

APPLICATION OF MANAGEMENT ACCOUNTING TOOLS  
IN LISTED INSURANCE COMPANIES OF NEPAL

**A THESIS**

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## **VIVA- VOCE SHEET**

We have conducted the Viva- Voce examination of thesis prepared by

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### **Application of Management Accounting Tools in Listed Insurance Companies of Nepal**

And found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as

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### **DECLARATION**

I hereby declare that the thesis “**Application of Management Accounting Tools in Listed Insurance Companies of Nepal**” submitted to Nepal Commerce Campus, the Faculty of Management, Tribhuvan University is my original work done for the partial fulfillment of requirements for the Master of Business Studies (M.B.S.) under the supervision of Prof. Dr. Bihari Binod Pokhrel and Keshab Nath Wagle of Nepal Commerce Campus.

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## **CHAPTER I**



# INTRODUCTION

## 1.1. Background of the Study

Nowadays, we see, hear and read many cases of accidents in the newspapers causing untimely or pre-matured death, loss of property by fire and loss in accidents etc. We are exposed to all of these common types of risks. Similarly, some risks are such they cannot be predicated beforehand for they can happen at any time. Such risks involve accident, death, sickness, loss of job, fire, perils of the sea etc. Human beings cannot predict future with a hundred percent accuracy

It is impossible to eliminate the happening of uncertain events or risks. Such types of risks may create economic crisis to the concerned party as well as hamper in economic development of the country, in case they happen. So protection against such unfortunate events is very essential thing for every one of us. There are some risks, which are out of control of human being like earthquake, landslide, storm, floods, thunderstorm etc. Although human beings are still trying to overcome such uncertain events or risks, they have not completely become successful in doing so. However, they have created a "device" to reduce uncertain risks, which is known as "insurance". So in order to make life worth living, people must adopt the device (appropriate measure) that is "insurance".

Insurance is a cooperative form of distributing a certain risk over a group of persons who are exposed to it. Insurance is a co-operative device to spread the loss caused by a particular risk over a number of persons who are exposed to it and who are exposed to ensure themselves against risk.

Thus, insurance is one of the methods of protection against risks spreading over of the risks. People can reduce the financial loss with the help of insurance.

Insurance may be defined as an agreement consisting of two parties in which one party (the insurer) agrees to pay to the other party (the insured) or his beneficiary, a certain sum upon a given contingency (risk) against which the insurance is sought.

Thus, risk can be insured in a number and extent owing to the growing complexity of the present day economic system. Insurance occupies an important place in the modern world. Insurance has now become a thriving business. The party doing the business promises to indemnify the losses occurred due to particular risk in return considering against a risk to persons who propose to insure themselves. Thus, nowadays insurance is also defined as form of contract under which one party agrees in return for the premium paid to pay for or make good a loss suffered by the other party as a result of some uncertain events.

Thus, insurance is a social device to accumulate funds to meet the uncertain losses through a certain risk to a person insured against the risk. The true nature of insurance is that it is a social device, which only reduces risk. It does not stop an event to happen; insurance does not eliminate risk from the society.

Accounting system play important role in business and helps to enhance the business activities in future. Accounting system includes management accounting that provides guideline to utilize available resources and help to achieve advantage in the present

competitive environment through using various tools and technique of management accounting. Management accounting plays a significant role in organizing the business. It helps to the manager for planning, controlling and decision making. The study is focused on management accounting practice of insurance companies in Nepal.

## **1.2 Evolution of Insurance**

The earliest traces of insurance in the ancient world are found in the form of marine trade loans or carriers' contracts, which included an element of insurance. Travelers by sea and land were very much exposed to risk of loosing their vessels and merchandise because of piracy on the open seas and highway robbery of caravans was very common. The risk to owners of such ships were enormous and therefore to safeguard them the marine traders devised a method of spreading over them the financial loss which could not be conveniently borne by unfortunate individual victims. The co-operative device was voluntary in the beginning but now in the modern times, it has converted into modified shape of premium. The Brugians sold the marine policies of the present form in the beginning of fourteenth century. The insurance development spread throughout Spain, Portugal, France, Holland and England

After marine insurance, fire insurance developed in the present form. It is originated in Germany in the beginning of sixteenth century. It got momentum in England after the great fire in 1666 A.D. when the fire loss was tremendous.

Life insurance made its first appearance in England in the sixteenth century. The first recorded evidence in England was the policy on the life of William Gibbons on June 18<sup>th</sup>, 1653.

## **1.3 History and Development of Insurance in Nepal**

The history of insurance in Nepal is not very long. There were altogether 4 insurance companies operating their business in Nepal till 1986. Two were local companies.

- i) Nepal Insurance Company: 2004 B.S. a subsidiary company of NBL which was operating both life and non-life insurance business.
- ii) Rastriya Beema Sansthan: 2024 B.S. both life and non-life insurance business.
- iii) National Insurance Company (Indian Company) had license to operate non-life insurance business.
- iv) Oriental Insurance Company to operate non-life insurance business.

At present insurance business can be carried out under Nepal Insurance Act 2049 B.S. and insurance rules 2049 B.S. When RBS was set up in 2024 B.S. it had intended to take up only non-life business but after 5 years it started to issue life policies and that was taken over by India. RBS were set up by government affecting from 2024 B.S. His Majesty's Govt. of Nepal after enacting the insurance act 2024 B.S. framed the insurance rules in 2025 B.S. Insurance board gives permission to transact non-life business to National Life and General Insurance Co. Ltd., a public sector company established in 2044 B.S. Later in 2045 B.S it got permission to issue life insurance policies. The period between 2044 B.S. and 2049 B.S. show a rapid development of Nepalese Insurance industry. In this period more private sector companies were eager to invest in insurance sector.

It has been more than sixty years since insurance business started in Nepal. The advent of this business was through Indians. There were 4 Indian Insurance Companies viz. Ruby General Insurance Co., Premier Insurance Co., Life Insurance Co. (LIC) and National Insurance Co. After the nationalization policy followed by Indian Govt., only two of the above mentioned companies remained in our country. However they were established under different names. The Oriental

Insurance Co. Ltd. (1967 A.D.) and National Insurance Co. Ltd. (1987 A.D.) are still operating in Nepal.

There are two types of insurance viz. life and non-life.

### **1. Life insurance**

Insurance that is done on the behalf of the human life is known as life insurance. It is also a kind of contract where one party indemnify the other if the incident happen as mentioned in the contract. "Life Insurance may as such, be defined as a contract where by one party undertake to pay another a certain sum of money on the death of later or on his attaining a certain age, in exchange for a cash compensation known as premium which may be paid in a lump sum or periodically.

## 2. Non Life or General Insurance

All type of insurance except life lies in Non Life insurance. It means that it generally includes the insurance of physical assets. In such type of insurance compensation is paid on the fact of incident. Insurance like motor, aviation, marine, fire, cattle etc lies in this category

After then, During BS 2049 amendment was made on "Insurance act 2025" and another act naming 'Insurance act 2049' was introduced. After the introduction of "Insurance act 2049" as, as result, a large number of modern insurance companies were established from private sector contributing a lot in the economic growth of the country. According to the data provided by insurance board (2064), there are 21 insurance companies established in the country. Among them sixteen are related with non life insurance four are life and one is both life and non life .they are as follows.

S.N	Name of insurance company	type	Estd. date
1	Nepal insurance company	Non-life	1947
2	Nepal oriental insurance company limited	Non-life	1967
3	Rastriya bema sansthan	both	1967
4	National insurance company limited	Non-life	1973
5	National insurance company ltd	life	1947
6	National general insurance company ltd	Non-life	1988
7	Himalayan general insurance company ltd	Non-life	1992
8	United insurance company ltd	Non-life	1994
9	Premier insurance company ltd	Non-life	1994

10	Everest insurance company ltd	Non-life	1994
11	Neco insurance company ltd	Non-life	1994
12	Sagarmatha insurance company ltd	Non-life	1996
13	Alliance insurance company ltd	Non-life	1996
14	N.B insurance company ltd	Non-life	2001
15	Nepal life insurance company ltd	Life	2001
16	Life insurance company ltd	Life	2001
17	American life insurance company ltd	life	2001
18	Prudential insurance company ltd	Non-life	2002
19	Shikhar insurance company ltd	Non-life	2004
20	Lumbini general insurance company ltd	Non-life	2005
21	Siddhartha general insurance company ltd	Non-life	Non-life

*Source: Khadka , Serjeng, 2008:455*

#### **1.4 A Brief Overview of Management Accounting**

However, the process of accounting was started long ago but the history of management accounting practice is rather new. Management accounting practice started from 20<sup>th</sup> century the importance of management accounting was not felt in ancient time. There was no any competition between the business firms. Therefore, the managerial decision was not so important. Today, business is competitive and needs optimal managerial decision. The management has to carry out basic function that is cost minimization, maximization of profit, cash management in an uncertain atmosphere. Management accounting gathers necessary data, which helps to reduce uncertainty and risk after adopting management accounting tools.

The management accounting obviously helps to the manager for planning, organizing, directing and controlling because the objective of management accounting is the same. Management accounting is concerned with accounting information that is useful for management. Management accounting is concerned with providing financial and non-

financial information that helps decision maker to make good decision with good ideas. Management accounting concept emerged because of the complexity that exists in today's business decision making process. Its main theme is to simplify the planning and decision making process and to provide support to achieve better organizational outcomes. It is important for every level of managers, who have to involve in some sort of decision making process. Management Accounting is "the process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of information used by management for planning, evaluating and controlling within an entity and assuring appropriate use and accountability for its resources. Management accounting also comprises the preparation of financial reports for non management groups such as shareholders, creditors, regulatory agencies, and tax authorities". (CIMA Official Terminology). A management accounting applies his or her professional knowledge and skill in the preparation of and presentation of financial and other decision oriented information in such a way to assist management in the formulation of policies and in the planning and control of the operation of the undertaking. Management Accountants therefore are seen as the "value-creators" amongst the accountants. They are much more interested in forward looking and taking decisions that will affect the future of the organization, than in the historical recording and compliance (scorekeeping) aspects of the profession. "Management accounting knowledge and experience can therefore be obtained from various fields and functions within an organization such as information management, treasury, efficiency auditing, marketing, valuation, pricing, logistics etc."(Institute of Certified Management Accountants, ICMA)

Thus, the whole idea of managerial accounting is to assist strategic managers to perform management function more effectively by providing relevant economic information. Management is the process of planning, decision making and control. An organization is the common place, where the management accounting tool is applied for better improvement of its performance within the organization.

## **1.5 Profile of the sampled Insurance Companies**

Himalayan general insurance company limited (HGICL)

Insurance business history in Nepal is not so much longer. Nepal Bank Ltd. (the first established Commercial Bank of Nepal) started the first insurance company as "Nepal Insurance and Transport Company Ltd. (NITC) in 2003 B.S. During that period NITC has covered limited areas of insurance business. Nepalese people used to go to Indian Insurance Companies for life insurance and general insurance. A huge amount of money was going out from the country. Public were facing difficulties in getting insurance facilities. Those insurance companies in India were successful in collecting substantial amount of pyramid across the broader. This situation hampered the economic development process as insurance business it directly related with it. As a result, there was a lack of necessary Capital to mobilize the internal available resources for the betterment of economic development.

Himalayan general insurance company limited was formally established on 2050-04-06(B.S) providing various type of non life insurance perils to customer. It has expanded six branches in different geographical regions. It is well managed by it's staff under one umbrella.

Head office: Babar mahal Kathmandu

Branch office: Darbarmarg (KTM), Lalitpur , Biratnagar, Birjung, Pokhara, Butwal



Insurance perils provided by HGICL are fire, machinery broaden, electron equipment ,marine ,cargo ,personnel accident insurance, fidelity granite, workmen's compensation.

Contractor's all risks, erection all risks, trade comprehensive, householder's comprehensive, medical and health and other insurance.

### **Nepal Insurance Company limited (NICL)**

Nepal life insurance Company limited NICL was established as an public limited company in 2058-1-21 B.S under company act 2053 B.S and insurance act 2049B.S. it was established from the pure Nepalese investment of the private sector. It has been operating life insurance business by opening twelve branches offices in main urban area of Nepal .It's branches offices are located in Kathmandu, Banepa , Birjung , Nepaljung, Pokhara, Mahendranagar, Lahan, Janakpur, Biratnagar, Narayanghat, Butwal, and Birtamod. Life insurance policies are issued by every branches of the company. Total paid up capital of the company is Rs 250 million out of which 80% was paid by the founder member of the company and rest 20% by the general public.

### **Nepal Life Insurance company limited (NLIC)**

NLIC is established under the company act 2053 B.S and insurance act 2049 B.S as a public limited company on 2058/01/21 B.S. NLIC is the foremost life

insurance company established by private investor. The promoters of the company are a group of well known businessman and business houses of Nepal. Within the nine years of operation the company has set up strong financial position,

The company has an authorized capital is Rs 100 crore. Issued capital is Rs 50 crore and paid up is capital Rs 30 crore. Right share of 4:1 is in the process for offering to the share holders.

Corporate office: Kamaladi, Kathmandu

Branch offices: Biratnagar ,Birjung Butwal, Pokhara, Banepa, Narayanghat, Nepaljung,

Birtamod, Lahan, Janakpur, Mahendranagar, Dang, Surkhet, Hetauda,

Urlabari, Phidim and Dhangadi

### **Life Insurance Corporation (Nepal) limited (LIC (N) L)**

**LIC (N)** limited is a joint venture between Life Insurance corporation of India (55%) and Vishal group of Nepal (25%). The insurance company has public participation to the extend 20%. Life Insurance Corporation (Nepal) ltd's registration no 765-057/058 and incorporated under the companies Act 2053 B.S on the date 27-12-2000. Company started it's service from dated 1-09-2001

The company has an authorized and paid up capital ofRs 25 crore

Corporate office: Katmandu plaza, Kamaladi. Kathmandu

Branch offices:        Biratnagar, Nepaljung, Butwal, Birjung, Mahendranagar.  
Lahan,

Narayanghat, Birtamod, Dhangadi, Pokhara

## **1.6 Statement of the Problems**

The insurance business has been growing rapidly. But majority of the people in this country are not aware about insurance and its importance due to poverty and illiteracy. Some of the insurance companies are operating at loss. There is no transparency of financial transaction and no sound management accounting practice. Profit is must for every business firm. Insurance business also cannot survive and operate without profit. But profit does not just happen. It is to be managed and planned. Management accounting provides such type of techniques and tools where the business firm can grow easily and spread over the country with profit. Poor planning, controlling and decision making enforce to bad performance of the firm. Most of the insurance companies do not apply management accounting tools. Therefore, it is felt that there should be serious study on management accounting practices of insurance companies in Nepal and some questions are raises as below:

- a. How far insurance companies are practicing management accounting tools and techniques and which tools are mostly practiced in their sector?
- b. What are the major difficulties in the application and implementation of management accounting tools?
- c. What are the effects of application of management accounting tools and techniques in insurance companies?
- d. What steps should be taken to strengthen the management accounting practice of insurance companies?

## **1.7 Objectives of the Study**

- a. To analyze and evaluate the management accounting practices in listed insurance companies of Nepal.
- b. To examine the business sector where the MA tools can be applied to strengthen economic activities.
- c. To identify the difficulties for applying the MA tools.
- d. To provide suggestions and recommendation based on the major findings.

### **1.8 Significance of the Study**

This study will provide information relating MA tools and techniques used in Insurance companies of Nepal. It will be useful to analyze the problem in management accounting practices, managerial decision. It is beneficial for those peoples who are directly or indirectly related with management field.

The study will be significant in the following ways.

- a. It examines MA tools applied in insurance sector.
- b. It explores the problems and potentialities of insurance companies.
- c. It is useful to concerned company, investor, policymaker, company manager, practitioners, researchers, and students.
- d. It provides information on the application of MA tools and techniques under different situation and encourages to the management for applying this tool for the betterment of controlling and decision making.
- e. It provides literature to the researcher who wants to carry out further research in this field.

### **1.9 Limitations of the Study**

- a. This study focuses on the practice of MA tools in selected insurance companies only.
- b. The present study pays attention to the practice of management accounting tools and technique in Nepalese context only. Therefore, it does not consider the global context.
- c. The research work is based on the responses and the data available from the management of the concerned companies..

- d. The study covers a period of five years from F.Y (2060/061 to 2064/065)

## **1.10 Organization of the Study**

The entire study will be organized as follows.

### **Chapter - 1 Introduction**

This introduction chapter covers the background of the study, evolution of insurance, history and development of insurance in Nepal, a brief review of management accounting, profile of the sampled insurance companies, Statement of the problems, objectives of the study, significance of the study, the limitations of the study and organization of the study.

### **Chapter - 2**

#### **Review of the Literature**

This chapter reviews the existing literature in the relevant areas. Mainly, it includes the conceptual review and brief review of previous research work.

### **Chapter - 3**

#### **Research Methodology**

This chapter deals with methodology and includes research design, population and sample, sources of data, data collection procedure, data processing procedure and major accounting tools.

### **Chapter – 4**

#### **Data Presentations and Analysis**

This chapter deals with the presentation and analysis of collected data and information. For this purpose various analytical tools, table, have been used. Major finding of the study is also included in this chapter.

### **Chapter - 5**

#### **Summary, Conclusion and Recommendations**

This chapter is the final chapter of the study and include summary, conclusion and recommendations.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

#### **2.1 Accounting Concept**

Accounting refers to the process of collecting, summarizing, analyzing and reporting monetary terms of information of the business. It helps to identify measure and communicate financial information. Primarily, the main objectives of the accounting were to ascertain the result and financial position of business activities of particular period. However, at present the scope of accounting has been increased in competitive environment with business complexities.

Accounting provides information to management so that planning, organization and controlling can be done in an orderly and rational manner. The management accountant must provide a system, which allows management to receive this necessary information in useful form. The top management accountant, the controller, is thus responsible for gathering, analyzing, evaluating and reporting data.

#### **2.2 Classification of Accounting**

Accounting can be classified into the following three categories.

- Financial Accounting,
- Cost Accounting and
- Management Accounting

##### **2.2.1 Financial Accounting**

Financial accounting is concerned with the recording of financial transactions of the business and provides information in financial terms to parties or people wanting information about the state of the business. It is that part of accounting that is employed to communicate the financial information of a business unit. The objectives of financial

accounting are to find out the profitability and to provide information about the financial position of the business concern.

### **2.2.2 Cost Accounting**

Cost accounting is a tool of management providing detail records of cost relating to product operations or functions. It also classifies analyses and interprets costs. Cost accounting mainly deals with the use of cost, the planning of costs and the control of costs. The cost accounting is concerned with classification of costs, allocation of cost, and absorption of costs and communication of cost information.

Cost accounting as part of management accounting which establishes budgets and standard costs and actual cost of operations, processes, departments or products and the analysis of variance, profitability or social use of funds.(The Chartered Institute of Management Accountants, UK )

### **2.2.3 Management Accounting**

Management accounting is a branch of accounting that is concerned with supplying relevant information to manager at appropriate time to enable them to take decision in organization. It is a process of accounting which generates accounting information from financial accounting and cost accounting and provides essential accounting information to all concerned departments,

Management accounting is an accounting discipline that provides essential information to every hierarchy of management for discharging its functions. It is concerned with the provision of information to people within the organization to help them make better decision. Management accounting is the presentation of accounting information in such a way as to assist management in the creation of policy and in the day-to-day operation of undertaking. It provides information to management for planning, controlling and decision making in an orderly manner. It does not confine itself merely to financial data to assist the management in the decision making process. It furnishes data and statistical information required for the managerial decision making that affects the survival and



success of the business. It provides information at periodical intervals to meet the varying requirements of the different level of management. (Munakarmi, 2002:5)

Management accounting presents processed information collected from internal and external sources to the management so that they can more effectively plan, make decision and control operation as and when necessary. It does not intend to flood manager with too many data. (Wagle and Dahal, 2004:1.3)

### **2.2.3.1. Objectives of Management Accounting**

The main objectives of management accounting are to assist the management for achieving the goal of the organization that is maximization of profit. Management accounting supplies accounting information to the management for planning, formulating policies, controlling business operation and decision making. (Munankarmi, 2002:7)

The basic objectives of Management accounting are as follows.

#### **a. Planning and Policy Formulation**

Management is mainly concerned with planning. Planning is one of the primary functions of management. It involves forecasting, setting goals, framing policies, determination of alternatives courses of action and deciding on the program of activities to be undertaken. Management accounting facilitates for the preparation of statement in the light of past results and gives estimation for the future.

#### **b. Providing information for planning and decision making.**

All major plans and important decision made by internal users rely largely on management accounting information. This information includes financial and non-financial data to help managers with strategic planning and decision making.

#### **c. Motivating employees**

Management accounting helps the management for motivating the employees to direct their efforts towards achieving the organization's goals. The motivated manager can achieve organization's goals by communicating the plans, providing a measurement, how well the plan is achieved and promoting an explanation of deviation from the plan.

**d. Controlling performance**

Management accounting devices like standard costing and budgetary control are helpful in controlling performance. The actual results are compared are with predetermined objectives. The management is able to find out the diviations and correct the measures. Thus, management is able to control performance of each individual with the help of management accounting device.

**e. Budgeting**

One means of achieving goal is budgeting. The budgeting indicates the top management's desire to allocate resources and emphasize activities.

**f. Organizing**

Organizing is related to establishment of relationship among different individuals in the concern. It also includes the delegation of authority and fixing of responsibility. Management is concerned with the establishment of cost centre, preparation of budget, preparation of cost control account and fixing of responsibility for different functional departments. All these aspects are helpful in setting up effective and efficient organizational framework.

**2.2.3.2. Functions of Management Accounting**

To assist the management in performing its functions effectively is the main function of management accounting. Some functions of management accounting are as follows.

**a. Planning and forecasting**

Management accounting helps in planning either in short term or long term period. It helps to forecast for the future. For these purpose management accountant use various technique such as budgeting, standard costing, funds flow analysis and profitability.

**b. Analysis and Interpretation**

Data are raw figures and cannot speak anything. Analysis and interpretation are necessary for utilizing these data. Management accounting helps for analyzing and interpretation of data in simple way. It also helps for presenting those data in a non-technical language.

**c. Facilitates managerial control**

Management accounting provides special assistance in controlling the business activities and cost. For controlling purpose, standard of various departments and individuals are set up. Then it is compared with actual performance. All these are made through standard cost and budgetary control system. The standard costing and budgetary control system are integral part of management accounting.

**d. Help in communication**

Management accounting helps in communicating the data to various personnel of the organization as well as to outsiders. For this management accounting prepares and presents the reports for different level of management. It also communicates the business affairs and fact to investors, bankers, creditors and government agencies by publishing annual report and other statements.

**e. Qualitative information**

Management may need qualitative information, which is non-monetary form. There is no any restriction for management to use monetary data only. Management accounting provides information regarding government policy, raw materials and basic inputs for the future.

**f. Helpful in decision making**

Management accounting assists the management for decision making by providing significant information relating to various alternatives in terms of costs and revenue. Such information can be collected with the help of technique such as marginal costing, break ever analysis.

**2.2.3.3. Scope of Management Accounting**

The scope or field of management accounting is very wide and broad based and it includes a variety of aspects of business operations. The main aim of management accounting is to help management in its function of planning, directing, controlling and areas of specialization included within the admit of management accounting (Munakarmi, 2002:6).

Management needs a variety of information to plan, to control, and to make decision. So the management accounting is related to a number of fields that provides information. The scope of management accounting is wide and broad based. Main important fields are as follows:

- a. Financial accounting
- b. Budgeting and forecasting
- c. Cost accounting
- d. Tax accounting
- e. Statistical methods
- f. Inventory control
- g. Internal control
- h. Mathematical technique

- i. Reporting to management
- j. Office services
- k. Law

#### **2.2.3.4. Limitations of Management Accounting**

Management accounting is a helpful tool for the management as it provides information for planning, controlling and decision making. Still a number of reasons limit its effectiveness. Some limitations of management accounting are listed below :(Bajracjarya, Ojha and Others 2004:27)

- a. Based on assumption and estimations
- b. Based on historical accounting information
- c. Lack of knowledge
- d. Intensive decision
- e. Marginal accounting
- f. Evolutionary stage
- g. Subjective
- h. Psychological resistance
- i. Costly structure

### **2.3 A Brief Review of Management Accounting Tools**

Management accounting is a process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of information used by management to plan, evaluate and control within an entity and to assure appropriate use and accountability for its resources. For performing the managerial functions management must use various tools and techniques from accounting branch. Tools and techniques provided by management accounting help to perform functions like planning, decision making and controlling. Management accounting provides valuable services to the management. Several tools and techniques applied by management are as follows

**Cost**

Cost is an amount of resources given up in exchange for some goods and services. As such, it may be regarded to a sacrifice or given up of resources for particular purpose. It refers to sacrifice of resources for goods and services. There are different elements of cost of a product. They are materials, labor, and expenses (Munakarmi, 2004:15). Management accounting has been started from cost. Managers require cost information for planning, controlling and decision making. Cost refers the amount of expenditures spent to generate product and services. The monetary units that must be paid for goods and services are cost.

## **1. Cost Classification**

Cost classification is the process of grouping costs according to their common characteristics. In other words, it is placement of like items together by virtue of their common features. Though costs are identified with, cost units, cost centers or objective in general, the same figures can be classified differently depending upon the very purpose or specific requirement of the management. Cost classification not only helps management in determining products costs for stock valuation and profit measurement, but also helps in decision making, planning and control(Wagle and Dahal, 2004:2.2-2.3). Costs have been classified in different ways in accordance with their common characteristics. Classification of cost is the process where costs are grouped under their similar nature(Dongol, 2006:19)

### **a. Classification According to time**

On the basis of time, the cost can be classified into historical and predetermined cost.

#### **i. Historical cost**

Those cost, which are collected after they have been incurred, are known as historical cost. These cost report past events are available only after

incurred. Historical cost is thus past cost and irrelevant for decision making. Historical cost may be an expired cost or an unexpired cost.

**ii. Predetermined cost (Future Cost)**

Those cost, which have been expected to be incurred in future, are known as predetermined costs. These costs are computed in advance. Such costs may be estimated or standard cost. Future or predicted cost are not just forecasts, they are related to operating plans of the firms. The system of incorporating predicted cost into the firm's operating plans is called budgetary control and the predicted cost are called budgeted or standard cost (Pandey, 1994:193).

**b. Classification according to nature or element**

According to this classification, cost has been divided into three categories: material, labour and expenses.

**i. Material cost**

All types of goods used in the process of production are known as materials. The cost can be classified as direct and indirect. Direct material includes crude material, components or parts, work in progress inventory and primary packing material like card board boxes. The amount paid to acquire this material is called direct material costs. Indirect materials are such materials which do not form the part of the finished product. Coal for industries, fuel used to run the engine, thread in garment industries are indirect material. The cost of these is material called indirect materials cost.

**ii. Labour cost**

The contribution of work made by a person in the process of production is called labour. The cost paid for such work is called labour cost. Wages,

remuneration are labour cost. Labour cost is classified as direct labour cost and indirect labour cost.

**iii. Other expenses**

All those expenses other than material and labour, which are incurred and are part of production, process or job fall under this group. These types of expenses may be subdivided into direct expense and indirect expenses. Cost of hiring special plant, cost of designing building are direct cost. Likewise building rent, insurance premium, depreciation, repair, electrical charges, salary of administrative staffs are indirect expenses.

**c. Classification according to traceability to the product**

A firm has to incur various types of cost in the process of production. There are certain costs which can be easily identified to a particular product and likewise there are several types of costs which cannot be directly identified to particular product. On the basis of traceability cost may be subdivided into direct cost and indirect cost.

**i. Direct costs**

Direct cost consists of all, those items of expenditure and identified with a unit of cost. For making dresses, the cost of cloth and tailoring cost can be taken as an example of direct cost.

**ii. Indirect costs**

Indirect cost includes all other expenses incurred for the undertaking as a whole and is not identifiable wholly with a particular unit of cost.



**d. Classification according to change with the activity or volume**

The cost can be classified on the basis of variability of cost with the volume of production. There are certain expenses, which remain constant and do not vary with increase or decrease in production volume. However, certain expenses do vary directly and proportionately with output. In terms of variability or changes in cost behavior in relation to changes in output or volume, cost can be classified into fixed, variable and semi-variable or mixed cost.

**i. Fixed cost**

Fixed cost are costs associated with those inputs, which do not vary with changes in the volume of output or activity within a specified range of activity or output (relevant range). Fixed cost thus remain constant whether the activity increase or decrease within a relevant range. Fixed cost is subject to change over a period. As fixed cost are unaffected by volume changes, any increase in volume implies that the cost will be allocated to greater number of units consequently fixed cost per unit will become progressively smaller as the volume increase and decrease.

**ii. Variable cost**

A cost that varies in total in direct proportion to changes in activity is a variable cost. It must be a constant amount per unit. In other words, variable cost is those costs which vary in total with a variation in production volume without affecting the cost per unit. Those cost are directly proportionate to the volume of output. Variable costs are controllable one.

**iii. Semi variable cost (mixed cost)**

All costs, other than fully variable and fixed, which are neither perfectly variable nor fixed in relation to volume changes, are semi-variable costs. Semi-variable or semi-fixed costs, also known as mixed costs, are neither

fixed in total amount nor fixed per unit. Semi-variable costs remain fixed to certain extent and thereafter these vary with the increase in output or activity levels. Since semi-variable or mixed costs include both a fixed and a variable component, they can be segregated into fixed and variable parts.

**e. Classification according to functions**

An organization performs various functions. All of this function requires costs. Functional classification of costs refers to how and where is used. According to the functional classification, cost can be subdivided into: production cost, administrative costs and selling and distribution costs.

**i. Production cost**

All the costs involved in the process of production within the factory are called production cost. It includes the costs involved from processing of raw materials into the finished product. Production cost is also called manufacturing cost or factory cost or work cost. Cost of raw materials, cost of labours, salary of supervisor, remuneration of foreman, depreciation of factory building and plant are the examples of production of cost.

**ii. Office and administrative cost**

Expenses related to the general administration including the expenditure incurred in formulating the policy, directing, organization and controlling the operation of an organization and not related to production and selling and distribution are administrative costs. Administrative cost helps the organization for daily operational work.

**iii. Selling and distribution costs**

All expenses incurred in processing the selling and distributions of finished products fall under the expenses. Selling expenses are related to pushing of sales. Therefore, it includes the salaries of sales manager and his staff

including office staffs and salespersons commission, advertising and showroom expenses, rent of finished goods, warehouse and their repairs. Distribution expenses are related to the distribution of goods, it includes the cost of delivery, depreciation of delivery van and their running expenses.

**f. Classification according to the control**

According to control, cost can be classified into two categories.

**i. Controllable cost**

Cost that can be influenced by the action of a responsible member of a particular cost centre is a controllable cost. Direct cost, which comprises of direct materials, direct labour, direct expenses and some portions of overhead expenses they are telephone or electricity charges is controllable by the cost centre in charge. Thus these types of cost are controllable. (Dongol, 2005:25)

**ii. Uncontrollable cost**

Cost, which cannot be controllable and influenced by the action of specified member of the organization, is known as uncontrollable cost. Rent, salary, rise in electricity are beyond the control of the management. Most of the fixed costs are uncontrollable cost.

**g. Classification according to association with product**

On the basis of association with product, the cost can be classified into:

**i. Product cost**

The cost of making a product is product cost. It is also known as the manufacturing costs. Product costs are taken for inventory valuation. Those

expenses, which matter for the volume of production and inventory valuation, are product costs.

**ii. Period cost**

These costs are charged to the period in which they are incurred. They are treated as expenses and are incurred on the basis of time. Rent, salaries, insurance are examples of period cost. These costs are not carried forward as a part of value of stock to next accounting period.

**h. Classification according to managerial decision**

Management uses different types of cost as tool while making certain managerial decisions. These costs are special purpose costs and they are applicable only in the situation in which they are complied. They are not recorded in the books of accounts. However, such costs have a relevancy on the decision making process. These costs are as follows (Dongol, 2005:26).

**i. Relevant costs**

The costs, which will be changed by the managerial decision, are known as relevant cost. Relevant costs are future costs, which vary as consequences of the decision. If a manufacturer decided to drop one of its product, the required cost for material and labour would disappear. In that case, the costs of raw materials and labour are relevant cost.

**ii. Irrelevant cost**

The cost that remains unaffected by the managerial decision is called irrelevant cost. This type of cost has to bear under each alternative decision.

**iii. Avoidable cost**

Avoidable costs are those that can be eliminated by not adopting a given alternative. If not installing a new product line, additional direct material, direct labour cost and overhead costs could be avoided.

**iv. Unavoidable cost**

Those cost, which will not be eliminated by adopting a given alternative, are known as unavoidable cost. The nature of unavoidable cost is just the opposite to avoidable cost. If product is discontinued, the management can avoid the cost of material and labour, but is cannot avoid rent paid for factory building.

**v. Opportunity cost**

An opportunity cost can be defined as the potential benefit that is lost or sacrificed when the choice of one course of action requires the giving up of an alternative course of action. Opportunity cost is not usually entered on the books of organization but it is a cost that must be expertly considered in every decision that a manager makes.

**vi. Marginal cost**

Marginal cost is the amount at any given volume of output by which aggregate costs are changed if the volume of output is increased or decreased by one unit. Fixed cost does not change with increase or decrease in the volume of output. Therefore, fixed cost does not come under marginal cost. Variable cost itself can be termed as marginal cost.

**vii. Differential cost**

A difference in the total cost of two alternative products is called differential cost. When any alternative action is done and increase or decrease in the

cost appears, it is differential cost. If it is increase, it is called incremental cost, and if decrease it is called decremented cost. Managers of profit planning department should have in-depth knowledge regarding the nature of cost and category in which category it lies. Otherwise, it is impossible to plan and control of cost.

## **2. Cost estimation**

Management must have some way of estimating fixed and variable costs. Different costs exhibit a variety of cost behavior patterns. Cost estimation is the process of determining how a particular cost behaves. It is the process of determining the cost of certain levels of output. (Wagle & Dahal, 2004:2.8)

Cost estimation is the process of determination about the behavior of cost in relation to level of activity or output. There are certain costs, which vary in total with change in volume of activity or output. There are certain costs, which vary in total with change in volume of activity. They are known as variable costs. Likewise, there are other types of costs, which do not change in total regardless of the volume or the level of activity. Besides there are another type of cost that contains both a fixed and variable element known as semi-variable or mixed cost. For use in planning and decision making all these costs have to be estimated. For the purpose of cost estimation, semi variable cost must be broken down into fixed and variable element. The breakdown of mixed cost into fixed and variable cost is termed as segregation of mixed cost. (Dongol, 2005:29).

Some methods or models that helps to breakdown mixed cost into fixed and variable are:

### **a. High low method**

The high low method of analyzing mixed costs is based on cost observed at both the high and low level of activity within the relevant range. It is an unsophisticated method of estimating the components of mixed costs. In this

method, the semi-variable cost is computed using data at two points, at the highest point and the lowest point of activity within the relevant range. The high and low activity levels are taken from the available data set. The highest and lowest activity levels along with the cost associated with them are used to compute variable cost and the fixed cost. For this, the difference in cost at the two extreme level is divided by change in activity between the extremes in order to determine the amount of variable cost component as follows (Munakarmi, 2002:26)

$$\begin{aligned} \text{Variable cost per unit} &= \frac{\text{Difference in cost levels}}{\text{Different in activity levels}} \\ &= \frac{\text{Cost at higher levels} - \text{Cost at lower levels}}{\text{Output at the highest level} - \text{Output at the lowest level}} = \text{Rs.} \end{aligned}$$

Therefore, the variable cost = Activity level x UVC = Rs.

#### Determination of amount of fixed cost

	At higher level Rs.	At lower level Rs.
Mixed/semi-variable cost	.....	.....
Less: Variable cost	.....	.....
Fixed cost	.....	.....

#### b. Least square method

Least square method is a statistical method. It is an accurate and trusted method of segregating fixed and variable cost from mixed cost. In this method, variable cost per unit is calculated. After this fixed cost and variable cost can be separated by adopting the following formulae.

$$b = \frac{N \sum xy - \sum x \sum y}{N \sum x^2 - (\sum x)^2}$$

$$a = \frac{\sum y - b \sum x}{N}$$

Where, a=Fixed cost per period

b= variable cost per unit

N= No. of observations

x= Activity measures

y = Total mixed cost

### 3. Cost allocation

Cost allocation is the process of tracing or reassigning costs of one product or department to another product or department on the basis of quality of resources consumed to the particular cost centers. Generally, two types of departments are involved in any organization. One is revenue producing and another is non-revenue producing. Service departments provide necessary supports to revenue producing department. It does not involve generating revenue but involving overhead costs. One of the main problems of management is to allocate the overhead costs of these service departments to each product or cost centre.

The main objective of cost allocation is to provide information for economic decision to motivate managers and other employees, to justify costs or compute reimbursement and to measure income and assets for reporting to external parties. Different cost allocations may be appropriate for different purpose (Bajracharya, Ojha and Others, 2004:121).

Method of cost allocation is as follows

#### a. Traditional costing method

The traditional costing methods allocate indirect costs to cost object using a single overhead rate for the total overheads as a whole. It involves the apportionment of different items of overhead to all department of a factory.



This is also known as departmentalization of overhead, which disregarded distinction between department and service department.

**b. Activity based costing**

Activity based costing is a method of allocating manufacturing overhead to products using multiple application rates and a wide variety cost drivers. One of the major aims of activity base costing system is to use only cause and effect cost allocations for the indirect cost items.

**c. Direct method**

The direct method assigns service department's costs directly to revenue producing areas using the specified basis for each department. Under this method, service department's costs are apportioned to production department only. It use only one specific cost driver to allocate to cost. (Munakarmi, 2002:39)

**d. Step Allocation Method**

The step allocation method allocates the cost of one service department to other service and production in a sequential manner. The producers began by choosing a service departments and operating divisions. Then a second service department is chosen and all of its costs including its share of the allocated costs from the first service department are allocated to remaining service departments and operating divisions. This process continues until all service department cost are allocated. This method is also known as sequential allocation and secondary distribution on non-reciprocal basis method (Munakarmi, 2002:40).

**e. Reciprocal Allocation Method**

Under the reciprocal method, a system of linear equations is constructed, one for each service department. Each equation contains service

departments. This system of equation is then solved using matrix algebra to derive the cost shares for each operating department and the cost per unit of output in each service department (Munakarmi, 2002:42).

#### 4. Product/service costing method

Profit is the excess of revenue over expenses. For the purpose of profit determination in business, finished and semi-finished goods in a firm need true and fair valuation. Value of the output that is finished and semi-finished goods is known as inventorial product cost. Rational method should be required for the proper determination of product cost. The system of product cost determination affects the size of assets and the size of assets and the size of income both. There are two types of tool and technique for the product cost determination.

##### a. Variable Costing

Variable cost is more accurately as direct costing perceived as direct costing or marginal costing as it applies only the variable production cost to the product. The costing approaches that fixed manufacturing overhead, which is regarded as an expired cost to be immediately charged against sales later as a part of the cost of goods sold. Furthermore the direct costing approach to the inventorying of costs is not confined to only direct material and labour. It also includes the indirect cost the manufacturing overhead as a part of product cost. (Horngren, Sundem and Stratton, 2001:425)

#### Income statement under variable costing

Particular		Amount
<b><u>Sales revenue (Sales x Selling price per unit)</u></b>		<b>xxx</b>
Less: variable manufacturing cost		
Direct material (production units x cost rate)	xxx	
Direct labour (production units x cost rate)	xxx	
Direct expenses(production units x cost rate)	xxx	

Variable mfg. overhead (production units x cost rate)	<u>xxx</u>	
<b>Total variable cost of goods manufactured</b>	<b>xxx</b>	
Add: Opening stock(stock units x total variable cost rate)	xxx	
<b>Variable manufacturing cost of goods</b>	<b>xxx</b>	
Less: Closing stock (stock units x total variable cost rate)	xxx	
<b>Variable Manufacturing cost of goods sold</b>	<b>xxx</b>	<b>xxx</b>
<b><u>Gross contribution margin</u></b>		<b><u>xxx</u></b>
Less: Variable selling and distribution expenses (Sales units x Rate)		xxx
<b><u>Net Contribution margin</u></b>		<b><u>xxx</u></b>
Less: Fixed costs:		
Manufacturing	xxx	
Office and administrative	xxx	
Selling and distribution	xxx	
<b><u>Net income</u></b>		<b><u>xxx</u></b>

**b. Absorption costing**

A costing method that includes all manufacturing costs in the cost of a unit of product is known as absorption costing. This cost accumulation method treats the cost of all manufacturing components as product costs. Absorption costing technique is also termed traditional or full costing method. It is sometimes known as total absorption costing and is the basis of all financial accounting statement.

Absorption costing absorbs all costs into production and thus operating statements do not distinguish between fixed and variable costs. That is the cost of product is determined, under absorption costing, after considering both fixed and variable costs. The variable cost such as those of direct materials, direct labour, variable manufacturing overhead are directly charged to the product while the fixed costs are apportioned on a suitable basis over different products manufactured during a period

under considerations. That is all the fixed manufacturing overheads are allocated to products under absorption costing technique.

### Income statement under Absorption Costing

Particular		Amount
<b><u>Sales revenue (Sales x Selling price per unit)</u></b>		<b>xxx</b>
Less: cost of goods sold:		
Direct material (production units x cost rate)	xxx	
Direct labour (production units x cost rate)	xxx	
Direct expenses (production units x cost rate)	xxx	
Variable manufacturing overhead (production units x cost rate)	xxx	
Fixed manufacturing overhead (production units x cost rate)	xxx	
<b>Total cost of goods manufactured</b>	<b>xxx</b>	
Add: Opening stock(stock units x total cost rate)	xxx	
<b>Cost of goods available for sales</b>	<b>xxx</b>	
Less: Closing stock (stock units x total cost per unit)	xxx	
<b>Cost of goods sold available for sales</b>	<b>xxx</b>	<b>xxx</b>
<b><u>Gross margin</u></b>		<b><u>xxx</u></b>
Less, Non manufacturing costs:	xxx	
Variable selling & distribution (sales units x rate)	xxx	
Fixed office and administrative	xxx	<b><u>xxx</u></b>
Fixed selling and distribution		<b><u>xxx</u></b>
<b><u>Net income</u></b>		

#### 2.2.3.5.1. Cost Volume Profit Analysis (CVP Analysis)

##### a. Concept

The analysis of relationship between costs, volume and profit is known as cost volume-profit analysis. It is an analytical tool for studying the relationship between volume, cost, price and profit. It is also an important tool, used for profit planning in a business. There are three factors of CVP analysis, which are

interconnected and dependent with each other. Where profit depends upon sales, selling price depends upon the volume of production. (Fago, 2003:231)

CVP analysis is the process of examining the relationship among revenues, costs and profits for a relevant range of activity and for a particular period. It is one of the most important powerful tools. Which managers have at their command in short-term planning. It helps managers understand the interrelationship between cost, volume and profit in an organization.(Munakarmi:2002:123).

CVP analysis is a management accounting tools to show the relationship between the elements of profit planning. Profit planning is the function of the selling price of the product, demand, variable cost, and fixed costs. The whole picture of profit planning is associated with cost-volume profit interrelationships. A popular technique to study cost profit relationship is breakeven analysis. Break even analysis is concerned with the study of revenue and cost in relation to sales at which the firm's revenues and total costs will be exactly equal or the net income will be zero.

#### **b. Importance of CVP analysis**

Planning, controlling, and decision making are the essential managerial functions. Cost-volume profit analysis helps managers to plan for profit, to control cost and make decision. As such it helps (Munakarmi, 2002:123-124)

- To determine the break-even point in terms of units or sales value.
- To ascertain the margin of safety.
- To estimate profits or losses at various levels of output.
- To help management to find the most profitable combination of costs and volume.
- To determine the optimum selling price.
- To determine the sales volume at which to avoid losses.
- To determine most profitable and least profitable product.

- To determine new breakeven point for changes in fixed or variable costs.

#### **2.2.3.5.2. Decision Regarding Alternative Choice**

Decision-making is one of the major functions of management. It is very important as well as obviously a difficult task. Decision making can be defined as making choice between future uncertain alternatives. A short-term practical, decision making consists of choosing among alternatives with an immediate or limited end in view. It must be emphasized that all decision making relates the future and that a decision is a choice between alternatives in pursuit of an objectives.

There are so many types of decisions. They are as follows:

##### **a. Make or buy decision**

Buying is the process of obtaining goods from outside suppliers instead of producing the same goods within organization. Decision on whether to produce components within the organization or to acquire them from outside suppliers are called make or buy decision. A firm produces these goods that is parts and components Which are not available in the market, similarly it purchase, if there is no capacity to produce them within the organization. But when the both conditions are available at same time, parts and components are available in the markets as well as idle capacity in the factory, a manager should take decision. In order to reach at decision, comparative cost analysis is necessary. The costs of direct material, direct labour, additional fixed cost, opportunity cost due to making, variable overhead additional other expenses if required should be considered as relevant cost for making parts and components. Similarly, the costs of purchasing, transportation, shipping, carriage cost, and other expenses if required should be considered as relevant costs for purchasing the parts and components from outside suppliers.

##### **b. Drop or continue decision**

A company is divided into many departments, section, branches and product line to produce and sales various types of products. Different factors have been affecting the company and not all product line may be in profit. In case of loss or low profit one or more department or product line, management must have to evaluate their individual performance, whether to drop or continue the product line, because of basic criteria whether to drop or continue. The segment margin can be obtained by deducting departmental fixed cost from contribution margin of the department. If the segment margin is greater than zero, it is better to continue and if less than zero, better to drop the product line.

**c. Accept or Reject a Special Offer**

A special order is one that has been offered for a bulk volume at a reduced price. Opportunity to consider an order for a quantity of its regular product at a special price, usually less than that charged to regular customers, frequently arises for a management. When there is idle capacity, such an offer may be attractive. The basis of decision making should be the difference that it will make in the overall profit of the company. Essentially, if there is idle capacity the special order is advantageous if the price amounts exceed out of pocket cost and the opportunity cost. The decision for this purpose is based entirely on differential cost and contribution margin of product considering both with special offer and without special offer.

**d. Decision to sell or Further process of Joint Product**

Joint products are the two or more products produced by using the same basic raw materials and common production process. After completing the common process, the joint products will be separated. Often joint products are sold at the separation/split-off point. But sometimes, it is more profitable to process further a joint product beyond the split off point, prior to selling it. Additional processing adds some value to a product and increases its selling price. Therefore, manager has to decide whether a product should sell at split off point or sold after further

processing. Further processing not only increase the total revenue but also increase additional cost. Therefore, the decision to process further depends upon whether the increase in total revenue exceeds the additional costs incurred for processing beyond split off point. That is, incremental analysis provides the solution to sell or process further decision. The cost incurred before split-off point are past cost or irrelevant cost for sell or process further decision. Only further incremental revenue and differential costs should be considered and compared each other for decision process. That alternative, which gives more benefit, the policy must be adopted. Otherwise, the further processing should not be favorable in the present condition.

**e. Lease or buy**

Leasing is a contract between the owner (lessor) and the hirer (lessee) for the hiring of a specific asset. In exchange for the lease rentals, the lessee obtains possession and use of the asset, while the lessor retains legal ownership. The lessee has no right to acquire exercise rights over the assets during the period of the contract. Leasing is an important source of financing the long-lived assets. Some assets are financed for intermediate term and some are for long-term. Undertaking a contract to lease an asset is quite similar to borrowing money. There is immediate cash flow, because the lessees do not have to pay for the assets, followed by future cash outflows consisting of the payments specified in the lease contract. Alternatively, the user could have borrowed the full purchase price of the assets by accepting a binding obligation to make interest and principal repayment to the lender. Therefore, the cash flow consequence of leasing and borrowing is similar. Consequently, leasing and borrowing should be compared as financing alternatives that are dependent to the investment decision. In other words, we assume that investment have been evaluated as a part of a company's capital budgeting and are profitable.

**2.2.3.5.3. Pricing decision of product/services**



The pricing decision arises in virtually all types of organizations. Manufacturers set price for the product they produce, merchandising companies set prices for their goods, service firms set prices for such services as insurance policies, air ticketing and bank loans. Nonprofit organizations also set the price for vehicle registration and park user. Pricing decision is always depend upon the situations. Pricing for existing product or service may be different from pricing new product or services. Public utilities and TV cable companies face political considerations in pricing their products and services, since a government commission often must approve their price.

Price has determinant role in market success and the success of any business firm mainly depends on the markets success. Once the product get success or failure in the market, it establishes a corner stone for the firm's future. In this regard one of the most important strategic decision is management must make the setting of prices for the company's product and services. The decision has a direct impact on financial position, profitability, and cash flow of the company and it is often costly and different. Economic theory shows that under certain assumptions, the profit maximizing price and quantity are determined by the intersection of the marginal revenue and marginal cost curves. While the economic model serves as a useful conceptual framework for the pricing decision, it is limited by its assumptions and informational demands it implies. Some pricing of standard products that are sold to customers in the routine day to day conduct of business activities. Other pricing decisions relate to special orders of standard or near standard products and still other relate to the pricing of the special product have been taken on in an effort to fill out amused productive capacity. The ways of pricing special products are.

**a. Cost-plus pricing**

The approach in cost plus pricing is to compute cost and then to add predetermined mark up to arrive at a target selling price. The cost-plus pricing

formulas establish a starting point in setting prices. Then, the prices setter must weight market conditions, likely actions of competitors and general business conditions. Thus, effective price setting requires a constant interplay of market considerations and cost awareness. The cost-plus pricing sets the price of a product or service at an amount equal to its standard manufacturing cost plus a normal mark up. This mark up is intended to cover marketing and administrative costs and net profit before taxes.

Selling price per unit = Cost per unit of the cost base + markup

Or selling price per unit = cost per unit of the cost base + (cost per unit of the cost base x markup %)

Determination of mark-up

The mark-up is the margin of profits to be added to the cost base. Mark-up covers the uncovered costs by the costs base plus the desired profit. The desired profit again should cover the minimum required rate of return on invested capital. The approximate mark-up percent is one that must cover the costs not included in the cost base and target profit for the minimum required return on the invested capital.

The mark-up percentage can be ascertained applying the following general formulae.

$$\text{Mark-up percentage} = \frac{\text{Cost uncovered by the cost base} + \text{Desired profit}}{\text{Cost per unit of the cost base} \times \text{Normal volume}}$$

Desired profit = Total invested capital x required return on investment.

#### **b. Variable cost pricing**

Firms may decide to use marginal cost as a base for setting prices of the products. To avoid the effects of cost behaviors on profit, some managers prefer to use cost-

plus pricing techniques based on either variable manufacturing costs, or total variable costs.

This can be shown under

Variable manufacturing cost includes:

Direct material cost	xxx
Add: Direct labour cost	xxx
Add: Direct expenses	xxx
Add: Variable manufacturing overhead	<u>xxx</u>
<b>Total variable manufacturing cost</b>	<b>xxx</b>

Or Total variable cost includes:

Variable manufacturing cost	xxx
Add: Variable selling and administrative cost	<u>xxx</u>
Total Variable cost	xxx

This method of pricing, sometimes referred to as the marginal cost or contribution method of pricing is simply the application of cost-volume profit analysis to pricing decision. Using variable cost pricing the firms sets prices so as to maximize contribution towards fixed cost and profit. But in some situations, particularly when the firm decides to utilize its otherwise idle capacity, mark-up percentage may cover only a part of fixed costs. This approach is known as mark up pricing. The formula for pricing the product under variable cost pricing is :

$$\text{Price} = \text{Total Variable Cost} + (\text{mark up \%} \times \text{Total Variable cost})$$

(Munakarmi, 2002:402)

**c. Full cost pricing**

Under this conventional method of pricing, the price of the product or services is determined by the accumulation of expected manufacturing or total cost per unit plus a normal mark up. If absorption or total manufacturing costs are taken into consideration, the mark-up is intended to cover administrative and marketing costs and net profit before tax. If total costs including administrative and

marketing are taken into account the mark-up equals to desired net profit before tax.

If cost is defined as manufacturing cost it includes:

Variable manufacturing cost per unit	xxx
Add: Fixed manufacturing cost per unit	<u>xxx</u>
Total manufacturing cost per unit	xxx
(+)Normal mark-up (%)	<u>xxx</u>
Tentative selling price per unit	xxx
Or if cost is defined as total cost	
Variable manufacturing cost per unit	xxx
Fixed manufacturing cost per unit	<u>xxx</u>
Total manufacturing cost per unit	xxx
Add: Total non-manufacturing cost	<u>xxx</u>
Total cost per unit	xxx
(+)Normal mark-up (%)	<u>xxx</u>
<b>Tentative selling price per unit</b>	<b>xxx</b>

(Wagle and Dahal, 2004:9.2)

#### **d. ABC Pricing**

Activity Based Pricing is also a form of cost based or cost plus pricing. It is method of allocating manufacturing overhead to products using multiple application rates and a wide variety of cost drivers in multi-product firm. It attempts to show relationship between overhead costs and activities that cause them. ABC recognize that the sizes of the certain production overheads influenced by the diversity and complexity of products manufactured rather than simply by the volume of output. It endeavors to measure cost of performing activities and and uses appropriate cost drivers for assigning costs to products, which have been benefited by such activities. this system of pricing is used in multi-product industry.

**i. Procedures of ABC System**

Costs are accumulated by activity centers. Cost drivers should accurately reflect the underlying factors that cause a particular overhead activity's cost to vary. ABC techniques necessitate the following steps:

- 1 Identify the major activities in the organization.
- 2 Determine the cost driver for each major activity.
- 3 Create a cost centre for each major activity
- 4 Trace the cost of activities to products according to a products demand for activities.(Munakarmi, 2004:404)

**e. Target cost pricing**

Target pricing is based on target costing. Target costing is a method of determining the cost of a product or service based on the price that customers are willing to pay. That is target costing is driven by external market factors. A target market price is determined prior to designing and introducing a new product. In other words, the marketing department determines what characteristics and price for products are most acceptable to consumers. Then, it is the job of company's engineers to design and develop the product so that cost and profit can be recovered by that price. Target pricing is the process of determining the maximum allowable cost for a new product and then developing a prototype that can be profitably manufactured and distributed for that maximum target cost. The target cost for a product is computed by starting with the product's anticipated selling and deducting the desired profit as follows.

[Target cost = Anticipated selling price - Desired profit]

**f. Transfer pricing**

A transfer pricing is the price a subunit of an organization charges for products or services supplied to another subunit of the same organization. The transfer pricing

creates revenue for the selling subunit and purchase cost for the buying subunit, affecting operating income for the both subunits. The operating income can be used to evaluate the performance of each subunit and to motivate managers. (Horngren, Foster & Datar, 1990:904)

Transfer pricing is the principal tools of financial control in decentralized organization. The pricing policy of the materials or components of transferring from one unit to other should be based on considerations as following (Munankarmi, 2002:429)

- a. The objective of the company as a whole
- b. The evaluation of performance of each divisional unit.
- c. Maintaining the autonomous status of the subunits
- d. Continuing the motivation to produce and sell competitively by each subunit in order to contribute to the overall profits of the corporation.
- e. The earnings of each subunit should be commensurate with the growth of the company as a whole.

#### **2.2.3.5.4. Capital budgeting**

Investment in long-term assets for increasing the revenue of the firm is called capital budgeting. It is a decision to invest funds in long term activities for the future benefits that increase the wealth of the firm and thereby increase the value of the share of the firm. On the other, capital budgeting plan to deploy the available resources for maximizing the long-term profitability of the firm. Thus, capital budgeting results the exchange of current fund for future benefits, which will occur over a series of years to come. Future benefits will occur through cost reduction, cost saving, revenue increase and sales increase. Numerous methods of measuring the economic value of an investment has been developed. The mostly

used techniques for evaluating the investment proposals can be classified into broad categories.

**a. Traditional Method**

The traditional method for evaluation of capital expenditures does not consider the time value of money. The method assumes that, there is no difference between present value and future value of money I,e as a rupee earned today do not different from to a rupee earned in future years. Under the traditional method, following techniques are used to evaluate the projects.

**i. Cash Pay Back Period**

The numbers of years (period) that requires for recover the net investment by its income is known as payback period. Calculation of payback period is different in following two conditions.

**Even Cash Flow:-** If the cash inflows of the projects us equal during the period of projects life is known as even cash flow. In this case, to determine the PBP, the formulae is

$$\text{Pay Back Period in years} = \frac{\text{Net Cash Investment}}{\text{Annual Net Cash Inflow after Tax}}$$

[Welsch, Hilton and Gjordon, 2000:415]

**Uneven Cash Flow:-** If the cash inflow from the project is different or fluctuation series during the period of project life is known as uneven cash flow. The payback period is calculated by using formulae after calculation of cumulative cash inflows.

$$\text{PBP} = \text{Minimum required period} + \frac{\text{Amount required to recover investment}}{\text{Next Year CFAT}}$$

**Decision:** The project, which returns the initial investment in the smallest period as well as less than the project period is acceptable under this method.

It is a traditional as well as non-discount method of capital budgeting. But it is a simple and perhaps the most widely used quantitative method for appraising the capital expenditure decision.

**ii. Average/Accounting Rate of Return**

The average rate of return is the ratio of NI to the average investment outlay. It is based upon accounting information rather than cash flow. Accounting rate of return indicates to the profitability of the project. The simple ARR method considers the profitability of projects rather than liquidity position. The well known formulae to determine the ARR is as follows:

$$ARR = \frac{2 \times \text{Total Net Income}}{\text{No. of Project's life} \times \text{Investment}} \text{ or } \frac{ANI}{AI} \times 100$$

$$ANI = \frac{\text{Total Net Income}}{\text{No of Years}}$$

$$AI = \frac{\text{Investment}}{2}$$

**Decision:** According to this method, the project with higher rate of return is considered better project rather that the lower rate of return.

**b. Time Adjustment Method**

In fact, a rupee earned today has more value than a rupee earned in future period. Therefore, the sophisticated or time adjusted method has been developed. The method considered the time value of money. Before evaluation of any project under this method, the future cash flow must be converted into present value. The following methods are used to evaluate the project.

**iii. Discounted cash payback period**

In discounted cash payback period (CPB), the expected cash flows are discounted by the project's cost of capital or the required rate of return for the project. It is



the numbers of years required for the sum of the cash inflows discounted at (k) the cost of capital, to equal the present value of the initial outlay. Thus, the discounted PBP is defined as the number of years required to recover the investment from discounted cash flows. The discounted cash payback method does take the time value of money into account. The evaluation and decision criteria remain the same of cash payback period stated above.

#### **iv. Net Present Value**

The net present value (NPV) is a discounted cash flow approach to capital budgeting that discounts all expected future cash inflows to the present value using the minimal desired rate of return. The sum of expected cash flows from the project after discounted to present value using the minimum desired rate of return is total present value. The net present value is the net benefit at present value of an investment. It is the net difference between present value of cash outflow and present value of future cash inflow. This method required the determination of three items for the project. (Bajracharya, Ohja and Others, 2004:791)

- a. Initial Cash Outflow
- b. Future net cash inflow
- c. Minimum required rate of return

[Net Present Value = Total Present Value - Net Cash Outflow (Investment)]

The evaluation technique of NPV is different under even and uneven cash flow.

The common formulae to determine the NPV is as follows.

$$NPV = \frac{CF_1}{(1+K)^1} + \frac{CF_2}{(1+K)^2} + \frac{CF_n}{(1+K)^n} - IO$$

CF= Net Cash Flow

K = Cost of capital (Required rate of return)

IO= Initial Outlay

N= Expected life of project

[Sharma, 2002:123]

**Decision:** If the sum of the present value of the cash flow is zero or positive, the project is desirable and if negative it is undesirable. When choosing from among several investments, the one with the largest net present value is the most desirable. [Horngren, Sunderm and Strattan, 1991:392]

**v. Internal rate of return**

The internal rate of return is usually the rate of return that a project earns. It is defined as the discounted rate, which equates the aggregate present value of the net cash inflows (CFAT) with the aggregate present value of the each cash outflows of a project. In other word, it is that rate which gives the project NPV zero. (Khan and Jain, 1996:204)

This method depends upon cash inflows and cash outflows of the project. The rate discounts an investment's future cash flows to the present so that the present value of those cash flows exactly equals to the cost of investment. This rate is also called as time adjusted rate of return, Marginal rate of return, yield of investment and so on. The procedure to calculation of IRR is as follows.

**Common procedure for both even and uneven cash flow:**

Step 1: To determine the factor by using following formulae:

$$\text{Factor} = \frac{\text{Net Investment}}{\text{Average cash inflow (annual)}}$$

Step 2: Locate the factor in the annuity table on the line representing the numbers of years corresponding the estimated useful life of the project. Determine two rate, one more than and another lesser than factor.

**For Even Cash Flow cases only:**

Step 3: Interpolate the two factors to determine IRR from the following formulae.

$$\text{IRR} = \text{LR} + \frac{\text{LR factor} - \text{Required factor}}{\text{LR factor} - \text{HR factor}} \times \text{HR} - \text{LR}$$

Where, LR = Lower rate

HR = Higher rate

**For Uneven Cash Flow cases only:**

To prepare the trial and errors table and interpolate two factors from the following formulae

$$\text{IRR} = \text{LR} + \frac{\text{TPV of lower rate} - \text{NCO}}{\text{TPV of lower rate} - \text{TPV of Higher rate}} \times \text{HR} - \text{LR}$$

Where, TPV = Total Present Value

**Decision:** The IRR must be greater than cost of capital to desire the project. The higher rate of return is acceptable among the mutually exclusively proposals.

**vi. Profitability index (PI)**

The profitability index (PI) or benefit cost ratio is the time adjusted capital budgeting techniques. It is similar to the NPV approach. The PI approach measures the present value of return per rupee invested, while the NPV is the based on the difference between the present value of future cash inflow and the present value of cash outlays.

Mathematically,

$$\text{PI} = \frac{\text{Present Value of each cash inflow}}{\text{Present Value of each cash outflow}}$$

Decision: If the value of profitability index is greater than one the project is acceptable and if it is less than one the project is not acceptable.

#### **2.2.3.5.5. Funds Flow Analysis**

The efficiency of the firm is reflected in the inflow and outflow of funds in the business. To understand the operational efficiency of the business concern, it is necessary to have an analysis of the dynamic aspects of the flow of funds. And such an analysis made through funds flow analysis by preparing a statement is called a statement of change in financial position or funds flow statement. The funds flow statement is a statement which shows the movement of funds. In the words of Anthony "the funds flow statement describes the sources from which additional funds were acquired and the use to which these resources were put." (Shukla, Gupta & Grewal, 2006: 23.22)

Therefore, the main purpose of funds flow analysis is to get clear information about the financial transactions that brings changes in the company's resources. It is a kind of financial tools which answers the following questions:

- From which source fund are received?
- How many funds is received?
- For what purpose the fund is used?
- Whether the business is solvent or not?
- How can a profitable business be running on low cash and working capital? (Shukla, Gupta & Grewal, 2006: 23.33)

#### **Cash Flow Analysis**

Cash is the lifeblood of business organization. Without cash no any business transactions can be imagined to be done. It is the fuel that keeps a business alive. Without cash no activities can take place. A business must have an adequate amount of cash to operate. So, analysis of liquidity position is an important aspect of modern business organization. As such the decision

makers must pay close attention to the firm's cash position and the events and transaction that affect the cash position of the company is termed as cash flow analysis. (Munankarmi, 1999: 259)

## **2.4 Profits and Cash Flow**

Profits are accounting measures that may not reflect the economic reality of the firm. Increasing profits will not always result in higher stock prices, Profits of the firm depend on many factors such as method of depreciation, non operating gains incomes expenses and losses. Cash flow analysis not only recognize the profit but it goes a little further and measures the actual cash available for the firm. It is after all the available cash not the profit that determines the firm's future investment and growth. Cash flows have earning potential and capture the economic impact of managerial decisions. Cash flows are not the profits that determine the wealth.

### **Cash Flow Statement**

Cash flow statement is the systematic and analytical presentation of cash flow from different sources within an accounting period. It is the reconciliation of opening and closing cash. It shows the actual view of business on cash basis. The FASB no 95 "statement of cash flow" issued reconciliation of opening and closing cash. It shows the actual view of business on cash basis. The FASB no 95 "statement of cash flow" issued in 1987 has classified the cash flow into operating, Investing and financing activities. Similarly Nepal accounting standard (NAS-03) issued by NASB (2003), "cash flow statement should report cash flow during the period classified by operating, investing and financing activities." (Wagle & Dahal,2004 : 11.2) The IAS has also replaced FFS and asked its entire member to present cash flow statement along with the balance sheet and income statement. As such enterprises should prepare a cash flow statement along with the balance-sheet and income statement since 1992. Nepal company act 2053 B.S. also

made mandatory to present cash flow statement along with balance sheet and income statement. NAS says "The cash flow statement is the part of the complete set of financial statement including balance sheet, income statement and accounting policies and extraordinary notes."

An enterprise should prepare a cash flow statement and should present it as an integral part of its financial statement for each period for which financial statement are presented.

### **Importance of Cash Flow Analysis**

Enterprises need cash to conduct their operation, to pay their obligation and to provide returns to their investors. Users of an enterprise financial statement are interested in how the enterprise generates and uses cash and cash equivalents. It helps the user of financial statement evaluate a company's ability to have sufficient cash both in short term and long term basis. For this reason, the statement of cash flow is useful to virtually everyone interested in the company's financial health. Cash flow statement is important to provide information about inflows and outflows of cash and cash equivalents. It provides useful information to the users of the statement in the following ways.

- a) It helps to evaluate financial polices & cash positions
- b) It helps to inform about the availability of cash. So that management can determine policies regarding financial management i.e. raising utilities of funds.
- c) Assess a company's ability to generate positive future cash flows.
- d) Assess a company's ability to meet its obligation, its ability to pay dividends and its need for external financing.
- e) Assess the reason for difference between income and associated cash receipts and payments.
- f) Assess both the cash and non-cash aspects of a company's investment and financial transactions.

In other words cash flow statement may helps to answer the following:

- a) If a company operates at profit why is it continually short of cash?
- b) How can a company operate at a loss and still generate huge inflows of cash from operations?
- c) How was the company's growth and expansion financed?
- d) Did the company acquire any long term investment or other income producing assets?
- e) Was financing obtained during the period through issuance of debt or equity securities? If so what were the amount of cash obtained?
- f) Did the company use cash to retire any long term debt or equity securities during the period?
- g) Are the company's incomes producing activities using more than they are generating?
- h) Do operating activities consistently generate enough cash to assure prompt payment of operating expenses, maturing liabilities, interest obligation and dividends? (Munankarmi, 2003: 13.02)

## **Objectives of Cash Flow Statement**

The objective of cash flow statement is to highlight the major activities of the business that have provided cash for the business and have used during a period. Similarly, it also shows the resulting effect on the overall cash balance. The objectives of cash flow statement should be as follows:

- a) To assess the company's ability to generate positive cash flow in the future.
- b) To assess its ability to meet its obligations to service loans, pay dividend etc
- c) To assess the reason for differences between reported and related cash flows.
- d) To assess the effects on its finances of major transactions in the year.
- e) To find out the causes of changes in the cash position on two dates.
- f) To evaluate the financial policies with the help cash flow Statement.
- g) To help the management to know and predict its position, it can plan its policy and make decisions regarding the redemption of debentures and purchase

of fixed assets and so on.

## **Methods of preparing cash flow statement**

### **1. Indirect Method**

### **2. Direct Method**

#### **1. Indirect Method to Cash Flow Statement**

Under this method, the cash from operating activities could be derived by preparing funds from operation, as have been done in case of fund flow analysis. funds from operation could be converted in to cash from operation by adjusting change in short term assets and liabilities excluding cash. Cash from investing activities are generated internally from non operating activities like fixed assets and long term investment. Similarly cash from financing activities are the presentation of cash from or to lenders, investors and shareholders that affect cash.

#### **Operating Activities:**

The amount of cash flows arising from operating activities is a key indicator of the extent to which the operations of the enterprise have generated sufficient cash flows to repay loans, maintain the operating capability of the enterprise, paying dividends and make new investments without recourse to external sources of financing. It relates to a company's primary revenue generating activities. It is the single major continuing sources of cash. Operating activities are always within the management control and they provide base for management estimation of fund needed to raise from available sources. Cash flow from operating activities is generally the cash effects of transactions and economic events included in the determination of income.

Under this method, the net cash flow from operating activities is determined by adjusting net profit or loss for the effect of:

- Changes during the period in inventories and operating receivables and



payables.

- Non- cash items such as depreciation, provision, deferred taxes and unrealized gains or losses.
- All other items for which the cash effects are investing or financing cash flows.
- Cash receipts and payments from contracts help for dealing or trading purpose.

Alternatively the net cash flows from operating activities under indirect method may be present showing operating revenues and expenses, excluding non-cash items disclosed in the statement of profit and loss and the changes in inventories and operating receivables and payables during the period.

### **Investing Activities:**

All the cash flows (either outflows or inflows) from investing activities can be determined by the long term assets and investment of two accounting periods. Any increase in assets shall be considered as having purchased and cash paid for it unless any information contrary to the same is provided. At the same time, decrease in assets accounts represents the sale of those assets and cash inflows unless information opposing to that is provided. The gain or loss on sale need to be adjusted to calculate the exact amount cash received. Investing activities are:

- Cash payment to acquire the fixed assets.
- Cash receipts from disposal of fixed assets.
- Cash payments to acquire shares, warrants or debt instrument of other companies.
- Cash advances and loan made to other parties.
- Cash receipts from the repayment of advances and loans made to third

parties.

### **Financing Activities:**

Cash flows from financing activities are calculated by analyzing the liabilities side of the balance sheet. The amounts of secured loans, unsecured loans, the amount of share capital and retained earnings accounts are analyzed to calculate the inflows and outflows from financing activities. The increase in these amounts can be taken as inflows either with the name of more borrowing or issuance of shares. Similarly, the decrease in these amounts can be taken as outflows with the name of redemption of debts or preference shares. Besides the capital and loan amounts, another financing activity is dividend paid or drawings by the owners. Dividend may be in the form of cash dividend or stock dividends do not use any cash. Hence, they should not be considered for cash flow statement.

The separate disclosure of cash flows arising from financing activities is important because it is useful in predicting claims on future cash flows by providers of capital to the enterprise. Examples of cash flows arising from financing activities are:

- Cash proceeds from issuing shares or others equity instruments.
- Cash payments to owners to acquired or redeemed the enterprises shares.
- Cash proceeds from issuing debentures, loans, notes, bonds and mortgages and other short or long term borrowings.
- Cash repayments of amounts borrowed.
- Cash payment by a lessee for the reduction of the outstanding liability relating to a finance lease. [International accounting standard 7 (Revised 1992)]

### **Direct Method**

International accounting standard committee (IAS) has encouraged preparing cash flow statement only on direct method. Therefore as far as possible we need to follow direct method. When the direct method is used the cash flow statement does not begin with net income, rather, it shows cash collected from customer and deducted cash

used for various expenses. That is, major class of gross cash receipt and gross cash payments are disclosed. (Munankarmi, 2003: 13.12)

### **Operating Activities**

Operating activity only include transaction that return to the calculation of net income. It involves the purchase and the sales of goods and services to customers. Cash flow from operating activities includes all cash flows from transaction that are not defined as financing and investing activities. The cash flow from operating activities is primarily derived from the principal revenue - producing activity of the enterprise. Examples of cash flow from operating activities are:

- Cash receipts from the sales of goods and services.
- Cash receipts from royalties fees, commission and other revenue.
- Cash payment to suppliers of goods and services.
- Cash payments to and on behalf of employees.
- Cash receipts and cash payments of an insurance company for premium and claims, and other policy benefits.
- Cash payments refund of income taxes.

The direct methods provide information which may be useful in estimating future cash flows and which is not available under the indirect method. Under the direct method information about the major classes of gross receipts and gross cash payments may be obtained either.

- From the accounting records of the firms or
- By adjusting sales, cost of sales and other items in the statement of profits and loss for:
  - Changes during the period in inventories and operating receivables and payables
  - Other non- cash items and
  - Other items for which the cash effects are investing or financing cash flows.

## Investing Activities

Determinations of cash flows from investing activities require analyzing the non operating incomes and expenses in income statement relating to:

- Productive assets.
- Investment in share and debentures.
- Intangible assets.
- Short term investment other than cash equivalents. (Munankarmi, 2003: 13.16)

## Financing Activities

A company's transaction with its owners and long term creditors are typically called financing activities also it includes borrowing of cash on short term basis for determination of cash flow from financing activities items relating to:

- Share capital (Equity)
- Share premium
- Debenture
- Dividend proposed

Comparative balance sheets should be analyzed by preparing necessary accounts.

Format of Cash Flow Statement under Direct Method

<b>A. Cash from Operating Activities (CFOA)</b>	
<b>a. Cash Sales and collection from customers:</b>	
Total Net Sales (less sales return)	
(+ ) Decrease in debtors (sundry debtors, A/R and B/R)	
(-) Increase in debtors (sundry debtors, A/R and B/R)	
(+ ) Decrease in bad debt provision (Bad debt recover)	
(-) Increase in bad debt provision	

(-) Bad debt written off

**b. Cash Purchase and payment to creditors:**

Total cost of goods sold (COGS)

(+) Increase in Inventory

(-) Decrease in Inventory

(+) Decrease in creditors (sundry creditors, A/P and B/P)

(-) Increase in creditors (sundry creditors, A/P and B/P)

**c. Cash operating expenses and other warranty services:**

Total cash operating expenses (selling, distribution, Adm. etc)

(+) Decrease in outstanding expenses

(-) Increase in outstanding expenses

(+) Increase in prepaid expenses

(-) Decrease in prepaid expenses

**d. Interest expenses:**

Interest expenses

(+) Decrease in interest payable

(-) Increase in interest payable

(+) Increase in prepaid interest

(-) Decrease in prepaid interest

**e. Income tax payments:**

Tax paid (or, provision for taxation as per P&L a/c)

(+) Decrease in provision for tax or tax payable

(-) Increase in provision for tax or tax payable

(+) Increase in prepaid tax

(-) Decrease in prepaid tax

**Cash from Operating Activities before extra ordinary items (a-b-c-d-e)**

**Extra ordinary items:**

(+) Increase in bank overdraft

(-) Decrease in bank overdraft

(+) Decrease in marketable securities

(-) Increase in marketable securities	
<b>Cash From Operating Activities (CFOA)</b>	
<b><u>B. Cash from Investing Activities (CFIA)</u></b>	
Purchase of fixed assets (Individual as per ledger)	
Purchase of Investment ( as per ledger if any)	
Sales of fixed assets (individually)	
Dividend or interest received from other investment if any	
<b>Cash from Investing Activities (CFIA)</b>	
<b><u>C. Cash from Financing Activities (CFFA)</u></b>	
Issue of share/debenture with premium or discount	
Redemption of Preference Share/debenture at premium or discount	
Payment of dividend (Provision of dividend last year)	
Interim dividend (if any)	
<b>Cash from Financing Activities (CFFA)</b>	
<b>Net cash increase/decrease (A+B+C)</b>	
(+) Opening Cash/Bank Balance	
<b>Closing Cash/Bank Balance</b>	

### **Ratio Analysis**

Ratio analysis is a technique of analysis and interpretation of financial statement through mathematical expression. It can be defined as the mathematical expression of the relationship between two accounting figures. To evaluate the different performance of an organization by creating the ratios from the figures of different accounts is termed as Ratio Analysis. In short, ratio analysis can be defined as an analysis of financial statements with the help of ratios.

Ratio analysis is an important technique of financial analysis. The data given in financial statements are meaningless and they are unable to communicate anything from the analytic viewpoint. One has to work very hard in digging out the required information. Ratio analysis thus helps the different interested parties

in studying the helps of figures given in the financial statements. (Dongol and Dongol, 200:595/596).

Ratio analysis is designed to show the relationship between financial statements at a given point of time and over a period. This relationship can be expressed on times and percentage Financial ratios are calculated to examine different aspects of business operations. The ratio analysis includes a wide range examination from a specific aspects of a division or unit to the overall firm. The main objectives of the ratio analysis is to examine various aspects of business and make sure that the operating results have not deviated from the standard norms. Based on the different operating and financial aspects and need for their examination, ratio are classified in the following five set. (Pradhan, 2004:52)

- a. Liquidity ratios -To examine liquidity position
- b. Assets Management ratios -To examine operating efficiency
- c. Debt management ratios -To examine financial leverage
- d. Profitability ratios -To examine earning power
- e. Valuation ratios -To examine market value

## **Budgeting**

### **a. Concept**

The two primary functions of the managers of any enterprises are planning and controlling. Planning means deciding in advance what is to be done in future. Planning starts with forecasting and predetermination of future events. One of the major elements of planning as well as controlling is budgeting. Simply budgeting is a comprehensive plan of action prepared for achieving objectives.

A budget is a detailed plan expressed in quantitative terms that specifies how resources will be acquired and used during the specified period. The procedure used to develop a budget constitute a budgeting system.[Hilton, 2007:47]

A budget is a numerical plan of action, which generally covers the area of revenues and expenditures. A budget is a quantitative expression of a plan of action and an aid to coordination and control. A budget may be formulated for an organization as a whole or for its sub-units. Budgets basically are forecasted financial statements formal expression of managerial plans. They are that targets that encompass all phases of operations including sales, production, purchasing and financing.

The budget is not only financial statements of actual and anticipated revenues and outlays of the enterprises but is also documents of detailed programs and policies of action which they desired to pursue in the coming years to raise the level of economic activities. [Ghimire, 2004:275]

### **Budgeting Process**

The planning process should involve periodic, consistent and in depth re-planning so that all aspects of operations are carefully re-examined and re-evaluated. This prevents of budget planning approach that involves only justification of increase over the proper period. A systematic budgeting should encompass the following procedure, (Welsch, Hilton and Gordon, 2000:73-88)

- a. Identification and evaluation of external variables.
- b. Development of Broad objectives of the enterprises
- c. Development of specific goals for the enterprises.
- d. Development and evaluation of company strategy.
- e. Executive management planning instruction.
- f. Preparation and evaluation of project plan.
- g. Development and approval of strategic and tactical plans.
- h. Implementation of profit plans.
- i. Use of periodic performance reports.
- j. Implementation of follow up

### **b. Time Dimensions of Budget**



Time dimension is an important consideration in planning. Generally three types of plan are generated.

**i. Strategic Long-range plan**

A strategic long range plan is prepared for more than a year, generally not less than five years. When plans are prepared more for than five years, they are called long-range or strategic planning. Strategic long range planning is not concerned for day-to-day operations of business. It is a brief review of business plan by covering the large period of time. Therefore, it does not express in detail. Strategic budgets are developed for long-term objectives of the enterprises.

**Tactical Short range plan**

A tactical short-range planning is the process of determining the specific objectives and means by which strategic plans will be achieved. The tactical plan is usually prepared for one year by dividing into months and quarters. This budget is the detail plan of action and it helps for budgeting of strategic plan. For short-term objectives tactical budgets are developed.

**Medium terms plans**

A medium term planning is that type of planning, which covers more than one year but less than five years period. This budget will be prepared for strategic plan on the basis of tactical plans. For mid plans medium terms budget are developed.

**The Master Budget**

The master budget is a networking consisting of many separate budgets. A complete set of operational as well as financial plan for a business firm is often called the master budget. This entire separate budget is independent but important component of master budget. The types budgets should be depend upon the size and nature of business entity. A master budget can be divided into two parts, they are as follows.

## **Operational or Functional budget**

Sales, merchandise purchase budget, cost of goods sold budget. They are described as follows.

### **i. Sales Budget**

A sales budget is a forecast of what the company can expect to sell during a budget period. It is forecast of total sales expressed and incorporated in quantities and money. A sales budget is the starting point in which other budgets are also based. All other budgets such as production budget, purchase budget, labour budget and overhead budget are affected by sales budget. Therefore, sales budget can be referred as a nerve centre or backbone of the enterprises. While preparing the sales budget, the following factors should be considered; they are past sales figures, assessment and reports by salesman, seasonal fluctuation, proposed management policies, availability of materials, extent of competition, government policies and regulations, general trade prospectus, economic conditions of the country and sales force size. (Dongol and Dongol, 2004:271)

### **ii. Merchandise Purchase Budget**

Non-manufacturing business enterprises prepare the merchandise purchase budget to determine the quantity of items to be purchase during the period. The purchase quantity should be depending upon the inventory level and policy. The purchase budget specifies the estimated quantity to be purchased with estimated cost and delivery dates.

Purchase budget in unit = Requirement units + Ending stock - Beginning stock

### **iii. Cost of Goods Sold Budget**

The cost of goods sold is the making cost of sold units. Cost of goods sold budget is to be prepared after completion of the cost of goods manufactured budget. This budget determined the manufacturing cost of the sales quantity. It includes direct material, direct labour, and manufacturing overhead cost of sold units of goods by time and product. (Fago, Gyawali and Subedi, 2003:57)

### **Financial Budget.**

Financial budget details the inflow and outflows of cash and overall financial position. It reflects the financial decision of the firm as well. The financial budget consists of cash budget, budgeted income statement and budgeted balance sheet.

#### **i. Cash Budget**

Cash budget is a most significant device for planning and control of cash. The cash budget is plan of future cash receipts and payments. In other words, a summary statement of the firm's expected cash inflows and outflows over the projected period is known as cash budget. The forecast of cash flow is made on the basis of past behavior of cash flows as modified and adjusted to likely changes during the coming period. This information helps the manager to determine the future cash needs of the firm, plan for the financing of these needs and exercise control over the cash and liquidity of the firm. (Sharma, 2002:264)

The primary purpose of the cash budget is to:

- a.** Give the probable cash position at the end of each period as a result of planned operations.
- b.** Identify cash excesses or shortages by periods.
- c.** Establish the need for financing or the availability of idle cash for investment.
- d.** Establish a sound basis for continuous monitoring of the cash position.

The planned statement of cash flows that is cash budget is necessarily prepared near the end of the annual planning cycle along with the planned income statement and balance sheet. The cash plan or budget is prepared from the previously completed budgets, such as the sales budget, materials, labour, overhead and capital expenditures budgets. Thus, preparing the cash plan or budget primarily involves two activities they are a) combining all the planned cash inflows and outflows b) making decision about interim financing in case of cash shortages and interim investing, in case of excess of cash. The cash budget can be prepared by using either a) the cash receipts and cash disbursements approach or b) the financial accounting approach.

The cash receipts and disbursement approach involves the use of detailed data from the budgeted cash account. The financial statement approach starts with net income (accrual basis), which is adjusted to a cash basis to compute cash flow from continuing operations. The remaining cash sources are must be determined by using data from the various budgets, which are already prepared. The cash receipts and disbursements approach is usually used for the tactical short-term plan because it provides more details. The financial statement method is usually used for broad analysis of the cash position and for strategic long range planning. (Welch, Hilton 2000:456

## **ii. Budgeted income Statement**

Planned income statement is concerned with determining the total income of the planned period. It is to be prepared under accrual basis rather than cash basis. The budgeted income statement is one of the key schedules in the master budget. The document tells how profitable operations are anticipated to be in the forth-coming period. After it has been prepared, it stands as a benchmark against which subsequent company performance can be measured.(Garrison, 2000:718)

## **iii. Budgeted Balance Sheet**

The projected balance sheet is a statement of assets and liabilities prepared after the preparation of functional and financial budgets. It is based on functional budgets, cash budget, projected income statement and the previous year's assets and liabilities. It can be prepared either in horizontal or vertical format. (Munankarmi, 2002:234). The balance sheet is the final document in the master budget and even in financial record keeping. It shows the final or ending balances of all the account titles.

The budget is not only a financial statement of actual and anticipated revenues and outlays of the enterprises but it is also a documents of detailed programmed and policies of action which they desired to pursue in the coming years to raised the level of economic activities. A complete set of above mentioned functional and financial planned is the master budget. This provides the overall picture of the plan performance of the budget period. This type of budget or plan depends upon the nature of business enterprises. The master budget is a network consisting of many separate budgets, which normally cover the areas operational sectors budgets, cash budgets and budgeted financial statements.

**c. The Budgeting Techniques**

There are some techniques, which are used for budgeting, they are as follows.

**i. Incremental Budgeting Techniques**

Most of running enterprises/organizations start budgeting for the next year based on previous budgets or the actual results. If the budgets for a given time are based on the budget or actual data of the same unit of previous time, this technique is called incremental budgeting or base budgeting. The main idea of incremental budgeting is to make an increase over the past years figures to given budget allowance for the next year. (Ojha,& Goet , 2004:353-354)

**ii. Zero Based Budgeting**

Zero base budgeting is the method of budgeting in which managers are required to start at zero budget levels every year and to justify all costs as if the programs involved were being initiated for the first time. No costs are viewed as being on going in nature, the manager must start at the ground level each year and present justification for all costs in the proposed budget regardless of the type of cost involved. (Bajaracharya, Ojha & and others, 2004:354)

### **iii. Activity Base Budgeting**

Activity base budgeting focuses on the lots of activities to produce and sell products and services. It separates costs into separate homogeneous activity cost pools. Management uses the cause and effect criterion to identify the cost drivers for each of these indirect cost pools. The main aim of ABB is to authorize the supply of only those resources, which are needed to perform activities required to meet the budgeted production and sales volume. (Ojha, Bajracharya and Others, 2004:355)

### **Flexible Budgeting**

A flexible budget is a set of alternative budget for different expected levels of activities i.e. production and sales on the cost-volume-profit relationship. It can be used to evaluate the efficiency of a department throughout the business activity differs from the management's original estimates. (Singh, Ojha and Acharya, 2004:19.3)

A flexible budget is considered as an effective tool of management for cost control as it enables the management to analyze the deviation of the actual output from expected output. It provides a correct basis for comparison between actual and expected costs for an actual activity and it shows where actual performance deviates from planned performance. The commonly used approaches for developing flexible budgets are columnar approach and formulae approach.

## **Responsibility Accounting**

Responsibility accounting is a system of dividing an organization into smaller units. These units may be set up in the form of divisions, segments, departments, product line and geographical regions. Each unit comprise as individuals who are responsible for particular task of managerial function. The manager of the each unit should ensure that the people in their units are doing well to achieve the organizational goal. Responsibility accounting refers to the various concepts and tools used by manager to measure the performance of individuals or departments in order to ensure the achievement of the goals set by the top management.

Responsibility accounting focuses on responsibility centers. A responsibility center is a subunit of an organization under the control of a manager who is responsible for the activities of the responsibility center. Responsibility accounting collects and reports planned and actual accounting information about the inputs and outputs of responsibility center. (Khan and Jain, 1994:432)

Responsibility accounting system identify, measure and report on the performance of people controlling the activities of responsibility centre. Responsibility center are classified according to their manager's scope of authority and type of financial responsibility. They are as follows:

- i.** Cost center
- ii.** Revenue Center
- iii.** Profit Center
- iv.** Investment Center

## **Standard Costing**

Standard costing is a pre-determined cost, which is calculated from management standards of efficient operation and the relevant necessary expenditures. It may be used as a basis for price fixing and for cost control through variance analysis. (ICMA, London)

A standard costing is a measure of an acceptable performance, established by management as a guide to certain economic decision. (Lynch and Williamson, 1992:194)

### **Process of Standard Costing**

To fix the standard cost for material, labour and overhead.

To find out the actual cost.

To analyze the variance between standard & actual cost

To make decision for corrective

The following management functions would be quite tough or just subjective in the absence of standard data.

Budgeting

Economic decisions

Pricing decisions to compare the actual cost with standard cost

## **2.5 Review of Previous Related Studies**

Review of Management Accounting Practice in Nepalese Context

Management accounting is an important part of management of every type of organization. It is in developing stage in Nepalese business houses. New tools and techniques of management accounting have been developing as a new ways. Research entitled in "An analysis of Management Accounting Practices in Insurance Sectors of Nepal" has not been made. But so many research have been made in the separate area of management accounting. Most of the researches have been done in the area of cost-volume profit analysis, cash flow statement, profit planning and control, capital expenditure planning and soon. This content covers a small part of management account. conducted researches on these areas are taken into consideration and an attempt has been made to review of some dissertation related to the research title.

### **i. Krishna Bahadur Karki (2006)**



Mr. Krishna Bdr. Karki has conducted a research work entitled "Management Accounting Practice in Public Enterprises". Mr. Karki has mainly focused his study to study and examine the extent of practice of "Management Accounting Tools and Techniques made in Nepalese Public Enterprises". The data and necessary information have been collected from the primary as well as secondary sources. In this study, he has pointed out various findings and recommendations, which are as follows:

- a. Various management accounting tools and techniques, which are taught in colleges and universities, are not used in real practice in Nepalese public enterprises.
- b. Some management accounting tools like capital budgeting, cash flow, ratio analysis and annual budgeting are widely practiced of in public enterprises of Nepal but some tools like standard costing, activity based budgeting, zero base budgeting, long term budget are not practiced.
- c. Management accounting tools help to the managers to develop the overall managerial activities through providing information, planning, controlling, and decision making process.
- d. As Nepal is proceeding towards globalization and has got the membership of WTO, public enterprises are recommended to apply management accounting tools to fit with the global environment.

**ii. Sagar Sharma (2002)**

Mr. Sagar Sharma has conducted a research entitled "Management accounting practices in Listed Companies of Nepal". He has mainly focused on the present Practice of management accounting tools in the listed companies as per Nepal stock exchange. He has used stratified random sampling procedure to draw a sample with 27% and 41% of total population and target population. The necessary data have been collected from the primary sources by using a schedule

questionnaire. Mr. Sharma has pointed out various findings and recommendations, which are as follows:

- a. Nepalese listed companies are at infant stage in practicing of management accounting tools such as capital budgeting, annual budgeting, cash flow, ratio analysis, zero based budgeting, activity base costing, target costing and value engineering.
- b. Most of the companies prepared budget on the basis of actual past expenses. Almost 87% of the companies take actual past expenses as a base for budget preparation, 26% of the companies used past budget estimate to prepare budget.
- c. There is lack of information of management accounting tools so there is no practice of zero base budgeting and activity base budgeting.
- d. Most of the companies' measure and control by using profit and loss criteria.
- e. Companies are practicing privileged tools of management accounting like sensitivity analysis, judgmental analysis, past actual expenses.
- f. No companies have management accounting expert, they use management accounting as like as financial accounting

**iii. Narayan Prasad Acharya(2006)**

Mr. Acharya has conducted a research entitled “Management Accounting Practice in Nepalese Public Enterprises”. He has focused his study to identify the business sector where Management Accounting can applied to strengthen the Public Enterprises in Nepal. It focused on the practice of Management Accounting tools and techniques only. The information are collected from primary sources by using questionnaire. In this study he has pointed out major findings and recommendations, they are as:

- a. The managerial accounting tools that is annual budgeting, cash flow statement, responsibility accounting are widely practiced in Public enterprises in Nepal and break-even analysis, capital budgeting, financial statement analysis, flexible budgeting are slightly practiced.
- b. FIFO method is widely used technique for inventory management.
- c. Most of the managerial accounting decisions of public enterprises are affected by the government policy.
- d. Managerial accounting is a new discipline and still in developing stage.
- e. Many kinds of Management accounting tools and techniques are taught in the universities but they are not practiced in public enterprises.

**iv. Ram Kumar Subedi (2007)**

Mr. Subedi has conducted a research entitled "Management Accounting Practices in Joint Venture Banks in Nepal". He has focused his study to examine and study the practice of management accounting tool in the commercial banks, and to recognize the problem while practicing management accounting tool in the commercial banks, and to recognize the problem while practicing management accounting tools faced by the joint venture bank of Nepal. The data and other necessary information were collected from both primary and secondary sources. In this research Mr. Subedi has pointed out some major findings and recommendations as follows:

- a. Management accounting tools and techniques is one of the important techniques for all organizations so that it helps to the organizations to improve its performance.
- b. To survive in competitive environment, management accounting tools enforce the organization for better performance.

- c. Various types of Management accounting tools and techniques are taught in the universities are not practiced in Joint Venture Bank in Nepal.
- d. Nepalese Joint Venture is in Preliminary stage with respect to the application of modern management accounting tools.

## **2.6 Research Gap**

There is the gap between the present research and the previous researches. The previous research had been conducted on management accounting practice, budget, c.v.p analysis, and ratio analysis in manufacturing company, public enterprises and banks. It only covers the existing practices that had been practicing in concerned company but it does not consider the financial aspects of the field. There are very few research studies found in the area of practice of management accounting tools and techniques only in banks and public enterprises. But these all are only a part of management accounting, which can't represent the overall practices of management accounting. They were either a case study of a particular company or a comparative study of two different companies. The findings of previous research were mostly based on secondary data and some of them were based on primary data only. Their studies can't identify which MA tools are practicing and which tools are not practicing till now? What might be the reasons behind the non-practicing of MA tools in insurance sector of Nepal.

To fulfill these gaps, this research has been conducted in the field of insurance. This research has clearly describes, which MA tools and techniques are practicing and which are not practicing in Nepalese insurance companies. This research also discloses the major non practicing tools in Nepalese insurance sector. This research also disclose the major difficulties for the application of MA tools and techniques in insurance sector and benefit after its application and suggestion to apply of such tools which help to improve the financial performance of the company. One of the most important things is that this research is not only focus

to study the practice of management accounting tools and techniques but it also analyzed the financial performance and trend of cash inflows and outflows in insurance sector of Nepal.. It can help to management for managerial work and decision making, which assist to maximize the profit and boost up to the company in today's situation so that they can reach in decision to select the company for investment purposes.

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

The objectives of this study are to analyze the present practice of management accounting and difficulties in the application of management accounting tools and technique in insurance companies of Nepal.

A research methodology is a systematic way to solve the research problem. It describes the method and process applied in the entire aspect of the study.

A methodology refers the various steps that are generally adopted by a researcher in studying his/her research problem. The methodologies followed for the study are research design, population and sample, period covered, sources of data, data collection, procedure data processing, procedures and of major M.A tools.

#### **3.1. Research Design**

A research design is an overall framework or plan for collection and analysis of data. It is the overall operational pattern of framework of the project and stipulates what information is to be collected from which source and by what procedure

This study attempts to analyze the management accounting practice in insurance companies. Hence, descriptive, analytical as well as historical research design had been followed. Descriptive research is a fact finding operation searching for adequate information. It is a process of accumulating facts. Likewise, historical research is concerned with past phenomena. It is a process of collecting, evaluating, verifying and synthesizing past evidence systematically and objectively to reach a conclusion. The main purpose of the research design is to provide answers to research question and to control variance.

#### **3.2. Population and Sample**

All the insurance companies listed in Nepal Insurance Board according to data provided by Insurance board are considered as the total population. Out of them four insurance companies are considered as target sample for the research study.

### **3.3. Period Covered**

This research paper covers the time period of five years for the purpose of analyzing financial performance and cash flow analysis. The data from four insurance companies HGICL, NICTL, NLIC and LIC(N)L have taken from the FY 2060/61 to FY 2064/065.

### **3.4 Source of Data & Data Collection Procedure**

Data had been mainly collected from primary as well as secondary sources. They are collected from concerned companies Primary data were collected from questionnaire. Tick mark and open-ended question were developed for questionnaire and distributed it in the concerned company. Interviews and discussions were also made with chartered accountants and managers. Secondary data were collected from annual report of the company, books and previous research.

### **3.5 Data Processing Procedure**

Data collected from questionnaire are classified and tabulated in the required form. Simple arithmetic percentage tools are used for analysis. Table and charts were also demonstrated as per the requirements.

### **3.6 Major MA Tools**

The major management accounting tools included in this research are Cash flow statement analysis .Budgeting standard costing , ratio analysis , cost –volume profit analysis , capital budgeting , activity based costing and zero base budgeting.

## **CHAPTER IV**

### **PRESENTATION AND ANALYSIS OF DATA**

#### **4.1. Introduction**

The main objective of this research study is to analyze the present practice of management accounting tools and techniques in insurance companies of Nepal and identify the area where the management accounting tools can be applied to strengthen the insurance business. Besides this, the present research helps to find out the difficulties in the application of management accounting tools within insurance sector. This chapter is meant for the to present, analysis and interpretation of collected data.

This research is based on primary sources as well as secondary sources of data. The data are collected through questionnaire, informal, interviews, observation and meetings. Secondary data were collected from annual report provided by insurance companies, website, magazine and newspaper. All collected data have been properly processed, tabulated and analyzed. To complete this study necessary tables are also prepared as per requirements. The information collected through open-end question is arranged in this chapter in a descriptive way.

#### **4.2. Practice of Management Accounting Tools and Techniques**

**Table 1**

**Practice of Management Accounting Tools and Techniques**

<b>S.N.</b>	<b>Tools</b>	<b>Population</b>	<b>No. of Practitioners</b>	<b>Percentage</b>
-------------	--------------	-------------------	-----------------------------	-------------------



1.	Cost segregation into fixed and variable	4	3	75
2.	Standard costing	4	1	25
3.	Cash flow Analysis	4	4	100
4.	Pricing Decision	4	4	100
5.	Activity Based Budgeting	4	1	25
6.	Capital budgeting	4	3	75
7.	Ratio Analysis	4	3	75
8.	Budgeting Annual	4	4	100
9.	Budgeting long term	4	-	-
10.	Zero Based Budgeting	4	-	-
11.	Responsibility Accounting	4	2	50
12.	Break-Even Analysis	4	1	25

Source: Survey and Interview

The above table shows the practice of MA tools and techniques in insurance companies of Nepal. According to the above table, 75% of insurance companies are practicing ratio analysis, capital budgeting and cost segregation into fixed and variable technique. 25% companies use activity budgeting and break-even analysis. Likewise, 100% companies are practicing annual budgeting, cash flow analysis and pricing decision. 50% practice responsibility accounting. None of the banks are practicing long term budgeting and zero based budget

**Table 2**  
**Technique of Inventory Valuation**

S.N.	Techniques	Population	No. of Practitioners	Percentage
1.	LIFO	4	-	-
2.	FIFO	4	2	50
3.	Weighted Average	4	-	-
4.	Others	4	-	-

Source: Survey and Interview

From the above table, it can be described that 50% of insurance are using FIFO technique for inventory valuation and companies use no other method for inventory valuation.

**Table 3**

**Practice for Pricing Services/Products**

S.N.	Pricing Techniques	Population	No. of Practitioners	Percentage
1.	ABC pricing	4	-	0
2.	Full/absorption cost pricing	4	2	50
3.	Variable cost base pricing	4	1	25
4.	Target on return on investment pricing	4	-	0
5.	Others	4	2	50

Source: Survey and Interview

The above table shows pricing technique of insurance companies in Nepal. According to the table 50% companies use full/absorption cost pricing and other techniques that are according to the company's requirements. 25% of them practice variable cost base pricing. No other technique is used by insurance companies in this regard

**Table 4**

**Segregating mixed cost into fixed and variable costs**

S.N.	Cost Segregating Method	Population	No. of Practitioners	Percentage
1.	High-low Method	4	-	-
2.	Regression Method	4	-	-
3.	Average Method	4	2	50
4.	Analysis Method	4	1	25
5.	Others	4	-	-

Source: Survey and Interview

Above table describes the methods of segregating mixed cost into fixed and variable costs in insurance companies of Nepal. From the table it can be said that 50% insurance companies use average method for segregate mixed into fixed and variable and 25% companies practice analysis method. None of them practice high low, regression and any other method. The reason for not practicing such tools in insurance company is that, there is no compulsion to use these tools like as trading business houses and manufacturing concern.

**Table 5**  
**Practice of Capital Budgeting Tool**

S.N.	Capital Budgeting Tools	Population	No. of Practitioners	Percentage
1.	Profitability Index (PI)	4	-	-
2.	Net Present Value (NPV)	4	2	50
3.	Pay Back Period (PBP)	4	2	50
4.	Internal Rate of Return (IRR)	4	-	-
5.	Average Rate of Return (ARR)		2	50
6.	Others	4	-	-

Source: Survey and Interview

The above table shows the capital budgeting tools practiced by insurance companies of Nepal in present condition. According to the table, it is found that 50% companies practice NPV, PBP, and ARR. None of them use PI, IRR, and other techniques.

**Table 6**  
**Measurement and Control of Overall Performance**

S.N.	Practiced tools	Population	No. of Practitioners	Percentage
1.	Ratio Analysis	4	3	75
2.	Standard Costing	4	-	-
3.	Cash Flow Statement	4	4	100
4.	Activity Based costing	4	-	-
5.	Budgetary control	4	3	75
6.	Profit and loss made by company	4	4	100
7.	Others	4	-	-

Source: Survey and Interview

The above table shows the overall performance measurement and control tools being practice. From the table it is clear that 100% of insurance companies practice cash flow statement and profit and loss made by the company to measure and control the performance. Likewise 75% practice ratio analysis and budgetary control. None of them uses standard costing, activity base costing and other tools for measurement and control the performance.

**Table 7**  
**Types of Budget Practiced**

S.N.	Types of Budget	Population	No. of Practitioners	Percentage
1.	Annual Budget	4	4	100
2.	Operation Budget	4	-	-
3.	Cash Budget	4	1	25
4.	Long-term budget	4	-	-
5.	Overall master budget		-	-
6.	Others	4	-	-

Source: Survey and Interview

Above table shows that, 100% insurance companies practice annual budget and 25% company practice cash budget. But there is no practice of rest of budget like operation budget, long term budget, overall master budget and others.

**The following table represents the basis adopted for budget preparation**

**Table 8**  
**Basis for Budget Preparation**

<b>S.N.</b>	<b>Basis</b>	<b>Population</b>	<b>No. of Practitioners</b>	<b>Percentage</b>
1.	Past Budget Estimates	4	3	75
2.	Zero Base Budget	4	-	-
3.	Activity Base Budget	4	2	50
4.	Others	4	-	-

Source: Survey and Interview

The above table represents budget preparation basis of insurance companies in Nepal. From this table, it is understood that 75% of companies prepare budget on the basis of past estimates and 50% prepare budget on the basis of activity. No companies follow the zero base and other techniques to prepare budget. According to the table, it can be said that companies are highly practicing past budget estimates to prepare budget and there is low practice of activity base budget. But they do not prefer to practicing activity base budget and others techniques either.

**The table given below shows the sub unit involved in the budget preparation system**

**Table 9**  
**Budget Preparation System**

S.N.	Basis	Population	No. of Practitioners	Percentage
1.	Finance department	4	3	75
2.	Planning department	4	-	-
3.	Budget committee	4	1	25
4.	Outside expert		-	-
5.	Others	4	-	-

Source: Survey and Interview

According to the above table finance department prepares budget in 75% of companies, and budget committees prepares in 25% of insurance companies. The companies do not use planning department for preparing budget. There no practice of hiring outside expert for budget preparation purpose and no use of other techniques also.

From the survey; it was found that budget preparation by finance department is widely practiced in insurance companies.

**The following table shows the types of budgets practiced by the organization**

**Table 10**  
**Types of Budget Practice**

S.N.	Types of Budget (Period covered)	Population	No. of Practitioners	Percentage
1.	Short term budget (1 years )	4	3	75
2.	Medium term budget (3 years)	4	-	-
3.	Long term budget (5 years and more)	4	1	25

Source: Survey and Interview

From the above table, it can be described that 75 % insurance companies practice short term budget (i.e. 1 yr or less). No company practice long-term budget and medium term budget.25% insurance companies practice long term budget ( i,e 5 year than more )

### 4.3 Financial Performance Analysis

Table 11

#### Himal general insurance company Ltd

#### Fiscal year 2060/61 to 2064/65

S.N	particular	2060/61	2061/62	2062/63	2063/64	2064/65
A	<u>Capital and liabilities</u>					
1	Paid up capital	30,000	30,000	30,000	30,000	30,000
2	General reserve	24,486	30,000	30,000	30,000	30,000
3	P/L A/C	6,007	11,986	21,484	33,326	5,558
4	Insurance fund	16,645	19,220	23,035	28,439	35,560
5	Other estimated liabilities provision	7,973	4,564	3,806	51,26	10,532
6	Other current liabilities	46,933	52,256	119,380	49,897	36,113
	<b>Total</b>	<b>130,065</b>	<b>146,512</b>	<b>227,705</b>	<b>176,788</b>	<b>180,763</b>
	<u>Assets</u>					
1	Fixed assets	12,638	9,840	42,597	47,488	47,003
2	Investment	72,690	91,390	110,790	78,942	81,000
3	Other assets	40,943	43,482	71,636	45,704	44,971
4	Cash and bank	3,794	1,800	2,682	4,654	7,789
	<b>Total</b>	<b>130,065</b>	<b>146,512</b>	<b>227,705</b>	<b>176,788</b>	<b>180,763</b>
	<b>Premium(annual)</b>	154,675	149,597	202,679	227,363	218,112
1	Net premium	32,677	37,579	45,205	55,948	69,547
2	Total claimed paid	55,059	36,262	69,215	215,889	55,537
3	Net claimed paid	8,893	16,139	21,482	23,406	30,193
4	<b>Management expenses</b>	16,521	21,230	19,584	20,542	23,624
5	Under writing profit	15,200	16,530	13,927	17,065	13,380
6	Interest income	6,165	6,909	7,222	6,059	5,603
7	Miscellaneous income	1,024	1,061	815	1,425	567
8	Net profit (before tax)	16,398	17,223	15,527	16,539	11,275
9	Income tax provision (including special fee)	4,875	5,265	4,516	4,569	3,745
10						
11	<b>Profit (after tax)</b>	<b>11,523</b>	<b>11,958</b>	<b>11,011</b>	<b>11,970</b>	<b>7,530</b>

The above table shows five year financial performance analysis of the company which is extracted from annual reports. The company's general reserve and cash and bank balance has also increased for each year shows strong financial position of the company .Likewise, premium collection, management expenses and net profit earned by the company are also analyzed into this table. The table shows, the company collected RS 154,675 crore as a premium in fiscal year 2060/061 and was more by 0.21% than previous fiscal year. In the same year, management expenses was Rs1.65 crore which was only 10.68% out of total premium income and the company earned profit ofRs 1.15 crore.

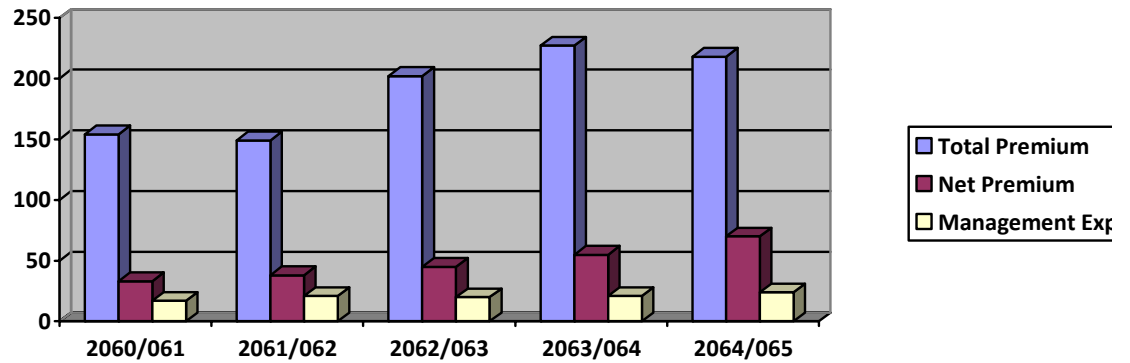
For the fiscal year 2061/2062, the company collected Rs 14.96 crore as total annul premium, which was decrease of 3.28% than the previous year. In the same period the management expenses of the company were Rs 2.12crore which was 14.19% of total premium and the company earned profit of Rs 1.20crore that was more than the previous year's profit. Similarly, in financial year 2062/063 and 2063/064 the company collected cash Rs20.27 crore and 22.74 crore as insurance premium and the management expenses were 1.96 crore and 2.05 crore . the percentage or management expenses were 9.66 and 9.03. Out of total premium respectively. In the same fiscal year company earned 1.10 crore and 1.20crore profit which was more than the previous years. In fiscal year 2064/065 the company collects premium from different sector which was Rs 21.81 crore and company's expenses for management was 2.36crore that is 10.68% out of total premium and the company earned profit of Rs 0.75 crore

Thus, in every financial year the company has been earning profit. Hence, it cha be said that HGICL has strength financial position among Nepalese insurance company. It can also be described form graph as unde

#### **Diagram-1**



**Total premium, net premium and management expenses of HGICL (2060/61 to 2064/65)**



The above diagram -1 describes the total premium collection, net premium collection and management expenses of HGICL. In fiscal year 2063/064 the company collects highest insurance premium that is 227 crore whereas, in 2061/062 the company collects lowest premium that is 149 crore . Similarly the company's net premium is highest in 2064/065 that is 70 crore and lowest in 2060/061 and the management expenses has been shown always in average rate that is between 17-24 crore. According to this figure it can be said that company has been trying to increase and insurance business and collects more premium every year.

**Table No: 12**  
**Nepal insurance company limited**  
**Fiscal year (2060/061 to 2064/065**

**in 000)**

**( Rs**

S.N	particular	2060/61	2061/62	2062/63	2063/64	2064/65
A	<u>Capital and liabilities</u>					
1	Paid up capital	78,999	78,999	78,999	102,676	102,682
2	General reserve	76,109	79,016	82,291	91,116	91,129
3	P/L A/C	1,458	11,344	3,274	1,688	1,700
4	Insurance fund	-	-	-	40,423	47,725
5	Other estimated liabilities provision	37,803	30,396	35,500	33,437	35,197
6	Other current liabilities	96,840	216,336	226,956	96,727	151,000
	Total	<b>291,209</b>	<b>416,091</b>	<b>427,020</b>	<b>366,067</b>	<b>439,441</b>
B	<u>Assets</u>					
	Fixed assets	10,854	10,697	11,013	11,025	11,848
1	Investment	208,502	201,004	200,355	191,168	190,754
2	Other assets	53,128	183,520	166,829	132,317	192,750
3	Cash and bank	18,725	20,870	48,823	31,557	44,089
4	Total	294,209	416,091	427,020	366,067	439,449
1	<b>Premium(annual)</b>	143,871	166,822	187,539	206,212	216,075
2	Net premium	87,990	57,205	87,957	79,716	93,950
3	Total claimed paid	23,207	41,726	75,800	52,857	59,277
4	Net claimed paid	33,513	26,693	29,490	31,207	35,141
5	<b>Management expenses</b>	32,206	29,541	35,623	37,021	29,634
6	Under writing profit	13,402	13,398	11,906	-	9,209
7	Interest income	305	2,97	21,884	2,736	2,129
8	Miscellaneous income	34,345	28,781	37,161	22,420	2,721
9	Net profit (before tax)	10,327	8,106	10,357	5,056	2,696
10	Income tax provision (including special fee)					
11	<b>Profit (after tax)</b>	<b>24,018</b>	<b>20,675</b>	<b>26,804</b>	<b>17,364</b>	<b>25,000</b>

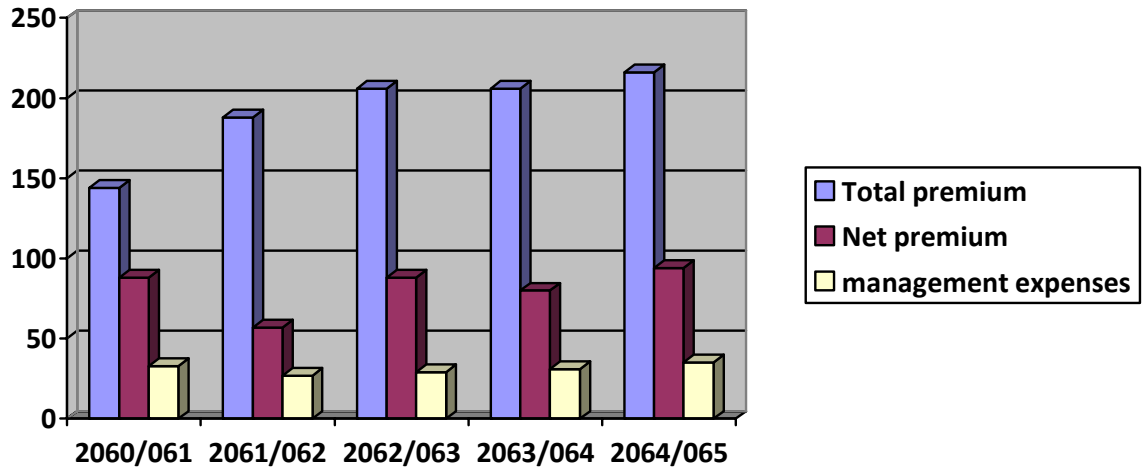
Source: Annual report

of NICL

for last three fiscal year and Rs 10.27crore for previous two year's respectively. The general reserve was Rs 7.61, Rs 7.90, Rs 8.23, Rs 9.11 for FY 2060/61, 2061/62, 2062/63, 2063/64 and 2064/2065 respectively. The company's total premium was 14.39 crore, 16.68 crore, 18.75 crore and 20.62 crore in these fiscal years respectively. However, FY 2064/065 the company collected Rs 21.61 crore as annual premium which is highest premium in comparisons with previous year collection. Similarly the net premium was also 9.40 crore the highest among the five fiscal year's net premium collection. But the management expenses were only 23.9%, 16%, 15.7%,

15.13% and 16.26%. Out of total premium in fiscal year 2060/061, 2061/062, 2062/063, 2063/064 and 2064/065 respectively. Every year the company collects huge premium and expend less rupees as management expenses and earn more profit it is shown in above table. The total premium, net premium, management expenses and net profit for five fiscal years can be presented in the bar diagram and graph respectively.

**Diagram-2** Total premium, net premium and management expenses of NICLFY (2060/61 to 2064/065)



The above diagram-2 shows the company collects highest premium in fiscal year 2064/065 in comparison to previous fiscal year that is Rs 21.6 crore. The above figure also shows increasing rate of total premium in every fiscal year and net premium is also at satisfactory level. However, the management expenses are always in nominal rate out of total premium. Thus, NICL has been earning high profit in each fiscal year

Table 13

**Nepal life Insurance Company limited**

For fiscal year (2060/061 to 2064/2065)

(Rs in 000)

S.N	particular	2060/061	2061/062	2062/063	2063/064	2064/065
	<u>Capital and liabilities</u>					
1	Paid up capital	250,000	250,000	250,000	250,000	250,000

2	P/L A/C	-	-	-	10,453	6,800
3	Life insurance fund	92677	252,616	635,867	787,357	1,690703
4	Liabilities provision	416	585	818	2,607	5,871
5	Current liabilities	890	1,960	2084	25,499	69,256
	<b>total</b>	<b>343,983</b>	<b>505,161</b>	<b>888,769</b>	<b>1,191,156</b>	<b>2022,630</b>
	<b><u>Assets</u></b>					
1	fixed assets	4,520	5,900	88,446	98,992	164,671
2	investment	326,431	485,225	775,398	933,826	1364,903
3	other assets	-	-	-	127,135	448,720
4	cash and bank	13,032	14,036	24,925	31,204	44,336
	<b>total</b>	<b>343,983</b>	<b>505,161</b>	<b>888,769</b>	<b>1,191,156</b>	<b>2022,630</b>
1	<b>premium (annual)</b>	145,364	187,110	331,118	465,642	576,806
2	net premium	145,364	187,110	329,171	462,921	576,802
3	total claimed paid	1,820	2087	3,114	7,852	9,682
4	net claimed paid	-	-	-	-	-
5	management expenses	17,342	19,393	26,653	34,721	43,257
6	underwriting profit	-	-	-	11,615	51,369
7	Interest income	-	27,695	43,183	62,319	81,372
8	Miscellaneous income	-	66	30	100	1,421
9	Net profit(before tax)	190,205	493,215	675,431	889,972	1369,040

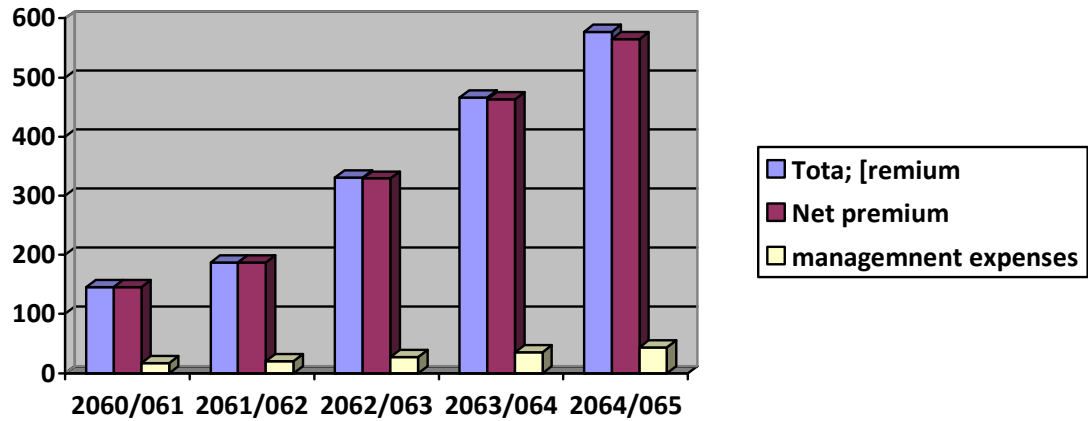
10	Income tax provision	1,087	2,510	5,403	6,922	7,829
11	<b>Profit(after tax)</b>	<b>189,118</b>	<b>490,705</b>	<b>670,388</b>	<b>883,050</b>	<b>1,361,211</b>

Source: Annual report of NLIC

According to the table, paid up capital of the company is Rs 250 crore in each fiscal year from 2060/61 to 2064/065 respectively. Likewise, total insurance premium from FY 2060/061 to FY 2064/065 were Rs 14.54 crore, Rs 18.71 crore, Rs 33.11 crore, Rs 46.56 crore and Rs 57.68 crore respectively. The annual premium rate is always in increasing rate, however operating expenses for management is in nominal rate out of total premium. Therefore the company always earn more profit. The company earn profit Rs 1.89 crore, Rs 4.9 crore, Rs 6.7 crore, Rs 8.83 crore and Rs 13.61 crore for the fiscal year 2060/061 to 2064/065 respectively. The figure shows the company has been earning profit in increasing rate for each fiscal year. Increasing rate of total premium, net premium and management has been clearly described through bar diagram as below

### **Diagram-3**

**Total premium, net premium and management expenses of NLICL FY(2060/61 to 2064/065)**



The above bar diagram-3 clearly indicates the increasing and decreasing rate of total premium, net premium and management expenses of NLICL. The diagram shows the company collects total and net premium in increasing rate. The net premium and the total premium are similarly in equal position. Likewise, the company is able to operate the business activities with minimum cost for maximum profit. Therefore, NLICL has been earning more profit and increasing its business with different scheme within different region of the country. According to the above diagram net premium for FY 2060/061 to 2064/2065 were Rs 57.7 crore TP and Rs 57.6 crore for 2064/065 and lowest premium was (both TP and NP) Rs 14.5 crore. Similarly, management expenses are very low that is Rs 1.7 crore in FY 2060/061 and Rs 4.3 crore in FY 2064/2065. It shows the company collects insurance premium in increasing rate for every year and operate the business successfully with low management and earn high profit ratio.

Table 14  
**Life insurance Corporation (Nepal) limited**  
**Fiscal year (2060/61 to 2064/065)**

S.N	particular	2060/61	2061/62	2062/63	2063/64	2064/65
A	<b>Capital and liabilities</b>					
1	Paid up capital	250,000	250,000	250,000	250,000	250,000
2	General reserve	-	-	-	-	-
3	P/L A/C	-	-	-	-	-
4	Life Insurance fund	159	180	338,418	673,084	1,136,837
5	Estimated liabilities provision	-	-	3,885	5,860	10,271
6	Other current liabilities	1,009	2,402	20,753	9,523	18,620
	<b>Total</b>	<b>251,168</b>	<b>252,582</b>	<b>613,056</b>	<b>938,467</b>	<b>1,415,728</b>
B	<b>Assets</b>					
1	Fixed assets	7,681	8,749	6,458	6,645	5,754
2	Investment	218,700	217,176	562,844	871,943	1,345,313
3	Other assets	2,241	4,784	28,235	37,701	44,173
4	Cash and bank	22,546	21,873	15,519	22,178	20,488
	<b>Total</b>	<b>251,168</b>	<b>252,582</b>	<b>613,056</b>	<b>938,467</b>	<b>1,415,728</b>
	<b>Premium(annual)</b>	21,224	42,236	264,370	399,041	542,892
1	Net premium	21,224	42,235	264,370	397,353	541,544
2	Total claimed paid	-	-	1,607	6,340	7,090
3	<b>Management expenses</b>	32,308	3,38,418	23,130	31,357	44,356
4	Under writing profit	991	12,744	673,084	334,665	463,753
5	Interest income	44	183	30,666	45,420	67,437
6	Miscellaneous income	4	125	212	212	360
7	Net profit (before tax)	787	6,022	7,603	14,062	23,441
8	Income tax provision (including special fee)	236	1720	2,281	4,283	5,576
9	<b>Profit (after tax)</b>	<b>551</b>	<b>4302</b>	<b>5,322</b>	<b>9,779</b>	<b>17,865</b>

Source:- Annual report of LIC(N)L

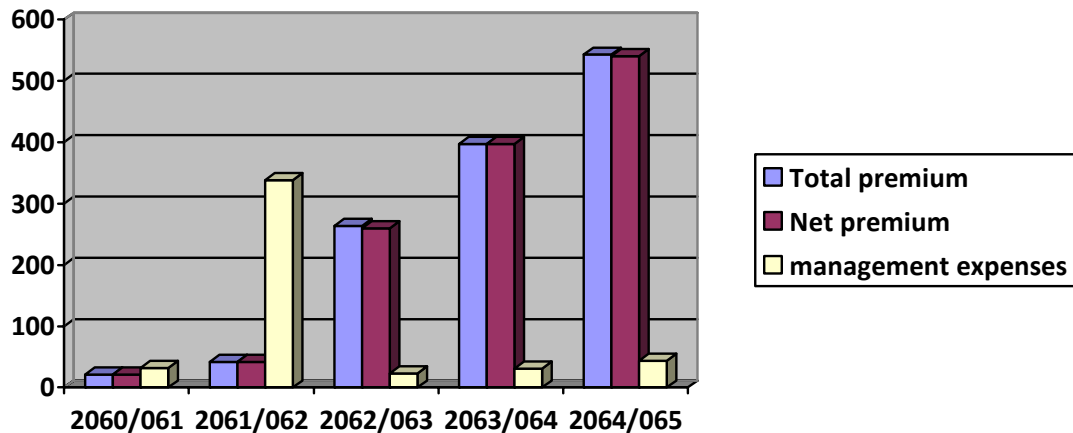
The above table shows the liability, assets, closing balance, total income, claimed paid by the company, management expenses, net profit after tax of LIC(N)L in different fiscal year. according to the above table Rs 25 crore was paid up capital for each five fiscal year and the company has been collecting as insurance premium were Rs 2.12 crore, Rs 4.22 crore, Rs 26.44 crore, Rs 39.90 crore, Rs 54.30 crore for FY 2060/061 to 2064/065. Thus, the company has been earning maximum profit and it has strong financial position shown in above table

The bar diagram-4 also figure out the expenses and income of the company which shown as under.

#### Diagram-4

Total premium, net premium and management expenses of LIC(N)FY( 2060/061to 2064/065)





According to diagram-4 the company has been collecting insurance premium as income source from the beginning of the company's establishment. The above diagram figure out the total premium collection and management expenses for five fiscal year of LIC(N)L. In fiscal year 2064/065 the company collected cash Rs 54.30 crore as total premium and Rs 54.10 crore as net premium but company's cost as management expenses was only Rs 4.4 crore which is in nominal rate in comparisons to total premium in FY 2061/062 management expenses was very high which was Rs 33.8 crore and total premium was Rs 4.2 crore and it was 8 times higher than the total premium collection. The management expenses were very low in other fiscal year that was Rs 3.2 crore, Rs 2.3 crore, Rs 3.1 crore, Rs 4.4 crore from FY 2060/061 to 2064/065 respectively.

### Cash flow analysis

The data have been extracted from the Appendix 3-5 and have been analyzed as following form

#### Nepal insurance company limited

FY 2060/061: OA: +22185656 IA: -9736271 FA: -12567450 = -118065(Decrease)

FY 2061/062: OA: -8002489 IA: +18048080 FA: +7899870 = +17945461(Increase)

FY 2062/063: OA: +17878051 IA: +5129495 FA: -23375818 = -368272(Decrease)

FY 2063/064: OA: -27077334 IA: +17710686 FA: -7899870 = -17266518(Decrease)

FY 2064/065: OA: +17166268 IA: +5633898 FA: -10267640 = +12532526(Increase)

**Total                    22150152            36785888            -46210908            +12725132(increase)**

Cash flow pattern of NLIC has been changing every year. This company is earning cash from investing and operating activities but financial outflow is bigger. However, five years cash flow shows up and down situation of the company but in aggregate the cash flow is in increasing rate and it proves that the company has inadequate cash for business operation.

### **Himal general insurance company ltd**

FY 2060/061: OA: +18728475 IA: -6811853 FA: -9535079 = +2381543(Increase)

FY 2061/062: OA: +10616072 IA: -11779958 FA: -829971 = -1993857(Decrease)

FY 2062/063: OA: -4912549 IA: -47040307 FA: +52835121 = +882265(Increase)

FY2063/064: OA: +20065392 IA: +29095768 FA: -47189350 = +1971810(Increase)

FY 2064/065 OA: +12177969 IA: -92962            FA: -8499745 = +3135262(Increase)

**Total                    +56675359            -36629312            -13669024 =  
+6377023(Increase)**

The above analysis shows cash flow of HGCL is in increasing rate. The company is actually earning more cash by its operating and has spent money for long term investment and financial purposes. It is clear that the company is engaged in revenue producing activities; revenue from investing activity will be seen after five years. However, the company has sufficient cash for business operation.

### **Nepal life insurance company ltd**

FY 2060/061: OA: +55185191 IA: -129981148 FA: +76085000 = +1289043(Increase)

FY 2061/062 : OA: +52993257 IA: -192542462 FA: +144025000 =  
+4475795(Increase)

FY 2062/063: OA: +21133051 IA: -305443231 FA: 105300000 = -  
179010180(Decrease)

FY 2063/064: OA: +350465805 IA: -195862313 FA: -148325000 =  
+6278492(Increase)

FY 2064/2065: OA: +409421373 IA: -526289660 FA: -130000000 =  
13131713(Increase)

**Total                    +889198677    -1350118814    +307085000 =**  
**153835137(decrease)**

The above analysis shows, cash flow pattern of NLICL has been increasing every year except in fiscal year 2062/063. The company has earned cash from operating and financing activities and has spent cash in investing activities for every five fiscal year. But in aggregate, the cash flow is in decreasing rate and it proves that the company has spent huge amount of cash for investment that will return the company as revenue after some years.

#### **Life insurance corporation (Nepal) ltd**

FY 2060/061: OA: +133003346 IA: -132798772 FA: 0            = +204574(Increase)

FY 2061/062: OA: 207756605 IA: -203890978 FA: 0            = +3865626(Increase)

FY 2062/063: OA: +188298616 IA: -183355435 FA: 0            =+4943181(Increase)

FY 2063/2064: OA: 292158579 IA: -27892247 FA: 0            =  
+13226332(Increase)

FY 2064/065: OA: +400992011 IA: -418026861 FA: 0            = -  
17034850(Decrease)

**Total**                      **1222209157**                      **-1217004294.6**                      =  
**+5204863.4(Increase)**

Cash flow pattern of LIC(N)L has been increasing every year.

#### **4.4 Analysis of Open-End Opinions**

Four open-end questions were asked and discussions were made with chartered accountants, managers, accountants and financial officers of different insurance companies to take their opinions in order to i) identify the difficulties in applying management accounting tools and techniques ii) benefit achieved after application of such tools iii) suggestions for the application of these tools and iv) method of evaluation financial performance of insurance companies.

The views and opinion from respondents are as follows. Difficulties in application of management accounting tools and techniques are:

1. Understanding level is very poor among the existing staffs
2. Lack of knowledge about accounting tools
3. Lack of management accounting experts
4. Lack of management commitment for application of MA tools and techniques
5. Managerial decision making is very poor
6. High-level union influences decision making.
7. No availability of accurate information

On the basis of respondents, the following benefits can be achieved by the application of management accounting tools

1. Prompt decision making
2. Better service to policy holders
3. Better risk management
4. Accurate accounting
5. Profit maximization
6. Cost control of insurance companies
7. Helpful for progress of the company

Likewise, Suggestions for application of management accounting tools are:

1. Trained man-power should be prepared to understand the importance of management accounting tools and techniques
2. Seminar, workshop should be conducted in time to time for accountant and manager so that they could be acquainted with such tools and can apply it for their company without any confusion
3. Every company should apply the management accounting tools as per their business requirement

According to the respondent's opinions, methods adopted for financial performance of insurance companies are as follows:

1. The company prepared balance sheet, cash flow, profit and loss account to analyze the financial performance
2. Ratio analysis, past trend analysis is also analyzed to evaluate the whole financial position of the company.

#### **4.5 Major Findings of the Study**

From the presentation and analysis of information and data, major findings are as follows:

1. After examining the MA tools and techniques practiced in Nepalese insurance company for planning, controlling and decision making, it is found that cash flow, annual budgeting and pricing decision are widely practiced management account tools. Almost 100% insurance companies practiced these tools to carry out the operational activities. Likewise 80% insurance companies practice cost segregation into fixed and variable, capital budgeting and ratio analysis respectively. Less than 25% companies practice break-even analysis, standard costing and ABC pricing. Only 40% companies practice responsibility accounting. But there is no practice of some management accounting tools like long term budget and zero base budgeting in the insurance companies of Nepal.

2. While analyzing the techniques of inventory valuation 60% companies applied FIFO technique for inventory valuation. No company use either LIFO method or weighted average method for inventory valuation.
3. For pricing the product and services, 50% insurance companies followed full cost pricing method and other 50 % followed other technique like actuary method. Only 25% companies practice variable cost base pricing but no company follow other techniques like ABC pricing and Target on return on investment pricing. Thus most of companies follow full cost pricing and 50% follow different technique which is suitable for insurance as per company requirement.
4. Method of segregating mixed cost into fixed and variable,. 50% companies follow average method while 25% follow analysis method to segregate the mixed into fixed and variable. No companies follow rest of techniques like-low method, regression method and any other techniques. So it can be described that average method is highly practiced techniques among the companies of Nepal, analysis method is less preferred and rest of other techniques are not in practiced.
5. Regarding long term investment decision and purchasing fixed assets companies mostly practice NPV, PBP and ARR. No company practice PI, IRR and others method for purchasing fixed assets or making long term investment decision.
6. While measuring and controlling overall performance of companies of Nepal, 100% companies practice cash flow statement, 100% practice profit and loss and 100% companies practice budgetary control made by company. Likewise 75% companies practice ratio analysis to measure and control overall performance of the company. Thus cash flow statement and P/L are highly practiced tools and ratio analysis and budgetary control are also practiced in companies to control and measure the overall performance.
7. Regarding the types budget practice in companies of Nepal, it was found that almost all the companies prepare annual budget. 100% companies

prepare annual budget, only 25% companies prepare cash budget. No company prepares other type of budget like, long term budget, overall master budget and any other techniques. These analyses have been made according to data provided by the company.

8. Past budget estimates is widely practiced for budget preparation basis, where 75% companies prepares budget on the basis of past budget estimates and 50% prepares on the basis of activity base budget. No company prefers zero base budget and other any base for budget preparation. Therefore it can be said that past budget estimates is highly practiced base for budget preparation and zero base budget is almost nil in companies of Nepal.
9. While examining the budget preparation system, it was found that most of the companies prepare budget through finance departments. 75% companies prepare budget through finance department and 25% companies prepare budget through budget committee. Neither the planning department prepare budget nor do companies hire outside expert for budget preparation.
10. In the context of time period covered in budget, 75% companies prepare short term budget (that is one year or less). No company prepares medium term budget and 25% companies prepare long term budget(that is 5years than more).Thus, short term budget is only highly practiced budget among insurance companies of Nepal.
11. In the context of open end questions, it is found that the major difficulties for application of management accounting tools and techniques were lack of expertise, lack of information about accounting tools and techniques, lack of management commitment, high cost, influence of labor union and other political and environmental factor.
12. While analyzing the benefit after the application of management account tools, they are as follows: i) it can help to management for prompt decision making and other administrative work, ii) manager can manage risk in better way so that company can earn profit, iii) company can

prepare accurate accounting system so that it helps to minimize the cost and maximize the profit which assist to the manager to control the cost. Finally, it is very helpful for profit earning and expansion of company in the long run.

13. After analyzing the financial performance of company it can be said that all companies are trying their best to increase business activities in competitive environment. They have been collecting and earning more profit. every fiscal year .It shows that they are eager to capture the market as a whole.

## **CHAPTER V**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1. Summary**

Management accounting can play a vital role by using its tools and techniques in business organization. No matter a business organization provides services to the public or produces the product, every organization need better performance to survive in the long run with the existing competitors and with newcomer also. For this purpose, management should apply several management accounting tools and techniques to increase their performance in today's competitive market. Management reduces the business risk after application of management accounting tools and techniques to their business. It helps not only reduce the risk of the organization but also to increase the profit of the company. Management principle can be applied at all organization and at all level of an organization. It is the equally important for manufacturing organizations and services organizations.



Insurance companies assure against risk and uncertainties to the public for the loss of life and individual property. No business organization and manufacturing company can run in the country without safe of life and other activities. Therefore, every organization needs assurance of life and property so they increase their business into near future. Though, every company has limited resources. Insurance companies pay money or interest to the to the public for their loss and helps to reduce the risk and uncertainties.

Before doing these all, the company should run in a healthy and balanced manner. To do so, the management of the company should apply management accounting tools and techniques effectively and efficiently.

Management accounting is one of the important parts of management. It is the branch of accounting which helps the management to perform all its functions including planning, organizing, staffing, directing and controlling. Management accounting is the integral part of management process and acts as the strategic business partner in support of managerial role in rational decision making. Whether Nepalese insurance companies are applying management accounting tools and techniques or not? Whether insurance companies of Nepal are applying these tools and getting advantages or not? To identify these all facts this research has been conducted. Cost segregation, cost classification, pricing techniques, pricing decision, standard costing, cash flow analysis, financial performance analysis, budgeting, capital budgeting, cost revenue estimation are major MA tools and techniques in this regard.

The main objective of this research is to analyze the present practice of MA tools and techniques and to know the financial position of insurance companies in the present situation. As per the nature and demand of the study, analytical approach has been followed. This research is based on primary and secondary sources of data. The primary data had been collected from companies by distributing the questionnaires and conductive interviews. The secondary are data collected from companies annual report, news papers, magazine and website. The collected raw data has been properly processed, tabulated, and analyzed.

## **5.2. Conclusion**

Management accounting concept emerged to resolve the complexity which appeared in today's business decision making process. It is of vital importance to every level of management because every manager has to be involved in some or other sorts of decision making process. Management accounting is a new discipline and still in developing stage in the context of modern business environment. Different types of management accounting tools and techniques are evolving as a new dimension and that facilitates the management to perform the management functions better covering from planning to control. Various kinds of management accounting tools and techniques are taught in the colleges and universities but they are not completely practiced in insurance companies of Nepal. It shows a vast gap between theory and practice.

The management accounting tools like cash flow, pricing decision and annual budgeting are widely used in Nepalese insurance companies. Similarly cost segregation, capital budgeting and ratio analysis are practiced in almost all companies. However other tools like break-even, standard costing, activity base budgeting and responsibility accounting are least practice in insurance companies of Nepal. Some tools like zero base budgeting and long term budgeting are not in practice. The traditional inventory valuation techniques FIFO was widely practiced but the other techniques like LIFO, weighted average and other techniques were not found in practice of insurance companies. Similarly traditional costing for pricing was practiced by some companies and least companies practices variable cost base pricing but there was no use of other pricing techniques like ABC pricing and target on return on investment pricing. Most of the companies prefer average method for segregating the cost into fixed and variable. Some company's uses analysis method but no companies use high-low method and regression method. Likewise, all companies practice cash flow and profit and loss made by the company to measure and control the overall performance of insurance companies. Some practice ratio analysis and budgetary control. But there is no practice of standard costing and activity base costing for the measurement of performance, While preparing the budget, all most all company prefer to prepare annual budget. There is no practice of, long-term budget and overall master budget. But very few companies use cash budget technique. Finance departments prepare budget in insurance companies for short term only. Most of the companies follow past trend analysis for cost and revenue

estimation and least companies follow market survey and judgmental analysis for this purpose.

Thus it can be said that, some management accounting tools and techniques are widely practiced in insurance companies of Nepal. Some are not in practiced and some are least practiced due to lack of sufficient knowledge of accounting personnel. Neither the management of the company hires outside expert for application of management accounting tool nor they train to accounting staff for the same purpose.

The financial and cash flow analysis showed all insurance company has been trying to capture the market and has been trying to improve their financial performance in public eyes. Finally, we conclude that Nepalese insurance companies are in preliminary stage with respect to the application of modern management accounting tools and still they are trying to adopt such tools and techniques more and more to cope with the future expected opportunities and challenge to be faced in the insurance sector.

### **5.3. Recommendations**

Management accounting plays important role to expand business activities and for the increment of income for all types of business organization. It helps to utilize limited resources to earn maximum profit. In this present context, practices of management accounting tools and techniques for all business and non-business organization have been almost compulsory. These tools and techniques provide a key idea, guidelines and strategies to the manager for better conduct of business activities.. The company should adopt different types of MA tools and techniques so that they can easily provide several facilities to the public, which is very useful to the individual. On the basis of study findings, it may be appropriate to give the recommendations which are fruitful to Nepalese insurance companies to expand their business, further implementation of management accounting tools and techniques and improvement of financial position of the company. They are:

For the expansion of insurance business towards the country, management should apply management accounting tools and techniques effectively and

efficiently within the organizations. For this purposes, management of the companies should provide different management accounting training to the accounting staff and manager of the company. Thereafter, the accounting professional can manage for application of MA tools and techniques which helps to management for decision making and improvement of business activities. Likewise, every company should interact with academicians about MA tools and techniques so that they could be easily acquainted with advantages, disadvantages, problems and application procedure of MA tools and techniques. The account officer should always be updated for practicing of these tools.

Insurance companies of Nepal should use different MA tools and apply it in different areas according to the nature of tools. For example; budgeting, decision making, capital budgeting, cost estimation, cost classification and allocation can be applied for planning. Similarly standard costing, budgetary control, cash flow statement, flexible budgeting and responsibility accounting can be used for controlling. If management applies right tools in right place, then the company can achieve more benefit in near future.

Cost segregation, allocation and cost estimation are important tools for the cost control of insurance companies. So these tools should be applied for the better planning, controlling, and decision making process. The company should use regression and high low method for segregating the cost Zero base analysis, engineering analysis and judgmental analysis are also useful tools for cost and revenue estimation.

Nepalese insurance companies should prepare not only short term budget but also medium term and long term budget. So, that would be able to perform future work without any financial crisis. Besides past budget estimates, the company should follow zero base budget and activity base budget because past budget estimation may not be effective for the future work.

While preparing budget, there should be coordination between finance department, planning department and budget committee. If necessary, the outside expert should be hired by the company.

For the long-term investment decision, the insurance companies of Nepal are recommended to practice internal rate of return, profitability index and net present value.

To measure and control the overall performance, the company should also practice the standard costing and activity base costing. They should not avoid the application of these tools also.

Management of the insurance companies should use effective information system. Each worker and shareholder should be informed about company's financial performance and should be involved for policy making and major decision making process.

Each level of accounting staff should be aware for practicing of management accounting tools and techniques and they should be responsible for outsider regarding practice of these tools, which help to increase in insurance activities in grass root level.

All Nepalese insurance companies should provide better services to the people and make them aware about risk and uncertainty. They should compete as a service provider but not as a profit maker. Once, they attract the people they will always earn more profit.

Nepalese company should spend more cash for operating activities, so that they can earn more revenue in present condition. Long-term investment will return only in coming years.

The company should not have huge amount of cash balances at the end of fiscal year. The closing balance will be free at the ending period. Therefore, the company should utilize it for revenue generation activities.

