NATIONAL OPEN UNIVERSITY OF NIGERIA

SCHOOL OF BUSINESSANDHUMAN RESOURCE MANAGEMENT

COURSE CODE:MBF 722

COURSE TITLE:RISK MANAGEMENT

COURSE GUIDE

MBF 722
RISK MANAGEMENT

Course Developer/Writer Remi O. Oluoma

Course Editor Araga Abdullahi
National Open University of Nigeria

Programme Leader Dr. Dimi Mai-Lafia
National Open University of Nigeria

Course Coordinator Caroline-Aturu-Aghedo
National Open University of Nigeria

NATIONAL OPEN UNIVERSITY OF NIGERIA

National Open University of Nigeria
Headquarters
14/16 Ahmadu Bello Way
Victoria Island
Lagos

Abuja Office
No.5 Dar-es-Salaam Street
Off Aminu Kano Crescent
Wuse II, Abuja

e-mail: centralinfo@nou.edu.ng
URL: www.nou.edu.ng

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Introduction

MBF 722: Risk Management, in a semester work of two credit hours, available and compulsory to all learners taking the MBA (Financial Management) programme in the school of Business and Human Resources Management.

Risk Management pervades the life of every individual and organization. For certain, every organization has a mission statement or organizational objectives. However, events in life are full of uncertainties as there exist such odds which may prevent an organization from achieving its set objectives.

Risk Management, thus, embraces all the techniques involved in reducing or minimizing the impact of uncertain loss events towards the sustenance and achievement of organizational corporate goals or objectives. It is important that where risks exist, they should be handled properly to the best economic advantage of an organization or individual. This is the focus of this course.

This course guide will fell you how the course is structured the materials you will be using to ensure adequate success as well as how you will be assessed at the end of the semester

Course Contents

The course contents include basic elements of risk; risk and uncertainty and their impact; the scope and essence of risk management; risk management process; the administration of the risk management process; identification and evaluation/measurement of risk; risk control and financing; insurance as a risk management technique.

Course Aims

The aim of this course is to equip you with the knowledge and techniques necessary to reduce or minimize the impact of uncertain loss events towards the sustenance and achievement of organizational corporate defectives; to handle risks to the best economic advantage of an organization of individual. These aims will be achieved by:

- Exposing you to the basic elements of risk as well as the distinction between risk and uncertainty;
- Assessing the impact of risk and uncertainty;
- Highlighting the scope and essence of risk management;
- Describing the risk management process and its administration;

- Taking you through how risk can be identified, measured, controlled and financed;
- Treating insurance as a risk management technique.

Objectives

On the successful completion of this course, you should be able to:

- Define risk and distinguish between the different kinds of risks;
- Distinguish between risk and uncertainty;
- Discuss the different attitude to risk;
- Discuss the impact of risk ad uncertainty;
- Give meaning to risk management, and discus the scope and essence;
- Describe the basic components of risk management process;
- Discuss the administration of the risk management process;
- Explain the techniques of risk identification and measurement;
- Discuss the various methods of treating risk;
- Describe the main strategies of loss prevention/reduction;
- Explain the essence of evaluating risk reduction measures;
- Discuss risk financing relative to the meaning, forms, ability of an organization to finance risks, etc.;
- Discuss the reasons for the formation of captives as a system of risk management;
- Discuss the role/functions of insurance in an economy as a risk management technique.

Course Materials

- Course Guide
- Study Guide
- Textbooks
- Assignment Guide

Study Units

There are seventeen (17) units in this course under three (3) modules, which should be studied carefully:

Module 1

Unit 1 Basic Elements of Risk
Unit 2 Risk and Uncertainty
Unit 3 The Impact of Risk and Uncertainty

Unit 4 The Scope and Essence of Risk Management I
Unit 5 The Scope and Essence of Risk Management II

Module 2

Unit 1 Risk Management Process I
Unit 2 Risk Management Process II
Unit 3 The Administration of the Risk Management Process
Unit 4 Identification of Risk I
Unit 5 Identification of Risk II
Unit 6 Evaluation/Measurement of Risk

Module 3

Unit 1 Risk Control I
Unit 2 Risk Control I
Unit 3 Risk Financing I
Unit 4 Risk Financing II
Unit 5 Risk Financing III
Unit 6 Insurance as a Risk Management Technique

Each study unit, made up of the introduction, objectives, main Content, Self-Assessment Exercise, Conclusion, Summary, Tutor-Marked Assignment, and References/Further Readings, will take at least two hours. May we emphasize that you are expected to study the materials carefully, and do the exercises. Consult the textbooks under references/Further Readings for additional information.

Assessment

The assessment for this course will be in two parts:

(a) Continuous assessment, using the Tutor-Marked Assignment (TMA)
(b) Final written examination

Tutor-Marked Assignment

The NOUN will direct further on the number of TMA you are expected to answer, when to do them and when to turn them in to your facilitator for grading. You are expected to utilize the information gathered from the study material and the reference in doing the assignment. The assignment will count for 40% of the total course mark.

Final Examination and Grading

The final written examination will be of three hours duration, and will attract the remaining 60% of the total course mark. You are to expect that all the areas of the course will be assessed during the examination.

Summary

The importance of risk management, which embraces all the techniques involved in reducing or minimizing the impact of uncertain loss events towards the sustenance and achievement of organizational corporate goals, needs as emphasis. At the end of this course, you would have been equipped with the knowledge and techniques necessary to handle risks to the best economic advantage of an organization or individual.

Course Code	MBF 722
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MODULE 1

UNIT 1 BASIC ELEMENTS OF RISK

CONTENTS

1.0 INTRODUCTION

Our understanding of the word "risk" is made more difficult by various ways in which it is used in the world of risk management and insurance. Such usage may derive albeit from a person's background or attitude to events of life. In this unit our aim is to offer a theoretical understanding of risk by examining the basic ingredients of risk and the dimensions of risk as they relate to human and business activities. While the theory is overshadowed in later units by practical issues of risk management, a good foundation in risk concepts will provide a much easier journey through the remainder of the course.

2.0OBJECTIVES

At the end of this unit, you should be able to:

- define risk
- distinguish between pure and speculative risk
- distinguish between fundamental and particular risk
- distinguish between dynamic and static risk
- distinguish between risk and uncertainty
- explain risk aversion, risk optimist, risk neutral.

3.0 MAIN CONTENT

3.1 Basic Elements of Risk

3.1.1 Concept of Risk

Equating risk to love, Bickelhaupt (1974: 3) remarks that "… Love is an excellent example of risk or uncertainty. Like risk, love is all around us, tremendously important yet difficult to define or predict, and hard to get along with or without. Too much love is bad and too little is worse. It can miraculously inspire, or hopelessly frustrate. Risk is much the same".

The litany of risks manifest in living cannot be exhaustive. A visit to the hospital tells already one aspect of the many sides of risk of living, namely health problems; a visit to the law courts tells another aspect, namely the risk of interacting with fellow man. Yet, man is a gregarious animal. Even there is a risk in eating food as one can die of food poisoning (Oluoma, 1999: 6).

Moreover, behind the boisterous activities on the stock exchange lies the risk of losing one's investments. Nations go to war at the risk of losing their sovereignty and national prestige. Professionals are exposed to risk of practice eg. Architects and Engineers (for faulty designs); Medical doctors (for wrong diagnosis and surgical mishap); Lawyers and Solicitors (for wrong legal opinion and advise). (Mordi, 1986).

The situation indicated above already suggests one underlying feature: the inability of man to foresee exactly the outcomes of his activities. Omniscience is a quality ascribed only to God. If everyone knew everything, then everyone could be self-assured and there would be no fear of the unknown. Despite all the advances in science, technology and philosophy, man has a limited knowledge of himself, his future and the universe. There are many types of men, activities and visions of life. Given this, it becomes easier to appreciate the fact of many types of risk one is exposed to in life.

3.1.2 Definitions of Risk

There is no one universally accepted definition of risk. The reason is mainly due to the fact that risk, is a multi-disciplinary phenomenon. It could be defined from any side or angle one is looking at it. Thus, the following statements usually feature as definitions of risk.

- Chance of loss;
- Chance of mishap

- Unwanted and uncertain event;
- Objective doubt concerning the outcome in a given situation;
- A combination of hazards; and
- The possibility of unfortunate occurrence.

Clearly, each of the above definitions has been made and supported by the various authors. Some are interrelated while some are diverse in their meanings; it all depends from what perspective one is benching his assessment.

It is indeed useless to debate on which of the definitions is the right one or generally acceptable; they all serve their purpose. However, all the definitions reveal two common features, namely that:

- there is the element of uncertainty because of the inability to foresee exactly the result of an event, and
- the event could result to a loss.

In fact, for risk to exist, it must be possible for loss to occur. Loss may or may not occur under risk, but no risk exists when the probability of loss is either zero or 100 percent, because under these conditions, the outcome is not variable. When we know what is going to happen as a result of an activity during a particular time, such as a day or year, no risk exists. Our concern is with unfavorable, unpredictable deviations from expectations. Variability derives from deviations from expectations. The greater the size of deviation the greater the variability, and the more difficult becomes the task of planning. Much of a risk manager's job involves estimating future outcomes (losses) and the variability of those future outcomes. (Pritchett Schmit, et al, 1996:4)

Based on the foregoing, it would be pertinent to derive yet a more precise and comprehensive definition. Therefore, risk can be defined as uncertainty of loss. This definition is simple and devoid of ambiguous terms. It incorporates the two main elements of risk: uncertainty and loss.

No human being is so certain as to the exact time, year, place, etc., every event will occur or whether it would result in a loss or not. Clearly, any business undertaking is made with a motive of gain. The individual, in his rational business pursuit, never intends to make a loss, at worst he hopes to recover his outlay (break-even). Despite this expectation, he is uncertain whether he will make a loss or not, it is this situation of lack of assurance that there will be loss or no loss in an event that is the bedrock of the phenomenon, risk.

SELF ASSESSMENT EXERCISE

Attempt a definition of Risk.

3.1.3 Classifications of Risk

(a) Fundamental Risk and Particular Risk

"Risks are said to be fundamental if their origin and associated losses are impersonal and socially extensive or universal in their impact" (Mordi, 1986). The term 'impersonal' is used here to indicate that the origin of such risks is not traceable to one particular person. Furthermore, the damage or destructions (or disruptions) arising there-from are usually extensive socially, if not cataclysmic to be considered fundamental.

Examples of fundamental risks are wars, earthquakes, flood and general unemployment. Some of them are by act of God (earthquake and drought for example) and some are act of man (wars and inflation for example)

On the other hand, where risks are traceable to a specific individual or object in their origin and/or the damage there from are restricted to a specific individual or object they are said to be particular risks. For instance, the possibility of a policeman firing a gun at a demonstrating crowd killing one person or more is a particular risk. The origin is the policeman. If the origin is impersonal but the losses are limited to an individual or object, it is a particular risk. For instance thunder hitting and killing a person; lightning setting a house ablaze; are particular risks.

It should be noted however, that there is no clear-cut distinction between the two forms of risks with regards to changing situations. In fact, it is useless to be too rigid about some life events according to circumstances. Some risks that previously qualify for classification as particular risks might ultimately due to changes in circumstances be classified as fundamental. For instance at a period of poor social consciousness, education was considered as a matter between a child and the parents (ie. a particular risk). However, with changes in the level of consciousness in social responsibility, education at least up to a certain level becomes a charge on the nation's treasury without parental contribution, thereby assuming the status of a fundamental risk. Also injury at work place (workmen's compensation) was formerly seen as a particular risk (an issue involving only the employee and employer) but later with greater sense of societal responsibility it assumed the dimension of a fundamental risk.

(b) Pure Risk and Speculative Risk

Risk is said to be pure, first if it relates to an item already in existence (person, property or transaction) and, secondly if with regard to that item, the focus of attention is either the event of loss or no loss (defined in this respect as breaking even or maintaining the status quo) That is, a pure risk offers no prospect of gain.

For example, a building is exposed to the danger of destruction by fire. If the building is destroyed or damaged by fire, this is a loss; if however there was no fire, then nothing would happen to the building and it remains in its previous state (i.e. maintaining the status quo). Note that risk situation does not offer the prospect of gain to the owner of the building and that the building is in existence before the question of fire ever arises. Pure risk can arise from natural forces (i.e. act of God) or from act of man. According to Hansel (1992: 2), "They include fire, flood, accidental death, etc. These are the kinds of risks which might normally be the subject of insurance".

Risk is said to be speculative, first, if the risk causing transaction was hitherto not in existence but rather created by the very act of speculation and, secondly, if the transaction can yield any of the following three possible outcomes; 'loss' or 'no-loss-no-gain' (i.e. zero position) or 'gain'.

Betting is a fitting example of speculative risk. Betting is speculation for gain, but the gambler may lose his stake (i.e. loss) or just recovers his stake (i.e. zero position) or wins more than his stake (i.e. gain). Note that it is the very act of betting i.e. speculation that introduces the risk. If the gambler did not bet, this particular risk would not have arisen. He had speculated for gain.

3.1.3.1 Dynamic Risk and Static Risk

The term 'dynamic' implies that the very situation under consideration calls for self-propelling activities like a business undertaking, with prospects of changing its socio-economic status overtime. For instance, one engages in business in order to improve on one's economic status. (Mordi, 1986)

Such changes can be self-induced (business organization, change in business policy or method) or arise from external forces. External forces can be in the nature of socio-political developments (war, change in technology, fashion, taste, value of money, price structure, taxation, population development, etc.)

The term ‘static’ implies that there is no self-generating activity induced with a view to influencing the socio-economic prospects of the situation over time. Thus, in ‘static’ situation there is no prospect of gain in future. It is a case of either the status quo being maintained or even a deterioration in value.

In fact, this pair of risk is sometimes used as synonyms for the pair speculative risk and pure risk.

SELF ASSESSMENT EXERCISE 2

Differentiate between the following risks with examples:

1. Pure and speculative
2. Fundamental and particular

4.0 CONCLUSION

All human activity revolves around risk. Such risks exist in various forms and in varying circumstances. It could be detrimental to human existence to fail or ignore to recognize the presence of risks and take appropriate action to adapt to potents of risk.

5.0 SUMMARY

It is pertinent to summarize the unit as follows:

a) that risk pervades all human activity and endeavour;
b) risk is a multidisciplinary phenomenon having varied definitions;
c) fundamental risks have universal applicability while particular risks are restricted in effects and cause;
d) pure risks offers no prospects of gain while it is possible to make gain under speculative risk.

6.0 TUTOR-MARKED ASSIGNMENT

Chance of loss is an inadequate description of risk. Discuss

7.0 REFERENCES/FURTHER READINGS

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UNIT 2 RISK AND UNCERTAINTY

CONTENTS

1.0 INTRODUCTION

Risk and Uncertainty are critical aspects of our lives. While some events of life involve losses, others may not. Some of these losses might be common and somewhat predictable; many others are shocking, unexpected events. Each involves risk or uncertainty. While the basic element of risk has been discussed in Unit 1, in this Unit, our focus is to provide a further insight into risk and uncertainty. The discussion will additionally dwell on attitude to risk and uncertainty.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- give the meaning of uncertainty
- distinguish between risk and uncertainty
- differentiate between objective and subjective risks
- discuss the different attitude to risk.

3.0 MAIN CONTENT

3.1 Risk and Uncertainty

3.1.1 Risk and Uncertainty Distinguished

Even though no statistical treatment of risk is envisaged in this study, some basic facts from that approach seem necessary for proper understanding of the concepts under discussion. Indeed, it is true that the future cannot be known precisely by man. However, there are events or

development of events that can be known up to a given point in time, past or present and which can be analyzed statistically in order to forecast what the future hold for the event(s).

Under condition of risk, a person or a decision maker is faced with a situation in which results of an action or decision are not totally known, but will probably fall within a possible range of outcomes. Here, there could be more than one possible outcomes resulting from the selection of an option. The decision maker is assumed to know the probability of occurrence of each outcome. The decision maker's problem is to estimate the mathematical probabilities of occurrence. Basically, some errors of estimate, forecast or prediction are bound to occur, this error being termed risk, implying the error of being wrong- in one's prediction. Happily enough, statisticians have a way of determining such errors and measuring them. Indeed, the decision maker can determine from past experience the objective probability and relative frequency of the occurrence of various outcomes. Thus, measurements could be possible with the aid of past experience and record kept. Examples of measurable events are births, vehicular traffic, death, population structure, schools and school attendance, number of buildings in a town, etc. (Oluoma, 1999:10)

Under uncertainty condition, the decision maker has difficulty assigning probabilities to outcomes either because there is a lack of information or an absence of knowledge concerning what outcome can be expected. In other words, there are either two main possible outcomes or too many known facts or both. In this case, the decision maker cannot predict the outcome with any degree of confidence. In fact, since the possible outcomes of the event under consideration and/or their probabilities are unknown, it is difficult to measure or forecast accurately. This situation is faced frequently by managers when entirely new products or services are being introduced. Other examples of non-measurable events are salvation in religion, state of mind, etc. In addition, unlike risk, uncertainty is a subjective phenomenon. The implication is that two or more individuals are unlikely to have identical views of the outcome of decisions taken under condition of uncertainty. Consequently, it is very difficult to develop universally acceptable techniques for dealing with uncertainty. In practice, a decision maker faced with uncertainty would attempt to generate a probability distribution of possible outcomes on the basis of his personal judgment of the situation. For instance, any predication as to which of two teams, hitherto unknown, will win a match is bound to be subjective. People are bound to give their opinions according to their fancies of the team.

Risk concerns variations in possible outcomes in a situation. Uncertainty is often used as a synonym for risk, although when so used

it usually refers to objective (measurable or quantified) uncertainty. Economists and Statisticians use this concept when they measure variation in occurrences. One such measure of variation is called the standard deviation which helps predict expected variations from a norm. Predictability of an expected probability actually occurring is increased as the number of events is increased as evident in the principle of large numbers. (Bickelhaupt, 1974:5)

Still within the realm of uncertainty, there is a dividing line between objective and subjective uncertainty. According to Bickelhaupt, subjective uncertainty which involves a feeling or state of mind as to expected results, differs from the above concept of objective uncertainty. Lack of knowledge as to the real facts, prejudices, unwarranted high hopes, or other factors can cause different predictions. Therefore, different subjective risks occur, and these often deviate from the underlying objective risk. This kind of uncertainty is not readily measurable and is not usually what is meant when the term risk is used.

In summary, risk is associated with measurability while uncertainty with non-measurability of the event(s) or the error(s) of forecast about future situation(s).

Measurability here should be addressed from two important angles:

- Knowledge of the possible outcomes of an event and their probabilities of occurrence; and
- Objectiveness of measurement.

SELF ASSESSMENT EXERCISE 1

Uncertainty is a subject phenomenon. Discuss.

3.1.2 Subjective versus Objective Risk

Trieschmann, Gustavson and Hoyt (2001: 5) drew a distinction between subjective and objective risks. According to them, subjective risk refers to the mental state of an individual who experiences doubt or worry as to the outcome of a given event. In addition to being subjective, a particular risk may also be either pure or speculative and either static or dynamic. Subjective risk is essentially the psychological uncertainty that arises from an individual's mental attitude or state of mind.

Objective risk differs from subjective risk primarily in the sense that it is more precisely observable and therefore measurable. In general, objective risk is the probable variation of actual from expected

experience. This term is most often used in connection with pure static risks, although it can also be applied to the other types of uncertainties.

The concept of subjective risk is especially important because it provides a way to interpret the behaviour of individuals faced with seemingly identical situations yet arriving at different decisions. For example, one person may be ultraconservative and tend always to take the "safe way" out, even in cases that may seem quite risk – free to other decision makers. Objective risk may actually be the same in two cases but may be viewed very differently by those examining this risk from their own perspectives. Thus, it is not enough to know only the degree of objective risk; the attitude towards risk of the person who will act on the basis of this knowledge must also be known.

3.1.3 Subjective Risk and Attitude to Risk

Before going further into the intricate aspects of risk management, it will be necessary to briefly highlight some basic features of risk and individual's reaction to risks situations which are fundamental ingredients in decision taking toward effective handling of risks.

It should be noted that although a particular type of event may be of such a nature that in principle it ought to be possible to calculate both the probability and the potential variation in particular outcomes, often defects in the quality of the data available to risk managers prevent the calculation of reliable objective estimates of future loss probabilities.

Two common problems are:

a) insufficiently large samples (that is, the available details of past experience are based on only a small number of exposure units), and
b) changes in risk factors that cast doubts on the usefulness of past experience as a guide to the future.

In such circumstances, there is no alternative but to draw on one's experience and judgment to interpret loss trends to arrive at subjective probability estimates. Such estimates may differ markedly from the underlying true probabilities, not least because the estimator's judgment may be coloured by his own attitude to uncertainty.

When risk cannot be measured objectively with a high degree of accuracy, so that individual judgment and attitudes enter into the process, then subjective risk will be present. Subjective risk has been defined as "the uncertainty of an event as seen or perceived by an individual".

Attitude to risk could be approached from three angles:

a) risk averter,
b) risk optimist/risk seeker
c) risk neutral

To be risk averse implies that a person is willing to pay in excess of the expected return in exchange for some certainty about the future. To pay an insurance premium, for example, is to forgo wealth in exchange for the insurer's promise that covered losses will be paid. Some people refer to this as an exchange of a certain loss (the premium) for an uncertain loss. An important aspect of the exchange is that the premium is larger that the average or expected loss because insurer's expenses and profit are included. A person willing only to pay the average loss as a premium would be considered risk neutral. Someone who accepts risk at less than the average loss, perhaps even paying to add risk such as through gambling is a risk seeker. (Pritchett, schmit et al, 1996. p. 4, 7)

One person may be very cautious and averse to taking chances, whereas another may be highly optimistic regarding uncertain outcomes: the former (risk averter) is likely to arrive at higher loss probability estimates than the latter (risk optimist). Someone who is strongly averse to accepting even the smallest variation in outcomes from the expected may choose to insure, whereas a less risk averse individual may be prepared to carry the risk himself. In fact, attitude to risk influences not only subjective estimates of probability but also risk handling decisions.

What causes one person to be more risk averse than another? This is a question best answered by psychologists, sociologists, or anthropologists. However, it is safe to say that family and societal influences, genetics, and religious / philosophical beliefs all play an important role. Some what less clear is the relationship between a person's risk aversion and his or her uncertainty; a problem that is influenced by the imprecise way the terms "aversion" and "uncertainty" are used commonly. In some respects, uncertainty could be affected by aversion. For example, an individual might be so wary of risk in general that he/she would tend to discount his / her own judgment regarding a particular risk. In that respect, her/his own level of uncertainty regarding a particular risk might be driven higher by her / his aversion to risk. In other situations, it is possible to say that uncertainty influences aversion, in that a person consistently exposed to an environment of seemingly random and unpredictable events might eventually develop a high level of aversion to risk. (Williams, Smith and young, 1995: 7)

Some scholars have taken a different approach to relating risk, risk aversion, and uncertainty to one another. For instance, William and

Heins (1989) discussed risk as consisting of objective and subjective components. Objective risk refers to the measurable component of risk, while subjective risk reflects an individual reaction to (attitude towards) risk. In this approach, uncertainty becomes an aspect of subjective risk. Other views are possible and perhaps the best that can be said is that risk aversion and uncertainty are distinct concepts that are not fully independent of one another. (Williams, Smith and young, 1995: 7)

SELF ASSESSMENT EXERCISE 2

What makes a person to be more risk averse than another?

4.0 CONCLUSION

Risk and uncertainty are two concepts that occupy the centre stage of human and business activities. They can make or mar the future of any entity. Whatever degree or level they assume at any circumstance, the response or attitude of the individual or business will determine the extent to which they can be taken to play negative or respectful role.

5.0 SUMMARY

You have learnt in this unit that risk and uncertainty are central in measuring organisatonal performance. We have equally discovered that attitude to risk is vital to determining the best part to take in resolving organizational problems. It is thus, trite to assert that a conscious effort in handling organizational risks must start with a proper synergy of risk and uncertainty and the adaptability of organizations to such business dynamics.

6.0 TUTOR-MARKED ASSIGNMENT

Distinguish between risk and uncertainty.

7.0 REFERENCES/FURTHER READINGS

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UNIT 3 THE IMPACT OF RISK AND UNCERTAINTY

CONTENTS

1.0 INTRODUCTION

Risk and uncertainty have an important impact on organizations. They exact a cost – cost of risk and at the same time bestows some benefits. In fact, life is more interesting when risk and uncertainty are present. Organisations have a motivation to address risk and uncertainty since the consequences are so important. This motivation gives rise to "risk management". At its most basic level, risk management is practiced because the negative and positive possibilities of risk (as well as moral considerations) provide incentives for an organization to take steps to minimize the costs of risk in all their forms – and to maximize the benefits of risk.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

- discuss the various costs of risk and uncertainty
- explain the differences between the terms peril, hazards and losses.

3.0 MAIN CONTENT

3.1 The Impact of Risk Uncertainty

3.1.1 The Cost of Risks

The cost of risks could be broadly divided into two categories:

(a) The nature of the costs

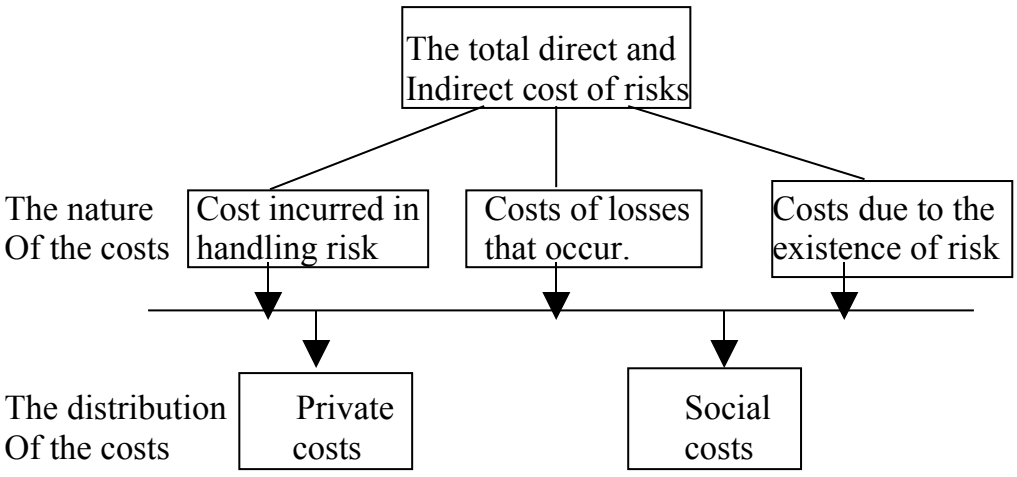
i) Risk handling costs
ii) Costs of losses that occur (loss costs)
iii) Costs due to the existence of risk

(b) The distribution of the costs (between the individuals and groups in a society)

i) Private costs
ii) Social costs

Figure 3 below is a diagrammatic representation of the cost of risks.

Fig. 3: **Cost of risks**



Risk Handling Costs

- Costs involved in identifying, evaluating and treating risks
- Insurance premiums
- Charges for loss prevention devices
- Fees for consultancy services
- Opportunity costs: management and staff time spent on dealing with risks cannot be devoted to other activities
- The cost of avoiding a risk may be a loss of revenue derived from the particular activity involved.

Loss Costs

(a) Direct costs to a firm (of industrial accidents)

- Compensation payable to injured employees
- Damage to machinery, equipment and work in progress
- Loss of production
- Accident investigation expenses

(b) Indirect Costs

- Other employees may either stop work for a short time or their work rate may slow down.
- Decreased morale of workers
- Consequent drop in productivity and increase in spoilt materials
- Loss of future earnings.

Costs Attributable to the Existence of the Risk

- For the risk averter mere exposure to risk involves a welfare loss.
- Besides the loss of welfare suffered by those directly exposed to risk, there may be indirect costs for the rest of society. If the potential losses are so severe that firms are reluctant to produce a particular commodity, potential consumers will be deprived of the satisfaction they would have derived from its consumption.

Private and Social Costs

Private costs are those costs necessarily incurred by the individual or firm engaging in a particular activity.

Also flowing from that activity may be other costs which fall upon the community at large; economists refer to such costs as social costs.

So for example, a manufacturing company will have to meet the costs of raw materials, labour, and other inputs which will appear in its accounts, but if during the production process, it discharges untreated effluents into adjacent water courses or smoke into the air, the ensuing loss of amenities, additional cleaning costs and so forth will fall upon the surrounding community. Whether any of the latter costs will also figure in the company's accounts as a part of its private costs will depend upon the law. There may be government regulations/legislation requiring that firms be financially responsible for all of the consequences of their actions (CII, 1985).

There are both private and social costs associated with many pure risks. For example, a serious fire may close down a factory with a consequent

loss of employment not only for those who worked there but also amongst its suppliers and local tradesmen. Likewise an explosion such as the Ikeja bomb blast may cause extensive damage to surrounding properties and injuries to members of the public. In both cases the companies or institutions concerned may have to bear at least some part of those social costs: redundancy payments would have to be made to dismissed employees, and third parties suffering personal injury or damage to their property would probably be entitled to compensation. Even if there is no legal obligation to compensate injured third parties, a company may feel that it has a moral obligation to offer some recompense or that to fail to do so would be bad for public relations.

SELF ASSESSMENT EXERCISE 1

Distinguish between private and social costs with examples.

3.1.2 Risk and Allied Terminologies

According to (Bickelhaupt, 1974: 6), terminology becomes important in the serious study of any subject. It is the basis for communication and understanding. Thus, an understanding of the following terms is very necessary:

a) Perils
b) Hazards
c) Losses

3.1.2.1 Perils

In contrast to risk which is the uncertainty of loss (or results or happenings), the word peril should be used to identify the cause of risk. Examples of perils are commonplace and include fire, automobile accidents, thefts, earthquakes, windstorms, forgeries, water, illness, and hundreds of other causes of uncertainty.

The law has coined the term “acts of God” to describe perils operating without human agency or intervention and not preventable by human foresight or care. Fires caused by lightening are often so considered, as are storms, extraordinary floods and other forces of nature.

3.1.2.2 Hazards

The various contributing factors to the perils are termed hazards. Ordinarily, there are many separate hazards that attach to any particular object or person. The sum total of the hazards constitutes the perils which cause the risk.

A practice of the insurance business divides hazards into two major classifications, namely:

a) Physical Hazards
b) Moral Hazards

a) Physical Hazards

Physical hazards are the tangible conditions / characteristics of the risk that affects the frequency and / or severity of loss. Such tangible / physical conditions include: Location, Structure / Construction, Occupancy, Security Protection, Exposure, etc. Specifically, physical hazards will include conditions such as these: waste paper piled under a staircase, gasoline stored on the premises, weak construction which may fail in a heavy wind, unsafe brakes on a car, holes in a sidewalk, inadequate inventory checks in a store, improper water drainage systems and many others. These examples each would increase the chance of a loss occurring in regard to a specific peril such as fire, wind, water, theft.

b) Moral Hazards

The term moral hazards are applied to those factors that have their inception in mental attitudes as they concern the human aspects that may influence the outcome. This includes hazards created by dishonesty, insanity, carelessness, indifference, and other causes Psychological in nature.

A distinction is sometimes made between “Moral” and “Morale” hazards. Drawing such distinction Pritchett, Schmit, et al (1996: 13) observed as follows:

Moral hazards involve dishonesty on the part of insureds. In the context of insurance, moral hazards are conditions that encourage insureds to cause losses intentionally. Generally, moral hazards exist when a person can gain from the occurrence of a loss. For example an insured who will be reimbursed for the cost of a new stereo system due to the loss of an old one has an incentive to cause loss. Such an incentive increases the probability of loss.

Morale hazards, in contrast, do not involve dishonesty. Rather, morale hazards are attitudes of carelessness and lack of concern that increase the chance a loss will occur or increase the size of losses that do occur. Poor housekeeping (for example, allowing trash to accumulate in the attic or basement) and careless cigarette smoking are example of morale

hazards that increases the probability of loss by fire. Often such lack of concern occurs because an insurer is available to pay for losses.

Although Pritchett, et al later pointed out that the distinction between moral and morale hazards is fussy, and generally their existence may lead to physical hazards, they remarked that hazards are critical characteristics to analyze because our ability to reduce their effect will reduce both overall costs and variability. Hazards management, therefore, can be a highly effective risk management tool.

3.1.2.3 Losses

An economic loss is the undesirable end result of risk. It is the decrease or disappearance of value, usually in an unexpected or at least relatively unpredictable manner. In general terms, not all losses have to be related to risk; some losses are the result of foreseeable actions, as for example, the giving of a birthday gift. Other losses may be expected because they are known always to occur, such as depreciation of physical properties which can be expected as well as predicted fairly accurately. Many losses, however, cannot be predicted and become the result of risks. Illustrations include loss of property due to fire, or theft, or other perils, losses of income due to property destruction or personal perils of death or disability, increased expenses such as medical costs, and loss of assets due to legal liability for losses affecting other persons (Bickelhaupt, 1974: 8-9).

SELF ASSESSMENT EXERCISE 2

Differentiate between physical and moral Hazards

4.0 CONCLUSION

We have shown in this unit that risk and uncertainty exert certain costs. Our analysis also depict that some of the costs are desirable and predictable while others are undesirable and may be inevitable. A conscious effort was also made by drawing clearly a line between perils, hazards and losses.

5.0SUMMARY

In this unit, we have dealt with the issue of impact / costs of risk as a factor in determining the risk appetite of an organization. The point was made that important as the risk costs is in estimating the extent of resources to commit, the effective and efficient handling of risk remains an underlying factor.

6.0 TUTOR-MARKED ASSIGNMENT

Distinguish between risk handling costs and loss costs

7.0 REFERENCES/FURTHER READINGS

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UNIT 4 THE SCOPE AND ESSENCE OF RISK MANAGEMENT I

CONTENTS

1.0 INTRODUCTION

Risk management pervades the life of every organization, nay every individual. Every organization has a mission statement or organizational objectives. Most mission statements or goals of organization revolves around profit maximization, maintenance of larger share of markets, or survival and to remain in business. Others are set up as amenity, social and non-profit making organizations. The success of an organization, individual or corporate are measured at the end of the accounting period by the extent of the attainment of its set objectives (Adekunle, 1995)

Events of life are, however, full of uncertainties, there exist such odds which may hinder or prevent an organization from achieving its set objectives. It is these variable unforeseen events which cannot be predictable with absolute certainty termed as risk or uncertainties that are the concern of risk managers.

Thus, risk management embraces all the techniques involved in reducing or minimizing the impact of uncertain loss events towards the sustenance and achievement of organizational corporate goals or objectives. It is, therefore important that where risks exist, they should be properly handled to the best economic advantage of an organization or individual.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain the scope of risk management
- define risk management
- explain the changing face of risk management
- discuss the objectives of business entity.

3.0 MAIN CONTENT

3.1 The Scope and Essence of Risk Management I

3.1.1 The Scope of Risk Management

The scope of risk management is subject of debate by text writers. Two schools of thought have emerged in relation to the scope of risk management. The first school of thought holds the view that risk management applies only to pure risks, while the second school argues that risk management goes beyond pure risk, encompassing both pure risks and business risks (speculative risks).

Some text writers and practitioners take a far narrower perspective of the role of risk management. In its most restricted form, their views embrace little more than the formulation and administration of insurance programmes for dealing with pure risks. Then the only thing that can distinguish a firm's 'insurance manager' from a 'risk manager' is that whereas both may be responsible for executing the insurance programmes decided by top management, including the buying of insurance and handling of claims, a risk manager would be responsible for identifying and analyzing risks and advising management on the appropriate insurance programmes (CII, 1985: 21).

The view held by most authorities is that risk management is wider than just pure risk management and includes business (speculative) risks. The difficulty in defining the scope of risk management is partly caused by the fact that, in practice, the role ascribed to the risk manager is limited to handling certain aspects of the risk management process. Apart from the issue of whether risk management encompasses business (speculative) risks and pure risks, it should be noted that the management of pure risks involves two broad areas: physical and financial controls and most organizations confine the authority of the risk manager to the area of financial control. Moreover, it should be borne in mind that what may be plausible in theory may not in practice be feasible.

According to the Chartered Insurance Institute (1985), there is little room for argument about the applicability of risk management concepts and principles to all types of risk: marketing, production, financial, and other business risks need to be identified, quantified, and controlled in just the same way as pure risks can be managed. However, in practice, each type of business risk calls for very different areas of knowledge and skills, and every large organization employs expert staff to deal with those risks as part of their specialist management functions. So, for example, part of the job of a marketing manager is to undertake market research. It is unrealistic to expect any one individual to possess the breadth of knowledge and skill to be capable of assuming responsibility for controlling and advising top management on every type of risk. Nevertheless, divisions of responsibility should not mean that risk handling decisions are taken on different bases in the various parts of an organization: an agreed risk policy dealing with such questions as loss tolerance limits should form part of the overall corporate plan.

3.1.2 The Changing face of Risk Management

Risk management is multi-disciplinary and everyone is at one point or the other involved, from the house wife going about her normal cores, to the corporate manager in an office consciously putting a risk management process in place. A safety conscious mother dissuading her restless toddler from continuing in a potentially harmful pastime is unconsciously managing risk. Also traditional methods of managing risk such as staying at home after dark, using well lit streets at night instead of passing through a dark alley are acknowledged fact of everyday existence. (Wilcox, 1996: 29)

In recent times, approaches to risks are apparently changing across organizations, many business leaders are recognizing that risks are no longer merely hazards to be avoided but in many cases opportunities to be embraced. (Soludo, 2006: 4). He quoted the chief risk officer, Royal bank of Canada, who observed that, “Risk itself is not bad. What is bad is risk that is mismanaged, misunderstood, mis-priced, or unintended”

Risk management is moving well beyond the tradition of risk mitigation (using controls to limit exposure problems) towards risk portfolio optimization (determining the organization’s risk appetite and capacity among a group of risk across the enterprise, seizing opportunities within those defined parameters and capitalizing on the rewards that result). As a consequence, risk management is beginning to be perceived as a means of strategic business management, linking business strategy to day to day risks. Many of the traditional risks, such as credit, market and operations risks, are relatively well understood and managed, however, it is the more dynamic and newer risks, such as information and

reputation risks, that are causing organizations greatest difficulty. (Soludo, 2006: 4-5)

3.1.3 Definitions of Risk Management

For a meaningful understanding of what risk management is all about, it is essential we first isolate and define the word "risk" and "management" after which we can fuse them together to derive a combined single definition. We have earlier defined risk in unit 1, what we need to do here is to briefly provide the meaning of management and then logically define risk management.

Management is concerned with taking risks, tackling problems and utilizing resources with minimum friction to achieve optimal results. The relationship between the key words/phrase, 'taking risk', tackling problems, 'utilizing resources', 'minimum friction', and 'optimal result' are interactions of human and material resources on the one hand and on the other hand, the interaction between the combined resources and external forces which are, the general economic situation, local competition and the international environment. These two interactions generate friction, create problems and involve taking risks. The ability to overcome the effects of the resulting friction, tackling the problems and combating the identified risks, makes all the difference in the result achieved by an enterprise (Ogunlana, 1995: 17)

Then, risk management has been given as many definitions as possible depending on the leanings, knowledge and experience of managers. Some are narrow, some are broad, while others may be too wide.

To the insurance manager, it may be the practice of examining the cost – effectiveness of insurance protection; to the production manager, it may represent a technique for coping with effects of changes; the cost accountant may regard it as a method of arranging self insurance; the loss control and accident prevention officer within an organization will have different views. But the truth of the matter is that risk management is not safety audit; it is not self insurance; it is not accident prevention; it is not loss control. It is a combination of all these factors and many more. It also encompasses the political, technical, marketing and labour aspects of risk. Risk management is a bundle of common sense. It can be defined as "the identification, measurement, and economic control of risks that threaten the assets and earning of a business or enterprise". (Ogunlana, 1995: 20)

Risk Management can equally be seen as a management process aimed at "the effective reduction of the adverse effects of risk" (Bickelhaupt,

1974: 41). It can also be described as "the process by which any unexpected loss contingency is managed" (Harold, 1987).

Generally, risk management can be seen as a mechanism of planning, organizing, evaluating and controlling resources and activities for the effective reduction or elimination where possible of risk or the adverse effects of risks.

Risk management can apply to the life of an individual – a personal affair, or to the life of a business organization – a business affair. The ensuing discussion is mainly restricted to risk management in business organization. (Note however that the principle remains the same whether it is personal affair or a business organization. The main difference lies in the complexity, records and accountability of a business organization unlike a one man's personal affair)

SELF ASSESSMENT EXERCISE 1

Define Risk Management

3.4 Business Entity Objectives

Before we consider the techniques or methods of risk management, it may be pertinent to look at some of the objectives of business units, both commercial and industrial, and the role which risk management can play in assisting the achievement of these objectives. Kpodo (1989:39) articulates such objectives as follows:

(i) A company must survive; the organization must take steps to ensure that whatever risk may operate, it will have the assets and earning capacity to survive financially.

(ii) A company must maximize its project. It is trite knowledge that profits arise where the earnings from providing sales and services exceed the costs of producing them. Costs and selling prices are usually influenced by external conditions of supply and demand, wage levels generally, government policies and many others, and the individual firm may only be able to change these within rather narrow margins.

(iii) Sometimes, for prestige reasons, an objective may be to obtain as large a share of the market as possible. In otherwords, there is the desire to maximize sales.

(iv) A company must provide some earnings for its shareholders. Most commercial and industrial organisations seek to increase dividends and share values because:

(a) the shareholders are the owners of the business, and
(b) when they wish to raise extra capital their share performance will be a major factor in the availability of capital.

(v) An organization may also have public, legal and social objectives. Most firms are anxious to create good public relations and have a good image. To this end, they will wish to comply with the complexities of company, industrial and safety law and may go far beyond legal requirements.

SELF ASSESSMENT EXERCISE 2

Is risk management restricted to management of pure risks only?

4.0 CONCLUSION

Risk management embraces all the techniques involved in reducing or minimizing the impact of uncertain loss events towards the sustenance and achievement of organizational corporate goals or objectives. It is therefore important that where risks exist they should be properly handled to the best economic advantage of an organization or individual

5.0 SUMMARY

In this unit, we have been able to explain the scope and essence of risk management. What we have grasped in this discussion can best be summed below:

a) that risk management covers not only pure risk but also speculative or business risks;
b) that approaches to risk change overtime in relation to changing circumstances; and
c) that the essence of risk management is to eliminate or reduce the impact of risk to ensure the realization of individual or corporate goals.

6.0 TUTOR-MARKED ASSIGNMENT

Why is it difficult to define the scope of risk management?

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UNIT 5 THE SCOPE AND ESSENCE OF RISK MANAGEMENT II

CONTENTS

1.0 INTRODUCTION

Effectively, management of risks presupposes that the goals and objectives of an organization are optimally achieved. In the unit, you will learn about the relationship of the objectives of the organization and stakeholders' interest in the context of risk management. This will be amplified also by looking at the importance and benefits of risk management.

2.0 OBJECTIVES

At the end of this unit, you should be able to:-

- explain the relationship of the objectives of the organization and
- stakeholders interest vis-à-vis risk management
- assess the importance of risk management
- describe the benefits of risk management.

3.0 MAIN CONTENT

3.1 The Scope and Essence of Risk Management II

3.1.1 Relationship between Risk Management Objectives of the Organization and Stakeholders Interest

The objective of the organization as have been seen above, may be informal, while at times, they are formal and documented in form of strategic plan. These objectives are shared with organization's stakeholders' in overall risk management efforts of the organization.

The 'stakeholders' have been defined by Kaye (2001) as people or organization, which could be affected by a risk incident occurring in the organization itself. Also, he sees risk as having the potential to "threaten the operations, assets and other responsibilities of an organization". The identified 'stakeholders' by Kaye (2001) are:

Employees

- Morale and pride. This often reflects the degree of the employees' interest in the success of an organization and has a direct link into the quality of work performed.

- A need for a job to sustain personal and family life and also self-esteem.

- A safe working environment

Suppliers

- Suppliers to the organization will depend on its survival to be able to deliver and receive payment for the goods or services contracted.

- Sometimes the loss of one or more large customers can destroy a supplier of goods and services.

- The organization, as supplier, can destroy customers who are further up the delivery chain.

Customers and other recipients of service

- Most business customers are free to move to other organizations. They will do so if they lose confidence in either delivery or quality.

- Other, non-commercial, service suppliers may find that their relationships with their existing recipients will become difficult and even fail should confidence be lost.

- Sales teams will find it increasingly difficult to find new customers.

- Failure to deliver the contracted services with sufficient quality can lead to litigation for damages well beyond the value of the item in dispute.

Distributors

- Distributors are in effect wholesale customers. All the comments about customers therefore apply.

- Some distributors depend on few or even one source of supply (e.g. a distributor of a new motor vehicles). Failure of that one source of supply could damage that distributor on many different ways. It can even cause it to fail if an adequate replacement supplier is not found soon enough.

Regulators

- There are various regulators who, in many different ways, will take a continuing interest in the organisation.

- Failure to satisfy the statutory and other requirement of these regulators can result in them imposing fines, restricting business or closing down the business altogether.

- The losses therefore can range from financial, reputational damage and even closure.

The Media

- The media has many firms:

- Local and international Newspapers
- Television and Radio
- Popular and Professional Magazines
- Increasingly, the Internet.

- These can be regarded as wholesale distributors of the reputation of an organization and its officials.

- If a publication is negative about an organization much damage can be done. This is so whether the story reflects the truth, only part of the truth, or even is factually incorrect.

- The impact therefore is of significance to all other stakeholders.

Private Investors

- Private, monetary, investors can range from family, partners, employees, associated companies and other investors in an organization. Often, they can be exposed to devastating loss than stock market investors who have more opportunity to spread their investments, and therefore the risk across different companies and market.

- There are also 'investors' who have a non-monetary stake in the organization. They stake their professional and personal reputations alongside that of the organization. They too can suffer loss alongside any damage to the organization itself. They can find it a very long and difficult process to rebuild this type of asset.

Banking Industry

- Banking and investor finance companies will maintain, throughout, an interest in the fortunes of those organizations to which they have provided money.

- If that money is perceived to be at greater risk due to an unexpected downturn in the strength of an organization, the cost of borrowing can increase significantly.

- If the financier believes there is sufficient cause for concern, the assets that are the security for that loan can be sold. The lender can have that power under the terms of the loan or mortgage agreement. Primarily, the decision when to sell the mortgage assets will be based on the interests of the financier and not necessarily the longer-term interests of the organization and its other stakeholder.

Quoted Shareholders

- Quoted shareholders come to the organization through stock markets in various forms.

- Usually the investor has many choices beyond the subject organization and can switch funds away rapidly.

- Stock market sentiments, however, have many other influences (beyond the success of the individual quoted organization) and thus its behaviour becomes a risk in itself.

- Failing stock values can also increase the cost of borrowing capital. If leaders perceive that the relationship between total borrowings and the value of the company is narrowing they can demand higher interest rates and security.

- Single points of influence can affect shares widely. These influences include credit rating agencies such as Standard and Poor's, and investment analysts employed by the bigger brokers and merchant bankers.

The Environment

- Increasingly, there is public and statutory interest in the quality of the environment.

- It is a very wide subject not only covering pollution of the physical environment. Organizations may need to consider money laundering and insider dealing through to corporate manslaughter and other potential criminal acts.

And Others

- Individual organizations may have their own, different stakeholder pressure. One example would be a political organization with own dependencies to protect.

- Competitors too are a form of 'stakeholders'. If an organization is weakened by an unexpected damaging incident, there is usually a whole range of competitors who will see the incident as an opportunity for themselves.

SELF ASSESSMENT EXERCISE 1

What is the relationship between risk management, objectives of the organization and stakeholders' interest?

3.1.2 Importance of Risk Management

According to Kpodo (1989), risk management is crucial in a developing economy; firstly, on purely economic grounds. The financial waste caused by risk is substantial. There is the fire waste, employer's and public liability losses, motor accidents and hosts of loss producing incidents. It is relatively simple to calculate how much is spent on each of these incidents by way of claim payments or losses financed by companies directly. What is more difficult to gauge is the total economic waste to the economy as a whole. At the risk of repetition, when we think of an employer's liability claim there is the financial cost of the loss in terms of the damages awarded to the claimant. In addition, however, there is the lost production time, the possible need for retraining, lowering of morale, possibility of other staff losing time to attend to inquests or hearings. The total "waste" will be substantially higher than the simple claim figure.
Secondly, risk management is crucial on social grounds. It has a human face and has an important part to play in minimizing the social consequences of risk. The untold hardships that families go through when the breadwinner dies or is disabled through an accident make it imperative for us to adopt risk management. Such difficulties that arise on the demise of the main income earner lead to the breakdown of the family which is the basic unit of society.

3.1.3 Benefits of Risk Management

The benefits of risk management to the developing countries can be discussed under three headings: (Kpodo (1989)).

A) Business Concern

An effective risk management strategy would help improve the effective use of capital, by reducing long term production cost and improving the price competitiveness of one company's products and/or services. Additional benefits to business concerns include:

i) reduction in the cost of insurance
ii) improved credit status of the business
iii) reducing the effect of disasters, e.g. fire, storm etc. that would be potentially crippling to the enterprise.

B) National Economy

The benefits accruing to the various business concerns contribute to the positive development of the national economy. By improving the competitiveness of domestic product vis-à-vis those of industrialized countries, it is expected that the nation would be in a positive balance of

payment position as it would now earn foreign exchange from its exports, and reduce its dependence on imported goods.

An efficient risk management practice would reduce wastage especially in relation to damage and destruction of plants and equipment, the replacement of which would cause avoidable depletion of limited foreign exchange. In addition to the national economy, the domestic insurance industry will be able to redirect its capacity to potentially large losses as against paying for smaller losses.

C) The Individual

By imposing safety regulation that reduce industrial and work related injuries and illnesses, higher productivity of the work force is attained. This is because of the reduction of industrial tension, and the provision of a happy working environment. Higher productivity of the work force will in turn increase the gross national product of the economy.

To the extent that pains, sickness, injury and property loss are reduced to bearable limits, the individual is guaranteed a tranquility of mind and unqualified confidence to undertake events of life for the satisfaction of his needs, wants and aspirations.

SELF ASSESSMENT EXERCISE 2

Discuss the importance of risk management.

4.0 CONCLUSION

Risk management ensures optimal utilization of the resources of the organizational avoiding wastes. In this unit, we have looked at the contribution/position of the stakeholders the achievement of corporate objectives. To properly reap the benefits of risk management, such task must be a collective responsibility.

5.0 SUMMARY

What we have learnt in the unit can best be summed – that risk management is of immense benefit to the entire society for socio – economic growth and development.

6.0 TUTOR-MARKED ASSIGNMENT

What are the benefits of risk management?

7.0 REFERENCES/FURTHER READINGS

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MODULE 2

UNIT 1 RISK MANAGEMENT PROCESS I

CONTENTS

1.0 INTRODUCTION

Management of risk presupposes that steps are taken in logical manner to understand and unravel the nature, intricacies and complexities of risk to ensure that effective actions are taken as appropriate. Such logical steps have overtime translated into an enduring process that have proved adequate and efficient in handling risks and uncertainty situations in personal and business affairs. In this unit therefore, an overview of risk management process in the handling of the risk of an individual or business organization will be looked into.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- describe the basic components of risk management process
- explain the differences in the use of terminologies

- relate the ideas incorporated in the meanings of risk analysis, risk control and risk financing in consonance with identification, measurement and treatment of risks.

3.0 MAIN CONTENT

3.1 Risk Management Process I

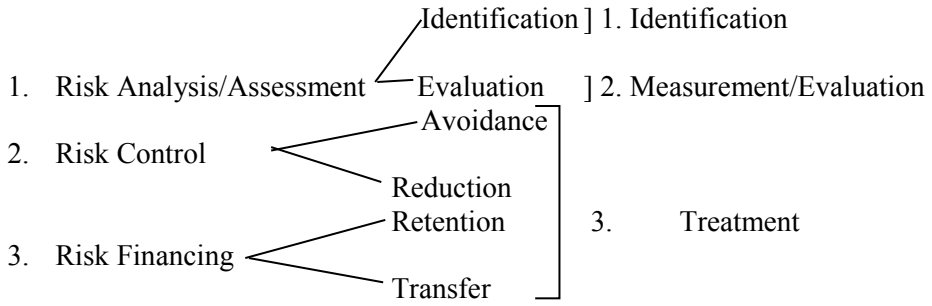
Risk management requires that the threats to expectations are identified, analyzed or evaluated and a policy developed by physical and financial means so that the expectations will be fulfilled in the most efficient manner by reducing or removing these threats. (Kpodo, 1989).

The risk management process is indeed the methods (steps) of handling risk situations which involves the following:

1. Identification
2. Evaluation/Measurement and
3. Treatment
4. Administration of risk management process
5. Monitoring and Reviewing of the process

The last two are not necessarily steps/methods as they pervade the entire methods of risk management.

Sometimes the first two methods are grouped together as "risk assessment" or "risk analysis". Some authorities also use the term risk evaluation to describe the second method – measurement/analysis. There is no conflict actually as some authorities use the terms indifferently in insurance and risk management literature. The difference lies in the choice of words or nomenclature. For a better understanding of these terms, a summary of their relationship and meaning in the context of risk management process is presented below:



A brief explanation of these terms or process of risk management will be undertaken here, while detailed discussions will be handled in subsequent units.

3.1.1 Risk Identification

Risk identification is the process by which an organization systematically and continuously identifies risks and uncertainties. Identification activities are intended to develop information on sources of risk, hazards, risk factors, perils and exposures to loss. (Williams, Smith and Young, 1995:40)

Identification of the risks of an organization requires a knowledge of the organization, the market in which it operates, the legal, social, economic, political and climatic environment in which it does its business, its financial strengths and weaknesses, its vulnerability to unplanned losses, the manufacturing processes, and the management systems and business mechanism by which it operates. Risk identification provides the foundation for risk management. (CII, 1985)

3.1.2 Risk Evaluation/Measurement

The second stage in the risk management process is the evaluation of risk or the measurement of its impact on the firm. This involves compiling very accurate records of past events in order that decisions taken in the future are made on the basis of sound statistics. One very important reason for carrying out careful evaluation is to ensure that the company does not spend too much money on controlling a risk that is not likely to cost a great deal should it materialize. (Kpodo,1989).

To be systematic about the evaluation of risk we must consider the aspects of the risk as regards:

a. The probability of a loss occurring or the frequency of loss;
b. The severity of the loss; and possibly
c. The maximum possible (probable) loss.

3.1.3 Treatment of Risk

It should be noted that the identification of risk and its evaluation may be termed as risk analysis. As in medicine, risk identification and evaluation are diagnostic. The next logical step therefore is prescription and treatment. This is what risk treatment is all about. (Kpodo, 1989)
Four basic methods of treating risk are:

a.) Avoidance
b.) Reduction
c.) Retention and
d.) Transfer

Avoidance

Here, one tries to avoid as many risks as conceivable. This could involve ceasing to undertake the activity which creates the risk or to shun the responsibilities or costs that the risk impacts. An obvious disadvantage here is that most cases in an attempt to avoid a particular risk, a new risk is created. It is apparent that some risks could be avoided while the majority cannot, as we have to live with some risks. It is impossible therefore to avoid risk completely in life. Risk avoidance, therefore, may not be the practical solution to the many risks which are involved in normal activities as it carries with it some lost opportunities. (Oluoma, 2004: 6-7)

Risk Reduction

Risk reduction or loss prevention involves actions aimed at reducing, if not eliminating, the chances of loss. The activities could be taken prior to, during, or after the occurrence of loss. This would involve the adoption of loss prevention / control measures or techniques to minimize the cost, frequency and/ or severity of losses which could happen in an organization. Internal Control is part of such control measures.

Risk Retention

Where risk cannot be avoided or reduced, it can be consciously or unconsciously retained. Unconsciously (unplanned) risks can be retained through ignorance, lack of knowledge or inability to reach the right decision, laziness, indifference or lack of thought. Risks could be consciously (planned) retained either by the fact that the risk is too minor or inexpensive to deserve special treatment or that the risk is a major risk involving huge financial cost requiring special treatment.

Risk Transfer

Two main ways of transferring risks are by: non-insurance and insurance transfer. By non-insurance transfer, the purpose is to transfer part or whole of liability for loss or damage to another person or unit / agency that is not an insurance institution. On the other hand, by form of insurance contract, the insured transfers' part or whole of his risks to the insurer who undertakes to indemnify the insured at the happening of the event insured against, subject to the terms and conditions of the contract. Insurance is a modern and more reliable scientific management tool of treating risk.

SELF ASSESSMENT EXERCISE 1

Discuss the basic methods of treating Risk

3.2 Alternative Approach to Risk Management Process

The foregoing methods, as earlier highlighted could be categorized into another three methods namely:

i) Risk Assessment / Analysis
ii) Risk Control
iii) Risk Financing

3.2.1 Risk Assessment/Analysis

Risk assessment/analysis consist of those activities that enable the risk manager to identify, evaluate, and measure risk and uncertainty and their potential impact on the organization. Risk assessment is the most fundamental activity undertaken by the risk manger. It involves the identification of risks, the analysis of hazards and outcomes, and the measurement of risk. (Williams, Smith and Young, 1995:39)

The underlying objectives of risk analysis according to Kaye (2001:3-4), are to identify and quantify the treats that may bring damage or loss to an organization, its responsibilities and its objectives. He reasoned that it will be useful, however, when beginning to analyze what risk there are, to keep the broad objectives continually in mind. These are to:

a) Identify risk;
b) Measure risks carried against the risk levels that are acceptable to the organization
c) Assist in presenting risk concepts clearly and in a consistent style;
d) Support decision taking about spending and other actions that may be needed to reduce the risk to the acceptable level;
e) Assess both the operational, and the cost effectiveness, of any existing risk management measures that are in place;
f) Encourage good decisions about any contingency planning that may be needed;
g) Raise management awareness and the depth of understanding of the exposures that are being carried. This is both to assist managers in routine good management of the organization and also to enable managers to illustrate to stakeholders that they are in control.

3.2.2 Risk Control

Risk control covers all those measures aimed at avoiding, eliminating or reducing the chance of loss producing events occurring, or limiting the severity of the losses that do happen. Here, one is seeking to change the

conditions that bring about loss producing events or increase their severity.

In effect, risk control involves two methods of treating risks viz:

a) Avoidance
b) Reduction

Some authorities sub-sum these two methods into: risk avoidance, risk reduction, loss prevention and loss minimization. However, the dividing line here is fuzzy and may only be a matter of semantics or use of nomenclature.

3.2.3 Risk Financing

Risk financing is concerned with the manner in which the risks remaining after the risk control measures have been implemented shall be financed. The main object of risk financing is to spread the cost of risks more evenly over time so as to reduce the financing burden and possible insolvency that may be caused by random occurrence of large losses. It is also possible to minimize risk costs through effective risk financing method. Thus, risk financing involves two main processes, namely; risk retention and risk transfer.

Risk Financing may be achieved in any of the following ways:

i) Charging losses as they occur against current operating costs;
ii) Prior (ex ante) provision for losses arranged either through the purchase of insurance or through the creation of a contingency fund to which losses can be charged;
iii) Financing losses as they occur by obtaining loans from financial houses which may be repaid over some months or years.

The choice as to the method of risk financing strategy to adopt would largely depend on management's perception of the probability and severity of a potential loss-producing event, as well as the financial strength of the organization.

3.2.4 Administration of Risk Management Process

In order to make for an efficient and sustained risk management programme, a consistent administrative system has to be installed as opposed to an ad-hoc management. (Kpodo, 1989). The emergence of

risk management as a separate specialist area of management has led to the appearance of risk managers in the management structure of an increasing number of companies. Broadly, every risk manager is charged with the task of administering his organization's risk management programme.

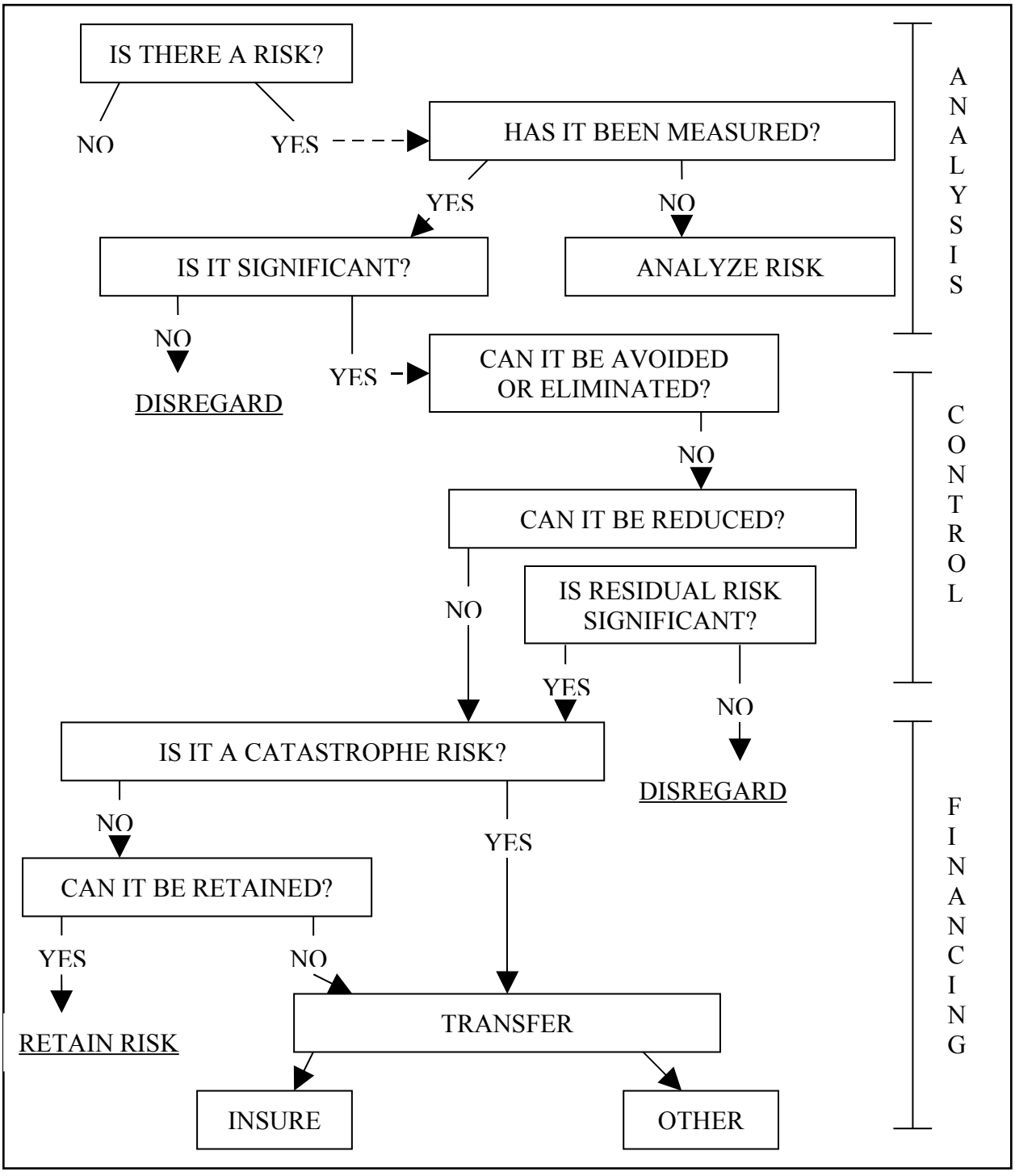
3.2.5 Monitoring and Review of Risk Management Process

Regardless of the techniques that may be employed at each stage, or the eventual form of the risk handling arrangements, every risk management programme must proceed according to the following logical sequence of events if it is to stand any chance of success:

- all exposures to risk must be identified;
- all exposures need to be evaluated according to (a) cause, and (b) effect, the aim being to quantify probabilities and severities;
- the possibility of avoiding or eliminating any of the risks should be investigated, and if feasible the appropriate steps should be taken;
- in the case of other risks, risk reduction measures need to be explored and implemented;
- the residual risks need to be evaluated so that decisions can be taken about the best methods of financing them; and finally
- the results of the whole programme need to be monitored and regularly reviewed in the light of changing conditions.

Fig. 1 (the interrelationship of Risk Analysis, Risk Control and Risk Financing)

THE INTERRELATIONSHIP OF RISK ANALYSIS, RISK CONTROL AND RISK FINANCING



Source: CII Risk Management Tuition Book

SELF ASSESSMENT EXERCISE 2

Explain why risk identification is described as the foundation of risk management process.

4.0 CONCLUSION

We have learnt in this unit that risk is effectively managed by adopting some universally accepted process. Such processes logically follow in sequence. A proper application of these processes will invariably result to a smooth and orderly management of risk of organizations.

5.0 SUMMARY

In this unit, we have dealt with risk management process in a corporate entity. The processes are collapsed in three steps: Identification, Evaluation, Treatment, Administration of Risk; and Monitoring and Reviewing of the process.

6.0 TUTOR-MARKED ASSIGNMENT

Differentiate between risk reduction and risk retention.

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UNIT 2 RISK MANAGEMENT PROCESS II

CONTENTS

1.0 INTRODUCTION

Many of the techniques of risk management are more easily applied to large organization than to small firms, not the least reason being because the former control more exposure units and they usually have recourse to more sources of finance and financial and technical expertise. At the other end of the scale to the large multinational corporations are sole traders and individual persons, yet they too can apply risk management principles to the management of their risks. To see what is possible, it will be pertinent to examine briefly the principles of personal risk management. This is provided in this unit.

2.0 OBJECTIVES

At the end of this Unit, you should be able to:

- explain personal risk management
- discuss the methods of managing personal risks
- differentiate between personal and corporate risk management
- outline the problems in planning future personal financing.
- Risk Management Process II.

3.0 MAIN CONTENT

3.1 Risk Management Process II

3.1.1 Personal Risk Management

An individual is exposed to many types of risks that may adversely affect his own or his dependant's welfare, notably, risks of:

a) Death, sickness, and injury;
b) Loss of or damage to property he may own or for which he is responsible;
c) Incurring liability to compensate others for personal injury or damage to their property or infringement of intangible property rights arising from acts committed by him or by others for whom he is responsible.

Note that, the occurrence of property damage and liability risks will result in a reduction in the individual's wealth. Other risks may cause a loss of income, for example, the loss of earnings during periods of incapacity caused by sickness or accident. Sometimes additional expense may be incurred to minimize such losses (for example, expenditure on medical treatment to hasten recovery from injury or sickness). The cost of many losses may be measured with varying degrees of accuracy in monetary terms.

However, it is difficult, if not impossible to place a monetary value on pain, suffering, and loss of amenities caused by personal injury or loss of the sentimental value associated with certain articles.

In fact, no matter how one lives it is impossible to avoid all risks, and indeed even to try to minimize the total risk to which one is exposed would involve forgoing the pleasures and other benefits associated with many activities such as sports, travel, and the higher risk occupations (including habitual pastimes). It is a matter of balancing costs and benefits. The ordering of those costs and benefits will depend, however, on an individual's attitude to risk, and even individual attitudes are likely to vary according to the size of the potential adverse consequences.

SELF ASSESSMENT EXERCISE 1

What do you understand by "personal risk management"?

3.1.2 Methods of Managing Personal Risks

(i) Risk Identification

Whatever an individual's attitude towards risk may be, if he is to maximize his welfare, the first step must be to identify the risk to which he is or may become exposed. He may approach this by compiling an exposure list embracing the following:

(a) All those events which may bring about deterioration in one's present welfare in regard to:

(i) Physical and mental well-being;
(ii) Current income;
(iii) The value of one's assets.

b) Any other events that may frustrate the fulfillment of future welfare plans.

Personal circumstances inevitably change over time. An individual's view of his own welfare normally will embrace the welfare of dependants, so that as his situation changes so too will the above lists. For example, a married man will be concerned not only about his own health and current and future standards of living, but those of his wife and children and possibly the in-laws and extended family burden.

One benefit of the periodic analysis of personal risk exposures is that it will highlight actual needs, and given limited resources for dealing with those needs, it will help in the ordering of priorities. An obvious example is the protection of income. Loss of income may occur due to unemployment, sickness, injury or death. There may also be the possibility or risk of one spending above his income or means planlessly as a result of ostentatious living or life of debauchery. This would be forestalled by adequate planning and re-odering of priorities and attitude to life. Social security in most countries offers some protection against all four risks – unemployment, sickness, injury or death, and in addition, private insurance is available for the last three. But in a country like Nigeria where unemployment benefits, for instance, is non-existent, the burden entirely rests on the individuals.

(ii) Risk Evaluation

Just like corporate risk management, risk evaluation here would involve the following elements:

- The probabilities of loss producing events occurring (frequency of loss);
- The potential losses (severity of loss);
- Maximum possible (probable) loss.

A major problem for the individual is that even if he knows the probabilities of any of the risks to which he (or members of his family) are exposed, such knowledge is of severely limited value when it comes to planning how to handle the risks. In effect, probabilities are mean values conveying useful information when the decision taker controls a large number of exposure units, but the smaller the number of units the larger will be the variations in outcomes from that expected on the basis of the probability.

The same problem arises when considering the sizes of potential losses. Apart from death, if a loss-producing event does occur usually the outcome will be a partial loss - for example, damage to a car, house, or other property, rather than total loss. But total losses do happen and must be planned for even if their probabilities are small. Therefore, a part of a risk evaluation exercise must be to itemise and value assets exposed to loss, and the size of potential income and liability losses, allowing for the potential impact of inflation on future income and replacement costs of assets.

(iii) Risk Handling (Risk Treatment)

The same ranges of options available to firms are also available to individuals viz:

- Avoidance
- Reduction
- Retention
- Transfer (Oluoma, 1999:22-25)

It may be pertinent however, to add, that most people have some choice in the occupations they follow and all are free to choose their leisure activities, so that is usually possible to avoid particularly hazardous activities if so desired.

Moreover, steps can be taken to reduce risks to property and person. For example, protective clothing, helmets and footwear can be worn in vehicles, though in all cases the individual may weigh the monetary and other costs against the benefits as he perceives them.

Furthermore, the scope for risk retention is generally far more limited for individuals than for corporate bodies. Essentially, insurance is a

device for dealing with those risks which may cause severe financial difficulties. However when dealing with losses that are either small relative to one's income and/or financial savings, or occur with high frequency, it is more economical for a potential policyholder to carry the risk himself.

Lastly, one of the paradoxes is that generally the individuals who most need insurance are those least able to afford it. A poor man with little or no savings can least afford the loss of any of the few possessions he may own or of any of his incomes, but at the same time for him insurance may rank as a luxury. If there is any income to spare for premiums, then the first priority should be to insure against loss of income.

3.1.3 Differences between Personal and Corporate Risk Management

(1) Corporations, although composed of individuals, are not themselves capable of suffering the pain, loss of amenity, and possible death caused by personal injury and sickness. Although corporate decision-takers may feel a sense of responsibility towards employees and others, largely the consequences of such risks will be felt as financial losses.

An individual, on the other hand, may seek to ameliorate the financial effects of personal injury or death, but financial compensation can never be completely satisfactory substitute for life and health, so that there is a direct personal interest in avoiding or reducing risks.

(2) The scope for risk retention is generally far more limited for individuals than for corporate bodies, which usually control several and possibly many exposure units so that they can take advantage of risk combination. The only way in which an individual can participate in the benefits of risk combination is by insuring.

(3) Corporate risk management are more complex, involving extensive records, accountability and more technical approach than that of a one man's personal affair.

3.1.4 Problems in Planning Future Personal Financing

(a) However certain may be one's knowledge of levels of earnings at different ages, unemployment, incapacity, or death may upset one's plans.

(b) Although death is certain, its timing is uncertain so that besides the possibility of premature death there is also the possibility of living beyond one's life expectancy. If that happens, savings accumulated to provide an income after retirement may prove inadequate.

(c) Fluctuations in price levels - and notably inflation are hard to predict, and even harder to plan for over long periods.

SELF ASSESSMENT EXERCISE 2

What are the major risks an individual is exposed to?

4.0 CONCLUSION

In this unit, we have learnt that management of personal risks follow almost similar pattern as corporate risk management. However, the scope for risk retention is generally far more restricted for individuals that for corporate entities.

5.0 SUMMARY

Our understanding of the unit could be summed as follows:

- that individuals are exposed to various risks including life, health, property and liability;
- that methods of managing personal risks are almost similar with that of corporate risk management, except in terms of scope, data and complexity, etc.
- planning future personal risk financing may pose some problem, outside the control of the individual.

6.0 TUTOR-MARKED ASSIGNMENT

Differentiate between personal risk management and corporate risk management.

7.0 REFERENCES/FURTHER READINGS

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UNIT 3 THE ADMINISTRATION OF THE RISK MANAGEMENT PROCESS

CONTENTS

1.0 INTRODUCTION

The emergence of risk management as a separate area of management has led to the appearance of risk managers in the management structure of an increasing number of companies and other organizations. Broadly, every risk manager is charged with the task of administering his organization's risk management programme, but precisely what role risk managers play and where they are placed in the management structure varies from organization to organization. Therefore, the following comments are intended merely as a guide to current practice. (CII, 1985)

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- describe the place of a risk manager in an organization
- discuss the role of the risk manager
- evaluate the need for outside brokers and consultants
- explain the essence of monitoring and reviewing of the risk management process.

3.0 MAIN CONTENT

3.1 The Administration of the Risk Management Process

3.1.1 The Place of the Risk Manager

There is no right answer to the question of where a risk manager should be located within an organizational structure, even when the job warrants a full-time appointment. Studies show that while a few risk managers (or insurance managers, as most in the UK are still called) report directly to the Managing Director or another member of the board of directors, the majority are located either within the organization's finance division or the company secretary's department. There are strong cases to be made for each, bearing in mind both the financial and legal aspects of risk control. Where the risk manager is heavily involved in handling employee benefit schemes, including pensions, he sometimes forms part of the personnel division. Precisely where a risk manager is fitted into an organization's management structure may partly be the result of:

- Historic accident, that is, whether the position has developed out of the management of the organization's insurances, for example, or from the risk control side;

- The nature of the organization and its activities;

- The range of duties assigned to the risk manager. (Chartered Insurance Institute, 1985).

What matters is the degree of authority the risk manager possesses either personally or through his superior, and how he is viewed by colleagues throughout the organisation whose cooperation and help he requires in order to perform his task efficiently. Authority and willing co-operation do not always go hand in hand; for example, a risk manager who reports directly to the managing director of a large diversified group may possess considerable authority but may encounter distrust and resentment amongst managers of operating units who may see him as a head office spy. The sort of personality that enables a risk manager to gain the confidence and co-operation of others is probably more important than formal authority.
(CII, 1985).

For the efficient management of their risks, some companies employ a full-time specialist risk manager, while others use the services of consultants. Whether a business enterprise should employ a full-time

manager or not would depend on the size of the business, and the scope of its operation. For a small or medium sized enterprise operating in one of the third world countries, there is probably no need for a full-time risk manager. But most large business enterprises would find it desirable to employ a full-time risk manager with the primary responsibility of managing the company's risk exposures. (Irukwu (1991). However, the growing trend in recent times in sophistication and magnitude of risk would require the employment of a full-time specialist risk manager by organizations whether small, medium or large in size although he might need to cooperate with independent experts in some cases.

There is no uniformity in most third word countries on the qualification of risk managers. This is primarily due to the fact that risk management is still very must an infant discipline in these developing countries. A risk manager to be effective should be a highly qualified expert not only in the management of risks, but also in general businesses management. He should have a broad general education. (Irukwu (1991). In fact, the qualifications for a good risk manager are determined by the extent of his important and usually broad responsibilities. He usually has a college education, as well as insurance and other business experience of many years, and often technical background in accounting, engineering or law. Personal characteristics which enhance his effectiveness are leadership abilities, initiative, tact in working with others, and sound decision-making judgment. (Bickelhaupt (1974).

3.1.2 The Role of the Risk Manager

The responsibilities and authority of the risk manager are quite extensive, cutting across many spheres of the activities of an organization. He may have responsibilities for dealing with the risk exposures of the organization which may be confined to pure risks only or may include speculative risks too. Whatever his responsibilities may be, it is likely that his role will be both executive and advisory.

Amongst the various roles of the risk manager, the following could be mentioned:

a) Identification and evaluation of risks
b) Communication and cooperation
c) Advising top management on techniques of risk management to be used.
d) Encourage and help management in formulating risk management policy.
e) Administering of insurance programmes
f) Loss prevention

g) Developing education and training programmes for risk management
h) Record keeping
i) Reporting.

(a) Identification and Evaluation of Risks

It is the role of the risk manager to identify all the risk exposures of the organization and ensure they are properly evaluated for effective handling. Such risks may include loss of material and human resources, liabilities to third parties for accidents caused by negligent employees, or agents, or defects in the products, production risk, marketing and distribution risks, financial risks, personnel risks, and environmental risks, etc. In fact, the risk manager should pay adequate regard to the structure and operational characteristics of the company, the personalities and nuances and the operating environment. He may also wish to develop his own risk-exposure list, or other systems for identifying and classifying risks. The idea here is to obtain further information as regards possible risk occurrence areas with a view to evaluating and controlling them. In fact, he has the task of identifying potential loss exposures and the size of the potential loss. In the area of risk financing he would determine whether to insure or to retain the exposure and guides the company appropriately in all matters relating to insurance and other risk management methods.

(b) Communication and Co-Operation

From the risks identified, it would appear that the risks cut across all the departments of the organization. But it is impossible for one man to acquire all of the knowledge and skill brought together in an organization for risk management purposes. Therefore, the risk manager will have to communicate and co-operate effectively with colleagues in all departments of the organization whose assistance he will invariably need in performing the task of co-ordinating the risk management function throughout the entire organization.

Any department of the organization may influence the risk manager's work in some aspects but there would be a more frequent, direct relationship with legal, finance and accounts, production and personnel departments. For instance, the legal department will be involved in the preparation and vetting of sales and purchasing contracts, the leasing of buildings and plants and dealing with claims from dissatisfied and possibly injured customers and members of the public. The terms of the contracts, may involve the shifting of legal liabilities for damage or injury, or provisions regarding insurance, all matters on which the risk manager, will need to be informed and consulted. In turn, he may want

assistance from the legal department in the drafting of new insurance contracts or in setting up a captive insurance company.

The Finance and Accounting departments control the financial records and budgets of the organization and are therefore in a position to furnish the risk manager with details of the properties and other assets of the organization and their values as well as other valuable information including the records of insurance policies and insurance costs generally. This department will also assist the risk manager in designing appropriate insurance cover to protect the assets of the company especially fidelity guarantee insurance cover against possible falsification of accounts and embezzlement of the organization's funds as a result of employee's dishonesty. (Irukwu (1991).

Production and works managers are directly involved in many of the activities that create risks and may be given responsibility for safety and security. Likewise, personnel departments through their responsibility for the welfare of employees will be involved in programmes to reduce industrial accidents, and the risk manager may be responsible for arranging and operating insurance schemes that form part of the package of employee benefits negotiated by the personnel department. (CII, 1985).

(c) Advising Top Management

The risk manager's role may largely consist of advising top management, including, in a decentralized organization, the top management of the various operating divisions, on the techniques to be used for the evaluation, control and financing of risks. In that role, in conjunction with engineering, production, financial and other specialist colleagues, he may be drawn into the task of helping to establish for the organization standards of feasible and sensible risk control compatible with the corporate objectives. He will also be expected to advise on the financing of residual risks. (CII, 1985)

(d) Encourage and help Management in Formulating Risk Management Policy

One other important role of the risk manager is to encourage and help management to formulate a policy statement in regard to the objectives and responsibilities of risk management. Having such a written policy statement approved by the President (Chairman) and board of directors can aid the risk manager greatly in defining the scope and limitations of his job. The objectives, responsibilities, authority and general policies of his department should be clearly stated. Setting broad guidelines in this way improves the risk manager's relationships with other executives and

departments, and enables him to obtain the cooperation of many persons within the organization who are crucial to a risk manager for information and supervision of risk management in the firm. (Bickelhaupt (1974).
A typical risk management policy formulated by a medium-sized Nigerian business enterprise for example, might read in part as follows:
"It is the policy of this company to assume the risks of property damage, legal liability and all other pure risks where the exposure is so small that a loss would not significantly affect our operations or our financial position. It is also the policy of this company to purchase insurance cover for all risks not assumed.

Furthermore, we, as a corporate body are fully committed to a policy aimed at eliminating or improving all conditions and circumstances likely to cause losses and every member of staff must participate actively in our loss prevention programmes and activities. The risk management department is charged with the full responsibility for enforcing this policy and for carrying out risk management processes and all managers and employees must co-operate with the risk management department in this regard"(Irukwu (1991).

(e) Administering of Insurance Programmes

For the effective administration of the insurance programmes of the organization, the risk manager must be sufficiently knowledgeable and experienced in insurance, its operations, benefits and technicalities to be able to articulate and implement a sound insurance programmes.

In fact, the risk manager should understand the particular insurance needs of his organization, because of his day-to-day contact and experience in his own firm. As risk manager, he should be familiar with and well trained in analyzing insurance coverage, rates and markets. He is not, however, a substitute for a good insurance agent or broker. The agent should be able to supplement the work of the risk manager and to provide many essential services in aiding him in locating insurance markets, loss prevention services, and obtaining fair loss settlements. Other advisors often may be used by or in conjunction with the insurance agent. Examples include safety engineers, accountants, attorneys and trust experts. (Bickelhaupt (1974).

Moreover, often, risk reduction measures have a bearing on insurance arrangements and may even stem from a request that certain things be done, when the risk manager will need to involve responsible colleagues in the discussions with the insurers. (CII, 1985)

(f) Loss Prevention

An integral part of the risk manager's role is loss prevention or accident prevention. It has been stressed earlier that the risk manager should maintain a close working relationship with all the other departments of the organization for the proper identification and evaluation of risk exposures of the organization. This relationship becomes ever more important for the purposes of loss prevention. He can develop and administer loss prevention programmes to achieve structural, operational, defensive and consequential damage protection of human and material resources of the organization. Such protective measures could involve: impeccable building/ plant design from safety point of view, means of escape, disentanglement of safe and hazardous processes, prevention of risk spread, installation of loss reduction equipment (structural); safe design of production flows , storage, training of staff in safety matters, safe technical installation/operation, organization of watch service, safety engineer, safety officers (operational), securing water supply for cooling and extinguishment, organization of fire alarm or emergency calls, saving people and property, training personnel in using extinguishers and other defensive equipment (Defensive); organization of salvage groups, prevention of consequential damage by removing water, dust, corrosive, gases, rehabilitation of damages (consequential damage protection). Since he cannot perform these tasks alone, the risk manager assigns or delegates responsibilities to other managers in various departments for effective loss prevention and control. For instance, the prevention of product defects is usually the responsibility of design and production department. Likewise, responsibilities for employee safety may be shared between works engineers, production managers and personnel managers.

(g) Developing Educational and Training Programmes

The risk manager should develop educational programmes aimed at informing and enlightening the management and the entire organization of the intricacies and benefits of a sound risk management programme. This will also tend to change the attitude of management which hitherto may have indifferent attitudes towards risk. In fact, the effective control of risk is only likely to occur if the measures taken have the full support of the top management. Part of the educational process could be done through the preparation of risk management and insurance manuals, issuing periodical reports on situation of risks in the organization and steps in handling them.

Furthermore, the risk manager will also train employees on risk prevention and reduction measures like fire prevention courses, use of fire extinguishers, escape devices, crisis management (including crowd

control and evasive driving), etc. Some of the training programmes can be organized in-house, while some can done outside the organization. Such training programmes should embrace both management and staff. Thus, it is the responsibility of risk manager to prepare a master plan of such trainings from time to time and identify the relevant sections or individuals due for such trainings and the need, objectives of such training exercises as the case may be.

(h) Record keeping

Record keeping is another important role of the risk manager. Thus, to facilitate the work of his department, the risk manager should maintain appropriate official records which would include:

- record of fixed and movable assets of the organisation like buildings, plant, machinery, stock, motor vehicles, etc including their purchase dates, current value, etc;
- insurance records, including register of policies, premium payments, date of cover and expiry, loss or claims data, inspection reports, etc.
- records of all losses, dates and amount of interim payments and of final settlement, nature of loss, cause of loss, steps taken to prevent any repetition;
- risk analysis reports, recommendations made for the handling of risks, and decisions taken.

(i) Reporting

The risk manager should prepare, for both top management and departmental heads, annual reports on the activities of his department.

The reports for top management could include such matters as:

- Changes in the cost, arrangement and scope of insurance coverage, highlighting changes in the level of retained risk;
- An analysis of claims and their relationship to premiums paid, and data on insured values and other measures of exposure to risk;
- An Analysis of the cost of operating the risk management department, with estimates of the benefits it provides.

Reports for other departmental heads dealing with matters under their control could include:

- an analysis of vehicle accidents and costs may be prepared for the transport manager,
- analysis of industrial injuries may be prepared for personnel and production departments, etc.

SELF ASSESSMENT EXERCISE 1

Discuss the role of the Risk Manager.

3.1.3 The Use of Outside Brokers and Consultants

Sometimes it may be necessary to use the specialized services offered by outside consultants in risk management to supplement the services offered by the risk management department of a business organization. For example, the use of the services of independent appraisers, loss adjusters, solicitors, chartered accountants and sometimes, medical specialists (including brokers). The use of outside consultants is desirable and therefore recommended whenever it will help to improve on the quality of the risk management service available to an organization. Irukwu (1991).

Outside consultants can offer various advantages, such as:

- the resources to tackle an urgent problem quickly, free from difficulties that internal managers have of attending to their normal duties, at the same time;
- specialist skills and knowledge which may not be available in the same depth inside the organization;
- access to information which either may not be available to internal management or could involve very high search costs;
- a breadth of knowledge and experience in dealing with similar problems not possessed by internal management;
- impartiality when dealing with and advising on issues that involve the
  interests of individual managers;
- an ability to provide certain specialist services in a regular basis more cheaply than an individual client could provide them for itself.

On the other hand, the services of brokers and consultants have to be paid for, either in the form of a fee or in the forgoing of some part of the insurance commissions that otherwise could be deducted from an organization's premiums. Therefore, as with other risk management decisions, the questions of whether to employ outside brokers and consultants to assist on any part of the risk management process is a matter of comparing the relevant costs and benefits.

3.1.4 Monitoring and reviewing the Risk Management Process

Since we live in a dynamic world and new risks are constantly introduced into our lives daily, whichever risk management method or approach chosen by an organization should constantly be monitored,

reviewed and necessary adjustments made to meet new challenges. To this end, a risk manager must continually re-identify exposures to loss, be concerned with the control of losses, constantly re-evaluate the financial capacity of the organization to retain risks and select the most advantageous method of funding losses (Wilcox (1996).

In fact, the risk management process is a continuing process calling for action on two fronts; results of policies adopted need to be monitored. Risk handling decisions are always concerned with the future, and one of the difficulties confronting risk managers is that decisions usually have to be taken on the basis of information which falls far short of perfect, and so policies may need to be reviewed in the light of fresh information; policies need to be reviewed at regular intervals in the light of changing conditions. (CII, 1985)

SELF ASSESSMENT EXERCISE 2

Where should a risk manager be created in the organizational structure?

4.0 CONCLUSION

The administration of the risks of an organization is an important task of the risk manager. The risk manager plays a central and perverse role in the realization of corporate goals of the organization by preventing or minimizing losses – human and material.

5.0 SUMMARY

The task of administrating the risks of an organization is a multidisciplinary team work. The risk manager is the co-ordinator of the team. There has to be harmony amongst all the segments / sections of the organization for a fruitful result to be achieved.

6.0 TUTOR-MARKED ASSIGNMENT

Outline and discuss the advantages of using outside consultants to supplement the efforts of full-time risk managers by an organization.

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UNIT 4 IDENTIFICATION OF RISK I

CONTENTS

1.0 INTRODUCTION

Identification of risk is the first step towards a proper management of risk. It is only when the risk exposures are carefully previewed and identified that further action can be taken to handle them. In this unit, we shall look at the segments of the organization that expose the organization to risk of loss.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain what identification is all about
- discuss the various risk exposure units of an organization
- discuss the nature of risks in the different aspects of operation of an entity.

3.0 MAIN CONTENT

3.1 Identification of Risk I

3.1.1 Risk Identification

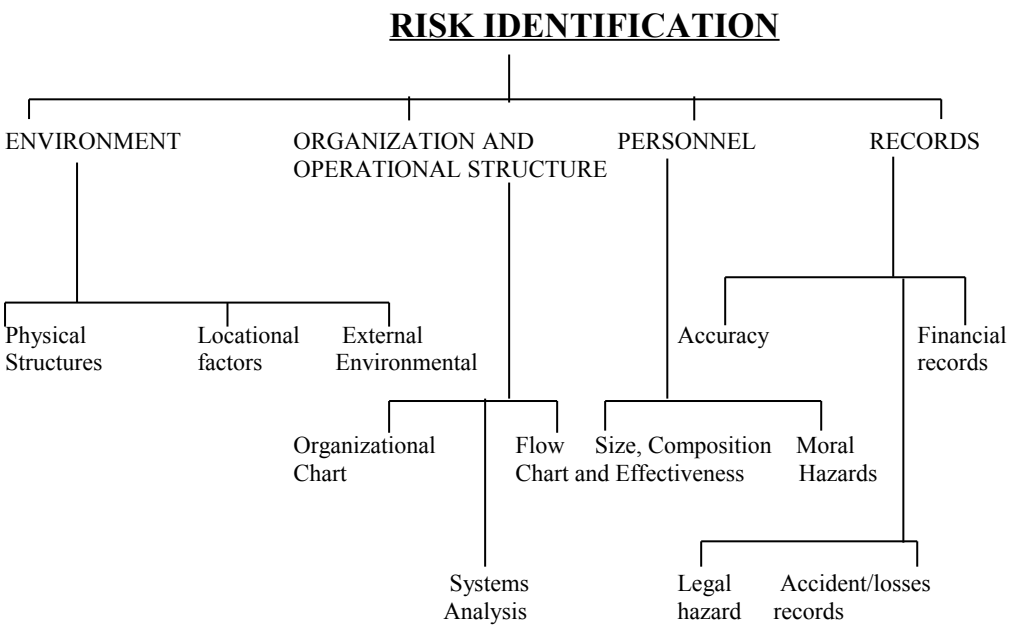
Risk identification implies the study of an organization and it's activities with a view to detecting all the risk elements thereto. As businesses are exposed to risk, the risk elements referred to are those risk factors that can lead to loss of human and material resources. These risk elements constitute economic loss. Thus, it is necessary to prepare a list showing

possible sources of loss (i.e. loss exposure list) to ensure that appropriate strategies are adopted for the effective handling of such risks.

In order to be thorough about the identification of the possible risk exposures of an organization, a study of the following areas could be quite significant: (Oluoma, 1999: 13 – 19)

1.) Environment
2.) Organizational and Operational Structure
3.) Personnel
4.) Records

The following scheme for risk identification provides an overview.
Fig. : Risk identification scheme (Check List of Risks)



Source: *Oluoma R. O., Elements of Insurance, Impress Publishers Ltd., Lagos, p. 13*

3.1.1.1 Environment

a) Physical Structures

Attention will be focused here on such items as building, machinery, equipment and fixtures. The idea is to detect the factors that can lead to loss. One could find out, for instance, how fire resistant are the materials used in construction, or how secure the fixtures and equipments are against damage or loss due to theft/burglary. Indeed, loss or damage could happen to any of these items occasioned by such peril as: fire, theft/burglary, explosion, collapse or break down as well as third party liabilities that may be incurred from there.

b) Locational Factors

The location of the operational base of the organization could reveal the degree or level of danger or likely loss the physical structures and its operations are exposed to. For instance, a building situated near a river or other water course, may be prone to flood or rainstorm. The organization may suffer severe losses or damage from inundation from the sea, storm water, drainage backing up, flash floods, Burst River banks, etc. Also, sites on high grounds are prone to high windstorm as well as areas where mining is /or has been carried out may be exposed to subsidence, or hive, etc. A building near a fuel depot or filling station is exposed to fire peril. In addition, in some countries like Nigeria where industrial areas stand close to airport, it poses a great danger with increasing frequency of air crashes in recent times. (Oluoma, 1999: 14)

c) External Environment (The Society)

The various aspects of environment on which the organization operates could pose some threat to the existence of the organization. One should consider society as a large environment. It is important thus to look at social, political, economic and legal environment. It should be noted that there are expectations and pressure from the society which cannot be easily ignored. There are, for instance, consumer pressures, Government pressure, and Competition pressure. These could lead to business actions that are not rational, thereby causing some losses to the organization. Also in a period of high economic depression, an organization may be adversely affected in many ways including: low capacity utilization, low sales resulting in low stock turnover, financial crunch, high production cost, high labour cost, etc. These could lead to wastages, financial losses, labour management conflict, retrenchment of workers and possible closure of some operational outlets or the entire business.

3.1.1.2 Organizational and Operational Structure

The focus here is mainly on the interactions relationship and processes in an organization with a view to detecting any inadequacies in the system that could result to loss of material, financial or human resources.

(a) Organizational Charts

The chart of an organization depicts the structure of hierarchy, relationships, communication and control in the establishment. The nature of the chart can make all the differences between an organization that is sensitive to risk factor, and another that is quite complacement to hazard. The communication procedure for instance can have such built-

in rigidity and barriers that delays occur in reporting cases, particularly in emergencies to the appropriate authority in the system. An organization with bottlenecks in communication may be more exposed to risk, because of the inability to react promptly to events or activities dangerous to life of the organization. (Mordi, 1986)

Furthermore, the level of hierarchy in organization could create some problems. Some organizations have over bloated structure with many levels of hierarchy while others have very few levels. Most of the authorities in management are of the view that the optimal levels of hierarchy lie between 3 to 5 levels depending on the size of the organization. Levels above this, breed excessive bureaucracy, delays, buck-passing, excessive overhead costs, etc, while levels less than this, breed excessive dictatorship, improper and hasty decision taking, lack of expertise, etc.

(b) Flow Charts

Flow charts can be described as 'schematic' representation of the order of occurrence of events which constitute completion of ones desired objective (Bowman et al, 1967: 36-7). The character of a flow chart depends on the type of organization and activity being studied. Usually, industrial manufacturers have flow charts including the sequence and timing of activities from the beginning (i.e. the raw material stage) through the real manufacturing process stage to the final output stage from the system. The stages may involve many several sub-stages or steps depending on the nature and type of product. Numerous stages may arise where an organization regards steps as stages. However, while stages are a broad tag; steps may refer to specific action processes in a stage.

A cursory look at a flow chart would reveal whether the sequencing of activities could cause accidents, delays, wastage of materials and/or man hours. All these shall entail cost and losses to the organization.

It is also necessary to look into the layout of plant and equipment. They influence the flow of production items. This is an issue that involves production engineering, production economics and industrial safety in production process.

(c) Systems Analysis

A system may be defined as an assemblage of objects or function with interactions and interdependence desire to achieve stated goal. There are open lop and closed loop systems. According to Koontz and O'Donnell (1968; 43) "the open loop system is characterized by a one one-way

cause and effect relationship, while the close loop system is characterized by a feed back of information to correct errors which might go unnoticed in an open loop".

One can consider the whole operation of an enterprise as a 'single' complex system consisting of a network of subordinated, less complexes-in some instance, simple-sub-systems." An industrial organization is geared towards conceiving, producing and marketing profitability of products. There are systems without commercial orientation, and for which no marketing yardsticks are appropriate guides in their study. An example is public service. A system analysis is a convenient tool for assessment in such cases.

Following this, system analysis can, be described as: "a method of evaluating costs in relation to benefits in activities where it is not possible to apply market analysis. Having precisely defined a particular objective, the problem is to organize the most economic methods of achieving it. Cost/benefit analysis, operation research and mathematical models are tools it employs."

In systems analysis, one takes a holistic view of the entire organization and its purpose. Thus, by means of systems analysis, it is possible to detect elements of inefficiency which entails unnecessary waste.

A fitting summary of the system analysis is given by the following requisites:

a.) Explanation of purpose of the system;
b.) Information needed to achieve the purpose;
c.) Sources of data that can provide the information;
d.) Method of obtaining the data;
e.) Determination of who are the information users;
f.) Determination of when the information should be used; and
g.) Determination of the way and form which the information should be used.

In other words, this is the production of information in the entire system of operation for management purposes.

SELF ASSESSMENT EXERCISE

What is risk Identification?

4.0 CONCLUSION

We have seen that risk identification is the first step in managing risks. We have also discovered that the risks an organization is exposed to varies from the nature of the activity involved. Nevertheless, the loss resulting from the risks could be human, material or psychological in nature.

5.0 SUMMARY

In this unit, we have dealt with risk identification and taken a specific look at the various aspects of the organization as it related to the environment and operation, with a view to detecting all the risk elements thereto. It is imperative that risk identification is the foundation of any successful risk management process.

6.0 TUTOR-MARKED ASSIGNMENT

Discuss the risk exposure inherent in the business environment of an entity.

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UNIT 5 IDENTIFICATION OF RISK II

CONTENTS

1.0 INTRODUCTION

In unit 4 we looked at risk identification and the various identification techniques/schemes. We especially focused on the environment and the organizational and operational structure. Here, we will continue our discussion on risk identification with special emphasis on personnel and records of the organization to further underline the importance of risk identification in the management of risk.

2.0 OBJECTIVE

At the end of this unit, you should be able to:

- identify the risk exposures inherent in the personnel and records of an organization towards effective handling of such risks for the purpose of achieving organizational goals and objectives.

3.0 MAIN CONTENT

3.1 Identification of Risk II

3.1.1 Risk Identification Schemes

3.1.1.1 Personnel

(a) Size, Composition and Effectiveness of Personnel

A business is a combination of factors of production, for instance, land, capital and labour. There is in any given establishment an amount of

labour which combined with a given amount of other resources, will produce the best result. This amount of labour can be called the optimum size of labour.

The issue in risk management, therefore, is to identify as much as possible any deviation from a stated or calculated optimum size labour, one notes however, that size is one thing, the effectiveness in its application, another. Among the factors that influence effectiveness are timing, job specifications, motivation and remuneration.

One can also look at personnel from such perspective as sex (male/female composition) or professional background of employees. For instance, in factories that are high labour intensive and requiring hard and excruciating labour, the ratio of males are expected to be far higher than those of females. Where the reverse is the case it may lead to inefficiency and low productivity.

(b) Moral Hazards

The attitude and behaviour of the employees can greatly affect positively or negatively the fortune of an organization. Human beings are susceptible to behaviours that run counter to the approved norms in the particular society. Some of these social aberrations could have negative impact on the organization, creating costs and losses to the establishment.

It simplifies understanding to consider as bad moral hazard the negative derivation from approved good behaviour, and should be watched.

Indeed, personnel moral hazards could arise from a defect in a company's internal operational systems/policies or self-induced as a result of inherent bad attitude of employees. A defective selection and recruitment policy may ignore the family/social background of intending staff and could lead to employment of employees of questionable characters who could jointly or severally ruin the company through unwholesome behaviours. More so, a poorly motivated and remunerated staff whose incomes are not sufficient enough to meet his needs may be tempted ot meddle with the companies resources (cash, stock, other material resources).

Also a factor to watch is company/employee relationship. This can influence the morale of workers positively or negatively. A company with poor labour management relationship is bound to experience series of strikes, lock-outs, closures, resulting to low productivity and disenchantment to work.

3.1.1.2 Records

Records simply are stored information. The information can relate to any item in the business including environmental and physical structures, operational characteristics and personnel. However, attention is focused here on records of financial transactions, the organization's legal obligations, accident/losses records and the accuracy of the very records kept. A glimpse into the usefulness of these items, for risk management is given below.

(a) Accuracy

The importance of records to the life of a business organization cannot be over emphasized. However, of more importance is the accuracy of such records kept. Given proper intellectual and managerial disposition, decisions are as good or as poor as the records on which they are based. Some records may in fact be mere 'garbage' entries without system, without focus, without cross referencing and without correct facts.

Such lapses can arise accidentally due to ignorance, carelessness and inability to organize records. Some lapses could be willingly done. These relates to moral hazards. Whatever the case, it is important to study records also with a view to detecting wrong procedure and facts.

(b) Financial Records

Financial records embrace the financial statement of the financial activities of an organization over a given period, expressed in accounting terms. "By analyzing these statements, comparing the results with previous (periods) or by making comparisons with other similar firms, a manger may discover the cause of existing problems or even more importantly, discover that problems are likely to arise unless corrective action is taken"

The types of financial records from which information can be obtained include: annual accounts, notes on the accounts, chairman's statement and statement on sources and disbursement of funds. Also, other interesting information which could give clue to a company's risk exposure include output, inventory and distribution structure, profit and loss development, assets and liability structure, plant and property maintenance and replacement schedule, expansion and investment programme.

It is, however, one thing to keep the financial records; it is another thing to interpret accurately the significance of such financial indicators and to

ensure efficient financial management. Thus, a careful study of such item will reveal the level of efficiency in the management of funds in an organization. It will also reveal the healthiness or otherwise of the organization at any given point in time.

(c) Legal Hazards

An organization (or entity) being a body present in a society, would have legal obligations. These are usually documented explicitly or impliedly. The organization's activities need be watched for possible legal hazards, by way of breaches of laws and conventions. Note that court judgments against an establishment can lead to enormous amount of fine and other costs.

Also it may be important to look into the records of terms and conditions of, and compliance with, agreements or contracts entered into with other parties including: purchasing and sales contracts, construction contracts, leasing agreements, etc.

These will not only throw light on the attitude of the organization to comply with agreements and level of compliance, but also on the severity or the impact of the penalties for non-compliance with such terms and conditions which may lead to severe financial losses or possible liquidation.

(d) Accidents/Losses Records

A record of accidents/losses could relate to both human and material resources of the organization. Accidents could occur as a result of fire, theft/burglary, explosions, collision, collapse of building, flood, breakdown of plants and machinery, riots, commotion and other perils. Such accidents may result to bodily injury or death of employee or third parties, as well as damage or destruction of material resources.

In order to be systematic about the records of accidents/losses, it is necessary to keep records regarding: events (perils) that produce loss or causes of loss; the frequency of the loss: the severity of the loss; and the cost of alternative or remedial action taken. This will reveal the degree of susceptibility of the organization to accidents/losses as well as the efficiency or otherwise of the management in managing the resources of the organization.

The above diagram (fig. 2 in unit 9) can also serve as a check list of risks. The risk elements could perhaps be listed on the previous knowledge, experience if any, of some particular organizations or on general expectations of a typical organizational setting. It is called a

check list system because the list itself is meant to check if all the items of interest have been duly entered in the list. However, to arrive at a comprehensive list, it will be necessary to conduct initial inspections and have discussions with managers and principal actors of the organization. This will tend to validate the data since there is feedback information and recourse, to data source, human and recorded.

Having classified the risk into relevant categories for proper understanding the check list thus made is a valuable tool in ensuring effective analysis, evaluation and treatment of the risks.

SELF ASSESSMENT EXERCISE

Discuss the risk exposure inherent in the personnel of an organization.

4.0 CONCLUSION

It is clear from the foregoing discussion that the personnel and records are very sensitive aspects of an organization that identification of risk exposures in such areas must thoroughly handle. Proper identification of risk is a key to effective management of risks.

5.0 SUMMARY

In this unit, we have further dealt with risk identification and taken a specific look at the personnel and records of an organization. It is unarguable that in identifying the risks of an organization, the check lists thus made serves as a useful tool in ensuring effective evaluation and treatment of risks.

6.0 TUTOR-MARKED ASSIGNMENT

To what extent can the study of Accident / Loss records be useful in detecting possible risk exposures of an organization?

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UNIT 6 EVALUATION/MEASUREMENT OF RISK

CONTENTS

1.0 INTRODUCTION

Measurement/evaluation of risk presupposes information gathering about risk in its various manifestation with a view to assessing its likelihood of occurrence, the impact or extent of loss possible as well as providing clue to the best approach in treating the risk. Therefore, risk evaluation involves the process of collection, collation, and analysis of data and the proper interpretation of the result obtained (Oluoma, 1991: 19).

This might even call for the use of complex descriptive and inferential statistical tools which are not really necessary at this stage. For preciseness, we will limit ourselves to the simple methods involved in measurement and evaluation of risks.

2.0 OBJECTIVES

By the end of this unit, you should be able to:

- define risk Measurement/Evaluations
- classify and explain loss dimensions
- explain risks that are acceptable and unacceptable based on organizational varying criteria.

3.0 MAIN CONTENT

3.1 Evaluation/Measurement of Risk

3.1.1 Loss Classification/Dimension of Exposure to Risk

For effective measurement of risk, risk managers often classify potential losses into the following categories.

a.) Frequency of loss
b.) Severity of loss
c.) Maximum possible (probable) loss.

3.1.1.1 Frequency of Loss:

The frequency with which a loss (or loss producing event) occurs is very important. It will help to know the events that occur frequently and those that occur infrequently over time (say within a year) so as to determine the level of attention to accord to such event. The frequency of occurrence will also relate to the financial cost incurable when the event happens. There are events that occur frequently in a year but resulting in a small amount of loss; or events that occur infrequently but with a high financial loss; or events that occur frequently and resulting in big financial losses. Whatever be the case, the response of an organization in its treatment depends on which category of the loss event above it is faced with. Examples of such frequency of loss are: frequency of burglaries in a given area (say Lagos) per year, frequency of fire incidents on buildings per place, per year, frequency of car accidents per place, per year, etc. Based on this, a frequency distribution could be drawn to aid further studies and adequate interpretations (Oluoma, 1999: 19-20).

For instance, suppose a pool of 2000 car owners are studied over a period of one year to determine their proneness to accident, with the following result:

Table 1: Frequency Distribution of Car Accidents in a Town in 1997

Number of Accidents	Number of cars (i.e. frequency F)
0	1, 600
1	220
2	80
3	35
4	26
5	15
6	12
7	8
8 and above	4
	2, 000

Table 1 above shows that 1600 cars owners had no accident at all in that year. Of the remaining 400, 220 car owners had 1 accident each, 80 had two accidents each, 35 three accidents each, and so on. The study could even be extended to the previous five or ten years to determine the average number of occurrence each year, the variation may not be really necessary at this stage. However, If need be said that the larger the sample size being studied the nearer the result of accuracy and the higher the degree of predictability of loss.

3.1.1.2 Severity of Loss

Here loss is measured in terms of the size, impact or severity of financial loss incurred or incurable. It will provide information, on say, how frequent or otherwise, the big or small losses occur.

To serve as an example following the information in table 1 above, one can present the situation of the 400 car owners who reported accidents in the following way:

Table 2 Financial Costs of car repairs

Cost of car repairs (in Naira)	No of car Accidents
2, 300	260
3, 000	90
4, 500	28
6, 000	13
7, 300	6
9, 500	3
	400

An easy way of interpreting this presentation is to say that it costs N2, 300 to repair each of the 260 cars, N3, 000 for each 90 cars and so on to N9, 500 for each 3 cars involved in the accidents.

It should be noted that severity in this regard refers not to the extent of physical damage but rather to the extent of financial cost of accident. It is this financial involvement that is referred to as a loss; hence the severity of loss is an expression for the degree of financial expenditure caused by, in this regard, a car accident.

The frequency and severity of loss dichotomy could still reveal some important facts useful both in risk management generally and Insurance in particular. It is seen as a general trend, that most losses that have high frequency do have low severity, while those having low frequency have high severity, only very few losses do have high frequency and high severity, for instance, aviation risks.

3.1.1.3 Maximum Possible (Probable) Loss

Estimates of "Maximum possible loss", the worst that could happen, and "maximum probable loss", the likely to happen, are valuable measures. In this way, the solution for the most significant kinds of loss can be tackled first, and others of minor importance can be disregarded in the process of risk management (Bickelhaupt, 1974: 49-50)

In fact, it is important to know, from the losses which event could create the maximum loss recorded possible. This information will help to improve the level of preparedness to combat accidents or losses in future. For example, for a given building, it becomes interesting to know the total cost involved, should the entire building and contents be destroyed by fire. Also there may be a belief or understanding that a single event could result in a total loss of the entire subject matter depending on its nature and the circumstances surrounding its safety. For instance, it might not be possible for thieves to cart away all the very heavy stocks of timber in a very big and well secured premises in one theft case in a limited time frame except the owner or security agent are privy to it. In that case, it may be possible to estimate the maximum possible loss in a single event.

SELF ASSESSMENT EXERCISE 1

Distinguish between 'frequency of loss' and 'severity of loss'

3.1.2 Acceptable and Unacceptable Risk

It should be noted that in most types of events that are handled by risk managers two elements of uncertainty are discernible viz:

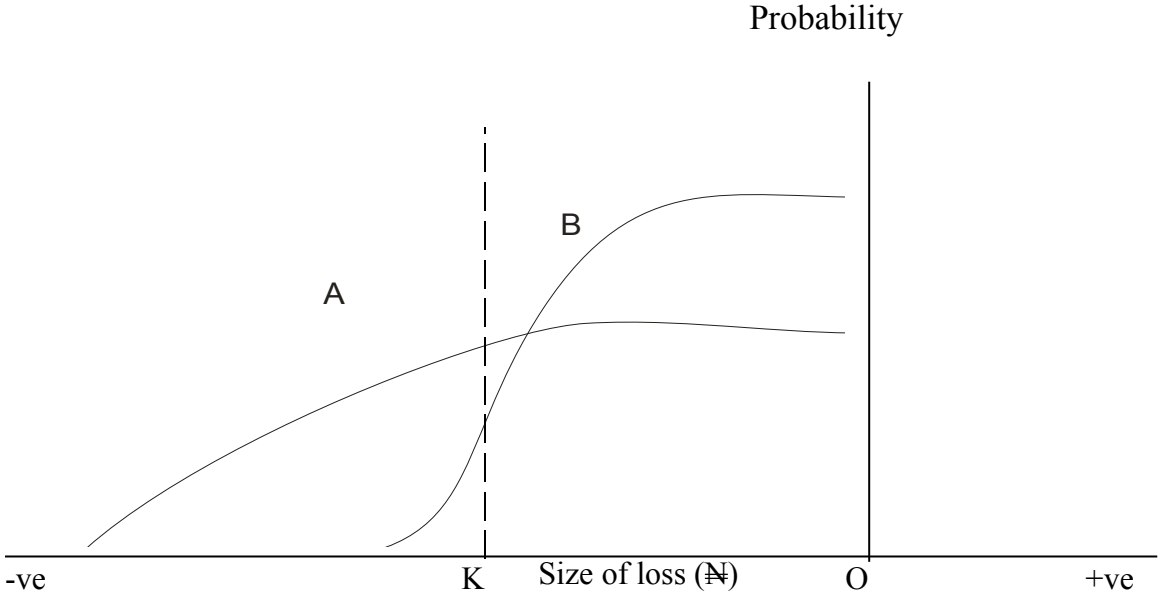
- the likelihood of the event occurring, and
- the size of the loss

Generally, the degree of risk aversion displayed by individuals acting in either a private or managerial capacity tends to increase with the potential size of loss. Some loss potentials are so small that an individual or organization is prepared to accept the risk and assume any loss that does occur. Beyond a certain size, the risk becomes unacceptable and ways will be sought to avoid, reduce or transfer that risk (CII, 1985).

One concept that encapsulates ideas is that of downside risk, which can be defined in terms of the probability that the outcome of an event falls below some minimum acceptable standard, (CII, Risk Management), shown as a loss of ok in figure 2 below.

If the maximum loss which a firm could bear was ok, then event A clearly would be more risky than even B, in that the probability of incurring a loss equal to or greater than OK is greater with A than with B. (The measure of probability would be the area under the curve to the left of ok).

Fig. 2: Downside risk phenomenon



The distinction between acceptable and unacceptable risks is not entirely clear cut as the maximum size of loss tolerable varies from one organization to the other. However, what is acceptable or unacceptable would be influenced by the following factors:

- Time: The size of loss that could be absorbed by, say, one year's profits would normally be far larger than could be accommodated within one month's operating budget;
- The financial strength of the organization;
- The cost of handling the risk relative to the benefits thereof;

- Range of potential losses where the occurrence of the loss could strain the individual's or organisation's finances;
- Methods of handling the risks or risk reduction measures employed; and
- The views of the employees (or organized labour/trade union) on what the employer considers acceptable or unacceptable.

SELF ASSESSMENT EXERCISE 2

Define risk measurement.

4.0 CONCLUSION

Risk measurement/evaluation is a very critical step in effective management of risk. It is only after risks have been identified and adequately measured or evaluated that treatment option would become manifest.

5.0 SUMMARY

In this unit, we have dealt with the measurement of risks. We have seen that a good risk management programme presupposes proper measurement of risks. We also did point out that the frequency and severity of loss are important barometers in measuring risks. It was as well indicated that the dictomy between what is acceptable and unacceptable risk is not clear cut.

6.0 TUTOR-MARKED ASSIGNMENT

The distinction between acceptable and unacceptable risks is not entirely clear cut. Discuss.

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MODULE 3

UNIT 1 RISK CONTROL I

CONTENTS

1.0 INTRODUCTION

In the three previous units, we looked at risk identification and the various methods/techniques of detecting the risk exposures of an organization. We observed that risk identification is the first step in risk management process. Thus, it is after risks have been identified that they could be measured/evaluated for possible treatment with much emphasis on risk avoidance and risk reduction.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain what is meant by treatment of risk.
- discuss the various methods of treating risk
- describe the main strategies of loss prevention/reduction
- discuss how to prevent/control fire loss.

3.0 MAIN CONTENT

3.1 Risk Control I

3.1 Treatment of Risk

After risks have been identified and measured, the next step in their handling or management is treatment. This is the most crucial stage as it requires careful analysis and appraisal of the cost and benefit of the several alternatives possible (Oluoma, 1999: 22)

Four major methods of treatment of risk are discernible, viz:

a.) Avoidance
b.) Reduction
c.) Retention and
d.) Transfer

3.1.1.1 Avoidance

One of the most obvious ways of treating risk is to avoid as many risks as conceivable. One tries to shun the responsibilities or cost that the risk impacts. Take for instance, a man faced with possible financial loss of a car to thieves may decide not to buy a car. By this act he can put his money in a more profitable venture and travels by public transport only. He may even discover that this alternative is inconvenient to him socially and economically, and also expensive since the fares could be arbitrarily fixed, and it might even be unsafe since most public transport vehicles are prone to accidents. Faced with this kind of situation, the risk avoider can decide to trek. By trekking, certain other risk situation exists; he can only trek a short distance and cannot meet up social, economic or other engagements in distant places; he might easily be knocked down by a motorcycle or cycle rider or might even be hit by another person in the traffic resulting in bodily injury or death. He may also decide to sit entirely indoors, in an effort to protect his life. This decision also creates its own disadvantages; he may cease to be

economically, socially and politically active; he may also lose his life because even at home he can still be killed by an event traceable to act of God or man.

On the other hand, a person can in a bid to avoid the possible loss of a house to fire, rent a flat instead of building a house. Also a person can avoid air plane accidents by not traveling by airplanes.

It is apparent from the discussion above that some risks could be avoided but the majority cannot. It indeed portrays the impossibility of avoiding risk completely by man. Risk avoidance may not be the practical solution to the many risks which are involved in normal activities as it carries with it some lost opportunities.

3.1.1.2 Reduction

Risk reduction or prevention involves actions aimed a reducing, if not eliminating, the chances of loss. The actions could be taken prior to, during, or after the occurrence of loss. For instance, car maintenance is a step taken to prevent accident on the road either as a result of collision with other vehicle, or fire by electrical or mechanical faults etc. This is loss reduction prior to the occurrence of loss. Where however, the car has sustained loss due to fire, the use of fire extinguisher could be helpful to reduce the impact of the loss. This is loss prevention/reduction during the occurrence of loss.

On the hand, actions could be taken to salvage some properties from further damage in a burning building. This is risk reduction after occurrence of loss.

Loss prevention or reduction methods and agencies abound in various developed countries of the world with relative high level of efficiency. In the Nigerian scene, a lot of such techniques and agencies exist but of much concern is their organization and level of efficiency which are far from being adequate.

3.1.2 Main Strategies/Stages of Loss Prevention/Reduction

Loss prevention embraces the action taken prior to, during, and after the occurrence of loss. Such action or activities are aimed at checking, lessening, or curtailing the existing loss from being further aggravated (Oluoma, 1997).

Indeed the first strategy in loss prevention is to try and forestall the occurrence of an anticipated loss. It involves the taking of precautionary measures aimed at stifling the loss producing event from happening. For

instance, to avoid mechanical breakdown of a plant or machinery, it requires regular servicing and maintenance; the same could be said of any electronic, electrical or mechanical devices including motor vehicles. More so, to ensure that a building is shielded from fire damage, all flammable materials should be kept away from the building. Indeed, the watchword here is that to highly treasure an item is to ensure its jealous preservation.

On a second note, a loss could be lessened extensively, if it could not be effectively prevented or checked from occurring. This loss reducing device need be in place constantly to be able to serve its role usefully and not to be belated when in need. Commonest examples here are the installation and use of fire extinguishers, the services of fire Brigades (to reduce the impact of fire); installation and use of burglary proof, use of security men, strict internal financial control in an organization (to reduce, where the incident could not be prevented, the impact of theft or fraud).

Lastly, where a loss has occurred, actions could be taken to safeguard or preserve the savaged items from further losses, for instance, in a situation where fire is ravaging a business premises, it may be possible that some items of stock may be saved from the fire. It is necessary that the items saved should be properly kept to avoid their theft or further losses from water damage, frost and others.

Thus, in line with the foregoing strategies, risk reduction has been sub-divided by Mow bray and Blanchard (1959) into four types:

- preventive to eliminate the cause of loss;
- protective or quasi preventive, to protect things or persons exposed to damage or injury;
- minimizing, to limit loss to as small a compass as possible;
- salvaging, to preserve as much as possible of the value of damaged property or the ability of injured persons.

Indeed, the first two types fall under the first strategy of loss prevention/ risk reduction.

3.1.3 Need for Loss Prevention/Reduction

(a) large scale destruction of property by fire causes absolute economic loss of wealth to the society;
(b) properties destroyed by fire cannot be retrieved back even though compensation is paid for its replacement/reinstatement;

(c) resources are scarce and difficult to get, thus, the destruction of such resources means utter deprivation of present and further enjoyment or use by the owner.
(d) The loss of property by theft/burglary or accidental means reduces the wealth or resources of the individual concerned and he /she may lack the financial ability to recoup the loss.
(e) More importantly, apart from the loss of material resources, the loss of human lives by disaster creates long standing agonies and pains on the survivors and the society at large.
(f) Besides direct losses incurred, indirect losses are also enormous.
(g) The need to prevent loss may arise equally by legal obligation e.g. Health and safety at work; workmen compensation; standard factory operation requirements, etc.

Due to the ugly consequences of various categories of losses on the individual, corporate bodies and the community as a whole, a responsibility lies virtually on all to try to mitigate and as far as possible to prevent loss in every field of their operation or endeavors.
Indeed a great responsibility lies on the individual, corporate bodies, employers and employees, Government, insurers, other agencies, etc.

3.1.4 Fire Risk Loss Prevention

Perhaps, the best way of defining fire that readily comes to mind is that given by the court in the case of Western Woolen mills Company v. Northern Assurance Co. 139 Feb 637. Defining 'fire' the court said; "Spontaneous combustion is usually a rapid oxidation. Fire is oxidation which is so rapid as to produce either flame or a glow. Fire is always caused by combustion, but combustion does not always cause fire. The word 'spontaneous' refers to the origin of the combustion. It means the internal development of heat without the action of an external agent. Combustion or spontaneous combustion may be so rapid as to produce fire but until it does so combustion cannot be said to be fire". (Bickelhaupt (1974))

Thus, the presence of heat, steam, or even smokes is evidence of fire, but taken by itself will not prove the existence of fire. Unless accompanied by ignition, heat sufficient to cause charring or scorching does not constitute fire. To constitute fire, Combustion must proceed at a rate sufficiently fast to produce a flame, a glow, or incandescence.

Regardless of the amount of heat there can be no fire until ignition takes place.

In other words, for there to be fire the following three factors must be present

(a) An oxidizing agent –oxygen (supporter of combustion)
(b) Combustible material (which may be in solid, liquid or gaseous state - Textiles, wood, papers, kerosene, petrol, oil, hydrogen, butane etc.
(c) Heat-ignition source sufficient to raise the temperature to ignition point e.g. Welding & cutting operation, hot pipes etc.

These three factors represent what is called the triangle of combustion.

3.1.4.1 Control/Prevention of Fire Risk

Risk control is an essential element of the risk management process especially as it encompasses other areas like the identification and the eliminating of the dangers, hazards or conditions that are likely to produce losses. It basically involves:

(a) The avoidance of the loss exposure or the elimination of the possibility of loss;
(b) The prevention of loss which includes any action aimed at reducing the likehood of a loss occurring; and
(c) Loss reduction which takes the form of reducing loss severity (Irukwu, 1991).

In essence, risk control covers all those measures aimed at avoiding, eliminating or reducing (or preventing) the chance of loss producing events occurring or limiting the severity of the losses that do happen. (C11, 1985: 3/1).

This will lead us to assess the strategies adopted in fire prevention/reduction.

3.1.4.2 Fire Prevention Devices

On the basis of devices adopted, measures aimed at reducing the severity of loss can be divided into three categories.

(a) **Physical Devices:** It is aimed at reducing either the probability or size of loss. In respect of fire risk, this may take the form of fire proof doors or sprinkler systems, or fire break walls, or smoke vents, etc.

(b) **Procedural Devices:** The poor standard housekeeping and poor maintenance of plants and machineries had been the major cause of fires and industrial / occupational accidents. This could be

remedied by prompt clearing and disposal of flammable wastes, adequate separation of dangerous processes, installation of safeguards on dangerous machineries, effective supervision and inspection, and security checks on the employees.

(c) **Education and Safety Training:** Human errors, acts and omissions as related to security and safety enhance loss. Proper education on cause and consequences of loss need be impacted on all categories of employees. (Akinjobi (2005: 30); Banjo (2000: 39).

3.1.4.3 General Fire Prevention Measures

(a) Adequate preventive educational measures
(b) Good housekeeping
(c) Periodical checking/inspection of electrical and mechanical installations
(d) Cigarette ends should be properly extinguished before disposing of them.
(e) Avoid placing of lighted candles and mosquito coils on window blinds and under beds.
(f) Disconnection of electrical appliances when not in use.
(g) Prohibition of bush burning and burning of refuse in public places.
(h) Maintenance of fire fighting equipment like fire extinguishers, water sprinklers, fire alarm.
(i) Adherence to fire safety standards and measures (Oluoma, 1997: 27-28).

SELF ASSESSMENT EXERCISE 2

Can Risk be avoided?

4.0 CONCLUSION

We have discovered in this unit that treatment of risk is very vital as it unravels the possible options an organization can adopt in handling the risk. We have also seen that while some risks may be avoided, others are inevitable or cannot be avoided, thus, effort should always be made to reduce the frequency of occurrence or the impact of such risks that cannot be avoided.

5.0 SUMMARY

In this unit we have dealt with treatment of risk especially as it related to risk avoidance and risk reduction/prevention. We have equally argued that a responsibility lies on all to try as much as possible to adopt positive strategies towards minimizing losses especially fire and ancillary losses.

6.0 TUTOR-MARKED ASSIGNMENT

Discuss the main strategies of loss prevention.

7.0 REFERENCES/FURTHER READINGS

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UNIT 2 RISK CONTROL II

CONTENTS

1.0 INTRODUCTION

In unit 1, we discussed the treatment of risk concentrating on risk avoidance and risk reduction. We indeed provided the theoretical framework for risk prevention/reduction – measures. In this unit, we shall undertake a practical approach by evaluating the risk reduction measures using known mathematical financial techniques of evaluating risks/projects.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain the essence of evaluating risk reduction measures
- discuss payback period, accounting rate of return and discounted cash flow as veritable methods of evaluating risk reduction measures.

3.0 MAIN CONTENT

3.1 Risk Control II

3.1.1 Evaluating Risk Reduction Measures

Apart from measures that have to be taken in order to comply with official regulations, decisions about risk reduction measures are unlikely to be influenced solely by financial considerations. Even so, the relationship between monetary costs and benefits cannot be ignored

entirely; no organization has unlimited financial resources so that money spent on risk reduction means that less will be available for other uses.

A typical risk reduction programme will involve current expenditure in the expectation of reducing future losses due to the occurrence of the risk(s) concerned. Sometimes the expenditure may consist mainly of recurrent expenses (for example, on maintenance and cleaning), whereas in other cases it may consist mainly of one large outlay on the purchase of equipment (for example, the capital cost of installing sprinklers). In every case, there is an expectation of obtaining a flow of benefit over time. Therefore, financial evaluation may take the same form as for other investment projects where flows over time of both costs and expected benefits have to be compared.

Among the methods that have been devised for evaluating projects designed to provide a flow of benefits over time, three are in common use and these are considered below. Which one is deemed appropriate will depend partly upon the firm's objectives at the time. (CII, 1985)

3.1.1.1 Payback Period

Here, one simply looks at the length of time it will take to recoup the cash outlay on a project. For example, if two projects each involving a capital outlay of N25,000 were expected to yield cash returns (that is, extra revenue or reductions in costs less any additional expenditure) as follows, on a payback criterion project B would be chosen as it recoups its capital cost within two years;

NET CASH RETURNS

	PROJECT A	**PROJECT B**
	N	**N**
Year 1	8,000	10,000
Year 2	10,000	15,000
Year 3	12,000	10,000
Year 4	10,000	Nil
Year 5	Nil	Nil

The above example illustrates one of the shortcomings of the payback period method in that it takes no account of any returns accruing beyond the payback period. The total cash flow on project B (N35,000) is estimated as being less than on project A (N40,000).

3.1.1.2 Accounting Rate of Return

Another simple measure that overcomes that problem is the accounting rate of return which is basically measured as the accounting profit

divided by the investment outlay. It is arguable whether the measure of profit should be taken as gross or net of tax and depreciation, and related to the whole period or expressed as an annual rate. Likewise, the investment outlay may be taken as the original cost or averaged over the period. Using the simplest of the measures with the above example, the returns on the two projects would be;

ACCOUNTING RATES OF RETURN

PROJECT A	**PROJECT B**
40,000	35,000
25,000= 1.6	25,000= 1.4

So on this criterion project A would be chosen. This method still fails to deal with the timing of returns, which can be handled by using the third method.

3.1.1.3 Discounted Cash Flow

There are various DCI criteria, all of which take account of time value of money, that is, the fact that money receivable in the future is of less value than money received now. Take for example, the choice of receiving N100 today or in two year's time: obviously money today would be preferred even if there was no problem with inflation, because N100 invested at, say, 10% for two years would accumulate to N121 (N100 x 1.10^2).

The three DCF techniques commonly used are net present value (NPV), internal rate of return, and net terminal value. It is proposed to illustrate only the NPV techniques here.

The term net present value is self explanatory: it expresses the present value of a set of future cash flows which may be either positive inflows or outflows. Thus the NPV of a capital project is calculated as follows:

$$NPV = - C + a_1 (1 + i) -^1 + a_2 (1 + i) -2 \ldots a_n (1+i)-_n$$

Where C = the initial investment outlay
$_1$.. a_2…….a_n the cash flows through time
i. the time discount rate

The formula can be rewritten as:
$NPV = -C + a_i (1+ i) -^i$

Again taking the example of the two projects, it being assumed for simplicity that earnings accruing at the end of cash year, and using a

discount rate (which may represent the current market rate of interest) of 10 per cent, the result would be:

NPV Project A =- N25000 + (N8000 x 1.10 -^{1}) + (N10000 x 1.10- ^{2})
+ (N12000 x 1.10 -^{3}) + (N10000 x 1.10 -^{4})
= N6383

NPV Project B = - N25000 +(N10000 x 1.10 -^{1}) + (N15000 x 1.10 -^{2})
+ (N10000 x 1.10 - ^{3})
= N4001.

Therefore, project A would be chosen on the NPV criterion.

Although project A shows a better return according to its accounting rate of return and NPV, under certain circumstances, the firm may still prefer to go ahead with project B. For example, during a period of considerable economic uncertainty and low profits, a project offering the prospect of a quick return may be preferred to others offering a higher return on capital viewed over a longer period.

SELF ASSESSMENT EXERCISE

Why is it necessary to evaluate risk reduction measures?

4.0 CONCLUSION

We have seen that it is quite important to evaluate the risk reduction measures to determine the cost/benefit implications of such exercise. It was clear that no one method is always preferred in every circumstance. Economic situation and management posture are also put into consideration in adopting any of the methods of evaluation.

5.0 SUMMARY

In this unit, we have dealt with the evaluation of risk reduction measures and the methods of such evaluation, and how the methods could help in determining the cost/benefit implication of any choice of action.

6.0 TUTOR-MARKED ASSIGNMENT

Discuss the payback period making hypothetical use of example.

7.0 REFERENCES/FURTHER READING

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UNIT 3 RISK FINANCING I

CONTENTS

1.0 INTRODUCTION

The treatment of risks in all its ramifications involves financial considerations. Indeed, as observed in the previous topics, risk avoidance and risk reduction decisions should not be taken without regard to their financial costs and benefits. Moreover, loss reduction measures interact with the financing of risk costs through either the purchase of insurance, the use of contingency (self-insurance) funds, or the charging of losses against current operating costs as they arise. If loss reduction measures are a success in cutting loss expectancies, then there will be smaller losses to finance in the future. (CII, 1985)

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- explain what risk financing means
- assess the ability of an organization to finance risk
- evaluate the essence of the use of capital funds
- discuss the various forms of risk financing available to an organization.

3.0 MAIN CONTENT

3.1 Risk Financing I

3.1.1 Risk Financing

Risk financing is concerned with selecting the cheapest method commensurate with the degree of financial security desired by the organization. Given the stockastic, or random, nature of loss events, it will usually be necessary to use some methods will which spread the cost of losses more evenly over time in order to avoid the sudden, possibly financially crippling, effect of a large loss occurring. Therefore, risk financing decisions have to take account of the time element.

3.1.2 The Ability to Finance Risks

According to the Chartered Institute of Insurance (1985), how a firm decides to handle its risks depends not only upon its attitude to risk and corporate objectives but also upon its financial situation. Essentially, financial considerations affect what a firm may like to do and what it can afford to do. To take an extreme case, the owner of a small firm may have a highly developed sense of responsibility for the safety and security of his employees and for the welfare of customers and other persons affected by his activities. He may also be averse to taking risks, so that given the choice he would do everything possible to reduce the risks associated with his business. If, however, he is operating on a financial knife-edge, only barely managing to cover operating costs, then in order to survive he may have no choice but to take chances, spending nothing on risk reduction or insurance, and just hopes that nothing untoward happens. Normally choices are not as brutal as that, but every organization has to operate within certain budgetary constraints.

Two types of decisions in particular are bound by financial considerations:

- the commitment of capital funds to finance either capital expenditure on loss reduction, or the setting up of a contingency fund;
- the form of risk financing to be employed. (CII, 1985)

3.1.3 The Use of Capital Funds

Before committing funds to loss reduction projects, management will require some idea as to the possible return on the outlay. Unless

mandatory safety, pollution control or other regulations are involved, a project that offers no prospect of showing a positive return normally is unlikely to receive approval. Likewise, capital is unlikely to be made available to finance a contingency fund unless it can show a sufficiently high expected saving compared with the cost of insuring. However, in both cases something more than just a positive rate of return may be required.

Given that in every organization there are usually insufficient capital funds available at any one time to finance all possible project, rules have to be devised for deciding which projects, shall be financed. It is a rationing problem which technically can be handled in various ways but it will suffice here to say that only exceptionally will projects be considered that require more finance than the organization currently has available, or can easily borrow. After deciding the rationing problem, those projects which qualify for consideration may be ranked in order of priority according to their expected rates of return, starting with the highest. That however, may still leave the organization with difficult rationing problems; for example if N100,000 was available and there are three possible projects:

Project	**Capital Requirement**	**Expected rate of return per annum**
A	30, 000	15%
B	80, 000	13%
C	65, 000	12%

It could not proceed with A and B which together would cost more than the N100,000 available. A and C are possible and would give a better return than B alone, however that would leave N5,000 unused and the abandoning of B in favour of the lower yielding C.

3.4 The Form of Financing

The following are three major ways of financing risk cost:

- the charging of losses to current operating costs;
- making ex ante provision for losses through insurance or a contingency fund;
- arranging loans to spread the cost of losses as they occur over the next few months or year.

The method(s) chosen by an organization will partly depend on its financial position, for reasons that are examined below:

a) The Financing of Risks from Operating Budgets

The cost of risks can be carried as a charge against operating budgets, either in the form of insurance premiums or by the charging of losses as they occur. The latter form of financing is suitable for those small to medium sized losses which are an inevitable, regular expense on a company. Provided such losses can be identified and quantified, then their costs can be budgeted for: they may range from accidental damage to vehicles, which normally all but the smallest companies can accept, to perhaps stock shrinkage, theft, or fidelity losses which may lead companies such as multiple stores to reserve several hundred thousand naira each year.

In fact, irrespective of whether one is considering the absorption of losses within monthly cash budgets or over a longer planning period, it is not sufficient that the expected losses during the period can be accommodated within the budget. It is only safe to handle risks in this way if the possible variation in both the size of individual losses and the aggregate losses during the period also all within the budget limits.

If those two conditions are met, then the charging of losses to operating budgets yields certain benefits, notably:

- Cashflow improvements resulting from the fact that whereas insurance premiums have to be paid at the inception of the period of insurance, no charge will accrue for retained risk until losses actually occur and have to be paid for;

- The limitation of costs to actual losses, thus excluding insurer's expenses and profit;

- The application to risk costs of normal in-house budgetary control measures. It is normal practice for commercial and other organizations to have budget control departments which analyze actual results against budgets. The analysis may be broken down into both timing and size of variations and the causes of those variations. Thus, loss experience due to the occurrence of retained risks would be subject to automatic monitoring as part of the budgetary control system.

The system for administering a policy of charging losses to operating budgets is a matter of individual choice. In a large organization divided into separate profit-and/or cost centres those choices are essentially either to deal with losses as part of central overheads or for each centre to charge its losses directly against its own operating budget. The former system has the advantage of enabling larger losses to be retained in that

it enjoys some benefit from risk combination, but there is then the problem of allocating total risks costs to individual profit centres, with the possible loss of incentives for local management to control their own risks. A system which makes each center responsible for financing it's own losses has the reverse effects, and may necessitate different retention levels in different parts of the organization.

Whatever method is employed, it is likely that a combination of both internal financing and insurance will be used for many risks. If each profit centre is made responsible for financing its own losses, then it may be necessary to allow local management more freedom in selecting the level of insurance protection it requires.

b) Contingency Funds

Usually, the administration of an internal contingency fund is kept as simple as possible. If it is desired to retain internally risks which give rise to losses that are too large and unpredictable in occurrence to be charged against operating costs, the solution may be to set up an internal contingency fund so that the costs of losses can be spread over a longer period of one or more years. Such a fund can be financed by either the transfer of a capital sum to the fund or by paying in periodic contributions like the payment of premiums for insurance though, unlike premiums, payments into an internal contingency fund is not usually tax deductible.

As a contingency fund needs to be kept in readily realizable assets, the transfer, of a capital sum to a fund means foregoing other ventures that could have been financed by those reserves, notably their use to finance an expansion of the organization's business. Therefore, the amount that an organization will be willing to set aside to establish a contingency fund will depend upon the size of its existing liquid reserves and the returns that it can expect from alternative uses.

How much an organization can afford to contribute to a contingency fund each year, or pay out in insurance premiums, will depend upon its annual net cash flow – that is, the surplus of earnings over costs (including depreciation and interest payable on loans).

In order to simplify the administration of internal funds, normally only losses are debited against the fund, with no charges being levied for the management expenses or other overheads involved in the administration of the fund. This aspect of management involvement has serious implications in the event of substantial funds accruing, because not only may the handling of claims be fairly accruing, because not only may the handling of claims be fairly time – consuming but also investment

portfolio management for the fund, the maintenance of adequate liquidity, and the control of foreign currency exposures may all require highly skilled management involvement. If no allowance is made for administrative expenses, then funding may appear to be cheap compared with the cost of insurance.

Also, if annual net cash flows vary substantially from year to year, the internal funding of risks has the advantage over insurance that the sizes of the annual contributions to the fund can be varied accordingly, whereas insurance premises have to be paid regardless of the current financial position.

The use of internal contingency funds, may, however be limited by the following factors:

Tax considerations and rules. The inadmissibility of contributions to contingency funds as tax deductable items means that such funds can only be built up out of taxed profits, a factor that has given a considerable impetus to the establishment of captive insurance companies.

If a central fund is set up to include the risk of overseas subsidiaries, further difficulties may be encountered such as exchange control restrictions on remittances of monies either to of from the fund, and the additional involvement of overseas tax authorities and regulations;

If substantial use if made of internal funding procedures it is possible that significant fluctuations may occur in a firm's overall profitability, due not to normal trading activities but because of either exceptionally good or bad loss experience.

(c) Risk Financing by Borrowing

A large orgainsation may choose to finance retained risks by resort to borrowing which may take three possible forms:

- losses suffered by one division may be covered by borrowing from central funds.
- Ad hoc loans may be obtained from external sources;
- Contingency loans may be arranged in advance of losses occurring.

Internal Borrowing

The dangers of relying on funds that one hopes will be available internally to cover necessary payments when losses occur are that (a)

they simply may not be available at that time and (b) even if available they may not be in a liquid assets having to be sold quickly. Moreover, if reserves have to be used to finance losses some desirable investment opportunities may have to be foregone.

Ad hoc Loans

Reliance on raising loans when losses occur is equally dangerous. After a loss the value of an organization's assets will be diminished and its demands for cash will be urgent. Even if its gearing ratio is low so that it can offer good security, the immediacy of its needs may mean that it has to accept a loan on very disadvantageous interest and/or repayment terms. An organization with poor credit standing before a loss occurs is unlikely to be able to obtain a loan on any terms.

Contingency Loans

If the possibility of financing losses by borrowing is seriously considered, the best solution may be to try to negotiate contingency loan arrangements before any loss occurs. Then, when the loss-producing event happens, funds will be immediately available and repayment can take place over the agreed term, so spreading the risk over time.

The advantages of risk financing through loans rather than by buying insurance are that it avoids having to pay the often substantial loading element of premiums and the risk costs are certain to be based on one's own loss experience. On the other hand, a financial institution is unlikely to be prepared to commit itself to making loans available at some future date, even subject to a limit on amount, without the payment of either a commitment fee or a higher than normal rate of interest.

Moreover, as the rate of interest payable is likely to be related to the market rates current at the time the loan is made, the potential borrower cannot be sure of the risk financing cost. Also, unless there can be some moratorium period between the granting of the loan and the time when interest and repayment charges start to become payable, the borrower may have difficulty in meeting his commitment if earnings have been severely depressed temporarily because of an interruption to his business due to the occurrence of the loss producing event.

Clearly, the spreading of losses by means of borrowing is not a method suitable for every organization but it might be a partial alternative to insurance.

SELF ASSESSMENT EXERCISE

Explain what you understand by risk financing

4.0 CONCLUSION

In view of the various importance of risk financing in effectively managing organizational risks, the discussion in this unit has sought to find out the liability of organization to finance risk and the use to which the capital funds are put and whether the forms of financing adopted are contingent and tenable in contemporary financial services sector as a veritable tool in effective management of risks of organizations.

5.0 SUMMARY

In this unit, we have systematically analyzed the ability to finance risk, the use of capital funds and the various forms of risk financing an organization can adopt to adequately manage its risk exposures.

6.0 TUTOR-MARKED ASSIGNMENT

Discuss the implication of risk financing by borrowing.

7.0 REFERENCES/FURTHER READINGS

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UNIT 4 RISK FINANCING II

CONTENTS

1.0 INTRODUCTION

Progression from the internal funding of losses to the formation of a captive insurance company is only a small step. It is a logical extension of self-funding, with various additional advantages available that can provide substantial benefits, provide the corporate philosophy regarding the objectives and operation of a captive is soundly based.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- define and explain captive insurance
- discuss the reasons for the formation of captives as a system of risk management.

3.0 MAIN CONTENT

3.1 Risk Financing II

3.1 Captive Insurance Companies

The simplest definition of a captive insurance company is that it is an insurance company established by a commercial or industrial concern with the principal intent of insuring or reassuring risks emanating from its owner and subsidiary and associated companies. If the captive only accepts business from these sources then it is known as a pure captive, whereas captives taking business from other sections of the market involving business entirely unrelated to its parent are normally called open market captive (CII, 1985).

3.2 Reasons for the Formation of Captives

a) Internal Funding of Risks

A captive may be operated like an internal contingency fund, as earlier discussed. The formal establishment of a separate company to operate a fund does, however, have certain advantages, notably:

- Unlike contributions to an internal contingency fund, the premiums paid to a captive are treated as a tax deductible expense for its parent company and fellow subsidiaries and associated companies in the same way as premiums paid to a conventional insurance company.

- A captive can qualify as an authorized insurer for purposes of meeting compulsory insurance regulations.

b) Saving on Insurance Costs

The operation of a captive insurance company can in principle be as cheap as that of an internal fund. If it acquires business only from its parent organization, it will incur none of the sales and marketing expenses which a conventional insurance company has to pay and which are included in the loading element of its premiums. It will also receive all of the investment earnings generated by the funds it hold. Moreover, on that part of the organization's insurances which the captive retains, it will receive any profit which otherwise could have accrued to its insurers.

c) Risk Control

The difficulties of relating insurance premiums to the loss expectancies of individual policyholders lead to complaints by large organizations that devote considerable effort and resources to risk reduction that the premiums they are charged inadequately reflect their better than average loss experience. By retaining a substantial part of their own risks, albeit through a captive company, an organization automatically and directly benefits from any improvement in its own loss experience. Conversely, the knowledge that it will equally suffer from the consequences of any slippage in its standards of loss control provides a strong financial incentive to pursue a fully integrated risk management policy throughout all parts of the organization.

d) Access to Reinsurance Markets

In the same way as the capacity of an internal contingency fund is limited by the finance at its disposal, so too a captive insurance company is unlikely to be able to carry more than a small proportion of the parent organization's major risks. Over the years it may manage to build up its reserves, but it is never likely to be able to retain for its own account all of those risks. By forming a captive it is possible to gain ready access to reinsurance markets. Compared with direct insurers, reinsurers have tended to be more ready:

- to offer cover on an excess of loss basis with a substantial deductible;
- to relate premiums more directly to the client's own loss expense;
- to be more flexible in their attitudes towards underwriting unusual risks.

e) Flexibility of Operation

At least in relation those risks which it retains entirely for its own account, a captive can administer the business in a manner which suits its parent's needs in regard to such matters as the timing of premium payments, the interpretation of policy conditions and the handling of claims.

Captives have also been used to provide cover that is not readily available form conventional insurers. By showing confidence in the parent organization's ability to control its risks by taking a significant share in the cover provided, the captive may be able to persuade other insureres or reinsurers to participate too.

f) Global Insurance Arrangements

Multi-national companies differ in their risk handling strategies. In those cases where a centralised policy is adopted, its implementation may be frustrated by insurance regulations in different countries which require domestic risks to be placed with locally established insurers. A captive may then be used to restore central control, by means of the local companies reinsuring most of the risks they write with the captive, which in turn retrocede any balance over its own retention that then, in effect, becomes the group deductible.

g) Off–Shore Tax Havens

Essentially, a tax haven is a country that levies a significantly lower rate of corporate tax than the country of domicile of the parent company. Thus by siting a captive insurance company in a tax haven, although the

parent company will have to pay its going-rate of tax on profits remitted by the captive, until they are remitted they will be subject to a lower rate of tax. Therefore, the captive's funds and risk-bearing capacity can be built up much more rapidly than if it were established in the same country as its parent company.

SELF ASSESSMENT EXERCISE

Define Captive Insurance.

4.0 CONCLUSION

Captive Insurance as a progressive from internal funding of losses is an effective risk management strategy adopted by the parent company to realize the corporate risk management philosophy of the organization. Captive insurance is thus, a problem/risk – resolving device, a tool which comes close to the operations of the parent and adoptable to its needs and aspirations.

5.0 SUMMARY

In this unit, we have dealt with the definition, philosophy and reasons for the formation of captive insurance as an effective risk management device.

6.0 TUTOR-MARKED ASSIGNMENT

Outline and discuss the reasons for the formation of Captives.

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UNIT 5 RISK FINANCING III

CONTENTS

1.0 INTRODUCTION

In this unit, you will learn about the risk treatment methods of risk reduction and risk transfer in the context of risk financing. You will also learn about insurance transfer method exemplified by discussion on the nature of insurance, definition of insurance and requisites of insurance risks.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- describe risk retention and risk transfer
- discuss Insurance risk transfer methods
- define and explain the nature of insurance.

3.0 MAIN CONTENT

3.1 Risk Financing III

3.1.1 Risk Retention

If risks cannot be avoided, it may be necessary to retain them. Risk can be consciously or unconsciously retained. In other words, risks retention can occur in two broad ways.

i) Unplanned risk retention, and

ii) Planned risk retention (Oluoma, 1999: 23)

i. Unplanned risk retention:

Unplanned risk retention might result from any of the following:

1. Ignorance

Some risks are unconsciously retained because the individual may be ignorant of the existence of the very risk. Example, one may contact disease about which one is ignorant and not seek medical attention, at least early enough.

2. Lack of Knowledge or Inability to Reach the Right Decision

Some diseases could be due to the fact that the individual lacks knowledge of how they could be treated.

3. Laziness, Indifference or Lack of Thought

In fact, risk retention could result out of laziness or indifference or lack of thought in exploring or discovering further a better way to treat the risk. A qualified graduate who is too lazy to search for a job may face the risk of not securing a good job to earn good living.

ii. Planned Risk Retention

1. Minor Risk

Some risks are retained because they are too minor or inexpensive to deserve special treatment. Example, a biro or a pencil could easily be lost by a student, yet not much effort is often made for its extra protection due to its inexpensive nature. It should be noted that for the fact the biro is inexpensive does not necessarily mean that it is unimportant since a biro or pencil is very important to a student.

2. Major Risk

The major risks involve such losses that cause much financial hardship to an individual, family or business, requiring special treatment. The technique of handling major risks include: internal reserves and funding of risk through the use of current operating fund, contingency funds, borrowing; or self-insurance; establishment of special unit charged with responsibility of managing the retained risk; establishment of a captive insurance company, etc.
Whichever method is applied, the following factors need be considered:

i.) The size of loss;
ii.) The financial strength and stability of the firm
iii.) The cost of staff and facilities for organizing the unit;
iv.) The maximum probable losses expected;
v.) Ability to study the risks and provide proper estimate;
vi.) Possible repetition of losses within a certain period;
vii.) Concentration or spread of risk;
viii.) Cost of keeping funds 'waiting'
ix.) Tax considerations; etc.

3.1.2 Risk Transfer

Some of the most important risks and losses faced by individuals and businesses cannot be avoided or retained. The sole method left for consideration is the transfer of as much of the unpredictability as possible to someone else.

Two principal ways of transferring risks are:

i) Non-insurance transfer and
ii) Insurance transfer

i. Non-Insurance Transfer

The purpose of this is to transfer part or whole of liability for loss or damage of property to another person or unit/agency. Example of this could be seen in contract awards in which certain risks are transferred (through indemnity clauses) to the contractor or sub-contractors, hedging contacts, bailment, and lease contracts. Other ways include: creating a trust for estate management, putting money in the bank, depositing will or jewelry in bank safe, etc.

ii. Insurance Transfer

Insurance is a modern and more reliable scientific management tool of treating risks. In fact, insurance is risk management, but risk management is not necessarily insurance. Risk management is more than insurance management since insurance is a sub-set of risk management but a very prominent tool.

Certainly, insurance as one of the techniques of handling risk is needed. In fact, it may remain as the principal method of treating many risks of business. But without careful study of all the alternatives in risk management in a coordinated decision making process, insurance may often times be used where it shouldn't be used, or not used where it

should be used. If one is to manage risks, he must almost always insure some risks and be an "insurance buyer". He must also do much more than this if he deserves the title risk manager.

The issue of insurance transfer or more specifically, insurance as a tool of treating risk could be well understood after a good explanation of what insurance is, its mechanism and significance shall have been made.

3.1.3 Insurance Risk Transfer

3.1.3.1 The nature of insurance

Unlike other products and service, the best an insurance company can do is to promise the customer that by acquiring an insurance policy, he or she will be in a position no worse and no better than the situation existent before the event against which the service that has been provided has occurred. To the insurance customer, buying insurance means accepting relatively small but definite financial loss in order to avoid a larger (probable) loss. (Meidan, 1984: 1).

By nature, insurance products are intangible unlike manufactured goods that are tangible. Arising from this intangible nature, insurance marketing thrives on trust, integrity and confidence. If clients cannot be certain that valid claims will be paid promptly, the benefit of purchasing a policy, in the first place, is lost. Whenever confidence in the willingness and ability of an insurance company to pay claims is eroded, the prospects for the industry become gloomy and the foundation of her existence is undermined.

Insurance plays a vital role in the socio-economic development of any nation. It plays a dual inter-related role: It provides reasonable security to the policy holders which stimulate their economic and social activities, and it also contributes immensely to economic growth and development by generating investible funds and channelling them into productive national investments. It is, therefore, imperative that our country needs a strong and viable insurance market to further our growth and development.

3.1.3.2 Requisites of insurable risk

For any risk to qualify for insurance the following features must be present (Oluoma, 1999: 31)

1. There must be insurable interest. Insurance without insurable interest is a mere wager or gambling as such is unenforceable at law.

2. Insurance is limited to financial value. The subject matter of insurance should be capable of being measurable in financial or monetary terms. It is the financial value that is insured and not that sentimental value attached to the items.

3. There must be large number of similar risks. The concept of large number on insurance has been earlier stressed. It need be said here that sufficiently large number of similar risk gives a high degree of accuracy in determining the probability of loss.

4. It must be possible to calculate the risk of loss. Here, statistical information or past experience is necessary as a useful guide to be able to determine the risk of loss.

5. Losses must be accidental or fortuitous. It is the unexpected element of the event happening, or the cause of not being a deliberate occurrence that is the focus of insurance.

6. It must be consistent with public policy and being lawful. Insurance is a legal business undertaking and as such should be transacted in legal garb. It is not meant to protect or to cover any act that is against the law or public policy. For instance, it cannot cover fine for motoring offences imposed on the driver; also it does not cover deliberate misconduct of an individual or a professional man.

3.1.3.3 Definitions of Insurance

With regard to the nature of the phenomenon insurance, no one definition is quite sufficient. Indeed there abound several viewpoints from which insurance could be defined. However, we will look at insurance from the legal and business institution view point and make an inference.

Legally, Ivamy, (1979: 3-4) define insurance as, “a contract of insurance in the widest sense of the term may be defined as a contract whereby one person, called the ‘insurer’ undertakes, in return for the agreed consideration, called the ‘premium’, to pay to another person called the ‘insured’, a sum of money, or its equivalent, on the happening of a specified event….where the payment of the money or other benefits is discretionary and not obligatory the contract is not one of insurance”

Although the superlative ‘widest’ may appear deceptive here as it suggests a general rather than a comprehensive approach to the issue, it did however highlight some other respects. It reveals that there is no

doubt about the obligation to pay the sum insured or its equivalent at the happening of the event insured against. The validity of insurance rests on the terms and provisions. The contract, therefore, is a legal way of shifting (or transferring) a burden of risk from the insured to the insurer in return for a premium.

According to Bickelhaupt (1974:30) "Insurance has been defined as a plan by which large number of people associate themselves and transfer to the shoulders of all risk that attach to individuals. Insurance may also be looked upon as an important part of the financial world, where insurance serves as a basis for credit and a mechanism for saving and investments. It is a major part of the free enterprise economy".

The definition relates insurance to the concepts of large number and transfer of risk as earlier discussed. It went further to recognize insurance as an important instrument in effective financial intermediation, a good credit system and a tool for mobilization of savings and investment of funds for the growth and development of an economy.

From all the definition viewpoints, the common and salient facts remains that, insurance involves:

- Management of uncertain risks;
- Transfer and pooling of risk;
- Payment of consideration called premium by the insured;
- An obligation, legal, on the part of the insurer to make good the loss sustained by the insured under the contract terms and provisions;
- The concept of large number and loss sharing; and
- Financial intermediation for the growth and development of the economic system

SELF ASSESSMENT EXERCISE

1. What ways can risk be retained?
2. Attempt a definition of Insurance

4.0 CONCLUSION

We have seen that where risks cannot be avoided they can be retained either consciously (planned) or unconsciously (unplanned). We equally observed that if risks cannot be avoided or retained, they can be transferred through non-insurance or insurance method.

5.0 SUMMARY

In this unit, we have dealt with risk financing with dimensions of risk retention and transfer. We also treated the nature, definition of insurance and requisites of insurable risks.

6.0 TUTOR-MARKED ASSIGNMENT

Discuss requisites of insurable risks.

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UNIT 6 INSURANCE AS A RISK MANAGEMENT TECHNIQUE

CONTENTS

1.0 INTRODUCTION

In the previous units we learnt that insurance is a method of transferring risk. In this unit we shall look at the functions/roles of insurance as an effective risk management tool.

2.0 OBJECTIVE

At the end of this unit, you should be able to:

- discuss the role/functions of insurance in an economy as a risk management technique.

3.0 MAIN CONTENT

3.1 Insurance as a Risk Management Technique

3.1.1 Functions/Role of Insurance

Insurance performs, among others, the following roles:

A) Traditional Economic Role

The traditional role of insurance is to provide cover or protection for loss or damage suffered by the insured. The idea is to reduce burden on the insured by placing him in the position he was prior to the loss/damage. In return for a premium known or determined at inception of a contract, the insured transfers to the insurer the risk of losses which may be uncertain both as to timing and amount. The transfer system involves the combination of the risks of many individual who are

banded together. It does not reduce the aggregate amount of potential loss, but it does achieve a reduction of uncertainty and spreads the burden for those whose risks are pooled. Therefore, the major economic benefit occurring to society from insurance mechanism is thus, the reduction of uncertainty in the aggregate. To the extent that pure risk, like drought, fire, or flooding, is inimical to economic progress, its reduction is valuable contribution to the well being of society.

B) A Business that Allows Other Businesses to Survive

Insurance assumes the risks of other business ventures to ensure their continued growth and development. In this regards insurance has been tagged as "the business that exists in order to ensure the survival of other businesses.

In fact, there are numerous risks, other than normal trade risk which confronts a businessman. Premises may damaged by fire, tornadoes, explosion, riot and civil commotion; warehouse or store may be burgled; workmen may be injured in the cause of their employment; wages may be snatched by armed robbers; there may be defalcations by some employees. Without insurance, a prospective entrepreneur, for the reasons give above, would hesitate to commit all his available funds to the purchase of premises, expensive machinery, plant and equipment. Anticipating the possibility of the destruction of his property, he may withhold part of his funds in reserve. Presumably, all economic units, including banks and other finance houses, would require a greater liquidity position. This accumulation of individual reserve fund would operate to restrict output (Falegun, 1991: 48).

The availability of insurance minimizes the entrepreneur's uncertainty to the extent that some of the risks with which he is faced can be transferred for a fixed amount (called premium) he is free to fully commit his assets to the operation of his business. Businessmen are thus guaranteed against actual losses and are enabled to acquire the necessary confidence and tranquility of mind that are a requisite of fruitful risk taking.

C) Contribution towards the Growth and Development of Science and Technology

The availability of insurance has made it possible for entrepreneurs and scientist alike not only to transfer the risk of sustaining losses to insurance companies, thus making it possible for them to put their available resources into more productive use, but also to relieve their mind of what will become of them should they sustain losses. The transfer of these risks thus provides the peace of mind required to be

more creative and innovative, with the assurance that if things go wrong, all is not lost. Insurance is, therefore, a source of comfort as well as a source of compensation (Kari, 1994: 6).

The great scientific and technological feats that have been recorded in recent times bore their efficient performance to adequate insurance safeguards. Capital intensive projects like construction of bridges, flyovers, dams, erection of beams, high-rise buildings, computer innovation, giant and chemical instruments, etc. are cases that require effective insurance protection (Oluoma, 1999: 33).

D) Capital Investment Function

Insurance companies, as financial intermediaries provide capital or funds for economic development. In the economic and financial spheres, the national value of life assurance is incalculable, and the aggregate sums continuously made available for investment are considerable and have a dual effect. They afford a stream of capital into industry which would be difficult to stimulate from any other source. Modern industrial organization tends towards large-scale operation. The borrowing of money is recognized as essential to business and to finance new or existing undertaking on a large scale by an appeal to small investors would involve an uneconomic expense in gathering together the nominal contribution of each (Evans, 1985: 13).

In fact, by generating funds (life and non-life) from the general public, insurance companies accumulate a vast pool of which is utilized for investments in various sectors of the economy. More so, in recent times, with increasing government's interest in insurance and the growing economic role of insurance as a viable financial infrastructure, government has had cause to legislate or regulate the investment of insurance companies. Insurance funds could be invested in such securities as the stocks of the federal and state governments and semi-government bodies, equities, mortgage loans on real estate, industrial debentures and unsecured loans, treasury bills and treasury certificates, cash on deposit account, etc.

E) Provision of Welfare and Social Benefits

Of equal importance is the service rendered to social welfare. In some instances, on the death of the breadwinner, it is found necessary for a family to break-up and disperse among relatives. Such a situation is wholly undesirable for the family unit is still the basis of our social structure. Adequate assurance cover can provide the buffer against shock of early death and relieve the financial stress during the period of

readjustment; furthermore, it affords a means of independence on old age or, at least assistance to that end. (Evans, 1985: 8).

Moreso, life assurance contracts like whole life and endowment can guarantee the provision of fund for the up-keep of the dependants at the death of the bread winner. Even educational endowment assurance policies exist to ensure that the education of the child continues uninhabited following the death of the parent(s). In addition, state and occupational pension schemes operate to take care of retirement schemes have been designed by governments in recent times to cater for the financial problems of unemployed, old age, disability, sickness, death, maternity and medical expenses, etc. In Nigeria, apart from the State and occupational pension schemes, there is the Nigeria Social Insurance Trust Fund (formerly Nigerian Provident Fund); and the National Health Insurance Scheme (Oluoma, 1999: 36).

F) Provision of Employment Opportunities

Like any other industrial or business concern, insurance industry is run by human beings working with their mental and physical energies. There is, thus, a proper utilization of human and material resources. Such human resources are usually recruited from among the labour force. The industry is indeed an important employer of labour.

Persons employed in the insurance industry include those employed in the insurance companies and intermediaries. They range from clerical to managerial staff. With over 135 insurance and Reinsurance companies, over 450 insurance brokers and thousands of agents and over 30 loss adjusting firms presently in Nigeria and their branch networks across the country, the insurance industry no doubt has provided jobs for thousands of persons. Apart from direct jobs within the industry, the industry has also provided jobs to other ancillary bodies or organs like lawyers, bankers, external auditors, engineers, contractors, actuaries, institutions of higher learning, etc. Thus, it could be said that the insurance industry has contributed immensely in solving the unemployment problem in the country.

G) Provision for unforeseen economic, social and other losses

Insurance makes provision for unforeseen economic, social and other losses which may be:

i) Self-inflicted, unintentionally, in the course of one's professional, economic or personal pursuits: e.g. fire or motor accident due to owners fault;

ii) Inflicted, on other persons and/or institutions in the conduct of one's professional, economic or personal activities: e.g. medical, architectural or engineering practice or as a driver of a vehicle, whereby in each case the cause of the damage is the insured.

iii) Sustained directly from professional, economic or professional pursuits of other persons and/or institutions; e.g. oil spillage, atmospheric pollution, burglary and theft, air crash, and retrenchment. In this case, the insured is the victim of other people's action.

H) Income/Profit to Shareholders

Proprietary or limited liability companies place much emphasis on profit generation in expectation of a decent return for shareholders on their capital outlay as well as for the growth, expansion and continuity of the business. Virtually all insurance companies in Nigeria have been declaring huge profits and dividends for the owners as a mark of successful business activity. The level of profitability of a business is one of the major yardsticks in measuring the health and viability of an organization. This profit/income generation motive has equally spurred increasing government participation in insurance business in recent times.

I) Foreign Exchange Conservation

Reinsurance did not develop in time with direct insurance business in Nigeria. The early stage of insurance business in Nigeria witnessed the placing and reinsuring of substantial insurance business overseas, due mainly to lack of underwriting expertise and small market capacity. Premiums were likewise remitted overseas in foreign exchange. This, no doubt, resulted in loss of substantial foreign exchange and revenue. The presence of National Insurance Corporation of Nigeria (NICON) in 1969 which was made then to function as an Insurer and Re-insurer, by accepting 10% legal cession from all insurance companies in Nigeria could not check the problem of loss of foreign exchange as more businesses continued to be reinsured abroad. However, with the establishment of a professional re-insurer, the Nigeria Reinsurance Corporation in 1978, which accepted 20% legal cession from every insurer in Nigeria and having the power to control overseas reinsurance, our foreign exchange position has been boosted. The existence of 4 other Re-insurers in the market has added more tonics to the industry.

J) Encouragement of International Trade

With increase in a nation's volume of foreign trade, it is quite necessary that its financial services are developed to match such trend hence, the

need for insurance protection and financial safeguards. This could as well result to increase in invisible exports. In Nigeria, all imports into the country must be compulsorily insured by local insurer, by legislation. This ensures that the importers or merchants are adequately protected against various losses they may be subjected to including loss/ damage to goods and merchandise, etc. either by air, land, or sea. The perilous nature of maritime / Aviation venture cannot be over emphasized hence the need for adequate insurance safeguards. Also increasing exports need increased insurance cover hence the need to spread such risk in some cases across the border. This also explains the international role of insurance.

K) Loss Prevention Role

Apart from the fact that the bedrock of the insurance business is essentially risk management exemplified in underwriting and rating, insurers do provide special services in the area of loss prevention. Insurers tend to prevent losses through the system of surveys and inspections of risks. Surveys and inspections are carried out especially in areas of insurance like fire, theft/burglary, engineering, etc. The purpose of this is to detect the physical and moral hazards affecting the risk which are usually presented in a report. Based on their findings, insurers do make adequate recommendations, advising the insured on the best ways to prevent the loss from occurring. Bearing in mind the loss of huge material, financial and human resources that may result in the happening of a risk, any effort made at preventing such a risk of loss from occurring is very laudable for the preservation of the material and human assets and makes for the continued growth and development of the economy.

SELF ASSESSMENT EXERCISE

Discuss the traditional economic role of insurance.

4.0 CONCLUSION

In this unit, we have seen that the roles/functions of insurance are very enormous and pervasive. It is equally a modern tool of risk management.

5.0 SUMMARY

In this unit, we have dealt with the functions of insurance as a risk management device. Insurance remains a veritable instrument of managing the various risks that confront society.

6.0 TUTOR-MARKED ASSIGNMENT

Insurance is risk management, but risk management is not necessarily insurance. Comment.

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