

# **The Validation of Risk Information in the Erm Process Based on Accounting**

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**Key words:** risk management, investors, information, strategies.

## **SUMMARY**

A value investors buys shares in a company as though he were buying the whole company, paying little attention to stock market temperament, the political climate or other exterior conditions. In the process he might ask himself a series of questions. If the investors comes up with the right answers, and if he can buy the store for less than it actual future worth to the buyer, than he has found a bargain. He`'s discovered a value investment.

Value investors may decide to enter a speculative investment venture, but not without full knowledge of risk that is taken. There is such a thing as intelligent speculation. Risk management is built into the concepts of value investing. The three legs on which the concept is built-avoidance of speculation, margin of safety, and diversification-provide inexpensive and easy to use tools for risk management.

## **REZIME**

Investitor kupuje akcije kompanije, iako je kupio celinu kompanije, poklanjajući malo pažnje uticaju tržišta akcija, političkoj klimi ili drugim eksternim uslovima. U ovom procesu on može sebi da postavi seriju pitanja. Ako investitor dođe do pravih odgovora, i ukoliko, on može da kupi zalihe po manjoj vrednosti, nego što je aktuelna buduća vrednost za kupca, tada je došao do ugovora. On je pronašao investiciju koja je povoljna.

Investitor može da odluči da uđe u rizičnu investiciju, ali ne bez potpunog razumevanja rizika koji preuzima. Takva stvar je inteligentna spekulacija. Rizik menadžment se gradi na konceptu investiranja vrednosti. Tri stuba na kojima se zasniva koncept su izbegavanje spekulacije, margina sigurnosti i diversifikacija koja obezbeđuje jeftino i jednostavno sredstvo za rizik menadžment.

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## **1. PREFACE**

There has been a lot interest lately in the concept of enterprise risk management (ERM). The key idea is to systematically identify the significant risks faced by a company. (One consulting firm has developed a list of 79 risks to use as a guide in its enterprise risk consulting practice.) The explicit recognition of risk helps a company manage its success by avoiding mistakes and pitfalls. Understanding the company's risks often results in gaining a deeper understanding of important strategic factors, which again contributes to corporate successes in sports and law, the key to a good offense is often a good defense. It also helps serve as a guide to the optimum capital structure of the firm by providing a more refined view of the debt/equity ratio question.

In an effort to carry the notion of enterprise risk management forward, companies have begun to appoint chief risk officers (Cross). These individuals are charged with developing a comprehensive view of the company's key risks and helping the company develop and implement appropriate risk management techniques.<sup>1</sup>

Nearly all companies today are living under the well-known Chinese curse: May you live in interesting times. They face increasing demands for performance from shareholders and other stakeholders. Their markets are globalizing while their industries are consolidating. New competitors, often riding the crest of a new technology, can arise from unexpected quarters—whether from another part of the world or from what had been an unrelated industry. Governments, regulators, and the courts can rewrite the rules of anybody's game at almost any time. All business is risky business. It's no wonder; then, those senior managers and accounting managers are paying greater attention to risk management as a strategic function. But we experience that they are not always certain about what they should be doing to manage risks strategically or how to do it. This uncertainty was reflected in the results of Enterprise Risk Management in the Insurance Industry, A Benchmarking Report, etc. For instance, insurance company executives, like those in other sectors, say they want to manage all risks in an integrated way. However, most risk management activity in that industry focuses on financial strategies to deal with financial risks clear conceptual framework include both financial and operational strategies to deal with both financial and operational risks. Insurance company executives also are dissatisfied with the tools currently available to put such a conceptual framework into practice. They are not alone; we observe a similar discontent among accounting executives in many industries.

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<sup>1</sup> Enterprise Risk Management: What's Beyond the Talk? May 2000 by Jerry Miccolis Tillinghast-Towers Perrin

## 2. WHAT IS ENTERPRISE RISK MANAGEMENT?

ERM is defined as a rigorous approach to assessing and addressing risks from all sources that either threaten the achievement of an organization's strategic objectives or represent opportunities to exploit for competitive advantage. The purpose of ERM is to increase the value of the enterprise. For most organizations, ERM achieves that goal by accomplishing the following.

- Improving capital efficiency by providing an objective basis for allocating resources, reducing expenditures on immaterial risks, and exploiting natural hedges
- Supporting informed decision-making by uncovering areas of high-potential adverse impact on the drivers of share value and identifying and exploiting areas of "risk-based advantage"
- Building investor confidence by establishing a process to stabilize results by protecting them from disturbances and demonstrating proactive risk stewardship.

The reasons organizations undertake ERM are both external and internal. External motivation comes from corporate governance studies (such as the reports from the Cadbury, Hamper, and Trundle Committees in the United Kingdom, the Dye Report in Canada, and the Peters Report in the Netherlands), mandatory bills (such as the contra in Germany), and pressure from institutional investors-all of whom insist that risk management be a board-level responsibility and the scope be all-encompassing.

However, that most organizations embarking on ERM are doing so for internal "good business" reasons. That is, they seem motivated by the goals outlined above: improving capital efficiency, making more risk-informed strategic decisions, and building investor confidence. On this last point, we see that investors assign to organizations that display consistent earnings results. Across a wide range of industries, investors assign materially higher value to those companies with lower earnings volatility than their peers, even after the study sample is stratified to adjust for other value drivers, such as growth and return. In short, there is demonstrable value in consistency-and consistency is a clear outcome of effective ERM.

## 3. OVERVIEW OF THE ERM PROCESS

The actual ERM process consists of the following four steps that usually make use of existing company information and procedures.

- **Assessing Risk.** Risk assessment focuses on risk as a threat as well as an opportunity. In the case of risk-as-threat, assessment includes identifying, prioritizing, and classifying risk factors for a subsequent "defensive" response. For risk-as-opportunity, this step includes profiling risk-based opportunities for later "offensive" treatment.
- **Shaping Risk.** This "defensive track" includes risk quantification/modeling, mitigation, and financing.
- **Exploiting Risk.** This "offensive track" includes accounting analysis, development, and execution of plans to exploit certain risks for competitive advantage.

- **Keeping Ahead.** The nature of risk, the environment in which it operates, and the organization itself changes with time. That situation requires continual monitoring and course corrections.

Properly understood, designed, and executed, ERM can be the effective decision-making framework that executives say they are looking for. It accomplishes the following.

- Allows a determination of the necessary capital level for the enterprise, and provides a means to efficiently deploy and improve return on capital
- Permits the proper allocation of capital to business segments, thereby improving the performance tracking of those segments
- Helps executives evaluate alternative capital structures that leverage returns
- Provides a method to ensure that enterprise owners receive proper compensation for the risks they assume
- Helps stabilize earnings by identifying and addressing the risks that create the most volatility
- Guides the development of an optimal risk financing strategy
- Provides better information, which increases negotiating leverage with the enterprises' stakeholders, from shareholders to analysts to regulators to capital markets to merger and acquisition targets <sup>2</sup>

Accounting management's objective is to maximize economic value over the long term while minimizing the risks of large deviations from expected performance. The relative preferences for maximizing value versus averting risks will differ for each management team, as well as the circumstances under which the team must develop its strategy. Nonetheless, the process that management teams use to answer these questions is the same, regardless of their risk-value preferences:

- Assessing Risks
- Articulating Strategies
- Evaluating Strategies from the Policyholders' Perspective
- Evaluating Strategies from the Owners' Perspective
- Refining Strategies

### **Step 1: Assessing Risks**

The first step in developing best strategies is to assess the current risk environment. The assessment includes examining both financial and operational risks, using qualitative and quantitative methods. Financial risks include credit, interest rate, currency, mortality, liability, and reinvestment risks. Operational risks include people, technology, distribution, political, and regulatory risks.

Risks should be described as fully as possible, taking into account such aspects as:

- Causal factors and consequences
- Timing, e.g., short-term versus long term, seasonal, etc.

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<sup>2</sup> Enterprise Risk Management: What's Beyond the Talk? May 2000 by Jerry Miccolis Tillinghast-Towers Perrin

- Correlation with other risks, including whether a given risk could trigger or be triggered by other risks and, importantly, whether certain risks are negatively correlated and therefore represent "natural hedges" against each other
- Current risk mitigation strategies and their effectiveness to date
- Either historical data on or expert assessment of a given risk's impact on financial performance

This process involves a combination of gathering historical data, reviewing documents, and conducting interviews to gather information on business processes, organization, technology, people, and culture. There are several ways to document the output of the risk identification process. A simple method is to create tables where each row represents a unique risk and each column is used to organize information gathered for each risk. An alternative method is to develop risk maps that graphically illustrate both the causes and consequences of each risk.

However they "plot" the risks, managers can then decide which risks require their greatest attention by classifying them as "manageable" or "strategic." Manageable risks are those that the organization can address with existing capabilities. These risks might include such things as weak contingency planning in critical facilities or midlevel employees dissatisfied with opportunities for advancement. The proper response to manageable risks is simply to use the existing organizational capabilities to mitigate them by assigning them to the appropriate managerial level.

Strategic risk factors, on the other hand, are those that have to be addressed with substantial expenditures and/or a change in strategic direction. These can arise, for example, when an organization enters unfamiliar business territory because of a major acquisition, or when a new competitor emerges, or when customers change their buying preferences. Strategic risks require greater analysis and often need to be analytically modeled. The models represent the uncertainty associated with each strategic risk factor regarding how, when, and the degree to which it will manifest itself. These models may range from entirely quantitative, relying strictly on hard data, to entirely qualitative, relying almost entirely on expert testimony. In either case, the objective is to develop probability distributions for each risk factor. Models that use both qualitative and quantitative "inputs" offer the greatest potential for modeling operational risks to which financial institutions may be exposed—at least until the industry's ability to gather and maintain data on operational risks matures.

## **Step 2: Articulating Strategies**

The next step in developing best strategies is to articulate financial and operational strategies in a way that allows measurement of their impact on the risks identified in the preceding step. For an insurer, these strategies represent a set of basic decisions regarding core business activities, including product mix, asset-class allocation, the structure of reinsurance programs, design of business processes, performance-incentive systems, and risk mitigation. The objective of this step is to propose alternative financial and operational strategies and to develop a financial model that will be used in later steps to evaluate these strategies.

These strategies are intended to maximize value in light of the risk environment. The "value" or "values" being maximized may include earnings growth return on capital, and consistency of financial performance. These objectives are often in conflict with each other. Some decisions may grow earnings at the expense of return on capital while others may increase return in the long term but create short-term instability. Thus, financial and operational strategies must be carefully coordinated to optimize the trade-off and maximize overall value based on management objectives.

The first two steps in the strategy development process—assessing risk and articulating strategies—constitute the bulk of the analytical effort. The remaining steps use the risk models and the stochastic financial model to evaluate strategies.

### **Step 3: Evaluating Strategies from the Policyholders' Perspective**

To select the best strategies, management at insurance companies needs to evaluate the alternatives from the standpoint of both customers (policyholders) and owners (shareholders). Generally, policyholders are concerned with the solvency of the business, whereas shareholders are concerned with returns on their investment. This step focuses on the interests of policyholders, while the next step shifts emphasis to shareholders. Policyholders' interests are reflected in the amount of capital the company holds against adverse performance. The greater the level of capital, the lower the risk of insolvency, all else equal. However, too high a level of capital will dilute the returns to shareholders. Therefore, the objective is to establish the minimum level of capital that will achieve the desired level of policyholder protection.

### **Step 4: Evaluating Strategies from the Owners' Perspective**

While the determination of economic capital is focused on the needs of the policyholders, this step primarily focuses on the interests of the owners of the enterprise. Owners are primarily interested in three objectives: growth of the business, return on their investment, and consistency of financial performance—the three pillars of the value edifice.

Strategies will distinguish themselves based on their relative impact on each of these value drivers. Some strategies are meant to primarily focus on growing the business, while others focus on return. Yet others focus on reducing variability. A combination of financial and operational strategies will likely affect all three objectives in positive and negative ways. Therefore, evaluating strategies will require optimizing the trade-off among the objectives based on the preferences of accounting managers who represent owners' interests. In order to evaluate strategies against management preferences, each objective must be defined in terms of measures that are generated by the stochastic financial model developed earlier. Note that the financial model generates projections of financial statements—specifically, it generates probability distributions on each major element of the financial statement.

Once management selects the measures that define each objective, the accounting management team can evaluate the various alternative strategies to achieve those objectives. The simplest method is to plot all combinations of financial and operational strategies on a

two-dimensional chart representing risk and value. Then either growth-based or return-based measures can be used to analyze risk and value.

### **Step 5: Refining Strategies**

This additional evaluation step involves decomposing the prior analysis into root causes. That is done by turning the uncertainty associated with a variable in the financial model "on" or "off." Turning "on" a variable means converting it from a deterministic variable to a stochastic variable. This is done by replacing it with the probability distribution of the risk source that it is associated with. Turning "off" a variable means replacing the probability distribution with the expected value of the variable, i.e., the mean of the distribution.

The difference in the values represents the contribution of that risk source to the uncertainty of return on capital. Repeating this exercise with each risk source provides information that can be used to compare each source of risk. Similarly, evaluating results based on changes to an isolated strategy, e.g., reinsurance can be used to determine the relative impact of each strategy within the complete set of financial and operational strategies. By constantly applying this iterative process of decomposing risk and isolating the impact of each strategy, management can not only refine its strategies, but also be assured that it is selecting the best strategies.

The five-step process we've outlined represents the logical flow of activities in developing strategy. The risk assessment process establishes the complete risk environment by considering both financial and operational risks. Manageable risks are assigned to appropriate managerial levels, while strategic risks are quantified and included in the financial analysis. Alternative financial and operational strategies are overlaid on the risk environment and modeled using an extension of existing financial models. At this point, insurance managers can be confident that they have, in fact, developed a set of "best strategies" to manage risk at the enterprise level and increase the value of their enterprise.

## **4. CONCLUSION**

ERM represents a very exciting opportunity for insurers to create new markets for their products. However, handling these new exposures presents some real challenges for insurers. Whether insurers can successfully rise to the challenge will be a dominant question for the industry in this decade.

Value at Risk is not nearly as well accepted in the institutional investment community as it is elsewhere. The main reason is that accounting managers are typically in the business of taking risks, either to fund uncertain liability streams or to generate positive excess risk adjusted returns. Not surprisingly, accounting managers – mutual funds, private banks, hedge funds, pension plans, endowments and foundations – often view risk management in general and value at risk in particular as inherently at odds with their primary business mandate. Nevertheless, Value at Risk can be a useful tool by which accounting managers can better ascertain whether the risk they are taking are those risks they want or need to be taking and think they are taking. Investors as well are becoming increasingly aware of the benefits of

var. as monitoring tool, causing them to further prod their fiduciary accounting managers toward the regular calculation and disclosure of this measure of market risk.

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## BIOGRAPHICAL NOTES

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