WOLLO UNIVERSITY
COLLAGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF ACCOUNTING AND FINANCE

DISTANCE MODULE FOR DEGREE PROGRAM

RISK MANAGEMENT AND INSURANCE (ACFN2111)

Prepared By: SelamawitLemech (MSc.)

KedirSeid (MSc.)

Editor: NaodMekonnen (MSc.)

Distance Education Program

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Course Information	
Course Number	AcFn2111
Course Title	**Risk Management and Insurance**
Degree Program	BA Degree in Accounting and Finance
Module No and Code	M11; AcFn-M2111
Module Coordinator	
Lecturer	
ETCTS Credits	5
Contact Hours (per week)	3
Course Objectives & Competences to be Acquired	After accomplishment of this course, students will be able to:- • Know basic concepts of risk • Explain the basic classification of risk • Understand the principles of insurance • Understand insurance Industry in Ethiopia • Explain the nature and application of reinsurance • Identify and measure business loss exposures. • Discusses how to select among the major tools of risk management • Measure, if not eliminate, exposures to loss or risk and analyze various class of insurance contracts
Course Description	Risk affects every aspect of an organization. The effects of risk are not confined within any predictable boundaries; a single event can easily influence several areas of an organization at once, producing consequences far beyond the immediate impact. The pervasiveness and complexity of risk presents strong challenges to managers, one of the most important being the coordination of risk management across areas within the organization. It deals with: the nature and management of pure

	risks, insurance and reinsurance; risk concepts, classification of risks, management of pure risks through various risk handling tools, industrial safety, general principles of insurance and major classes of insurance, reinsurance and development & regulation of the insurance Ethiopia
WEEKS	**Course Contents**
	1. Risk And Related Topics 1.1. Risk defined 1.2. Risk vs. uncertainty 1.3. Risk and probability 1.4. Risk, peril and hazard 1.5. Classification of risk
	2. The Risk Management 2.1. Risk management defined 2.2. Objectives of risk management 2.3. Steps in risk management process 2.3.1. Risk identification 2.3.2. Risk measurement 2.3.3. Selecting the appropriate tools of risk management 2.3.4. Risk administration
	3. Insurance 3.1 Insurance Defined 3.2 Basic characteristics of insurance 3.3 Fundamentals of insurable risk 3.4 Insurance and gambling compared 3.5 Insurance and Speculation compared. 3.6 Benefits and costs of insurance 3.6.1 Benefits of insurance to the society 3.6.2 Cost of insurance to society
	4. Legal Principle Of Insurance Contract 4.1. Principle of indemnity 4.2. Principle of insurable interest

	4.3. Principle of subrogation 4.4. Principle of utmost good faith 4.5. Principle of contribution 4.6. Doctrine of proximate cause
	5. Life And Health Insurance 5.1. Underwriting life insurance 5.2. Types of life insurance polices 5.3. Premium determination 5.4. Worker's compensation insurance 5.5. Personal accident insurance
	6. Non-Life Insurance 6.1. Motor insurance 6.2. Burglary and housekeeping insurance 6.3. Fire and lighting insurance 6.4. Marine insurance 6.5. Aviation insurance 6.6. Liability insurance 6.7. Pecuniary insurance 6.8. Fidelity guarantee insurance 6.9. Engineering insurance
	7. Re-Insurance 7.1. Meaning of Re-insurance 7.2. Reason for Re-insurance 7.3. Types of Re-insurance
	8. The Insurance Business In Ethiopia 8.1. Development of insurance in Ethiopia 8.2. Regulation of insurance companies 8.2.1. Proclamation No. 68/1975 8.2.2. Proclamation No.86/1994 8.2.3. NBE Directives

Evaluation Type	Weight
Assignment	35%
Tutorial Attendance	5%
Final exam	60%
Total	100%

Contents

CHAPTER ONE

The Nature of Risk

Chapter objectives

Dear learners, after completing this chapter you are expected to;

- Understand the meaning of risk
- Differentiate and relate between risk, uncertainty, and probability
- Understand Risk Distinguished from Peril and Hazard
- Identify the different types of risks

1.1. INTRODUCTION

It has been aptly stated that "man is the only case in a nature where life becomes aware of itself." However, man makes numerous choices and decisions on uncertain conditions. He is not aware of all that threatens him and eventually the ultimate reality and certainty that is, death. Thus, we live in an uncertain world in which decisions must be make and risks taken.

When a person gets married, goes into business, decides to attend college, buys a house or does innumerable other things that affect his life in any important way, he is naturally some what apprehensive over the outcome. He is uncertain as to how this particular action will turn out, but he always hopes for the best. He usually considers the various alternatives and make up his mind only after weighing the advantages and disadvantages of each course of action. We say that this individual is facing the uncertainties of the future, that is, the different kinds of risks. Usually he is happier for making decision that he is almost certain is correct. He likes the soft-heard advice, "be sure you are right, then go ahead." Conversely, he usually dislikes decisions that he has to make "in the dark," those with more risks attached.

As an illustration, consider the various uncertainties that enter into the purchase of a home by taking a loan from a bank to repaid within 20 years. The family breadwinner must make the decision whether or not to buy a certain home in the environment of uncertainties such as:

- ✓ Is the level of my income high enough and certain enough to enable me make the payments for 20 years?

- ✓ How can I protect the investment for my families benefit in case I should die before the loan is repaid?
- ✓ Will my health permit me to continue to work for 20 years?
- ✓ Would it be better to rent rather than to buy and use my funds for other purposes? if so, what risks characterize the alternative uses of my fund?
- ✓ How can a person protect my investment in case of fire, flood, wind-storm, or other peril?
- ✓ It is possible that may investment will lose value because of a job transfer and consequent forced sale of property?

In order to have exactly the type of house want, should the person take the risk of building a home rather than buying.

If the potential home buyer cannot find satisfactory answers to those and other questions, he may decide that "the risks are too great" and fail to purchase a home. Indeed, the subject of risk is of great importance to an "economic man"; risk has an element of distastefulness (economists would call it disutility) that make him want to eliminate it. The more completely he can avoid risk, the better. Because people usually try to avoid all the uncertainties they can, the subject of risk and its wise management has received important consideration by social scientists for many years. They have tried to identify what type of risks there are and how to avoid or to handle risk in some satisfactory manner.

In general, risk exists whenever the future is unknown. Because the adverse effects of risk have plagued mankind since the beginning of time individuals, groups, and societies have developed various methods for managing risk. Since no one knows the future exactly, everyone is a risk manager not by choice, but by sheer necessity.

Dear learners, this chapter discuss risks, uncertainties and related concepts and introduce you with the various types of risks.

1.2. Definition of Risk

The word risk is used in many different ways. It can refer to general uncertainty, doubt, an insured object, or chance of loss.

Williams and Heinz define risk as the variation in the outcomes that could occur over a specified period in a given situation. If only one outcome is possible, the variation and hence the risk is 0. If many outcomes are possible, the risk is not 0. The greater the variation is the greater the risk.

For the purpose of this course we will define risk as the possibility of an adverse deviation from a desired outcome that is expected or hoped for. If you own a house, you hope it will not catch fire. When you make a wager, you hope the outcome will be favorable. The fact that the outcome in either event may be something other than what you hope for constitutes a possibility of loss or risk.

Note that the above definition is not subjective. Risk is a state of the external environment. This possibility of loss must exist, even though the individual exposed to that possibility may not be aware of it. If the individual believes that there is a possibility of loss where none is present, there is only imagined risk, and not risk in the sense of the real world. Finally, there is not requirement that the possibility of loss must be measurable, only that it must exist.

Risk is uncertainty as to loss. If a cost or a loss is certain to occur, it may be planned for in advance and treated as a definite, known expense. It is when there is uncertainty about the occurrence of a cost or loss that risk becomes an important problem.

When risk is said to exist there must always be at least two possible outcomes. If we know in advance what the outcome will be, there is no risk. For example, investment in a capital asset involves a realization that the asset is subject to physical depreciation and that its value will decline. Here the outcome is certain so there is no risk.

The degree of risk is inversely related to the ability to predict which outcome will actually occur. If the risk is 0, the future is perfectly predictable. If the risk in a given situation can be reduced, the future becomes more predictable and more manageable.

In a two - outcome situation for which the probability of one outcome is 1 and the probability of the second outcome is 0, the risk is 0 because the actual outcome is known.

1.3. Risk versus Uncertainty

Uncertainty is the doubt a person has concerning his or her ability to predict which of the many possible outcomes will occur. Uncertainty is a person's conscious awareness of the risk in a given situation. It depends upon the person's estimated risk-what that person believes to be the state of the world-and the confidence he or she has in this belief. A person may be extremely uncertain about the future in a situation where in reality the risk is small; on the other hand, this person may have great confidence in his or her ability to predict the future when in fact the future is highly uncertain. Unlike probability and risk, uncertainty cannot be measured by any commonly accepted yardstick.

1.4. Risk versus Probability

It is necessary to distinguish carefully between risk and probability. Probability refers to the long-run chance of occurrence, or relative frequency of some event.Insurers are particularly interested in the probability or chance of loss, or more accurately, the probability that a loss will occur to one of a group of insured objects.

Risk as differentiated from probability, is a concept in relative variation. We are referring here particularly to objective risk, which is the relative variation of actual from probable or expected loss. Objective risk can be measured meaningfully only in terms of a group large enough to analyze statistically. If the number of objects is too small, the range of probable variation is so large that is virtually infinite as far as the insurer is concerned.

1.5. Risk Distinguished from Peril and Hazard

Many persons commonly employ the terms "risky," "hazardous," and "perilous" synonymously. For clarity in thinking, however, the meanings of these words should be carefully distinguished

A peril is a contingency, which may cause a loss. We speak of the peril of "fire" or "windstorm," for "hail" or "theft". Each of these is the cause of a loss that may occur.

A hazard, on the other hand, is that condition which creates or increases the probability of loss from a peril. For example, one of the perils that can cause loss to an auto is collision. A condition that makes the occurrence of collisions more likely is an icy street. The icy street is the hazard and collision is the peril. In winter the probability of collision is higher owing to the existence of icy streets. In such a situation, the risk of loss is not necessarily any higher or lower, since we have defined risk as the uncertainty that underlying probability will work out in practice.

It is possible for something to be both a peril and hazard. For instance sickness is a peril causing economic loss, but it is also a hazard that increases the chance of loss from the peril of premature death.
There are three basic types of hazards: physical, moral, and morale.

1. **Physical Hazard**

A physical hazard is a condition stemming from the physical characteristics of an object that increases the probability and severity of loss from given perils. Physical hazards include such phenomena as the existence of dry forests (hazard for fire), earth faults (hazard for earthquakes), and icebergs (hazard to ocean shipping). Such hazards may or may not be within human control. For example, some hazards for fire can be controlled by placing restrictions on building camp fires in forests during the dry season. Some hazards, however, cannot be controlled. For example, little can be done to prevent or to control air masses that produce ocean storms.

2. **Moral Hazard**

A moral hazard stems from the mental attitude of the insured. A moral hazard is a condition that increases the chance that some person will intentionally (1) cause a loss or (2) increase its severity.Some unscrupulous persons can make, or believe that they can make, a profit by bringing about a loss. For example, arson, inspired by the possibility of an insurance recovery, is a major cause of fires. A dishonest person, in the hope of collecting money from the insurance company, may intentionally cause a loss.

3. **Morale Hazard**

The moral hazard includes the mental attitude that characterizes an accident-prone person. A moral hazard is condition that causes persons to be less careful than they would otherwise be. Some persons do not consciously seek be bring about a loss, but the fact that they have insurance causes them to take more chances than they would if they had no insurance. The purchase of insurance may create a morale hazard, since the realization that the insurance company will bear the loss may lead the insured to exercise less care than if forced to bear the loss alone. Morale hazard results from a careless attitude on the part of insured persons toward the occurrence of losses.

Check your progress. 1.1.
1. State in short how risk differ from probability and uncertainty.

1.6. Classifications of Risk

Risks may be classified in several ways according to their cause, their economic effect, or some other dimension. However, there are certain distinctions that are particularly important for our purpose stated hereunder.

1.6.1. Financial Versus Non Financial Risks

In its broadest context, the term risk includes all situations in which there is an exposure to adversity. In some cases this adversity involves financial loss, while in others it does not. There is some element of risk in every aspect of human endeavor and many of these risks have no (or only incidental) financial consequences. In this course we are concerned with those risks which involve a financial loss.

1.6.2. Static Risk versus Dynamic Risks

A second important distinction is between static and dynamic risks.

Dynamic risks are those resulting from change the economy. They are risks associated with changes, especially changes in human wants and improvements in machinery and organization.

For example, changes in the price level, consumer tastes, income and output, and technology may cause financial loss to members of the economy.

Static risks involve those losses, which would occur even if there are no changes in the economy. These are risks connected with losses caused by the irregular action of the forces of nature or the mistakes and misdeeds of human beings.

Static risks are risks stemming from a level, unchanging society that is in stable equilibrium. Examples include the uncertainties due to random events such as fire, windstorm, or death. They would be present in an unchanging economy. If we could hold consumer taste, output, and income, and the level of technology constant, some individuals would still suffer financial loss. These losses arise from causes other than the changes in the economy, such as the perils of nature and the dishonesty of other individuals.

Dynamic risks normally benefit society over the long-run since they are the result of adjustments to misallocation of resources. They usually affect a large number of individuals and are generally considered less predictable, since they occur with no precise degree of regularity. Static risks, unlike dynamic risks usually result in a loss to society, affect directly few individuals at most, exhibit more regularity over a specified period of time and, as a result, are generally predictable.

1.6.3. Pure Risks versus Speculative Risks

A distinction has been made between pure risk and speculative risk, which further clarifies the nature of risk. A pure risk exists when there is a chance of loss but no chance of gain. For example, the owner of an automobile faces the risk associated with a potential collision loss. If a collision occurs, the owner will suffer a financial loss. If there is no collision, the owner's position remains unchanged.

A speculative risk exists when there is a chance of gains as well as a chance of loss. For instance, expansion of an existing plant involves a chance of loss and chance of gain. Pure risks are always distasteful, but speculative risks possess some attractive features. In the above example, i.e., expansion of existing plant, the investment made may be lost if the product s not accepted by the market at a price sufficient to cover costs but this risk is born in return for the possibility of profit. Gambling is also a good example of speculative risk. In a gambling situation risk is deliberately created in the hope of gain.

Pure risks also differ from speculative risks in that they generally are repeatable under essentially the same condition and thus are more amenable to the law of large numbers (a basic law of mathematics, which states that as the number of exposure units increases, the more certain it is that actual loss experience will equal probable loss experience).
This means that one can more successfully predict the proportion of units that will be loss if they are exposed to a pure risk than if they are subject to a speculative risk. One notable exception to this statement is the speculative risks associated with games of chance, which are highly amenable to this law.

In a situation involving a speculative risk, society may benefit even though the individual is hurt. For example, the introduction of socially beneficial product may cause a firm manufacturing the product it replaces to go bankrupt. In a pure-risk situation society almost always suffers if any individual experiences a loss.

The distinction between pure and speculative risk is an important one, because normally pure risks are insurable. Insurance is not concerned with the protection of individuals against those losses arising out of speculative risks. Speculative risk is voluntarily accepted because of its two dimensional nature, which includes the possibility of gain and loss.

Both pure and speculative risks commonly exist at the same time. For example, the ownership of a building exposes the owner to both pure risks (for example, accidental damage to the property) and speculative risk (for example, rise or fall in property values caused by general economic conditions).

Classification of Pure Risks

While it would be impossible to list all the risks confronting an individual or business organization, we can briefly outline the nature of the various pure risks that we face. For the most part, these are also static risks. Pure risks that exist for individuals and business firms can be classified under one of the following:

a) ***Personal Risks***. These consist of the possibility of the loss of income or assets as a result of loss the ability to earn income.In general earning power is subject to four basic perils:

   1. premature death
   2. dependent old age
   3. sickness or disability
   4. unemployment

b) ***Property risks***. Anyone who owns property faces risks simply because such possession can be destroyed or stolen. Property risks embrace two distinct types of loss: direct loss and indirect or consequential loss. Direct loss is the simplest to understand. If a house is destroyed by fire, the property owner loses the value of the house. This is a direct loss. However, in addition to losing the value of the building itself the property owner no longer has a place to live, and during the time required to rebuild the house, it is likely that the owner will incur additional expenses living somewhere else. This loss of use of the destroyed asset is an indirect or consequential loss.

   An even better example is the case of a business firm. When a firm's facilities are destroyed, it loses not only the value of these facilities but also the income that would have been earned through their use. Property risks, then, can involve three types of losses.

   i) the loss of the property
   ii) loss of use of the property or its income and
   iii) Additional expenses occasioned by the loss of the property.

c) ***Liability Risk***. The basic peril in the liability risk is the unintentional injury of property of others through negligence or carelessness. However, liability may also result from intentional injuries or damage. Under our legal system, the laws provide that one who has injured another or damaged another man's property through negligence or otherwise, can be held responsible for the harm cause. Liability risks therefore, involve the possibility of loss of present assets or future income as a result of damages assessed or legal liability arising out of either intentional or unintentional torts or invasion of the rights ofcontractor to complete a construction project as scheduled or failure of to make payments as expected.

1.6.4. Fundamental Risk versus Particular Risks

The distinction between fundamental and particular risks is based on the differences in origin and consequences of the losses. Fundamental risks involve losses that are impersonal in origin and consequence. They are group risks caused by economic, social, and political phenomena, although they may also result from physical occurrences. They affect large segments or even all of the population. Since these are group risks, impersonal in origin and effect they are, at least for the individual, unpreventable.

Particular risks involve losses that arise out of individual events and that are felt by individuals rather than by the entire group. They are risks personal in origin and effect and more readily controlled. Examples of fundamental risks are those associated with extraordinary natural disturbances such as drought, earthquake and floods. Examples of particular risks are the risk of death or disability from non-occupational causes, the risk of property losses by such perils as fire, explosion, theft, and vandalism, and the risk of legal liability for personal injury or property damage to others.

Since fundamental risks are caused by conditions more or less beyond the control of the individuals who suffer the losses and since they are not the fault of anyone in particular, it is held that society rather than the individual has a responsibility to deal with them. Although some fundamental risks are dealt with through private insurance (for example, earthquake insurance is available from private insurers in many countries, and flood insurance is frequently include in all risk contracts covering movable personal property) it is an inappropriate tool for dealing with most fundamental risks, and some form of social insurance or other transfer program may be necessary.

Particular risks are considered to be the individual's own responsibility, inappropriate subjects for action by society as a whole. The individual through the use of insurance, loss prevention or some other technique deals them with.

1.6.5. Objective Risks versus Subjective Risks

Objective risks, or statistical risk, applicable mainly to groups of objects exposed to loss, refer to the variation that occurs when actual losses differ from expected losses. It may be measured statistically by some concept in variation, such as the standard deviation. Subjective risk on the other hand, refers to the mental state of individual who experiences doubt or worry as to the outcome of a given event. It is a psychological uncertainty that stems from the individual's mental attitude or state of mind.

Subjective risk has been measured by means of different psychological tests, but no widely accepted or uniform tests of proven reliability have been developed. Thus, although we recognize different degrees of risk-taking willingness in persons, it is difficult to measure these attitudes scientifically and 5to predict risk-taking behavior, such as insurance-buying behavior, from tests of risk-taking attitudes.

Subjective risk may affect a decision when the decision-maker is interpreting objective risk. One risk manager may determine that some given level of risk is "high" while another may interpret this same level as "low". These different interpretations depend on the subjective attitudes of the decision-makers toward risk. Thus it is not enough to know only the degree of objective risk; the risk attitude of the decision maker who will act on the basis of this knowledge must also be know. A person who knows that there is only one chance in a million that a loss will occur may still experience worry and doubt, and thus would by insurance, while another would not. For example, Business A insures the plant against fire even though the premium may be very high, while Business B, a neighbor operating under similar conditions, refuses the insurance. In this example

A can be described as apparently perceiving a higher degree of risk in the given situation and behaving more conservatively than B. A tends to be a risk averted and B, a risk taker.

Check your progress 1.2.

A. State the distinction between pure and speculative risks by giving example of each.

B. Differentiate between personal risk, property risk and liability risks.

Chapter Summary

The word risk is used in many different ways. It can refer to general uncertainty, doubt, an insured object, or chance of loss. Uncertainty is the doubt a person has concerning his or her ability to predict which of the many possible outcomes will occur. Uncertainty is a person's conscious awareness of the risk in a given situation. Risk as differentiated from probability, is a concept in relative variation. Probability refers to the long-run chance of occurrence, or relative frequency of some event. A peril is a contingency, which may cause a loss. A hazard, on the other hand, is that condition which creates or increases the probability of loss from a peril.

There are three basic types of hazards: physical, moral, and morale. A physical hazard is a condition stemming from the physical characteristics of an object that increases the probability and severity of loss from given perils. A moral hazard stems from the mental attitude of the insured. A moral hazard is a condition that increases the chance that some person will intentionally (1) cause a loss or (2) increase its severity. The moral hazard includes the mental attitude that characterizes an accident-prone person. A moral hazard is condition that causes persons to be less careful than they would otherwise be.

Risks may be classified in several ways according to their cause, their economic effect, or some other dimension. A risk that involves financial loss are called financial risk while in others it does not which are known as non-financial risks. Dynamic risks are those resulting from change the economy whereas, static risks involve those losses, which would occur even if there are no changes in the economy. A pure risk exists when there is a chance of loss but no chance of gain.

Further pure risks can be classified as personal risk, property risk and liability risks. Fundamental risks involve losses that are impersonal in origin and consequence. Particular risks involve losses that arise out of individual events and that are felt by individuals rather than by the entire group. Objective risks, or statistical risk, applicable mainly to groups of objects exposed to loss, refer to the variation that occurs when actual losses differ from expected losses. Subjective risk has been measured by means of different psychological tests, but no widely accepted or uniform tests of proven reliability have been developed.

Answer for check your progress

Check your progress1.1.

1. The word **Risk-** refers to general uncertainty, doubt, an insured object, or chance of loss.

   Uncertainty -is the doubt a person has concerning his or her ability to predict which of the many possible outcomes will occur.

   Probability refers to the long-run chance of occurrence, or relative frequency of some event.

Check your progress1.2.

1. **A pure risk** exists when there is a chance of loss but no chance of gain. For example, the owner of an automobile faces the risk associated with a potential collision loss. If a collision occurs, the owner will suffer a financial loss. If there is no collision, the owner's position remains unchanged.

   A speculative risk exists when there is a chance of gains as well as a chance of loss. For instance, expansion of an existing plant involves a chance of loss and chance of gain. Pure risks are always distasteful, but speculative risks possess some attractive features.

2. ***Personal Risks***. These consist of the possibility of the loss of income or assets as a result of loss the ability to earn income.

   Property risks. Anyone who owns property faces risks simply because such possession can be destroyed or stolen.

   Liability Risk. The basic peril in the liability risk is the unintentional injury of property of others through negligence or carelessness.

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Review Questions

Part II: True or false questions

1. Risk is the doubt a person has concerning his or her ability to predict which of the many possible outcomes will occur.
2. Risk includes all situations in which there is an exposure to adversity.
3. A physical hazard is a condition that increases the chance that some person will intentionally (1) cause a loss or (2) increase its severity.
4. The basic peril in the liability risk is the unintentional injury of property of others through negligence or carelessness.
5. A hazard is condition which creates or increases the probability of loss from a peril.

Part II : Multiple choices

1. Which of the following consist of the possibility of the loss of income or assets as a result of loss the ability to earn income.
   A. Personal risk C. Liability risk
   B. Property risk D. Life risk
2. Which of the following is not pure risk?
   A. Personal risk C. Liability risk
   B. Property risk D. Life risk
3. Which of the following is/are not physical hazards?
   A. The existence of dry forests (hazard for fire)
   B. earth faults (hazard for earthquakes)
   C. icebergs (hazard to ocean shipping)
   D. Accident-prone person
   E. None
4. Which of the following hazard stems from the mental attitude of the insured?
   A. Physical Hazard
   B. Moral Hazard
   C. Morale Hazard

D. All

5. Which of the following risks results from change of the economy?

A. Static Risk
B. Non Financial Risks
C. Financial Risks
D. Dynamic Risks

6. Which of the following risks are risks stemming from a level, unchanging society that is in stable equilibrium.

A. Static Risk
B. Non Financial Risks
C. Financial Risks
D. Dynamic Risks

CHAPTER TWO
RISK MANAGEMENT

Chapter objectives

Dear learners, at the completion of this chapter, you should be able to:

- ✓ Describe what risk management means
- ✓ Understand the objectives of risk management
- ✓ Explain the functions of risk management
- ✓ Identify the steps in the risk management process

2.1. Introduction

The future is uncertain for everyone, exposed to many risks, and risks are inevitable part of everyday life. Business firms face risks, unforeseen circumstances that can damage their operational capability or financial integrity, arising from different perils. Accidental losses happen each day threaten the survival of the organizations; causes their earnings to dip below acceptable levels, interrupt their operations, or slow their growth or in a worst-case scenario, cause the organization to close. Worry about these possibilities does more than make life less pleasant; it may stop a business firm from engaging in certain activities and otherwise alter how it conducts its operations.

In addition, the environment of modern business, particularly the large industrial unit, is becoming increasingly complex. Several factors have contributed to the increased complexity of modern enterprise and have greatly enlarged the risks faced by business. Among these factors are inflation, the growth of international operations, more complex technology, and increasing government regulation. This increased complexity creates greater need for special attention to the risks facing the enterprise. Most large corporations and many smaller ones employ specialized managers to grapple with the problems of increased risk. Even if a separate risk manager is not employed, someone in the firm performs risk management functions such as insurance buying or loss control.

2.2. Meaning of risk management

Risk management is a systematic process for the identification, evaluation of pure loss exposures faced by an organization or individual and for the, selection, and implementation of the most appropriate techniques for treating such exposure. It is a scientific approach to deal with pure risks by anticipating possible accidental losses and designing and implementing procedures that minimize the occurrence of loss or the financial impact of the losses that do occur. Risk management focuses on a part of the total bundle of risks, those that are classified as “pure risk”. As a general rule, the risk manager is concerned only with the management of pure risks, not speculative risks. All pure risks are considered, including those that are uninsurable. Hence, risk management is the identification, measurement and treatment of property, liability and personnel pure risk exposures.

Understanding risk and application of risk management techniques is a very important aspect to effectively deal with uncertainty and associated risk. And

- Proper risk management enables a business firm to handle its exposure to accidental losses in the economic and effective way.
- It enables companies to react in early stage of change in environment and avoiding possible crises.
- It also enables a business firm to handle better its ordinary business risk, and
- It contributes to the survival and profitability of a business.

2.3. Objectives of Risk Management

The first step in the risk management process is the determination of the objectives of the risk management program, which is, deciding precisely what it is that the organization expects its risk management program to do. This step is often overlooked, with the result that the risk management program is less effective than it could be. In the absence of coherent objectives, there is a tendency to view the risk management process as a series of individual isolated problem, rather than as one single problem and there are no guidelines to provide for a logical consistency in dealing with the risks that the organization face. Risk management objectives serve as a prime source of guidance for those charged with responsibility for the program and also serve as a means of evaluating performance.

Risk management has several important objectives that can be classified into two categories:

I. Pre-loss objectives

II. Post-loss objectives

I. Pre-loss objectives

A firm or an organization has several risk management objectives prior to the occurrence of a loss. The most important includes:

A. Economy
B. Reduction in anxiety
C. Meeting external obligations

A. Economy

Economy means that the firm should prepare for potential losses in the most **economical** possible way. This involves an analysis of safety program expenses, insurance premiums and the costs associated with the different techniques for handling losses.

B. Reduction in anxiety

Certain loss exposures can cause greater worry and fear for the risk manager, key executives and stockholders than other exposures. For example, the threat of a catastrophic lawsuit from a defective product can cause greater anxiety and concern than a possible small loss from a minor fire. However, the risk manager wants to minimize the anxiety and fear associated with all loss exposures.

C. Meeting external obligations

This objective is to meet any externally imposed obligations. This means the firm must meet certain obligations imposed on it by outsiders. For example, government regulations may require a firm to install safety device to protect workers from harm. Similarly, a firm's creditors may require that property pledged as collateral for a loan must be insured. The risk manager must see that these externally imposed obligations are met.

II. Post-loss objectives

The most important post-loss objectives of the firm are:

A. Survival
B. Continuity of operations
C. Earnings stability
D. Continued growth
E. Social responsibility

A. Survival

The first and most important post-loss objective is ***survival*** of the firm. Survival means that after a loss occurs, the firm can at least restart partial operation within some reasonable time period if it chooses to do so.

B. Continuity of operations

For some firms, the ability to operate after a sever loss is an extremely important objective. This is particularly true for certain firms, such as a public service firm, which must continue to provide service. The ability to operate is also important for firms that may lose customers if they cannot operate after a loss occurs.

C. Earnings stability

The firms want to maintain its earnings per share after a loss occurs. Earnings per share can be maintained if the firm continues to operate. However, there may be substantial costs involved in achieving this goal (such as operating at another location), and perfect stability of earnings may not be attained.

D. Continued growth

A firm may grow by developing new products and markets or by acquisitions and mergers. The risk manager must consider the impact that a loss will have on the firm's ability to grow.

E. Social responsibility

The goal of social responsibility is to minimize the impact that a loss has on other persons and on society. A severe loss can adversely affect employees, customers, suppliers, creditors and the community in general. For example, a severe loss requires shutting down a plant in a small community for an extended period can lead to depressed business conditions and substantial unemployment in the community.

Check your progress2.1.

1. Define risk management
2. Explain the three pre-loss objectives of risk management

2.4. Functions of Risk Management

At one-time business enterprises paid little attention to the problem of handling risk. Insurance policies were purchased on a haphazard basis, with considerable over lapping coverage on hand,

and wide gaps in coverage of important exposures on the other. Little control over the cost of losses and insurance premium was exercised. Many risks were assumed when they should have been insured and vice versa. It was gradually realized that greater attention to this aspect of business management would yield great dividends. Instead of having insurance decision handled by a busy executive whose primary responsibility lay in another area, management began to assign this responsibility first as a part-time job to an officer, perhaps the treasurer, and later as a full time position.

As the full scope of responsibility for risk management was realized, an insurance department was established, with several people employed. At first the department manager was usually known as the insurance buyer. Later the title was changed to insurance manager or risk manager.

Many different titles, including insurance buyer, are still used, but the tendency is to reflect the broader nature of the manager's duties and responsibilities. Assistants to the insurance manager often include specialists in various branches of insurance, law, statistics, and personal relations.

In general, the functions of the risk manager include the following:

1. To recognize exposures to loss, the risk manager must first of all be aware of the possibility of each type of loss. This is a fundamental duty that must precede all other functions. Before other functions potential loss exposures must be identified.
2. To estimate the frequency and size of loss; that is, to estimate the probability of loss from various sources.
3. To decide the best and most economical method of handling the risk of loss, whether it be by assumption, avoidance, self-insurance, reduction of hazards, transfer, commercial insurance, or some combination of these methods.
4. To decide the best and most economical method of handling the risk of loss, including the tasks of constant re-evaluation of the programs, record keeping, and the like.

It is the responsibility of the risk manager to see that the concern's profits are not lost because of the occurrence of a peril which could have been insured against or otherwise adequately handled.

2.5. Risk Management Process

In order to have an effective risk management program, there are certain steps that must be followed. The following four procedures are significant in the risk management process.

- Risk Identification
- Risk Measurement
- Selecting the Appropriate Technique for Handling Losses
- Implementing and Administrating the Risk Management Program

2.5.1. Risk Identification

The first step in business risk management is to identify the various types of potential losses confronting the firm; the second step is to measure these potential losses with respect to such matters as their likelihood of occurrence and their probable severity.

Risk identification is the process by which a business systematically and continuously identifies property, liability, and personnel exposures as soon as or before they emerge. Unless the risk manager identifies all the potential losses confronting the firm, he will not have any opportunity to determine the best way to handle the undiscovered risks. The business will unconsciously retain these risks, and this may not be the best or even a good thing to do.

In one way or another, the risk manager must dig into the operations of the concern and discover the risks to which the organization is exposed. To identify all potential losses the risk manager needs first a checklist of all the losses that could occur to any business. To reduce the possibility of **overlooking important risks**, most risk managers use some systematic approach to the problem of risks identification. These tools include:

- **A.** Insurance Policy Checklists
- **B.** Loss Exposure Checklists
- **C.** Risk Analysis Questionnaires
- **D.** Flow Charts
- **E.** Analysis of Financial Statements and
- **F.** Inspections of the Firm's Operation
- **G.** Interactions with other Departments

A. Insurance Policy Checklists

Insurance Policy Checklists provide a listing of all the various policies or types of insurance that may be needed by a business. Since only insurable risks are listed in insurance policy checklists, they are not effective in identifying uninsurable pure risks. Insurance policy checklists can be sourced from insurance companies and other publishers.

B. Loss Exposure Checklists

Loss Exposure Checklists provide a listing of common risk exposures of a firm. An exposure checklist is a very simple but effective tool for risk identification. In fact, it is one of the most common tools used for identifying and analyzing risk. Loss exposure checklists are available from various sources, such as insurer, agencies and risk management associations. These checklists are containing possible source of loss to the business firm from the damage of physical and intangible assets. Sources of loss are organized according to whether the loss is predictable or unpredictable, controllable or uncontrollable, direct or indirect or from different types of legal liability. Then, the risk manger needs a systematic approach to discover which of the potential losses included in the checklist are faced by his/ her business. This is done by ask the question "is this a potential source of loss in our firm?" after each item. Use of such a list reduces the likelihood of overlooking important sources of loss.

C. Risk Analysis Questionnaires

Risk Analysis Questionnaires aim at identifying the risks faced by an organization. A series of well-developed and well-formulated questions are put forth to respondents. The answers indicate risk areas and specific risks.

Example: are company-owned vehicles provided to directors, executives or employees for business and personal use? if so, to what extent?

D. Flow Charts

Flow Charts are graphic representations of a sequential process. A flow chart depicting the operations of a firm can guide a risk manager to risks associated with those operations.

First, a flow chart or series of flow charts is constructed, which shows all the operations of the firm, starting with raw materials, electricity and other inputs at suppliers' locations and ending with finished products in the hands of customers. For example, the following flow chart shows the major operations of a hypothetical firm.

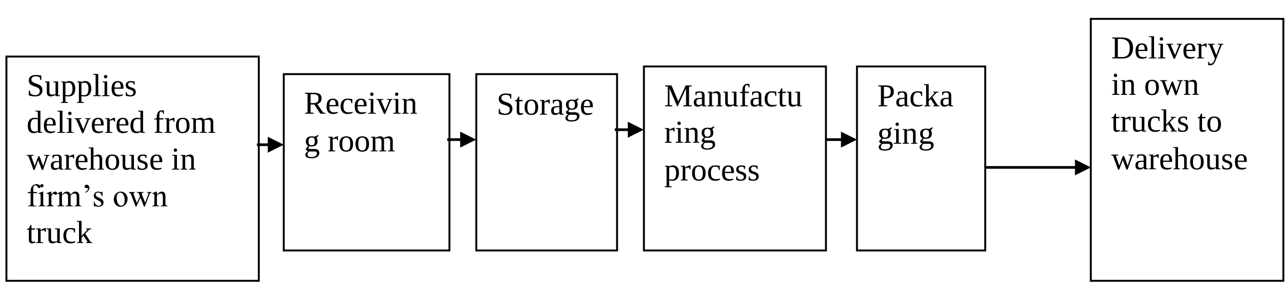

Figure 2.1 flow chart – manufacturing plant

Second, the checklist of potential property, liability and personnel losses is applied to each property and operation shown in the flow chart to determine which losses the firm faces. For example, Figure 2.1 suggests, among others, the following potential losses:

Property losses:

- Replacement or repair of trucks, manufacturing plant, machinery, raw materials, goods in process, or finished goods, subject to physical and human perils on the manufacturing premises or in transit.
- Shutdown or slowdown of manufacturing operations, because of direct property losses

Liability losses:

- Liability for bodily injury or property damage to customers because of defective products, to visitors because of defects in the premises and to other because of negligent operation of the firm's trucks
- Legal responsibility under the workers' compensation law for bodily injuries to employees

Personnel losses:

- Losses to firm because of death or disability of key employees
- Losses to families of employees because of death, poor health, retirement or unemployment of employees

E. Analysis of Financial Statements

By analyzing the balance sheet, operating statements and supporting documents; the risk manager can identify property, liability and human asset loss exposures of the organization. By coupling these statements with financial forecasts and budget, the risk manager can discover future exposures. Financial statements reveal this information because every organizational transaction ultimately involves either money or property.

F. On-site Inspections

On-site Inspections are necessary for the risk manager. By observing firsthand the organization's facilities and the operations conducted thereon, the risk manager can learn much about the risk exposures faced by the firm.

G. Interactions with other Departments

Interactions with other departments provide another source of information on exposures to risk. These interactions may include oral or written reports from other departments on their own initiative or in response to a regular reporting system that keeps the risk manager informed of development. The importance of such a communications network should not be underestimated. These departments are constantly creating or becoming aware of exposures that might otherwise get away the risk manager's attention. Indeed the risk manager's success in risk identification is heavily dependent upon the cooperation he/she secure from other departments.

The Best Method

No single method or procedure of risk identification is free of weakness or can be called perfect. The strategy of management must be to employ that method or combination of methods that best fits the situation at hand. The choice is a function of

(1) The nature of the business
(2) The size of the business and
(3) The availability of in house expertise

For example, smaller firms that cannot afford to have the task done by specialists in their own management structure use published checklists and outsiders more frequently. Larger firms with a more sophisticated risk management department may show more originality in identifications procedure.

The preferred approach to risk identifications is a combination approach, in which all available tools listed are brought to bear on the problem. In a sense, tools such as insurance policy checklists and risk analysis questionnaires, flow charts, and the analysis of financial statements can provide a part to the puzzle and together they can be of considerable assistance to the risk manager. However, no individual method or combination of methods can replace the diligence and imagination of the risk manager in discovering the risk to which the firm is exposed. Because risks may lurk in many sources, the risk manager needs a wide-reaching information system, designed to provide a continual flow of information about changes in operations, the acquisition of new assets, and changing relationships with outside entities.

2.5.2. Risk Measurement

After the risk manager has identified the various types of potential losses faced by his firm, these exposures must be measured. Risk measurement is required by the risk manager for two purposes: i) to determine the relative importance of potential losses and ii) To obtain information that will help him to decide upon the most desirable combination of risk management tools.

Dimensions to be Measured

Information is needed concerning two dimension of each exposure:

i) The loss frequency or the number of losses that will occur and
ii) The severity of losses. The total impact of these losses if they should be retained, not only their dollar values, should be included in the analysis.

Why we need Each Dimension

Both loss-frequency and loss-severity data re needed to evaluate the relative importance of an exposure to potential loss. Contrary to the views of most persons, however, the importance of an exposure to loss depends mostly upon the potential loss severity, not the potential frequency. A potential loss with catastrophic possibilities, although infrequent, is far more serious than one expected to produce frequent small losses and no large losses.

On the other hand, loss frequency cannot be ignored. If two exposures are characterized by the same loss severity, the exposure whose frequency is greater should be ranked more important. An exposure with a certain potential loss severity may be ranked above a loss with a slightly higher severity because the frequency of the first loss is much greater than that of the second. There is no formula for ranking losses in order of importance, and different persons may develop different rankings. The rational approach, however, is to place more emphasis on loss severity.

An example may clarify the point. The chance of an automobile collision loss may be greater than the chance of being sued as a result of the collision, but the potential severity of the liability loss s so much greater than the damage to the owned automobile that there should be no hesitation in ranking a liability loss over the property loss.

A particular type of loss may also be subdivided into two or more kinds of losses depending upon whether the loss exceeds a specified dollar amount. For example, consider the collision loss cited in the preceding paragraph. This loss may be subdivided into two kinds of losses: i) collision losses of $100 (for some other figure) or less and ii) losses over $100. Losses in the second category are the more important, although they are less frequent. Another illustration would be the losses associated with relatively small medical expenses as contrasted with extremely large bills. Such a breakdown by size of loss shows clearly the desirability of assigning more weight to loss severity than to loss frequency.

In determining loss severity the risk manager must be careful to include all the types of losses that might occur as a result of a given event as well as their ultimate financial impact upon the firm. Often, while the less important types of losses are obvious to the risk manager, the more important types are much more difficult to identify. The potential direct property losses are rather generally appreciated in advance of any loss, but the potential indirect and net income losses (such as the interruption of business while the property is being repaired) they may result from the same event are commonly ignored until the loss occurs.

The ultimate financial impact of the loss is even more likely to be ignored in evaluating the dollar value of any loss. Relatively small losses, if retained, cause only minor problems because the firm can meet these losses fairly easily out of liquid assets. Somewhat larger losses may cause liquidity problems which in turn may make it more difficult or more costly for the firm to borrow funds required for various purposes. Finally, very large losses may have serious adverse affects upon the firm's financial planning, and their dollar impact may be much greater than it would be for a firm that could more easily absorb these losses. Ultimately the loss could be the ruin of the business as a going concern.

To illustrate, a fire could destroy a building and its contents valued at $300,000; the ensuing shutdown of the firm for six months might cause another $360,000 loss. This $660,000 loss of the difference between the going-concern values of the business, say $2,400,000, and the value for which the remaining assets could be sold, say $1,500,000, causing a $900,000 loss.

Finally, in estimating loss severity, it is important to recognize the timing of any losses as well as their total dollar amount. For example, a loss of $5,000 a year for 20 years is not as severe as immediate loss for $100,000 because of:

i) the time value of money, which can be recognized by discounting future dollar losses at some assumed interest rate, and

ii) the ability of the firm to spread the cash outlay over a longer period.

Loss-frequency and loss-severity data do more than identify the important losses. They are also extremely useful in determining the best way or ways to handle an exposure to loss. For example, the average loss frequency times the average loss severity equals the total dollar losses expected in an average year. These average losses can be compared with the premium the firm would have to pay an insurer for complete or partial protection.

Proudly Measure of Severity

Measurement of the severity of risk is essential for ranking risks based on severity. One of the systems used to measure the severity of risk is the Prouty measure of severity. It was suggested by Richard Proudly, a risk manager. The two measures suggested by Prouty to measure loss severity are the maximum possible loss to one unit per occurrence and the maximum probable loss to one unit per occurrence. The maximum possible loss is the worst loss that could possibly happen to a firm. The maximum probable loss is the worst loss that is likely to happen. The maximum probable loss, therefore, is usually less than the maximum possible loss.

Priority Ranking Based on Severity

The process of risk evaluation ranks risks as per the severity (importance) of losses. The more severe the losses due to risk the higher the rank, as the relative severity of losses differs, not all losses warrant equal attention. Some are to be given priority over others. Under such circumstances, risks can be classified into three head.

- **Critical risks**
- **Important risks**
- **Unimportant risks**

Critical risks include those loss exposures to loss where the magnitude of losses could lead to bankruptcy.

Important risks include those exposures in which the possible losses would not lead to bankruptcy, but would require the individual or firm to borrow in order to continue operations.

Unimportant risks include those exposures in which the possible losses could be met out of the existing assets or current income without imposing too much financial damage.

Check your progress 2.2.

1. List the function of risk manager
2. Is there a best method of risk identification? List the conditions to be considered in identifying risks.

2.5.3. Selecting the Appropriate Technique for Handling Losses (Risk control & risk financing techniques)

Once potential exposure facing the firm has identified and measured, the next step is deciding how to handle them. There are two basic approaches: **risk contro**l and **riskfinancing** measures.

First, the firm can use **risk control** measures to alter the exposures in such away as:

(i) To reduce the firm's expected losses or

(ii) To make the annual loss experience more predictable.

These measures include:

a. Avoidance
b. Loss control
c. Separation/diversification/ and
d. Combination (pooling)

Second, the firm can use **financing measures** to finance the losses that do occur. These risk-financing tools include:

a. Retention/assumption/
b. Self-insurance
c. Non-insurance transfer and
d. Insurance

I. Risk Control techniques

Risk control techniquesattempt to reduce the frequency and severity of accident to the firm.

A. Avoidance (discarding risky activities or properties)

Avoidance means that a certain loss exposure is never acquired, or an existing loss exposure is abandoned. One way to control a particular risk is to avoid the property, person or activity-giving rise to possible loss by either refusing to assume it even for a short time or by abandoning an exposure to loss assumed earlier. The first of these avoidance activities is **proactive** avoidance, while the second is **abandonment**. If a business does not want to be concerned about potential property losses to a building or to cars, it can avoid these risks by never acquiring any interest in a building or cars. An existing loss exposure may also be abandoned. For example, a pharmaceutical firm that produces a drug with dangerous side effects may stop manufacturing that drug. Avoidance should be distinguished from loss-control measure. Loss control measures assume that the firm will retain the property, person or activity creating the risk but that firm will conduct its operation in the safest possible manner.

Avoidance is a useful, fairly common approach to the handling of risk. By avoiding a risk exposure, the firm knows that it will not experience the potential losses or uncertainties that exposure may generate. On the other hand, it also loses the benefits that may have been derived from that exposure.

Some characteristics of avoidance (it may be sometimes **impossible**, **impractical**, &**creates another risk**)

i. Avoidance may be impossible

The broadly the risk is defined; the more likely this is to be so. For example, the only way to avoid all liability exposures is to cease to exist.

ii. The potential benefits to be gained from employing certain persons, owing a piece of property or engaging in some activity may so far outweigh the potential losses and uncertainties involved that the risk manager will give due consideration to avoiding the exposure. For instance, most businesses would find it almost impossible to operate without owning or renting automobiles/cars. Therefore, they consider avoidance to be impractical approach.

iii. Avoiding a risk may create another risk. For example, a firm may avoid the risks associated with air shipments by substituting train and truck shipments. In the process, however, it has created some new risks.

B. **Loss Control**

Loss control activities are intended to reduce both the frequency and severity of losses. **Loss control measures attack risk by lowering the chance that a loss will occur or by reducing its severity if it does occur**. Loss control has the unique ability to prevent or reduce losses for the individual, firm and society while permitting the firm to commence or continue the activity creating the risk. Loss control deals with an exposure that the firm does not wish to abandon. The purpose of loss control activities is to change the characteristics of the exposure so that it is more acceptable to the firm; the firm wishes to keep the exposure but want to reduce the frequency and severity of losses.

Loss prevention and loss reduction methods

Loss prevention programs seek to reduce or eliminate the chance of loss. **Loss reduction programs** seek to reduce the potential severity of the loss.

The variety of **loss prevention** programs are illustrated below:

- The chance of fire can be reduced by fire-resistive construction, building in an area where there are few external dangers
- The chance of a product liability suit can be reduced by tightening the quality control limits and choosing distributors more carefully and
- Other examples of loss prevention programs include Periodic physical examinations for employees, Internal accounting control and speed limit for vehicles etc.

Loss reduction program include:

- Automatic sprinklers to minimize a fire loss by spraying water or some other substance upon a fire soon after it starts in order to confine the damage to a limited area
- Alternative facilities to reduce the net income losses arising out of direct losses to the original facilities
- Immediate first aid for persons injured on the premises
- Medical care and rehabilitation programs for injured workers
- Fire alarms
- Speed limits for motor vehicles etc

C. **Separation/ Diversification/**

Another risk control tool is separation of the firm's exposures to loss instead of concentrating them at one location where they might all be involved in the same loss. For example instead of placing its entire inventory in one warehouse, a firm may elect to separate this exposure by placing equal parts of the inventory in ten widely separated warehouses. If the fire destroys one warehouse, the firm will have others from which to draw needed supplies.

To the extent that this separation of exposures reduces the maximum probable loss to one event, it may be regarded as a form of loss reduction. The probability of some loss actually increases. The probability that at least one of several units will suffer a loss is greater than the probability that any particular unit will suffer a loss. Emphasis is placed here, however, on the fact that through this separation the firm increases the number of independent exposure units under its control.

D. Combination

Combination or pooling makes loss experience more predictable by increasing the number of exposure units. The difference is that unlike separation, which spreads a specified number of exposure units, combination increases the number of exposure units under the control of the firm. One way a firm can combine risk is to expand through internal growth. Combination also occurs when two firms merge or one acquires another. The new, firm has more buildings, more automobiles and more employees than either of the original companies.

II.Risk financing techniques

Risk financing techniques designed for the funding of accidental losses after they occur.

A. Retention/ assumption/

The most common method of handling risk is retention by the organization. The source of the funds is the organization itself including borrowed funds that the organization must repay. Retention may be passive or active, unconscious or conscious, planned or unplanned.

- Retention is **passive** or **unplanned** when the risk manager is **not aware** that the exposure exists and consequently does not attempt to handle it. By default, therefore, the organization has elected to retain the risk associated with that exposure. Few organizations have identified **all** their exposures to property, liability and human resource losses. Consequently, some unplanned retention is common and perhaps inevitable. If the risk identification has been poorly performed, **too much** risk is passively retained. A related form of unplanned retention occurs when the risk manager has properly recognized the exposures but has **underestimated** the magnitude of the potential losses.

❖ Retention is **active** or **planned** when the risk manager considers other methods of handling the risk and consciously decides not to transfer the potential losses. **Self-insurance** is a special case of active or planned retention. Self-insurance is not insurance, because there is no transfer of the risk to an outsider.

Retention can be effectively used in risk management program when the following three conditions exist.

i) When no other method of treatment is available

Insurers may be unwilling to write a certain type of coverage, the coverage may be too expensive, or noninsurance transfers may not be available. In addition, although loss control can reduce the frequency of loss, not all losses can be eliminated. In these cases, retention is a residual method.

ii) When the worst possible loss is not serious

For example, physical damage losses to automobiles in a large firm's fleet will not bankrupt the firm if the automobile are separated by wide distances and are not likely to be simultaneously damaged.

iii) When losses are highly predictable

Based on past experience, the risk manager can estimate a probable range of frequency and severity of actual losses. If most losses fall within that range, they can be budgeted out of the firm's income.

B. Self-insurance

Self-insurance is a special form of planned retention by which part or all of a given loss exposure is retained by the firm. A better name for self-insurance is **self-funding**, which expresses more clearly the idea that losses are funded and paid by the firm.

A self-insurance plan implies that adequate financial arrangement have been made in advance to provide funds to pay for losses if they occur.

Captive (locked up) insurers

One approach to self-insurance involves the use of a company formed to write insurance for a parent, called captive insurance company. A captive insurer is an insurer that is owned by the insured. A captive insurer is established and owned by a parent firm for the purpose of insuring the parent firm's loss exposures. The parent organization establishes a captive insurance subsidiary that writes insurance against the parents' insured risks.

Captive insurers are formed for several reasons, including the following:

❖ **Difficulty in obtaining insurance**

The parent firm may have difficulty in obtaining certain types of insurance from commercial insurers, so it forms its own captive insurer to write the coverage. Establishing a captive may also reduce insurance costs because of lower operating expenses, avoidance of an agent's or broker's commission and interest earned on invested premiums and reserves that otherwise would be received by commercial insurers.

❖ **Easier access to a reinsurer**

A captive insurer has easier access to reinsurance, since many reinsurers will deal only with insurance companies and not insured.

❖ **Profit center**

A captive insurer can be a source of profit by insuring other parties as well as providing insurance to the parent firm and subsidiaries.

C. Noninsurance transfers

Noninsurance transfers are a methods other than insurance by which a pure risk and its potential financial consequences are transferred to another party. Neutralization or hedging and hold-harmless agreements are examples of noninsurance transfer of risk.

Neutralization or Hedging

As generic terms, neutralization and hedging describe actions whereby a possible gain is balanced against a possible loss. Neutralization is the process of balancing a chance of loss against a chance of gain. For example, a person who has bet that a certain team will win the World Cup may neutralize the risk involved by also placing a bet on the opposing team. In other words, he or she transfers the risk to the person who accepts the second bet.

The nature of hedging is to take two simultaneous positions that offset each other. So that no matter what the outcome is of some event based on chance, the hedger neither wins nor loses. Because there is no chance of gain associated with pure risks, neutralization or hedging is not a tool of pure risk management.

Hold-harmless agreements are contract entered into prior to a loss, in which one party agrees to assume a second party's responsibility if a loss occurs. For example, contractors may require subcontractors to provide the contractor with liability protection if they are sued because of the subcontractor's activities.

D. Insurance

Commercial insurance is also used in a risk management program. From the risk manager's viewpoint, insurance represents a contractual transfer of risk. Insurance is appropriate for loss exposures that have a low probability of loss but the severity of loss is high. If the risk manager uses insurance to treat certain loss exposures, five key areas must be emphasized. These are:

- ✓ Selection of insurance coverage
- ✓ Selection of an insurer
- ✓ Negotiation of terms
- ✓ Dissemination of information concerning insurance coverage
- ✓ Periodic review of the insurance program

I. Selection of insurance coverage

The risk manager must select the insurance coverage needed. Since there may not be enough money in the risk management budget to insure all possible losses, the need for insurance can be divided into several categories depending on importance. One useful approach is to classify the need for insurance into three categories:

a. **Essential insurance** includes those coverage required by law or by contract, such as workers compensation insurance. Essential insurance also includes those coverage that will protect the firm against a catastrophic loss or a loss that threatens the firm's survival.

b. **Desirable or important insurance** is protection against losses that may cause the firm financial difficulty, but not bankruptcy. Desirable insurance coverages include those that protect against loss exposures that would force the firm to borrow or resort to credit.

c. **Available or optional insurance** is coverage for slight losses that would merely inconvenience for the firm. Optional insurance coverages include those that protect against losses that could be met out of **existing** assets or current income.

II. Selection of an insurer

The risk manager must select an insurer or several insurers. Several important factors should have to be considered. These include the financial strength of the insurer, risk management services provided by the insurer, and the cost and terms of protection.

III. Negotiation of terms

After the insurer or insurers are selected, the terms of the insurance contract must be negotiated. If printed polices, endorsements, and forms are used, the risk manager and insurer must agree on the document that will form the basis of the contract. If a specially tailored manuscript policy is written for the firm, the language and meaning of the contractual provisions must be clear to both parties. In any case, the various risk management services the insurer will provide must be clearly stated in the contract. Finally, if the firm is large, the premiums may be negotiable between the firm and insurer.

IV. Dissemination of information concerning insurance coverage

Information concerning insurance coverage must be disseminated to others in the firm. The firm's employees and managers must be informed about the insurance coverages, the various records that must be kept, the risk management services that the insurer will provide and the changes in hazards that could result in a suspension of insurance. Those persons responsible for reporting a loss must also be informed. The firm must comply with policy provisions concerning how notice of a claim is to be given and how the necessary proofs of loss are to be presented.

V. Periodic review of the insurance program

The insurance program must be periodically reviewed. The entire process of obtaining insurance must be evaluated periodically. This involves an analysis of agent and broker relationships, coverages needed, cost of insurance, quality of loss-control services provided, whether claims are paid promptly and numerous other factors. Even the basic decision-whether to purchase- insurance must be reviewed periodically.

Which method should be used?

In determining the appropriate method or methods for handling losses, a matrix can be used that classifies the various loss exposures according to **frequency** and **severity**. The matrix can be useful in determining which risk management method should be used.

		Frequency of loss	
		Low	High
Severity of loss	Low	Retention	Loss Control and Retention
	High	Insurance	Avoidance

Figure 2.2 Risk Management Matrix

The **first** loss exposure is characterized by both low frequency and **low severity** of loss. This type of exposure can be best handled be **retention**, since the loss occurs infrequently and when it does occur, it seldom causes financial harm.

The **second** type of exposure which is characterized by high frequency and low severity of losses is more serious. **Loss control** should be used here to reduce the frequency of losses. In addition, since losses occur regularly and are predictable, the **retention** technique can also be used.
The **third** type of exposure can be met by **insurance**. Insurance is best suited for low frequency, high-severity losses. High severity means that a catastrophic potential is present, while a low probability of loss indicates that the purchase of insurance is economically feasible. Examples of these types of exposure include fires, explosions and liability lawsuits.

The **fourth** and most serious type of exposure is one characterized by both high frequency and high severity. This type of exposure is best handled by **avoidance**.

Check your progress 2.3.

1. Differentiate between risk control and risk financing techniques.
2. Distinct between loss prevention and loss reduction techniques

2.5.4. Implementing and Administrating the Risk Management Program

The fourth step is implementation and administration of the risk management program. Typical activities of a risk manager include identifying and evaluating loss exposures, establishing procedures for handling insurance claims, designing and installing employee benefit plans, participating in loss control and safety programs, and administering group insurance and self-insurance programs. Thus, risk managers are an important part of the management team.

Periodic Review and Evaluation

To be effective, the risk management program must be periodically reviewed and evaluated to determine if the objectives are being attained. In particular, risk management costs, safety programs, and loss prevention programs must be carefully monitored. Loss records must be examined to detect any changes in frequency and severity. In addition, new developments that affect the original decision on handling a loss exposure must be examined. Finally, the risk manager must determine if the firm’s overall risk management policies are being carried out and if the manager is receiving the total cooperation of the other deportments in carrying out the risk management functions.

Check your progress2.4.

Explain the three conditions in which retention can be effectively used.

Chapter summary

Risk management is a systematic process for the identification, evaluation of pure loss exposures faced by an organization or individual and for the, selection, and implementation of the most appropriate techniques for treating such exposure. Understanding risk and application of risk management techniques is a very important aspect to effectively deal with uncertainty and associated risk. Risk management has several important objectives that can be classified into two categories (1) pre-loss objectives (2) post-loss objectives. The pre-loss objectives include economy, reduction in anxiety and meeting external obligations. The post –loss objectives consists of survival, continuity of operations, earnings stability, continued growth and social responsibility.

The functions of the risk manager include recognizing exposures to loss, estimating the frequency and size of loss, deciding the best and most economical method of handling the risk of loss, decide the best and most economical method of handling the risk of loss. The risk management process includes (a) risk identification (b) risk Measurement (c) selecting the appropriate technique for handling losses (d) implementing and administrating the risk Management Program.

Most risk managers use some systematic approach to the problem of risks identification. These tools include: insurance policy checklists, loss exposure checklists, risk analysis questionnaires, flow charts, analysis of financial statements and, inspections of the firm's operation, interactions with other departments.

After the risk manager has identified the various types of potential losses faced by his firm, these exposures must be measured. Risk measurement is required by the risk manager for two purposes: i) to determine the relative importance of potential losses and ii) To obtain information that will help him to decide upon the most desirable combination of risk management tools. In measuring possible risk exposures Information is needed concerning two dimension of each exposure: (1) The loss frequency or the number of losses that will occur and (2) The severity of losses. The total impact of these losses if they should be retained, not only their dollar values, should be included in the analysis. Measurement of the severity of risk is essential for ranking risks based on severity. The more severe the losses due to risk the higher the rank, as the relative severity of losses differs, not all losses warrant equal attention. Some are to be given priority over others. Under such circumstances, risks can be classified into three as critical risks , important risks ,unimportant risks.

Once potential exposure facing the firm has identified and measured, the next step is deciding how to handle them. There are two basic approaches: risk control and risk financing measures.

Risk control techniques attempt to reduce the frequency and severity of accident to the firm. Risk financing techniques designed for the funding of accidental losses after they occur.

Risk control techniques includes avoidance, loss control, separation/diversification/ and combination (pooling). Risk financing techniques consists of retention/assumption/, self-insurance, non-insurance transfer and insurance.

The fourth step is implementation and administration of the risk management program. Typical activities of a risk manager include identifying and evaluating loss exposures, establishing procedures for handling insurance claims, designing and installing employee benefit plans, participating in loss control and safety programs, and administering group insurance and self-insurance programs.

Answer for check your progress

Check your progress 2.1.

1. Risk management is a systematic process for the identification, evaluation of pure loss exposures faced by an organization or individual and for the, selection, and implementation of the most appropriate techniques for treating such exposure.

2. Post-loss objectives

The most important post-loss objectives of the firm are:

- ✓ Survival
- ✓ Continuity of operations
- ✓ Earnings stability
- ✓ Continued growth
- ✓ Social responsibility

Check your progress 2.2.

1. The functions of the risk manager include recognizing exposures to loss, estimating the frequency and size of loss, deciding the best and most economical method of handling the risk of loss, decide the best and most economical method of handling the risk of loss.
2. No single method or procedure of risk identification is free of weakness or can be called perfect. The strategy of management must be to employ that method or combination of methods that best fits the situation at hand. The choice is a function of
   A. The nature of the business
   B. The size of the business and
   C. The availability of in house expertise

Check your progress 2.3.

1. Risk control techniques attempt to reduce the frequency and severity of accident to the firm. Whereas, risk financing techniques designed for the funding of accidental losses after they occur.

2. Loss prevention programs seek to reduce or eliminate the chance of loss. Whereas, Loss reduction programs seek to reduce the potential severity of the loss.

Check your progress 2.4.

1. **When no other method of treatment is available**

Insurers may be unwilling to write a certain type of coverage, the coverage may be too expensive, or noninsurance transfers may not be available.

2. **When the worst possible loss is not serious**

For example, physical damage losses to automobiles in a large firm's fleet will not bankrupt the firm if the automobile are separated by wide distances and are not likely to be simultaneously damaged.

3. **When losses are highly predictable**

Based on past experience, the risk manager can estimate a probable range of frequency and severity of actual losses. If most losses fall within that range, they can be budgeted out of the firm's income.

Review Questions

Part I: True or false questions

1. Risk management contributes to the survival and profitability of a business.
2. Earnings stability is pre loss objective of risk management.
3. The risk manager must consider the impact that a loss will have on the firm's ability to grow.
4. Insurance Policy Checklists provide a listing of common risk exposures of a firm.
5. Risk Analysis Questionnaires aim at identifying the risks faced by an organization.
6. The more severe the losses due to risk the lower the rank.

Part II: Multiple choice Questions

1. Which of the following is not the importance of risk management?
   A. Proper risk management enables a business firm to handle its exposure to accidental losses in the economic and effective way.
   B. It enables companies to react in early stage of change in environment and avoiding possible crises.
   C. It also enables a business firm to handle better its ordinary business risk
   D. It contributes to the survival and profitability of a business.
   E. All
   F. None
2. Which of the following is post loss objective of risk management?
   A. Economy
   B. Reduction in anxiety
   C. Continuity of operations
   D. Meeting external obligations
   E. All
   F. None
3. ____________ means that after a loss occurs, the firm can at least restart partial operation within some reasonable time period if it chooses to do so?
   A. Survival
   B. Continuity of operations
   C. Earnings stability

D. Continued growth

E. Social responsibility

4. The correct sequence of risk management is;

A. risk identification___risk Measurement___selecting the appropriate technique__ administrating the risk Management Program.

B. risk Measurement ___risk identification __selecting the appropriate technique__ administrating the risk Management Program.

C. risk Measurement ___risk identification __ administrating the risk Management Program ___selecting the appropriate technique.

D. risk identification___risk Measurement___ administrating the risk Management Program ___selecting the appropriate technique.

5. ____________is the process by which a business systematically and continuously identifies property, liability, and personnel exposures as soon as or before they emerge.

   A. Risk Measurement
   B. Selecting the Appropriate Technique for Handling Losses
   C. Risk Identification
   D. Implementing and Administrating the Risk Management Program

6. ___________ provide a listing of all the various policies or types of insurance that may be needed by a business?

   A. Loss Exposure Checklists
   B. Insurance Policy Checklists
   C. Risk Analysis Questionnaires
   D. Flow Charts

7. Company-owned vehicles provided to directors, executives or employees for business and personal use? if so, to what extent? This is an example of:

   A. Loss Exposure Checklists
   B. Risk Analysis Questionnaires

C. Flow Charts
D. Analysis of Financial Statements and
E. Inspections of the Firm's Operation

8. Which of the following is risk financing technique?

    A. Avoidance
    B. Loss control
    C. Separation/diversification/ and
    D. Self-insurance
    E. Combination (pooling)

CHAPTER THREE

INTRODUCTION TO INSURANCE

Chapter objectives

Dear learners, after completing this chapter you are expected to:

- ✓ Define Insurance
- ✓ Describes the basic characteristics of insurance
- ✓ Identify insurable risk
- ✓ Differentiate between insurance and gambling
- ✓ Distinct Insurance and speculation
- ✓ Identify the benefits and costs of insurance to the society

3.1.Introduction

As stated earlier there are a number of ways of dealing with risk. Insurance is one of the basic tools of risk management and it is also the most important illustration of the transfer technique and the keystone of most risk management programs.

Insurance is complicated and difficult to define. However, in its simplest aspect it has two fundamental characteristics:

a) Transferring or shifting risk from an individual to a group.

b) Sharing losses, on some equitable basis, by all members of the group.

To illustrate the way the insurance mechanism works, let us assume that there are 1,000 dwellings in a given community and, for simplicity, the value of each dwelling is birr 10,000. Each owner faces the risk that his house may catch on fire. If a fire should break out, a financial loss of up to birr 10,000 could result. Some houses will undoubtedly burn but the probability that all will is remote. Now let us assume that the owners of these dwellings enter into an agreement to share the cost of losses as they occur, so that no single individual will be forced to bear an entire loss of birr 10,000 whenever a house burns each of the 1,000 owners contributes his proportionate share of the amount of loss.

If the house is a total loss each of the 1,000 owners will pay birr 10 and the owner of the destroyed house will be indemnified for the birr 10,000 loss. Those who suffer losses are indemnified by those who do not. Most who escape loss are willing to pay those who do not because by doing so they help to eliminate the possibility that they themselves might suffer a 10,000 birr loss. Through the agreement to share the losses, the economic burden these impose is spread throughout the group. This is essentially the way insurance works, for what we have described is a pure assessment of mutual insurance operation.

There are some potential difficulties with the operation of such a plan, the most obvious being the possibility that some members of the group might refuse to pay their assessment at the time of a loss. This problem can be overcome by requiring payment in advance. To require payment in advance for the loss that may take place, it will be necessary to have some idea as to the amount of those losses. This may be calculated on the basis of past experience.

Let us now assume that on the basis of past experience we are able to predict with reasonable accuracy that two of the 1,000 houses will burn. We could charge each member of the group birr 20, making a total of birr 20, 000. In addition to the cost of the losses, there would no doubt be some expenses in the operation of the program. Also there is a possibility that our predictions might not be entirely accurate. We might therefore, charge each member of the group birr 40 instead of birr 20, thereby providing for the payment of expenses and also providing a cushion against deviations from our expectations.

Each of the 1,000 house owners will incur a small cost of birr 40 in exchange for a promise of indemnification of the amount of birr 10,000 if his house burns down. This birr 40 premium is in effect the individual's share of the total losses and expenses of the group.

3.2.Meaning of Insurance

Insurance can be defined as a contract between two parties, where one promises the other to indemnify or make good any financial loss suffered by the latter (the insured) in consideration for an amount received by way of 'premium'. In other words, the party agreeing to pay for the losses is the 'insurer'. The party whose loss makes the insurer' pay the claim is the 'insured'.

In general, Insurance can be defined from two points of view.

First, insurance is the protection against financial loss provided by an insurer. It is an economic device whereby an individual substitutes a small certain cost (the premium) for a large uncertain financial loss which would exist if it were not for the insurance.

The primary function of insurance is the creation of the counterpart of risk, which is security. Insurance does not decrease the uncertainty for the individual as to whether or not the event will occur, nor does it alter the probability of financial loss connected with the event. From the individual's point of view, the purchase of an adequate amount of insurance on a house eliminates the uncertainty regarding a financial loss in the event that the house should burn down.

Many persons consider an insurance contract to be a waste of money unless a loss occurs and indemnity is received. Some even feel that if they have not had a loss during the policy term, their premium should be returned. Both view pints constitute the essence of ignorance. Relative to the first, we already know that the insurance contract provides a valuable feature in the freedom from the burden of uncertainty. Even if a loss is not sustained during the policy term, the insured has received something for the premium: the promise of indemnification in the event of a loss. With respect to the second, one must appreciate the fact that the operation of the insurance principle is based upon the contribution of the many paying the losses of the unfortunate few. If the premiums were returned to the many who did not have losses, there would be no funds available to pay for the losses of the few who did. Basically then, the insurance device is a method of loss distribution. What would be a devastating loss to an individual is spread in an equitable manner to all members of the group, and it is on this basis that insurance can exist.

Second, insurance is a device by means of which the risks of two or more persons or firms are combined through actual or promised contributions to a fund out of which claimants are paid. From the viewpoint of the insured insurance is a transfer device. From the viewpoint of the insurer, insurance is a retention and combination device. The distinctive feature of insurance as a transfer device is that it involves some pooling of risks; i.e., the insurer combines the risks of many insureds. Through this combination the insurer improves its ability to predict its expected losses. Although most insurers collect in advance premiums that will be sufficient to pay all their expected losses, some rely at least in part on assessments levied on all insureds after losses occur.

Insurance does not prevent losses, nor does it reduce the cost of losses to the economy as a whole. As a matter of fact, it may very well have the opposite effect of causing losses and increasing the cost of losses for the economy as a whole. The existence of insurance encourages some losses for the purpose of defrauding the insurer, and in addition people are less careful and may exert less effort to prevent losses then they might if it were not for the existence of insurance contracts. Also, the economy incurs certain additional costs in the operation of the insurance mechanism. Not only must the cost of the losses be borne, but the expense of distributing the losses on some equitable basis adds to this cost.

3.3. Basic Characteristics of Insurance

The basic characteristics of insurance are:-

- ✓ Pooling of losses
- ✓ Payment of unexpected losses
- ✓ Risk transfer
- ✓ Indemnification

1. Pooling of losses

Pooling of risks or the sharing of losses is the heart of insurance. Pooling of losses means the spreading of losses incurred by the few over the entire group, so that in the process, average loss is substituted for actual loss. To accurately predict the future losses, exposure units in large numbers have to be grouped together to bring in the application of the law of large numbers. For this there has to be a large number of exposure units facing the same or similar kind of perils. In simple words, pooling in an insurance context implies two things:

- Sharing of losses by the entire group, and
- Using the law of large numbers to predict future losses.

The law of large numbers *states that the greater the number of exposures, the more closely will the actual results approach the probable results that are expected from an infinite number of exposures.*

2. Payment of unexpected losses

The insurer should cover losses that are unforeseen and unexpected and occurs as a result of chance. To put it differently, the loss should be an accidental one and a result of chance and not deliberately caused.

3. Risk transfer

In this, a pure risk is transferred from the insured to the insurer who typically is in a stronger financial position and is willing to pay the loss than the insured (example, the risk of premature death, poor health, destruction or theft of property).

4. Indemnification (compensation)

Indemnification--means the insured is restored to his or her approximate financial position prior to the occurrence of the loss.

3.4. **Requisites of Insurable Risks**

Insurers normally insure only pure risks. However, all pure risks are not insurable. To be considered a proper subject for insurance, certain characteristics should be present. The following requisites are the "ideal" elements of an insurable risk.

1. There must be a large number of exposure units

There must be a sufficiently large number of homogeneous exposure units to make the losses reasonably predictable.Insurance is based on the operation of the law of large numbers. A large number of exposure units enhance the operation of an insurance plan by making estimates of future losses more accurate.

2. The loss must be accidental and unintentional

The loss must be the result of a contingency; that is, it must be something that may or may not happen. It must not be something that is certain to happen. If the insurance company knows that an event in the future is inevitable, it also knows that it must collect a premium equal to the certain loss that it must pay, plus an additional amount for the expenses of administering the claim and operation. Depreciation, which is a certainty, cannot be insured; it is provided for through a sinking fund. Furthermore, the loss should be beyond the control of the insured. The law of large numbers is useful in making predictions only if we can reasonably assume that future occurrences will approximate past experience. Since we assume that past experience was a result of chance happening, the predictions concerning the future will be valid only if future happenings are also a result of chance.

3. The loss must be determinable and measurable

The loss produced by the risk must be definite and measurable. This means the loss should be definite as to cause, time, place and amount. The basic purpose of this requirement is to enable an insurer to determine if the loss is covered under the policy and if it is covered, how much should be paid.

4. The loss should not be catastrophic (general)

Ideally, the loss should not be catastrophic (i.e., affecting a large number of exposure units at the same time). Because most **catastrophic losses**, such as floods, earthquakes, and war, occur erratically and usually with great destruction, both the frequency of occurrence and the severity of losses cannot be accurately forecasted, and, thus, catastrophic losses are usually not insured by private companies.

Insurers can deal with the problem of a catastrophe loss by **(1)** Reinsurance,

Reinsurance is the shifting of part or all of the insurance originally written by one insurer to another. **(2)** Avoiding the concentration of risk by dispersing coverage over a large geographical area.

5. The chance of loss must be calculable

It should be possible for the insurer to calculate the chance of loss with a reasonable degree of accuracy, as this is a major consideration in determining premium.

6. The premium must be economically feasible

Several requirements must be satisfied for an insurance company to be able to offer affordable premiums. First, the premium for the insurance must be affordable; otherwise few people would buy it, thereby spreading the risk among fewer people. With fewer people insured, the objective risk of the pool would be higher, because actual losses would be less predictable. Therefore, higher premiums would have to be charged to cover the increased objective risk.

Secondly, the premium must be considerably less than the policy coverage; otherwise, people would simply self-insure.

Check your progress 3.1.

1. Define insurance?
2. What is risk transfer?
3. What is meant by the loss must be accidental and unintentional

Insurance versus Adverse Selection

Adverse selection is the tendency of persons with a higher-than-average chance of loss to seek insurance at standard (average) rates, which if not controlled by underwriting, results in higher-than-expected loss levels. Adverse selection can be controlled by careful underwriting, by charging higher premiums to substandard applicants for insurance, and by certain policy provisions.

Underwriting refers to the process of selecting and classifying applicants for insurance. Underwriters determine if the policy should be written by the insurer, and if so, what premium should be charged and what restrictions should apply.

Basic Underwriting Principles

1. Selection of insured according to the company's underwriting standards.
2. Proper balance of insured within each rating classification.
3. Equity among policy owners.

3.5. Insurance versus Gambling

Insurance differs from gambling in two ways.

- **A.** First, gambling creates a new speculative risk that did not exist before, while insurance is a technique for handling an already existing pure risk.
- **B.** Second, gambling is socially unproductive, since the winner's gain comes at the expense of the loser. Insurance is always socially productive, since both the insured and insurer win if the loss does not occur.

Gambling transactions never restore the losers to their former financial position. In contrast, insurance contracts restore the position of insured financially in whole or in part if a loss occurs.

3.6. Insurance versus Speculation

Both insurance and speculation techniques are similar in that risk is transferred by a contract, and no new risk is created.

Insurance differs from speculation:

1. Insurance transaction usually involves the transfer of risks that are insurable. However, speculation is a technique for handling risks that are typically uninsurable, such as protection against a substantial decline in the price of commodities.
2. Insurance reduce objective risk by applying of the law of large numbers. In contrast, speculation typically involves only risk transfer, not risk reduction.

Check your progress3.2.

1. What is meant by adverse selection and how it can be controlled?
2. Explain why gambling is unproductive?

3.7. Benefits and Costs of Insurance

Insurance has peculiar advantages as a device to handle risk and so ought to be extended as far as possible, in order to bring about the greatest economic advantage to a given society. Insurance, like most institutions, presents society with both benefits and costs.

3.7.1. Benefits

1. ***Indemnification***. The direct advantage of insurance is indemnification for those who suffer unexpected losses. These unfortunate businesses and families are restored or at least moved closer to their former economic position. The advantage to these individuals is obvious. Society also gains because these persons are restored to production, and tax revenues are increased.

2. ***Reduced Reserve Requirements***. If there is an insurance protection the amount of accumulated funds needed to meet possible losses is reduced. One of the chief economic burdens of risk is the necessity for accumulating funds to meet possible losses. One of the great advantages of the insurance mechanism is that it greatly reduces the total of such reserves necessary for a given economy. Since the insurer can predict losses in advance, it needs to keep readily

available only enough funds to meet those losses and to cover expenses. If each individual has to set aside such funds, there would be a need for a far greater amount because the individual, not knowing precisely how much would be required, would tend to be conservative.

For Example a birr 60,000 residence can be insured against fire and other physical perils for about birr 200 a year. If insurance were not available, the individual would probably feel a need to set aside funds at a much higher rate than birr 200 a year.

3. ***Capital Freed for Investment***. Cash reserves that insurers accumulate are freed for investment purposes, thus bringing about a better allocation of economic resources and increasing production. Insurers as a group and life insurance firms in particular, have become among the largest and most important institutions to collect and distribute a nation's savings. A substantial part of the contributions of insurance companies is derived from regular savings by individuals through life insurance contracts. The provision of the life insurance mechanism, which encourages individual savings, is a most important contribution of insurance to the savings supply.

   The insurance mechanism encourages new investment. For example, if an individual knows that his family will be protected by life insurance in the event of premature death, the insured may be more willing to invest savings in a long-desired project, such as a business venture, without feeling that the family is being robbed of its basic income security. In this way a better allocation of economic resources is achieved.

4. ***Reduced Cost of Capital***. Since the supply of investable funds is greater than it would be without insurance, capital is available at lower cost than would otherwise be true. Other things being equal, this brings about a higher standard of living because increased investment itself will raise production and cause lower prices than would otherwise be the case. Also because insurance is an efficient device to reduce risk, investors may be willing to enter fields they would otherwise reject as too risky. Thus, society benefits by increased services and new products, the hallmarks of increased living standards.

5. ***Loss Control***. Another benefit of insurance lies in its loss control or loss- prevention activities. Insurers are actively engaged in loss-prevention activities. While it is not the main function of insurance to reduce loss, but merely to spread losses among members of the insured group, nevertheless, insurers are vitally interested in keeping losses at a minimum.

   Insurers know that if no effort is made in this regard, losses and premiums would have a tendency to rise, since it is human nature to relax vigilance when it is known that the loss will be fully paid by the insurer. Furthermore, in any given year, a rise in loss payments reduces the profit to the insurer, and so loss prevention provides a direct avenue of increased profit.

   By charging extra for bad features and less for good, insurers can induce the insured to make improvements, which have beneficial effect on losses. This can clearly be seen, for example, in fire insurance, where the installation of good-fighting equipment, such as a sprinkler system, receives considerable reward by way of reduced premiums.

6. ***Business and Social Stability***. Insurance contributes to business and social stability and to peace of mind by protecting business firms and the family breadwinner. Adequately protected, a business need not face the grim prospect of liquidation following a loss. A family need not break up following the death or permanent disability of the breadwinner. A business venture can be continued without interruption even though a key person or the sole proprietor dies. A family need not lose its life savings following a bank failure. Old-age dependency can be avoided. Loss of a firm's assets by theft can be reimbursed. Whole cities ruined by a hurricane can be rebuilt from the proceeds of insurance.

7. ***Aid to Small Business***. Insurance encourages competition because without an insurance industry, small business would be a less effective competitor against big business. Big business may safely retain some of the risks that, if they resulted in loss, would destroy most small businesses. Without insurance, small business would involve more risks and would be a less attractive outlet for funds and energies.

8. ***Invisible Export***. A valuable contribution towards Ethiopia's balance of payments is made by invisible exports. These include banking, shipping and other services, as well as insurance transacted abroad by the Ethiopian Insurance Corporation. Overseas insurance as an export is enhanced when the insurer is selling a commodity, namely security, to an overseas buyer. Although this commodity is invisible it is an export in the same way as any material goods.

3.7.2. Costs of Insurance

1. ***Operating Expenses.*** Insurers incur expenses such as loss control costs, loss adjustment expenses, expenses involved in acquiring insureds, state premium taxes and general administrative expenses. These expenses, plus a reasonable amount for profit and contingencies, must be covered by the premium charged. In real terms, workers and other resources that might have been committed to other uses are required by the insurance industry. The advantages of insurance are not obtained for nothing. They should be weighed against the cost of obtaining the services.
2. ***Moral Hazard***. A second cost of the insurance industry is the creation of moral hazards. A moral hazard is a condition that increases the chance that some person will intentionally (1) cause a loss or (2) increase its severity. Some unscrupulous persons can make, or believe that they can make, a profit by bringing about a loss. For example, arson, inspired by the possibility of an insurance recovery, is a major cause of fires. Others abuse the insurance protection by:

i) Making claims that are not warranted, thus spreading through the insurance system losses that they should bear themselves (eg. claiming automobile liability when there is no negligence on the part of the defendant).

ii) Over utilizing the services (eg. staying in a hospital beyond the period required for treatment).

iii) Charging excessive fees for services rendered to insured's, as is done by some doctors and garages, and

iv) Granting larger awards in liability cases merely because the defendant is insured. Some of these abuses are fraudulent; others indicate a different (and indefensible) code of ethics where insurance is involved.

3. ***Morale Hazard***. Another related cost is the creation of morale hazards. A morale hazard is a condition that causes persons to be less careful than they would otherwise be. Some persons

do not consciously seek to bring about a loss, but the fact that they have insurance causes them to take more chances than they would if they had no insurance.

Opinions differ on the degree to which moral and morale hazards are created by insurance, but all agree that some persons are affected in each way and that morale hazards are more common than moral hazards.

In weighing the social costs and the social values of insurance, the advantages far exceed the disadvantages. Insurance is used because of the great economic services attained thereby. These services cost something, of course; but like most expenses, insurance premiums are looked upon as essential to the successful maintenance of a family or a business.

Check your progress 3.3.

Explain how insurance reduce cost of capital?

3.8. Functions and Organization of Insurers

As part of the study of the insurance mechanism and the way in which it works, it will be helpful to examine some of the unique facets of insurance company operations. In general, insurers operate in much the same manner as other firms, however, the nature of the insurance transaction requires certain specialized functions which require a suitable organization structure. In this section, we will examine some of the specialized activities of insurance companies and the general forms of organization structure.

Functions of Insurers

Although there are definite operational differences between life insurance companies, and property and liability insurers, the major activities of all insurers may be classified as follows:

- i) Production (selling)
- ii) Underwriting (selection of risks)
- iii) Rate making

iv) Managing claims

v) Investment

These functions are normally the responsibility of definite departments or divisions within the firm. In addition to these functions there are various other activities common to most business firms such as accounting, personnel management, market research and so on.

Production

One of the most vital functions of an insurance firm is securing a sufficient number of applicants for insurance to enable the company to operate. This function, usually called production in an insurance company, corresponds to the sales function in an industrial firm.

The term is a proper one for insurance because the act of selling is production in its true sense. Insurance is an intangible item and does not exist until a policy is sold.

The production department of any insurer supervises the relationships with agents in the field. In firms such as direct writers, where a high degree of control over field activities is maintained, the production department recruits, trains and supervises the agents or salespersons.

Underwriting

Underwriting is the process of selecting risks offered to the insurer. It is an essential element in the operation of any insurance program, for unless the company selects from among its applicants, the inevitable result will be adverse to the company. Hence, the main responsibility of the underwriter is to guard against adverse selection. Underwriting is performed by home office personnel who scrutinize applications for coverage and make decisions as to whether they will be accepted, and by agents who produce the applications initially in the field.

It is important to understand that underwriting does not have as its goal the selection of risks that will not have losses, but merely to avoid a disproportionate number of bad risks, thereby equalizing the actual losses with the expected ones. While attempting to avoid adverse selection through rejection of undesirable risks, the underwriter must secure an adequate volume of exposures in each class. In addition, he must guard against congestion or concentration of exposures that might result in a catastrophe.

Process of Underwriting

The underwriter must obtain as much information about the subject of the insurance as possible within the limitations imposed by time and the cost of obtaining additional data. The desk underwriter must rule on the exposure submitted by the agents, accepting some and rejecting others that do not meet the company's underwriting requirements or policies. When a risk is rejected, it is because the underwriter feels that the hazards connected with it are excessive in relation to the rate.

There are four sources from which the underwriter obtains information regarding the hazards inherent in an exposure:

- i) The application containing the insured's statements
- ii) Information from the agent or broker
- iii) Investigations
- iv) Physical examinations or inspections.

The application The basic source of underwriting information is the application, which varies from each line of insurance and for each type of coverage. The broader and more liberal the contract, usually the more detailed the information required in the application. The questions on the application are designed to give the underwriter the information needed to decide if he would accept the exposure, reject it, or seek additional information.

Information from Agent or Broker In many cases the underwriter places much weight on the recommendations of the agent or broker. This varies, of course, with the experience the underwriter has had with the particular agent in question. In certain cases the underwriter will agree to accept an exposure that does not meet the underwriting requirements of the company. Such exposures are referred to as "accommodation risk," because they are accepted to accommodate a valued client or agent.

Investigations In some cases the underwriter will request a report from an inspection organization that specializes in the investigation of personal matters. This inspection report may deal with a wide range of personal characteristics of the applicant, including financial status, occupation, character, and the extent to which he uses alcoholic beverages (or to which neighbors say he uses them.) All the information is pertinent in the decision to accept or reject the application.

For example, the financial status of the applicant is important in both the property and liability field, and in life insurance field, although for different reasons.

In the property and liability field, evidence of financial difficulty may be an indication of a potential moral hazard. In life insurance, there is concern because an individual who purchases more life insurance than he can afford is likely to let the policy lapse, a practice which is costly to the company.

Physical Examinations or Inspections In life insurance, the primary focus is on the health of the applicant. The medical director of the company lays down principles to guide the agents and desk writers in the selection of risks, and one of the most critical pieces of intelligence is the report of the physician. Physicians selected by the insurance company or recognized medical centers supply the insurer with medical reports after a physical examination; this report is a very important source of underwriting information. In the field of property and liability insurance, the equivalent of the physical examination in life insurance is the inspection of the premises. Although such inspections are not always conducted, the practice is increasing. In some instances this inspection is performed by the agent, who sends a report to the company with photographs of the property. In other cases a company representative conducts the inspection.

Rate Making

An insurance rate is the price per unit of insurance. Like any other price, it is a function of the cost of production. However, in insurance, unlike other industries the cost of production is not known when the contract is sold, and will not be known until some time in the future, when the policy has expired. One of the fundamental differences between insurance pricing and the pricing function in other industries is that the price for insurance must be based on a prediction. The process of predicting future losses and future expenses, and allocating these costs among the various classes of insureds is called rate making.

A second important difference between the pricing of insurance and pricing in other industries arises from the fact that insurance rates are subject to government regulation. Because insurance is considered to be vested in the public interest all nations have enacted laws imposing statutory restraints on insurance rates. These laws require that insurance rates must not be excessive, must be adequate, and may not be unfairly discriminatory.

Other characteristics considered desirable are that rates should be relatively stable over time, so that the public is not subjected to wide variations in cost from year to year. At the same time, rates should be sufficiently responsive to changing conditions to avoid inadequacies in the event of deteriorating loss experience.

Makeup of the Premium

A “rate” is the price charged for each unit of protection or exposure and should be distinguished from a “premium”, which is determined by multiplying the rate by the number of units of protection purchased. The unit of protection to which a rate applies differs for the various lines of insurance. In life insurance, for example, rates are computed for each 1,000 birr in protection; in fire insurance the rate applies to each of birr 100 coverage.

The insurance rate is the amount charged per unit of exposure. The premium is the product of the insurance rate and the number of units of exposure. Thus, in life insurance, if the rate is 25 birr per 1,000 birr of face amount of insurance, the premium for a 10,000 birr policy is 250 birr.

The premium is designed to cover two major costs:

i) The expected loss and

ii) The cost of doing business.

These are known as the pure premium and the loading, respectively. The pure premium is determined by dividing the total expected loss by the number of exposures. In automobile insurance, for example, if an insurer expects to pay 100,000 birr of collision loss claims in a given territory, and there are 1,000 autos in the insured group, the pure premium for collision will be 100 birr per car, computed as follows.

$$\text{Pure premium} = \frac{\text{Expected Loss}}{\text{Exposure units}} = \frac{\text{birr } 100{,}000}{\text{birr } \quad 100} = 1{,}000$$

The loading is made up of such items as agents' commissions, general company expenses, taxes and fees, and allowance for profit. The sum of the pure premium and loading is termed as the gross premium. Usually the loading is expressed as a percentage of the expected gross premium. In property – liability insurance, a typical loading might be 33↓ percent. The general formula for the gross premium, the amount charged the consumer, is

$$\text{Gross Premium} = \frac{\text{Pure Premium}}{\text{1-Loading percentage}}$$

In the above example, where the pure premium was birr 100 per car, the gross premium would be calculated as

$$\frac{\text{Birr } 100}{1 - 0.333} = \text{birr } 150$$

Rate - Making Methods

Two basic approaches to rate making, class and individual rating are discussed below.

Manual or Class Rating The manual or class rating method sets rates that apply uniformly to each exposure unit falling within some predetermined class or group. Everyone falling within a given class is charged the same rate. For example a class rate might apply to all types of dwelling of a given kind of construction in a specific city. Rates which apply to all individuals of a given age and sex are also examples of class rates.

The major areas of insurance that emphasize use of the manual rate making method include life, automobile, residential fire, etc. For example, in life insurance the central classifications are by age and sex. In automobile insurance the loss data are broken down territorially by type of automobile, by age of driver, and by major use of automobile. In each case it is necessary only to find the appropriate page in a manual to find out what the insurance rate is to be, hence, the term "manual rate making."

The obvious advantage of the class rating system is that it permits the insurer to apply a single rate to a large number of insureds, simplifying the process of determining their premiums. Class rating is the most common approach in use by the insurance industry today, and is used in various lines of insurance.

Individual Rating Under individual rating, each insured is charged a unique premium based largely upon the judgement of the person setting the rate. This rating is supplemented by whatever statistical data are available and by knowledge of the premiums charged similar insureds. It takes into account all known factors affecting the exposure, including competition from other insurers. If the characteristics of the units to be insured vary so widely it is desirable to calculate rates for each unit depending on its loss producing characteristics.

Managing Claims / Loss Adjustment /

The basic purpose of insurance is to provide indemnity to the members of the group who suffer losses. This is accomplished on the loss-settlement process, but it is sometimes more complicated than just passing out money. The payment of losses that have occurred is the function of the claims department. Life insurance companies refer to those employees who settle losses as "claim representatives," or "benefit representatives." Employees of the claims department in the field of property and liability insurance are called "adjusters."

The Adjustment Process

In determining whether to pay or contest a claim, the adjuster follows a procedure with four main steps: notice of loss, investigation, proof of loss, and payment or denial of the claim. The details of these steps vary with the type of insurance.

Notice The first step in the claim process is the notice by the insured to the company that a loss has occurred. The requirement differ from one policy to another, but in most cases the contract requires that the notice be given "immediately" or "as soon as practicable." The policy usually requires that the notice be given in writing. Actually, however, oral notice to the insurer is usually sufficient unless the insurer or its agent objects.

The insured may also be expected to notify someone other than the insurer. Under a theft insurance, for example, the insured must tell the police, as well as the insurer, about the loss.

Investigation. The investigation is designed to determine if there was actually a loss covered by the policy, and if so, the amount of loss. Following the loss the insured should assist the loss adjuster in the investigation. The adjuster must determine:

i) Whether the loss actually occurred
ii) Whether it is covered under the contract, and
iii) The extent of the loss

Proof of Loss Within a specific time after giving notice, the insured is required to file a proof of loss. This is a sworn statement that the loss has taken place, and states the amount of the claim and the circumstance surrounding the loss. The adjuster normally assists the insured in the preparation of this document.

Payment or Denial If all goes well the insurance company draws a draft reimbursing the insured for the loss. If not, it denies the claim. The claim may be disallowed because there was no loss, the policy did not cover the loss, or because the adjuster feels that the amount of the claim is unreasonable.

Investment Function

When an insurance policy is written, the premium is generally paid in advance for periods varying from six months to five or more years. This advance payment of premiums gives rise to funds held for policyholders by the insurer, funds that must be invested in some manner. When these are added to the funds of the companies themselves, the assets would add up to huge amounts. These funds should not remain idle, and it is the responsibility of finance department or a finance committee of the company to see that they are properly invested.

Not all the money collected by the insurer is to be invested. A certain proportion of it should be kept aside to meet future claims. However, the need for liquidity may vary from one state to another.

Organization of Insurers

The type of organization used by a given insurer and the types of departments created depend upon the particular problems it faces. The most common basis is a centralized management with departments organized on a functional basis. However, other bases, such as territorial, are commonly used, often concurrently with the functional type. Thus, the form of organization adopted depends on the scope of the line of business and the activities performed by the insurance organization.

Based on the line of business, there are two basic forms of organization of insurers; single line or product organization and all-line organization. Single line insurance organizations are those who deal only with one type business, say fire insurance or life insurance only. All-line organization refers to that type of arrangement by which an insurer may write literally all lines of insurance under one administrative frame work of a single organization, example, the Ethiopian Insurance Corporation.

Chapter summary

Insurance can be defined as a contract between two parties, where one promises the other to indemnify or make good any financial loss suffered by the latter (the insured) in consideration for an amount received by way of 'premium'., in its simplest aspect it has two fundamental characteristics: (a) transferring or shifting risk from an individual to a group and (b) sharing losses, on some equitable basis, by all members of the group. The basic characteristics of insurance are pooling of losses, payment of unexpected losses, risk transfer and indemnification.

Insurers normally insure only pure risks. However, all pure risks are not insurable. The requisites for an insurable risk are (a) there must be a large number of exposure units (b) the loss must be accidental and unintentional (c) the loss must be determinable and measurable (d) the loss should not be catastrophic (general) (e) the chance of loss must be calculable (f) the premium must be economically feasible.

Adverse selection is the tendency of persons with a higher-than-average chance of loss to seek insurance at standard (average) rates. Adverse selection can be controlled by careful underwriting, by charging higher premiums to substandard applicants for insurance, and by certain policy provisions. Underwriting refers to the process of selecting and classifying applicants for insurance. Insurance differs from gambling in two ways. First, gambling creates a new speculative risk that did not exist before, while insurance is a technique for handling an already existing pure risk. Second, gambling is socially unproductive, since the winner's gain comes at the expense of the loser. Insurance is always socially productive, since both the insured and insurer win if the loss does not occur. Insurance differs from speculation in (a) Insurance transaction usually involves the transfer of risks that are insurable and (b) Insurance reduce objective risk by applying of the law of large numbers. In contrast, speculation typically involves only risk transfer, not risk reduction.

The benefits of insurance includes indemnification, reduced rserve requirements., capital freed for investment, reduced cost of capital, loss control, business and social stability, aid to small business, invisible export. And the cost of insurance includes operating expense, moral hazard, and morale hazard.The major activities of all insurers are Production (selling), Underwriting (selection of risks), Rate making, Managing claims and Investment.

Answer for check your progress

Check your progress 3.1.

1. Insurance can be defined as a contract between two parties, where one promises the other to indemnify or make good any financial loss suffered by the latter (the insured) in consideration for an amount received by way of ‘premium’.
2. A pure risk is transferred from the insured to the insurer who typically is in a stronger financial position and is willing to pay the loss than the insured.
3. The loss must be the result of a contingency; that is, it must be something that may or may not happen. It must not be something that is certain to happen.

Check your progress3.2.

1. Adverse selection is the tendency of persons with a higher-than-average chance of loss to seek insurance at standard (average) rates, which if not controlled by underwriting, results in higher-than-expected loss levels. Adverse selection can be controlled by careful underwriting, by charging higher premiums to substandard applicants for insurance, and by certain policy provisions.

2. Gambling is socially unproductive, since the winner’s gain comes at the expense of the loser. gambling transactions never restore the losers to their former financial position.

Check your progress 3.3.

Since the supply of investable funds is greater than it would be without insurance, capital is available at lower cost than would otherwise be true. Other things being equal, this brings about a higher standard of living because increased investment itself will raise production and cause lower prices than would otherwise be the case. Also because insurance is an efficient device to reduce risk, investors may be willing to enter fields they would otherwise reject as too risky. Thus, society benefits by increased services and new products, the hallmarks of increased living standards

Review Questions

Part I: True or false questions

1. Insurance does not prevent losses, nor does it reduce the cost of losses to the economy as a whole.
2. Insurers normally insure all pure risks.
3. Catastrophic losses are insurable.
4. gambling is socially unproductive.
5. Insurance is always socially productive.

Part II: Multiple choice Questions

1. All of the following are the basic characteristics of insurance are except;
   A. Pooling of losses
   B. Payment of unexpected losses
   C. Risk transfer
   D. Indemnification
   E. All
   F. None
2. __________means the insured is restored to his or her approximate financial position prior to the occurrence of the loss?
   A. Pooling of losses
   B. Payment of unexpected losses
   C. Risk transfer
   D. Indemnification
3. All of the following are the requisites for an insurable risk, except?
   A. there must be a large number of exposure units
   B. the loss must be accidental and intentional
   C. the loss must be determinable and measurable
   D. the loss should not be catastrophic (general)
   E. all
   F. none
4. Which of the following refers to the process of selecting and classifying applicants for insurance?

A. Insurance
B. Underwriting
C. Adverse selection
D. Gambling

5. Insurance differs from speculation:

A. Insurance transferred risk by a contract while a speculation technique does not.
B. No new risk is created in insurance but not in speculation.
C. Insurance transaction usually involves the transfer of risks that are insurable. However, speculation is a technique for handling risks that are typically uninsurable.
D. Insurance reduce objective risk by applying of the law of large numbers while speculation typically involves only risk transfer, not risk reduction.
E. A and B
F. C and D

CHAPTER FOUR

LEGAL PRINCIPLES OF INSURANCE CONTRACTS

Chapter objectives

Dear learners, at the completion of this chapter you should be able to:

- ✓ Explain principles of insurable interest
- ✓ Understand principles of indemnity
- ✓ Describe principles of subrogation
- ✓ Understand principles of Utmost Good Faith
- ✓ Describe principles of Contribution
- ✓ Understand doctrine of proximate Cause

4.1. Introduction

Insurance is effected by legal agreements known as contracts or policies. A contract, contrary to the impressions of many, cannot be complete by itself, but must be interpreted in light of the legal and social environment of the society in which it is made.

Dear learners, this chapter discuss the basic principles that underline the insurance contracts.

The most important **fundamental principles** of insurance contracts are:

1. Principles of Insurable Interest
2. Principles of Indemnity
3. Principles of Subrogation
4. Principles of Utmost Good Faith
5. Principles of Contribution
6. Doctrine of Proximate Cause

4.2. Principle of Insurable Interest

A fundamental legal principle underlying all insurance contracts is insurable interest. Under this principle an insured must demonstrate a personal loss or the insured will be unable to collect amounts due when a loss due to the insured peril occurs. Insurable interest is always a legal requirement because to hold otherwise would mean that an insured could collect without personal loss.

When we say that a businessman has an "interest in several companies," we usually imply that he has more than mere mental attraction towards them. This is also the sense in which the term is used in insurable interest.

The essentials of insurable interest are as follows:

i) Presence of subject matter to be insured.

ii) Existence of monetary relationship between the subject matter and there would be policyholder.

iii) The relationship existing between the policyholder and the subject matter need to be legal.

iv) The policyholder must be economically benefited by the survival or suffer an economic-loss from the damage or destruction of the subject matter.

An insurable interest may be applied on life, property, or potential liability.

Life

i) ***Self insurance***. An individual has an insurable interest in his own life, and there is no limit to the sum for which a man may insure his own life. In practice, the sum insured is restricted by the insured's ability to pay premium.

ii) ***Husband and Wife***. A wife may insure the life of her husband because his continued existence is valuable to her and she would suffer a financial loss upon his death. Likewise, a husband may insure the life of his wife because her continued existence is valuable to him and he could suffer a financial loss upon her death.

iii) ***Creditors and Debtors.*** A creditor stands to loss if his debtor dies without paying the debt. Thus, he has the right to insure the debtor up to the amount of the loan.

iv) ***Partners***. The death of a partner could well cause financial loss to the survivor(s), who therefore, have a right to insure him. This could arise with a professional firm or perhaps with theatrical performers. The amount of insurable interest would be difficult to ascertain, but legally it is limited to the financial involvement in the person insured.

A father may insure the life of a minor child, but a brother may not ordinarily insure the life of his sister. In the latter case there would not usually be a financial loss to the brother upon the death of his sister, but in the former case the father would suffer financial loss upon the death of his child.

Property

Insurable interest in property may arise as follows:

i) ***Ownership***. This is the most obvious form and in addition to full ownership, part or joint ownership gives the right to insure. With part ownership, the insurable interest is strictly limited to the financial involvement, but a part owner may insure the property for the full value, as he will be deemed to be acting as an agent for the other co-owners. Any amount he receives from the insurance, over and above his own interest, is to be held in trust for the co-owners.

ii) ***Husband and Wife***. A husband has an insurable interest in his wife's property as he is legally entitled to share her enjoyment of it, and a wife similarly has an insurable interest in her husband's property as their relationship is reciprocal.

iii) ***Administrators, Executors and Trustees.*** These are all persons entrusted with the estate and affairs of others. They have a right to insure the property for which they are responsible.

iv) ***Bailess***. These are persons or entities legally in possession of goods belonging to others, for example, laundries, cobblers, and the like have the right to insure for losses to goods in their custody representing interest of the owner.

v) ***Agents***. Provided the principal possesses an insurable interest, an agent may effect an insurance on his behalf. The insurance must, however, be authorized or ratified by the principal. A householder may effect a policy, which extends to cover the belongings of members of his family. Another example is with a private car insurance, which normally extends to cover the liability of other drivers using the vehicle with the insured's permission.

vi) ***Mortgagees and Mortgagors***. The interest of the mortgagee is limited to the sum of money that he has advanced.

Liability

Insurance of liability seldom gives rise to any difficulty over the existence of insurable interest. A person clearly has an interest in the sums he may be called upon to pay to third parties as a result of accident.

When the Insurable Interest Must Exist

In property and liability insurance it is possible to effect coverage on property in which the insured does not have an insurable interest at the time the policy is written, but in which such an interest is expected in the future. In marine insurance a shipper often obtains coverage on the cargo it has not yet purchased in the anticipation of buying cargo for the return trip. As a result the courts generally hold that in property insurance, insurable interest need exist only at the time of the loss and not at the inception of the policy.

On the other hand, in life insurance it is the general rule that insurable interest must exist at the inception of the policy, but it is not necessary at the time of the loss. The courts view life insurance as an investment contract. To illustrate, assume that a wife who owns a life insurance policy on her husband later obtains a divorce. If she continues to maintain the insurance by paying the premiums, she may collect on the subsequent death of her former husband, even though she is remarried and suffers no particular financial loss upon his death. It is sufficient that she had an insurable interest when the policy was first issued.

4.3. Principle of Indemnity

The principle of indemnity states that a person may not collect more than the actual loss in the event of damage caused by an insured peril. Thus, while a person may have purchased coverage in excess of the value of the property, that person cannot make a profit by collecting more than the actual loss if the property is destroyed. Many insurance practices result from this important principle. Only contracts in property and liability insurance are subject to this principle. Life and most health insurance policies are not contracts of indemnity. No money payment can indemnify for loss of life or for bodily injury to the insured, and that is why life insurance is an exception to the general rule.

The principle of indemnity is closely related to insurable interest. The problem in insurable interest is to determine whether any loss is suffered by a person insured, whereas in indemnity the problem is to obtain a measure of that loss. In the basic fire insurance contract, the measure of "actual cash loss" is the current replacement cost of destroyed property less an allowance for estimated depreciation. In liability insurance, the final measure of loss is determined by reference to a court action concerning the amount of legal liability of the insured for negligence. In any event, the purpose served by the principle of indemnity is to place the insured in the same position as before the loss.

One of the important results of the principle of indemnity is the typical inclusion in insurance contracts of clauses regarding other insurance. The purpose of such clauses is to prevent the insured from taking out duplicating policies with different insurers in the expectation of recovering more than the actual loss. Typically such clauses provide that all policies covering the same risk will share pro rata in the loss. Thus, if Desta carries 4,000 birr fire insurance in Company A and 6, 000 birr in Company B, the two insurers will divide a 1, 000 birr fire loss 40 percent and 60 percent, respectively.

Methods of Providing Indemnity

There are four basic methods of providing an indemnity:

i) ***Cash***. Many claims are settled by means of a cash payment to the insured. All that insurers require is reasonable proof of the cause and extent of the loss, and the cash payment is the measure of indemnity, or extent of the insurer's liability for any given loss.

ii) ***Repair***. An adequate repair constitutes an indemnity. This form of settlement is particularly common in motor insurance, where the insurer settles the repair bill direct with the garage concerned.

iii) ***Replacement***. It is sometimes advantageous for the insurer to replace an article rather than to pay cash. With a very new item or with such things as jewelry and furs, depreciation is likely to be negligible and the insured may well be content with a new replacement, which might possibly be acquired at a discount from the appropriate dealer. In glass insurance, it is the usual rule to replace, and all insurers pride themselves on the speed with which they replace shop windows so that there is minimum disturbance of trade.

iv) ***Reinstatement***. This is a term usually found in fire insurance and concerns the restoration or rebuilding of premises (not necessarily on the same site) to their former condition.

Check your progress 4.1.

1. Explain when an insurable interest exists?
2. Explain why insurable interest exists for creditors and debtors?
3. Contrast the problem of principles of insurable interest and indemnity?

4.4. Principle of Subrogation

The principle of subrogation grows out of the principle of indemnity. Under the principle of subrogation one who has indemnified another's loss is entitled to recovery from any liable third parties who are responsible. Thus, subrogation in insurance is the transfer by an insured to an insurer of any rights to proceed against a third party who has negligently caused the occurrence of an insured loss. For example, an automobile insurer that has paid a collision insurance claim obtains the right to collect reimbursement from any negligent third party who caused the accident.

The insured who has been indemnified by the insurance company may neglect to prosecute the wrongdoer where liability exists, or he might prosecute in order to get double recovery. Double recovery would violate the indemnity principle. By subrogation, the dilemma is resolved by assigning to the insurance company the right to prosecute the action against the wrongdoer and there by recoup a portion or all of the damages paid to the insured. Such salvage by insurance companies helps to maintain lower rate levels for insured's.

Subrogation is a corollary of the principle of indemnity and the right of subrogation, therefore, applies only to policies which are contracts of indemnity. Thus it does not apply to personal accident or life policies. For instance, if the death of a life insured should be caused by the negligence of a third party, his legal personal representatives may be able to recover damages in addition to the policy moneys. The insurers have no right of action against the third party and cannot benefit by any damages received.

4.5. Principle of Utmost Good Faith

Insurance is said to be a contract of utmost good faith. In effect, this principle imposes a higher standard of honesty on parties to an insurance agreement than is imposed in ordinary commercial contracts. Insurance contracts are based upon mutual trust and confidence between the insurer and the insured. Contracts of insurance are different because one party to the contract alone the proposer-knows, or ought to know, all about the risk proposed for insurance, and the other party-the insurer-has to rely largely upon the information given by the proposer in his assessment of that risk. For this reason, insurance contracts are contracts of the utmost good faith. The application of this principle may best be explained in a discussion of representations, concealments, and warrantees.

Representations

A representation is a statement made by an applicant for insurance before the contract is effected. Although the representation need not be in writing, it is usually embodied in a written application. It is a statement in response to a question by the insurer. An example of representation in life insurance would be "yes" or "no" to a question as to whether or not the applicant had ever been treated for any physical condition by a doctor within the previous five years. If a representation is relied upon by the insurer in entering into the contract, and if it proves to be false at the time it is made or becomes false before the contract is made, there exists a legal ground for the insurer to avoid the contract.

Avoiding the contract does not follow unless the misrepresentation is material to the risk. That is, if the truth had been known, the contract either would not have been issued at all or would have been issued on different terms. If the misrepresentation is inconsequential, its falsity will not affect the contract. However, a misrepresentation of a material fact makes the contract voidable at the option of the insurer. The insurer may decide to affirm the contract or to avoid it. Failure to cancel a contract after first learning about the falsity of a material misrepresentation may operate to defeat to insurer's rights to cancel at a later time, under the doctrines of waiver (voluntary relinquishment of a known right) or estoppels (which prevents a person from asserting a right because he has acted previously in such a way as to deny any interest in that right).

Concealments

Concealment is defined as silence when obligated to speak. Concealment has approximately the same legal effect as a misrepresentation of a material fact. It is the failure of an applicant to reveal a fact that is material to the risk. Because insurance is a contract of utmost good faith, it is not enough that the applicant answer truthfully all questions asked by the insurer before the contract is effected. The applicant must also volunteer material facts, even if disclosure of such facts might result in rejection of the application or the payment of a higher premium.

The applicant is often in a position to know material facts about the risk that the insurer does not. To allow these facts to be concealed would be unfair to the insurer. After all, the insurer does not ask questions such as "Is your building now on fire?" or "Is your car now wrecked?"

The important, often crucial, question about concealments lies in whether or not the applicant knew the fact withheld to be material. The tests of concealment are: (1) Did the insured know of a certain fact? (2) Was this fact material? and (3) Was the insurer ignorant of this fact?

Warrantees

A warranty is a clause in an insurance contract holding that before the insurer is liable, a certain fact, condition, or circumstance affecting the risk must exist. For example, a marine insurance contract may state "warranted free of capture or seizure." This statement means that if the ship is involved in a war skirmish, the insurance is void. Or a bank may be insured on condition that a certain burglar alarm system be installed and maintained. Such a clause is condition precedent and acts as a warranty.

A warranty creates a condition of the contract, and any breach of warranty, event if immaterial, will void the contract. This is the central distinction between a warranty and a representation. A misrepresentation does not void the insurance unless it is material to the risk, while under common law any breach of warranty, even if held to be minor, voids the contract.

Warrantees may be express or implied. Express warranties are those stated in the contract, while implied warranties are not found in the contract, but are assumed by the parties to the contract. Implied warranties are found in ocean marine insurance. For example, a shipper purchases insurance under the implied condition that the ship is seaworthy, that the voyage is legal, and that there shall be no deviation from the intended course. Unless these conditions have been waived by the insurer (legally cannot be waived), they are binding upon the shipper.

A warranty may be promissory or affirmative. A promissory warranty describes a condition, fact, or circumstance to which the insured agrees to be held during the life of the contract. An affirmative warranty is one that must exist only at the time the contact is first put into effect. For example, an insured may warrant that a certain ship left port under convoy-affirmative warranty and the insured may warrant that the ship will continue to sail under convoy promissory warranty.

Check your progress 4.2.

1. Explain how the dilemma in principle of subrogation can be resolved?
2. What are the tests of concealment?

4.5. Principle of Contribution

Contribution is the right of an insurer who has paid under a policy, to call upon other insurers equally or otherwise liable for the same loss to contribute to the payment. Where there is over-insurance because a loss is covered by policies effected with two or more insurers, the principle of indemnity still applies. In these circumstances, the insured will only be entitled to recover the full amount of his loss and if one insurer has paid out in full, he will be entitled to nothing more.

Like subrogation, contribution supports the principle of indemnity and applies only to contracts of indemnity. There is, therefore, no contribution in personal accident and life policies under which insurers contract to pay specific sums on the happening of certain events. Such policies are not contracts of indemnity, except to the extent that they may incorporate a benefit by way of indemnity, e.g., payment of medical expenses incurred, in which respect contribution would apply.

It is important to understand the difference between contribution and subrogation. Subrogation is concerned with rights of recovery against third parties or elsewhere in respect of payment of an indemnity, and need not involve any other insurance, although it frequently does. Contribution necessarily involves more than one insurance each covering the interest of the same insured.

Basis of Contribution

At the time of a claim, insurers usually inquire whether any other insurance exists covering the loss. Where other insurances do exist and each policy is subject to a valid claim, contribution will apply so that the respective insurers share the loss ratably. This term allows two constructions, both of which are found in insurance:

i) ***Contribution According to Independent Liability***. This means that the amount payable by each insurer is assessed as if the other insurances do not exist. If the aggregate of the amounts so calculated exceeds the loss, each insurer's contribution is scaled down proportionately, so that an indemnity is provided. This method is usually found where for some reason one or more of the policies will not cover the loss in full. This happens particularly in many fire policy contributions.

ii) ***Contribution According to the Sums Insured***. This is the normal method of contribution. Insurers will pay proportionately to the cover they have provided, in accordance with the following formula:

$$\frac{\text{Sum insured with the particular insurer}}{\text{Total sums insured with all insurers}} \times \text{Loss} = \text{Contribution}$$

Example: Assume that Ato Kebede has inured his house, which is worth 80,000 birr against fire insurers X, Y, and Z for 60,000 birr, 40,000 birr, and 20,000 birr respectively. Ato Kebede's house was completely destroyed by a fire caused by Ato Alemu's negligence. The amount of indemnity that Ato Kebede will be entitled to receive would be 80,000 birr, the value of the actual loss or the amount of insurance carried.

The amount that each insurer is entitled to contribute would be as follows:

X's share of the loss $\dfrac{\text{Br. } 60{,}000}{\text{Br. } 120{,}000}$ X Br. 80,000 = Br. 40,000

Y's share of the loss $\dfrac{\text{Br. } 40{,}000}{\text{Br. } 120{,}000}$ X Br. 80,000 = Br. 26,667

Z's share of the loss $\dfrac{\text{Br. } 20{,}000}{\text{Br. } 120{,}000}$ X Br. 80,000 = Br. 13,333

Total indemnity Br. 80,000

Check your progress 4.3.

1. Explain why the principle of contribution supports the principle of indemnity?
2. Differentiate between subrogation and contribution?

4.6. Essential Requirements of an Insurance Contract

A contract is an agreement embodying a set of promises that are enforceable at law, or for breach of which the law provides a remedy. These promises must have been made under certain conditions before they can be enforced by law. In general, there are four such conditions, or requirements, that may be stated as follows:

1. The agreement must be for a legal purpose; it must not be against public policy or be otherwise illegal. For example a contract of insurance that covers a risk promoting a business or venture prohibited by law is void. Similarly a gambling contract will not be enforced by law.
2. The parties must have legal capacity to contract. This requirement excludes persons who have been deemed incapable of contracting, such as those who have been judicially declared insane; and persons who are legally incompetent such as infants, drunken persons, etc.
3. There must be evidence of agreement of the parties to the promises. In general this is shown by an offer by one party and acceptance of that offer by the other.
4. The promises must be supported by some consideration, which may take the form of money, or by some action by the parties that would not have been required had it not been for the agreement.

4.7. Events Covered Under Insurance Contracts

Most insurance contracts contain certain exclusions, such as for loss due to war, loss to property of an extremely fragile character, and loss due to the deliberate action of the named insured. Most property insurance contracts require the insured to notify the insurer of loss as soon as practicable, and usually require that the insured prove the loss.

Named Peril Versus All Risk. The named peril agreement, as the name suggests, lists the perils that are proposed to be covered. Perils not named are, of course, not covered. The other type, all risk, states that it is the insurer’s intention to cover all risks of accidental loss to the described property except those perils specifically excluded.

Excluded Losses Most insurance contracts contain provisions excluding certain types of losses even though the policy may cover the peril that causes these losses. For example, the fire policy covers direct loss by fire, but excludes indirect loss by fire. Thus, the policy will not cover loss of fixed charges or profits resulting from the fact that fire has caused an interruption in business. Separate insurance is necessary for this protection.

Excluded Property A contract of insurance may be written to cover certain perils and losses resulting from those perils, but it will be limited to certain types of property. For example, the fire policy excludes fire losses to money, deeds, bills, bullion, and manuscripts. Unless it is written to cover the contents, the fire policy on a building includes only integral parts of the building and excludes all contents.

Defining the insured All policies of insurance name at least one person who is to receive the benefit of the coverage provided. That person is referred to as the named insured. In life insurance he is often called the policyholder.

Third party Coverage. Many insurance contracts may provide coverage on individuals who are not direct parties to the contract. Such persons are known as third parties.

In life insurance the beneficiary is a third party and has the right to receive the death proceeds of the policy.

The beneficiary can be changed at any time by the insured, unless this right has been formally given up-i.e., the insured has named the beneficiary irrevocably. The beneficiary's rights are thus contingent upon the death of the insured.

Excluded Locations The policy may restrict its coverage to certain geographical locations. Relatively few property insurance contracts give complete worldwide protection. For example automobile insurance may be limited to cover the auto while it is in Ethiopia. If the car is, say, in Kenya coverage is suspended.

Insurance contracts may be discharged by the lapse of time, failure to pay premiums, failure to renew the contract, or cancellation of the contract.

Chapter summary

The most important **fundamental principles** of insurance contracts are Principles of Insurable Interest , Principles of Indemnity, Principles of Subrogation, Principles of Utmost Good Faith, Principles of Contribution, Doctrine of Proximate Cause.

An insurable interest may be applied on life, property, or potential liability. An insurable interest in life exists for (a) Self insurance, (b) Husband and Wife, (c) Creditors and Debtors and (d) Partners. Insurable interest in property may arise in the form of Ownership, Husband and Wife, Administrators, Executors and Trustees, Bailess, Agents and Mortgagees and Mortgagors.

The principle of indemnity states that a person may not collect more than the actual loss in the event of damage caused by an insured peril. Thus, while a person may have purchased coverage in excess of the value of the property, that person cannot make a profit by collecting more than the actual loss if the property is destroyed. Many insurance practices result from this important principle. Only contracts in property and liability insurance are subject to this principle. Life and most health insurance policies are not contracts of indemnity. No money payment can indemnify for loss of life or for bodily injury to the insured. The indemnity can be made in the form of Cash, repair, Replacement or reinstatement.

Under the principle of subrogation one who has indemnified another's loss is entitled to recovery from any liable third parties who are responsible. Principle of Utmost Good Faith imposes a higher standard of honesty on parties to an insurance agreement than is imposed in ordinary commercial contracts. Contribution is the right of an insurer who has paid under a policy, to call upon other insurers equally or otherwise liable for the same loss to contribute to the payment.

A contract is an agreement embodying a set of promises that are enforceable at law, or for breach of which the law provides a remedy. In general, there are four conditions, or requirements, for insurance contracts. These are (a) the agreement must be for a legal purpose; (b) the parties must have legal capacity to contract; (c) there must be evidence of agreement of the parties to the promises and (d) the promises must be supported by some consideration. The events covered under Insurance contracts can be stated as named peril versus all risk, excluded losses,excluded property, defining the insured, third party coverage.

Answer for check your progress

Check your progress 4.1.

1. An insurable interest exist when an insured must demonstrate a personal loss or the insured will be unable to collect amounts due when a loss due to the insured peril occurs. Insurable interest is always a legal requirement because to hold otherwise would mean that an insured could collect without personal loss.
2. A creditor stands to loss if his debtor dies without paying the debt. Thus, he has the right to insure the debtor up to the amount of the loan.
3. The problem in insurable interest is to determine whether any loss is suffered by a person insured, whereas in indemnity the problem is to obtain a measure of that loss.

Check your progress 4.2.

1. By subrogation, the dilemma is resolved by assigning to the insurance company the right to prosecute the action against the wrongdoer and there by recoup a portion or all of the damages paid to the insured. Such salvage by insurance companies helps to maintain lower rate levels for insured's.
2. The important, often crucial, question about concealments lies in whether or not the applicant knew the fact withheld to be material. The tests of concealment are: (1) Did the insured know of a certain fact? (2) Was this fact material? and (3) Was the insurer ignorant of this fact?

Check your progress 4.3.

1. Like subrogation, contribution supports the principle of indemnity and applies only to contracts of indemnity. There is, therefore, no contribution in personal accident and life policies under which insurers contract to pay specific sums on the happening of certain events. Such policies are not contracts of indemnity, except to the extent that they may incorporate a benefit by way of indemnity, e.g., payment of medical expenses incurred, in which respect contribution would apply.
2. Subrogation is concerned with rights of recovery against third parties or elsewhere in respect of payment of an indemnity, and need not involve any other insurance, although it

frequently does. Contribution necessarily involves more than one insurance each covering the interest of the same insured.

Review Questions

Part I: True or false questions

1. An insurable interest may be applied on life, property, or potential liability.
2. A person has not an interest in the sums he may be called upon to pay to third parties as a result of accident.
3. The principle of indemnity states that a person may collect more than the actual loss in the event of damage caused by an insured peril.
4. Only contracts in property and liability insurance are subject to principle of indemnity.
5. Subrogation is applied only to policies which are contracts of indemnity.

Part II: Multiple choice Questions

1. Which of the following is not principle of insurance contract?
   A. Principles of Insurable Interest
   B. Principles of Indemnity
   C. Principles of Subrogation
   D. Principles of Utmost Good Faith
   E. All
   F. None
2. Under which principle an insured must demonstrate a personal loss or the insured will be unable to collect amounts due when a loss due to the insured peril occurs?
   A. Principles of Insurable Interest
   B. Principles of Indemnity
   C. Principles of Subrogation
   D. Principles of Utmost Good Faith
3. Insurable interest exists in life in all of the following except;
   A. Self insurance

B. Husband and Wife

C. Agents

D. Creditors and Debtors

E. Partners.

4. Which of the following statement is/are true?

   A. a person may collect more than the actual loss in the event of damage caused by an insured peril.

   B. Only contracts in property and liability insurance are subject to principle of indemnity.

   C. Life and most health insurance policies are contracts of indemnity.

   D. No money payment can indemnify for loss of life or for bodily injury to the insured.

   E. A and C

   F. B and D

5. An automobile insurer that has paid a collision insurance claim obtains the right to collect reimbursement from any negligent third party who caused the accident. this is an example of;

   A. Principles of Subrogation

   B. Principles of Utmost Good Faith

   C. Principles of Contribution

   D. Doctrine of Proximate Cause

CHAPTER FIVE

LIFE AND HEALTH INSURANCE

Chapter objectives

Dear learners, after completing this chapter, you are expected to:

- Describe life insurance
- Understand how to Underwriting life insurance
- Identify the types of life insurance polices
- Demonstrate how to determine premium for life insurances
- Explain life insurance
- Identify the types of life insurances

5.1. Introduction

Human values, aside from being more important to us from a personal standpoint, are far greater and more significant than all the different property values combined. The true wealth of a nation lies not in its natural resources or its accumulated property, but in the inherent capabilities of its population and the way in which this population is employed. A careful study of the specific types of economic loss caused by the destruction of life or health is vital to an understanding of the insurance methods available to offset these losses.

Life Values

A human life has value for many reasons. Many of these reasons are philosophical in nature, and would lead us into the realm of religion, esthetics, sociology, psychology, and other behavioral sciences. Of greatest interest here are economic values, although it is very difficult to separate the discussion in such a way that an economic analysis would have no implications or overtones for other viewpoints.

A human life has economic value to all who depend on the earning capacity of that life, particularly to two central economic groups-the family and the employer. To the family, the economic value of a human life is probably most easily measured by the value of the earning capacity of each of its members. To the employer, the economic value of human life is measured by the contributions of an employee to the success of the business firm. If one argues that in a free competitive society a worker is paid according to worth and is not exploited, the worker’s contribution again is best measured by earning capacity. It develops that earning capacity is probably the only feasible method of giving measurable economic value to human life.

There are four main perils that can destroy, wholly or partially, the economic value of a human life. These include premature death, loss of health, old age, and unemployment.

5.2. Life Insurance

Life insurance is a contract between the policy owner and the insurer, where the insurer agrees to pay a designated beneficiary a sum of money upon the occurrence of the insured individuals' death or other event.

Life insurance is an insurance coverage that provides a monetary benefit to a decedent's family or other designated beneficiary, and may specifically provide for income to an insured person's family. Life insurance policies often allow the option of having the proceeds paid to the beneficiary either in a lump sum cash payment or in an annuity. The primary purpose of life insurance is to protect financially the insured's family in the event of the insured's premature death. **Premature death** is the death of a family head with outstanding unfulfilled financial obligations, such as dependents to support, children to educate and other debt. Premature death can cause serious financial problems to the surviving family members, unless they have other source of fund, since their share of the deceased breadwinner's earning is lost forever

5.2.1 Underwriting Life Insurance

Underwriting is the process through which an insurance company evaluates the risk of a potential client, and this process allows the company to set premiums and coverage specific to the individual. Life insurance underwriting consists of both medical underwriting as well as non-medical underwriting.

Medical underwriting is an insurance term referring to the use of medical or health status information in the evaluation of an applicant for coverage (typically for life or health insurance). As part of the underwriting process, health information may be used in making two related decisions:

A. Whether to offer or deny coverage; and

B. What premium rate to set for the policy.

The use of medical underwriting may be restricted by law in certain insurance markets. Where allowed, the criteria used should be objective, clearly related to the likely cost of providing coverage, practical to administer, consistent with applicable law, and designed to protect the long term viability of the insurance system.

To conduct medical underwriting, an insurer asks people who apply for coverage (typically people applying for individual or family coverage) about pre-existing medical conditions. Life insurance companies each have their own extensive policy and procedure manuals they are supposed to follow in determining whether or not to issue an Individual Life insurance policy, and in pricing that policy. The insurer's underwriters typically use a combination of factors that experience shows equates with the risk of death (and premature death). They include the applicant's answers to a series of questions such as:

A. Age

B. Sex

C. Height and weight

D. Health history (and often family health history -- parents and siblings)

E. Marital status and number of children

F. Occupation (some are hazardous, and increase the risk of death)

G. Smoking or tobacco use (this is an important factor, as smokers have shorter lives)

H. Alcohol (excessive drinking seriously hurts life expectancy),

I. Drug use

J. Certain hobbies (such as race car driving, hang-gliding, piloting non-commercial aircraft) &

K. Foreign travel (certain foreign travel is risky).

Why is Underwriting Important?

The main purposes of life insurance underwriting are:

A. To prevent individuals who have a higher than average probability of loss from obtaining insurance at average rates,
B. To decide whether to offer or deny the coverage, and
C. To set the premium rate for the policy

Diseases that can make an individual uninsurable include serious conditions such as:

A. Cancer
B. Heart disease
C. Overweight and underweight
D. Diabetes
E. Blood pressure etc.

Check your progress 5.1.

1. What are the basic decisions in medical underwriting?
2. List diseases that can hinder individuals from life insurance?

5.2.2. Unique Characteristics of Life Insurance

Life insurance is a risk pooling plan economic device through which the risk of premature death or superannuation is transferred from the individual to the group. However, the contingency insured against has certain characteristics that make it peculiar; as a result, the contract insuring against the contingency is different in many respects from other types of insurance.

First, the event insured against is an eventual certainty. No one lives forever or maintains his economic value. Yet we do not violate the requirements of an insurable risk in the case of life insurance, for it is not the possibility of death itself that we insure against, but rather untimely death. The uncertainty surrounding the risk in life insurance is not whether the individual is going to die, but when.

Second, life insurance is not a contract of indemnity. The principle of indemnity applies on a modified form in the case of life insurance. In most lines of insurance, an attempt is made to put the individual back in exactly the same financial position after a loss as before the loss. For obvious reasons, this is not possible in life insurance, the simple fact of the matter is that we cannot place a value on a human life.

Third, as a legal principle, every contract of insurance must be supported by an insurable interest, but in life insurance the requirement of insurable interest is applied somewhat differently than in property and liability insurance. When the individual taking out the policy is also the insured, there is no legal problem concerning insurable interest. The important question of insurable interest arises when the person taking out the insurance is someone other than the person whose life is concerned. In such cases, the law requires that an insurable interest exists at the time the contract is taken out. There are many relationships, as stated earlier, that provide the basis for an insurable interest.

Fourth, life insurance contracts are long-term contracts. Nearly all life policies are intended to continue until the insured's death or at least for several years. Other forms of insurance policies may be renewed many times, but are usually twelve-month contracts, which may be terminated by either party. Finally the question of over insurance is immaterial in life insurance contracts.

Check your progress 5.2.

Explain how the insurance contract for life insurance differs from other insurance contracts?

5.2.3. Basic Types of Life Insurance Contracts

Not all people need exactly the same kind of protection from life insurance. Their ages differ, their incomes and financial obligations differ, and the number of their dependents differs. To provide all the different types of protection that are needed, insurance companies offer a variety of policies. The basic types of contracts are:

1. Term insurance
2. Whole life insurance.
3. Endowment insurance, and
4. Annuities.

Term Insurance

Term insurance provides protection only for a definite period (term) of time. A term insurance policy is a contract between the insured and the insurer whereby the insurer promises to pay face amount of the policy to a third party (the beneficiary) should the insured die within a given period of time. If the insured does not die during the period for which the policy was taken, the insurance company is not required to pay anything. Protection ends when the term of years expires. In other words, term life insurance resembles automobile insurance, fire insurance, and the like, which are always term insurance. Term insurance is sometimes called temporary insurance. Common types of term life insurance are 1-year term, 5-years term, 10-years term, 20-years term, and term to age 60 or 65. There are different forms of term insurance available to the potential purchaser, viz., straight term insurance, renewable term insurance, and convertible term insurance.

Straight term insurance is written for a year or for a specified number of years and terminates automatically at the end of the designated period.

Renewable term insurance is a type of contract under which the insured may renew his policy before its expiration date without making another medical examination or otherwise proving that he still is insurable. If the policy is renewable, the insurer will renew the policy, regardless of the insurability of the insured, for the number of times specified in the contract commonly to age 60 or 65.

Convertible term insurance is available from most life insurance companies. This insurance may be converted at any time during a specified period into a permanent form of insurance without taking a physical examination. Some insurance companies write a convertible term policy which provides that at the expiration of certain period of time the term insurance policy automatically will be converted into a permanent form of insurance. This is called automatic convertible term insurance. In most cases, these policies provide that term insurance will be converted to a continuous-premium whole-life policy.

Term insurance is suitable for insuring any need for protection, which is not life-long duration, non continuing needs for insurance. For example, a man with a mortgage that will take ten years to amortize can use term insurance to provide insurance protection during the mortgage period. Mortgage insurance protects homeowners frobgm losing their homes in case the insured person dies before the mortgage is paid off.

Whole Life Insurance

As the name suggests, it is a permanent insurance that extends over the lifetime of the insured. The sum insured is payable on the death of the life insured. In other words whole life insurance protects the beneficiary when the insured dies, since the contract can be continued in force as long as the insured lives.

Whole life insurance contracts may be placed in two categories, depending upon the premium payment period:

1. Straight life insurance , and
2. Limited payment life insurance

Under straight life insurance, the premiums are payable for the remainder of the insured's lifetime. Under limited payment life insurance, the premiums are payable for the remainder of the insured's lifetime or until the expiration of a specified period, if earlier. A limited-payment life policy is one arranged so that the insured pays a higher premium than would be required on the straight life contract. Thus a definite termination date can be established beyond which no further payments are due. Limited installment plans could be 20-payment life, 30 payment life, and life paid up at age 65.

There are many different ways of arranging premium payments for whole life insurance, ranging from continuous installments over a person's entire life to a single installment (single premium whole life). In other words, an insured, at age 35, may pay a single sum, say 5,000 birr for a 10,000 birr policy, and never pay another premium. At the time of death the insurer pays the insured's beneficiary 10,000 birr. If the insured does not have 5,000 birr with which to pay the single premium (and few do), it may be paid by installments over whatever length of time is desired.

Whole life insurance is the ideal form of insurance for a person with dependent relatives, as substantial life cover is obtainable for the amount of premium payable.

Endowment Insurance

Endowment insurance promises to pay a stated amount of money to the beneficiary at once if the insured dies during the life of the policy called the "endowment period," or to the insured himself if he survives to the end of the endowment period. This is “you win if you live and you win if you die” contract. The endowment policy is, in a sense, a savings plan, which also gives insurance protection.

Under this type of contract the sum insured becomes payable at a maturity date (on the expiry of a fixed term, say 10 or 20 years,) or at death before that date.

Endowment insurance may be a useful way for some persons to accumulate a specified sum over a stated period of time whether they live or die. The objective may be funds to finance a child’s college education, to pay living expenses during retirement, or to retire a debt.

Annuity Contracts

An annuity may be defined as a periodic payment to commence at a stated date and to continue for a fixed period or for the duration of a life. The person whose life governs the duration of the payments is called the annuitant. Annuity is insurance against living too long-against outliving one’s ability to provide an income for oneself.

Annuities can be classified according to several characteristics. First, annuities can be classified as immediate or deferred, depending upon whether the benefits are payable immediately after the purchase of the contract. The rent of an annuity can begin as soon as the annuity is purchased, in which case the transaction is called an immediate annuity. Alternatively, the rent can begin at some future time in which case the annuity is called a deferred annuity. Often the rent begins at retirement.

Second, annuities may be paid for by a single premium or by annual premiums. An annuity can be wholly paid up in a lump sum payment or it can be purchased in installments over a period of years. If the annuity is paid up at once, it is called a single-premium annuity. If it is paid for in installments, it is known as an annual-premium annuity.

Third, annuities may cover one life or joint lives. If two or more lives are covered, the payments may stop at the death of the first annuitant or at the death of the last annuitant. An annuity may be issued on more than one life. For example, the agreement might be to pay a given rent during the lifetime of two individuals, as long as either shall live.

This, a very common arrangement, is known as a joint and last survivorship annuity, because the rent is payable until the last survivor dies. The rent may be constant during the entire period or may be arranged to be reduced by, say, one-third upon the death of the first annuitant. Thus, a husband and wife both age 65 may elect to receive the proceeds of a pension plan on a joint and last survivorship basis, with an income guaranteed as long as either shall live.

Check your progress 5.3.

1. Differentiate Straight term insurance and renewable term insurance.
2. Distinct between straight life insurance and Limited payment life insurance.

5.3. Premium Determination for Life Insurance

Rate making refers to the pricing of insurance. An insurance rate is the price per unit of insurance. The process of predicting future losses and future expenses and allocating these to costs among the various classes of insured is called **ratemaking**.

Life insurance rates are influenced by three major determinants:

A. Expected mortality rates in the insured population,

B. Investment income earned by insurer on invested premium income, and

C. Expenses incurred in operating an insurance enterprise and in providing insurance related services.

Mortality Table

Mortality table is a table that shows the number of deaths per thousand and expectation of life at various ages. This table, which is revised periodically, states the probability of death both in terms of deaths per 1,000 and in terms of expectation of life. Example, Commissioners Standard Ordinary (CSO). Mortality table (1980) reveals that male age 20 has an expectation of living 52.37 years. At age 20, 1.90 men in every 1,000 are expected to die before they become 21. The probability of death at age 20 is thus 0.0019. The probability of death expressed in a mortality table is based on insured lives and not the whole population.

5.4. Health Insurance

Health insurance may be defined broadly as the type of insurance that provides indemnification for expenditures and loss of income resulting from loss of health. Health insurance is insurance against loss by sickness or bodily injury. The loss may be the loss of wages caused by sickness or accident, or it may be expenses for doctor bills, hospital bills, medicine, etc.

5.4.1. Types of Health Insurance

There are two types of insurance in the generic term health insurance:

1) Disability income insurance, and
2) Medical expense insurance.

Disability Income Insurance

Disability income insurance is a form of health insurance that provides periodic payments when the insured is unable to work as a result of illness or injury. It may pay benefits only in the event of sickness or only in the event of accidental bodily injury or it may cover both contingencies in one contract. Benefit eligibility presumes a loss of income, but in practice this is usually defined as the inability to peruse an occupation. The fact that the insured's employer may continue his or her wages does not reduce the insurance benefit.

The disability must be one that prevents the insured from carrying on the usual occupation. Most policies continue payment of the benefits for only a specified maximum number of years, but lifetime benefits are available on some contracts. However, under all loss of income policies, the benefits are terminated as soon as the disability ends.

Certain types of accidents are excluded, for example, losses caused by war, suicide and intentionally inflicted injuries, and injuries while in military service during wartime.

Medical Expense Insurance

Medical expense insurance provides for the payment of the cost of medical care that result from sickness and injury. Its benefits help meet the expenses of physicians, hospital, nursing and related services, as well as medications and supplies. Benefits may be in the form of reimbursement of actual expenses, up to a limit, cash payments or the direct provision of services. The medical expenses may be paid directly to the provider of the services or the insured.

Medical expense insurance is divided into four major classes:

1) Hospitalization expense contract
2) Surgical expense contract
3) Regular medical expense contract
4) Major medical expense contract

Hospitalization Contract:- The hospitalization contract is intended to indemnify the insured for necessary hospitalization expenses, including room and board in the hospital, laboratory fees, nursing care, use of operating room, and certain medicines and supplies.

Hospitalization expense is usually written for a flat daily amount for a specified number of days such as 30,120, or 365. The contract provides that costs upto the maximum benefit per day (say 40 birr, 50 birr, 70 birr etc.) will be paid for the number of day specified, while the insured or an eligible dependent is in the hospital.

The agreement may set birr allowance for the different items or may be on a service basis. Typical contracts offered by insurance companies, for example, may state that the insured will be indemnified up to “X birr per day” for necessary hospitalization.

Exclusions under hospitalization contracts:

Like all insurance policies, hospitalization contracts offered by insurers are subject to exclusions. The following exclusions are typical of hospitalization contracts:

1) Expenses resulting from war or any act of war.
2) Expenses resulting from self-inflicted injuries.
3) Expenses payable under worker’s compensation or any occupational disease law.
4) Expenses incurred while on active duty with the armed forces.

5) Expenses incurred for purely cosmetic purposes.
6) Expenses incurred by individuals on an outpatient basis.
7) Services received in any government hospital not making a charge for such services.

Surgical Contract**:** - The surgical contract provides set allowances for different surgical procedures performed by duly licensed physicians. In general, a schedule of operations is set forth together with the maximum allowance for each operation. It reimburses the policyholder according to a schedule that lists the amounts the policy will pay for a variety of operations.

Regular Medical Contract: - The regular medical expense insurance pays part or all of a physicians ordinary bills, such as his calls at the patient's home or at a hospital or a patient's visit to his office. It is a contract of health insurance that covers physicians' services other than surgical procedures. Normally, regular medical insurance is written in conjunction with other types of health insurance and is not written as a separate contract.

Major Medical Contract: - The major medical expense insurance provides protection against the very large cost of a serious or long illness or injury. The major medical policy is most appropriate for the large medical expenses that would be financially unaffordable for the individual.

The contract is issued subject to substantial deductibles of different sorts and with a high maximum limit. Since this kind of policy is designed to cover only serious illness or accidents, a deductible is used to eliminate small claims. A major medical policy might have a 5,000 birr maximum limit for any one accident or illness, have a 200 birr deductible for any one illness, and contain an agreement to indemnify the insured for a specified percentage of the bills, such as 80% over and above the amount of the birr deductible. This means the insurance company pays 80% of the loss in excess of the deductible, and the insured pays the 20%. In the absence of the coinsurance clause, there would be no incentive for the insured or the doctor to keep expenses within reasonable limits.

5.5. Workers' Compensation/Employers' Liability/ Insurance

Workers' compensation insurance covers loss of income, medical, and rehabilitation expenses that result from work related-accidents and occupational disease. Insured workmen always retain the right to claim damages. Employers' liability claims become much more common, aided by Trade Unions.

If an employee is killed or injured at work as a result of an accident arising from defective premises or equipment than a court may award damages against the employer. Any employer is liable for an employee who suffers accidental bodily injury or disease while working for him. The employee is thus entitled to compensation for injuries that may be temporary or permanent. This compensation being unforeseen expenditure, the employer finds it difficult to compensation such losses especially when it involves a huge amount. An employer may therefore, take out an insurance policy insuring himself against such claims by his employees.

The insurance which provided protection for injuries to employees while at work, and a s a result make the employer liable for the loss, is called workers' compensation insurance.

In addition to buying insurance, the insured (employer) can lower the loss claims by:

a) Providing a safe place of work to his employees,

b) Proper plant tolls, machinery and working implements, and

c) Hiring competent and sober fellow employees.

Check your progress 5.4.

Differentiate between Disability income insurance and Medical expense insurance.

Chapter summary

There are four main perils that can destroy, wholly or partially, the economic value of a human life. These include premature death, loss of health, old age, and unemployment. Life insurance is a contract between the policy owner and the insurer, where the insurer agrees to pay a designated beneficiary a sum of money upon the occurrence of the insured individuals' death or other event.

The primary purpose of life insurance is to protect financially the insured's family in the event of the insured's premature death. Premature death is the death of a family head with outstanding unfulfilled financial obligations, such as dependents to support, children to educate and other debt. Premature death can cause serious financial problems to the surviving family members, unless they have other source of fund, since their share of the deceased breadwinner's earning is lost forever. Underwriting is the process through which an insurance company evaluates the risk of a potential client.

Medical underwriting is an insurance term referring to the use of medical or health status information in the evaluation of an applicant for coverage (typically for life or health insurance). Life insurance is a risk pooling plan economic device through which the risk of premature death or superannuation is transferred from the individual to the group. the contract insuring against the contingency is different in many respects from other types of insurance. First, the event insured against is an eventual certainty. No one lives forever or maintains his economic value. Second, life insurance is not a contract of indemnity. The principle of indemnity applies on a modified form in the case of life insurance. Third, as a legal principle, every contract of insurance must be supported by an insurable interest, but in life insurance the requirement of insurable interest is applied somewhat differently than in property and liability insurance. Fourth, life insurance contracts are long-term contracts. Nearly all life policies are intended to continue until the insured's death or at least for several years. Finally the question of over insurance is immaterial in life insurance contracts.

The basic types of contracts are: (1) Term insurance, (2) Whole life insurance , (3) Endowment insurance, and (4) Annuities.

Term insurance provides protection only for a definite period (term) of time. A term insurance policy is a contract between the insured and the insurer whereby the insurer promises to pay face amount of the policy to a third party (the beneficiary) should the insured die within a given period of time. Whole life insurance is a permanent insurance that extends over the lifetime of the insured. The sum insured is payable on the death of the life insured. Endowment insurance promises to pay a stated amount of money to the beneficiary at once if the insured dies during the life of the policy called the "endowment period," or to the insured himself if he survives to the end of the endowment period. An annuity may be defined as a periodic payment to commence at a stated date and to continue for a fixed period or for the duration of a life. The person whose life governs the duration of the payments is called the annuitant.

Rate making refers to the pricing of insurance. An insurance rate is the price per unit of insurance. The process of predicting future losses and future expenses and allocating these to costs among the various classes of insured is called ratemaking.

Health insurance may be defined broadly as the type of insurance that provides indemnification for expenditures and loss of income resulting from loss of health.
There are two types of insurance in the generic term health insurance: (1) Disability income insurance, and (2) Medical expense insurance. Disability income insurance is a form of health insurance that provides periodic payments when the insured is unable to work as a result of illness or injury. Medical expense insurance provides for the payment of the cost of medical care that result from sickness and injury. Medical expense insurance further divided into four major classes as: (a) Hospitalization expense contract, (b) Surgical expense contract (c) Regular medical expense contract and (d) Major medical expense contract.

Answer for check your progress

Check your progress 5.1.

1. As part of the underwriting process, health information may be used in making two related decisions:

A. Whether to offer or deny coverage; and

B. What premium rate to set for the policy.

2. Diseases that can make an individual uninsurable include serious conditions such as:

- Cancer
- Heart disease
- Overweight and underweight
- Diabetes
- Blood pressure

Check your progress 5.2.

Life insurance is a risk pooling plan economic device through which the risk of premature death or superannuation is transferred from the individual to the group. the contract insuring against the contingency is different in many respects from other types of insurance. First, the event insured against is an eventual certainty. No one lives forever or maintains his economic value. Second, life insurance is not a contract of indemnity. The principle of indemnity applies on a modified form in the case of life insurance. Third, as a legal principle, every contract of insurance must be supported by an insurable interest, but in life insurance the requirement of insurable interest is applied somewhat differently than in property and liability insurance. Fourth, life insurance contracts are long-term contracts. Nearly all life policies are intended to continue until the insured's death or at least for several years. Finally the question of over insurance is immaterial in life insurance contracts.

Check your progress 5.3.

1. ***Straight term insurance*** is written for a year or for a specified number of years and terminates automatically at the end of the designated period.

   Renewable term insurance is a type of contract under which the insured may renew his policy before its expiration date without making another medical examination or otherwise proving that he still is insurable.

2. Under straight life insurance, the premiums are payable for the remainder of the insured's lifetime. Under limited payment life insurance, the premiums are payable for the remainder of the insured's lifetime or until the expiration of a specified period, if earlier.

Check your progress 5.4. Disability income insurance is a form of health insurance that provides periodic payments when the insured is unable to work as a result of illness or injury. Medical expense insurance provides for the payment of the cost of medical care that result from sickness and injury.

Review Questions

1. All of the following diseases may hinder an individual from having life insurance. Except;
   A. Cancer
   B. Heart disease
   C. Overweight and underweight
   D. Common cold
   E. Blood pressure
2. _____________is the death of a family head with outstanding unfulfilled financial obligations, such as dependents to support, children to educate and other debt?
   A. premature death
   B. loss of health
   C. old age
   D. unemployment.

3. All of the following are purposes of medical underwriting. Except?
   D. To prevent individuals who have a higher than average probability of loss from obtaining insurance at average rates,
   E. To decide whether to offer or deny the coverage, and
   F. To set the premium rate for the policy
   G. All
   H. None
4. Which of the following provides protection only for a definite period of time?
   A. Term insurance

B. Whole life insurance

C. Endowment insurance

D. Annuities

5. All of the following are common types of term life insurance. Except;

A. 1-year term

B. 20 payment life

C. 10-years term

D. 20-years term

E. term to age 60 or 65

CHAPTER SIX

NON-LIFE INSURANCE

Chapter objectives

Dear learners, after completing this chapter, you should be able to:

- ✓ Understand Fire insurance
- ✓ Explain Marine Insurance
- ✓ Describe Fidelity Guarantee Insurance
- ✓ Explain Theft Insurance
- ✓ Describe Automobile Insurance
- ✓ Understand Aviation Insurance
- ✓ Describe Workers' Compensation Insurance
- ✓ Understand Public Liability Insurance

6.1. Introduction

Non – life insurance consists of property and liability insurance that are designed to provide protection against losses resulting from damage to or loss of property and losses resulting from legal liability.

6.2. Property Insurance

Property may be exposed to a wide range of perils – fire, theft, perils of the sea, and damage by persons (whether accidental or carelessness).

6.2.1. Fire Insurance

Fire insurance is designed to indemnify the insured for loss of, or damage to, buildings and personal property by fire, lighting, windstorm, hail, explosion, and a vast array of other perils. Coverage may be provided for both the direct loss (that is the actual loss represented by the destruction of the asset), and indirect loss (defined as the loss of income and/or extra expenses caused by the loss of use of the asset protected). Originally, only fire was an insured peril, but the number of perils insured against has gradually been expended.

Business may therefore, purchase fire insurance contracts covering their building and its contents, to both the perils of fire and lightning. The standard fire policy promises in its insuring clause to indemnify the insured for “direct loss by fire, lightning and by removal from premises endangered by the perils insured against.”

Insurers, however, may offer protection against a very great number of perils other than fire and lightning by extending the contract in relation to the interest of the insured through additional premium payment. For additional premium, the standard fire policy may be extended to cover any of the following perils: windstorm, explosion, damage by aircraft, damage by vehicle, flood, earthquake fire and shock, bursting of pipes and water damage, etc.

Not all fires are covered under the fire insurance contract, but the exclusions are few:
1. fires caused by war
2. fires intentionally set by public authorities, and
3. fires set intentionally by the insured.

Policy Format

Most of the first page of the standard fire policy is a declarations section in which is printed such information as the insurerd's name and address, the policy inception and expiration dates, the description and location of the property covered, the perils insured against, the amount of insurance applicable to each peril, and the code numbers of the forms and endorsements that are attached. The standard fire policy plus the descriptive form may be modified by one of more other forms or endorsements. These other forms may add, for example, business interruption insurance or extra expense insurance. Endorsements may increase or decrease the coverage. For example, they may add additional perils or exclude some parts of a covered building, such as the foundations.

The first page also contains a brief insuring agreement that states the insurer’s basic promise. The second page describes such matters, as perils not included, uninsurable and excepted, property, cancellation, and requirements in case a loss occurs.

Types of Policies

There are different types of fire policies, some of the important policies include the following:

1. Valued Policy: This is a policy where the value of the property to be insured against fire and allied perils is determined at the time the policy is issued. Under valued policy also referred to as “ordinary fire insurance policy,” the insurer pays the total value of damaged property irrespective of the market value of the property at the time of destruction or loss.
2. Valuable (Automatic Reporting) policy: Under this policy the indemnity to be paid by the insurer is to be determined at the time of the loss or after the loss has taken place. This policy is often used for properties where their value cannot be accurately determined at the inception of the contract, example, a building in process.
3. Floating Policy: Under this policy the insurer covers the interest of the insured on assets in different locations. Comprehensive Policy: This form of fire insurance policy gives full protection, not only against the risk of fire but all related perils such as riot; theft; damage by vehicles, animals or articles from the air, including aircraft and the like.

Rating

The rate of any given policy of protection varies in relation to the nature of the property, location, type of perils insured against, the actual cash value of the property, duration of the policy, and other similar factors that will have a bearing impact on the risk to be assumed by the insurer. In general, after consideration of such factors, fire insurance basic rates are expressed in terms of cents per 100 birr value for a base of one year. In other words the rules of percentages is used in the computation of the premium rates.

To illustrate, assume that a property valued at 80,000 birr was insured at 60¢ per one hundred for a protection of one year, the premium required can be computed as follows:

$$\text{Premium} = \frac{\text{Value of the property}}{100} \times \text{Protection rate}$$

$$= \frac{\text{Birr } 80{,}000}{} \times 0.60$$

100

= Birr 480, premium for one year

Once the premium for one year is determined, it can be extended for any number of years as required by multiplying the annual rate and the long-term rate that can be determined by the company as in case of the mortality rate for different stages of age. To illustrate let us assume that the long-term rates for a given insurer are determined as follows:

Term	Long-term rates
2 years	1.85 times the annual rate
3 "	2.70 " " "
4 "	3.50 " " "
5 "	4.40 " " "

Further, if we assume that there is an insured who wants to have an insurance policy for his 20,000 birr worth at the annual rate of 25¢ per one hundred birr value, we can determine the premium required for one year or three years policy as follows:

$$\text{Premium for one year} = \frac{\text{Br. } 20{,}000}{100} \times 0.25 = \text{Br. } 50$$

Premium for three years = Br. 50 X 2.70 = Br. 135

Similarly, a house valued at 24,000 Br. is insured annually for 80 percent of its value at 36 ¢ per one hundred birr, the premium for four years can be computed as follows:

Premium base (insurable value) is:

$$\text{Br. } 24{,}000 \times \frac{80}{100} = \text{Br. } 19{,}200$$

Annual premium = 19,200 X 0.36 = Br.69.12

100

Premium for four years = Br. 69.12 X 3.5 = Br. 241.92

Settlement of Losses

Settlement of loss depends on the type of policy carried or the agreement made at the inception of the policy between the insurer and the insured. For illustration consider the following cases:

1) Settlement under ordinary fire insurance policy (OFIP) or standard fire insurance policy. Here the insurer pays the full amount of the loss up to the face value of the policy.

Example: A house that was valued at Br. 30,000 was insured for Br. 25,000. If a loss of 20,000 birr 25,000 birr and 30,000 birr has occurred, the insurer will pay 20,000 birr, 25,000 birr and 25,000 birr respectively.

2) Settlement of loss from more than one insurer: when the insured has carried insurance from more than one insurer and a loss has occurred the different insurers would contribute to the loss on pro rata basis up to the amount of the face value of the policy on the amount of the actual loss.

Example: An apartment building was insured under the following: with insurer 'A' for Br. 50,000 and with insurer 'B' for Br. 30,000. Assuming a loss of Br. 32,000 has occurred, the two insurers would contribute to the loss as follows:

$$A = \frac{\text{Br. } 50{,}000}{\text{Br. } 80{,}000} \times \text{Br. } 32{,}000 = \text{Br. } 20{,}000$$

$$B = \frac{\text{Br. } 30{,}000}{\text{Br. } 80{,}000} \times \text{Br. } 32{,}000 = \text{Br. } 12{,}000$$

Total indemnity for the insured = Br. 32,000

3) Settlement under coinsurance fire policy. When the policy is carried on the basis of coinsurance clause the insurer will have the right to make the insured pay part of the loss if he is underinsured.

Example: Assume that an insured six months ago purchased Br.100, 000 of insurance on property with an actual cash value of Br.150, 000. Assume further that the insurance contract contained an 80 percent coinsurance clause. If the property is worth 200,000 birr today, the amount the insurer would pay toward a loss today would be computed as follows:

$$\text{Indemnity} = \frac{\text{Amount of insurance carried}}{\text{(Coinsurance \%) value at time of loss}} \times \text{loss}$$

But not to exceed the loss or the amount of insurance, or

$$\frac{\text{Br. } 100{,}000}{0.80(\text{Br. } 200{,}000)} \times \text{loss}$$

$$= 5/8 \times \text{loss}$$

If the loss were Br. 80,000 the insurer would pay Br. 50,000.

If the loss were Br. 170,000, the insurer would pay Br. 100,000, the amount of insurance. The answer will always be the amount of insurance when the loss exceeds the required insurance.

The term coinsurance has different meanings in insurance. In health insurance the coinsurance clause is simply a straight, deductible, expressed as a percentage. Its purpose in health is to make the insured bear a given proportion, say 20%, of every loss, because it has been found through experience that without such a control, the charges for doctors and other medical services tend to be greatly enlarged, thus increasing the premium to a prohibitive level. The insured that must personally bear a substantial share of the loss is less inclined to be extravagant in this regard.

In fire insurance, the coinsurance clause is a device to make the insured bear a portion of every loss ***only when underinsured***.

Check your progress 6.1.

Explain the main fire insurance not covered under the fire insurance contract /policies.

6.2.2. Marine Insurance

Marine insurance is designed to protect against financial loss resulting from damage to, or destruction of owned property, due to the perils primarily connected with transportation. It is a contract of transport insurance whereby the insurer undertakes to indemnify the insured in the manner and to the extent thereby agreed, against losses and damages involved in being transported. In consideration of the payment of a certain sum called the “premium,” the insurer (underwriter), agrees to indemnify the insured (the client) against loss or damage caused by certain specified perils, termed “maritime perils.

The marine Cargo Policies of Ethiopian Insurance Corporation are internationally accepted, worded and standardized insurance policies. Accordingly, the coverage it affords is to indemnify the insuring public as per the terms, conditions, warranties, and exceptions of the policy in respect of loss of or damage to the cargo insured mainly resulting from maritime perils: (heavy weather, stranding, collision, etc.) or inland-transit accident (such as collision, overturning of the carrying conveyance, explosion, fire, theft, non-delivery of the goods, etc.)

Marine insurance is divided into two classes: ocean marine and inland marine.

Ocean Marine Insurance

Contracts concerned primarily with water transportation are considered to be ocean marine insurance. For a considerable time ocean marine insurance was the only kind of modern insurance.

Insurance has been developed and has attained a high degree of refinement in modern-day commerce. As world trade grew and values at risk became larger, the need for coverage become more apparent. Larger ships and more refined instruments of navigation made long voyages possible, and with this development insurance protection was looked upon as almost a necessity.

Major Types of Coverage

The four chief interests to be insured in an ocean voyage are:

1. The vessel, or the hull
2. The cargo
3. The shipping revenue or freight received by the ship owners
4. Legal liability for proved negligence

If a peril of the sea causes the sinking of a ship in deep water, one or more of these losses can result. However, each of these potential losses can be covered under various insurance policies.

Hull Policies

Policies covering the vessel itself or hull insurance are written in several different ways. The policy may cover the ship only during a given period of time, usually not to exceed one year. The insurance is commonly subject to geographical limits. If the ship is laid up in port for an extended period of time, the contract may be written at a reduced premium under the condition that the ships remain in port. The contract may cover a builder's risk while the vessel is constructed.

Cargo Policies

Contracts insuring cargo against various types of loss may be written to cover only during a specified voyage, as in the case of a hull contract, or on an open basis. Under the open contract, there is no termination date, but either party may cancel upon giving 30 days' written notice to the other; otherwise the insurance is continuous. All shipments, both incoming and outgoing, are automatically covered. The shipper reports to the insurer at regular intervals as to the values shipped or received during the previous period.

Cargo policies written on a voyage basis cover that single voyage, but open policies usually cover all shipments made on and after a certain date. If an open policy is cancelled, the coverage continues on shipments made prior to the cancellation date.

Freight Coverage

The money paid for the transportation of the goods, known as freight, is an insurable interest because in the event that freight charges are not paid, someone has lost income with which to reimburse expenses incurred in preparation for a voyage. The earning of freight by the hull owner is dependent on the delivery of cargo unless this is altered by contractual agreements between the parties. If a ship sinks, the freight is lost and the vessel owner loses the expenses incurred plus the expected profit on the venture. The carrier's right to earn freight may be defeated by the occurrence of losses due to perils ordinarily insured against in an ocean marine insurance policy. The hull may be damaged so that it is uneconomical to complete the voyage, or the cargo may be destroyed, in which case, of course, it cannot be delivered. Also the owner of cargo has an interest in freight arising from the obligation to pay transportation charges. Freight insurance is normally made a part of the regular hull or cargo coverage instead of being written as a separate contract.

Legal Liability for Proved Negligence

In ocean marine insurance policies the hull owner is protected against third – party liability claims that arise from collisions. Collision loss to the hull itself is included in the peril clause as one of the perils of the sea. The liability insurance is intended to give protection in case the ship owner is held liable for negligent operation of the vessel which is the proximate cause of damage to certain property of others. The vessel owner or agent of that owner who fails to exercise the proper degree of care in the operation of the ship may be legally liable for damage to the other ship and for loss of freight revenues.

Loss Settlement

If the cargo is totally destroyed, the insurer must pay the face value of the policy. If the cargo is only partially damaged the insured and the insurer must agree on the percentage of damage. If they cannot agree, the damaged cargo is to be sold for the account of the owner and the amount received compared, with what would have been received had the cargo been in sound condition. In either case, the liability of the insurer is determined by applying the percentage of damage to the amount of insurance.

For example, assume that a cargo insured for 4,000 birr could have been sold for 6,000 birr in sound condition but are worth only 4,500 birr in damaged condition. Since, the damage is 25 percent; the insurer must be pay 25 percent of 4,000 birr. Note that if the amount of insurance is less than the value of the cargo in sound condition, the amount of the insurance payment is equal to the amount under a 100 percent coinsurance clause.

Inland Marine Insurance

Inland marine cargo insurance covers shipments primarily by land or by air. Although the trucker, railroad, or airline may be a common carrier with the extensive liability (balled liability exposures), the shipper may still be interested in cargo insurance because:

1. It is usually more convenient to collect from an insurer than a carrier,
2. A common carrier is not responsible for perils such as an act of war, exercise of public authority, or inherent defects in the cargo.

No one cargo insurance contract exists. Instead, different insurers may issue different contracts, and a given insurer will tailor the contract to the insured's needs. A convenient way to classify the contracts is according to the type of transportation covered. One or more of the following modes of transportation may be covered-railroad, motor truck, or air. Shipments by mail are covered under separate first- class mail, parcel port, or registered mil insurance.

Check your progress 6.2.   List the four chief interests to be insured in an ocean voyage.

6.2.3. Fidelity Guarantee Insurance

Fidelity guarantee insurance indemnifies an employer for any loss suffered at the hands of dishonest employees. It provides guarantee against loss through the dishonesty or incapacity of individuals who are trusted with money or other property and who violate this trust.

Cashiers and others who handle money, and other persons employed in positions of trust, are frequently required by their employers to provide security as protection against their personal dishonesty usually in the form of fidelity guarantee policy. The policy indemnifies the employer against losses from the dishonesty of his employees. The employer himself often takes out the policy. He may insure a number of employees either individually or in a group basis under a variety of policies.

Unlike other policies, fidelity guarantee policies specify a time limit to discover the loss and report it to the insurer after the resignation, dismissal, retirement, or death of the employee in question. Hence, while the insurer undertakes to make the insured’s financial losses lighter, it is also a requirement that the insured should

1) Inform the insurer of such fraudulent act immediately upon discovery
2) Either obtain admission of fraud or take appropriate legal action to establish fraud, and
3) Cooperate with the insurer to bring the defaulter before the court of law.

In addition, before accepting the risk the insurer considers employer’s type of establishment, methods of selecting employees, working conditions, emoluments and benefits in relation to the responsibility assigned, supervision and control measures effectiveness.

6.2.4. Theft Insurance

Although theft is generally one of the perils covered under an all risks policy, the contract usually excludes or limits the amount of protection on certain types of property, such as money, that is highly susceptible to theft losses.

Theft insurance protects a business against losses by burglary, robbery, or some other form of theft by persons other than employees. Fidelity guarantee insurance or dishonesty insurance covers losses caused by dishonest acts of employees.

Burglary is the act of unauthorized entry, with criminal intentions into any building or residence. It is the unlawful taking of property from within premises closed for business, entry to which has been obtained by force. There must be visible marks of the forcible entry. Thus, if a customer hides in a store until after closing hours, or enters by an unlocked door, steals some goods, and leaves without having to force a door or a window, the definition of burglary is not met under a burglary policy.

Robbery, on the other hand, is defined to mean the unlawful taking of property from another person by force, by threat of force, or by violence. Personal contract is the key to understanding the basic characteristic of the robbery peril. However, if a burglar enters a premise and steals the wallet of a sleeping night guard, this crime is not one of robbery because there was no violence or threat thereof. The person robbed must be cognizant of this fact. On the other hand if the thief knocks out or kills the guard and then robs the guard or the owner, the crime would be classed as robbery. Robbery thus means the forcible taking of property from a messenger or a custodian.

According to the EIC burglary policy it does not cover losses or theft committed by:

1) Members of the insured’s household,
2) The insured himself or his assignee,
3) Theft connected with war (declared or undeclared) or any kind of population uprising, or
4) Theft of valuables including documents and works of art unless agreed pre hand. In addition, failure to disclose material facts at the time of writing the policy will also make any theft claims null and void.

6.3. **Liability Insurance**

Liability insurance contracts *obligate the insurer to pay amounts the insured becomes legally obligated to pay as a result of covered injury to others*. In addition, the insurer is obligated to provide legal defense services for the insured against liability claims to which the coverage applies.

Basis of Legal Liability

Each person has certain legal rights. *A legal wrong is a violation of a person's legal rights, or a failure to perform a legal duty owed to a certain person or to society as a whole*.

The peril of legal liability arises out of the general rule of law that people are responsible for any loss (injury) they cause another to suffer. The law creates three categories for describing situations in which one person injuries another:

- Torts or civil wrongs.
- *Breaches of contracts*. (This can occur when one party fails to keep a legally binding agreement).
- *Criminal acts*. (These actions are forbidden by law and can result in fines, imprisonment, or other penalties).

Categories of Liability Insurance

One of the major exposures facing every business is the possibility of legal liability: the chance that the firm or its owners may be sued for bodily injury or property damage which arises out of the activities of the business.

The liability exposures arising from business operations are both numerous and varied, and for the business firm as for the individual, there is virtually no calculable limit to the losses that can arise from legal liability. The sources from which liability can result multiplies with the complexity of the business, and as a result, the field of commercial liability is significantly more complicated than the field of liability coverages for the individual.

Business General Liability Insurance: Given the wide scope of most business activities the possibility of a firm's is sued is great. We can categorize business general liability exposures as follows:

- Direct liability
- Vicarious liability

- Contractual liability

Direct liability *arises out of the firm's own actions*. Most of these exposures fall into the following three categories.

Premises and Operations: Many lawsuits result from the ownership, use, and maintenance of business building and grounds. For example, assume an employee neglects to clean an oil spill from a floor, resulting in a patron's slipping and being injured. The patron then sues the firm, alleging the injury resulted from the firms negligence.

Products Liability: Products liability refers to the legal liability of manufacturers, wholesalers, or retailers of products to persons who incur bodily injuries or property damage from a product. A manufacturer or seller of a product can be held liable as a result of improper product design, improper assembly of the product, failure to warn of inherently dangerous characteristics, and deceptive advertising.

Completed Operations: Service firms like contractors and plumbers are sued when plaintiffs claim their work was improperly done or left undone resulting in an injury.

Vicarious liability *also called indirect liability, most often arises when a firm hires an independent (sub) contractor*. If the independent contractor injuries a third party, the firm hiring the contractor may find itself named in the lawsuit along with the independent contractor. The plaintiff would claim the firm was negligent in hiring, informing, or supervising the contractor.

Contractual liability arises from contractual agreements in which it is stated that some losses, if they occur, are to be borne by specific parties.

Business Liability Umbrella Policy: As the risk manger contemplates worst-case possibilities, surety the possibility of being sued successfully for an amount in excess of available policy (comprehensive general liability policy) limits must come to thought. To deal with this possibility, a commercial *umbrella policy* can be purchased. This policy provides coverage after underlying liability policies have been exhausted. In this case, the **umbrella policy** is called *excess insurance* because the umbrella policy pays only or losses in excess of the underlying limits. For example, assume the General Bean Factory is held responsible for injuring Ato Zeynu, a visiting can salesperson. The jury returns Birr 50,000 verdict in favor of Ato Zeynu. General Bean's comprehensive general liability policy has a coverage limit of Birr 10,000 for such bodily injuries.

If General Bean has a Birr 50,000 liability umbrella, it would pay Birr 40,000 of the award, which along with the comprehensive general liability policy coverage of Birr 10,000 would fully compensate Ato Zeynu.

Professional Liability Insurance: The term *professional* refers to a person with special skills, education, or knowledge compensated to provide a service to the public.

Professional liability insurance sometimes called *malpractice insurance or errors and omissions insurance typically commits an insurer to pay all sums that the insured becomes legally obligated to pay as damages resulting from providing or failing to provide professional services*. Illustrative of professional liability insurance contracts are policies issued to druggists, hospitals, physicians, surgeons, dentists, lawyers, accountants, members of board of directors, and insurance agents and brokers. Under these policies, the insurer agrees to pay all sums that the insured becomes legally obligated to pay because of damages arising out of malpractice, error, or mistakes in rendering or failing to render the appropriate professional services.

6.3.1. Automobile Insurance

Most automobile insurance contracts are schedule contracts that permit the insured to purchase both property and liability insurance under one policy. The contract can be divided, however, into two separate contracts one providing insurance against physical damage to automobiles and the other protecting against potential liability arising out of the ownership or use of an automobile.

The object of automobile insurance is to indemnify the insured against accidental loss or damage to his auto and/or his liability at law for bodily injury or material damage caused by the use of the motor vehicle, subject to the terms and conditions and to the cover granted.

There are two main types of insurance covers in both motor commercial and motor private insurance, viz.

Comprehensive cover and third party cover.

a) Comprehensive Cover:- A comprehensive cover provides protection against a wide range of contingencies. It includes indemnity in respect of the insured's legal liability for death or bodily injury or damange caused to the property of third parties arising out of the insured's vehicle. The policy also indemnifies the insured in respect of all damages to the vehicle caused by an accidental, external physical means as a result of collision, overturning, fire, self-ignition, lightning, explosion, and burglary.

The policy excludes, among other things, the following:

- Consequential loss sustained by the insured,
- Wear and tear /depreciation/ of motor vehicle,
- Mechanical or electrical breakdown of failure of any part of a motor vehicle,
- Death of or injury to members of insured family or his employees,
- Damage to property of the insured or held by him in trust or in custody.

b) Third Party Cover: - There are two parties involved in an insurance contract, the insurer and the insured. Accordingly, any other person who may become linked in some way with the insurance is regarded as third party. A third party only policy covers the insured's legal liability (i.e., property damage, death, and injury) towards other people in the event of an accident arising out of the use of a motor vehicle.

A third party policy may be extended to include at an additional premium the policy holder's vehicle against the risks of fire and theft as follows:-

- Third party, fire and theft
- Third party and fire
- Third party and theft.

The basic cover guaranteed by the Ethiopian Insurance Corporation's policies can be extended to cover additional risks at an additional premium.

Classification of Risks

There are various categories of automobile risks and a distinction is made in accordance with the use and type of the vehicles. The main classifications are as follows:-

1. Private Vehicles: - A motor vehicle used solely for private (social, domestic, pleasure, professional purpose or business calls of the insured) purposes are classified as "private vehicles" and are insured under the "private motor vehicles policy." The term "private

purposes" does not include use for hiring, racing, and carriage of goods in connection with any trade or business.

2. Commercial Vehicles:- A wide rage of vehicles which carry goods and passengers are classified under this heading and different rates of premium are applied depending on their use and type.

6.3.2. Aviation Insurance

Aviation insurance is a comparatively recent phenomenon that has been developing with the development of passenger planes, particularly "Jumbo Jets." The overall increase in the number of different passenger planes and the increase in their value called for aviation insurance. Aviation insurance is an insurance that provides protection against loss of or damage to the different types of passenger and cargo planes, and associated losses.

Like automobile insurance, aviation insurance includes both property insurance, on the planes and liability insurance.

Types of Policies

The most common types of policies under aviation insurance are:-

1) Aircraft comprehensive policy
2) Freight liability policy which includes airmail liability policy.

Aircraft Comprehensive Policy:- This policy covers against three type's of potential losses:

a) Accidental damage to the aircraft, where protection is provided for damage to the aircraft by accidents except those that are specifically excluded on the policy;
b) Third party legal liability, where the insurer assumes the responsibility to indemnify the insured for death of or bodily injuries to, third parties (excluding passengers) and ground damage;
c) Legal liability of the insured in respect of death of, or bodily injuries to, passengers. Passengers' baggage and personal effects, which are registered, are also covered by the insurance.

6.3.4. **Public Liability Insurance**

Public liability insurance was developed with employees' liability insurance. Once, public opinion had accepted the morality of being able to insure one's liability, and the availability of such insurance became known, the business grew rapidly.

The policy provides compensation for legal liability for death, injury, or disease to people other than employees (which should be covered by employers' liability policy). Public liability insurance provides what is popularly termed "third party cover". It indemnifies the insured in respect of his legal liability for accidents to members of the public, or for damage to their property, occurring in circumstances set out in the policy.

Under public liability insurance, policies are available to cover liabilities attaching to:

a) Pedal cyclists

b) Private individuals. The so called "personal liability" policy is available to protect private persons from claims arising due to injury caused by such things as polished floor, a loose rooftile or by pet animal. A pedestrian, for example, can incur heavy liabilities by causing a serious road accident.

c) Product liability: liability arising out of defects of goods produced or sold.

d) Professional men such as doctors, dentists, solicitors, and bankers may take out policies to protect themselves from claims arising out of negligence or mistake committed in the exercise of their professional duties.

It should be noted that this form of cover might include or be included with other risks. For example, a householder's policy covering loss or damage to the building an/or contents can be extended to cover the personal liability of the owner and his family towards the public. Whereas liability arising from the use of motor vehicles is always exclude, and must be covered by a separate motor policy.

Check your progress 6.3.

1. According to the Ethiopia insurance corporation (EIC) burglary policy it does not cover loss or theft committed by

Check your progress

Make sure that your level of understanding. Hence if you clearly understand the given concept (s) put (✓) mark in the box; Other wise put (x) in the box and reread the section again.

- Property insurance ☐
- Fire insurance ☐
- Type of policies ☐
- Rating ☐
- Settlement of losses ☐
- Marine insurance ☐
- Ocean marine insurance ☐
- Inland marine insurance ☐
- Liability insurance ☐
- Aviations insurance ☐

Chapter summary

Non – life insurance consists of property and liability insurance that are designed to provide protection against losses resulting from damage to or loss of property and losses resulting from legal liability. Property may be exposed to a wide range of perils – fire, theft, perils of the sea, and damage by persons (whether accidental or carelessness).
Fire insurance is designed to indemnify the insured for loss of, or damage to, buildings and personal property by fire, lighting, windstorm, hail, explosion, and a vast array of other perils. In general, after consideration of such factors, fire insurance basic rates are expressed in terms of cents per 100 birr value for a base of one year.

Marine insurance is designed to protect against financial loss resulting from damage to, or destruction of owned property, due to the perils primarily connected with transportation. The four chief interests to be insured in an ocean voyage are: (1) The vessel, or the hull (2) The cargo (3) The shipping revenue or freight received by the ship owners and (4) Legal liability for proved negligence. Theft insurance protects a business against losses by burglary, robbery, or some other form of theft by persons other than employees. Fidelity guarantee insurance or dishonesty insurance covers losses caused by dishonest acts of employees.

Liability insurance contracts obligate the insurer to pay amounts the insured becomes legally obligated to pay as a result of covered injury to others. In addition, the insurer is obligated to provide legal defense services for the insured against liability claims to which the coverage applies. We can categorize business general liability exposures as Direct liability, Vicarious liability and Contractual liability. Aviation insurance is a comparatively recent phenomenon that has been developing with the development of passenger planes, particularly "Jumbo Jets." The most common types of policies under aviation insurance are (1) Aircraft comprehensive policy and (2) Freight liability policy which includes airmail liability policy. Public liability insurance was developed with employees' liability insurance. Once, public opinion had accepted the morality of being able to insure one's liability, and the availability of such insurance became known, the business grew rapidly.

Answer for check your progress

Check your progress 6.1.

Not all fires are covered under the fire insurance contract, but the exclusions are few:

4. fires caused by war
5. fires intentionally set by public authorities, and
6. fires set intentionally by the insured.

Check your progress 6.2.

B. The vessel, or the hull
C. The cargo
D. The shipping revenue or freight received by the ship owners
E. Legal liability for proved negligence

Check your progress 6.3.

A. Members of the insured's household
B. The insured himself or his assignee
C. Theft connected with war (declared or undeclared) or any kind of population uprising, or
D. Theft of valuables including documents and works of art unless agreed pre hand. In addition, failure to disclose material facts at the time of writing the policy will also make any theft claims null and void.

CHAPTER SEVEN

RE- INSURANCE

Chapter objectives

Dear learners, after completing this chapter, you should be able to:

- ✓ Understand meaning of Re-insurance
- ✓ Describe the reason for Re-insurance
- ✓ Identify the types of Re-insurance

7.1 Meaning of Re-Insurance

Reinsurance is the shifting of part or all of the insurance originally written by one insurer to another. *Reinsurance* is an arrangement by which the primary insurer that initially writes the insurance transfers to another insurer (called the reinsurer) part or all of the potential losses associated with such insurance. The insurance company that initially writes the policy for the insured is called the **primary insurer** (**ceding company**), and the insurance company that accepts part or all of the insurance from the ceding company is the **reinsurer**. The amount of the insurance that the primary/ceding insurer retains is called the **retention limit** (**net retention**), and the amount insurance that is ceded to the reinsurer is known as the **session**. The reinsurer may transfer some of the insurance to another reinsurer. The process by which a reinsurer passes on risks to another reinsurer is known as **retrocession**.

7.2 Reasons for Reinsurance

The main purposes of reinsurance are the following:

1. To increases the underwriting capacity of the insurer;
2. To stabilize profits;
3. To reduce drain on surplus because of the unearned premium reserve; and
4. To protect against a catastrophic loss.

7.3 Types of Re-Insurance Agreement

There are two basic types of reinsurance: facultative and treaty reinsurance.

1. **Facultative Reinsurance**

Facultative reinsurance is an optional, case-by-case method that is used when the ceding company receives an application for insurance that exceeds its retention limit. Facultative reinsurance means the primary company shops around for reinsurance before the insurance policy becomes effective. If a willing reinsurer can be found, the primary company and reinsurer can then enter into a valid contract.

2. **Treaty Reinsurance**

Treaty reinsurance (**automatic reinsurance**) involves a standing agreement with a particular reinsurer. Treaty reinsurance means the primary insurer has agreed to cede insurance to the reinsurer and the reinsurer has agreed to accept the business. The amount of insurance sold by the primary insurer that is transferred and the services provided by both parties are specified by contract. There are various types of treaty reinsurance arrangements that differ according to the liability of the reinsurer.

Types of automatic treaties

(1) Quota share treaty

(2) Surplus share treaty

(3) Excess of loss treaty

(4) Reinsurance pool

1. Quota Share Treaty

Under a quota-share treaty, the ceding company and reinsurer agree to share premiums and losses based on some proportion. The ceding insurer's retention limit is stated as a percentage rather than as a Birr amount. Premiums and losses are then shared based on this proportion. Pro-rata reinsurance (quote-share treaty) is the proportionate sharing of premiums, losses, and expenses between the primary insurer and the reinsurer. For example, the primary insurer may decide to retain 70% of new business and transfer 30% to the reinsurer, and dividing income, losses, and expenses by the same proportion.

2. Surplus Share Treaty

Under a surplus-share treaty, the reinsurer agrees to accept insurance in excess of the primary insurer's retention limit, up to some maximum amount. The primary insurer and reinsurer then share premiums and losses based on the fraction of total insurance retained by each party. The retention limit for each policy, known as a **line** is specified as a Birr amount, and the reinsurer does not participate unless the policy amount exceeds this retention limit. If there is a loss, then
the primary insurer and the reinsurer pay for the same proportion as the provided coverage for that policy. For example, suppose that ABC property insurance has a retention limit of Birr 200,000

(called a line) for a single policy and that four lines or Birr 800,000 are ceded to XYZ reinsurer. Assume that Birr 500,000 property insurance is issued. Then ABC property insurance takes the first Birr 200,000 of insurance or two-fifths (2/5) and XYZ reinsurer takes the remaining 300,000 or three-fifths (3/5). These fractions then determine the amount of loss paid by each party. If a Birr 50,000 loss occurs, ABC property insurance pays Birr 20,000 (two-fifths)
and XYZ reinsurer pays the remaining Birr 30,000 (three-fifths). This can be shown below:

Amount of policy	**ABC property insurance (line)**	**XYZ reinsurer**
Birr 500,000	Birr 200,000	Birr 300,000
Amount of loss		
Birr 50,000	20,000 (50,000 * 2/5)	30,000 (50,000 *3/5)

The main benefit of the surplus-share treaty is that it increases the primary insurer's underwriting capacity, but, because the coverage provided by the reinsurer depends on each policy, there is more recordkeeping and greater administrative expenses.

3. Excess of Loss Treaty

An excess-of-loss treaty is designed largely for a catastrophe loss. Losses in excess of the primary company's retention limit are paid by the reinsurer up to some maximum limit. An excess-of-loss treaty can be used to provide protection against a catastrophic loss. The excess-of-loss treaty can be written to cover a single exposure, or it can apply to a single occurrence, such as a catastrophic loss from a windstorm or hurricane.

Example: Assume that the reinsurer agrees to pay all losses in excess of Birr 50,000 up to a further Birr 200,000; the way in which various losses are divided is as follow:

If loss is Birr,	**Primary insurer pays**	**Excess reinsurer pay**
40,000	40,000	Null
50,000	50,000	Null
100,000	50,000	50,000
250,000	50,000	200,000

3. Reinsurance Pool

A reinsurance pool is an organization of insurers that underwrites insurance on a joint basis. Pools are formed because a single insurer alone may not have the financial capacity to write large amounts of insurance, but the insurers as a group can combine their financial resources to obtain the necessary capacity. Each pool member agrees to pay a certain percentage of every loss.

Another arrangement is similar to the excess-of-loss reinsurance treaty. Pool members are responsible for their own losses below a certain amount. Losses exceeding that amount are shared by all pool members.

Chapter summary

Reinsurance is the shifting of part or all of the insurance originally written by one insurer to another. Reinsurance is an arrangement by which the primary insurer that initially writes the insurance transfers to another insurer (called the reinsurer) part or all of the potential losses associated with such insurance. The main purposes of reinsurance are (1) To increases the underwriting capacity of the insurer; (2) To stabilize profits; (3) To reduce drain on surplus because of the unearned premium reserve; and (4) To protect against a catastrophic loss. Facultative reinsurance is an optional, case-by-case method that is used when the ceding company receives an application for insurance that exceeds its retention limit. Treaty reinsurance (automatic reinsurance) involves a standing agreement with a particular reinsurer. Treaty reinsurance means the primary insurer has agreed to cede insurance to the reinsurer and the reinsurer has agreed to accept the business. Under a quota-share treaty, the ceding company and reinsurer agree to share premiums and losses based on some proportion. Under a surplus-share treaty, the reinsurer agrees to accept insurance in excess of the primary insurer's retention limit, up to some maximum amount. An excess-of-loss treaty is designed largely for a catastrophe loss. Losses in excess of the primary company's retention limit are paid by the reinsurer up to some maximum limit.

A reinsurance pool is an organization of insurers that underwrites insurance on a joint basis. Pools are formed because a single insurer alone may not have the financial capacity to write large amounts of insurance, but the insurers as a group can combine their financial resources to obtain the necessary capacity.

CHAPTER EIGHT

THE INSURANCE BUSINESS IN ETHIOPIA

Chapter objectives

After completing this chapter , you are expected to;

- Understand the development of insurance in Ethiopia
- Explain the regulation of insurance companies

8.1. Development of insurance in Ethiopia

Traditional protection of risk in Ethiopia can be found in the from of Edir and Equip Where people get in some financial contribution to save themselves and losses of properties from unexpected troubles in the future.

Insurance business in its modern sense in Ethiopia started in 1905when the than Bank of Abyssinia got underwriting authority in the from of A agency for Fire and Marine Insurance business. This was further followed bubaline when it set up a branch office in Addis in 1923.the first local insurance company was formed in 1951. Later on the number of insurance companies reached which two Withdrew from business in

As result of nationalization of these companies in 1975, proclamation No. 68/1975 declared to from the Ethiopian insurance Corporation with a capital of Birr 11 million. was since nationalization its premium production on the average has continual grown at the rate of 26./5% in 1976 to Birr 300 million in 1994/ 95. while its claims increased from 20 million in 1976 to Birr 160 million in 1991/92.

With the declaration of proclamation No. 86/94, which allowed the licensing and supervision of insurance companies, there emerged seven more than private insurance companies with a total capital of nearly Birr 205 million. The total market that was Birr 50 million 1976 reached Birr 345 million in two decades time. Insurance companies have reinsurance arrangements with reputable international reinsures mainly from Munich Re, etc.

Though there is a growing performance in the industry over the last few years, the industry is facing some problems. The major problems of the existing insurance companies in Ethiopia today are listed below in the order of order of importance:

i. Lack of adequate public awareness
ii. Shortage of skilled manpower
iii. Price cutting
iv. Lack of professional epics
v. Unfavorable policies
vi. Lack of proper data to conduct business analysis

8.2. Regulation of Insurance Companies

1. Why do we Need Regulation?

As a tarring point, it s hold be made clear that there are three are important differences of opinion among economists on the subject of government regulation, and much of the controversy concerning insurance regulation stems from these differences. While there is little disagreement in principle on the need for some from of government control of business, there is s serious disagreement on the form that this control should take,

Approaches to Government Control of Business

Broadly speaking, government control of business takes one of two forms, paralleling the tow economic philosophies just noted, antitrust and regulation.

Antirust concentrates on maintaining competition, while requires the application of specific performance standards to the firms in an industry. The principal objective of antirust that lead to excessive concentration, and abating market power. Theory of antitrust is competition, competition will result in the public welfare.

Answer for review questions

Chapter One

Part I: True or false

1. False
2. True
3. False
4. True

Part II: Multiple choices

1. **A**
2. **D**
3. **D**
4. **B**
5. **D**
6. **A**

Chapter Two

Part I: True or false

1. True
2. False
3. True
4. False
5. True
6. False

Part II: Multiple choices

1. **F**
2. **C**
3. **A**
4. **A**
5. **C**
6. **B**
7. **B**
8. **D**

Chapter three

Part I: True or false

1. True
2. False
3. False
4. True
5. True

Part II: Multiple choices

1. **F**
2. **D**
3. **B**
4. **B**
5. **F**

Chapter four

Part I: True or false

1. True
2. False
3. False
4. True
5. True

Part II: Multiple choices

1. **F**
2. **A**
3. **C**
4. **F**
5. **A**

Chapter five

1. **D**
2. **A**
3. **E**

4. **A**
5. **B**

Wollo University

College of Business and economics

Department of accounting and finance

Distance and continuing program

Individual Assignment on Risk management and Insurance

Name of candidate___________________________

Id. No.______________________________________

Part I: True or false Questions (10%)

Write true if the statement is correct or false if it is incorrect (0.5pt each)

1. It is simple to generalize about the risks a given organization is likely to face.
2. Unlike static risks, dynamic risks are a source of gain to the society in the long-run.
3. Measurement of loss exposures is a difficult task as compared to the identification of loss exposures for pure risks.
4. There is no best method of risk identification procedures rather the choice depends up on the nature and size of a business.
5. Insurance policy checklists do not include uninsurable pure risks.
6. No single method or procedure of risk identification is free of weakness or can be called perfect.
7. Avoidance measures attack risk by lowering the chance that a loss will occur or by reducing its severity if it does occur.
8. Speculation typically involves both risk transfer and risk reduction.
9. The basic purpose of insurance is to provide indemnity to the members of the group who suffer losses.
10. Unlike subrogation, contribution supports the principle of indemnity and applies only to contracts of indemnity.
11. Robber is the unlawful taking of property from another person by force.
12. Burglary is the act of unauthorized entry, with criminal intentions into any building on residence.
13. Liability insurance is a contract that protects the insured against legal responsibility for losses to the person or property of others.

14. Contracts concerned primarily with water transportation are considered to be none ocean marine insurance.
15. Fidelity guarantee insurance indemnities one employee for any loss suffered at the hands of dishonest employer.
16. Theft insurance protects a business against losses by burglary, robbery or some other form of theft by persons other than employees.
17. Automobile insurances contracts are schedule contracts that permit the insured to purchase both property and liability insurance under one policy.
18. Public liability insurance was developed with liability insurance.
19. Settlement of loss does not depend on the type of policy carried or the agreement made of the inception of the policy between the insurer and the insured.
20. The marine cargo policies of Ethiopia Insurance Corporation are not internationally accepted, worded, and standardized insurance policies.

Part II: Multiple choice Questions (13%)

Choose the best answer among the given alternatives for the following questions (1pt each)

1. The following are examples of fundamental risks, except

A. Inflation D. Earthquakes
B. Drought E. All of the above
C. War F. None of the above

2. Of the following identify the valid statement

A. In the speculative risks, the possibilities are either loss or no loss
B. Capital investment is an example of pure risk
C. Objective risk is the relative variation of actual loss from the desired loss
D. Static risks are the result of economic un stability
E. All of the above F. None of the above

3. Of the following one is not the risk management objective after a loss occurs

A. Social responsibility D. Survival
B. Meeting external obligation E. Earning stability
C. Continued growth F. None of the above

4. Identify the incorrect statement among the following

A. Loss can be controlled by avoiding the property, person or activity that rise possible loss
B. Unlike the avoidance technique, loss control deals with an exposure that the firm does not wish to abandon
C. Managers can handle their business risk by allocating the business asset in different location
D. Neutralization or hedging is one of the risk handling technique by the organization's on fund
E. Self-insurance is widely used in workers compensation insurance
F. None of the above

5. ______________ are graphic representations of a sequential process?

A. Loss Exposure Checklists
B. Insurance Policy Checklists
C. Risk Analysis Questionnaires
D. Flow Charts

6. Which of the following include those loss exposures to loss where the magnitude of losses could lead to bankruptcy.

A. Critical risks
B. Important risks
C. Unimportant risks
D. All

7. Which of the following is not the benefit of insurance?

A. Indemnification
B. Reduced Reserve Requirements
C. Capital Freed for Investment
D. Moral Hazard.
E. Reduced Cost of Capital

8. Which of the following is different from others concerning insurence?

A. Loss Control
B. Operating Expenses

C. Morale Hazard
D. Moral Hazard

9. Which of the following principle imposes a higher standard of honesty on parties to an insurance agreement than is imposed in ordinary commercial contracts?

A. Principles of Subrogation
B. Principles of Utmost Good Faith
C. Principles of Contribution
D. Doctrine of Proximate Cause

10. Which of the following is / are the requirements of insurance contracts?

A. the agreement must be for a legal purpose
B. the parties must have legal capacity to contract
C. there must be evidence of agreement of the parties to the promises
D. the promises must be supported by some consideration.
E. All
F. None

11. Which of the following is written for a year or for a specified number of years and terminates automatically at the end of the designated period?

A. Straight term insurance
B. Convertible term insurance
C. Straight term insurance
D. All

12. Life insurance rates are influenced by all of the following factors. Except;:

A. Expected mortality rates in the insured population
B. Investment income earned by insurer on invested premium income
C. Expenses incurred in operating an insurance enterprise and in providing insurance related services.
D. All
E. None

13. Which of the following is/ are medical expense insurance?

A. Hospitalization expense contract

B. Surgical expense contract

C. Regular medical expense contract

D. Major medical expense contract

E. All

F. None

Part III: Discussion Questions (2pts. each)

1. Differentiate between insurance and speculation and gambling?
2. List and explain the costs of insurance
3. Explain why risk management is needed
4. Explain the three pre-loss objectives of risk management
5. One of the most methods of handling risk is retention. However, it can be effectively used in a risk management program when three conditions exist. Mention the three situations in which retention will be suitable to handle risk by the company itself.
6. Briefly explain the different types of hazards and give examples for each