Introduction to Risk Management

Learning Outcomes

By the end of this unit the learner will be able to:

- ✓ Discuss the History of Risk Management and its concepts
- ✓ Analyze the uncertainty and its relationship to risk
- ✓ Differentiate between pure and speculative risks
- ✓ Outline the objectives of risk management

Introduction to Risk Management

Risk management is a very important and unique element for businesses and organizations that initially originated as a field of corporate insurance buying. Risk management can be a full-time job for one person, or perhaps for an entire unit within the company. People who are in control of the overall programme of pure risk management are basically known as risk managers. Comprehensively, risk management involves the process of making one's assets secure. It is the managerial function of an organization that uses systematic strategies to address risks.

The History of Risk Management and its Concepts

The current practices in risk management began during the early 1950s. The initial records of risk management are found in the 1956 issue of Harvard Business Review in which the author expressed an innovative opinion proposing that an individual within the company should be responsible for dealing with the organization's pure risks.

Large companies were the first to employ the initial insurance managers. As capital investment grew in other industries, insurance became a significant component within many company's budgets. With the passage of time, in-house specialists were designated the distinct responsibility of the insurance-purchase function.

While risk management is historically connected to corporate insurance purchase, the conversion from buying insurance to risk management cannot be conceived as an inevitable evolutionary approach. This transition took place after people's attitude towards insurance went through a change and insurance was no longer perceived as a popular strategy for managing a company's risk. Insurance manager had always considered insurance to be the normal accepted method for addressing risks.

As the insurance managers were assigned the responsibility to buy insurance, therefore, they couldn't be condemned for doing so, as it was obviously their job. What then could be the reason for this change in the general perspective towards insurance that led to the switch towards the risk management philosophy?

Two important scientific research studies about the curriculum followed by business colleges were published in the United States during the 1950s, namely the Pierson Report and the Gordon & Howells Report. Both studies provided vicious criticism of the curriculum followed by business colleges in the U.S., arguing about their failure to help train students for their roles as future decision makers due to being completely obsolete.

Although some business schools questioned the final thoughts of these evaluations, they started modifying their curriculum, introduced new programmes and changed the emphasis of others. Some of the most significant curriculum changes were the introduction of management science and operation research, with a change in focus from comprehensive courses to normative decision concepts.

Several companies that had been buying corporate insurance came to realize that there were other more cost-effective strategies for managing risk. They realized that perhaps the most advantageous method

could be to avoid the occurrence of losses in the first place, and later minimizing the financial consequences of any losses that could not be prevented.

Thus the idea evolved that if management can diagnose and evaluate any risks that it is subjected to, it can prepare itself to avoid the possibility of the occurrence of certain losses, and thus decrease the impact of others. Thus the conclusion was reached that if risk could be held at the lowest possible levels, the cost of risk could be managed.

As this approach for risk management was quite logical and made good sense, it spread from one organization to another. The current form of risk management presents the integration of three areas, namely, risk financing, risk control and decision theory.

The Element of Risk

Risk is defined as the probability that an injury or loss will occur. In today's world, it is in fact quite difficult to avoid risks completely. People investing in stocks or bonds, driving a vehicle, or jogging along a country road are in circumstances that contain a certain amount of risk.

In the business and corporate environment, risk is a part of every decision. In the real world, the basic element of business decision making is the process of assessing potential gains and risks involved in different courses of action.

Current Definitions of Risk

There is currently no universally accepted definition of risk; however, there are a few common elements in all definitions: loss and indeterminacy.

- The concept of an indeterminate or unspecified consequence is one of the considerations of every definition of risk. This basically means that every risk cannot be anticipated. There is no risk if we know for sure that a loss will occur.

For instance, investing in a capital asset involves the understanding that the asset will experience physical wear and tear, due to which its value will decline. As the outcome is definite in this situation, there is no risk.

- A risk may occur if one of the possible outcomes is unfavourable, which could be a loss, or perhaps a lesser profit that what was anticipated.

For instance, an investor who does not take complete benefit of a given opportunity loses the advantage that could have been made.

Our Definition of Risk

Risk can be defined as a situation in the real-world where there is a liability to hardship.

A risk is a condition in which there is a likelihood of a negative deviation from an end result that is expected or hoped for.

Within this definition, risk is stated to be a condition in the real-world as the definition has been derived from an observation of daily events.

If an incident is stated to be probable, it means that this incident may or may not occur at all; however, the incident does exist. It may or may not be possible to estimate the level of risk involved. The probability of the occurrence of the unwanted outcome should be between one and zero, meaning that this incident may or may not take place.

An individual, who owns a property, anticipates that it will not catch fire. When anyone places a bet, they wish for the result to be favourable. However, the end result may either be something different from what they hoped for and this constitutes the possibility of risk or loss.

Insurance providers estimate a specific number of unfavourable events and amount of losses, and thus charge a premium based on these expectations. The volume of predicted losses is the preferred outcome that is anticipated by the insurer. For the person taking on the insurance, the risk is most probably the possibility that the losses will differ adversely from what is expected.

Uncertainty and Its Relationship to Risk

Uncertainty is a phrase used frequently along with the word risk. It refers to an uncertain thought based on a lack of information about what may or may not occur in the future. The opposite of this is certainty that refers to surety about a specific situation.

A student who is certain that he will get an A in a course is sure that he will score an A. both statements are replications about the conviction of the outcome. If a student says he is unsure about the grade he will get in a course, this reflects a lack of knowledge about the outcome.

A situation where the possibility of a loss exists displays the presence of a risk and results in uncertainty. A person's beliefs or lack of understanding about a specific situation may or may not agree with the real world's conditions. It is quite probable that an individual feels uncertain in a particular situation where he imagines that the possibility for a loss exists. An individual is likely to feel sure or certain with reference to a particular risk if the exposure to loss is unknown.

Classification of Risk

The word *risk* comprises all circumstances that have the possibility that negative consequences may occur. Risks may be classified into various types, which include dynamic and static risks.

Dynamic Risks

Dynamic risks are those that occur due to changes in the economy. Variations in consumer tastes, price levels, productivity, profits, and technology can result in financial losses. This type of risk ultimately benefits the society. Although dynamic risks can have an impact on large numbers of people, they are generally less expected in comparison to static risks.

Static Risks

Static risks are the risks that cause losses even if there are no obvious changes in the economy. Even if it were possible to maintain consumer preferences, income and productivity, and the levels of technology, financial losses would still occur to some extent. The reason is that such losses occur due to reasons other than changes in economy, such as dishonesty of other people.

Static risks do not benefit the society. They consist of deterioration in an asset or a change in ownership caused by human failure or dishonesty. Static losses usually occur persistently over the passage of time. As they are predictable, such losses can be insured.

Fundamental and Particular Risks

Fundamental risks are related to losses that are usually impersonal in source and outcomes. They affect huge segments of people or maybe the whole population, such as war, unemployment, inflation, floods and earthquakes.

Particular risks are the losses caused by individual events and are commonly experienced by individuals rather than by large number of people. Such losses may be static or dynamic. Examples of particular risks include burning down of a property or a bank robbery. Because fundamental risks grow from situations that are frequently out of the control of these people, they do not occur due to the carelessness of anyone.

Certain fundamental risks can be managed by private insurance companies. Social insurance programmes or government transfer programmes can take on the responsibility for several fundamental risks. Examples of fundamental risks could be unemployment or work-related disabilities that can be addressed through social insurance. Earth quakes or flood wrecks make an affected area a disaster zone eligible for federal assistance and funds.

Pure and Speculative Risks

Speculative risks describe circumstances in which there is a possibility that a loss or a potential gain may occur. Most business decisions involve speculative risks, such as the launching of a new product. If the new product proves to be successful in the market, profits will be made; conversely, there will be losses if it fails. Another very good example of speculative risk is gambling, as the risk is intentionally produced as the gambler aspires to make a gain.

Pure risks are those risks that only have potential for a loss, with no possibility of a gain. A person who buys a car immediately faces the possibility that something may happen that may destroy or wreck the car. Thus the possible outcomes are losses or no losses. The possibility of damage to be caused by a fire, hurricane or car accident are pure risks because there will be no gain in case such damages do not occur.

The distinction between speculative and pure risks is very important because typically only pure risks can be insured. Insurance is not connected to the security of people against any losses emerging from speculative risks. Speculative risks are recognised voluntarily due to the two-dimensional nature which features the possibility of gain.

Types of Pure Risk

Pure risks that exist for people and businesses can be categorized into one of the following types:

1. **Personal Risks**

   Personal risks include the probability of losses of assets or income caused by the loss of the ability to earn money. Customarily, an ability to earn is controlled by four types of challenges, including:

   - Early death
   - Dependent old age
   - Sickness or disability
   - Lack of employment

2. **Property Risks**

   The owner of an asset faces property risk as such possessions can be stolen or wrecked. Property risks include two types of losses, direct losses and consequential or indirect losses. A direct loss occurs if a property is destroyed by fire and the owner loses the value of the property. Apart from suffering a loss in the value of the building itself, the owner suffers as he has no place to live. During the time needed to rebuild the house, the owner is likely to incur additional expenses as he may have to live elsewhere. Such loss is known as a consequential or indirect loss.

   Another more suitable example is when a company or business firm suffers from any damage to its amenities. Not only does the company lose the value of those amenities, it also loses income that it would have gained by using them.

   Therefore, property risks can include two kinds of losses:

   - Loss of property
   - Lost income or additional expenses caused by the loss of use of the property

3. **Liability Risks**

   The main danger in liability risk is that people or their property may face unintentional harm or damage due to carelessness or negligence. Liability can also occur due to deliberate damage or injuries.

   Liability risks consequently incorporate the possibility of loss of current assets or prospective income because of assessed damages or legal liability that arises from unintentional or deliberate offenses, or an invasion of others' rights.

4. **Risks arising from failure of other individuals**

When another individual agrees to carry out a service for you, this individual undertakes an obligation that your trust will be met. Risk exists when this person's failure to meet this duty would contribute to your financial loss.

Appropriate examples of risks included in this category would include the failure to complete a construction project according to schedule by a builder, or the failure to make payments as required by a debtor.

As the Internet has developed and grown very rapidly, e-commerce has undergone swift advancements, and large businesses reflect an increased trend towards outsourcing, a new range of risks have materialized.

Risk Management

Risk management is the process whereby an individual or a corporation analyses potential risks. It also contains strategies for decreasing the expenses associated with these risks. All categories of risk incorporate two kinds of costs.

The first is the cost that will be incurred if a possible loss materializes into an actual loss, such as the cost of re-equipping or restructuring an assembly plant that has been burned to the ground. The second includes expenses for reducing or perhaps eliminating risks of possible loss. This would include all costs equal to the net income which this plant may have generated. For risk management to be productive, both of these types of costs have to be balanced against each other.

Most people consider risk management to simply comprise buying insurance; however insurance is not the only strategy for managing risk. Several alternative methods can prove to be more economical in various situations. Furthermore, some kinds of risks are simply uninsurable. This means that no insurance company will be willing to issue a policy for protection against them.

Three common risk management techniques are:

1. **Risk Avoidance**

An individual can avoid any kind of car accident related risks by not travelling in a car. A business can avoid product failure risk by disregarding new products launches. Both situations exhibit attempts to practice risk avoidance; however, at a particularly high cost.

Individual who evades car accidents by not using cars might have to give up their jobs to do so. Companies that do not take a risk on new product releases would probably not be able to stay competitive, thus move towards business closure.

On the other hand, there are instances where risk avoidance is an appropriate strategy. Individuals who avoid strolling through a dark city park late at night or those who stop smoking are perhaps avoiding risks in more sensible ways that are likely to benefit them.

Businesses, such as jewellery shops that lock their products inside their vaults at the end of the work day are working towards risk avoidance by preventing losses through theft. Similarly, several petrol stations only accept credit cards or possibly only exact amounts of money for sales made after dark to avoid the risk of a holdup.

It is pointless to say that no individual or corporation can avoid all risks and neither should anyone make an assumption that all risks are unavoidable.

2. Risk Reduction

Although a risk may be possible to prevent, it may perhaps be minimized. An individual travelling by car can minimize the probability of injury during a car accident by wearing a seat belt. Business organizations can reduce the likelihood of product failure through careful product planning and comprehensive market testing.

In both situations, the cost incurred to minimize the risk apparently appears to be worth the potential savings. Businesses sometimes experience risks because of their immature operational strategies and inappropriate decision making by the leadership. An operating procedures' evaluation perhaps by company personnel or external experts can frequently identify places in which risk can be decreased.

Some strategies that may be used include:

- Establishment of safety programmes for employees which help to encourage employees to be aware of the importance safety measures.
- Purchase and application of safety equipment, such as hand guards for machinery, goggles, and safety shoes for personnel.
- Security guards, robbery alarms, and guard dogs to prevent burglaries at warehouses.
- Use of sprinkler systems, smoke alarms, and fire alarms to decrease the possible risk of fire and losses incurred due to fires.
- Accurate and productive financial and accounting regulations to protect business funds and inventories from stealing.

Risks resulting from management decisions can be reduced through productive decision-making. Risks may arise each time a decision is based on insufficient information or made in haste. Nevertheless, the costs associated with minimizing risks increases when managers require overabundant information before they can make a decision.

3. Risk Assumption

An individual or a business will possibly have to accept certain risks as part of conducting business activities or even as a component of their existence. When people drive to work, they accept the potential risk of an accident; however, wearing a seat belt reduces the risk of injuries in case an accident occurs.

Businesses promoting new products accept the potential risks involved with product failure and minimize this risk with strategies such as market testing and research. Assuming risk is therefore an act of taking responsibility for an injury or loss that may result from the risk.

Generally, it is practical to assume a risk when one or more of the following conditions exist:

- The potential loss is too insignificant to warrant too much concern.
- Practical strategies of risk management have reduced the risk to a minimal level.
- Any insurance coverage available is too expensive.
- No alternate strategies are possible for protection from the loss.

Large businesses with several facilities frequently find a certain kind of risk assumption strategy known as self-insurance to be a practical technique for avoiding huge insurance costs. The process of establishing a monetary fund to be used for paying for the cost of any losses that occur is known as self-insurance.

For example, if the business has approximately 16,000 XYZ grocery stores spread across the country and each of these is worth £400,000, a practical solution for self-insurance against fire losses could be to gather a specific sum, perhaps £600 from each store on an annual basis. The entire fund would then be deposited in an interest-bearing reserve fund. It could then be used if and when required to restore any damage caused by a fire that occurs at XYZ stores.

Any funds not used continue to be an asset of the business. If the fund continues to grow consistently, the yearly contribution from every store may be reduced. Self-insurance does not end risks; instead, it simply provides the means for covering any losses if they occur.

It is however a risky strategy; particularly at the start. If XYZ suffered a substantial financial loss with maybe over twenty-four stores being damaged by fire during the first year that the self-insurance programme had been implemented, the losses would exceed the accumulated funds rendering the entire exercise futile.

Benefits of Risk Management in a Nutshell

Risk management is a process that provides assurance in the following ways:

- By increasing the possibility that objectives will be accomplished.
- Destructive circumstances will be managed in a more practical and sensible manner.
- Beneficial objectives are more likely to be achieved.

Risk Management techniques do not necessarily stop risks from occurring. The objective of risk management is not to eliminate risk, instead it is aimed at managing risks related to all situations, so that possible opportunities may be increased and negative effects lowered significantly.

Risk Management Tools

Tools used for managing risk can be categorized into two methodologies; risk financing and risk control.

Risk Financing

Risk financing focuses on arranging finances to be available for covering losses that arise from any risks that still remain after risk control methods have been applied. This includes the tools of transfer and retention.

Risk Control

Risk control aims to reduce risk of loss through implementing the methods of reduction and prevention. Risk control includes the strategies that can reduce at least the possible costs. Such procedures comprise risk avoidance in addition to different tactics for limiting risk through control efforts and loss avoidance.

Risk Prevention

Risk protection must be applied in circumstances that have catastrophic potential with risk that cannot be transferred or minimized. Generally, such situations exist in events with severity and high frequency. If extensive prevention is used, the business will not be in a position to achieve its main objectives.

A product manufacturer cannot eliminate the risk of product liability through risk avoidance, while staying in business. Prevention is therefore, the final option in working with risk and should be used only if there is no other option.

Risk Reduction

Risk reduction contains all strategies that can decrease the possibility of loss, or even the possible verity of the losses that occur. As stated in the description, loss prevention emphasizes preventing the possibility that a loss occurs, which means governing the occurrence.

Strategies for risk reduction concentrate on reducing the severity of the losses that actually take place, such as installing sprinkler systems to manage a fire that does get started. Such tactics are control measures.

Several other methods for decreasing the severity of losses include distribution or segregation of assets, and also salvage efforts. Asset dispersion will not reduce the number of explosions or fires that could occur; however, it can decrease the potential severity of losses that do take place.

The ultimate approach for classification of risk reduction measures is based on the timing of their application, such as before the occurrence of the loss, during the occurrence of the event, or right after the loss has occurred.

Risk Management as a Business Factor

Risk management plays an important role in contributing towards the corporation's basic objectives and goals in several ways by guaranteeing that the company will not be held back from pursuing its various objectives because of losses connected to pure risks.

Risk management can directly affect the profit made by the corporation by controlling the cost of risk it incurs. Based on the fact that profits depend on the amount of costs in relation to income, the extent to which risk management strategies can reduce costs can directly increase the profits. Similarly, risk management can decrease costs by implementing risk control procedures to the extent that the expense incurred on loss control and prevention measures is less than the volume of losses that are avoided, and expenditure on uninsured losses is minimized.

Along with limiting costs connected to losses, income can also be maximized through risk management practices.

Risk managers may suggest acquiring political risk insurance that is reasonably priced and available, and management can decide to follow their recommendation, which may generate increased profits. Risk managers are responsible for pure risk management and may select from several alternative risk management techniques. They are generally in a position to make extensive contributions towards the organization's operating outcomes.

Further Reading:

- ✓ ***Edmund H. Conrow, (2003), Effective Risk Management: Some Keys to Success***
- ✓ ***Kit Sadgrove, (2005), The Complete Guide to Business Risk Management***