Long-Term Guarantees
and the Countercyclical Premium
Under Solvency II

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Life insurances and pension scheme products with a guaranteed interest rate are important components of retirement provisions – especially in Germany. Quantitative impact studies conducted in preparation for Solvency II reveal firstly that these guarantees have a substantial value, and secondly that their value is subject to a large degree of interest rate risk due to their long duration. Consider, for example, a long low-interest period during which the long-term guarantees need to be maintained by investments in short-term bonds. This situation creates a risk for the life insurer when the interest rate earned on the bonds does not cover the guaranteed interest rate on the insurance contracts.

The interest rate risk can be managed either by adequate structuring of the investments (duration matching) or by equity capital backing. In practice, the duration of bonds that can be used to “hedge” interest rate risk is usually significantly shorter than the duration of the issued guarantees. In the Solvency II standard model, the resulting duration mismatch requires additional capital backing in the event of decreasing interest rates. This is because lower interest rates lead to higher present values of the insurer’s future benefit payments, which are the main component of a life insurer’s liabilities. The increase in technical provisions can be balanced only if the interest rate risk is perfectly managed. Generally, such a perfect match – which would also imply giving up the upside potential of interest rate changes – is not possible in the insurance industry.

Thus, Solvency II sets strong incentives for cautiously managing interest rate risk so as to avoid an increase in technical provisions and in required equity backing. A possible response would be to issue guarantees that are not binding in every single year, but only over the entire contract period, which could alleviate the capital requirements. Another alternative would be to issue guarantees that are limited in time and can be rolled over according to a fixed scheme. This would reduce the duration of the guarantees and thus mitigate the problem of a duration mismatch. A third option could involve an increased demand by insurers for fixed-rate securities with a contract period of more than 30 years. This could induce an increased supply of long-term sovereign and corporate bonds.

These important developments, brought about by Solvency II, are, however, constrained by the existence of the so-called “countercyclical premium”, formerly known as an “illiquidity premium”. This premium signifies that, in times of crisis, the European insurance supervision applies higher (and less volatile) discount rates for investment guarantees. This leads to a lower present value of the guarantees and can diminish the need to raise capital. The idea behind the countercyclical premium is to reduce pro-cyclicality by not revealing the (temporary) financial distress of a life insurer. While this is, indeed, an advantage, there are also several severe disadvantages. By employing a countercyclical premium, the regulator deviates from market-consistent valuation, which is an important building block of Solvency
II. When crises do not become readily apparent, providers of investment guarantees have less incentive to actively manage their interest rate risk. In some situations, a company that perfectly manages its interest rate risk might even have to report an inferior solvency situation compared to an otherwise identical company lacking perfect interest rate management. Consequently, the product innovations mentioned above might be less appealing, with one result being a lower demand for long-term bonds.

Furthermore, the specific problems for the European Insurance and Occupational Pensions Authority (EIOPA) that arise from determining a countercyclical premium must be addressed. Policymakers as well as industry representatives may pressure EIOPA to introduce, increase, or not decrease the countercyclical premium. Even EIOPA itself might find it difficult to decrease a premium granted before, knowing that decreasing it could adversely affect insurers’ solvency situation.

Nevertheless, as a basic principle, we fully support the idea of introducing countercyclical elements into Solvency II. We believe it would be better, however, to define good and bad market scenarios (based on interest rates and the stock market) and then adapt the capital requirements to the prevailing situation. Capital requirements should be stricter in boom times and less strict in times of crisis. For example, if insurers experience a boom year with high profits, the maximum default probability should be set to lower than 0.5% so that the company is forced to retain some of the profits for times when the financial situation is deteriorating. Conversely, during times when insurers suffer losses due to adverse capital market developments, the regulatory requirements could be loosened (e.g., by allowing a default probability of up to 1%). Insurers will then avoid having to sell shares in a falling market. Without such a countercyclical element insurance companies will have to sell stocks in a falling market because capital buffers fall contemporaneously with stock prices. Insurers will likely invest in fewer shares and more safely, to reduce capital requirements. An obvious consequence of insurance companies investing less in stocks is that overall demand for stocks declines, leading to an even greater decrease in stock prices. Another consequence of selling shares during bad times is that the insurer will often have to pay more to buy the stock back at a later time, which will be detrimental to the insurer’s stakeholders. Thus, countercyclical requirements could reduce the acceleration of a crisis without having to deviate from an established set of rules. Fortunately, there is still time left to address some of the fundamental problems of Solvency II, the advantages and disadvantages of a countercyclical premium being one of them.