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RISK & INSURANCE

1.0 INTRODUCTION

Risk is a part and parcel of our daily lives. Risks are all around us whether we are aware of them or not. We may be familiar with some of the risks and then there are others, which may have escaped our attention. There are risks, which we have learned to live with such as "Will I live to see this year through" and than there are risks, which do not cross the mind like "The possibility of house or property getting damaged by an earthquake or lightening".

For example: Whenever you go out of your house the parents are worried that the possibility of accident on roads. Risk of accident is involved.

As & when you go to attend marriage of your relative out of town along with your family members and you lock your house and your parents always feel risk of theft.

1.1 OBJECTIVES

At the end of this lesson you will be able to know

- Risks in life
- How it can be avoided ?

1.2 WHAT IS RISK?

Risk has been defined as the **possibility of occurrence of an unfavourable deviation from the expected** i.e. what you want to happen does not happen or vice versa what you do not want to happen, happens. When such unexpected events occur there is invariably a sense of loss, which may or may not be measurable in terms of money. When your vehicle gets unexpectedly stolen there is a monitory loss but if your Favourite pet dies unexpectedly you feel a great loss but this loss is not measurable. Since an unfavourable deviation from the expected always results in loss, we can also define risk as the **possibility of occurrence of loss.**

Our expectations are mostly positive. We expect our car to be exactly where it was parked in the same condition as when we left it and are unpleasantly surprised if we find it is not there or that it has been damaged when we return. Once we realize that our expectations are less than certain and that actual events may differ from what we expected, **uncertainty** creeps into the mind and **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 easy.

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 resultants uncertainty, insecurity and worry definitely have an economic and a psychological cost.

1.3 SOURCES OF RISK

Risk as we have seen is all about losses. In the absence of possibility of loss there would be no risk thus it is important to know about the factors, which cause or contribute towards the occurrence of loss or extent of loss. There are two such factors and these are **"Perils"** and **"Hazards".**

PERILS

Perils cause the deviation in events from those that we expect. They are the immediate cause of loss. Their very existence ensures that we are surrounded by risk for example flood, death, sickness, theft, terrorism etc. and these are discussed below.

1. Natural Perils:

Our very existence on the planet earth ensures that we live with risk as the almighty in all his wisdom has although gifted nature with many sources of energy unbalance or disturbances beyond limits take the form of risk called perils, which can lead to unexpected losses. There are unexpected natural phenomena, which year in and year out cause untold misery, loss of life and property. The most recent example in the Indian context being the Gujarat Earthquake on Jan 26th 2001, which caused widespread devastation. Nearly 20,000 lives were lost, numerous villages and localities were razed to the ground and lakh were rendered homeless. There is no stopping the fury of nature and the havoc that it plays with mankind. Volcanic eruptions, fire due to lightning, landslides, cyclones, hurricanes, storms, floods, the vagaries of weather, unseasonal rainfall and prolonged dry spells, hailstorms are some other examples of natural risks that can cause losses. These perils are also called **Act of God perils,** and there is little that mankind can do to stop them, he can only learn to live with them and devise means to lessen the negative impact.

A global survey of losses for the year 2006 conducted by Sigma estimated the insured losses due to natural calamities at 14.8 billion dollars and out of this 12.6 billion dollars was on account of floods alone (while looking at these figures we have to bear in mind that these are only for insured losses, the actual figure may be actually much more).

40% of the lives lost during the year in catastrophes were on account of natural disasters with a major contribution being the lives lost due to floods in India & Bangladesh in and Southern Africa in February'2000 and Tsunami in 2005-06.

2. Man Made Perils:

Then there are the manmade perils, which cause loss, these are an outcome of our society and are the violent actions and unethical practices of people, which result in deviation from the expected. There are many of these but only a few are being discussed to illustrate their significance.

(a) **Theft: -** Page – 3 of your daily newspaper provides a fair idea about this rampant malady in our society. The entire page is full of incidents of thefts of motorcycles, daylight robberies and burglaries loss to human life by accident, terrorism, enmity, adulteration murder etc. The figure for the exact extent of losses due to such incidents is not available for India but a study done by the FBI in USA way back in 1974 estimated that such losses in material terms alone exceeded $3 billion that year. Not only outsiders but insiders also steal. Employees steal tools, equipments and goods from their employers worth millions every year.

(b) **Riots, Strikes and Malicious Damage: -** These are perils, which every property owner faces. During Riots miscreants damage, Public and Private property, loot stores, inflict injury or death to innocent people and the police personnel and bring business to a standstill causing untold damage. Similarly strikes sometimes turn violent resulting in damage to life and property. Strikes also result in loss of production causing huge monetary losses, which may even result in bankruptcy. Vandals target unoccupied houses when the proprietors are on vacation and damage the property, in some cases setting it on fire. Cars parked in the street are also often vandalized.

(c) **Accidents: -** Accidents are caused by people and they cause injury to themselves or to others and also damage to property. Automobile accidents alone contribute the maximum share of losses due to this peril. As per WHO study each year "Road Traffics" take the lives of 1.2 million men, women & children around the world and seriously injure millions more. In addition to automobile accidents, accidents due to carelessness of humans result in huge losses to property and life. A carelessly dropped cigarette can lead to fire resulting in heavy losses to property and even life. Thousands of workers lose their lives and limbs every year in industrial accidents caused by human error or carelessness.

In one of the reports by Sigma for the year 2006 puts the global figure of man made insured losses at 5 billion dollars with 50% being attributed to Industrial fires. 11700 people lost their lives and out of these 65% were killed in transport related disasters (which appreciating the extent of losses. We must remember that Sigmas report is only a study of major disasters and only 350 events during the year have been evaluated / studied. The figures therefore just give an idea whereas the ground reality may be even more alarming).

3. Economic Perils:

The third category of Perils or cause of Risk is economic in nature and the examples of this type of Risk are Depression, Inflation, Local fluctuations and the instability of Industrial firms.

Depression in the market leads to low production levels and an increase in unemployment. Low production results in reduced profits or losses for business houses whereas unemployment stops the income of individuals causing mental and physical suffering.

When Inflation is there in the economy the buying power of money declines and the real value of savings and income is reduced. People whose livelihood is based on fixed income such as pensioners (Retired persons) during such periods are the hardest hit and may find it impossible to make both ends meet.

This fluctuation in the general economy can cause unfavourable deviation from the expectations and create risks for both Industries firms as well as individuals.

Sometimes it so happens that even though the general economic condition in the country is stable there are some areas, which may experience recession. These are known as local fluctuations and can effect the Individuals or the business houses in the same manner as the general fluctuation in economy i.e. Depression & Inflation. When particular area is effected the value of investments made in the area declines and jobs are also lost.

At time it is the individual firms which are to blame. The owners lose part or whole of their investment and workers lose their jobs. There are many towns and communities, which are dependent on one single Industry for their well being and when this Industry fails or decides to shift operation the entire town or community is exposed to risk.

Hazards

While perils are the direct cause of loss **hazards are the underlying factors, which increase the probability of occurrence of loss.** There are conditions, which are more hazardous than others e.g., working, as an electrician is a more hazardous occupation than that of a banker as it is more susceptible to accidents. Owning a property on the banks of Ganga is more hazardous than a property in Chandigarh as it is exposed to the risk of damage due to floods. Similarly dealing in textiles is more hazardous than dealing in hardware as the risk of loss due to fire is greater. There are three kinds of hazards:

(i) Physical (ii) Moral (iii) Morale

(i) Physical Hazard: These are hazards, which are related to the physical aspects of the property, which may influence the chances that the property may be damaged or which may increase or decrease the losses incurred due to a particular risk.

The location of a building affects its vulnerability to losses due to fire, floods, earthquakes etc. A residential building close to a unit manufacturing crackers will be more susceptible to losses than a building located in a purely residential area.

Construction of a building also affects the extent of loss. A building or the use to which it is being put is another example of a physical hazard. The same building will be in greater danger of loss by fire if it was used for storing petroleum products than if it was being used as an office or a departmental store.

(ii) Moral Hazard: Moral hazard also affects the probability of loss occurring and the risk is increased. A dishonest person may set his own house or property on fire to avail the Insurance benefit. An unscrupulous trader may arrange for a robbery in his own store to get the benefits. Whenever persons of doubtful integrity buy an Insurance policy the risk increases because loss becomes a certainty.

(iii) Morale Hazard: This is not to be confused with moral hazard, which involves dishonesty but morale hazard is an attitude of lack of concern about the outcome of his actions. An example of this is a person who is careless about stubbing out cigarettes and just throws them around not in the least bothered that his action may cause fire. Bad house keeping is another example of a morale hazard as this also increases the chances of loss occurring.

INTEXT QUESTIONS 1.1

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1. Define risk.
2. What are the different types of perils?
3. Distinguish between Moral and Morale hazard.

1.4 TYPES OF RISKS

Risks can be classified into two categories **Pure Risks** and **Speculative Risks.**

To illustrate the difference between the two types of risk let us take the example of a property owner. When a person purchases a property, he is exposed to the risk of damage or loss to his property due to fire. In the event of a fire occurring he will suffer a loss and there is no possibility of him gaining anything if a fire occurs. Simultaneously the value of his property may increase or decrease due to various factors. The areas where the property is located may develop into a prime locality and the value of his property will increase or alternatively the area may not develop but instead becomes uninhabitable because of pollution and the value of his property may decrease. Thus by purchasing the property he exposes himself to the risks of either gaining or losing.

In the first case there was only the chance of a loss occurring this is known as **pure risks** whereas in the second there is a chance of either gain or loss this is known as **speculative risk**. Thus we see that in the same instance i.e. the purchasing of a property the owner exposes himself to both Pure and speculative risk.

Pure risks are those where in case of any unexpected happening the result is only loss whereas in **speculative risks** an unexpected occurrence can possibly result in gain or loss.

When a person gambles or he buys shares there is a chance that he may lose or win or that the share prices may go up and he gains or the share market crashes and he loses. These are **speculative risks**. Risks as we have mentioned earlier is the possibility of loss but when there is also a chance of gain then these risks are called speculative risks.

It is said that the profit that a businessman earns is his reward for bearing a speculative risk. No businessman willingly exposes himself to pure risk because in pure risk there is no gain. It is a universal fact that if one has to live in this risk prone world, one has to expose himself to the pure risks. Pure risks are a part of the environment and are all pervading.

Pure risks which every individual families, firms and other organisations are exposed to can be broadly classified as follows:

(i) **Personal Risk:** Since all losses are ultimately borne by the people it can be said that all risks are personal but there are some losses such as loss of income, mental or physical suffering etc. which have a direct impact on people. Therefore the risk of premature death, sickness, disability, unemployment and even dependent old age are put in this category of Personal risk.

(ii) **Property Risk:** The possibility of loss to an asset such as damage to a building due to fire or damage to a vehicle in an accident or theft of vehicle. These sort of risks fill in the category of Property Risk.

(iii) **Liability Risk:** This is the risk of becoming legally bound to compensate or to pay for damage to the person or property of others.

1.5 WHO FACES RISK ?

Risks as we have seen are inevitably a part of our lives and every individual or business/ Industrial house is exposed to the possibility of loss. The risks faced by the individual or family and the Industry are common but they differ in nature and the extent of loss.

It will be simpler if we discuss the risks faced by the Individual or family separately from the risks faced by the Business houses/ Industries.

1. Family Risks

The term family for all practical purposes henceforth includes an individual who may be living with the family or separately.

(i) Personal Risks

Death: When a person dies the income that he earns with his efforts stops. When death will strike is uncertain and the risk is there at any age. In addition to the loss of income when the head of family dies the family is subjected to expenses on last illness, funeral expenses and settlement of estate not to mention the mental and social burden which cannot be measured in monetary terms but is without doubt very high.

Disability

This may not be as serious as death but it has definite impact on the income. Expenses will increase due to medical care for the disabled family member. Poor health as a result of an accident or illness is one of the most important risks which a family has to face.

Retirement

A person may survive pre-mature death or disability but he still faces loss of income to maintain a reasonable standard of living during retired lifetime.

Unemployment

This risk is also an important one for every family. The current industrial & economic scenario is not very conducive for employment and a lot of companies industrial houses are downsizing, cutting down on the labour force. Voluntary Retirement Scheme and Retrenchment are the order of the day.

(ii) Property Risk

All families in addition to the risk of loss of income or increased expenses also face the risk of loss to property. Loss to property results not only in reduction of Assets but also in loss of income. Examples of property risk are innumerable but to illustrate the extent and nature some are being mentioned here. Homes may be destroyed by fire, floods and storms; cars may be damaged in an accident, burnt, be lost, stolen or destroyed; Savings may be lost in stock market crashes or failure of banks.

(iii) Liability Risk

An individual because of his negligence may become responsible for injury to the person or damage to the property of others for which he has to pay compensation and expose the family to such a risk. With a greater awareness amongst the common man the liability risks is ever increasing and the courts in their judgements appreciating the value of human life and right are awarding huge amounts as compensation for which any individual or family can be beyond imagination and intolerable.

2. Business Risks

As we have already said, businesses also face the same risks as the family but in a different manner and the magnitude is bigger.

(i) **Personal Risks :** The death or disability of an employee who is instrumental in the successful running of the business enterprise can result in loss of business and profits. If a partner in a partnership concern dies, the partnership is dissolved and the surviving partners can suffer loss of Income. In the case of disability of a key employee or partner the firm may be burdened with his medical expenses and may be obliged to continue paying his salary. Firms also to have face the risk of the death or injury to their employees and the burden, which has been transferred to them by law or by contract. The workmen compensation Act 1923 is an example whereby the financial burden resulting from disablement or deaths of an employee is placed upon the employer.

(ii) **Property Risk :** Business houses suffer direct and indirect losses due to property risk. Direct losses can be as a result of various perils much the same as for the family such as destruction of building, machinery and stocks in fire or due to other perils such as storms and flood. In addition dishonest employees may steal from the firm not only material goods but also ideas causing great loss. In this competitive era business houses spend a lot of money on research and development of new concepts but if these are stolen and handed over to other firms in the same field the returns expected from these investments are lost causing great loss. Equipment and property may be damaged or destroyed by rioters or employees on strike. Strike also cause loss of production.

These direct losses may only be a part of the total loss because apart from direct losses due to property damage the business houses also have to bear the indirect loss incurred due to stoppage of operations, disruption in production (Loss of profits) that they may have to face.

(iii) Liability Risk : As in the case of family business, firms also are liable to others for bodily injury or property damage but the exposure is greater than the family as the firm is responsible for the acts of a large number of employees as also the products or services that it deals in.

1.6 HANDLING RISKS

Now that we know that risks are a part of our daily lives we must know how to handle them. Risk management will be discussed in detail under "Practice of General Insurance" and here we shall only make a passing reference to this important aspect.

Some of the methods used to handle risks are Risk Avoidance, Loss Prevention and Reduction, Risk Retention and Risk Transfer. For convenience sake these are briefly being dealt with separately but in practice two or more are used in combination.

1. Risk Avoidance:

The simplest way to deal with risk is to avoid it together. If a factory is to be located on the banks of a river, which is prone to floods every year then it may be decided to shift the site to a safer location. Some people avoid the risk of death or injury in an aeroplane crash by traveling by surface transport only. Organisation like the Armed forces and even some corporate houses restrict the number of their officers traveling in a single aircraft or vehicle together to avoid the risk of all of them dieing in an accident. Though this is the simplest way it is not always practicable.

2. Loss Prevention and Reduction:

Possible loss due to risks may be eliminated or minimized by Loss Prevention and Reduction measures. Some measures such as strict enforcement of "No Smoking" regulations may eliminate fire losses whereas measures such as installation of sprinkler systems and other appliances may reduce the extent of loss due to fire.

Good manufacturing units spend a lot on safety devices and measures and enforce strict rules of conduct within their premises to eliminate or reduce the occurrence of accidents thus minimise their losses & expense incurred on treatment and compensation to employees.

Segregation of hazardous processes from others in a manufacturing unit and isolation of hazardous goods such as petroleum products from non-hazardous goods in a storage facility are some examples of the method of loss Prevention and Reduction.

3. Risk Retention:

It may be consciously decided to retain some risks. Small losses, which may occur frequently may be absorbed by the firm as normal operating expenses such as minor damage or loss of goods in transit.

A financially sound firm may **create an Insurance fund** to which regular payments are credited and from which losses are paid as and when they occur.

This method is used to take care of the domiciliary medical expenses of employees by some large companies having a big workforce.

Some individuals retain the risk of contracting cancer due to smoking not knowing that smoking causes cancer and other even though knowing of it rationalize and pretend that the risk does not exist by saying. "It won't happen to me".

4. Transfer of Risk:

Risk transfer occurs when the activity that creates the risks is transferred to another. For example if a particular process of manufacture is hazardous the firm may decide to get it outsourced i.e. get the job done from a specialized sub-contractor outside so that the associated risks are transferred.

Similarly when a person hires an equipment the owner may insert a condition in the contract that any damage to the equipment shall be the responsibility of the hirer. Lease and rental agreements are an example of this method of handling risk. A rental agreement carries the clause that the equipment shall be returned to the owner in good condition, ordinary wear & tear accepted. Guarantees are also a form of risks transfer where the buyer transfers the risk of purchasing a defective new item back to the manufacture. Most consumer goods coming in the market now are sold with the guarantee that in case of any manufacturing defect or non-performance the equipment will be replaced/ repaired by the manufacturer. Earlier it was not so and the buyer used to purchase the materials at his own risk and in case of defect had to bear the loss.

There are innumerable ways to transferring the risks and these are only a few illustrations but **the most important method of Risk transfer is Insurance.**

The general guidelines for handling risk are given in the table below:

Types of risk	Suitable Method
Low Frequency and low severity	Retention of Risk
High Frequency and Low severity	Loss control
High Frequency and high Severity	Risk avoidance
Low Frequency and high severity	Risk transfer (Insurance)

1.7 SUMMARY

Risk, which is the possibility of an unfavourable deviation from expectation, causes uncertainty to a person who is both exposed to it and aware of his exposure In many instances uncertainty is unpleasant if not unbearable and reaction to it creates a deterrent to economic activity. Perils causes deviations from expectations and hazards increase the likelihood of such occurrences. Hazards may be physical, moral or morale. The sources of perils and hazards are social, physical and economic. Risk is a common characteristics of the environment for individuals, families and firms. All are exposed to personal risk, property risk and liability risk.

1.8 TERMINAL QUESTIONS

1. What are various sources of risk?
2. Distinguish between Pure Risks & Speculative risks.
3. Explain various risk assumption.

1.9 OBJECTIVE TYPE QUESTIONS

1. Risk is _______________ of occurrence of loss. (Possibility/ impossibility)
2. Earthquake is ______ perils. (natural/ manmade)
3. Inflation is _______ perils.(economic/natural)
4. There are ______types of hazards(two/three)
5. Pure Risks are ____.(Insurable/non-insurable)

Choose the correct options

6. Statement A: Risk can be avoided.

   Statement B: Risk can be transferred.

   a. Both statements are correct
   b. Both statements are wrong
   c. Statement A is correct
   d. Statement B is correct

7. Statement A: Pure risks are insurable.

   Statement B: Speculative risks are not insurable.

   a. Both statements are correct
   b. Both statements are wrong
   c. Statement A is correct
   d. Statement B is correct

8. a. An individual does not face risks

   b. A business organization only faces the risks

   c. Both an Individual and business organization face the risks.

   d. Animals also faces the risk and can be insured.

9. Statement A: Business risks consist of personal, property and liability risks

   Statement B: Family risks consist of personal , property and liability risks.

   a. Both statements are correct

   b. Both statements are wrong

   c. Only statement A is correct

   d. Only statement B is correct

10. Statement A: Morale hazard means lack of concerns.

    Statement B: Moral hazard means dishonesty.

    a. Both statements are correct

    b. Both statements are wrong

    c. Statement A is correct

    d. Statement B is correct

1.10 ANSWERS TO INTEXT QUESTIONS

1.1

1. Risk is the possibility of occurrence of an unfavourable deviation from the expected that is occurrence of undesirable contingency.

2. i) Natural Perils, ii) Manmade perils-Theft, Riots, strikes and malicious damage, accidents iii) Economic Perils

3. Moral hazard means dishonesty of the person and Morale hazard carelessness of a person

1.11 ANSWER TO OBJECTIVE TYPE QUESTIONS

1.9

1. Possibility

2. Natural

3. Economic
4. Three
5. Insurable
6. a
7. a
8. c
9. a
10. a