

Solvency II

the Gordian Knot of “level 2”

At the beginning, in 2006, everything looked good for Solvency II. Developed in cooperation with the insurance industry, the reform of the insurance solvency regime was supposed to take better account of fluctuations in the economy and the risks confronting insurance companies by checking that they had the capital needed to honour their obligations to their policyholders under all circumstances. The reform was going to build a single insurance market and better protect policyholders while giving the EU the opportunity to be a vanguard.

The directive, which could have caused a real “big bang” in the insurance industry, has not only misfired (thanks partly to the Member States), but its progress has also been more complicated than expected. For example, the specific characteristics of mutual insurance companies have had to be taken into account. In addition, the financial crisis has significantly increased prudential requirements and therefore capital requirements, raising the capital charge associated with shareholding, taking into account market volatility. It therefore posed a major threat to the long-term institutional investor role played by insurance companies.

Of course, aversion to risk influenced the technical advice issued by the CEIOPS on the future “level 2” provisions, i.e. the implementing measures enabling the directive’s level 1 provisions to be applied in a concrete and precise manner. Now, the European insurance industry is up in arms about these level 2 measures.

Nothing is stopping the insurance industry from changing them, which is the good thing about the Lamfalussy process. We can only encourage it to participate actively in QIS5 (the fifth quantitative impact study), which kicked off on 23 August. Unless it wants to leave the supervisor a free hand, for want of data from the field.

Marie-France Baud,
Confrontations Europe

Why the Solvency II standard formula penalizes shares

The political objectives of Solvency II, i.e. better consumer protection and increased competitiveness of European insurers, have been translated primarily into a quantifiable target: Solvency II must determine the amount of capital needed by an insurance company (characterised by its activities and investments) for it to have a probability of bankruptcy over one year inferior to 0.5%, or, in other words, a probability of survival over one year of 99.5% (= **99.5 VaR**).

To do this, the SII directive has attempted to break down the causes of loss, to quantify them, and take into account their joint probability of occurrence. Obviously, these calculations are highly theoretical – in other words not very realistic – given our limited knowledge of the reality, and especially the fact that part of the future uncertainty cannot be modelled statistically.

Having made these fundamental reservations, let us look closer at how behind simple choices of mathematical formulae an economic model is emerging that is in contradiction with the economic reality of the insurance sector:

- **A first simplifying choice, made a priori, requires assets and liabilities to be treated separately** as if the nature of liabilities had no impact on assets.

- Then inside the calculation formulae, apparently to remain consistent with the one-year horizon of the objective, **the designers have used volatilities over one year**, in other words statistical risks of loss over one year.

The combination of these two decisions in the design of the standard formula “logically” requires the volatility of each type of asset over one year to be taken into consideration, even if these assets are not intended to be sold after one year but could be more optimally given the liabilities that they cover.

Now, **the volatility of certain assets¹ such as stocks for example do not grow proportionately with time.** Thus the risk of this type of asset over a ten-year horizon, for example, may be less than that of another asset with a lower volatility when measured annually but proportionally increasing with time. All experienced supervisors and leaders know that the natural in-credit situation of insurers and the nature of liabilities allow a diversification of assets that has been highly profitable for insurers as it is counter-cyclical. If the resulting macroeconomic impact in terms of stability has not been observed it is no doubt because it seemed perfectly natural.

What the designers of Solvency II have not seen (or not made explicit) is that **the purely arbitrary choice, in the simplified model represented by the standard formula, of totally separating the analysis of assets from that of liabilities means that the duration of the liabilities in the analysis of the assets is not take into account.** The reintroduction of this duration of liabilities by an additive mechanism has been proposed, which the Solvency II purists reject because it destroys the harmony of the formula.

While it is true that the trajectories of Copernicus’ planets achieved the perfection of the circle, they were false. Let us keep things as simple as possible, but correct the most dangerous consequences of such simplicity.

Jean-François Allard, Director General of the MAF Assurances

¹ The 99.5 VaR over one year of listed shares was set at 39%. This means that the drafters of the directive implementation measures believe that a package of €100 of shares has a 99.5% chance of being worth over €61 at the end of one year (and a 0.5% chance of being worth