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Rate of change

Life & Pension Risk and roundtable sponsor Royal Bank of Scotland convened with industry leaders to discuss the future of the German life insurance sector as it faces low interest rates and a new regulatory regime

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Interest rates are particularly low at the moment and have been so for some time. How concerning is this for the German life sector?

Johannes Lörper Of course it is a matter of concern. Having said that, there are several dimensions we have to talk about. For the existing business, we have to find assets and adjust our asset liability management in order to cope with the situation. We also have new business, and we have to think about how we should deal with that. Should we stay with the current business model, what is the influence of the new interest rates, and how long should our guarantees be?

Axel-Rainer Hoffmann Low interest rates are definitely a concern for us. Guaranteed rates for new business are being lowered to 1.75% from the start of next year, which means some relief but, overall, it's still a concern. When you look at the risk drivers – especially for life insurance companies, but also for health insurers – interest rates are still the main issue, especially with equity rates being kind of low after the crisis. Interest rates are the big risk and it is about duration and convexity. Interestingly, the market has responded to this in diverse ways – some firms have quite a long duration and have also addressed convexity issues, while others say they are waiting for a strong rise in interest rates and are rather short.

There is an element of game theory and that is very interesting to see because, when Solvency II comes into play in 2013, the firms that are now brave and think that interest rates will rise might be in a better position than the ones that follow sound risk management today. That is an odd situation – it might change the picture.

Isn't the solution to this uncertainty simply to match the duration risk?

Josef Seigner First of all, do we match our duration? Frankly, no. Is this risky? Partly. Is this irrational? No, this is part of the business model, particularly if you distinguish between runoff and a going concern. In a going concern, we can diversify risks along the time axis and it is perhaps not wise to match the runoff duration. On the other side, I think duration risk is a pretty poor bet, so I wouldn't take too much of it – I like other risks more. The fact is you will not match it completely, even though there is more need to match duration as rates decrease. I cannot imagine anybody in a going concern matching fully.

Paul Fulcher

Photographs: David Bathgate Photography

Paul Fulcher The difficulty of a low interest rate environment is that, at the end of the day, you are caught between a rock and a hard place. If you lock those interest rates in, the one thing you guarantee is that you are going to give low returns to your customers. If you don't lock those rates in, you are clearly exposed to falling interest rates and the need to hold capital against that.

Johannes Lörper We promise our clients – not a guarantee, but an implicit promise – that we will eventually move with interest rates. That means we make

Axel-Rainer Hoffmann

the implicit promise to not lock ourselves in. If we completely matched everything, then we could have the problem that people would feel cheated about their old-age pension if there were some inflationary tendencies and we were not able to move with it anymore.

In that context, does the move to reduce the maximum guaranteed rate for new business to 1.75% make life easier?

Axel-Rainer Hoffmann I think it is a double-edged sword. From the risk management perspective, it obviously helps if there is a lower guarantee for the new business. However, it is not good for the product itself. The sales force and distribution don't like it too much because, if policyholders only get the 1.75% guarantee after costs, people ask the questions: 'is that inflation hedged?' and 'what's the real rate when buying a life insurance policy?'.

Johannes Lörper In the past, the sales force played with the magic of large numbers many times. They came up with a small premium, which somebody had to pay, and a big outcome. It was in times of high inflation so, in real terms, it wasn't that much. Nowadays, if you tell people 'OK, you'll get your money back', it is maybe a good proposal from our point of view, but not from the client's. That's the real problem with low interest rates.

Paul Fulcher There is an important issue for the insurance industry to deal with relating to implicit versus explicit promises to customers. The regulatory environment increasingly puts more emphasis on the explicit promise, which is the guaranteed level and arguably makes one hold overly large amounts of capital against that. Against this, the industry has successfully highlighted the risk-absorbing effects of technical provisions, which is another way of saying 'well, if the worst comes to the worst, we don't honour those implicit promises – we only honour the explicit ones'.

How do you hedge out an implicit promise? What is the solution?

Paul Fulcher If you completely hedge an implicit promise, you have essentially made it explicit and, therefore, lost the important advantage of flexibility needed to manage the risks. I expect to see an increased trend towards people hedging these risks more dynamically and not completely locking everything in. The difficulty with this is that dynamic hedging can sometimes mean chasing the market down.

Axel-Rainer Hoffmann We try to capture the tension between explicit and implicit promises as the portfolios are built and when the strategic asset allocation is defined. We try to differentiate between hard guarantees that are really embedded in the contract – for example, the minimum guaranteed rate and the option to lapse – then we look at the softer things, like policyholders' reasonable expectations. Then it is basically a change in parameters. Depending on where interest rates are, the lapse sensitivity might be different. Both things are obviously very difficult to model, but we try to address them in the asset allocation – not only to match the guaranteed cashflows, but also the embedded options and derivatives we have in there. For some products, you need quite a lot of convexity to match those, and then you start thinking 'where's the thin line between hard guarantee and policyholder reasonable expectations?', because it is just too costly to fully match all of your options. That's why I think there is no-one in the market who really does it 100%. It should have been done eight or nine years ago because the rates were high enough then, but I don't know anyone in the market who was that advanced with all that modelling.

Is a change to the hedging approach the only way to overcome these difficulties?

Axel-Rainer Hoffmann I think other products will have to play a bigger role, so unit-linked with guarantees or variable annuities will come back because they are very attractive. Let's say we have a 6% interest rate – we could easily guarantee 4% to the customer. Things would look much better for new business, but we might run into trouble with our existing block of business because we have never experienced a rate increase as high as that, and policyholders are more financially rational than they were 10 years ago. I even think the German tabloids would tell the customers: 'now you must lapse your policy because it is better to switch to this and that'.

Johannes Lörper And because we have guaranteed surrender values.

Paul Fulcher We tend to talk about customers as 'rational', but we sometimes mean the customer is selecting against us as an insurer. In reality, a customer makes decisions for their own benefit. For example, they change their policies because they cannot afford the premiums anymore or because there are competing products elsewhere. How concerned should we be as an industry about those embedded surrender options and potential risk?

Axel-Rainer Hoffmann I'm concerned that if rates really rise a lot then the picture changes, so I absolutely agree with you – as long as the rates are around the current level or 100–150 basis points higher, then the policyholder lapses because of other, private reasons. Customers are not that rational, no-one calculates daily what the intrinsic value of their life insurance contract is compared to banking products. If rates are significantly higher, let's say 7–8%, we will be in a different situation.

Johannes Lörper It takes quite a while but there comes a point when you could write in the press that it was better for everybody to lapse, and then we would have a problem.

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Axel-Rainer Hoffmann They tell you, now switch to this or that banking product, or even switch to a variable annuity from the same provider. My expectation is that financial rationality will increase with increasing rates.

Variable annuities have not been successful in Germany so far – with AXA's Twinstar being one of the first launched. Is it true sales weren't high despite the product being underpriced?
Axel-Rainer Hoffmann That's no secret. The market timing was unfortunate so it was dramatically underpriced. The first series of TwinStar was a big gift to the customers and, when the press got it wrong, they said: 'AXA has a problem with TwinStar. You've got to get out of those products'. We didn't want to object to that, but the truth was the other way around, so it was really a gift to those customers. Now that we've re-launched the product, it is more costly because we have to charge higher implied volatilities and consider current market conditions.

Does that make it an uneconomic proposition? If the customers weren't happy with it before, and now it is more expensive, how realistic is it that it is going to become popular on a large scale?
Axel-Rainer Hoffmann We are still selling that product in different versions, but obviously we don't meet the first business plan expectations because, compared to the interest rate, the prices of the options are too expensive. I'm convinced that, if rates go up to the region of 6–8% and the market volatilities don't spike very dramatically, then it will be a very attractive product from the customer's point of view, but also from the insurance company's point of view because you can really hedge those guarantees to get the right price and offer an attractive guarantee product.

Paul Fulcher The advantage of the variable annuity business was that it put a more explicit price on the guarantees that were being offered to customers. The difficulty is that, while customers clearly value guarantees, it is much less clear that they value the guarantees quite as much as the cost of capital the insurers are forced to hold against them.

Johannes Lörper They take the guarantee for granted, it just comes naturally. In the past, we didn't give guarantees away for free – we gave guarantees away for our right to set profit participation, to withhold profits, and so on. It was not for free. Unfortunately, in today's environment, the possibilities we have are not strong enough to balance out those guarantees.

Johannes Lörper

Paul Fulcher Because of changes to regulation or because of the current interest rate environment?

Johannes Lörper Partly because of changes to regulation, but basically the current interest rate is the problem here.

If you are talking about the context of regulation, it is difficult to avoid Solvency II, which is clearly different to the current regulatory approach. Is there an issue, from an insurer's perspective, that you are working under a current regulatory regime and yet you can see another in the near future? Are you torn between what is an ideal approach for today and an ideal approach for 2013?
Axel-Rainer Hoffmann Definitely. You have to manage both environments – both have serious constraints at the moment, and then it is a question of where you want to position yourself. You could be a risk taker and speculate on rising rates. So, as of today, you would be insolvent if Solvency II was in place – your duration would be very low, but you speculate on a rise in interest rates and then lengthen your duration. The other approach, obviously, is to pretend that Solvency II is in effect today, thereby leaving fewer options with respect to the strategic asset allocation.

Josef Seigner I do not completely agree with that, at least with respect to Allianz. We have been using an internal model for several years, which is similar to Solvency II, and we are using it among others to steer our business. What we are now experiencing is a certain regime shift in the industry. In a way, the industry used to have a risk-taking attitude in the form – 'this is a risk I can swallow because in 10 years it will have gone away' or 'interest rates are low but in 10 years they will be high again. So, are my buffers sufficient for 10 years? OK, ticked, done'. This was a risk-taker attitude and the company didn't perceive itself to be forced to act at any price. Now, with the solvency fair-value regime, this low interest rate is perpetuated along the forward yield curve implied in today's spot curve. Whenever you run your models and you are not hedged, you continue to reinvest at rather low rates in your model, showing that you don't make the same profits as with high rates. In this fair-value regime – whether it is Solvency II or any other – the notion of taking risk and expecting a better future is gone.

Considering what you are saying about projecting the fair value into the future, does it act as a hindrance to effective risk management?
Josef Seigner No, actually the truth is somewhere between the old model and the new one. Solvency II is a little bit exaggerated. Consider again the interest rate risk – a year ago there were forward rates of 2.5%. These forwards become the assumed reinvestment rates. No wonder this implies a low profit, if not negative, depending on your guarantees. Would you assume that, in 40 years' time, the rates would be the same? Sure, they could be – but what is the probability of that? I don't know, but perhaps not as high as the risk-neutral model suggests. And, while you go there, you have 40 years of new business to come.

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Josef Seigner

Similarly with equities, they have the option to accrue unrealised gains over very long investment horizons. In reality, this option may make them less risky than rolling fixed bonds several times, while Solvency II would just see their short-term risk. So, overall, Solvency II will still allow us to draw our own conclusions. But there are a lot of things you don't model that have a massive impact on your decision.

Johannes Lörper There is one thing before that – what would we take as a long-term interest rate? There is, of course, the ongoing discussion about whether we should ultimately go to an interest rate that is given by assumptions on long-term interest rates, not by the market. If we do that, a lot of the problems we have with Solvency II would diminish fairly drastically.

Paul Fulcher I think that is the most controversial area in Solvency II because, to characterise a little bit at national level, the German industry has come out and argued for the extrapolation starting relatively soon, such as after 20 years.

Johannes Lörper In the eurozone, there is not a real deep and liquid bond market past 15 years.

Paul Fulcher But, if we crossed the border into the Netherlands, you would find insurers arguing that the extrapolation method was artificial and led to distortions between hedging regulatory and economic capital.

Johannes Lörper It depends on what kind of risks you are in.

Paul Fulcher The other difficulty is that the macroeconomic extrapolation method eases the pressure and some of the mark-to-market problems, but it also makes hedging quite difficult. For example, under the Quantitative Impact Study 5 method, there is no point in buying any instruments that have a maturity longer than 30 years because that market rate has no influence on the value of your liabilities. It can only induce volatility if you do the economic thing, which is to match out your liabilities past that point.

Axel-Rainer Hoffmann It's really a very sensitive point, so the question 'what rate do you take at the very long end?' makes a very big difference with respect to the coverage ratio, and that is why we had all of those debates.

Paul Fulcher It seems to be a heretical thing to say in the context of Solvency II, but I'm a little unclear as to why you are allowed to use an internal model for your capital requirement when the risk-free rate has to be set by one body in Europe at an overall level for the whole eurozone.

Axel-Rainer Hoffmann It is understandable that they want to have control over the parameters.

Paul Fulcher It does concern me that, no matter what risk-free rate is chosen for Solvency II, there is going to be market distortion.

Given all of this uncertainty, would it not be simpler to have a standard 4% discount rate that everyone could understand?

Paul Fulcher The question concerns the difference between having information and how you use that information. I think it is very important for regulators to have information on whether an insurance company could wind itself up tomorrow and buy market instruments that match out its liabilities, and hold capital against the non-hedgeable risk. It is wrong for regulators not to have that information. Maybe ignorance isn't bliss, and discounting things at a flat rate of interest and ignoring market conditions is withholding information that is useful for regulators and policyholders to understand. But what you need is flexibility in how you apply that information.

Johannes Lörper But, if you can't rely on that action, it is useless – if you can't rely on the regulator acting on information he has or acting in a relaxed way. If you always have to work under the assumption that they will take the whole thing seriously, then it doesn't help all that much.

Paul Fulcher I don't think there is one magic solution. Another way they could deal with these issues is to build in things like the equity dampener. Some sort of automatic mechanism that allows for market distortions could also be built in.

Johannes Lörper That is why the German Insurance Association position is that, from year 20 onwards, we should leave the swap rates we have and approach a 4.2% line until year 30 – I quite like that position. The only thing I would really like to have – but it would not be politically feasible – is a mirroring legislation that says: 'if it really doesn't work out that way in the long term, then the government or authorities would reduce our guarantees'.

Paul Fulcher We commented earlier about what happens if interest rates rise to much higher levels – 6%, 7%, 8%, even double-digit levels – how happy will people be with a 4.2% ultimate long-term forward rate if the market yields are actually 7% or 8%?

Johannes Lörper With a traditional product, insurance companies would not be able to have that high a guarantee. They would have to keep their guarantees strictly below that 4.2% level. That would be one element. Otherwise, I don't see a really big problem there. You would then have to do higher guarantees in other products, which are immunised against interest rates – it would not be a problem.

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