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- Boal & Co Briefing -

Solvency II – Risk Based Capital Assessment

“Solvency III!” I hear you cry. “We haven’t even finished our 2004 year-end yet so why are you talking about Solvency II?”.

Well the reason is that Solvency II is going to represent *the* biggest change to the Insurance industry in Europe since the introduction of the 1st European Life Directive. Solvency II’s impact will not just be confined to regulatory amendments but will impact the insurance market and shape the competitiveness of the players within it.

Insurers in non EU jurisdictions, such as the Isle of Man, will also need to take note. It is Boal & Co’s expectation that regulators, like the IPA in the Isle of Man, will look towards Solvency II as providing a new benchmark in solvency regulations and will review legislation to take account of risk based capital practices.

So it is only proper that we all start thinking about Solvency II now. This bulletin is split into three sections:-

- What is Solvency II?
- Why all the fuss?
- What stage is Solvency II at?

What is Solvency II?

Solvency II is a risk based approach to capital assessment II and is effectively the insurance equivalent of Basel II. That means that EU based insurance companies will be required to hold an amount of capital, the Target Capital, that reflects the risks run by that insurance company.

This Target Capital amount will be set such that there is only a small probability of the company having insufficient reserves to meet liabilities. One measure which is currently gaining momentum is that reserves need to be sufficient such that there is only a 1 in 200 chance that the company will have insufficient reserves to cover liabilities in one year’s time.

The types of risk that will need to be taken into account include:-

Mortality/Morbidity Risk: The risk that more (or less) people die or suffer disabilities than expected.

Lapse Risk: The risk that more (or less) people surrender or transfer policies than expected.

Expense and Operational Risk: The risk that expenses are different from expected or that operational mistakes cost money or damage reputation.

Market Risk: The risk that asset values do not move in line with expectations and/or in line with liabilities. This could be due to general market movements or through credit risk. Credit risk is worth highlighting as it includes not only fixed interest securities but also items such as reinsurance default.

Models will need to be put in place to measure these risks. These models will be based on probability distributions which attempt to place measures on the likelihood of potential adverse outcomes.

Companies will have the option of adopting the Standardised Models proposed by their regulator or of implementing their own Internal Models. It is expected that the

Target Capital calculated by Internal Models will be less than that calculated by Standardised Models. However an insurance company can only use their Internal Model having convinced their regulator that the Internal Models provide a better representation of the particular risks that they face.

The Solvency II approach to capital assessment is sometimes referred to as a Total Balance Sheet approach to solvency. This is because Solvency II attempts to place a value on the total capital required to remain solvent, rather than the current approach whereby solvency is viewed as an additional capital requirement on top of calculated reserves.

In Summary

You can see that Solvency II differs quite a bit from the current approach to solvency. The four major differences being:

- Solvency II will attempt to identify and report on different sources of risk
- Solvency II will attempt to be more scientific in the assessment of a particular risk as opposed to the simple loadings on reserves and sums at risk irrespective of the extent of the risk
- Solvency II will provide a Total Balance Sheet approach to solvency as opposed to the current approach which adds on capital to reserves

which already incorporate elements of prudence.

- Solvency II will allow companies to hold Target Capital amounts based on their own Internal Models. These amounts may be significantly less than if based on the regulator's standardised model.

Why all the fuss?

There are four main reasons for the fuss:-

- Risk based capital requirements
- Introduction of Operational and Expense Risk
- Internal Models
- Practicalities

Risk Based Capital Requirements

Currently two very different companies writing the same type of business are required to hold the same amount of additional solvency margin.

For example suppose there is a very large company and a very small company both writing protection business. Currently both companies need to hold 0.3% of the sum at risk as additional solvency margin.

However, all else being equal, the very large company is faced with less mortality risk than the very small company. This is because the small company will be more at risk to one or two large claims in any

particular year whereas the large company can diversify away this risk within its large portfolio of business.

Under Solvency II, the larger company will therefore need less Target Capital than the small company. In this example Solvency II has introduced competitive advantage to the larger company.

Operational and Expense Risk

Under the current regime only very simplistic allowance is made for expense risk and little or no allowance is made for Operational risk.

Under Solvency II companies which have more flexibility and a tighter control on their cost base should be able to hold less Target Capital. Similarly companies with tighter operational controls should be able to hold less Target Capital.

Therefore capital requirements depend not only on what type of business you do, but on how you do it.

This should lead to different solvency margin assessments for those companies who retain administration services in-house and those who have outsourced the administration functions.

Internal Models

It is expected that Internal Models will produce lower Target Capital numbers. Therefore companies using Internal Models should have a capital advantage over companies using Standardised Models.

It will be onerous, however, to use Internal Models. The regulator will need to be happy with the robustness of the Internal Model. Additionally it is likely that the regulator will require the Internal Model and risk management to be integrated into the culture and management decision making process of the company. This has two implications.

Firstly it is more likely that larger companies will be able to devote the resources required to build and maintain the internal models. This provides another potential advantage for larger companies. However there will be room for smaller niche players who are experts within their niche and therefore ideally placed to use Internal Models.

Secondly it is probable that companies will need to have risk management controls and internal models in place for a number of years before the regulator will be comfortable that they are necessarily robust and integrated into the company's management decision making process. Therefore the earlier you start looking into this the better.

Practicalities

Solvency II is a noble idea but many detractors will point to practical difficulties within its implementation. For example how are insurance companies supposed to model all these risks?

A word of caution is required for those adopting this stance. Basel II has created a head of steam behind risk based capital assessment in banks. Regulators will look at the example from the banking sector and are unlikely to look favourably on insurers saying that it can't be done.

Solvency II – Progress and Timescales

The Solvency II project has been organised in two phases.

1st Phase

This phase involves preparatory work on the general design of the framework for Solvency II. This phase has recently been completed.

2nd Phase

This phase involves:-

- drafting the framework directive for Solvency II.
- Mandating the local regulators to draft up the local regulations to implement the directive

The framework directive will effectively involve re-writing of large parts of the current Life Directive. The new regulations will replace large parts of the current Insurance regulations.

Phase 2 has already commenced with discussion papers and meetings having taken place with various European bodies (see figure 1 below for more information on the European bodies)

Figure 1

EU Commission: Drivers behind implementation of Solvency II

CEIOPS: This is the group of European regulators (and includes IFSRA). The EU Commission has tasked CEIOPS with proposing and drafting the Framework.

Groupe Consultatif Actuariel: This is the European body of Actuaries (and includes the Society of Actuaries in Ireland). CEIOPS has asked the Groupe Consultatif for assistance and input.

The European Commission has targeted October 2005 for the drafting of the Framework to be complete. It is then their hope that the regulations will be in place for 2007. This seems a little ambitious and, whilst a lot will depend on political will, it is our understanding that the October 2005 this may soon be revised to a 2006 date.

It is interesting to note that some European countries have already made efforts to introduce elements of risk based capital ahead of Solvency II, e.g. Netherlands and the UK. The UK in particular now requires realistic balance sheet reporting for With Profit offices and from 1st January 2005 all life offices will be required to undertake *Individual Capital Assessments* – a second pillar capital assessment using a risk based approach.

Boal & Co and our Milliman Global colleagues are keeping up to speed with Solvency II developments and other related Risk Based Capital initiatives. Duncan Robertson of Boal & Co is a member of the Society of Actuaries committee responsible for Solvency II and also a member of a Milliman Global Solvency II group.

This Milliman Global group are pooling resources to keep on top of Solvency II developments in general and also on the reactions of the insurance industry within the different member states.

The experiences of Milliman in the UK have been particularly interesting as they have helped a number of UK insurers implement Individual Capital Assessments.

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About Boal & Co

Boal & Co (Ireland) is the Irish member firm of Milliman Global, an international organisation of actuarial and consulting firms represented in major countries and principal cities worldwide (www.millimanglobal.com). Milliman Global employs more than 2,600 people, with over 100 offices in 33 countries. Milliman Global is composed of consulting firms recognised as leaders in their respective countries, providing international resources and capability suited to international client needs.

Boal & Co have been providing specialist actuarial consultancy services to the international life assurance industry since 1995. Our team comprises qualified actuaries with extensive experience of the offshore business world. We operate out of offices in Dublin and the Isle of Man, and additionally advise life companies in other offshore centres, including Luxembourg and the Channel Islands. We currently provide appointed actuary services to three companies in Ireland, three in the Isle of Man and one in the UK. Our Appointed Actuary clients are subsidiaries of Italian, Swiss, Swedish, Isle of Man and UK parent companies. Our client companies transact business in:

- Italy
- Spain
- France
- Germany
- Netherlands
- Belgium
- United Kingdom
- Sweden
- Norway

In addition our consultancy experience extends to companies who have transacted business in Hong Kong and the Far East, and UAE and the Middle East.

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