CHAPTER ONE
INTRODUCTION

1.1 Concept of Risk

Risk is defined as the possibility of occurrence of an unfavourable deviation from the expected. When such unexpected events occur, there is invariably a sense of loss, which may or may not be measurable in terms of money. Since an unfavourable deviation from the expected always results in loss, we can also define risk as the possibility of occurrence of loss.

Uncertainty is something, which most people are not comfortable with**.** The knowledge of risk and its potential to cause loss creates uncertainty and gives rise to a feeling of insecurity which leads to worry amongst people and once they are worried enough they will give the problem some thought and try to find a solution, and this is where Insurance comes in.

A man is aware that he may die unexpectedly and is worried that in case such an event does happen his family will have to face a lot of hardship and so to mitigate his worry he goes in for life Insurance. Another person may be aware that there is a possibility of his vehicle meeting with an accident and is worried that he may not be in a position to afford its replacement or repair therefore he opts for Motor Insurance. Insurance provides a means for reducing the adverse impact of unexpected losses and lessen the worry factor letting a person breathe more easily.

Worry, insecurity and uncertainty are all very negative factors, which adversely affect the output or performance of individuals or even business houses. A worker who is insecure in his job and is worried by this insecurity will be less productive than his counterpart who is secure. Worry not only leads to reduced production resulting in higher cost but it can also be the cause of accidents as worried workers are more likely to be careless than those who are concentrating on their duties. Even Business houses when they are uncertain about the future may not be willing to invest more. Thus, we see that Risk with its resultant's uncertainty, insecurity and

1.2 Types of Risk

Risk can be classified into several distinct classes:

- Pure and speculative risk
- Diversifiable risk and non-diversifiable risk
- Particular and Fundamental risks
- Enterprise risk

1.2.1 Pure Risk and Speculative Risk

Pure risk *is defined as a situation in which there are only the possibilities of loss or no loss.* The only possibleoutcomes are adverse (loss) and neutral (no loss).Examples of pure risks include premature death,job-related accidents, catastrophic medical expenses,and damage to property from fire, lightning, flood,or earthquake.

Speculative risk *is defined as a situation in which either profit or loss is possible.* For example, if youpurchase 100 shares of common stock, you wouldprofit if the price of the stock increases but wouldlose if the price declines. Other examples of speculativerisks include betting on a horse race, investing in real estate, and going into business for yourself. In these situations, both profit and loss are possible. It is important to distinguish between pure and speculative risks for three reasons:

First, private insurers generally concentrate on insuring certain pure risks. With certain exceptions, private insurers generally do not insure speculative risks.

Second, the law of large numbers can be applied more easily to pure risks than to speculative risks. The law of large numbers is important because it enables insurers to predict future loss experience. In contrast, it is generally more difficult to apply the law of large numbers to speculative risks to predict future loss experience. An exception is the speculative risk of gambling, where casino operators can apply the law of large numbers in a most efficient manner.

Finally, society may benefit from a speculative risk even though a loss occurs, but it is harmed if a pure risk is present and a loss occurs. For example, a firm may develop new technology for producing inexpensive computers. As a result, some competitors may be forced into bankruptcy.

Despite the bankruptcy,society benefits because the computers areproduced at a lower cost. However, society normallydoes not benefit when a loss from a pure risk occurs,such as a flood or earthquake that devastates an area.

1.2.2 Diversifiable Risk and Non-diversifiable Risk

Diversifiable risk *is a risk that affects only individuals or small groups and not the entire economy.* It is arisk that can be reduced or eliminated by diversification.Losses on one line can be offset by profits on other lines. Because diversifiable risk affects only specific individuals or small groups, it is also called *non-systematic risk* or *particular risk.* Examples include car thefts, robberies, and dwelling fires. Only individuals and business firms that experience such losses are affected, not the entire economy.

In contrast, **non-diversifiable risk** *is a risk that affects the entire economy or large numbers of persons or groups within the economy.* It is a risk that cannot be eliminated or reduced by diversification. Examples include rapid inflation, cyclical unemployment, war, hurricanes, floods, and earthquakes because large numbers of individuals or groups are affected. Because non-diversifiable risk affects the entire economy or large numbers of persons in the economy, it is also called *systematic risk* or *fundamental risk.*

The distinction between a diversifiable and non-diversifiable (fundamental) risk is important because government assistance may be necessary to insure non-diversifiable risks. Social insurance and government insurance programs, as well as government guarantees or subsidies, may be necessary to insure certain non-diversifiable risks. For example, the risks of widespread unemployment and flood are difficult to insure privately because the characteristics of an ideal insurable risk are not easily met. As a result, state unemployment compensation programs are necessary to provide weekly income to workers who become involuntarily unemployed. Likewise, the federal flood insurance program makes property insurance available to individuals and business firms in flood zones.

1.2.3 Enterprise Risk

Enterprise risk *is a term that encompasses all major risks faced by a business firm. Such risks include pure risk, speculative risk, strategic risk, operational risk, and financial risk.*

Types of enterprise risks

i. **Operational risk**

Results from the firm's business operations. For example, a bank that offers online banking services may incur losses if "hackers" break into the bank's computer.

ii. **financial risk**

Financial risk *refers to the uncertainty of loss because of adverse changes in commodity prices, interest rates, foreign exchange rates, and the value of money.* For example, a food company that agrees to deliver cereal at a fixed price to a supermarket chain in six months may lose money if grain prices rise. A bank with a large portfolio of Treasury bonds may incur losses if interest rates rise.

iii. **Strategic Risks**

Strategic risk refers to uncertainty regarding the firm's financial goals and objectives; for example, if a firm enters a new line of business, the line may be unprofitable. Strategic risk includes internal risks like those from adverse business decisions or improper implementation of those decisions, poor leadership, or ineffective governance and oversight, as well as external risks, such as changes in the business or competitive environment. These include:

a. Governance risk: One of the most understated and underestimated risks within any organization are the risk associated with inadequate governance or a poor governance structure. Direction and accountability come from the board of directors, who increasingly include representatives of various stakeholders in the business (investors, customers, institutional partners, etc). To protect against the risks associated with poor governance structure, businesses should ensure that their boards comprise the right mix of individuals who collectively represent the technical and personal skills and backgrounds needed by the institution.
b. Reputation Risk: This refers to the risk to earnings or capital arising from negative public

opinion, which may affect an enterprise's ability to sell products and services or its access to capital or cash funds. Reputations are much easier to lose than to rebuild, and should be valued as an intangible asset for any organization. Most successful enterprises cultivate their reputations carefully with specific audiences, such as with customers (their market), their funders and investors (sources of capital), and regulators or officials.

c. External business environment risk: This refers to the inherent risks of the business' activity and the external business environment. To minimize business risk, the enterprise must react to changes in the external business environment to take advantage of opportunities, to respond to competition,
d. Regulatory and legal compliance risks: Compliance risk arises out of violations or non-conformance with laws, rules, and regulations, prescribed practices, or ethical standards, which vary from country to country. The costs of non-conformance to norms, rules, regulations or laws range from fines and lawsuits to the voiding of contracts, loss of reputation or business opportunities, or shut-down by the regulatory authorities.

1.3 Major Personal Risks and Commercial Risks

The preceding discussion shows several ways of classifying risk. However, in this text, emphasis is on primarily the identification and treatment of pure risk. Certain pure risks are associated with great economic insecurity for both individuals and families, as well as for commercial business firms. This section discusses important personal risks that affect individuals and families and major commercial risks that affect business firms.

1.3.1 Personal Risks

Personal risks are risks that directly affect an individual or family. They involve the loss or reduction of earned income, extra possibility expenses, and the depletion of financial assets. Major personal risks that can cause great economic insecurity include the following:

- Premature death
- Insufficient income during retirement
- Poor health
- Unemployment

Premature death:is the death of a family head with unfulfilled financial obligations. These obligations include dependents to support, a mortgage to be paid off, children to educate, and credit cards or instalment loans to be repaid.

Insufficient income during retirement: The major risk associated with retirement is insufficient income. Unless they have sufficient financial assets on which to draw, or have access to other sources of retirement income, such as Social Security or a private pension, when they retire, they lose their earned income.

Poor health: Poor health is another major personal risk that can cause great economic insecurity. The risk of poor health includes both the payment of catastrophic medical bills and the loss of earned income e.g. the high cost of surgery.

Unemployment: The risk of unemployment is another major threat to economic security. Unemployment can result from business cycle downswings, technological and structural changes in the economy, seasonal factors, imperfections in the labour market, and other causes as well. Unless there is adequate replacement income or past savings on which to draw, an unemployed worker will be exposed to economic insecurity.

1.3.2 Commercial Risks

Business firms also face a wide variety of pure risks that can financially cripple or bankrupt the firm if a loss occurs. These risks include:

- Property risks
- Liability risks
- Loss of business income
- Other risks.

Property Risks: Business firms own valuable business property that can be damaged or destroyed by numerous perils, including fires, windstorms, tornadoes, hurricanes, earthquakes, and other perils. Business property includes plants and other buildings; furniture, office equipment, and supplies; computers and computer software and data; inventories of raw materials and finished products etc.

Liability Risks: Business firms today often operate in highly competitive markets where lawsuits for bodily injury and property damage are common. The lawsuits range from small nuisance claims to multimillion demands. Firms are sued for numerous reasons, including defective products that harm or injure others, pollution of the environment, damage to the property of others, injuries to customers, discrimination against employees and sexual harassment, violation of copyrights and intellectual property, and numerous other reasons.

Loss of Business Income: Another important risk is the potential loss of business income when a covered physical damage loss occurs. The firm may be shut down for several months because of a physical damage loss to business property because of a fire, tornado, hurricane, earthquake, or other perils

Other Risks: Business firms must cope with a wide variety of additional risks, summarized as follows:

- *Crime exposures.* These include robbery and burglary; shoplifting; employee theft and dishonesty; fraud and embezzlement; computer crimes and Internet-related crimes; and the piracy and theft of intellectual property.
- *Human resources exposures.* These include job related injuries and disease of workers; death or disability of key employees; group life and health and retirement plan exposures; and violation of federal and state laws and regulations.
- *Foreign loss exposures.* These include acts of terrorism, political risks, kidnapping of key personnel, damage to foreign plants and property, and foreign currency risks.
- *Intangible property exposures.* These include damage to the market reputation and public image of the company, the loss of goodwill, and loss of intellectual property. For many companies, the value of intangible property is greater than the value of tangible property.
- *Government exposures.* Federal and state governments may pass laws and regulations that have a significant financial impact on the company. Examples include laws that increase safety standards, laws that require reduction in plant emissions and contamination, and new laws to protect the environment that increase the cost of doing business.

1.4 PERIL AND HAZARD

The terms peril and hazard should not be confused with the concept of risk discussed earlier.

1.4.1 Peril

Peril is defined as the cause of loss. If a house burns because of a fire, the peril, or cause of loss, is the fire. If a car is damaged in a collision with another car, collision is the peril, or cause of loss. Common perils that cause loss to property include fire, lightning, windstorm, hail, tornado, earthquake, flood, burglary, and theft.

1.4.2 Hazard

A hazard is a condition that creates or increases the frequency or severity of loss. There are four major types of hazards:

- Physical hazard
- Moral hazard
- Attitudinal hazard (morale hazard)
- Legal hazard

Physical Hazard a physical hazard is a physical condition that increases the frequency or severity of loss. Examples of physical hazards include icy roads that increase the chance of auto accident, defective wiring in a building that increases the chance of fire, and a defective lock on a door that increases the chance of theft.

Moral Hazard Moral hazard is dishonesty or character defects in an individual that increase the frequency or severity of loss. Examples of Moral worry definitely have an economic and a psychological cost. Hazard in insurance include faking an accident to collect from an insurer, submitting a fraudulent claim, inflating the amount of a claim, and intentionally burning unsold merchandise that is insured.

Murdering the insured to collect the life insurance proceeds is another important example of moral hazard. Moral hazard is present in all forms of insurance, and it is difficult to control. Dishonest individuals often rationalize their actions on the grounds that “the insurer has plenty of money.” This view is incorrect because the insurer can pay claims only by collecting premiums from other insureds. Because of moral hazard, insurance premiums are higher for everyone. Insurers attempt to control moral hazard by the careful underwriting of applicants for insurance and by various policy provisions, such as deductibles, waiting periods, exclusions, and riders.

Attitudinal Hazard (Morale Hazard) Attitudinal hazard is carelessness or indifference to a loss, which increases the frequency or severity of a loss. Examples of attitudinal hazard include leaving car keys in an unlocked car, which increases the chance of theft; leaving a door unlocked, which allows a burglar to enter; and changing lanes suddenly on a congested expressway without signalling, which increases the chance of an accident. Careless acts like these increase the frequency and severity of loss. The term morale hazard has the same meaning as attitudinal hazard. Morale hazard is a term that describe someone who is careless or indifferent to a loss. However, the term attitudinal hazard is more widely used today and is less confusing to students and more descriptive of the concept being discussed.

Legal hazard refers to characteristics of the legal system or regulatory environment that increase the frequency or severity of losses. Examples include adverse jury verdicts or large damage awards in liability lawsuits; statutes that require insurers to include coverage for certain benefits in health insurance plans, such as coverage for alcoholism; and Regulatory action by state insurance departments that prevents insurers from withdrawing from a state because of poor underwriting results.

1.5 Burden of Risk on Society

The presence of risk results in certain undesirable social and economic effects. Risk entails three major burdens on society:

- The size of an emergency fund must be increased.
- Society is deprived of certain goods and services.
- Worry and fear are present.
- Loss of Certain Goods and Services
- Larger Emergency Fund