



FOPI press conference

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Part 2: Concept and effectiveness of supervision of the insurance market

Presentation by Monica Mächler, FOPI Director

Presentation by René Schnieper, Head of FOPI's Integrated Supervision Dpt.

Unofficial translation

Integrated supervision of the insurance market

Despite the welcome robustness of the Swiss insurance market, we still need to determine – particularly in light of latest developments and findings – whether the existing concept that FOPI uses to oversee the insurance market fulfils the intended purpose or if additional forms of supervision are needed.

At the start of last year, before the market storm had reached its full proportions, we were already in the process of re-examining the approach used to regulate the insurance market. Our in-depth analysis led to a new three-tiered concept: **integrated supervision of the insurance market**.

The first tier of this new concept is **traditional supervision**. It covers Solvency I (volume-based, simplified capital requirements), actuarial provisions, tied assets and investment regulations, rules applying to individual insurance branches, reporting and other areas. The second tier is **quantitative supervision**, which includes our economic capital model, the Swiss Solvency Test (SST). The third tier is **qualitative supervision**, which involves a series of objectives designed to introduce corporate governance, risk management and an internal control system. It also focuses on such things as internal and external audits, responsible actuaries, investment processes and other processes.

It is important for traditional, quantitative and qualitative supervision to cover different areas: Where traditional supervision involves fixed rules, quantitative and qualitative supervision deal with objectives that insurance companies should pursue to become more risk-conscious. An iterative process is used to ensure implementation by insurance companies. Insurance companies are responsible for implementing quantitative and qualitative objectives in their internal corporate processes. The interplay between rules and objectives – the so-called principle-based approach – is extremely important.

In light of current developments, can this concept be implemented in its present form or does it still need to be adjusted?

Traditional supervision: FOPI investment guidelines have had the desired impact

The difficult market conditions caused by write-downs of subprime loans and mortgages have put the new supervisory legislation and investment guidelines to the test. The robustness of the insurance market observed thus far is proof that the decisions made back in 2006 had been correct.

It is important to note that – unlike banks – insurance companies are required to invest the premiums that they receive and administer on their own behalf. Given their normally long-term commitments, insurance companies need to adopt correspondingly prudent investment policies. This means that their investment policy must be based on a careful matching of investments with insurance obligations (i.e. asset-liability matching). Direct insurance companies are required to use tied assets to cover their actuarial provisions. Insurance companies adhere to modern investment regulations designed to enforce prudent investment policies. These regulations do not apply to the non-tied portion of insurance company assets.

Here, we are talking about protecting one of the most essential aspects of the insurance business and oversight of the insurance market. Using tied assets to completely cover actuarial provisions enables insurance companies to honour claims that they may receive from their policyholders. As it happens, direct insurance companies in Switzerland hold over CHF 300 billion in tied assets, which directly covers potential claims from policyholders. More detailed information regarding the mechanisms used to protect tied assets may be found in our annual report.

The current turbulence has confirmed that investment regulations as a traditional instrument of Swiss supervision of the insurance market should be buttressed by adding qualitative supervisory aspects. This merging of traditional and qualitative supervisory aspects is exactly what is being recommended today in many circles as the most appropriate response to the turbulence seen over the past few months. Moreover, the current situation also clearly shows just how important it is for insurance companies to cover their potential obligations by steadily increasing their tied assets.

More efficient data transfer

The developments of the past few months have made it quite clear that the exchange of data between insurance companies and the supervisory authority needs to be as open and flexible as possible. Transparency is key.

The FOPI has therefore developed a new IT tool built entirely on Web-based technology. The new IT tool should be operational as early as next year. The Swiss insurance industry worked intensively with FOPI on the project. The testing phase, involving around 15 insurance companies, will take place in mid-May 2008. For this test phase, the participating insurance companies will use the new tool to resubmit their reporting data from 2007.

The new software solution can be configured to suit the needs of individual insurance companies. The new openness and flexibility will enable FOPI to respond much more quickly to developments on the insurance market. For example, the IT tool allows the book values and market values of individual investments to easily be grouped into ratings categories. This tool constitutes a major step forward as far as transparency is concerned.

Quantitative and qualitative supervision: the Swiss Solvency Test and the financial market crisis

Would the Swiss Solvency Test have been able to detect subprime risks of individual insurance companies in time to take preventive action? To answer this question, let us first briefly go over the field test conducted in 2007:

- Seventeen insurance companies took part in the 2007 field test on a compulsory basis and over forty insurance companies took part in the field test on a voluntary basis.
- Based on the latest findings, none of these insurance companies had any sizeable exposure to subprime risks on their books. That said, reinsurance companies and insurance groups will be taking part in the SST for the very first time in 2008, which means that most of the reinsurance companies did not take part in the 2007 field test

The Swiss Solvency Test has therefore not (yet) been used for the purpose of determining solvency under subprime crisis conditions. The question is nevertheless a good one, which we shall try to answer here today.

The Swiss Solvency Test (SST) – Basic principles

The SST bases itself on the insurance company's full balance sheet. In other words, all financial instruments must be taken into account and there are no off-balance sheet positions. The full balance sheet approach differs substantially from the Basel II approach where risks on the liabilities side of the balance sheet are not taken into account. Moreover, different models are applied to the positions listed in the banking and trading books.

The SST bases itself on market-adjusted values. This means that both the assets and liabilities of an insurance company's balance sheet are assessed at their current market value. In this manner, positions are calibrated to easily ascertainable market values. This applies, for instance, to positions taken in listed stocks and bonds. For positions whose market value is not easily ascertainable, a valuation model is used.

The SST bases itself on minimum reserve requirements. Depending on the extent of their risk exposure, insurance companies will have different minimum reserve requirements. This approach differs from the Solvency I approach, which takes neither market risk nor credit risk into account. Moreover, with Solvency I, actuarial risk is limited to the amount of volume. However, the risk categories that need to be considered are actuarial risk, market risk and credit risk.

Currently, there is no model that takes operational risk into account. The introduction of capital premiums at a later time remains subject to discussion. Liquidity risk, concentration risk and model risk are very far removed from the SST framework. Liquidity risk is not the same as insolvency risk and must therefore be assessed using a specialised approach. Concentration risk partly lends itself to analytical models. Model risk is generally taken into account using scenarios.

Comparison of results from the 2007 and 2006 field tests

How do the results of 2007 and 2006 field tests compare? Comparison of these two field tests shows that the solvency situation of the supervised insurance companies improved considerably between 2006 and 2007. In 2006, 8 out of 44 insurance companies (18%) had an SST ratio of less than 100%. In other words, the amount of required capital was less than

the SST target capital. In 2007, only 4 out of 56 insurance companies (7%) had an SST ratio of less than 100% in relation to the SST target capital. This improvement was first of all due to the increase in interest rates between 2006 and 2007, which had a positive impact on life insurance companies. FOPI response to SST findings from 2006 also resulted in better reserve ratios for individual insurance companies.

All in all, the 2007 field test confirmed the results of the previous field test, namely:

- For life insurance companies, market risk – particularly interest rates – determined capital requirements.
- For non-life insurance companies, market risk and actuarial risk were the main concerns.
- For both life and non-life insurance companies, credit risk was less important.

The risk profile of insurance companies differs considerably from the risk profile of banks.

The SST and the subprime crisis

Coming back to the question we asked earlier on: Would the Swiss Solvency Test have been able to detect subprime risks of individual insurance companies in time to take preventive action? In order to answer this question, we need to consider the causes and consequences of the subprime crisis. I shall go over these briefly.

Causes of the crisis

- Generally flawed risk models.
- Underestimation on the part of individual companies of their extent of concentration risk.
- Uncertainty regarding the value of these instruments, illiquid market.

Consequences of the crisis

- Higher than expected write-downs and write-offs in specific asset categories and financial instruments (particularly RMBS and CDOs based on underlying RMBS)
- Massive losses by companies that had been particularly exposed (concentration risk)
- Illiquid market; positions cannot be closed without prohibitive costs (liquidity risk)

Considering the nature of the risks in question (model risk, concentration risk and liquidity risk) and considering SST limitations as far as assessment of these risks is concerned, it would have undoubtedly been quite difficult for mere quantitative models to have detected the subprime problems of individual companies in time to take appropriate preventive action.

As with the investment guidelines discussed earlier, the Swiss Solvency Test also needs to be tied to qualitative supervisory aspects based on policy recommendations. Insurance companies adopting an effective risk management approach will easily be able to use the SST or a similar solvency testing model to detect and limit risks or future exposures early on.

The SST and qualitative supervision

Risk management is advantageous because it gives companies the ability to identify risk concentrations and large individual positions (e.g. counterparty risk), a large number of potentially correlated positions (e.g. mortgage loans from one single country) or interdependencies between various asset categories as well as insurance risks under extreme scenarios (WTC, pandemics, etc.).

Moreover, risk management entails sensitivity analysis, basically an assessment of the impact that departures from model-based assumptions will have on risk capital. In other words, companies are able to ask such questions as: what will happen to risk capital if the probability of a loss occurrence and/or a correlation between risks were to increase? What impact would interdependencies between insurance risks and specific asset categories (e.g. between RMBS, CMBS, auto loans, credit card loans, LBO loans, corporate Loans, E&O, D&O risks) have? Last but not least, risk management can be used as the basis for developing a liquidity risk model.

Quantitative models, qualitative risk management and corporate governance must be interwoven in such a way as to make these three aspects complementary. Quantification of risks and the assessment of solvency require adequate quantitative models. In order to identify possible disasters and anticipate crisis situations, insurance companies need to adopt effective risk management approaches. In order to make it through disasters and crises, insurance companies also need sound, first class corporate governance (See Sharma Report for more details).

As far as qualitative supervision is concerned, in 2007, considerable progress was made in terms of including corporate governance, risk management and internal control systems in supervisory activities. The so-called Swiss Quality Assessments were developed for this purpose. Both the Swiss Solvency Test and Swiss Quality Assessments are based on self-assessment by supervised insurance companies. Insurance companies were asked to describe and assess their current level of compliance with legal requirements in the key areas of corporate governance, risk management and internal control systems. The deadline for submission of their Swiss Quality Assessments was 31 March 2008. We are currently in the analysis phase.

The SST within the overall regulatory context

The role of supervision is to shield policyholders from the risk that their insurance companies will become insolvent. Supervision seeks to ensure that insurance companies very likely remain solvent for a given length of time. Insolvency cannot be ruled out entirely, but insurance takers must incur no damage. This is not what we would call a "zero failure regime". There is no testing of profitability of individual companies nor is there any testing of individual transactions.

The two solvency systems, SST and Solvency II, use the same basic principles but are implemented differently. In other words: while not strictly identical, SST and Solvency II are equivalent.

Summary and conclusions

The Swiss Solvency Test and the Swiss Quality Assessments are key instruments used by Switzerland in its supervision of the insurance market. In order for the Swiss Solvency Test to be a truly effective instrument, insurance companies need to adopt effective and proven

risk management procedures that are firmly rooted in sound, first-class corporate governance. In this manner, the Swiss Solvency Test can be supplemented by Swiss Quality Assessments, which are designed to test risk management and corporate governance within the supervised insurance companies.