Risk-based supervision – the Swiss Solvency Test (SST)

I. Summary

The risks to which insurance companies are exposed are manifold: tight stock markets, terrorist attacks, natural disasters, and demographic developments, to name only a few. A new approach for ascertaining the ability of insurers to handle risks – their "security" – is the Swiss Solvency Test (SST) administered by the Federal Office of Private Insurance.

In short, the SST determines a target capital for each insurer that is necessary to survive the assumed risks with an adequate level of security. In this way, the SST primarily pursues two objectives:

One aim is to promote risk management in insurance companies. Just as important as the target capital is the way by which it is determined. In addition, the target capital has the function of a warning signal: If the available risk-bearing capital is less than the necessary target capital, this does not entail the insolvency of the enterprise. Rather, either the necessary capital must be built up over a certain period of time, or the risks must be reduced accordingly.

A first field test was conducted in 2004. The main result of this test was that it could even be conducted in the first place. In addition, it was shown that SST demonstrates a favourable cost/benefit ratio for insurance institutions as well, and that it leads to very good and plausible figures. The results of the first field test helped further develop SST, so that a new field test could be conducted in the early summer of 2005, this time with 45 insurance companies.

SST was introduced simultaneously with the entry into force of the revised Insurance Supervision Law (ISL) on 1 January 2006. Transitional periods are envisaged for adapting capital reserve requirements to the results of the SST for each individual insurance enterprise, as well as in particular for the calculation of the necessary values, such as the market-consistent evaluation of assets and liabilities and the amount of the necessary risk-bearing capital.

In addition to central questions of reserves and solvency, the new law contributes an additional dimension of supervision: the increased attention of supervision to a qualitative review of the various risks.

These models complementing SST are therefore deliberately embedded in an overall strategy of comprehensive assessment of the general risk management of companies.

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II. Solvency I and Solvency II

The rules currently applicable to the calculation of solvency, i.e. the own funds of the insurance institutions, are based on the so-called “Solvency I” process of the EU. Switzerland implemented these rules through amendments to the old Insurance Supervision Law (ISL). These Solvency I principles will continue to hold and have been integrated into the new ISL.

At the same time, it is undisputed both within the EU and in Switzerland that the definitions for calculating solvency in accordance with Solvency I do not suffice. They are insufficiently differentiated and, in particular, do not take into account the risk profile of the insurance portfolio. The corresponding capital deposit requirements therefore also do not reflect the risk-oriented capital needs. International rating agencies have therefore long consulted risk-based measures to evaluate the financial strength of insurance companies. The necessity of such an approach was demonstrated to the broader public in a dramatic way when the stock markets collapsed (approximately March 2000 to March 2002): Many insurance companies worldwide ran into severe difficulties, since their equalization funds had not adequately take the capital risk into account.

The discussions in this regard are being conducted in the EU under the name “Solvency II” – in a certain analogy to Basel II in the field of bank supervision. At the same time, important differences between insurance companies and banks must be taken into account. In the case of insurance, the dependencies between risk concentrations, risk aggregations, and risk diversifications play a significantly greater role. In addition, insurance supervision is in general also subject to the desire of politics and society that insurers take on parts of the social security net.

The principles of Solvency II that are already available, the pilot projects undertaken in Switzerland, and the risk-based models used in other countries (such as Australia, Canada, the United Kingdom, and the United States) show that the consideration of risk in calculating necessary capital resources not only results in many differentiated solutions, but also deepens the understanding of the risk situation of an insurance company.

III. The Swiss Solvency Test (SST)

FOPI therefore took up the principles of Solvency II and launched a project in the spring of 2003 that was supported by specialists from the insurance industry, management consultant companies, and universities. The project succeeded in elaborating the appropriate applications and mathematical models by the summer of 2004 to the extent that a first field test with ten selected insurance companies could be undertaken. The Swiss variant of risk-based supervision, named Swiss Solvency Test (SST), has also attracted significant attention abroad.

In short, the SST determines a target capital for each insurer that is necessary to survive the assumed risks with an adequate level of security. In this way, the SST primarily pursues two objectives:

One aim is to promote risk management in insurance companies. Just as important as the target capital is the way by which it is determined. In addition, the target capital has the function of a warning signal: If the available risk-bearing capital is less than the necessary target capital, this does not entail the insolvency of the enterprise. Rather, either the necessary capital must be built up over a certain period of time, or the risks must be reduced accordingly.

IV. The results of the field tests

FOPI conducted two field tests. The main result of the first field test in 2004 was that it could even be conducted in the first place. In addition, it was shown that SST demonstrates a favourable cost/benefit ratio for insurance institutions as well, and that it leads to very good and plausible figures. The results of the first field test helped further develop SST, so that a new field test could be conducted in the early summer of 2005.

This test was conducted with 45 insurance companies. The test run will again serve to determine individual parameters, verify model assumptions, and review the applicability of SST for smaller insurance companies. The ongoing evaluations indicate that the costs for insurers are not insignificant, but that this is balanced by a considerable gain in knowledge for both the supervision authorities and the insurers. The second test run and its results have also enhanced the interest of the offices of the European Union and other groups in the international context dealing with Solvency II questions in the SST.

The economic perspective of SST already makes clear that the dominant risks of many insurance companies are to be found in the areas of financial risks and ALM risks, i.e. the management of assets and liabilities. Actuarial risks – especially in the case of non-life insurers – are the second area of risk analysis.

IV. Entry into force of SST

SST was introduced simultaneously with the entry into force of the revised Insurance Supervision Law (ISL) on 1 January 2006. Transitional periods are envisaged for adapting capital reserve requirements to the results of the SST for each individual insurance enterprise, as well as in particular for the calculation of the necessary values, such as the market-consistent evaluation of assets and liabilities and the amount of the necessary risk-bearing capital.