

# THE IMPERATIVE OF ENTERPRISE RISK MANAGEMENT IN THE VALUE-CREATING PROCESS

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**Abstract:** *A growing emphasis on risk assessment has marked the past 20 years of financial theory and practice and risk management has emerged as an independent research area. The present study focuses on enterprise risk management strategies which, in contrast to portfolio risk management, require different ways of thinking and different tools to use. With an understanding of risks and their consequences, firms can develop a strategic risk management strategy and exploit risks for higher returns rather than hedging.*

**Key words:** *Risk assessment, Hedging, Firm's Value, Discounted Cash-Flows.*

## 1. Introduction

Enterprise Risk Management is a relatively new and quickly developing term that is considered as the ultimate approach to risk management.

Risk management has to take into consideration two aspects: the trade-off between risk and return, and the link between risk and innovation, as new products and services have been developed to both hedge against and exploit risk [Damodaran, 2007]. The link between risk and return is most perceptible when an investment opportunity is concerned. Financial theory, as well as common sense, shows that investments that are riskier need to generate higher return to compensate for risk exposure. In the innovation process, it is important to strike a balance between inventiveness, on the one hand, and prudence on the other. Every time a new product is launched, a new production process is implemented, new markets or sources of supply are

explored; the success of these endeavours depends on the capacity of these innovations to be absorbed by the industry where the firm operates.

Risk management supposes, first of all, a measurement of the risks. Hence, risk management begins with risk assessment.

## 2. Risk and Value

In common valuation, two established approaches are used: the discounted cash-flow valuation and the relative valuation, which estimates the firm's value by examining the way the market prices firms with similar characteristics.

*Discounted cash-flow valuation models* consider the firm's value as the present value of future expected cash-flows that the company can generate.

$$VF = \sum_{t=1}^{\infty} \frac{EFCF_t}{(1 + \text{Cost of Capital})^t}$$

where,

VF- Value of the Firm

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EFCF - Expected Free Cash-Flows Generated by the Firm's Activity. It can be calculated as the difference between After-Tax Operating Income and Reinvestment needs.

Cost of Capital = the weighted average cost of capital demanded by equity as well as debt holders.

Because it is impossible to estimate these cash-flows forever, the above calculation can be approximated by considering a limited period of time and estimating the terminal value of the firm at the end of the considered period. The terminal value encompasses the remaining future cash-flows after the forecast period.

$$VF = \sum_{t=1}^n \frac{EFCF_t}{(1 + \text{Cost of Capital})^t} + \frac{TV_n}{(1 + \text{Cost of Capital})^n}$$

where,

$TV_n$  – Terminal Value of the Firm at the end of year n.

For evaluating the terminal value of a business, the most commonly used method is the stable perpetual growth model, which is based on the hypothesis that the future expected cash-flows grow forever at a stable rate (g).

$$TV_n = \frac{\text{Expected Cash - Flow for Year } n + 1}{\text{Cost of Capital} - g}$$

Alternatively, in order to assess the value of a company, we can discount the expected cash-flows for equity holders (the net income after debt payments and taxes) at the cost rate of equity.

In these discounted cash-flow models the effect of risks is incorporated in the discount rate. Using the capital asset pricing model (CAPM), the firm's levered equity beta reflects the riskiness of the cash-flows to equity. Similarly, the riskiness of the firm's free cash-flows is reflected by the firm's asset beta.

*Risk adjustment in a DFC Model.* In the Equity DCF Model, expected cash-flows represent expected cash flows to equity, and they are not adjusted for risk. Cost of equity increases as exposure to market (nondiversifiable) risk increases. The discount rate is unaffected by exposure to firm specific risks.

In the Firm DCF Model, expected cash-flows represent expected cash flows to all claimholders of the firm, and they are not adjusted for risk. In addition to the cost of equity effect, the cost of debt will increase as the default risk of the firm increases and the debt ratio may also be a function of risk.

In the valuation process of a firm the *relative valuation method* can be used, based on the market value multiples of comparable firms. This approach provides a rough estimation of a company's market value due to several inconveniences. For lack of identical firms on the market, the analyst has to identify similar firms to the one being valued as concerns size, cash-flows, financial structure, brand strategy, growth potential, exposure to risks.

The multiples used are related to the market price of the company's equity:

- *price earnings ratio (P/E)*, also called earnings multiple, directly relates the price of a share to the proportion of the company's profits that belong to the owner of that share.
- *market to book ratio (M/B)*, also called the multiple of book value, is the ratio of the current share price to the book value per share. It measures how much a company is worth at present, in comparison with the amount of capital invested by current and past shareholders into it.
- *price to sales ratio (P/S)*, also called the multiple of revenues, is a ratio for valuing a stock relative to its own past performance, other companies or the market itself.

- *P/EBIT or P/Cash-flow*, is a measure of the market value of a company's equity to its operating profit or cash-flow.

After selecting the multiples used in the valuation, the qualitative process of comparison starts, followed by the explanation of the differences between these multiples across similar firms, including why a firm is under- or overvalued relatively to similar companies.

### 3. Developing a Risk Management Strategy

Every business is exposed to risks, and therefore risk management should be considered as a central part of doing business. Risk is a danger and an opportunity, so the future uncertainty can be exploited in order to create more value.

Enterprise risk management (ERM) creates value through its effects on companies at both a "macro" or company-wide level and a "micro" or business-unit level. At the macro level, ERM creates value by enabling senior management to quantify and manage the risk-return tradeoff that the entire firm faces. By adopting this perspective, ERM helps the firm maintain access to the capital markets and other resources necessary to implement its strategy and business plan [Nocco, Stulz, 2006].

In developing a risk profile, analysts have to take into consideration the following steps:

1. make a list of all potential risks that the firm is exposed to. These risks include not only the firm-specific risks, but also the risks that affect the economic environment in which the firm operates (industrial and macroeconomic risks).
2. categorize risks into market risks; risks related to the firm's financing choices (financial and operational risks); risks that continuously affect the firm's activity, and event risks; risks that have a great impact on the firm's value and

risks that only affect the activity of the company to a smaller extent.

3. measure the firm's exposure to the above mentioned risks. Assess how different types of risks impact the earnings or the value of the corporation.
4. decide if hedging the risk exposure is required taking into consideration the costs and benefits of hedging. Hedging risks has both implicit and explicit costs that can vary depending upon the risk being hedged and the hedging tool used, and the benefits include better investment decisions, lower distress costs, tax savings and more informative financial statements [Damodaran, 2007]. Managers have to be aware of the fact that hedging risks does not always create added value for the stockholders.
5. evaluate which are the risks that the firm can cope with better than the competitors can. In the case of these risks that can be viewed as potential opportunities, a risk management strategy has to be implemented.

The last step should be crucial in every firm, because higher risk taking leads to higher returns, and can increase the competitive advantage on the market, by creating added value to the owners.

It does so by enhancing the investors' confidence in the management's ability to carry out the firm's business plan, simultaneously reassuring the rating agencies of the firm's ability to service debt, under most foreseeable circumstances [Fraser & Simkins, 2007].

### 4. Conclusions

The concept of risk has occupied a central and often controversial place in the financial theory and practice. A growing emphasis on risk assessment has marked the past 20 years of financial theory and practice and risk management has emerged as an independent study.

We can conclude that corporate governance can be a key part of good risk taking by increasing the value of the businesses, rather than reducing or increasing risk exposure, followed up by developing a valuation framework that incorporates all of the elements of risk management [Damodaran, 2007].

Too much emphasis has been put on risk hedging and too little on risk management. Risk management should be an important preoccupation in conducting every business. Enterprise risk management emerged in the last decades as a new way of doing business. ERM is not truly a new form of risk management; it is simply the recognition that risk management means total risk management, not some subset of risks [D'Arcy, 2001].

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