When a sponsor is there, everything is fine. When a sponsor disappears, that is when there is a problem.

My concern around risk, what scares me, is not this list of unknown unknowns, but the risks which we know are there, but, because we do not know what to do with them, we do not look too closely at them.

With pensions, the key risk actually lies outside the pension scheme; the risk of the sponsor failing. This is a fairly alien risk to the Actuarial Profession, but it is actually the key one, and it has an order of magnitude greater than worrying about the investment strategy or worrying about longevity. It is the longevity of the sponsor about which we should care, not the longevity of the member.

Defined benefit is a superior form of pension provision compared to defined contribution in so many ways. It would be a real pity for the Actuarial Profession if we get rid of the problem by getting rid of the scheme, instead of actually tackling the problem head on.

Mr Speed: I agree that one of the key risks is that of the sponsor disappearing. You need to look at the different stakeholders here. First, I have yet to meet a finance director who believes that his company is going to go under in the near future. Inherently, they have an optimistic view.

Similarly, the trustees are placed in a very difficult position; when it comes to the sponsor covenant, they would very much like to believe that the sponsor will always be there. However, they do not have the reserves in the pension scheme to protect against the adverse event of sponsor failure. Indeed, they operate with negative capital (or a deficit), whereas an ideal pensions scheme governance model would have a positive amount of capital and a separate entity covering the risk.

I think that, looking at specialist vehicles, insurance companies or alternatives are going to be attractive for economies of scale and managing those risks in an effective manner.

I fully agree with Mr Slater, so let us look and focus upon the risks. There will not be one solution to fit all, but some of the solutions now being developed are very attractive to stakeholders.

Mr Bowie: I am not sure which is the biggest risk, because it varies from scheme to scheme. The covenant risk is, in effect, only in respect of that part of the benefit which lies between what the PPF will provide and the total benefit. So far as the members are concerned, that is the only part of the sponsor risk. When you take that into account, it is only that sliver of benefit, from the member's point of view, so I am not sure that it is quite so clear cut.

Mr Clarke: I am struggling a little with what a list of unknowns looks like! In terms of quantifying the risk, this is something which we have done, and I think that Mr Slater is right that longevity falls into insignificance compared with the credit risk that is there, and also the market risk.

In terms of quantifying the risk which sits under the PPF at the present time, one of the measures developed and used, the market risk, which is the interest rate and equity risks which schemes suffer, is more or less the same as the credit risk of the sponsors. They are virtually equal in amount, and, as I said previously, considerably exceed the longevity risk.

Probably where Mr Slater and I would agree is that these risks are made more affordable by an insurance solution, whether it is through your own organisation or through the PPF.

Referring to what Mr Bowie has just said about the sliver of difference between the pension scheme and the levels of compensation, we actually only take 1/5th of the risk out of the equation. So, 4/5ths of it still is that gap between the level of PPF compensation and the scheme benefit. The reason why it is so large is the circumstances in which a sponsor goes into liquidation or insolvency, and the degree of underfunding is such that, in PPF levels, it is a much smaller proportion of the total than the difference between the two, where the funding level is sufficient to pay PPF benefits, but not sufficient to pay the full scheme benefits.

So, we take a lot of risk out of the equation. We take 1/5th of it out, but there is still 4/5ths of it for the pension scheme members and their sponsors.

Mr Hawkins: I have a great deal of sympathy with the points made by Mr Slater. It is very easy to forget that, when the CFO of the investment grade BBB-plus company says that it is undoubted in credit, if you look at the historical default frequencies for the BBB-plus credits of S&P over the last ten years, it is about 1 in 20, about 5%. For that same company, if you look at their Credit Default Swap (CDS) prices, or at their bond spreads, or at a proprietary model like KMV, you might well find, over a ten-year period, that the expected default frequency is a lot higher than 5%. So, I think that a lot of CFOs and treasurers need to be brought back down to earth if you get into that sort of conversation.

Mr Bowie mentioned the fact that, as you are funding, at least some of the benefit goes to the PPF in this country. This is the extraordinary thing about Germany. I do not know what the current number is, but something like 80bn to 100bn euros of assets have now been put into Contractual Trust Arrangements in Germany, completely voluntarily. There is no tax advantage. There is no reduction in the PSV levy, which is their PPF equivalent, and virtually the whole of that 80bn to 100bn euros benefits the PSV rather than the members of the schemes. It is something which nobody has ever managed to explain to me.

Mr Goford: I have a comment on the size and the nature of the employer covenant. Yes, it can cover the deficit — that is what it is there for, but also, for a fund which is funded assuming an equity risk premium and has a mismatched portfolio, the employer covenant is also covering the mismatch or volatility risk.

Even if the covenant is big enough, if you could value it, and if it was then invested in the same portfolio, you then get a volatility risk on that investment as well. So, it does not solve the problem. Then, looking at the nature and term of the asset and liability, the short-term liability of making up the deficit is there, and that may be covered if there is enough in the treasury, but the mismatch or volatility risk is a 30 to 40 years' risk. I just wonder how many covenants on the employer are credible for more than five or so years. It just does not work.

Mr Hawkins: I think that this is a debate which is going to go on and on. There are going to be more companies particularly, and possibly more trustees, who are going to look at this very seriously over the next 12 to 18 months. I would be staggered if the volume of business does not continue at something like its current level or somewhat higher. Certainly, for a lot of companies, this is the way of the future, rightly or wrongly.

Mr Speed: There is great potential in this area. It is an exciting time for the Actuarial Profession. Particularly on the pensions side, many of the changes in recent years have been driven by regulation, be it Government regulation or accounting.

It was meant to be the dawn of risk sharing pension schemes. Instead of going from defined benefit to defined contribution, there was going to be some middle ground. Although there was some work done on that, it never really seemed to take off.

The idea of risk transfer from pension schemes to other vehicles, whether partial or complete, is an exciting area. It is a real chance to show product innovation, innovation in the way in which advice is given, and to show how to deliver solutions to clients in a way which I do not think that we have had the opportunity to do for quite a few years. It is a great opportunity, let us seize it.

Mr Bowie: My comment is to be slightly perplexed about one aspect of this, which, if there were a change, would accelerate the interest, and it comes back to the original point which was made by Mr Martin and the response of Mr Hawkins, taking the Emap example, where the value to shareholders of the underlying business was improved apparently once the pension schemes had been got rid of to a specialist insurance company.

What perplexes me is why, given all the covenant worries and the possible drain on the company resources which the pension scheme might represent if the investment risk went wrong, and all the rest of it, City analysts do not put a bigger penalty upon those companies which have these kinds of risks. It seems to me that most of the motivation for this has come internally, within companies in their risk management departments. It perplexes me that City analysts do not seem to have reached any kind of level of sophistication in this. If that were to change, incentives for companies really to get on and to do something about this would be much greater. I suspect that, without that incentive from the quoted company analysts, we may see a sudden acceleration of interest in this, which might then progress at a much more gradual pace.

If the analysts really got their teeth into this and understood it, I can see there being another spurt to this, and a new generation of products emerging.

Mr Clarke: I agree with that comment. A higher visibility to the risks, whether it comes from that particular source or from elsewhere, would give a further stimulus to it. We have heard, in this discussion, that trustee groups do tend to be fairly cautious in their approach to this. For me, what has happened is that the market has had one or two high profile new entrants and a lot of 'me-too'.

The high profile ones have potentially more traction. The 'me-too' have driven, in true insurance fashion, into product development as their source of market exploitation. We have seen quite a lot of different solutions of different types and different natures, whether they be bundled, unbundled, or whatever. I feel that the market will settle down as some of those innovations, frankly, will not fly. There will be a growing body of schemes taking this particular route.

My own anxiety is around this apparent dichotomy on the part of trustees, that, while buy out is good, we still do not seem to be seeing exactly the same behaviour when it comes to taking some of the risks out of their investment portfolios. Mr Goford referred to the potential for future catastrophes, which may not be supported by a sponsor. Yes, the market is growing. People are definitely seeing this as a way of reducing risk, but there are other ways of dealing with reduced risk, not just a full buy out.

The President: I am sure everyone here will agree with me that we have had an excellent discussion on an extremely current and important topic. That is all down to the quality of the panel which we have had before us. I should like you to join me in congratulating the panel on their contributions.