Integrated risk management for the firm: A senior manager's Guide

By Lisa K Meulbroek, HBS Working Paper, 2002

Companies have three fundamental ways of managing risk:

- Modifying the firm's operations
- Using targeted financial instruments
- Adjusting the firm's capital structure

An integrated approach to risk management looks holistically at:

- All the risks
- The three approaches available to manage risk

The three ways of managing risk are functionally equivalent. So, their use connects seemingly unconnected areas of management- Strategy, Operations and Finance.

In the world of Miller Modigliani, risk management cannot create value. But in the real world, risk management can add value in various ways:

Risk management by the firm can facilitate risk management by the company's shareholders. On paper, investors can diversify their unsystematic risk and adjust their exposure to systematic risk through a combination of bonds and the market portfolio. But investors' estimation of risk may not be accurate because of the problem of private information. Managers know much more than the shareholders about the current and future prospects for the firm. This information cannot be disclosed for competitive reasons. Managers can use their proprietary information to deal with risk in a superior way. Managers can also hold risk at a targeted level thereby enabling investors to adjust their own risk exposures more easily. Also, due to economies of scale, risk management at the level of the firm may be less expensive than that at the level of the individual investor.

Financial distress can be costly. Even the prospects of financial distress can cast a costly shadow over the firm. *Risk management can reduce the costs of financial distress by making it less likely.*

Risk management can lower the risk faced by important non-diversified investors especially managers who have been given stock options. Without the benefits of risk management, the firm may either have to give more ESOPs to managers or offer them at a discount.

Risk management can increase firm value by reducing taxes. Most countries have a progressive tax structure. Such a structure gives firms the incentive to smoothen earnings and thereby minimize taxes. Progressive tax rates mean that firms will do better by staying consistently in the lower tax region rather than have negative earnings in one year, followed by high earnings that lead to a higher tax rate in the next year. Risk management helps to smoothen earnings. The penalty for volatility in taxable earnings is even higher when the firm has limited scope to carry its losses forward.

Risk management can also increase the debt capacity of the firm and thereby reduce taxes. By decreasing firm volatility, risk management enables the firm to operate with a higher debt equity ratio. This argument is less relevant for start-up firms which are still struggling to find their feet. But it is definitely applicable to established, profitable firms.

Risk management minimizes the potential for conflict between the debt and equity holders. A high debt to equity ratio increases firm volatility and can be viewed with concern by debt holders. Through risk management, the firm can commit itself to a targeted risk level. This will reassure the debt holders and even allow the firm to operate with a higher debt to equity ratio that would not have been possible without risk management.

Risk disclosures and risk targeting can lower the cost of monitoring and evaluating firm performance for investors, creditors and customers.

Risk management can create value by ensuring the availability of funds for making investments whenever required. It is often costly to raise external capital. This means that projects have to be internally funded. By smoothening the cash flows, risk management makes the availability of internal funds for investment more likely. Larger firms will find it relatively easy to raise external capital. So, this argument is more applicable to smaller, more specialized firms.

What are the advantages of integrated risk management? To start with, it is the total risk of the firm that matters to shareholders. *Integrated risk management also ensures that some risks offset others thereby reducing the need for hedging and reducing transaction costs.*

Integrated risk management can enable the purchase of more comprehensive insurance policies that cover many types of risk. The total premium paid will be less as it is unlikely that losses will simultaneously arise out of say product liability, fire, earthquake and floods. Without a firm wide integrated risk management approach, it would be difficult to buy such a comprehensive cover. Integration of the different ways of managing risk, i.e. an optimal combination of modifying operations, using targeted financial instruments and adjusting the capital structure, can also create value.

When should the firm hold the risk and modify operations and when should it transfer the risk? When the firm understands the risk well, it is best placed to hold and manage the risk. Thus, poor product quality can lead to product liability risk. This risk is best held by the firm and actively managed. A limited product line can make the company vulnerable to market shifts. This risk is again best managed by the company by expanding the product line.

Where risks are difficult or expensive to manage by modifying the operations, targeted financial instruments make sense. Thus, automobile companies can use this approach to manage currency risk. By using targeted financial instruments, firms can focus on a specific risk in a cost-effective way, without disrupting the firm's operations.

Adjustment to the capital structure does not require precise forecasting of the source and magnitude of a specific risk. Indeed, equity provides general purpose protection against risks that cannot be readily anticipated or measured, for which no specific financial instrument exists. The problem with equity is that it is more expensive. Too much of equity can also amplify the agency problem.

The most common classes of risk faced by firms are:

- Operational
- Product market
- Input
- Tax
- Regulatory
- Legal
- Financial

Managers must expand their narrow focus and move away from tactical to strategic risk management. Whereas tactical risk management looks at hedging or transferring a specific risk, strategic risk management is concerned with how risk affects the value of the entire firm. A firm may be hedged tactically but still have substantial strategic exposure.

Risk management is ultimately the responsibility of executive leadership. It cannot be delegated to derivatives experts or the heads of individual business units. Leadership must decide what risks are essential to the profitability of the firm and then develop a strategy to manage those risks.

Various risk management tools are available today but they need to be used judiciously to create value for the firm and the stakeholders.