

From strategic risk to risk strategy

Insurance scenarios for risk identification and business model innovation

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Missing the boat?

The worldwide risk trends – comprehensively produced for 2012 by the World Economic Forum in a study of global risks¹ – suggest that the general economic conditions are not particularly conducive to the strategic stabilisation, let alone further development, of sectors exposed to the financial markets such as the insurance industry in times of crisis. The authors of the study deduced that the economic scenarios could include prolonged liquidity risks, continuing fluctuations in investment returns, inflation or deflation scenarios and financial uncertainties due to more stringent regulatory requirements. Risks around life science and so far little-researched nanotechnology applications play a significant part in the technological trends.² Risks such as cyber attack and the associated misuse of data are on the rise.³

These emerging risks will increasingly become a part of the world of underwriting in the coming years once there has been sufficient loss experience. There are also strategic risks that can strike at the core of every company:

- Ineffective mergers or acquisitions
- Incorrect interpretation of market trends and competitor activity
- Wrong decisions based on unrealistic price and profitability assumptions
- Misinterpretation of or failure to comply with legal changes affecting taxation or accounting in a company's governance, planning or organisation

We are of the opinion that increased regulatory and operational requirements can exert constructive pressure on business model innovation. We therefore intend in this article to focus on strategic scenarios, which can constitute a significant risk for insurers.⁴ At the same time, we will demonstrate how those scenarios can be integrated into an extended risk culture, which alongside the established risk management functions such as identification, monitoring and reporting, can also provide impulses for the reorientation of the whole company.

¹ Cf. World Economic Forum: Insight Report Global Risks 2012. Seventh Edition, Geneva 2012.

² Cf. World Economic Forum: Insight Report Global Risks 2012. Seventh Edition, Geneva 2012, pages 36–37 and 44–45.

³ See also Munich Re: Cyber risks: Challenges, strategies and solutions for insurers, Knowledge Series Technology, engineering and risks, Munich 2012.

⁴ Definition: We designate risks as "significant" if they could have a long-term adverse effect on a company's assets, financial situation or profitability. Cf. Munich Re Group 2011 annual report, page 124.

“From strategic risk to risk strategy” means that it is sensible and advisable to take a comprehensive and, as far as possible, an objective look at a company’s present and future risks. In our view, risk strategy goes beyond covering the risk capital requirement for a portfolio for the coming financial year on the basis of valid models; it can be a framework for questioning and enhancing the company’s business.⁵

In this connection, we assume that any shortcomings in the evaluation and processing of strategic risks is not so much a question of the resources available, as a large quantity of economic and industry data can be found on the internet. Furthermore, professional associations, external service providers and economic institutes can provide a multiplicity of studies, models and applications. We assume on the contrary that not enough time is made available for strategic issues in “fast close” periods. However, new standards such as “reverse stress-testing”⁶ will result in the ongoing and systematic analysis of company figures, portfolios and development risks increasingly becoming a matter of course. Since it is a regulatory requirement for companies to identify those

scenarios that might pose a threat to their existence, both the identification of strategic risks and risk-management systems themselves are becoming more crucial to the long-term protection of an insurance company’s operations.

Aspects of strategic risk

First we need to define strategic risk so that we are clear exactly what we are talking about and to distinguish it from other risk categories such as operational risk.⁷ We will take Munich Re’s definition, which in addition to the strategic actual scenarios provides a time perspective for the future development of an insurance group. Munich Re defines strategic risk as “the risk of making wrong business decisions, implementing decisions poorly, or being unable to adapt to changes in the operating environment. The existing and new potential for success in the Group and the segments in which it operates create strategic risks, which can lead to a significant long-term reduction in corporate value.”⁸

The three components of this definition – wrong decisions, poor implementation of decisions and inability to adapt – help us to structure generic risk identification and the associated building of scenarios:

- **Decisions:** refers to all fundamental business-model decisions, strategic partnerships, acquisitions, product and price models, target group definitions, entry into markets, and short-, medium- and long-term investment strategies.
- **Implementation:** refers to systems, processes and resources used, all related shortcomings in structures and processes, and the project risks in the implementation of strategic plans.
- **Adaptability:** refers firstly to the ability to react to legal changes in the areas of compliance (e.g. labour, company or commercial law), taxation, accounting, and insurance and financial supervision, and secondly to developments in the market environment itself.

⁵ The extension of the 12-month horizon for risk strategy purposes to a multi-year integrated business and risk strategy is also a concept found in Solvency II, the future supervisory system, notably in the rules for the ORSA. Cf. Solvency II framework directive (Directive 2009/138/EC) dated 17.12.2009, Article 41, in particular: Article 45, Article 111, and European Commission: Draft Implementing Measures Solvency II dated 31.10.2011, Chapter I, Section 1, and EIOPA: Consultation Paper no. 33, Sections 3.3, 3.48 and 3.49.

⁶ The UK financial supervision authority FSA introduced the relevant stress tests with its Policy Statement PS09/20 dated 14.12.2010.

“Reverse stress-testing” means identifying and evaluating those scenarios that could endanger a company’s business model as a whole. In the context of Solvency II, at the current stage of the debate it relates to the area of internal-model validation; cf. European Commission: Draft Implementing Measures Solvency II dated 31.10.2011, Article 230 TSIM19, point (6).

⁷ To distinguish between the operational, reputation and strategic risk categories in the future Solvency II supervisory system: cf. Solvency II framework directive (Directive 2009/138/EC) dated 17.12.2009, Article 101.

⁸ Cf. Munich Re Group 2011 annual report, page 127.

Let us now consider the time factor more closely. In principle it is not critical in the analysis of an insurance company's strategic risks – with the exception of the tactical risk management needed if it experiences a shortage of liquidity – as strategic management decisions are normally taken in planning cycles governed by a systematic process. It should therefore be possible to incorporate an effective and efficient “review-preview scenario thought process” into the cooperation between the board and the strategic planning, financial control and risk management functions. Apart from anything else, governments and supervisory authorities are increasingly expecting companies to work in this way.⁹

For the implementation of strategic decisions, different periods apply depending on the area; these can be

challenging, for example in the case of post-merger integration. Also as regards “adaptability”, a substantial time budget can be set for strategic decisions, as the legislation process generally lasts for several years. In addition, an adequate volume of key economic-trend figures is available, for example on the demographic change in a country with the impact on insurance mortality tables or guaranteed benefits. At least on this point, all insurance companies are theoretically able to take the risk of producing their own strategic forecasts even covering a relatively long period and with barely adequate staff resources.

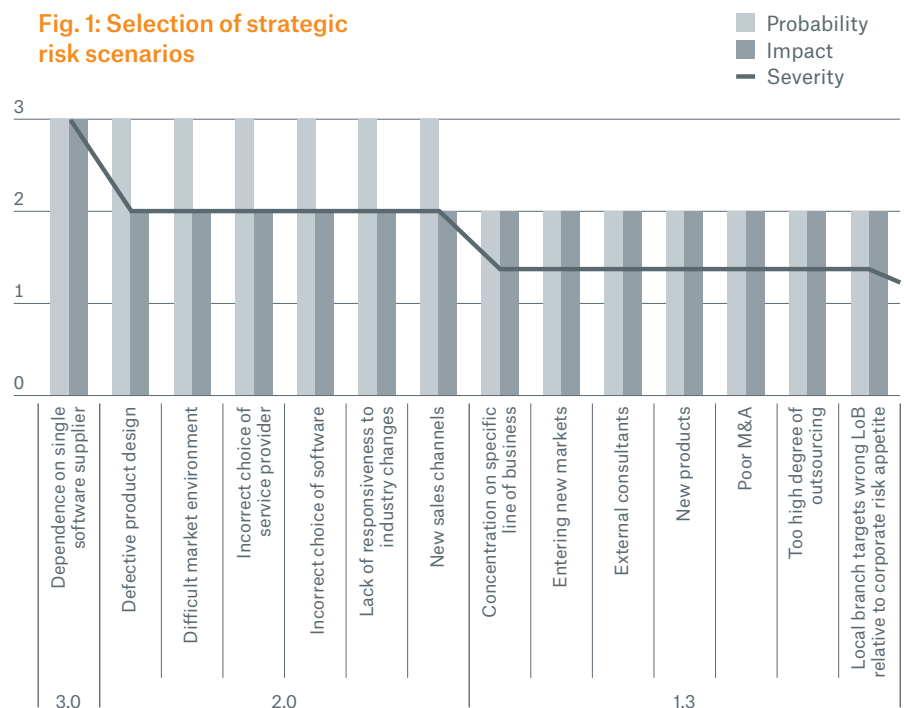
In other words, risk managers must constantly keep in mind the need to prevent failure (of strategic risk management) – which may be the result of their merely missing changes in the insurance market environment.

Relevant scenarios

We illustrate below some major scenarios for strategic risk based on surveys and estimates of occurrence probability and potential impact. The data has been drawn from an analysis of around 50 workshops on qualitative risk categories held from 2009 to 2012 attended by representatives from European and non-European insurance companies and groups. The scenarios were identified and assessed by experts at board level and from the risk management, actuarial, product development, corporate planning, risk management and internal audit areas.

Figure 1 shows the top strategic risks selected from a range of 30 scenarios identified.

Fig. 1: Selection of strategic risk scenarios



⁹ The Solvency II rules for the ORSA (Own Risk and Solvency Assessment) currently in course of preparation explicitly prescribe this cooperation. See also Footnote 5. For Germany, cf. Insurance Control Act (VAG), para. 64a.

Any surprises? No, just consequences!

Even though this selection was identified in brainstorming sessions and no operational purpose had been set for the heat map assessment used, the chart can be assumed to be fairly representative. In any event, it enables us to derive indicators for an insurer's strategic risk exposure.

However, some scenarios are insufficiently precise. For example, for the "difficult market environment" scenario the causes need to be defined, such as the price sensitivity of an insurance product or the lack of purchasing power of a customer segment in a certain country. The inclusion of a "new products" scenario is only useful if the risk assessment defines the products more precisely and takes account of the main core processes. This could include product pricing (underwriting), unique selling points (marketing and sales) and the financeability and profitability of a product (risk management/financial control).

Further analysis of the risk scenarios reveals that many of the causes are outside the control of an average insurer. At the end of the day, a company's dependence on the macroeconomic environment is a fact of life and cannot be circumvented by discussion or assessment.¹⁰ Nevertheless, there are still enough scenarios that can be processed both from a strategic and an operational perspec-

tive. So, the next step is to derive questions for proactive risk management, which serve both to initiate the evaluation process and as a basis for management decisions:

- Strategic: is our company properly structured with regard to risk distribution, its range of products and services, its size and its capitalisation? What strategic shareholdings could we consider? What would be the consequences?
- Strategic: does the structure of our business model permit value-based management? For example, can profits from one business segment or product compensate for temporary losses in another area?
- Strategic: what (business) partners do we need to ensure the stability and strategic enhancement of our business model?
- Strategic and operational: how can we ensure that for new participations, takeovers and mergers all relevant risks are identified in the due diligence and avoided or minimised when the project proceeds?
- Strategic: what systems and software solutions do we need for the key processes at our company? Which systems are critical to value creation?

- Strategic and operational: which of the systems and services concerned can we protect against failure and how do we do it? What alternative systems and services can or must we have available?
- Strategic: what knowledge and expertise do we need for our particular business model? How do we ensure that knowledge and expertise is built up, maintained and developed?
- Strategic and operational: what knowledge do we want to consciously cover with internal resources? What elements of that knowledge should be maintained and at what levels (e.g. group and/or subsidiary)?
- Strategic and operational: what knowledge do we want to cover with external resources? How can we ensure that it is maintained over the medium to long term?

This list of questions is far from exhaustive and can be directed at providing a basis for either getting decisions right or getting implementation right. In any event, these points do evidence the correlation described above between the strategic view of risk and the business model, as ultimately they relate to areas of direct management concern to the board such as structures and processes, cost control, quality management, protection of reputation and value orientation.

¹⁰ Cf. EIOPA Financial Stability Report 2012 (EIOPA-FS-12-097) dated 10.12.2012.

An example: Munich Re's risk strategy

The arguments and scenario examples above were intended to make the reader aware that an insurance company's risk strategy encompasses more than ensuring the availability of the risk capital required for solvency purposes or compliance with limits set for predefined scenarios. Indeed, the risk strategy can provide a basis for the insurance business itself. Munich Re sets the bar high in this regard:

"The framework for any business activity is our risk strategy ..., from which we derive a detailed network of limits and reporting thresholds."¹¹

The risk strategy as a whole and the associated risk management techniques such as capital allocation, the monitoring of triggers and limits and the control of company accumulations are by no means an aim in themselves, but serve to enable business objectives to be achieved that are aligned with the company's risk-bearing capacity and risk appetite. This rigorous enterprise-risk-management approach links return and profitability objectives with figures defined in the risk strategy.

Munich Re has an overriding objectives hierarchy as shown in Figure 2:

In practice, the risk strategy is implemented via defined tolerances for a series of risk criteria based on the capital and liquidity available and on our target profit margins within specified volatility limits. The risk criteria also serve as a guideline for the various fields of business in the Munich Re Group (reinsurance, insurance and asset management):

- **Whole portfolio criteria**, relating to Munich Re's entire portfolio of risks, designed to protect our capital and limit the likelihood of an economic loss for the year.¹³
- **Supplementary criteria**, to limit losses that can arise out of individual risk types or accumulations, such as natural hazards, terrorism and pandemics, and to limit market and credit risks that could endanger Munich Re's ongoing viability.
- **Other criteria**, aimed at preserving Munich Re's reputation and thus protecting its future business potential. They encompass limits for individual risks that, though they would not necessarily threaten the company's existence, could cause lasting damage to the confidence of clients, shareholders and staff were they to materialise.

Stakeholders in a risk strategy

The objectives shown in Figure 2 are specifically aimed at their main target groups. They refer implicitly to the risk carrier's business model and explicitly to the benefits and added value for important stakeholders in the company. In our case, these are clients, shareholders, and other stakeholders (especially employees).

We consider such an allocation of objectives to be essential for an integrated view of strategic risk, risk strategy and the viability of the business model. Apart from legal or regulatory requirements – such as the separation of certain functions to avoid conflicts of interest for risk governance purposes – the business and risk strategies should always be aimed at the same objectives, which are based on the expectations of the main stakeholders.

Fig. 2: Objectives of Munich Re's risk strategy¹²



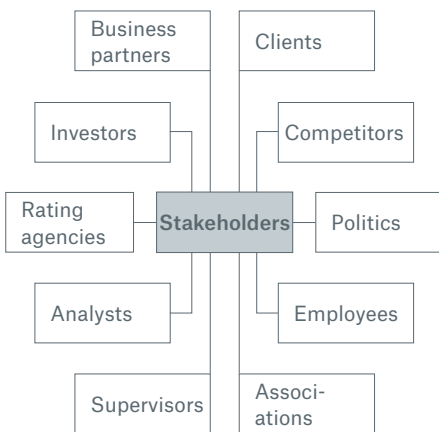
¹¹ Cf. Munich Re Group 2011 annual report, page 58.

¹² Cf. Munich Re Group 2011 annual report, page 121.

¹³ Of key importance is the "economic earnings at risk" (EEaR) criterion, which is used to manage the Group's risk profile in such a way that risk-bearing capacity does not fall below a defined threshold in the event of adverse business experience of the type that occurs statistically around every ten years. Cf. Munich Re Group 2011 annual report, page 121.

Figure 3 shows the most important stakeholders in a quoted insurer and should help provide a clearer picture of the business model an insurer has and the scenarios for strategic risk exposure that could arise.

Fig. 3: Important stakeholders in a quoted insurance company



The business models and the strategies for protecting them should therefore be considered not only from a risk and profit perspective, but also with regard to the anticipated stakeholders' expectations of "their" insurer:

- Customers expect reliable insurance products at appropriate prices.
- Business partners expect a solvent and liquid company.
- Investors expect a constant and reliable return on the capital they have invested.
- Analysts and rating agencies expect complete, transparent and comprehensible management information.
- Supervisory authorities expect an insurance company to comply with the rules and cooperate.
- Employees expect a secure job with an employer with a good reputation.
- The general public (politicians, the media, etc.) expect companies to be dependable members of society, for example in the way state and private health insurance systems correlate.

According to our observations, there are many possible variations of strategies aimed at the three core objectives shown in Figure 4 – safety, growth and profit.

Fig. 4: Risk-strategy triangle



There is unlikely to be a business model that is capable of achieving all three objectives equally well and, in particular, at the same time – if business objectives are too heavily biased towards safety, they will decrease profits and are unlikely to be accompanied by growth. An aggressive growth strategy on the other hand will entail increased costs for investments and higher new business commissions, leading to lower profits, etc.

Ultimately, it will only be possible to achieve the objectives in parallel if different implementation strategies are possible within a single insurance portfolio or an appropriate compensatory balance can be found within parts of an insurance group. The risk strategy should therefore be able to depict differing scenarios for different circumstances in the group and its constituent parts.

Questioning the business model

Assuming the strategic risks have been identified and the business objectives and stakeholder expectations are known, we comment briefly below on some examples of business models. This list is not exhaustive either, but is intended to illustrate the above-mentioned risk management issues as applicable to a tailor-made risk strategy:

- **Focused business model:** A monoliner adopts a risk strategy closely tailored to its own book of business. As there is no diversification, the focus will be on underwriting quality and risk sharing. Monoline clients expect a special service in a clearly defined field of business.
- **Choice of legal form:** A small mutual insurer will adopt a risk strategy that focuses primarily on the policyholders as a whole. Capital management is subject to the principle of commercial prudence and the regulatory requirements for calculating risk capital. A mutual insurer also needs efficient asset-liability management. What is not needed on the other hand is the voluminous financial communication usual for companies with a credit rating, as they do not have the exposure to the capital markets.

- **Group structures:** A parent company that is not an insurance or reinsurance company but has insurance subsidiaries will not have the same strategic return objectives and management models as a pure insurance group. Management will reflect the overall strategy of the group, which may include, for example, achieving tax arbitrage effects at certain locations or using special-purpose companies as captives.
- **Specialist insurers:** A health insurer is strategically heavily exposed to the risk of change, as its business, and even its existence, can be directly affected by health-care legislation.

Summary

We would summarise the points we have made in this article as follows:

The process for identifying strategic risk should focus on its three core components: wrong decisions, poor implementation of decisions and failure to adapt to changes in market conditions.

The risk strategy should have clear objectives aligned with the needs of a company's key stakeholders. This is important for both the business model and the company's reputation.

The strategic risks form the basis of a company's risk strategy. It should be effectively integrated into the business strategy and it follows that the two strategies must be correlated.

An integrated view of the risk and business strategies enables an insurer to organise, adapt and enhance its structures and processes accordingly.

Dealing with the interdependencies between insurance, the market environment and regulation will gain in importance. We believe that techniques such as reverse stress-testing have the potential to generate business-model innovation.

The quality of strategic risk assessment will be enhanced if the impact of decisions on the safety, growth and profit objectives is analysed before the decisions are made.

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