

ESSENTIALS OF RISK MANAGEMENT: A STUDY

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ABSTRACT

The subject of risk management does not have a long history. It is reported by Ben Hunt that "one of the earliest references to the term "risk management" was in 1956 in the US when it was used in a Harvard Business Review article. Risk is a condition where there is a possibility of an adverse deviation from a desired outcome that is expected or hoped for. There is no requirement that the possibility should be measurable but only that it must exist. Risk is not necessarily a bad thing. In fact, risk-taking is an essential component of a competitive economy. At the same time, an important characteristic of risk is that some losses will actually occur. There is a financial loss when a wage earner dies, or money is stolen or a building is destroyed by fire. Such losses are examples of primary burden of risk and the main factor prompting individuals and businesses to try to avoid risk or mitigate its impact. The focus on risk management, particularly by corporate, has undergone remarkable change over time. There has been a change in regard to concern with gravity of risk.

KEYWORDS: Risk Identification, Loss Exposure, Flow Charts, Potential Losses, Portfolio, Hedging.

Introduction

Risk is a condition where there is a possibility of an adverse deviation from a desired outcome that is expected or hoped for. There is no requirement that the possibility should be measurable but only that it must exist. Risk is not necessarily a bad thing. In fact, risk-taking is an essential component of a competitive economy. At the same time, an important characteristic of risk is that some losses will actually occur. There is a financial loss when a wage earner dies, or money is stolen or a building is destroyed by fire. Such losses are examples of primary burden of risk and the main factor prompting individuals and businesses to try to avoid risk or mitigate its impact. Once an individual or organization or society is exposed to risk, there is a need to manage the risk by suitable techniques. The management of risk is a process with the objective of identifying risk exposures faced by an individual/organization with a view to selecting the best available technique for treating such exposures. According to Bernstein "the essence of risk management lies in maximizing the areas where we have some control over the outcome while minimizing the areas where we have absolutely no control over the outcome "Risk management remained framed within the discipline of insurance purchasing. The spectrum of risks that corporations wanted to manage still tended to be 'insurable' – physical hazards, liability risks and so on". The corporate have become far less concerned with traditional "high frequency, low severity" risks but have started devoting greater attention to risks that could lead to corporate collapse and corporate bankruptcy.

Doherty observes that risk management is about insurance and hedging and biases the use of both insurance and financial instruments to control the costs of corporate risk. For a long time, corporates have used insurance to manage property, liability and other insurable risks. Insurable risks expose the firm to volatility that is only on the downside – chance of loss, not of gain. However, it was slowly recognized that insurance is not the only possible strategy. To pay for losses, insurance provides the needed funds. With no insurance, the firm could pay for losses by contracting a debt or raise fresh equity capital. It is increasingly accepted that the source of risk is of no great importance. Furthermore, the contribution of each source of risk cannot easily be isolated. As Doherty observes "risk does not simply add up". There is therefore a need to adopt a comprehensive approach for managing risk. This comprehensive strategy for treating risk is referred to as "Integrated risk management" (IRM) or "Enterprise risk management" (ERM).

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Risk Identification

The most important element of and the second step in the risk management process is the identification of risks and exposures to loss. This involves a systematic and careful analysis of all major and minor potential loss exposures. An essential prerequisite for a conscious choice of appropriate and efficient methods for dealing with losses if they occur is the recognition of all sources of possible losses. As is seen earlier, a loss exposure is a potential loss that may be connected with a particular category of risk. As such, the classification of loss exposures is the same as the one adopted for pure risks; that is, losses associated with life, health, property and liability risks.

The following categorization of risks that can impinge on the financial security of an individual or a business entity will be found useful.

- **Maintenance of a large Emergency Fund:** Once it is agreed that prudence demands that a fund has to be set aside for meeting emergencies, individuals and businesses have to maintain a larger fund to meet unanticipated loss in the absence of insurance industry.
- **Deprivation of certain goods and services:** Because of the threat of liability law suits, a number of firms may refrain from producing certain products. It is estimated that out of approximately 250 firms around the world which were producing childhood vaccines, only a few firms now remain in that business.

The approaches used for risk identification include use of loss exposure checklists, flow charts, statistical analysis of historical loss data, analysis of financial statements and on-site inspection.

Evaluation of Potential Losses

Subsequent to identification of risk, the next step in the risk management process relates to analyzing, evaluating and measuring the impact of losses on the individual or corporate unit by estimating the potential frequency and severity of losses. While frequency of loss relates to the probable number of particular losses that may occur during some given period of time, severity of loss refers to the probable magnitude of losses that may occur, if they occur. This will enable ranking of various loss exposures according to their relative importance. A loss potential that is small even though frequent, is much less important compared to potential loss exposures that are infrequent (such as destruction of a factory by devastating fire or accidental deaths) but has a potential for bankruptcy. Thus, though both frequency and severity have to be considered in the risk management process, severity of course, is substantially more important. It is possible that a firm may become bankrupt by a single catastrophic loss – the size of the loss from a single event can be truly crippling. In the risk management process, it is therefore necessary for estimating maximum probable loss and maximum possible loss. The maximum probable loss is an estimate of the worst loss that is likely to happen such as the loss that could likely result if lightning strikes an individual's home or the firm's building. The maximum possible loss is an estimate of the worst possible loss that might result from the lightning. An example to illustrate the difference may be in order. Suppose, in a flood a firm's plant is destroyed, it is estimated that the cost of debris removal, costs for restoration of the plant, the cost of replacement etc., will total Rs.2 crore. The maximum possible loss is thus Rs.2 crore. It is also estimated that a flood causing more than Rs.1.5 crore of damage to the firm's plant is very unlikely. Such a flood is unlikely to occur more than once in 40 years, an infrequent occurrence. Thus, the maximum probable loss is Rs.1.5 crore.

Selection of Appropriate Techniques for Treating Loss Exposures

The next step in the process of risk management lies in selecting the appropriate techniques for managing the loss exposures. The techniques are broadly classified as follows:

- **Risk Control:** The methods of risk control include risk avoidance and various approaches to reducing risk through prevention of loss and efforts of risk control. Risk reduction involves techniques that are aimed at reducing the likelihood of loss or the potential severity of losses that do occur.
 - **Avoidance:** This is the most drastic way of handling the risk. this happens when the activity that causes the risk is avoided. For example, the potential consequences of an escape of a highly toxic gas may be so catastrophic that a chemical company may decide to avoid the risk by ceasing to produce or use it. Another example is when a risk of damage by flooding may be avoided by moving to another site well above recorded flood levels.

- **Loss Control:** Those efforts that are aimed at minimizing the severity of loss if it should actually occur are referred to as techniques of loss control. For example, installation of a sprinkler system.
- **Risk Financing:** This covers all methods employed to fund either the probability of loss - producing events occurring or the potential size of losses that do occur. For example, installation of fire extinguishers is necessary to minimize loss in case of fire. The methods are:

- **Risk Retention:** Retention refers to financing of losses internally - either fully retained or partially retained. Losses that do occur when prior planning for their financing has been done are also retained. Retention is resorted to when no other risk management treatment is available like when insurance coverage is not available or very expensive. Further, non-insurance transfer may be unavailable. Thus, retention may in fact be a residual method. Retention can be effectively used when the potential losses are highly predictable. It is also said that "the more risk averse the less the retention".
- **Non-Insurance Transfers:** They are techniques (other than insurance) by which a risk exposure and its potential financial losses are transferred to another party who is in a better position to exercise loss control. A number of instances of non-insurance transfers can be cited. A computer lease agreement by a firm may contain a clause to the effect that maintenance, repairs etc., of the computer are the responsibility of the computer firm. A publishing firm may specify that the author and not the publisher is legally liable for plagiarism, if any.
- **Insurance:** Commercial insurance is a technique of transferring risk from one party (individual or business) for whom the risk is costly to another party who is willing and is able to bear the risk. Insurance is thus one of a number of available instruments for hedging risk. It is an instrument for post loss financing. Purchase of medical insurance is an appropriate strategy for controlling loss exposures that have a high severity of loss coupled with a low probability of loss.
- **Combination:** This method takes advantage of the law of large numbers. One can combine a large number of independent exposure units in one portfolio. By doing this, an insurance company is able to reduce the risk of its aggregate losses. The best example would be in the case of a large group which by centrally pooling the risk of breakage of its shop windows could contain annual losses within narrow limits.
- **Hedging:** Firms that enter into contracts to supply goods at a fixed price in the future face the risk that a rise in prices between entering into the contract and the delivery date may involve them in a loss. Hedging gives protection, say, to the Indian importers by allowing them to forward purchase specific foreign currencies. Thus, regardless of the exchange rate the importer's liability will be limited to the cost of purchasing the currency.
- **Research:** This is done to improve the information on which decisions are taken that can help reduce risk. For example when marketing a new product, a firm may go for market research to reduce uncertainty against its reception in the market.

Selection of Appropriate Methods for Handling Losses

For the purpose of determining the appropriate technique(s) for tackling losses, Rejda suggests a matrix. The matrix classifies the various loss exposures on the basis of frequency and severity.

Risk Management Matrix

Type of Loss	Frequency of Loss	Severity of Loss	Appropriate Risk Management Technique
1	Low	Low	Retention
2	High	Low	Loss Control and Retention
3	Low	High	Insurance
4	High	High	Avoidance

As can be noticed, for the purpose of selection of the method for handling losses, both severity and frequency of loss have to be considered. When the frequency and severity of loss are low, (that is, where the loss is small and occurs infrequently such as loss of a cheap transistor radio in the house or loss of the typist's dictionary in the office) retention is the most appropriate risk management technique. When the loss frequency is low and severity is high (third type of loss exposure in the table), the most appropriate technique to choose is insurance. Examples of this type of loss exposure include natural disasters, explosions, fires, law suits and premature deaths.

Implementation of Risk Management Programme and its Evaluation and Review

The next step in the process of risk management by individuals and businesses is implementation and monitoring of the programme to achieve the objectives. To achieve the goal and to make the programme effective, a periodic review of the programme is called in order to determine whether or not the objectives of the risk programme are being realized. This step will be helpful in modifying the programme, if found necessary, in the light of the record of experience.

Significance of the Study

This paper discusses about the Need for Managing Risks, Determine the Objectives of Risk Management and how we Identify and Evaluate Potential Losses. This paper is helpful to Distinguish between Frequency of Loss and Severity of Loss and also helpful to understand various Techniques for Treating Loss Exposures. In this paper we know about Selection of Appropriate Techniques for Risk Management. This paper Assess the Importance of Implementing and Periodically Reviewing the Risk Management Programme.

Research Methodology

The present study is descriptive in nature. The present paper is primarily based on secondary sources of data. The information and data for the research has been collected from government publications, published articles, journals, newspapers, reports, books, and official websites of IRDA, GIC, LIC OF INDIA.

Review of Literature

Review of literature paves way for a clear understanding of the areas of research already undertaken and throws a light on the potential areas which are yet to be covered. The reviews of some of the important studies are presented below.

- **According to Harry Markowitz (US economist in 1952):** Demonstrates mathematically that risk and expected return are directly related, but that investors can reduce the variance of return on their investments by diversification without loss of expected return.
- **According to Daniel Bernoulli in 1738:** Introduces the idea of utility: decisions relating to risk involve not only calculations of probability but also the value of the consequences to the risk taker.
- **According to Ben Hunt in a Harvard Business Review article:** The term started gaining currency in 1970s. According to him “even the establishment [by corporations] of risk management departments toward the end of 1980s and early in the 1990s did not herald a more strategic approach to risk and its management....”
- The chronology of risk as suggested by **Bernstein** in his article “**The Enlightening Struggle against Uncertainty**”

Conclusion

This study concludes with briefs us about the Distinguish between Risk and uncertainty and Understand the distinction between risk, peril and hazard. There is no generally or universally accepted definition of risk. It connotes different things for different people. Some people use the term risk for insured items “This building is a poor risk”, some others to the chance of loss (the risk of loss in this venture or investment is high) and yet others to the cause of loss (insurance is available against the risk of burglary or risk of fire). Further, for economists and statisticians risk is associated with variability (like variability of return on investment in an equity share of a corporation). Risk is defined as variation in the range of possible outcomes. The greater the potential variation, the greater the risk. Bernstein observes: “when we take a risk, we are betting on an outcome that will result from a decision we have made, though we do not know for certain what the outcome will be”.

References

- ⇒ www.IRDA.com
- ⇒ www.lic.org.
- ⇒ www.Risk Management of India.org.
- ⇒ www.GIC.gov.in
- ⇒ www.Google.com.

