

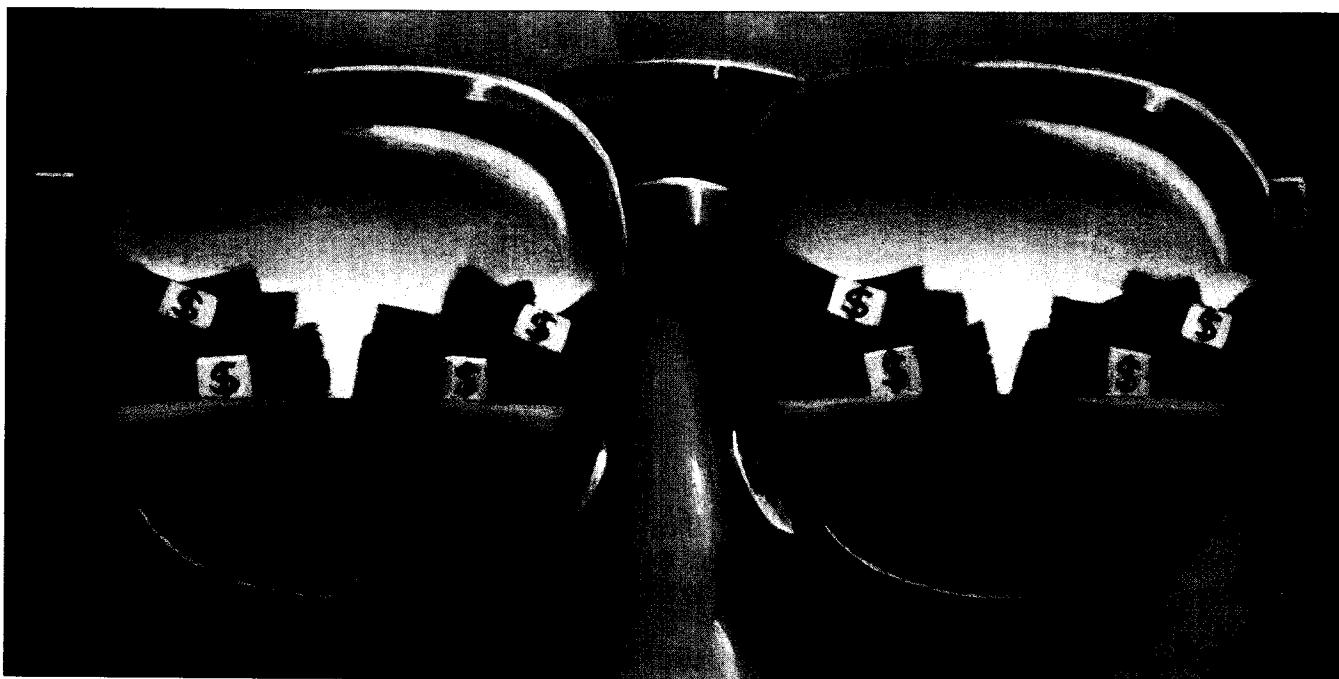
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# How the Corporate Risk Manager Contributes to Company Value

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By Michael L. Smith, Ph.D., and C. Arthur Williams Jr., Ph.D.



**I**n concept, the objective of a risk manager is the same as that of other managers: to increase the value of the firm. Yet the actions advocated by the risk manager may not always coincide with those advocated by other managers. Conflicts often arise when the risk manager considers indirect effects that are not apparent to other managers. In short, it boils down to the risk manager's long-term view of the value of the company vs. managers' short-term view.

The risk manager's expertise lies in managing special classes of claims against the firm such as liability and employee benefit claims, while evaluating their long-term effects on the

company's value. In assessing the possible costs of an accident, for example, the risk manager considers indirect effects or possible adverse outcomes that may not be obvious to other managers. If an oil spill occurs, for instance, the company responsible for it will incur obvious direct costs as well as indirect costs such as the loss of future drilling rights.

Possible regulatory actions and penalties offer other examples of indirect costs. The possibility that these costs may be incurred affects the owners' perception of the value of their company. Since these types of claims can be characterized as low probability/high severity, the large costs associated with them may take a long time to materialize. The risk manager's role is to identify potential outcomes that carry severe consequences.

In a market where securities analysts sift through incomplete information to forecast fu-

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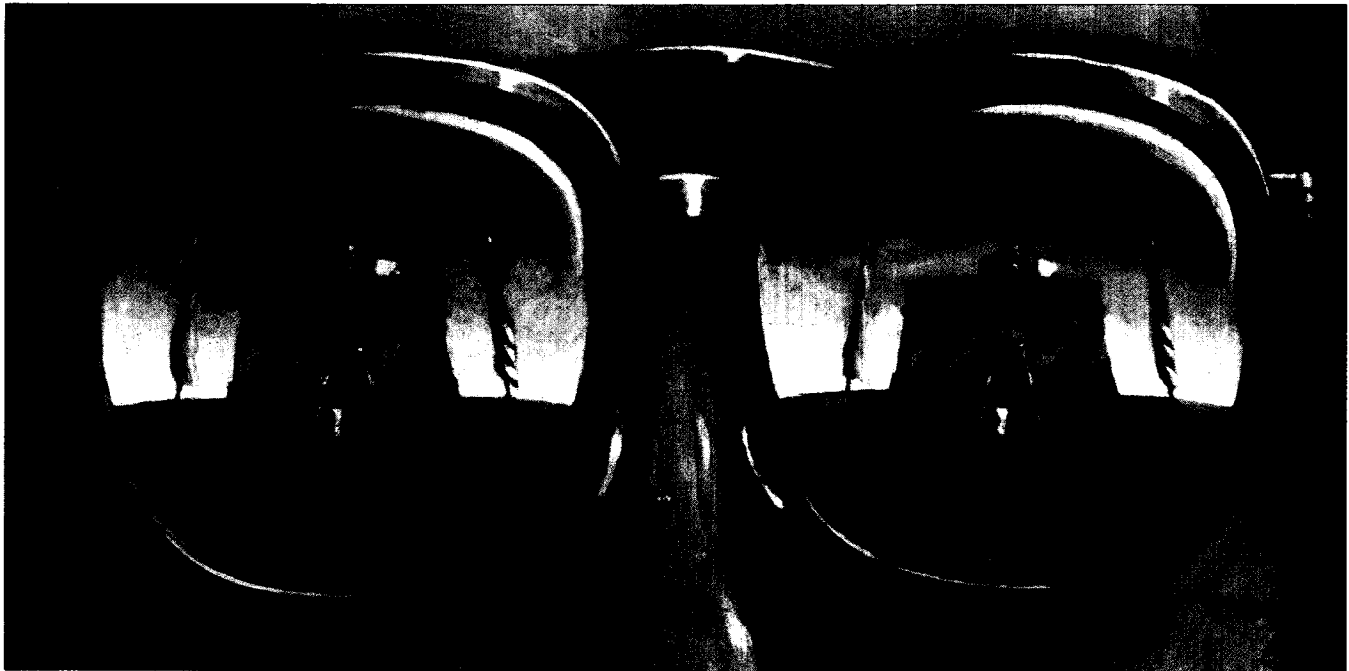
ture earnings, a firm's risk management policies can send important signals to claim-holders about the firm's attitude toward matters affecting their long-term interests. By providing assurance to holders of the firm's long-term securities, such as mortgage debt, a risk manager's policies can increase their willingness to hold onto them. This translates into higher market values for these holdings, which in turn lowers the cost of raising funds for the firm.

### **The Value-of-Firm Principle**

Most risk managers would agree that an

well as its costs.

A value-of-firm criterion has the advantage over other conceptual methods of not requiring a specific time period to measure management costs. The correct accounting period for measuring risk management effectiveness is difficult to ascertain using standard methods. A one-year horizon is too short, because of conflicting short-run fluctuations. For example, the effectiveness of loss control measures may not become apparent in a single year. At the other extreme is a point where the number of years is too long, for instance, 20 years, since over that time most



objective standard is essential for evaluating risk management policies, yet few would agree on a single criterion for measuring their effectiveness. There is, however, one standard, known as the value-of-firm principle, that helps in assessing the contribution of risk management to the firm and communicating the purpose of risk management activities to managers in other areas.

A single criterion unifying risk management objectives for publicly held corporations can be achieved by extending the cost-of-risk concept outlined by Christopher A. Duncan in the February 1990 issue of *Risk Management*. According to Mr. Duncan, the concept seeks to identify all the financial effects of a firm's risk management policies, including effects on retained losses and insurance premiums. It can be extended by evaluating cost-effectiveness using the firm's market value and assessing long-term effects as well as the effects on near-term cash flows. This assessment should also consider the positive consequences of risk management as

insurance coverages would cost a firm more than its claim reimbursements. In addition, a 20-year horizon cannot be widespread if, as reported by the Insurance Information Institute, premiums for commercial coverages continue to remain at about one-half the total U.S. property-liability insurance market.

### **A Single Shortcoming**

The value-of-firm principle has one shortcoming: The positive effects of risk management on the firm's value may not be directly observable. Sudden negative effects, however, such as the consequences of a major uninsured catastrophe, may be observable. Most risk managers know that positive effects are realized gradually and are often masked by economic factors, such as recessions, interest rate movements and changes in the market for the firm's products. While these factors strongly influence the firm's value, they are beyond the risk manager's control. Therefore, positive effects of risk

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management must be estimated using more indirect methods.

The strongest argument for a value-of-firm criterion is built around assumptions leading to efficient markets. Under these assumptions, all individuals have the same information and assessments of risks and returns, and no action against the company escapes the attention of shareholders or claim-holders. Also, holders of claims against the firm have rational forecasts of the company's future actions, and transaction costs are zero. In such a setting, it is impossible to cheat holders of a company's securities or other claim-holders, and prices react immediately to available information.

Price change possibilities induced by newly released information implies that securities returns are subject to random fluctuation. Rational investors respond to this possibility by diversifying their securities holdings across companies and industries to reduce risk at zero cost. Consequently, possible fluctuation in returns available to holders of an individual company's securities is not a concern. Also, investors would not finance an activity if less expensive methods were available. Activities that only reduce fluctuation in the company's earnings would have no value to investors, because they can reduce fluctuation on their own through diversification at negligible cost.

#### Different Motives

If possible fluctuation is not a concern to investors, a major reason for purchasing insurance appears to be absent. David Mayers and Clifford W. Smith Jr., in the April 1982 issue of *Journal of Business*, suggest different motives other than risk aversion to explain corporate insurance purchases; their arguments can be

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applied to other risk management activities. For example, the risk of fluctuation could be important to the owners of closely held companies if their holdings are not diversified. Also, fluctuation in a company's income raises the possibility of driving its taxable income to zero. In this case, the value of the firm's tax shields is lost,

since the right to write off depreciation against taxable income becomes valueless. However, it is the loss of the tax shield—not the fluctuation—that causes the problem.

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*"The positive effects of risk management on the firm's value may not be directly observable"*

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In an efficient market, investors accurately forecast the effect of any decision on a company's long-term earnings. For example, by terminating its liability insurance coverages and reducing quality-control expenditures, a company could improve its short-run profits. In an efficient market, shareholders would not be fooled by such moves because they have accurate forecasts of future uninsured product liability claims arising from reduced quality-control vigilance. Similarly, a product liability insurer would assess the firm's quality-control activities to determine the price it would charge if the company reinstated insurance coverage.

Customers would not be fooled either. Their decreased demands for the company's products would reflect poor product quality and the lack of recourse against a third party insurer for injuries caused by product defects. Customers have a claim against a company if they can compel it to honor product warranties or they can seek compensation for injuries from defective products. Possible recourse against an insurer increases the value of the customer's product liability claim because the customer can enforce the claim if the company becomes insolvent. Terminating liability insurance reduces the likelihood that the customer will be reimbursed if a product is defective, which decreases demand for it.

In an efficient market, investors respond to the company's actions by balancing the decrease in customer demand and increase in future product-liability claims against reduced insurance expenses and quality-control costs. By adjusting their demands for the company's securities, investors would judge whether reducing quality-control measures and canceling insurance are appropriate. These adjustments, which recognize the value of other claims against the company, cause its value to rise or fall.

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affect the value of common stock. If shareholders believe that quality-control measures and insurance against product-liability claims are cost effective, their reaction to these two factors being terminated will decrease the company's value. The company's response to these indirect effects or their possibility of happening is called stakeholder management.

Skeptics might argue that claim-holders rarely uncover enough information on the company's risk management policies to form accurate judgments about how they will affect future profits. However, even skeptics will not argue against the consequences of risk management policies becoming evident over time. The only

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issue remaining in the debate then becomes how long it takes claim-holders to forecast the effects of risk management activities.

#### **Serving the 'Right' Interest**

Risk managers evaluate a course of action from the perspective of an investor who holds company shares. The question is, Which activity would be chosen by an informed hypothetical outside investor? For example, if an investment in loss-prevention equipment is being considered, risk managers would ask whether an investor who is familiar with risk management would be willing to help fund the project.

Because risk managers usually advise other members of a company's management team, their allegiance may appear to lie with incumbent management rather than outside investors. However, when the interests of company managers and outside investors conflict, the survival of the firm or its managers is called into question. In addition, reward systems for company managers are likely to be tied to securities returns. Thus, risk managers should value the interests of hypothetical outside investors.

In the April 1980 issue of *Journal of Political Economy*, Eugene Fama states that diversification by security holders counters the presumption that a large, modern corporation has owners in any meaningful sense of the word. Thus, he says, the company faces competition, which

forces it to develop systems for monitoring and rewarding managers. Securities holders would be expected to establish systems providing indirect penalties and rewards to managers for actions that affect the value of their holdings. Managers also experience direct effects as a result of holding stock options or through other incentive plans. Individual managers, including risk managers, are thus disciplined by these reward systems and by outside opportunities.

A value-of-firm criterion incorporates ethics of all possible claim-holders. If direct and indirect claim-holders embody typical societal standards, there is no obvious conflict between the criterion and an ethical standard using societal norms. Indeed, risk managers do not have to argue that the company has a social responsibility to maintain high-quality control standards when this action serves the interests of the company's owners. The interests of stockholders may be served by actions that appear directed toward meeting social responsibilities.

#### **Assurance Measures**

Rational claim-holders should anticipate actions by managers that affect their interests. Rational forecasts do not permit one group to enrich itself at the expense of another. For example, canceling all insurance increases profit when no losses occur but exposes the company to bankruptcy and debt default. Exposure to possible bankruptcy causes the value of debt to fall, while increased profit causes the value of common stock to rise. In effect, savings from canceled insurance would appear to enrich stockholders at the expense of bondholders.

Bondholders, however, will react to the possibility of expropriation. Rational bondholders would be expected to recognize managers' incentives to take actions that benefit stockholders at bondholder expense. Accordingly, bondholders would be expected to reward appropriate safeguards against such actions. Safeguards might include requiring that insurance be purchased to protect against loss of assets pledged as collateral, or requiring that the company maintain a specified level of liquidity. Without these safeguards, bondholders downgrade the value of their holdings.

The company's legal obligation to purchase insurance against loss of assets pledged as collateral has two effects. On one hand, the cost of the required insurance reduces profits that can

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be distributed as dividends. Thus, holders of common stock would be expected to resist the requirement. Conversely, the requirement increases the willingness of investors to hold the secured debt, so they bid up its value. If secured debt holders bid up its value by more than the cost of insurance to stockholders, the requirement is in the stockholders' interest and increases the company's value.

Employee benefit programs offer another example of how claim-holders react to the possibility of expropriation. The value of employees' claims for any form of compensation is affected by how the claims can be enforced. Benefits promised under an unfunded deferred-compensation plan, for example, may be viewed by an employee as less secure than the same set of benefits promised under a funded pension plan. In the employees' view, a deferred compensation plan provides less security if it is subject to claims against the firm, such as bankruptcy proceedings. In such cases employees of a company using a deferred-compensation plan would be expected to increase their demands for salary and wage compensation.

At the other extreme, a company's bondholders may view the deferred-compensation plan as less expensive if plan assets are subject to their claims. The plan also encourages employees to help maintain the company's financial well-being. The effect of the plan on the value of the company balances the costs of the plan against its effects against future profitability.

Managers should realize that employees arrange their own affairs to reduce their exposure to adverse events, which may affect their productivity and allegiance. Individuals will diversify their employment risk by developing a variety of skills and maintaining contacts where opportunities are likely to develop. Employees also can arrange their personal affairs to reduce exposure to adverse events. For example, an employee concerned about the possibility of

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being laid off may choose to live in an apartment rather than own a house.

According to the Sept. 19, 1989, edition of

The Wall Street Journal, trends have developed among large companies toward special funding or security arrangements for benefit plans covering top managers. It reported that most of these secured plans provide payment assurance in the event of takeovers but not bankruptcy. Pre-

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sumably, the company's financial condition is a responsibility of top managers, so the lack of assurance in a bankruptcy aligns managers' and stockholders' incentives. The assurance of benefits in a takeover prevents the stockholders from enriching themselves at managers' expense.

The effect of an employee benefit program on a company's value is evaluated by considering whether an outside investor would be willing to contribute funds to operate the program. In making the evaluation, the investor would consider intangible factors such as effects on employee allegiance and morale. Benefit programs may enhance company value when the resulting improvement in employee morale increases productivity or encourages workers to focus on the firm's reputation or customer satisfaction.

#### **Risk Manager as Specialist**

The value-of-firm principle ties the objectives of risk managers to those of managers in other areas such as marketing and finance. The principle unifies the generalist view of risk management advocated by H. Felix Kloman in the April 1990 issue of Risk Management with views of others who regard the discipline as more specialized. However, this unifying objective does not imply that the risk manager and marketing manager do the same thing, except in the most generic sense. Rather, specialization defines the boundaries of their respective disciplines. The risk management rationale rests on this specialization, not on any set of objectives unique to the profession. In committing the company's resources to activities, the risk manager should consider whether an outside investor would be willing to contribute needed funds. Activities meeting this standard of cost-effectiveness serve the interests of the company's owners as well as the risk manager. **RM**