

## CHAPTER EIGHT

# Risk Management

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downward deviation from Expected return= Risk  
Risk should have material effect

### What is Risk?

Most, if not all, business decisions relate to the activities to be undertaken in the future. Inevitably, a large proportion of these decisions are made without having all the necessary information in hand. This gives rise to uncertainty. The outcome of uncertainty can be positive or negative. For example, Khoobsoorat Ltd. is going to introduce a new beauty product. Now, at the planning stage, despite all optimism, it cannot be said with total certainty, as to how will the market receive the new product. The future of the product is therefore quite uncertain. Now, it can happen that the product may prove an instant hit and lead to doubling the profits of Khoobsoorat Ltd. within a year. This possibility is a positive one. On the hand, it is also possible that the product may fail to attract the customers and as a result all the investment made in research, development and promotion of the product may simply sink, leading to a drastic reduction in profits of the company. This possibility is a negative one.

Uncertainty exists whenever one does not know for sure what will occur in the future. Risk is uncertainty that has a potential of a loss. Thus, uncertainty is a necessary but not a sufficient condition for risk. In certain cases, uncertainty may carry no possibility of a loss at all and hence have no risk. To illustrate, suppose your elder brother is getting married and you are planning his mehndi function. You have invited 300 persons but your best guess is that around 200 will actually come. There is this uncertainty. Maybe only 100 will come, maybe less than 200 will come and maybe all 300 will turn up. This uncertainty will however become a risk only if the number of actual arrivals will materially affect your party. If not, there is no risk.

For example, in providing for your guests, you have to decide how much food to prepare. If you knew for sure that 200 people will show up, then you would prepare

exactly enough for 200—no more and no less. If 300 actually show up, there will not be enough food, and you will be displeased with that outcome because some guests will go hungry and be dissatisfied. If only 100 guests actually show up, there will be too much food, and you will be displeased with that too because you will have wasted some of your limited resources on surplus food. In such a case, the uncertainty matters, and therefore there is risk in this situation.

On the other hand, suppose you are not serving any food at the function; only soft drinks are being served which can easily be procured at a very short notice; or returned for a full refund if some remain unused. In such a case, the uncertainty would not matter, as it will cause you no undue financial cost – and hence have no risk.

### **Why take a Risk?**

There are essentially two reasons why people take risks: inevitability and reward. Some risks are simply unavoidable, they have to be taken in order to achieve a goal or perform a task. As for avoidable risks, they are taken because they offer rewards. To understand this situation, let us assume you are a batsman, facing a fast bowler. Batsmen get out because they do not play a ball correctly. Therefore leaving a ball alone would generally offer no risk of getting out. But, if a ball comes straight on to the wicket, you simply have to play it. If you don't play such a ball, you will get clean bowled or trapped leg before wicket. So playing a straight ball is an unavoidable risk for a batsman. Now if a ball is going well wide off the wicket, the batsman may choose to leave it alone. Playing such a ball is an avoidable risk. A ball going outside the stumps cannot get you out if you do not attempt to play it. However, such deliveries offer the scope of hitting a four or a six, which is a rich reward for the batsman. Quite naturally, the hit can go wrong and the batsman can get caught. So what it boils down to is this: hitting an off-line delivery carries a risk of getting out but also offers a rich reward of a big score. If a batsman refuses to take the risk of hitting an off-line delivery he eliminates the risk of getting out but at the same time foregoes the reward of four or possibly six runs.

Running a business is not so much different from playing a game of cricket. To run a business you have to take certain inevitable risks. At the same time, you are often faced with certain avoidable risks but taking those risks can significantly improve your profits so you may be tempted to take those risks. The success of a business depends on how correct your risk taking decisions turn out to be. Suppose you have just borrowed Rs one million from a relative at an interest of say 10%. Now, you have to invest them in order to earn something in excess of 10% or else you will have to pay the interest out of your pocket. One choice you have is to deposit this

money with a government bank that offers, say 10.5% interest. Now, government banks are safe and therefore you run no risk of losing the principal or interest. This will leave you with very little for your efforts – just 0.5%. But it is relatively risk free – the return is low but assured. You can also choose to buy shares at the stock exchange and it is quite possible that the value of your shares may rise to say Rs 1.45 million at the end of the year. This will leave you with a profit of around 35% (i.e. 45% earnings less 10% cost). But this option also has the distinct possibility that stock market may crash and the value of your shares may simply drop to say Rs 500,000, leaving you with a loss of Rs 550,000. Moral of the story is “investing in shares is an avoidable risk but the potential of great profits leads businessmen to take this or such other risks”.

### **Risk Aversion**

Risk aversion refers to an individual person or company's attitude towards risk. Some people are willing to take risk and others are not. Risk averse people are willing to pay to reduce their exposure to risk. Let us take an example of two persons buying new cars. Jamal Jaffery buys a new car but insures it only for third party liability because that is the legal requirement. He is quite willing to face the risk of accident, fire or theft of the vehicle, so he is not prepared to pay any premium for taking out insurance to cover these risks. Kamal Khan, on the other hand, is risk averse. He takes out a comprehensive insurance, paying a hefty annual premium to secure assurance that he is fully covered against whatever happens to his new car. If the year passes, and the two cars have not experienced any accident or other untoward incident, Jamal Jaffery may appear to have saved money (by not paying for comprehensive insurance). But if his car is stolen or destroyed in an accident, he would appear foolish for not having taken out adequate insurance.

Risk-averse businessmen are willing to accept a lower expected rate of return on an investment if that investment offers a more predictable rate of return. Let us assume there are two projects, say A and B in which investment is sought from Jamal Jaffery and Kamal Khan. Project A is relatively safe but is likely to offer only 7% return on investment. Project B offers 12% return on investment but is considered risky as it may fail if certain things go wrong. You can guess which project will appeal to Jamal Jaffery and which one will be attractive to Kamal Khan.

### **Risk Exposure**

If you face a particular type of risk because of your job, the nature of your business or your pattern of consumption, you are said to have a particular risk exposure. For example, if you are a temporary office worker, your exposure to the risk of a layoff is relatively high. If you are a tenured professor at a major university, your exposure is

the risk of a layoff is relatively low. If you are a farmer, you are exposed both to the risk of a crop failure and to the risk of a decline in the price at which you can sell your crops. If your business significantly involves imports or exports of goods, you are exposed to the risk of an adverse change in currency exchange rates. If you own a house, you are exposed to the risks of fire, theft, storm damage, earthquake damage, as well as the risk of a decline in its market value.

### **Risks faced by firms**

Virtually every activity of a company entails exposures to risks. Taking risks is an essential and inseparable part of business enterprise. Business risks of a company are borne by its stakeholders: shareholders, creditors, customers, suppliers, employees, and government. The financial system can be used to transfer some of the risks faced by a company to other parties. Specialized financial firms, such as insurance companies, perform the service of pooling and transferring risks.

Let us take the example of Sunny Juices Ltd., a company specializing in fruit juices. It buys fruit, extracts concentrate, and sells bottled juices in local market. Sunny Juices Ltd., like all other companies in the fruit juices or soft drinks industry, faces several risks. Some of these risks are:

#### *Production and operations risk*

This is the risk that machines (e.g., juicing plant, delivery trucks) will break down, that deliveries of raw materials (e.g. fresh fruit, flavourings, bottles) will not arrive on time, that workers will not show up for work, or that a new technology will make the firm's existing equipment obsolete.

#### *Price risk of outputs or market risk*

This is the risk that the demand for the bottled juices will unpredictably change because of an unanticipated shift in consumer preferences e.g., fresh juices become a fad and the market price of bottled juices falls; or competition can become more intense, and Sunny Juices Ltd. might be forced to lower its prices to stay in the market.

#### *Price risk of inputs*

This is the risk that the prices of some of the inputs of the factory will change unpredictably. There may be a crop failure and price of fresh fruit may rise, or labour may become more expensive due to increase in government-mandated minimum wage. If Sunny Juices Ltd. has borrowed money to finance its operations at a floating interest rate, it is exposed to the risk that interest rates might rise.

### *Economic conditions risk*

A change in general economic conditions of the country or internationally may have an effect on the business of any company. For example, if economy experiences hard times, the unemployment may rise, causing drop in purchasing power of clients. Sunny Juices Ltd may find that due to paucity of funds, people reduce their intake of juices and revert to cheaper drinks like water or soft fizzy drinks.

### *Political risk*

A change in government may bring forth changes in governmental policies which may adversely affect a firm. Certain political parties are pro-agriculture, others favour industrialists, yet others may opt for more liberal labour policies. Any of these policy changes can cause a reduction (or improvement) in a company's profits.

### *Environmental risks*

Poor weather can affect a company in many ways. For Sunny Juices Ltd it could mean higher fruit prices, or heavy rains may damage its factory, or cause disruption to production process through labour having difficulty in reaching the factory, etc. A mild summer could also cause drop in demand for juices.

### *Project risk*

If Sunny Juices Ltd starts a new project, e.g. construction of new bottling plant, it may experience a number of risks in planning and implementing the project. Delays may take place in construction, arrival of machinery, installation, commissioning, etc. Changes in duty structure may increase the project cost, delays may increase the borrowing amount while economic changes may force an increase in borrowing costs. All this may add up to the cost of the project.

### *Reputational risk*

If any of the products of Sunny Juices Ltd are found out to be of poor quality, or some negative news spreads about the management of the company among the public, or if company's labour union starts issuing damaging statements to the press about the manner the workers are allegedly being mistreated by the company, the reputation of the company may suffer. In turn this may have impact on its sales, the quality of staff it can get for its operations, etc. The government may start interfering, press and electronic media may have a field day at the expense of company's reputation. A board must protect the reputation of the company through its transparent and fair policies.

### Who bears these risks?

The shareholders of Sunny Juices Ltd. are not the only people who bear the risks of the business. The company's managers (if they are different from the owners) and its other employees are also affected by some of these risks. If profitability is low or if the production technology changes, some of them may lose their jobs or be forced to take a cut in pay. Similarly, lower profits are a danger signal for company's lenders as well as this could lead to a default by the company in debt servicing. At a larger level, risks faced by a company have implications for the society as a whole - e.g. stoppage of production will deprive the customers of their choice in products, government will lose some of the tax revenue, etc.

### **Risk Management**

Let us go back to your brother's mehndi party. Let us assume that you will be serving food at the function but there is a time lag of around 90 minutes between the time the guests arrive and the time when the food is actually served. Now if your caterer is able to provide additional food at a notice of around one hour at only a nominal additional charge, you may place an initial order for only 100 guests and adjust the order once all the guests have actually arrived. If this happens you will end up having to pay a higher rate per person. This is the price you are paying for eliminating the risk of having too little or too much food at the party. Thus, there is a trade-off between the benefit of eliminating the risk of having the wrong amount of food (i.e. wastage or unpleasantness) and the cost of eliminating that risk (i.e. higher price of food per person). The process of formulating the benefit-cost trade-offs of risk reduction and deciding on the course of action to take (including the decision to take no action at all) to reduce or eliminate risks is called risk management.

### **Responsibility for managing the risks**

The Company's Board of Directors is ultimately responsible for managing the risks faced by a company because of its basic duty to protect the company's assets (against inter alia risks). Hence, risk management is very much a governance issue. While the actual process of risk management will be carried out by the management, it must be overseen by the board. The board has to ensure that its management team has adequate expertise in managing risks so that it could run the company effectively and profitably. The company's management team can manage these risks using several techniques: It can keep extra stock of inputs in warehouse to protect itself against delays in delivery; it can maintain spare parts for its machinery; and it can subscribe to services that forecast trends in the demand for its products. It can also buy insurance against some of the risks such as accidental injury to its employees or theft of its equipment. It can also reduce some price risks by either engaging in fixed-price contracting with customers and suppliers directly or by

transacting in the forward, futures, and options markets for commodities, foreign exchange, and interest rates. Making trade-offs (between the costs and benefits of these risk-reducing measures) is an essential part of managing a company.

The size and organizational form of the company itself can also be affected by risk. Juicing firms come in many different types and sizes. At one extreme are small production and retail operations owned and operated by a single individual or family. At the other extreme are large corporations such as Shezan, with a workforce of thousands of people and an equally large number of shareholder owners. One purpose (and usually not the only one) of organizing as a large corporation is to better manage the production, demand, price or other risks of the business.

### **The risk management process**

The risk-management process is a systematic attempt to analyse and deal with risk.

The process can be broken down into five steps:

- Risk identification
- Risk assessment
- Selection of risk-management techniques
- Implementation
- Review

### *Risk Identification*

Before a company can make any plan or policy about how to handle the risks it faces, it must be fully aware of all the risks that it is exposed to. Many a time, people are not even aware that they are exposed to a risk. This simply means they will make no effort to protect themselves against such a risk. Again, not being aware of the exact nature of risks to which a business is exposed may also mean buying insurance (or making other similar arrangements) for eventualities that may not be posing any real risk at all. For example, if your factory is based in an earthquake prone area, and you are not aware of this fact, you are not likely to include this risk when you buy insurance for your factory buildings and plant. But, if your factory is not in an earthquake prone area, it would be silly to cover this risk and pay unnecessary insurance premiums. Hence, it is a good idea to have a formal checklist that enumerates all of the entity's potential exposures and the relations among them. In the case of a company, this may require a good deal of detailed knowledge about the economics of the industry in which the firm operates, the technological state of the firm, and its sources of supply. It is not uncommon for larger corporations to employ professional consulting firms to have a professionally prepared risk profile of the company, incorporating such a check-list.

### *Risk Assessment*

Once all the potential risks to which a company is exposed have been listed, the next step is to evaluate each risk to determine the possible financial consequences (or costs) upon occurrence of the impugned event. For example, when you buy a car, the different risks related to car ownership may include, e.g. damage to car due to an accident, loss of car due to theft, complete destruction of car by fire, or mob-action, or accident, and third party liability if your car hits another vehicle or person

Risk assessment will involve finding answers to the following questions:

1. How likely is it for any of these risks to happen?
2. What is the maximum possible financial loss that you will suffer in each of the listed situations?
3. What would be the cost of eliminating or transferring this risk to some one else?

Quite similarly, whenever companies decide to invest in a new project (or buy an investment), they undertake detailed studies (often with the help of external experts) to assess their exposure limits and in quantifying the trade-offs between the risks and rewards of investing in such projects. Only when you have found answers to the above questions, will you be able to formulate a plan to handle the risks.

### **Selection of risk management techniques to be used**

The next step is to decide what steps to take to eliminate or reduce the impact of risks. There are four basic techniques available for reducing risk, namely Risk avoidance, Loss prevention and control, Risk retention and Risk transfer. Let us briefly explain each technique.

### ***Risk Avoidance***

A conscious decision not to be exposed to a particular risk. People may decide to avoid the risks of going into certain professions and firms may avoid certain lines of business because they are considered too risky. But it is not always feasible to avoid risks. For example, all people are inevitably exposed to the risk of illness by virtue of being human. They cannot avoid it. But certain risks can be avoided. For example, a person who does not buy shares at a stock exchange (instead he invests his money in government securities carrying a low rate of return but having absolute security of funds) eliminates the risk of loss in value of his investments when the stock exchange index takes a nosedive. Quite similarly, there are certain projects (e.g. opening a branch in an undesirable location) that may be refused for simple purpose of avoiding the unnecessary risk.



### ***Loss Prevention and Control***

This refers to actions taken to reduce the likelihood or the severity of losses. Such actions can be taken prior to, concurrent with, or after a loss occurs. For example, you can reduce your exposure to the risk of illness by eating well, getting plenty of sleep, not smoking, and keeping your distance from people known to have fresh colds. If you catch a cold, you can stay in bed and reduce the possibility of having it turn into pneumonia. Quite similarly, companies can reduce the risk of fire at factories by taking necessary precautions, and in the event of a fire they can reduce the damage by having fire-extinguishing equipment handy. A factory manager can reduce the risk of plant stoppages by following a sound machinery maintenance regime, etc. In fact instituting sound internal control measures can reduce a large number of operational risks. The importance and means of internal control are discussed in greater detail later in the next chapter.

### ***Risk retention***

This refers to absorbing the risk and covering losses out of one's own resources. This sometimes happens by default, as for example, when one is unaware that there was any risk or one chooses to ignore it. If the loss occurs, one has no choice but to bear it. But in certain cases one may make a conscious decision to absorb a known risk. For example, some people may decide to absorb the costs of treating illnesses from their own savings and not buy health insurance. Many people do not buy comprehensive car insurance. They prefer to save insurance premium by agreeing to meet any repair costs that may ensue from an accident. In certain cases, it makes sense to retain a risk as the cost of obtaining the cover against the risk may exceed the potential losses. For example, it is estimated that a transport company that has 20 or more vehicles will do well not to insure them for losses arising out of accidents and theft. This is so because the total annual insurance premium payable for 20 or more vehicles is likely to be more than the possible losses that the company may face in a year from accidents to its vehicles. If we take this point further, we will notice that many large corporate groups have an insurance company of their own that extends insurance cover to various group companies. This is also a form of risk retention.

### ***Risk Transfer***

One way to cover your self against risks is to transfer the risk to others. Quite obviously, others will not assume your risks without getting some compensation from you. You need to weigh this compensation against your ability to bear the loss yourself and decide whether to retain the risk or to transfer it to someone else. Some organisations specialize in taking risks on behalf of others for a fee. When you insure your car, you transfer the risk to the insurance company. Insurance company

accepts this risk from you and several other car owners on the basis that money collected from such persons will be adequate to cover all possible losses. Similarly, people who sell you a foreign currency at a price decided today for a transaction to take place three months later, free you from the risk of currency price fluctuation. But they are able to take this risk off your shoulders because they make a large number of similar transactions. By using their specialized skills and knowledge, they are able to spread the risk over a large number of clients. In the process, they are able to make a profit for themselves.

There are four basic methods of accomplishing the transfer of risk: hedging, options, insuring, and diversifying. These will be discussed in some detail later in this chapter.

### **Implementation of Risk Management Plan**

Following a decision about how to handle the risks identified, one must implement the techniques selected. The underlying principle in this step of the risk-management process is to minimize the costs of implementation. Thus, if a company decides to buy insurance to cover some of the risks faced by it, it must shop around to find the best possible cover at optimal cost. Again, having selected the insurer, the must company must complete the necessary formalities to bring the insurance into effect to ensure that it is fully covered. Similarly, if the company has opted for risk retention and on risk control as its techniques for risk management of its factory plant, it must draw up and implement necessary plant safety measures, maintenance schedule, etc.

### **Regular review of the risk situation**

Risk management is a dynamic "feedback" process, in which decisions are periodically reviewed and revised. As time passes and circumstances change, new exposures may arise, information about the likelihood and severity of risks may become more readily available, and techniques for managing them may become less costly. Thus, you will probably decide not to purchase life insurance if you are single, but reverse that decision if you get married and have children.

### **Risk transfer techniques**

These include hedging, options, insurance and diversification.

#### *Hedging*

One is said to hedge a risk when the action taken to reduce one's exposure to a loss also causes one to give up the possibility of a gain. For example, farmers who sell their future crops before the harvest at a fixed price to eliminate the risk of a low

price at harvest time, also give up the possibility of profiting from high prices at harvest time. They are hedging their exposure to the price risk of their crops. If you subscribe to a magazine for three years instead of subscribing one year at a time, you are hedging against the risk of a rise in the price of the magazine. You eliminate the potential loss due to an increase in the price of a subscription, but you give up the gain from a potential drop in subscription prices.

### *Buying Options*

An option gives the buyer a right to buy (or sell) an item at pre-determined price on a pre-determined date. This is however a right, not an obligation. To understand how this arrangement works, let us take an example. Umar Khattak has to pay US\$ 100,000 to his plant supplier, six months from now. The dollar is currently selling at Rs 60. Umar Khattak fears that the dollar may rise in value against the Pakistani rupee during the next six months. If he agrees to buy dollars today, at say Rs 60.50 for delivery six months from now, he will be hedging. This saves him from the adverse impact of any increase in price of a dollar. However, when the time for getting dollar comes, if the dollar price is say Rs 58, he will be a loser as he will be obligated to buy dollars at his contracted price of Rs 60.50. Now, he has an alternative. He can go to an options dealer and buy an option to get dollars at say Rs 60 six months from today. For getting this option, he will have to pay a fee (in about the same way as you pay insurance premium). Suppose the fee is 55 paise per dollar. Now, he has the assurance that he will get the dollar at not more than Rs 60. However, should the actual price of dollar at the time delivery drop to say Rs 58 he can simply forego his right to buy dollars at Rs 60. Hence by buying an option, he will be covered against the possibility of increase in value of dollar without foregoing the possibility of benefiting from a fall in price of the dollar. /

There is a fundamental difference between hedging and options. When you hedge, you eliminate the risk of loss by giving up the potential for gain. When you buy an option, you pay a fee to eliminate the risk of loss and retain the potential for gain.

Options are basically of two types: call options and put options. A call option is an option to buy at some future date an item at a price agreed now. A put option is an option to sell at some future date an item at a price agreed now. The people who make a business of offering these options charge a fee for their services which is payable at the time of buying the option, regardless of the fact that the option is actually exercised or not.

In Pakistan, options market is not yet fully developed but Pakistani businessmen are free to buy options from anywhere else in the world.

### *Insuring*

Insuring means paying a premium (the price paid for the insurance) to avoid losses. By buying insurance, you substitute a sure loss (the premium you pay for the policy) for the possibility of a much larger loss if you do not insure. For example, if you own a car, you almost surely have bought some insurance against the risks of damage, theft, and injury to yourself and others. The premium may be Rs 10,000 today to insure your car for the next year against the potential losses stemming from these contingencies. The sure loss of Rs. 10,000 replaces the possibility of losses that can run into hundreds of thousands of rupees.

One important fact to remember about insurance is that by getting an insurance policy an insured simply covers himself against a loss; he does not benefit or profit from it. When his car is stolen, and the insurance company pays him for a new car, that simply restores him to the financial position in which he was before the loss. Unlike a forward contract or an option, there is no possibility of an insured benefiting from an insurance policy (i.e. getting compensation beyond the amount of actual loss sustained by him.)

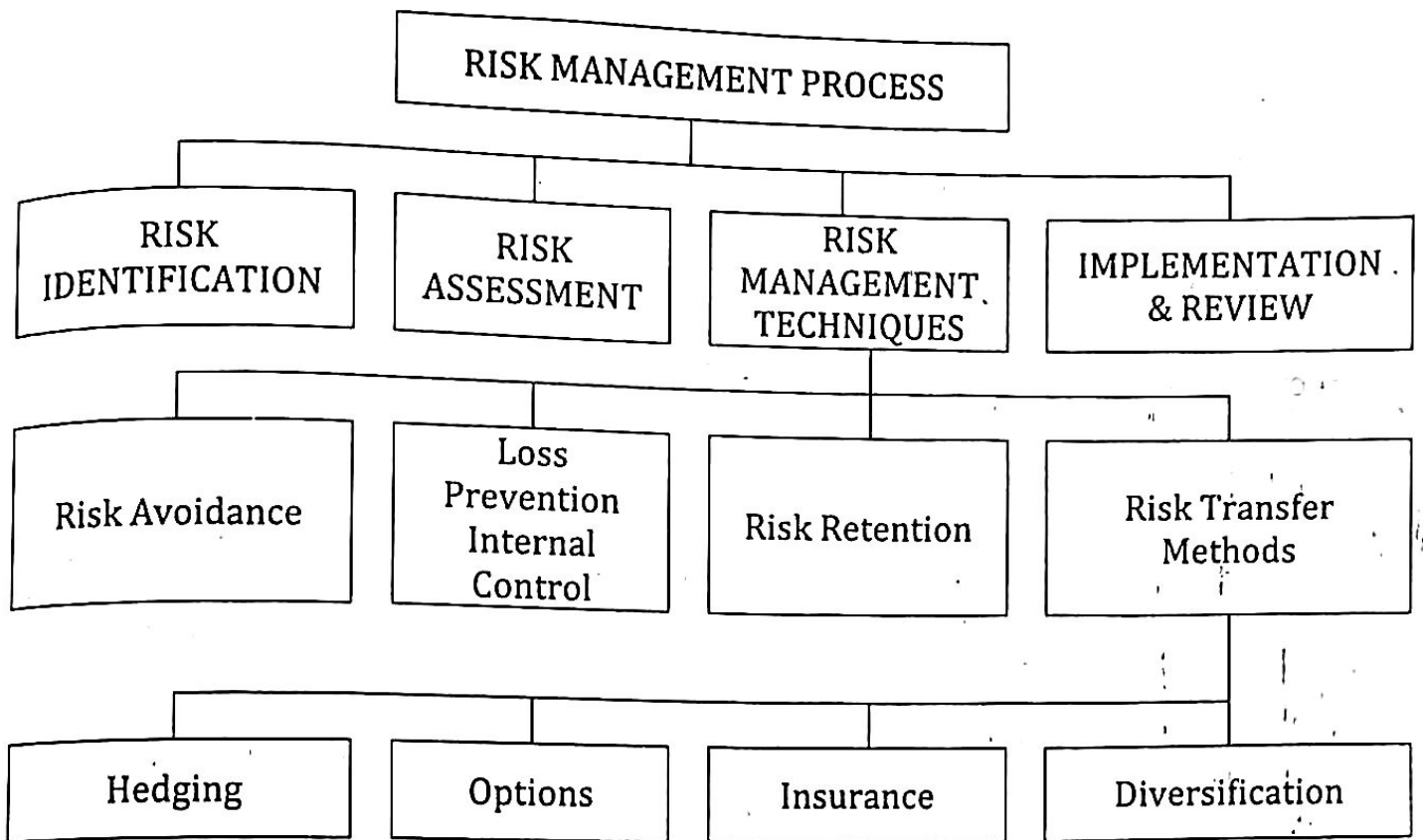
### *Diversifying*

Diversifying means holding similar amounts of many risky assets instead of concentrating all of your investment in only one. Diversification limits your exposure to the risk of any single asset. Let us take an example to understand how diversification helps reduce risk exposure.

There are three investors, say Awan, Bhatti and Chawla, each with Rs one million to invest. There are two opportunities available in the particular field of business they are engaged in: Opportunity X and Y. Each opportunity offers the prospect of 300% profit but also carries the possibility of total loss within four years. Let us also assume that only one of these opportunities will succeed, i.e. if Opportunity X succeeds, Y must fail, and vice versa.

Now Awan puts his entire Rs 1,000,000 in Opportunity X. If this project succeeds, he will have Rs.4,000,000 at the end of the fourth year (i.e. his original investment plus 300% profit). But if this project fails, he will be left with nothing. This is the risk.

Bhatti decides to put his entire Rs. 1,000,000 in Opportunity Y. If this project succeeds, he too will have Rs. 4,000,000 at the end of the fourth year. But if this project fails, he too will have nothing. He too is running the same risk.



**Fig. 8.1:** Risk Management Process at a glance

### **Institutions for risk management**

It is not possible to cover all the various institutions that play a role in helping businessmen manage their risks in this elementary text. However, briefly the following are some of the institutions that assist in risk management.

- Insurance companies
- Stock Exchanges
- Specialist traders in forward contracts and options
- Mutual Funds
- Financial Institutions offering guarantees, letters of credit, underwriting of shares and bond issues, and similar facilities.

### **Disaster Recovery**

Disasters happen, some are natural like earthquakes and tsunami, and others are man or more appropriately company made like Bhopal disaster and the recent BP crude oil leak in Gulf of Mexico. After the 9/11 incident in USA and the wave of terrorism of which Pakistan has had a more than fair share, disaster recovery plans are becoming increasingly necessary.

Companies must prepare for disasters and the life after disasters. The manner in which a company responds to a disaster may well determine whether or not it will continue to exist. Insurance can cover many risks, but not all. There are certain assets which if lost are impossible to replace like the talents of certain employees or certain confidential files.

The directors must ensure that a formal disaster recovery plan is in place which helps the company resume its operations quickly and efficiently. A very important aspect of disaster recovery is security of financial data. Some companies like banks can face very serious consequences if its records are lost or damaged.

### **The role of government in risk management**

Government plays an important role in managing risks for the public at large either by preventing them or redistributing them. People often rely on government to provide protection and financial relief from natural disasters and various human-caused hazards, including war and pollution of the environment. An argument in favour of an activist role for government in economic development is that government can readily spread the risk of an investment in infrastructure among all of the taxpayers within its jurisdiction. Government managers often use the markets and other channels of the financial system to implement their own risk-management policies in much the same way that managers of firms and other nongovernmental economic organizations do.

In case of private sector institutions of risk management, the persons seeking cover against a risk pay for the coverage in one form or the other. Much in the same way, risk protection offered by a government also comes at a price. All risks are ultimately borne by the people. Whether government offers insurance against the risk of natural disasters or insurance against default on bank deposits, it is not free. The government either charges the insured parties a price sufficient to cover the costs of these insurance services, or taxpayers pay the claims.

### **Report by Board on risk management**

While the Pakistan's Code of Corporate Governance issued by SECP is relatively silent on this aspect, the Combined Code of CG of UK which is widely accepted throughout Commonwealth prescribes that the company's annual financial reports must include, either as a separate statement or within the body of Chairman's report, a report from the Audit Committee on risk management. This report covers the following points:

- It lists the significant risks faced by the company and how they are being identified, assessed and managed.
- It reports on the effectiveness of the systems put in place to manage these risks, and
- It lists the actions being taken to remedy any significant failings or weaknesses that may have already been detected.
- It also comments on the need, if any, for greater monitoring of procedures.

## QUESTIONS

1. What is risk? How does risk differ from uncertainty? Give three instances of situations where (a) there is uncertainty but no risk (b) there is uncertainty as well as risk.
2. Define risk aversion. How does it differ from risk avoidance?
3. Why must one take risks?
4. What is meant by risk management? Is it a governance issue? Why?
5. Discuss the steps involved in risk management process.
6. Distinguish between risk identification and risk assessment.
7. Discuss the situations where risk retention may be more beneficial than risk transfer.
8. Differentiate between (a) Hedging and options (b) Options and insurance
9. Discuss the role of financial system in helping businessmen manage their risks.
10. Which risk management technique has been chosen in each of the following situations?
  - Installing a smoke detector in your office
  - Investing savings in T-bills rather than in shares
  - Purchasing a life insurance policy for yourself