The Corporate Risk map

Fernando Utrilla Agüero
Graduate in Business Administration and Insurance Studies
Internal Auditing Manager of MAPFRE RE, Madrid, Spain.

"The accounting scandals unveiled in large multinationals, the bursting of the technology and telecommunications bubbles and the decline of the stock market, the capital requirements of first-class insurance and reinsurance companies and the world economic slowdown may indicate some weaknesses and cast doubt on the effectiveness of corporate internal control systems. New regulations covering corporate governance and transparency, Basle II and Solvency II, are clear attempts to improve the situation by forcing companies to strengthen their internal controls in order to recognize and evaluate the risks to which they are exposed, and act appropriately."

The Board of Directors is responsible for maintaining an appropriate and efficient system of internal control by laying down guidelines for implementation by Management. Both Management and Board establish the risk level that is acceptable for the organization and try to avoid instability. The Audit Department is responsible for supervising the adequacy and effectiveness of control procedures.

Internal control and risk management are closely related. We understand risk to mean any event or occurrence that may affect a company adversely, whether by virtue of results or because of image, customers and investors, etc. Risk is part of business life and we must learn to live with it as it is impossible to eliminate completely.

The European insurance sector is going to experience a revolution in the next few years as a result of the Solvency II project, which represents a transposition to the insurance world of the Basle II project for the banking industry. Current EU solvency requirements are based on a fixed ratio in accordance with the amount of premiums and losses, and are totally insensitive to each company's specific risk profile and ignore diversification of the investment portfolio.

As a result of the increase in the number of insolvencies in the insurance sector, in 1994/95 USA began to reform solvency supervision in insurance companies, by the introduction of more risk-sensitive capital models (Risk-based Capital), which are still, however, poorly equipped to predict insolvencies.

The objective of European regulating bodies is to review and harmonize the rules that evaluate the overall financial position of insurance companies by developing a new method of measuring risk and assessing capital requirements in relation to risk profile; this covers assumed risks as well as the management of them.

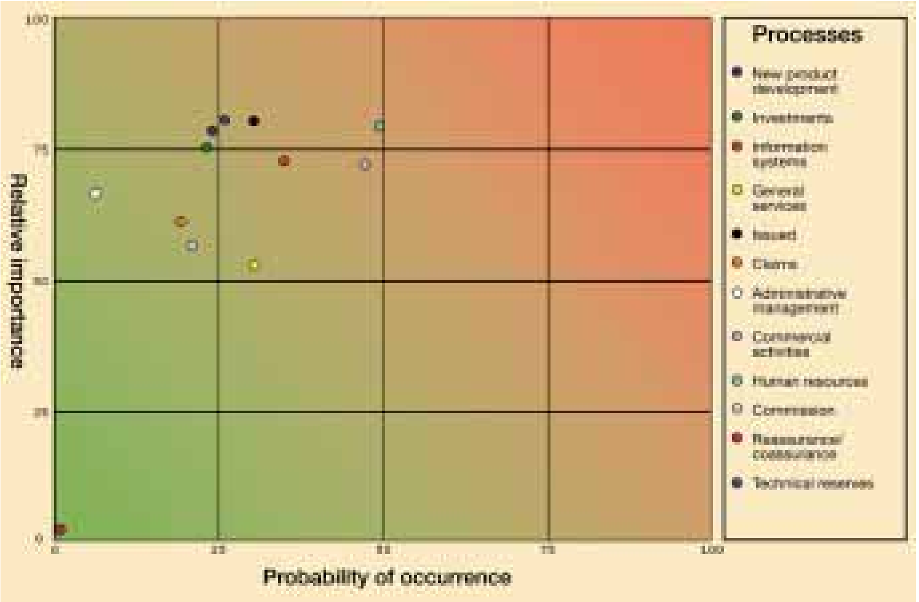
What is a corporate risk map?

In order to manage a risk properly, it is necessary to understand and know exactly which risks the company faces and the potential impact that each may have. The best way of obtaining a clear and prompt view of risk quality is to draw up a risk map. It is also advisable to examine risk quantity by using extreme simulations (stress testing) and other tools that establish the likelihood and the amount of potential profits and losses to which the company is exposed.

At present, legislation always refers to adequate internal control but does not specify the use of risk maps. Companies are gradually becoming aware of the need to control their risks and are beginning to invest in more advanced analysis and risk management procedures; this is viewed as a competitive advantage that adds value both to the shareholder and the company and enables it to make greater use of the capital at its disposal.

A risk map is a simple diagram or model where all the risks to which a company is exposed are set out, with an indication of their likely occurrence, the degree of control and the impact or importance

Risk Map Graphic



Risk map produced by Riskm@p

of each one. It is usually presented in several colours, with the red area being the most "dangerous" or exposed to risk, and the green area being the most "benevolent".

Production of risk map

We list the following stages in the production of a risk map:

1. Identification and definition of risks. At this stage the involvement of all personnel is required, especially those responsible for each process as they are the individuals who know the relevant risks.

2. Evaluation of the identified risks in relation to their degree of likely occurrence, the controls established and their impact or importance.

3. Production of action plans to improve the efficiency of existing controls or the creation of new controls on identified risks, especially those located in the red or most dangerous area for the company.

4. Periodic updating of the risk map, by monitoring compliance with the action plans and examining the movement or performance of principal risk characteristics.

"A risk map enables us to obtain a clear and prompt idea of the risks faced by a company."

Types of risks to be assessed

Although over the next few years Solvency II will regulate an insurance company's risk categories, we can classify them as follows:

- Market risks: loss risks resulting from economic variations outside the company's control (interest rates, exchange rates, inflation, business cycle).

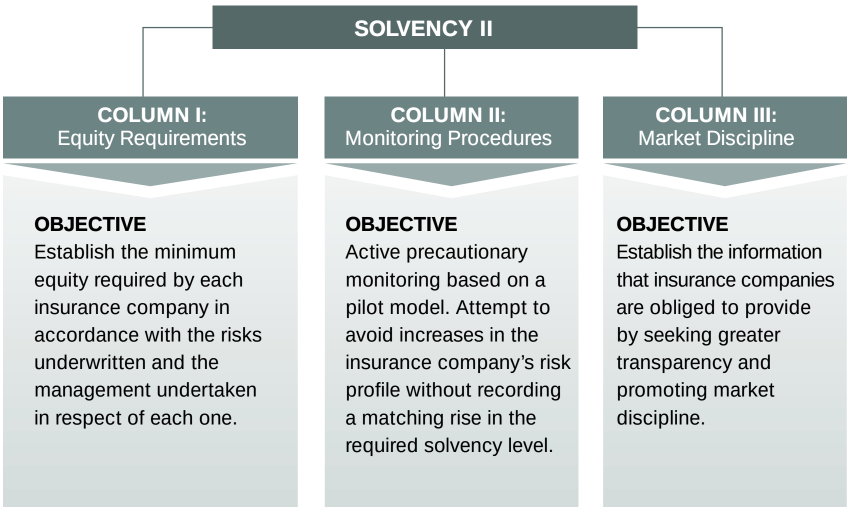
- Insurance sector risks: loss experience, credit risk on reinsurance, actuarial risks (estimation of technical reserves, inadequate rating).

"An effective risk management system has a positive effect on results, financial ratios and company valuation."

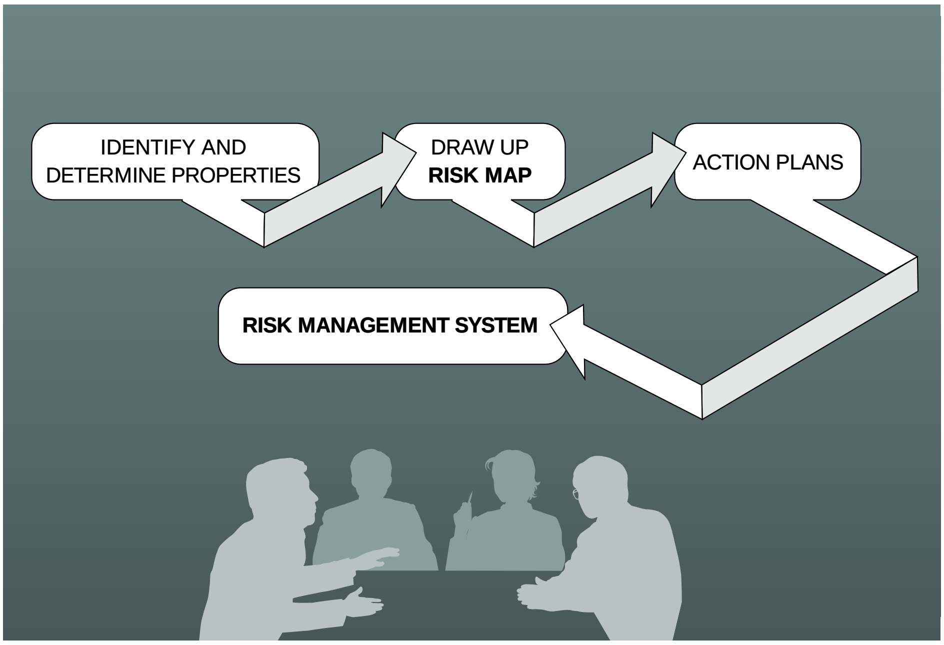
- Management risks: arising from the company's strategic policies (growth targets, investment policy, underwriting policy, liquidity).

- Operating risks: direct or indirect risk of incurring losses as a result of failures in internal procedures, human error, systems or external factors.

It is important to carry out an objective assessment of all risks in accordance with their importance, degree of likely occurrence and the controls existing to contain them. An assessment scale might be as follows: very high, high, medium, low and very low, although other similar measurements may be valid.



Formal risk evaluation system



Graphic representation

After identifying, assessing and classifying the risks, the graphic representation of the risk map is undertaken. Although the common objective is to understand the nature (reasons, consequences, likelihood) and importance of the risks faced by a company, the graph may be prepared in different ways:

- Based on a model demonstrating the relative importance and the likelihood of occurrence.
- By means of a bar chart diagram covering the different procedures and their risk exposure.
- Bubble chart where the height demonstrates the control exercised, and the volume indicates the importance of the risk.

"A risk map is a simple diagram or model where all risks encountered by a company are represented, with an indication of the likelihood of occurrence, level of control and impact or importance."

After identifying and analysing all the risks, the company must decide whether to assume the risk (financing it for its own account or for another party's) and attempt to monitor it or cede it to a third party. It is estimated that only one third of the risks of European companies are transferred (principally to insurance companies, banking institutions and other financial markets), whereas the remaining two thirds are retained by the companies. It is evident that appropriate management of assumed risks has a direct impact on results and on companies' principal financial ratios, while at the same time having a positive influence on their valuation.

Conclusion

In conclusion, it is worth highlighting the importance of effective systems of internal control and risk management, both internally for the benefit of the Board of Directors, Management and personnel in general, in order to minimize the impact of unexpected events; and from an external viewpoint because it favours: policyholders and customers (resulting in greater loyalty), supervising bodies (in future with Solvency II, in the absence of appropriate internal control, capital requirements will be higher), shareholders and investors (greater confidence because of return on the company's capital) and the market in general (higher valuation with less instability) ■

"By risk we understand any occurrence that may have an adverse effect on a company, principally on its results, image, customers or investors."