

# REINSURANCE'S QUALITATIVE CONTRIBUTION TO VALUE ADDED WITHIN THE FRAMEWORK OF PILLAR 2 OF SOLVENCY II

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## 1 Introduction

Following the Solvency II debate, most of the discussions have focused on quantitative, Pillar-1-related issues. In this context, also risk mitigation instruments such as reinsurance were analysed in respect of risk capital relief. For a short time, Pillar 2 requirements were added to the agenda, and CEIOPS outlined its initial views concerning this matter.

More precisely, at European level CEIOPS<sup>1</sup> published a consultation paper (CP 33) in March 2009 on "the system of governance" containing advice on implementing measures relating to the second pillar of Solvency II. These ideas are likely to be reflected in the subsequent implementing regulations, as CEIOPS will submit its proposals to the European Commission at level 2 of the so-called Lamfalussy process.

This paper is intended to discuss qualitative aspects of reinsurance in the context of Pillar 2.

## 2 The system of governance

Qualitative risk management in Solvency II is based on Articles 41-48 of the Solvency II Directive on the following issues:

Article	Issue
41	General governance requirements
42	Fit and proper
43	Risk management
44	Own Risk and Solvency Assessment (ORSA)
45	Internal control
46	Internal audit
47	Actuarial function
48	Outsourcing

According to the Directive, implementation of a governance system is mandatory for each and every insurance company. However, the proportionality principle will apply, with implementation being very individual and based on the nature, scope and complexity of the company and its business.

As part of the ORSA process, which will take place at least annually, insurance companies have to develop an integrated view of Pillar 1 and Pillar 2 and determine their "overall solvency needs" to meet both the regulatory and internal capital requirements. The ORSA process should be seen as an integral part of business strategy designed to evaluate and meet capital requirements, while future business objectives, risk appetite and risk profile should be given sufficient consideration in the planning process for the next few years.

<sup>1</sup> CEIOPS – Committee of European Insurance and Occupational Pensions Supervisors.

This point alone shows that Solvency II involves more than merely meeting the Pillar 1 requirements. The regulations in Pillar 2 go much further:

- Pillar 1: One-year time horizon, evaluation of the current portfolio
- Pillar 2: Assessment of an insurance company's financial situation for the entire planning period, including consideration of the business strategy

The ORSA process will be subject to supervisory review.

### 3 Supervisory review process/Reporting requirements

The Supervisory Review Process (SRP) checks all insurance companies for compliance with general laws and regulations and for compliance with the future Solvency II Framework Directive. Figure 1 shows the individual steps involved:

Fig. 1 Schematic steps of SRP

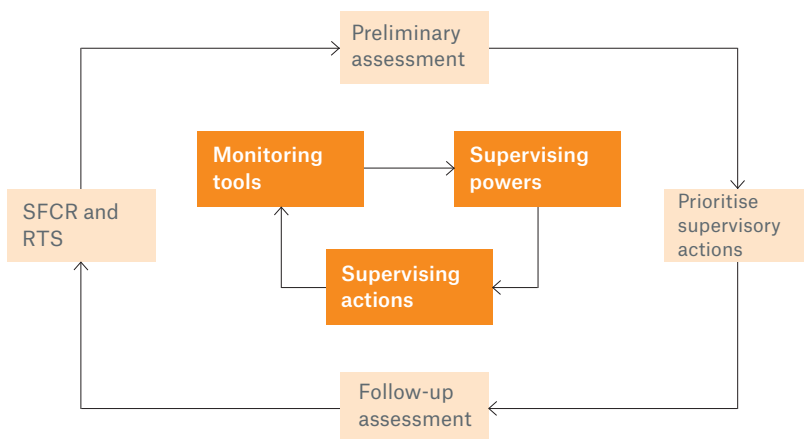


Fig. 2 Preliminary assessment



In the first SRP stage (preliminary assessment), the business environment, business overview and performance, quantitative requirements and above all the governance system are scrutinised.

The quantitative requirements concern Pillar I. The insurance company must show, for example, that:

- the assets have been invested in conformity with the Directive and are sufficiently diversified and appropriate asset-liability management have been carried out;
- the liabilities have been calculated in conformity with the Directive and statistically valid assumptions have been incorporated in the calculations (methods/data sources);
- the solvency requirements (minimum capital requirement MCR, solvency capital requirement SCR) have been calculated in conformity with the Directive and the own funds are sufficient both in terms of quantity and quality to meet the solvency requirements, etc.

The graph also shows that the SRP reviews the entire governance system, including ORSA.

A further component is the monitoring of the reporting requirements. SRP also stipulates that two reports have to be submitted to the supervisory body:

- Solvency and Financial Condition Report (SFCR) and the
- Report to Supervisors (RTS)

Articles 50-55 of the Solvency II Directive specify the requirements from Pillar III vis-à-vis the SFCR. The separate RTS, on the other hand, contains proprietary/confidential information intended only for the supervisor and is not published in the SFCR. Both reports will contain quantitative and qualitative information.

#### 4 Reinsurance aspects in the context of Pillar II

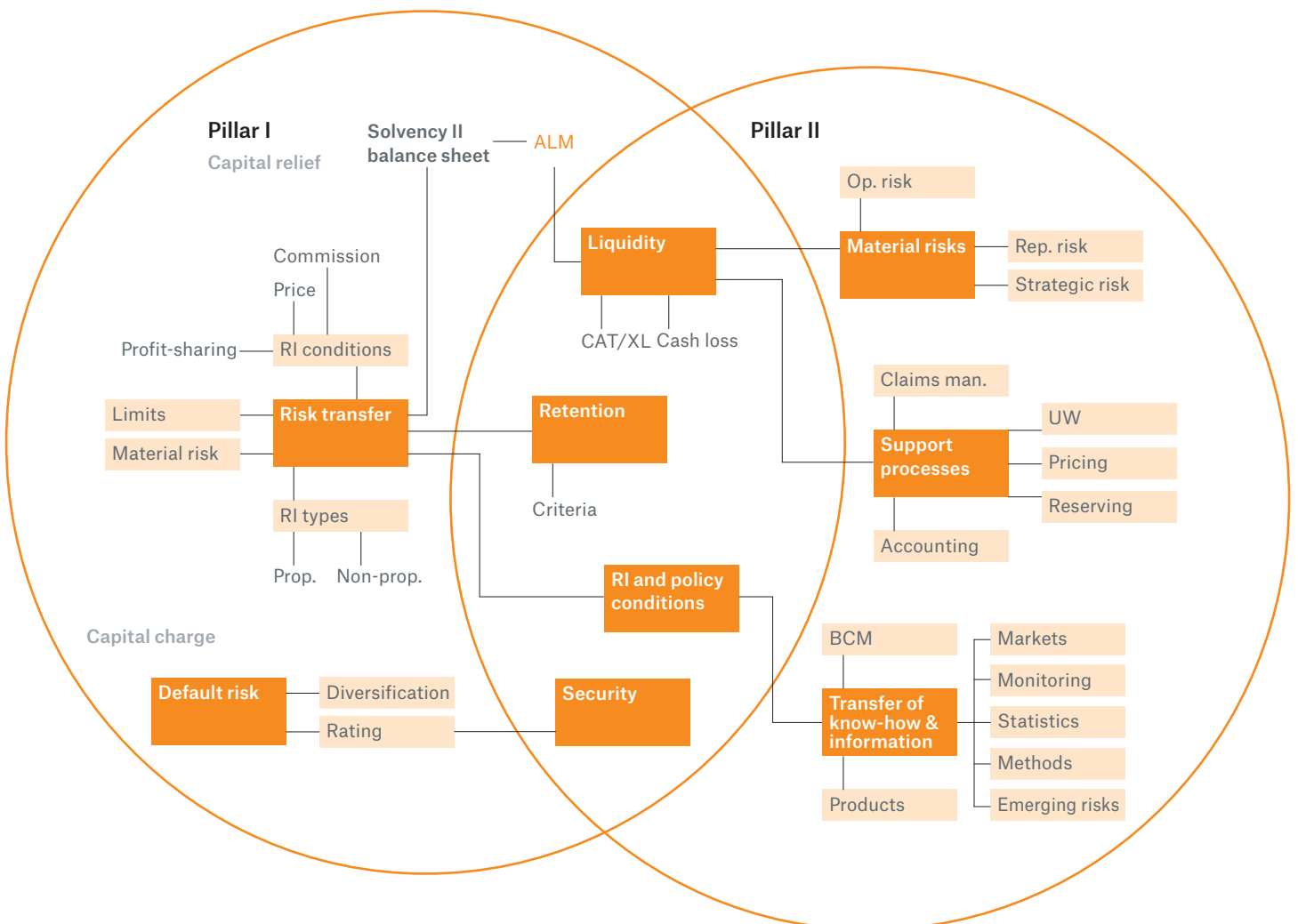
The following graph shows at what stage of the risk management process reinsurance can be applied and can have a positive effect in terms of quality assurance.

In Pillar I, models can be used to measure the effect of reinsurance on the risk capital, for example a reduction in capital requirements.

The graph below illustrates the complex interactions involved beyond Pillar I:

The extent of risk transfer – summarised under “capital relief” in the diagram – depends on a variety of factors. “RI types”, “RI limits” and “RI conditions” are easier to quantify than the remaining elements of Pillar II:

Fig. 3 Potential scope of reinsurance



As a consequence, the impact of reinsurance can be expressed in one figure under Pillar I, whereas qualitative effects of reinsurance – appearing under Pillar II – involve a multitude of aspects.

For example:

- The level of retention depends on an insurance company's objectives. Criteria such as limiting major losses, protecting against fluctuations in the frequency range and against accumulation losses can have a smoothing, stabilising effect on annual results. The retention not only affects the claims experience for own account but also impacts on risk capital, investment volume, liquidity and other factors. Ultimately, the retention level depends on each company's strategy, for example when launching new products, and is of course also influenced by the interests of the reinsurer.
- Can a capital requirement be calculated for all material risks? The current standard formula does not take into consideration a capital charge i.e. for strategic risk, though it might be material for the company. On the other hand, the operational risk is considered in the risk capital calculation. In this context, the effects of reinsurance can be ambiguous, as reinsurance does not necessarily reduce the corresponding capital requirement, because one part of the OpRisk formula is fixed to gross premiums and gross reserves.
- As part of risk management, the incongruities that exist in practice between the scope of cover on the primary insurance side and on the reinsurance side have to be identified and evaluated.

Our basic argument is that reinsurance under Pillar II can support or even improve an insurer's qualitative risk management. The qualitative character of reinsurance has not yet come to the fore in the current political and economic debate. However, from a purely formal point of view, reinsurance is affected by the following articles of the Solvency II Directive: Risk Management, ORSA and Actuarial Function.

#### 4.1 Risk management

According to CEIOPS<sup>2</sup>, an effective risk-management system should contain the following components:

- A clear and well-documented risk strategy (formulation of objectives, risk appetite, regulation of responsibilities) which must be consistent with the business strategy
- Appropriate written principles (definition and categorisation of risks, control mechanisms)
- Appropriate processes (identifying, evaluating, managing, controlling and reporting risks)
- An adequate ORSA process

Accordingly, risk management should not only identify and as far as possible evaluate material risks, there must also be written principles/procedures formulated and implemented in everyday practice. This concerns the underwriting risk and reserving, ALM, investment, liquidity risk, concentration risk, operational risk, reinsurance and other risk mitigation techniques, as well as other risks (credit risk, reputational risk, strategic risk).

The qualitative influence of reinsurance for selected types of risk is as follows.

<sup>2</sup> See: Issue Paper "Implementing Measures on System of Governance" 3.11.2008.

### 4.1.1 Underwriting and reserving risk

As regards the underwriting risk, suitable processes and methods have to be set up. These cover the areas of product development, pricing, risk selection, sales, reserving, claims management and reinsurance.

In many areas, the reinsurer can provide qualitative support to the primary insurer by taking on the job of quality assurance or by providing expertise. The most important consulting services include:

between the primary insurer's claims payment and reimbursement by the reinsurer. Furthermore, the primary insurer can also protect itself against extreme liquidity fluctuations, for example due to catastrophe events.

### 4.1.3 Strategic risk

The strategic risk is difficult to quantify and highly individual. However, the exchange of information with the reinsurer can help to minimise strategic risks in certain subsectors – such as the introduction of new products or planned entry into new markets.

### 4.1.4 Reinsurance

CEIOPS has identified the following factors in connection with the expected Solvency II requirements:

- Establishing a reinsurance strategy which reflects the objectives of the risk strategy (e.g. risk minimisation, stabilising capacities, increasing UW capacity)
- Establishing a reinsurance process that stipulates and implements a targeted reinsurance programme for defined lines of business (LoBs)
- Evaluating the creditworthiness and diversification of reinsurers
- Stipulating concentration limits
- Developing criteria for selecting reinsurers
- Documenting reinsurance strategy

The reinsurer can offer support on many of these points, which also appear in the ORSA process and within the set of tasks of the actuarial function.

RI aspect	Support
Product development	Identifying and limiting the risk (ratio of risk to premium; options and guarantees); legally compliant and complete description of the scope of cover for original policies; seminars; case-by-case coaching; second opinion
Pricing	Statistical bases and methods for pricing; incorporating experience values for special or new covers, seminars; case-by-case coaching; second opinion
Risk selection	Defining risk, review and acceptance criteria: support through assessment software in risk selection; assessing risks (substandard risks, facultative risks), seminars; case-by-case coaching; second opinion
Reserving	Know-how/methods of reserving, early identification of loss trends, determining best estimates and reserve audits; portfolio analyses; case-by-case review; coaching
Claims management	Defining internal loss settlement and reserving regulations; claims reviews; legal advice; compiling reports; second opinion; seminars; case-by-case coaching

### 4.1.2 Liquidity risk

Besides having an effective ALM tool, reinsurance is also an instrument for limiting the liquidity risk, as reinsurers cover the reinsured portion of payment obligations resulting from loss events. Depending on the structure of the reinsurance agreement (accounting intervals, cash loss limits), it is possible to minimise the incongruity of the payment flows, i.e. the interval

Fig. 4 Business strategy and ORSA process

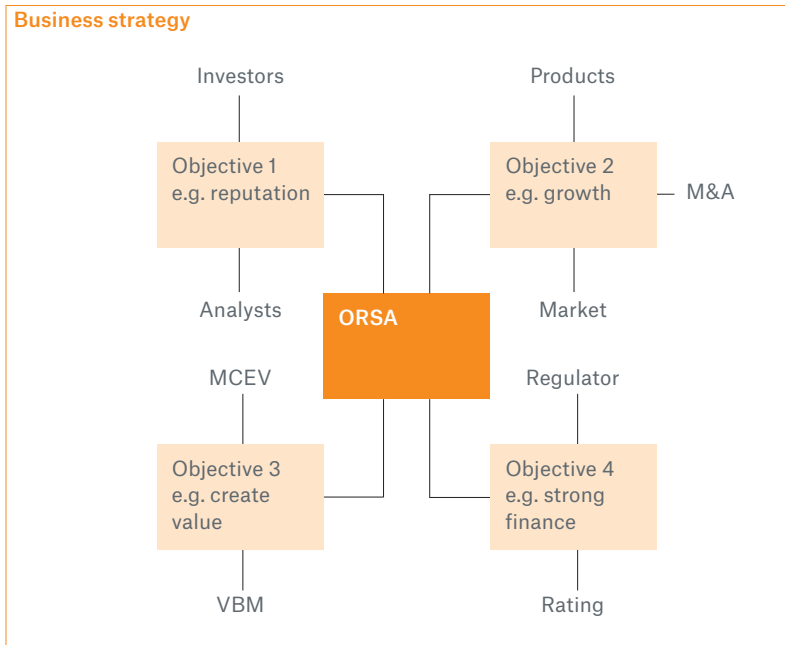
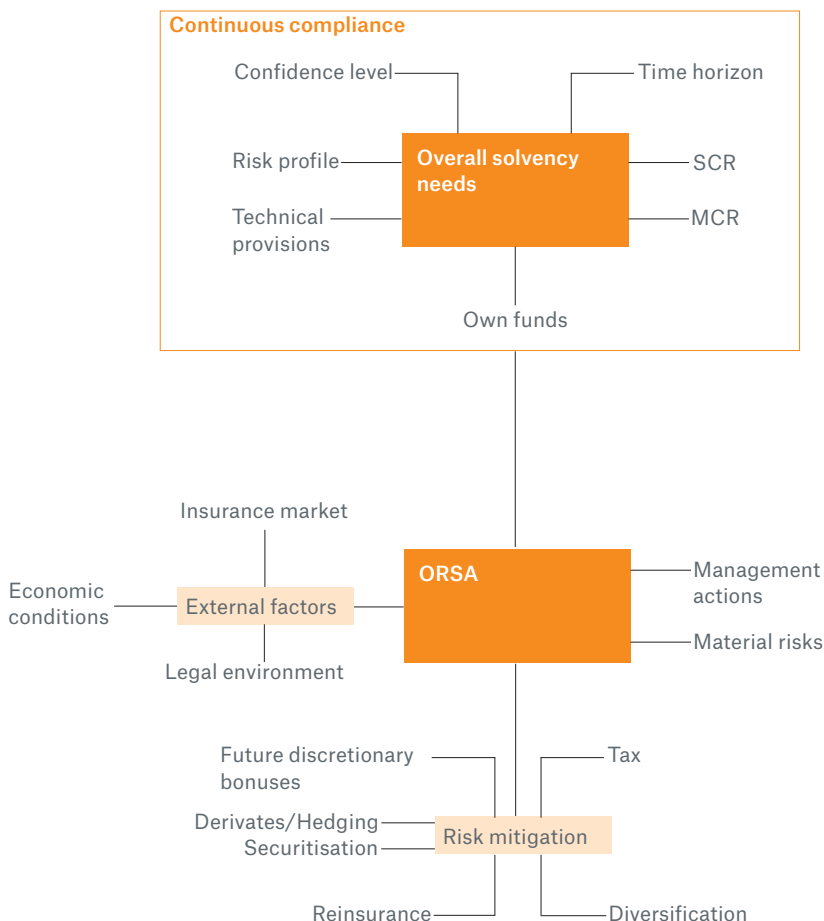


Fig. 5 Compliance and ORSA process



## 4.2 ORSA

The ORSA process is a fundamental part of the overall risk management system.

Within the business strategy, it should be located where risks have to be identified, evaluated, controlled, managed and reported. Future risks which emerge as a result of the business strategy also have to be considered. The result of the process is an assessment of how the insurance company's strategy influences its financial situation and solvency.

The uppermost objective is sustained compliance with regulatory and internal capital requirements, whereby current and future risks have to be considered in relation to the timeframe of the strategic business plan. Risk profile, confidence levels, evaluation of the reserves and quantity and quality of the capital play an important role in this respect. Moreover, external factors, material risks, and management rules should also be considered and evaluated.

Apart from these complex aspects, indicated in Figure 5 – consideration should also be given to risk mitigation techniques, including reinsurance.

Insurance companies should understand the implications of their treaties and ascertain, for example:

- whether the agreed retention and reinsurance limits are in accordance with the risk tolerance limits;
- what treaty type is appropriate for each LoB and what kind of risk should be covered;
- whether they are able to fully simulate the effect of alternative forms of risk transfer on their net situation (e.g. parametric triggers, extent of basic risk, security of special purpose vehicle structures).

- whether policy incongruities (direct versus reinsurance) are material for the company and consider how to deal with them;
- whether policies for facultative reinsurance are in place;
- whether contingency plans exist in the event that the reinsurance treaty is not renewed, the reinsurance market offers only limited capacity or the reinsurer defaults;
- whether there are mismatches between cash inflows and cash outflows (falls within the scope of a financial contingency plan – see also point 4.1.2).

Finally, the undertaking should have an integrated understanding of the level of risk transfer and should identify, assess, control and manage the risks remaining within its retention.

### 4.3 Actuarial function

A separate and efficient actuarial unit should be established at insurance companies. In addition to understanding the stochastic nature of insurance business, this unit should also be able to carry out actuarial procedures in order to suitably calculate premiums and reserves.

The area should also meet other requirements:

- Coordinating function in reserve calculation
- Ensure the appropriateness of methods and assumptions of reserve calculation
- Evaluate the data on which reserve calculation is based
- Best-estimate analyses
- Reporting requirements
- Assess underwriting principles
- Assess the suitability of reinsurance treaties

In CEIOPS' opinion, it is feasible to locate the actuarial functional area in risk management or vice versa. The reinsurance aspects mentioned in the "Risk management" section can also be transferred to the ORSA process and the actuarial function, as in both cases there has to be reporting on the appropriateness of reinsurance treaties.

To cope with the new requirements, strategic decision-making in many insurance companies will increasingly shift towards risk management and actuarial function. It is likely, that deliberation and decisions on reinsurance cessions will also move towards these functions.

## Conclusion

The second pillar requires implementation of a governance system. This should ensure that an insurance company is managed transparently and professionally in order to guarantee compliance with regulatory requirements. The supervisory body must be convinced that implementation of the entire governance system (structures, processes, functions, etc.) satisfies the company's individual requirements and that the selected methods, assumptions and data sources are meaningful and consistent.

The main arguments for the value added of reinsurance in Pillar 2:

1. Reinsurance can be used as a risk management instrument, for example in respect of liquidity risk.
2. In addition, reinsurance can improve qualitative risk management in terms of process support (i.e. underwriting and claims management), second opinion, consultancies, and quality assurance.
3. The quality of reinsurance advice differs fundamentally from that of third-party consulting services, which have to be paid for additionally by the insurer: the reinsurer shares the risk with its cedant, and therefore pays its share of the claims covered by the reinsurance contract ("follow-the-fortunes" principle). Therefore: best service means best protection for both parties.