Interview by Andrew Candland, Head of EIOPA Oversight Unit, conducted by Noel Hillmann, the Report "Insurance Risk and Operations, Europe 2015"

Noel Hillmann: Thank you for joining me today Andrew.

I'll begin by asking, there is no standard definition of how an Internal Model should look. What's the closest in terms of a definition that you can give?

Andrew Candland: I would probably give you three ways of looking at it.

First of all with my regulatory hat on, in a sense the answer is there in the Solvency II Directive, within its principles. Then we have a lot of guidance on what should be understood by those principles and how they should be applied.

The second way I would look at it is to say, the answer is in the first word - "internal", so it's really for the firms to decide how the models should be designed and look like. Clearly it must be tailored to their risks, the way they assess those risks, the way they measure them and also the way in which the quantification fits in with their own risk management framework.

In terms of what the ideal model looks like, there are three things. It's got to be technically good. Its performance should be independently assessed and also should carry on being assessed on an ongoing basis. Lastly, it's got to be a model that the firm understands, including its weaknesses. Alongside that, the model is trusted enough to use to run the business. Those three points neatly map onto the six principles that are indicated in the Solvency II Directive.

Noel: How will internal models be reviewed against the standard model framework?

Andrew: The first thing is that, all firms should be asking themselves the question as to whether the risks that they face are the same as those in the assumptions underlying the standard formula. EIOPA has published a paper outlining those assumptions.

As to what supervisors do, it's certainly the case that a number of supervisors have asked firms to supply a breakdown of their standard formula Solvency Capital Ratio (SCR) alongside the internal model SCR. Of course the question is, why and what are they going to do with that? Our understanding is that supervisors are not considering the standard formula as "right" and just examining how wrong and how different the internal model is. The supervisors rather say "the standard formula is something we understand and, hence, it is a good starting point to explore the assumptions that the internal model is using". It's really there as an anchor point rather than the "right" answer.

Noel: Do you have a certain viewpoint that due to many insurers trying to move towards exotic premium areas and moving into more exotic investment areas, that the standard model framework is going to need to be updated fairly quickly? Although we're getting to the final rules there is going to be a need for a lot of upgrading on those definitions as insurers try to move further and further away from more traditional insurance lines?

Andrew: Certainly a review of the standard formula is built into the Solvency II directive and even now we have a case in point. We've said publically that we're considering infrastructure investment and how it's included in the standard formula, so that is one area where EIOPA is doing some work at the request of the European Commission. We'll send our recommendations later this year.

Noel: It's been said by insurers we've spoken with that it will be a learning curve for both insurers and supervisors to test the internal modelling framework? What is it insurers need to be mindful of to make a convincing case?

Andrew: I certainly agree that it has been a learning curve and it will continue to be so, almost indefinitely. It's probably fair to say that part of that learning, if we look back say five years, when people really started to get underway with internal models, is that it's been far more challenging than anybody thought it would be, probably both for firms and regulators. One of the consequences is that even in the time since people started building their models, best practice has already evolved and maybe some of those models that were cutting edge are no longer quite at the cutting edge.

For the second question of how to make a convincing case, something I often say is that in order to convince the regulators you have to explain how you convinced yourself as a modelling professional. How have you convinced your board? How has the validation process been convinced that the model you're using, both in terms of its individual components and also in its entirety, is appropriate and meets the tests and standards? Clearly the independent validation plays an important role in this, but if you've not been able to convince yourselves, if you've not done the work internally, then you're unlikely to be able to convince the supervisors.

Noel: On a slight side point, there's going to be a lot of pressure on insurers to reveal what can be seen as some very cutting edge and confidential information on their risk modelling techniques, how they are working to get a cutting edge advantage over competitors. How will the regulators protect insurers against the risk of sensitive and proprietary data being released? We've seen this issue raised quote a bit in the asset management sector, where staff who are validating investment managers processes subsequently move to private industry and take up a post.

Andrew: Certainly all regulators will be bound by some form of professional secrecy. We also have it here for EIOPA staff. But in a way there's no difference from people moving on from the regulator compared to people moving away from the firm. Clearly there are fluid employment markets and people move on, it's not purely a regulatory problem.

Noel: Ok, so what levels of 'adequacy' of information must insurers go to, to be seen as satisfactory to supervisors?

Andrew: I would mention materiality and proportionality; this should always be the point that we would expect to see insurers start from. Where there are risks that are relatively simple, a fairly small part of the overall SCR, then the level of justification and convincing should be smaller and of course the reverse is true.

The other aspect in terms of information is, it comes back to this idea of the model being appropriate for the risks and therefore it's important that the simplifications and assumptions on which models are based are really brought out in the documentation. Therefore everybody involved, both within the firm and also the supervisor, has a really clear sight on why the models are appropriate and what their weaknesses are, when the models no longer perform and are inappropriate.

Noel: The definition of risk is evolving with financial crime; cyber risk is still an unknown quantity. What new areas of risk most concern you and how do you feel the treatment of those will develop over time?

Andrew: In a way it's not so much the definition of risk that's evolving, it's simply the world we live in that's changing. Criminals are always looking for new ways to become rich dishonestly!

Looking at another area, where we see low investment returns insurers become more innovative and invest in new, riskier asset classes. As we mentioned, that brings new risks.

From an internal model perspective, there are two big questions. Firstly, are these risks being included in the model? The second more subtle question is, does the insurer have the appropriate framework in order to detect when the risks on their balance sheet are actually diverging from what they've built into their model, as will be the case when new risks appear in the world and therefore start to have an impact on the balance sheet. Again, it comes back to the importance of validation and the Profit and Loss (P&L) analysis.

Looking at the wider question, really the question isn't purely an internal model question, all I'd say is that you'd want to have insurers watching these new and emerging risks long before the internal model tells them about it. They should be finding these risks, spotting them early enough that they can put them into their pricing framework and change their underwriting where appropriate. It should be a case of the risks coming onto the balance sheet at the right price.

Noel: How is the regulator setting themselves up to spot these emerging risks? Of course insurers need to be conscious of it and cognisant of its impact on their pricing framework. But the regulator of course needs to keep up with what the industry is doing in order to provide a satisfactory oversight.

Andrew: I'd give you an example: low interest rates; EIOPA had been raising the issue of a prolonged period of low yields since it came into being in 2011. In 2013 EIOPA issued an Opinion on it and national supervisors reported back last year on the steps they were taking.

We also watch what national supervisors are doing and share experiences. In the UK, for example, the PRA wrote to insurers last year to ask questions about the impact of climate change.

Noel: Thank you Andrew, we'll finish just there. Thank you for sharing your thoughts.