

**MANAGEMENT ACCOUNTING TOOLS USED IN NEPALESE
BANKING AND FINANCIAL COMPANIES**

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DECLARATION

I hereby declare that the research work reported in this thesis "Management Accounting Tools Used In Nepalese Banking And Financial Companies" submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original research work done in the form of partial fulfillment of requirements of degree of Master's of Business Studies (MBS) under the supervision of Prof. Dr. Kamal Deep Dhakal and Shankar Raj Joshi of Shankar Dev Campus, T.U.

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I hope the possible errors would be covered by the subsequent studies in this field in the future.

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Nagima Shrestha
Researcher

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ABBREVIATIONS

ABB	Activity Based Budgeting
ABM	Activity Based Management
AD	Anno Domini (English Date)
AGM	Assistant General Manager
AM	Activity Management
ARR	Average Rate of Return
AV	Average
BC Ratio	Benefit Cost Ratio
BEP	Break Even Point
BS	Bikram Sambat (Nepali Date)
CAPM	Capital Assets Pricing Models
CEO	Chief Executive Officer
CFAT	Cash Flow After Tax
COGS	Cost of Goods Sold
COM	Commercial
CVP	Cost Volume Profit
D/E Ratio	Debt Equity Ratio
DCF	Discounted Cash Flow
DPS	Dividend Per Share
Dr.	Doctorate
DY	Dividend Yield
EAC	Equivalent Annual
EPS	Earning Per Share
Fig	Figure
FY	Fiscal Year
GDP	Gross Domestic Product
HMG	His Majesty's Government
IFAC	International Federation of Accountants
IRR	Internal Rate of Return
JIT	Just In Time

L.T.D.	Limited
LC	License Category
LCC	Life Cycle Costing
LS	Local Information System
MAS	Management Accounting System
MBS	Master of Business Studies
MIRR	Modified Internal Rate of Return
NBL	Nepal Bank Limited
NGO	Non- Government Organization
NPV	Net Present Value
NRB	Nepal Rastra Bank
ORG	Organization
PBP	Pay Back Period
PI	Profitability Index
PPC	Profit Planning & Control
Prof.	Professor
PV	Present Value
RBB	Rastriya Banijya Bank
SMA	Strategic Management Accounting
STD	Standard
TC	Target Costing
TOM	Total Quality Management
TU	Tribhuwan University
USA	United States of America
WACC	Weighted Average Cost of Capital
WTO	World Trade Organization
WWW	World Wide Web
ZBB	Zero Based Budgeting

CHAPTER I

INTRODUCTION

1.1. BACKGROUND OF THE STUDY

The modern service firms such as banking and financial companies must conduct its business in a rapidly changing, competitive as well as dynamic and complex environment, which poses many challenges to management of firms. A premium is placed on the ability to react quickly and correctly to constantly changing market conditions. Management must be concerned with all aspects of the firm's operations including delivery of services, marketing activities, supporting functions, such as personnel training, data processing etc. Due to the complex business environment management has to carry out its basic functions by cost minimization and profit maximization in atmosphere of uncertainty. The old technique of management by intuition is no longer considering dependable in a situation in which the modern management has realized that even a slight error in policy decision may mean either losing a lot of business opportunities or going out of competition. Management accounting is therefore beneficial for proving both financial and non financial information that will help decision makers to make good decisions.

Management accounting has proved beneficial in every aspect of management activities from planning to decision making. In most successful organizations, management accounting has been a strategic business partner in support of management's role in decision making, planning and controlling. Management accounting information serves major roles in organization. It enhances decision making, guides strategy development and focuses efforts related to improving organizational performance and to evaluation the contribution and performance of organizational units and member. (Kaplan and Atkison, 1998:12)

Management accounting is that area of accounting, which not merely informed but also provided with analytical conclusion to take necessary actions. The thinking of management accounting is provided with standards of references, vehicles of judgments, and forms in which to express these judgments and to bring changes. Thus, management accounting has to be regarded as an integrate part of the personality of management.

The top level management plays a great role in integrating all the activities by mobilizing different resources to create value for the organization and to ensure a successful future for the organization as management accounting is the subject of high level management. To be competitive in the market every aspect of organization should be considered from the beginning of the business selection to daily operational matters, which demands the best formulation of planning, best selection of alternatives and lastly the best monitoring of implementation.

In Nepal, modern banking was first introduced in 1937 AD with the establishment of Nepal Bank Limited. A new era in banking began in 1984 A.D. with the establishment of the first joint venture bank, Nepal Arab Bank Limited. The Nepalese financial sector is composed of banking sector and non banking sector. Banking sector comprises Nepal Rastra Bank (NRB) and Commercial Banks. Now a day's most of the commercial Banks have practiced major management accounting tools such as capital budgeting tools, financial statement analysis tools, decision making tools. They have started to use modern and innovative tools recently. Whereas Non Banking Sector includes Development Banks, Finance Companies, Micro Credit Development Banks, Co-operatives, Non-Government Organizations (NGO's) performing limited banking activities and other financial institutions such as insurance companies, employee's provident fund, citizen investment trust, postal saving offices and Nepal Stock Exchange have not practiced even those tools and fully unknown about

the modern management accounting tools beside development banks and some of the finance companies.

As management accounting tools are the recent development of supplementary tools for management in the field of accounting for the better utilization of the limited resources and achieving goal though cutthroat competition.

The growing numbers of management accounting practitioner among Nepalese banking and financial companies will surely increase the efficiency and effectiveness in managerial activities which ultimately leads the success of those companies.

1.2. STATEMENT OF THE PROBLEM

Profit and growth does not just happen. It is to be planned, managed and controlled. Management accounting provides techniques to aid management functions. Most of the Nepalese banking and financial companies are not performing well as is evident from their annual reports. Their poor performance is due to poor management. Some of the finance company and bank are merged and closed as well. Nepal Rastra Bank has takeover the management of failure commercial bank and handover to new management. Nepal bank Ltd. Is running with foreign management team. Such example raised the questions whether Nepalese Managers are competent enough? Do they practice management accounting tools and techniques to carryout planning, decision making and controlling functions?

Thus, the proposed study will try to get the answer for the following research questions:

- i. Whether Nepalese banking and financial companies are practicing management accounting tools?

- ii. Which tools of management accounting are practiced more and which of them the least?
- iii. What are the major difficulties in the application of management accounting tools especially in banking and financial companies?
- iv. In which area of the business operations can management accounting tools be applied to improve the competitiveness of the Nepalese banking and financial companies?

1.3 OBJECTIVE OF THE STUDY

The main objective of this research is to examine and study the practice of management accounting tools in the banking and financial companies in Nepal. The Specific objectives were as follows.

- i. To study and examine the present practice of management accounting tools in the banking and financial sector in Nepal.
- ii. To identify the areas where management accounting tools can be applied to strengthen the banking and financial companies.
- iii. To identify the difficulties in applying management accounting tools in Nepalese banking and financial companies.
- iv. To provide appropriate recommendation on the use of management accounting tools.

1.4 HYPOTHESIS

The following hypothesis has been formulated for the purpose of the study.

Hypothesis 1

H₀: There is no significant relationship between the type of the company and practice of the NPV Technique of Long Term Investment or Capital Budgeting. (Practicing of NPV and type of the companies are independent.)

H1: There is significant relationship between the type of the company and practice of the NPV Technique of Long Term Investment or Capital Budgeting. (Practicing of NPV and type of the companies are dependent.)

Hypothesis 2

H0: There is no significant relationship between the type of the company and practice of Ratio Analysis Techniques of Financial Statement Analysis. (Practicing of Ratio Analysis Techniques and type of the companies are independent.)

H1: There is significant relationship between the type of the company and practice of Ratio Analysis Technique of Financial Statement Analysis. (Practicing of Ratio Analysis Techniques and type of the companies are dependent.)

1.5. SIGNIFICANCE OF THE STUDY

The research work is the study of the practice of management accounting tools in banking and financial companies in Nepal. This study will be significant in the following means:

- i. It examines the application of management accounting tools in the Nepalese banking and financial companies.
- ii. It explores the problems and potentialities of the selected banking and financial companies.
- iii. It will encourage the use of management accounting tools in decision making to those companies who have not yet used any tools.
- iv. It also provides literature to the researcher who wants to carry on further research in this field.

1.6. LIMITATION OF THE STUDY

Various sectors are involved in the whole economy. But, beside banking and financial companies, others are not the scope of the study. The study is concerned only with the management accounting tools. So that the limitation of the research are as follows:

- i. The study is concerned with the banking and financial companies of Nepal. Thus, the findings might not be applicable to other sector.
- ii. The study is concerned with management accounting. It doesn't consider the other aspect of accounting and economic aspects as well.
- iii. The study pays attention to the use of management accounting tools only but it doesn't consider the implementation aspects of the tools.
- iv. The research is based on primary data only. No secondary data will be used for this study.

1.7 ORGANIZATION OF THE STUDY

The whole study process has been divided into following five chapters:–

- i. Introduction
- ii. Review of Literature
- iii. Research Methodology
- iv. Presentation and Analysis Of Data
- v. Summary, Conclusion And Recommendation

Introduction

The chapter one is introduction that includes Background of the Study, Statement of the problem, Objective of the Study, Hypothesis, Significance of the Study, Limitation of the Study and Organization of the Study.

Review of Literature

This chapter concerns with review of literature. It is directed to the theoretical portion of the study including General Introduction, Conceptual Framework, A Brief Review of Previous Research Work and Research Gap.

Research Methodology

This chapter deals with Research Design, Research Population and Sample, Source and Type of Date, Data Gathering Process, Data Processing Procedure, Research Variable and Statistical Procedure.

Presentation and Analysis of Data

This is the most essential and most extensive chapter as it includes the main theme of the study. It deals with the presentation, analysis and interpretation of collected data and information. For this purpose, Analysis of Questionnaires, Testing of Hypothesis, Analysis of Open- End Opinions and Major Findings of the Research have been incorporated.

Summary, Conclusion and Recommendation

This chapter is the final chapter of the study which includes Summary of the study, Conclusions and Recommendations.

CHAPTER II

LITERATURE REVIEW

2.1 GENERAL INTRODUCTION

2.1.1 MEANING AND DEFINITION OF MANAGEMENT ACCOUNTING

Management accounting is the presentation of accounting information in such a way as to assist management in the creation of policy and the day to day operation of an undertaking. Thus, it relates to the use of accounting data collected with the help of financial accounting and cost accounting for the purpose of policy formulation, planning control and decision making by the management. (Jain and Narang, 1995: 2)

Management accounting is that branch of the accounting information system of business enterprises, which uses accounting information for planning, controlling and decision making. It uses partly financial accounting but mostly cost accounting. (Khan and Jain, 1993: 9)

In ordinary language "Management Accounting is used to describe the modern concept of accounts as a tools of management in contrast to the conventional annual or half yearly account prepared mainly for information of proprietors, the object being to so expand the financial and statistical information as to shed light on all phases of the activities of organization. (Goyal and Man Mohan, 1997: 5)

Management accounting system provides information to assist managers in their planning and control activities. Management accounting activities includes collection, classifying, processing, analyzing and reporting information to manager. Unlike the financial accounting information prepared for external constituencies such as investors, creditors, suppliers and tax and regulatory authority's management accounting should be designed to help decision making

within the firm. Therefore, the scope of management accounting extend beyond traditional measures of the costs and revenue from the transaction that have already occurred to include also information on sales, backlogs, unit quantities, price demands and capacity resources and extensive performance measures based on physical or non financial measures (Kaplan and Atkinson, 1998:1)

2.1.2 HISTORICAL OVERVIEW OF INTRODUCTION OF COST AND MANAGEMENT ACCOUNTING INNOVATIONS

Introduction of Cost and Management Accounting Techniques Before 1950s

According to Chandler (1977), Management Accounting system (MAS) first appeared in the United States during the nineteenth century. These MAS employed both simple and sophisticated accounting methods. For example, the early management accounting measures where simple but seemed to satisfy the needs of business owners and managers. Simple managerial accounting procedures created during the nineteenth century were used to monitor and evaluate the output of internally directed processes. Cost accounts were used to ascertain the direct labor and overhead costs of converting raw materials into goods. The use of sophisticated accounting procedures also dates back to the nineteenth century.

According to Porter (1980), some companies in the USA used sophisticated sets of cost accounts as early as the first quarter of the nineteenth century. During this period, new accounting system were devised to control and record the disbursement of cash which provided management with timely and accurate reports on expenditures. A voucher system of book keeping which is used for controlling and recording disbursements was also created during the nineteenth century. (Wood, 1895)

In comparison, before the industrial revolution, accounting was mainly used as a record of the external relations between business units. Information for decision making and control was usually acquired from market prices. (Graner, 1954)

According to Johnson and Kaplan (1987), during the nineteenth century cost accounting became more than just a tool for evaluating internal conversion processes. It was also used as a means to assess the performance of subordinate managers. Moreover, internal accounting systems for evaluation costs, throughput, and working capital were developed during the nineteenth century. New cost measurement techniques for analyzing productivity and linking profit to products were developed during the late nineteenth and early twentieth. It had a substantial impact on twentieth century accounting practices. Some of these techniques provided the basis for the development of standards to monitor labour and material efficiencies and costs. This was the time of the development of scientific management that concentrated on gathering accurate information regarding the efficiency of workers engaged in specified task. Furthermore, the use of variance analysis of actual costs and standard costs for the purpose of controlling operations was also developed. During the nineteenth century scientific management experts also developed new cost accounting procedures to evaluate and control physical and financial efficiency of tasks and processes in complex machine-making firms and to assess the overall profitability of the enterprise. (Johnson & Kaplan, 1987)

Around the 1900s managers started paying attention to the productivity and performance of capital. The design of Du Pont management accounting procedures during that period facilitated the evaluation of the performance of capital; these gave significant attention to the application of return on investment. Such information helped managers in the allocation of new investments among competing economic activities and the financing to new capital requirements (Chandler & Salsbury, 1971).

According to Johnson and Kaplan (1987), before World War I, the Du Pont Company was using almost all of the management accounting procedures for

planning and controlling purposes, known until the 1980s. As Johnson and Kaplan (ibid) reported, most of cost and management accounting procedures were developed during the nineteenth and first quarter of the twentieth century. They further stated that before World War I some organizations were trying to develop and use accurate cost accounting systems to trace costs accurately to diverse lines of products. This evidence confirms that even the idea and logic behind activity based costing for designing as accurate costing method is not new. The application of non accounting information (financial and non-financial) in management accounting, which has attracted considerable attention in the last two decades, is not new either. According to Johnson (1992), as far back as the first half of nineteenth century, businesses owners and managers were using non financial information to control organizational operations. The idea of paying more attention to the working people and customers of organizations as a long- term source of profit also dates back to before the 1950s. It might be argued that the logic behind most of management accounting techniques dates back to the first half to nineteenth century, however, the demand for management accounting information for the purpose of planning and control decisions is a much more recent phenomenon (Coper & Kleinchmidt, 1990, Johnson & Kaplan, 1987; and Kaplan, 1984). Also a comparison between today's management accounting procedures and those used before the 1950s would show a considerable number of innovations in this field.

Introduction of Cost and Management Accounting Techniques After 1950s

Since the 1950s more than 30 popular cost and management accounting techniques have been introduced. The majority of these innovations have been introduced during the last two decades. According to Hagerty (1997) and Smith (1999), the major developments in management accounting since 1950s can be explained as follows:

- a. Cost and Management accounting innovations in 1950s can be identified as - Discount Cash Flows, Total Quality Management, Cusum Charts and Optimum Transfer Pricing.

- b. Cost and Management accounting innovations in 1960s can be identified as - Computer Technology, Opportunity Cost Budgeting, Zero-Base budgeting, Decision Tree, Critical Path Scheduling and Management by Objectives.
- c. Cost and Management accounting innovation in 1970s can be identified as - Information economics and agency theory, Just in time Scheduling, Strategic Business Units, Experience Curves, Portfolio Management, Materials Resource Planning, Diversification, Matrix Organization and Product Repositioning.
- d. Cost and Management accounting innovation in 1980s can be identified as - Activity Based Costing, Target Costing, Value- added management, Theory of constraints, Vertical Integration, Private Labels and Benchmarking.
- e. Cost and Management accounting innovations in 1990s can be identified as - Business process reengineering, Quality functional deployment, Outsourcing, Gain sharing, Core Competencies, Time Based Competition and Learning Organization.

Reviewing cost and management accounting innovations of the last two decades, Bjornenak & Olson, (1999, p.327) identify the major recently developed cost and management accounting techniques in the literature as follows: "activity based costing (ABC); activity management (AM) and activity based management (ABM); local information system (LS); balanced scorecard (BS); life cycle costing (LCC) and target costing (TC); strategic management accounting (SMA)."

As the above historical review shows, the number of cost and management accounting innovations during the last two decades is higher than those of two preceding decades (1960s and 1970s). This review supports the suggestion that the lack of cost and management accounting innovations during the last two decades does not appear to be an issue. This suggestion can be confirmed by comparison between the number of cost and management accounting innovations of the last two decades and those of two preceding decades. Supporting this view,

Kaplan (1994) emphasizes that the 1980s and 1990s have been a revolution in regard to the innovation in management accounting theory and procedures. Bjornenk & Olson (1999, p.325) also echo this observation by suggesting that "over the last two decades there has been a rich supply of management accounting innovations in the literature". Johnson and Kaplan (1987,p. 163) go further and argue that until the 1980s, "the adoption of the discounted cash flow approach for evaluating capital investment projects has been the main innovation in management accounting practice during the past sixty years".

They emphasize that in the period between the 1920s and 1980s no new ideas or thoughts have affected the design and the use of cost management systems. Given the number of recently developed cost and management accounting innovations during the last two decades, at this stage the current paper suggests that cost and management accounting lag should not be considered a consequence of a shortage of cost and management accounting innovations.

2.1.3 EVOLUTION OF MANAGEMENT ACCOUNTING

In 1998 the International Federation of Accountants (IFA) issued a statement describing the development of management accounting through four sequential stages.

Stage 1- Cost Determination and Financial Control (pre 1950)

IFAC describes management accounting before 1950 as a technical activity necessary for the pursuit of organizational objectives. It was mainly oriented towards the determination of product cost. Production technology was relatively simple, with products going through a series of distinct processes. Labor and material costs were easily identifiable and the manufacturing processes were mainly governed by the speed of manual operations. Hence, direct labor provided a natural basis for assigning overheads to individual products. The focus on product costs was supplemented by budgets and the financial control of production processes.

The strong position held by Western countries in international markets made their products highly regarded. They could be sold relatively easily, and competition on the basis of either price or quality was relatively low. There was little innovation in products or production processes as existing products sold well and the production processes were well understood. Accordingly, management was concerned primarily with internal matters, especially production capacity. The use of budgeting and cost accounting technologies was prevalent in this period. However, the dissemination of cost information tended to be slight, and its use for management decision making poorly exploited (Ashton et al. 1995)

Stage 2- Information for Management Planning and Control (by 1965)

In the 1950s and 1960s the focus of management accounting shifted to the provision of information for planning and control purposes. In stage 2 management accounting is seen by IFAC as a management activity, but in a staff role. It involved staff (Management) support to line management through the use of such technologies as decision analysis and responsibility accounting. Management controls were oriented towards manufacturing and internal administration rather than strategic and environmental considerations. Management Accounting, as part of a management control system, tended to be reactive, identifying problems and actions only when deviations from the business plan took place (Ashton et al.,1995)

Stage 3 - Reduction of Resource Waste in Business Processes (by 1985)

The world recession in the 1970s following the oil price shock and the increased global competition in the early 1980s threatened the Western established markets. Increased competition was accompanied and underpinned by rapid technological development which affected many aspects of the industrial sector. The use, for example, of robotics and computer controlled processes improved quality and in many cases reduced costs. Also developments in computers, especially the emergence of personal computers, markedly changed the nature

and amount of data which could be accessed by managers. Thus the design, maintenance and interpretation of information systems became of considerable importance in effective management (Ashton et al. 1995).

The challenge of meeting global competition was met by introducing new management and production techniques, and at the same time controlling costs, often through reduction of waste in resources used in business processes (IFAC, 1998).

In many instances this was supported by employee empowerment. In this environment there is a need for management information and decision making, to be diffused throughout the organization. The challenge for management accountants, as the primary providers of this information, is to ensure through the use of process analysis and cost management technologies that appropriate information is available to support managers and employees at all levels.

Stage 4 - Creation of Value through Effective Resources Use (by 1995)

In the 1990s world wide industry continued to face considerable uncertainty and unprecedented advances in manufacturing and information processing technologies (Ashton et al., 1995). For example the development of the world wide web and associated technologies led to the appearance of E- commerce. This further increased and emphasized the challenge of global competition. The focus of management accountants shifted to the generation or creation of value through the effective use of resources. This was to be achieved through the use of technologies which examine the drivers of customer value, shareholder value and organizational innovations (IFAC, 1998).

A critical difference between Stage 2 and Stage 3 and 4 is the change in focus away from information provision and towards resource management, in the form of waste reduction (Stage 3) and value creation (Stage 4). However the focus on information provision in Stage 2 is not lost, but is refigured in Stage 3 and 4. Information becomes a resource, along with other organizational resources; there is a clearer focus on reduction waste (in both real and financial terms) and on

leveraging resources for value creation. Accordingly, management accounting is seen in Stage 3 and 4 as an integral part of the management process, as real time information becomes available to management directly and as the distinction between staff and line management become blurred. The use of resources (including information) to create value is an integral part of the management process in contemporary organizations.

2.1.4 HISTORICAL BACKGROUND OF BANKING AND FINANCIAL COMPANIES IN NEPAL.

“A bank is an institution which collects money from those who have it spare or who are saving it out of their income and lends this money out to those who required it”.

In general, a bank is an institution with the following features:

- i) It deals with money, it accept deposits and advances loans.
- ii) It also deals with credit, it has the ability to create credit.
- iii) It is commercial institution, it aims at earning profit.

In overall development of the banking system in Nepal the Tejarath Adda may be regarded as the father of modern banking institution and for a quite a long time it rendered good service to the government servants as well as to the general people. This was granting loans against Gold, Silver and other Collateral Securities that are more or less similar to one of the modern banking functions. It did not accept deposits that were not probably considered then to be a function falling with in the competence of banking.

Although services provide by the Tejarath were intended in other parts of the country, its benefits were not available to society as a whole. So the monopolies of the local money lenders were still on practices on the rural areas. So, to eliminate this draw back monopoly in 1937 A.D. The Tejarath was replaced by a commercial bank. Nepal Bank Limited which marked the beginning of a new era in the history of modern banking in Nepal. It was established as a semi government with the authorized capital of Rs. 10 million and the paid up capital of Rs. 842 thousand. The private shareholders till 1951 controlled Nepal Bank

Limited. During that period, HMG increased its share ownership in NBL to 51% in the total share capital of this bank in order to hold and to control over its management.

Its establishment solve the prevailing financial inconvenience of the people and activates were numerous especially in the field of trade and commerce. But till the establishment of Nepal Rastriya Bank as the Central Bank under the Nepal Rastriya Bank Act 2012, the major function of Central Bank was performed by Nepal Bank Limited. So it was serving two purposes that are central and commercial banks. The foundation of Nepal Rastriya Bank set a milestone in the history of banking in Nepal with various objectives.

Introduction of commercial bank act 1964, government established another commercial bank, Rastriya Banijya Bank in public sector on 23, Jan, 1966 with the authorized capital of Rs. 10 million and paid up capital of Rs. 3 million. The purpose of the bank has been mentioned in the permeable act, to provide facilities and help economic welfare of the general public. It is necessary to mention that the establishment of Rastriya Banijya Bank helps to supply the growing financial need of the economy. Its underlying feature is to contribute to the development of the banking system particularly in remote area lying in hilly regions. This can be proved by its policy of investing 12% of total deposit in priority sector. This policy also applies to the commercial bank, established in private sector.

Besides Nepal Bank Limited and Rastriya Banijya Bank other commercial banks did not come into existence until 1984 A.D. Commercial banking act 1974 was amended in 1984 A.D. to increase the competition between commercial banks. As per the provision made in this act, private sector (including foreign investment) was given freedom in opening commercial bank. Consequently, Nepal Arab Bank Limited (NABIL) was established in 1984 A.D. as a joint venture bank, likewise Nepal Indo-Sues Bank Limited and Nepal Grindlays Bank Limited (Renamed as Standard Chartered Bank Nepal Limited) was established under joint venture in 1986 and 1987 A.D. respectively. After the initiation of

democracy in 1990 A.D. Nepal Rastra Bank adopted a more liberal policy in establishing the commercial banks.

2.1.5 CURRENT STATUS OF BANKING AND FINANCIAL COMPANIES NEPAL.

The Nepalese financial sector is composed of banking sector and non banking sector. Banking sector comprises Nepal Rastra Bank (NRB) and Commercial Banks. The Non- Banking Sector includes Development Banks, Financial Companies., Micro Credit Development Banks, Co-operatives Financial Institutions, Non – Government Organizations (NGO's) performing limited banking activities and other financial institutions such as insurance companies, employee's provident fund, citizen investment trust, postal saving offices and Nepal Stock Exchange. However, the information contains only on those financial institutions which are licensed by NRB. (NRB, Banking and Financial Statistic, Mid- July 2008).

Table – 2.1
Growth of Financial Institutions

Types of Financial Institutions	Mid July								
	1980	1985	1990	1995	2000	2005	2006	2007	2008
Commercial Banks	2	3	5	10	13	17	18	20	25
Development Banks	2	2	2	3	7	26	28	38	58
Financial Companies	-	-	-	21	45	60	70	74	78
Micro Credit Development Banks	-	-	-	4	7	11	11	12	12
Saving & Credit Cooperatives	-	-	-	6	19	20	19	17	16
NGO's (Financial Intermediaries)	-	-	-	-	7	47	47	47	46
Total	4	5	7	44	98	181	193	208	235

(Source : www.nrb.org.np)

During the last two and half decades the number of financial institutions has grown significantly. At the beginning of the 1980's there were only two commercial banks and two development banks in the country. After the adoption of economic liberalization policy, particularly the financial sector liberalization that imputes in the establishment of new bank and non-banks financial institutions. Consequently, by the end of mid- July 2008 altogether 235 banks and non- banks financial institutions licensed by NRB are in operation. Out of these ,25 are “A” Class Commercial Banks, 58 are “B” Class Development Banks, 78 are “C” Class Financial Companies, 12 are “D” Class Micro Credit Development Banks, 16 are “Saving & Credit Co-operatives and 46 are NGO's. (NRB, Banking and Financial Statistics, Mid July 2008 A.D.)

2.2 CONCEPTUAL FRAMWORK

2.2.1 COST CONCEPT, CLASSIFICATON AND ESTIMATION

Cost may be defined as the sacrifice or giving up of resources for a particular purpose. Cost is frequently measured by monetary units that must be paid for goods and services. Cost is initially recorded in Elementary form. Then these costs are grouped in different ways to help managers make decisions such as evaluating subordinates and sub units of the organizations, expanding or deleting equipments. To aid decisions managers want the cost of something. This something is called a cost objectives or cost object which may be defined as any activity for which a separate measurement of cost is desired. (Horn green,1991;5).

Cost classification is the process of grouping cost according to their common characteristics. The same cost figures sometimes can be classified according to different ways of costing depending upon the purpose to be achieved and requirements of particular concern. The important ways of classification are:

(Jain And Narang, 1992:1.97)

- ✍ By Nature or Element
- ✍ By Function
- ✍ As Direct or Indirect
- ✍ By Variability
- ✍ By Controllability
- ✍ By Normality
- ✍ By Time
- ✍ According to Planning and Control
- ✍ For Management Decision

In management accounting with the purpose of assisting managers in managerial; task, cost are classified on the following ground. (Garrison, 1985:27)

Cost Relating to Profit Planning

Profit planning is quite concerned with decision making, planning and control. Planning deals with the future. Future costs are relevant cost in profit planning. The relevant cost concepts are:

Fixed Cost

Fixed cost are costs associated with these inputs which do not vary with changes in volume of output or activity within a specified range of activity or output (Relevant Range). Fixed costs thus remain constant whether activity increases or decreases within a relevant range. Like other cost fixed cost is subject to change over a period of time. As fixed cost are unaffected by volume changes any increase in volume implies that the costs will be allocated to greater number of units consequently fixed cost per unit will become progressively smaller as volume increases and vice versa. (Kaplan and Atkinson, 1998:13)

Variable Cost

Variable costs are the cost that tends to vary in direct proportion or income to one relationship to change in production activity, sales activity or some other measures of volume or cost driver. The cost of these inputs increase / decrease in proportion to increase / decrease in volume or cost driver. (Horn Green, Foster and Datar, 1999:29)

Semi Variable Cost/ Mixed Cost

All cost which are neither perfectly variable nor absolutely fixed in relation volume changes are semi variable cost. Semi Variable costs are also known as mixed cost as they consist both of fixed costs and variable costs. The fixed component of mixed cost consist the cost of providing capacity, whereas variable component is caused by using the capacity. The first part won't be affected by the changes in the volume/ activity. But the later part

will be affected by the change activity. Ideally, semi variable cost should be bifurcated into fixed and variable cost as the function of profit planning, cost control and decision making assume that cost are either variable or fixed. (Khan and Jain, 1993: 151-152)

Methods of Mixed Cost Segregations.

The methods prescribed for segregating cost are:

Least Square Method

This method follows regression equations to segregate mixed cost into fixed cost and variable cost. (Khan and Jain, 1993:157)

The Two Point Method (High Low Method)

As the same suggested by this method consider two level of activity, to bifurcate the cost. It considers the output at different levels i.e. High or Low Points is compared with the amount of expenses incurred at these different periods. (Jain and Narang, 1992:2.226)

Analytical Method

The method is also known as “degree of variability” technique because the genesis of this method lies in measuring the extent of variability of costs on a careful analysis of each item to determine how far the cost varies with volume.

Variable overheads under this method computed as follows:

Variable overhead = Budgeted Mixed Overhead × Degree of Variability

(Brown and Howard, 1969:249)

Future Cost

Future costs are relevant costs in profit planning function of management. Those cost which are reasonably expected to be incurred at some future date as a result of a current decision are called future costs. As they deal

with a future period, they are estimated costs based on expectation. Future cost is controllable within a management Future cost can be planned for and planned to be reduced if they are too high. Thus, is not possible with historical cost. (Khan and Jain,1993: 158-159)

When an operating plan involving future cost is accepted and incorporated formally in the budget for a specific period, such cost get converted to what may referred to as budgeted costs. Budgeted cost are important elements in which they provide the basis for measuring the actual performance of different cost centre and therefore constitute an important input of responsibility accounting (Khan and Jain, 1993:159)

Cost for Decision Making

Major Cost for Decision Making is :

Relevant and Irrelevant Cost

Cost which is influenced by a decision is a relevant cost and hence is importance for decision makers. Cost which is not affected by a decision is irrelevant cost. Such a cost is of no relevance to decision makers. These costs should be ignored while making decision – committed fixed costs are irrelevant that of additional fixed cost are of relevant. Relevant cost in true sense is incremental cost. Most of the variable cost are irrelevant cost for decision maker. (Khan and Jain, 1993:162)

Differential Cost (Incremental/Decremental Cost)

Any cost that is present under one alternative but is absent in whole or in part under another alternative is known as differential cost. Differential cost is also known as incremental cost. Any cost which increases between the alternatives are incremental cost while which decreases is decremental cost. Both incremental and decremental cost is relevant in decision making purpose. (Garrison, 1984:43)

Out of Pocket Cost and Sunk Cost

Cost, which requires current or future cash expenditure as a result of a decision, is labeled as an out of pocket cost. In contrast, those cost which have already been incurred in the past and will not require any current cash expenditure is sunk cost. Sunk cost is the result of the past commitment. They should be ignored while making decision, while out of pocket cost is relevant for decision making purpose. Mostly sunk cost deserves fixed behavior while out of pocket cost deserves the variable behavior. But in same situation, sometimes- sunk cost might be of variable while out of pocket cost bear to be fixed. (Decoster, 1979:10)

Opportunity Cost and Imputed 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 going 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 has some opportunity cost attached to it. In short, every alternative course of action facing a manager has a mixture of goods and bad features. In rejecting a course of action, the good features must be given up along with the bad. The net good feature of a rejected alternative becomes the opportunity costs of the alternative that is selected. (Garrison, 1985:44)

Cost Relating To The Managements Of Income

Product Cost

The cost which is better matched against products than they are against period of time is product cost. Cost of these types consists of the costs that are involved in the manufacturing of the goods and include direct material, direct labor and manufacturing overhead. These costs are viewed as "Attaching to units of products as the units of sales taken place. At that

time, these costs are released as expenses and matched against sales revenue." (Garrison, 1985:30)

Period Cost

Period Cost are costs, which vary with the passage of time and not with volume of production, Rent, Insurance, Salary type expenses vary with time period. (Khan and Jain, 1993: 144)

Absorbed and Unabsorbed Cost

Fixed cost help create value in the product. The benefit of fixed cost will lapse with the passage of time and must be absorbed by the revenues of that period. The part of fixed cost which is absorbed during the revenue of the particular period is known as absorbed cost. Absorbed cost is those cost which have been changed to production. Cost which remains unchanged is known as unabsorbed cost. (Moore and Jacdiake, 1972:263-269)

Expired and Unexpired Cost

An expired cost is one which can not contribute to the production of future revenues. In contrast, unexpired cost is one which can contribute to the production of future revenue e.g. of unexpired cost is inventory, which can be sold in subsequent years all will influence total revenues. (Khan and Jain, 1993:195)

Joint Product Cost and Separable Cost

Joint product costs are the cost of a single process or series processes that simultaneously produce two or more products of significant sales value. Such costs are not attributable to different individual products until after a certain stage of production known as the split off point. Separable cost that can be attributed exclusively and wholly to a particular product, process, division or departments. (Horngreen, 1991:118)

Cost Relating to Controlling Purpose

Direct and Indirect Cost

Different types of cost in a responsibility can be categorized as direct and indirect. Costs which can be traced into the particular department or product are direct costs. Those cost which are not allocated into any particular department, product or units is indirect cost. Indirect cost is the common cost e.g. salary of the manager is the common cost of all the departments and product as per the activity (cost driver). (Decoster, 1979:10)

Controllable and Non Controllable

An item of cost is controllable if the amount of cost incurred in a responsibility center is significantly influenced by the actions of the manager of the responsibility centre otherwise it is non controllable. (Anthony and Welsh, 1977:451)

Responsibility Cost

Cost, which is incurred due to the responsible person of the responsibility centre, is responsibility cost. This help to localize the responsible person for the course of cost when an actual cost exceed to budgeted cost. For e.g. purchase manager will be responsible for the purchase cost. He will be accountable in case actual cost exceeds budget cost. The budgeted cost is prepared by the head of management known as manager, over which he has control to incur. (Khan and Jain, 1993:160)

2.2.2 COST-VOLUME-PROFIT ANALYSIS

Cost- Volume - Profit Analysis includes the related concepts of (a) contribution analysis (b) breakeven analysis. These concepts entered the mainstream of management accounting starting in the 1930's, with major emphasis in the 1950's. Both concepts rest upon the concept of cost variability (i.e. flexible or

variable expenses budgets). Contribution analysis involves a series of analytical techniques to determine and evaluate the effects on profit of changes in sales volume, sales prices, fixed expenses and variable expenses. Basically it applies the concept of a contribution margin and income statement: Revenues minus variable expenses equals profit. Breakeven analysis focuses on the breakeven point: fixed expenses divided by the contribution margin equals breakeven sales volume (the point at which profit is zero because revenues equal total cost). The results of breakeven analysis are usually graphed to show the relationship between revenues (i.e. Sales), fixed expenses and variable expenses within a relevant range of sales volume. (Glenn A. Welsch, Ronald W. Hilton and Paul N. Gordon, 1997: 531)

2.2.3 BUDGETING

Budgeting as a tool of planning is closely related to the broader system of planning in an organization. Planning involves the specification of the basic objectives that the organization will pursue and the fundamental policies that will guide it. (Khan and Jain, 1993:573)

A budget is the detailed plan outlining the acquisition and use of financial over some given time period. It represents the plan for the future expressing in formal quantitative terms. The act of preparing budget is called budgeting. The use of budget to control firm's activities is known as budgeting control. (Garrison, 1985: 297)

2.2.4 ELEMENTS OF BUDGETING

The essential elements of budgeting are as following:

Plan

The first ingredient of a budget is its plan. A plan is an expression partly of what the management expects to happen and partly of what the management intends to happen. (Fregman, 1976: 157)

Operations and Resources

A budget is a mechanism to plan for the firm's operations and resources. The operations are reflected in revenues and expenses. The planning of various assets and the sources of capital to finance these assets. (khan and Jain, 1993: 575)

Financial Terms

Budgets are prepared in financial terms i.e. in terms of monetary value such as the rupee, dollar and so on it is because monetary unit is a common denominator (Welsch, 1992:84)

Specified Future Period

A budget relates to a specified period of time, usually one year. If it is not relates time horizon, it will be meaningless. Planning merely for a given amount will not constitute a budget unless a time dimension is added. (Welsch, 1992:85)

Comprehensiveness

A budget is a comprehensive. It includes all the activities and operations of an organization. It covers the organization as a whole and not only some segments and these are integrated into an overall budget for the entire organization. The overall budget is referred as master budget. (Garrison, 1985:303)

Coordination

Budgets are prepared for the different components / segments/ divisions/ facets/ activities of an organization so as to take care of the situation and problem of each component. The budget for each of the components is prepared in harmony with each another. This is called coordination. (Coopeland and Dascher, 1978:35)

2.2.5 MASTER BUDGET : A NETWORK OF INTER- RELATIONSHIP

The master budget is a networking consisting of many separate budgets that are independent. A master budget normally consists of three types of budget.

Operating Budget

Operating Budget relates to the physical activities/ operations of a firm such as sales, production, purchasing, debtors collection and creditors payment schedule.

In specific term an operating budget has the following term:

Sales Budgets

A sales budget is a detailed schedule of expected sales for coming period. It is usually expressed in both amounts and units. Once the sales budget has been set, a decision can be made on the level of production that will be needed to support sales and the production budget can be set well. The sales budget is the starting point in preparing the master budget. The sales budget is constructed by multiplying the expected sales in units by the sales price. Generally, sales budget is accompanied by computation of expected cash receipts for the forthcoming budget period. This computation is needed to assist in preparing the cash budget for the year. Expected cash receipts are composed of collections on sales made in the current budget period. (Garrison, 1985: 306)

Sales budget is prepared from sales forecast. A sales forecast encompasses potential sales for the entire industry as well as potential sales for the firm preparing the forecast. Factors that are considered in making a sales forecast include:

- ✍ Past experience in terms of sales volume
- ✍ Prospective pricing policy
- ✍ Unfilled order backlog
- ✍ Market research studies
- ✍ General economic condition
- ✍ Industry economic condition

- ✍ Movements of economic indicators such as gross national product, employment prices, and personal income.
- ✍ Advertising and product promotion industry competition
- ✍ Market Share

Sales results from prior years are used as a starting point in preparing a sales forecast. (Welsch Holton and Gordon, 1992: 173)

The Production Budget

After the sales budgets has been prepared, the production requirements for the forthcoming budget period can be determined and organized in the form of a production budget sufficient goods will have to be available to meet sales need and proved for the desired ending inventory. A portion of these goods will already exist in the form of beginning inventory. The remainder will have to be produced. Thus, production need can be determined by adding budgeted sales units to the desired ending inventory and deducting by adding budgeted sales units to the desired ending inventory and deducting the beginning inventory from the total. (Homegreen, Foster and Datar, 1999: 182)

Purchase Budget

In case of Merchandising Firm, instead of preparing production budget it would prepare a merchandise purchase budget showing the amount of goods to be purchased from its suppliers during the period. The merchandise purchase budget is in the same basic format as the production budget, except that it shows goods to be purchased rather than goods to be produced.

Direct Material Budget

After production needs have been computed, a direct material budget should be prepared to show the materials that will be required in the production process. Sufficient raw materials will have to be available to meet production needs and to provide for the desired ending raw material inventory for the budget period part

of this raw material requirement will already exist in the form of a beginning raw material inventory. The remainder will have to be purchased from supplier.

Direct Labor Budget

The direct labor budget is also developed from the production budget. Direct labor requirements must be computed so that the company will know whether sufficient labor time is available to meet production needs. Just knowing in advance, the company can develop plan to adjust the labor force as the situation may require. Direct labor requirement can be computed multiplying product to be produced by each period by the number of direct labor - hours required to produce a single unit. Many different types of labor may be involved. If so, then computation should be type of labor needed. The hours of direct labor time resulting from these computations can then be multiplied by the direct labor cost per hour to obtain budgeted total direct labor cost.

The Manufacturing Overhead Budget

The manufacturing overhead budget provides a schedule of all costs of production other than direct material and direct labor. These costs should be broken down by cost behavior for budgeting purposes and a predetermined overhead rate developed. This rate will be used to apply manufacturing overhead to units of product throughout the budget period.

The Selling and Administrative Overhead

The selling and administrative expenses overhead budget contains a listing of anticipated expenses for the budget period that will be incurred in areas other than manufacturing the budget will be made up of many. Smaller, individual budgets submitted by various persons have responsibility for cost control in selling and administrative matters. If the number of expenses items is very large separate budgets may be needed for the selling and administrative functions.

Financial Budgets

Financial budgets are concerned with expected cash receipts/ disbursement financial position and results of operations, the component of financial budget are :

The Budgeted Income Statement

The budgeted income statement is one of the key schedules in the budget process. It is the document that 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, 1985:313)

The Cash Budget

Cash budget is the detail snowing cash receipt, cash disbursement and the balance cash. The cash budget is composed of four major sections;

- The receipt sections
- The disbursement sections
- The cash excess of deficiency section
- The financing section

The receipts section consists of the opening balance of cash added to whatever is expected in the way of cash receipts during the budget period. The major source of receipt will be from sales. The disbursements section consists of cash payment that are planned for the budget period these payment will include raw material purchases, direct labor payments, manufacturing overhead cost, and so on. Other cash disbursement is income tax, capital equipment purchases, dividend payment. The cash excess of deficiency section consists of the difference between the cash receipts section totals and the cash disbursement section totals. If a deficiency exists the company will need to arrange for borrowed funds from its bank. If and excess exists, fund borrowed in previous period can be repaid or the idle funds can be placed in short term investment.

The financing section provides a detailed account of the borrowing and repayments projected to take place during the budget period.

The cash budget should be broken down into time periods that is as short as feasible format cash budget is given below; (Garrison, 1985:312)

Budgeted Balance Sheet

Beginning with the current balance sheet and adjusting it for the data contained in the other budgets develop the Budgeted Balance

2.2.6.ZERO BASED BUDGETING

A method of budgeting in which all expenses must be justified for each new period. Zero based budgeting starts from a "Zero Base" and every function within an organization are analyzed fro its needs and costs. Budgets are then built around what is needed for the upcoming period, regardless of whether the budget is higher or lower than the previous one.

ZBB allows top level strategic goals to be implemented into the budgeting process by tying them to specific functional areas of the organization, where costs can be first grouped, then measured against previous results and current expectations.

Because of its detail oriented nature, zero based budgeting may be a rolling process done over several years, with only a few functional areas reviewed at a time by managers or group leadership.

Zero based budgeting can lower costs by avoiding blanket increases or decreases to a prior period's budget. It is however, a time consuming process that takes much longer than traditional, cost based budgeting. The practice also favors areas that achieve direct revenues or production, their contributions are more easily justified than in departments such as client service and research and development. (<http://www.investopedia.com/terms/z/zbb.asp>)

2.2.7 FLEXIBLE BUDGETING

The fundamental concept of flexible budgets for expenses is that all expenses are incurred because of the passage of time, output or productive activity and combination of time and output or activity. If this premise is reasonable in a business, the expenses can be given mathematical formulations from which expenses plans can be computed for planning and control. Application of this concept means that:

- Expenses must be identified as to their fixed and variable components when related to output or productive activity.
- Expenses must be reasonably related to output or productive activity.
- Output or productive activity must be reliably measurable.
- Flexible budget formulas for each expense must be for a specified time period and for a specified relevant range of output or productive activity.
- For planning and control purpose, flexible budget formulas must be developed for each expenses in each responsibility center in an enterprise. (Welsch, Hilton, Gordon, 1999: 343 – 344)

2.2.8 ACTIVITY BASED BUDGETING

A method of budgeting in which the activities that incur costs in every functional area of an organization are recorded and their relationships are defined and analyzed. Activities are then tied to strategic goals, after which the costs of the activities needed are used to create the budget.

Activity based budgeting stands in contrast to traditional, cost based budgeting practices in which a prior period's budget is simply adjusted to account for inflation or revenue growth. As such, ABB provides opportunities to align activities with objectives streamline costs and improve business practices.

By looking at the cost structure of an organization via the processes that are actually being performed, managers can more effectively analyze the profit potential of a company's products and services. Cost efficiencies can be found by comparing activities performed in different areas of the organization and consolidating or rerouting certain functions.

At its essence, activity-based budgeting begins by looking at results and the activities that created them, as opposed to cost based budgeting, which often begins with raw input and material and works outward. ABB can also help firms create more accurate financial forecasts.

(<http://www.investopedia.com/terms/a/abb.asp>)

2.2.9 DECISION MAKING

Decision making can be regarded as an outcome of mental processes (Cognitive Process) leading to the selection of a course of action among several alternatives. Every decision making process produces a final choice. The output can be an action or an opinion of choice.

Human performance in decision making terms has been subject of active research from several perspectives. From a psychological perspective, it is necessary to examine individual decisions in the context of a set of needs, preferences an individual has and values he/she seeks. From a cognitive perspective, the decision making process must be regarded as a continuous process integrated in the interaction with the environment. From a normative perspective, the analysis of individual decision is concerned with the logic of decision making and rationality and the invariant choice it leads to.

Yet, at another level, it might be regarded as a problem solving activity which is terminated when a satisfactory solution is found. Therefore, decision making is a reasoning or emotional process which can be rational or irrational, can be based on explicit assumptions or tacit assumptions.

(www.en.wikipedia.org/wiki/decision_making)

Decision making is one of the most crucial tasks of management. Manager is constantly faced with problems of deciding what products to sell, what

production methods to use, whether to make or buy component parts, what prices to change, what channels of distributions to use, whether to accept special orders at special prices and so forth. In decision-making, cost is always a key factor. The cost of one alternative must be compared against the cost of other alternatives as one step in the decision making process. To be successful in decision making, managers must have tools at their disposal to assist them in distinguishing between relevant and irrelevant cost so that latter can be eliminated from the decision frameworks. (Garrison, 1985:539)

As management is the practice of consciously and continuously shaping formal organization, the art of decision making central to doing that. Decision making is the process of identifying and selecting course of action to solve a specific problem. (Stoner, Freeman and Gilbert, 2000:239)

As cost is the key factor for decision, the cost general can be classified as relevant and irrelevant from decision perspective. All the cost which are avoidable or which changes with the change in alternatives are relevant and vice versa. The following cost such as:

- Variable cost which changes
- Opportunity cost
- Avoidable cost
- Differential costs are

The relevant cost where as,

- Sunk cost
- Committed cost are

Irrelevant from decision making perspective. (Khan and Jain, 1993:830)

2.2.10 TOOLS OF FINANCIAL STATEMENTS ANALYSIS

Method used by interested parties such as investors, creditors and manager to evaluate the past, current and projected conditions and performance of the firm. Ratio analysis is the most common term of financial analysis. It provides relative measures of the firm's conditions and performance Horizontal Analysis and

Vertical Analysis are also popular forms. Horizontal analysis is used to evaluate the trend in the accounts over the years, while vertical analysis, also called a Common Size Financial Statement discloses the internal structure of the firm. It indicates the existing relationship between sales and each income statement account. It shows the mix of assets that produce income and the mix of the sources of capital, whether by current or long-term debt or by equity funding. When using the financial ratios, a financial analyst makes two types of comparisons:

(1) Industry Comparison: The ratios of a firm are compared with those of similar firms or with industry averages or norms to determine how the company is faring relative to its competitors. Industry average ratios are available from a number of sources, including: (a) Dun & Bradstreet. Dun & Bradstreet computes 14 ratios for each of 125 lines of business. They are published in Dun's Review and Key Business Ratios. (b) Robert Morris Associates. This association of bank loan officers publishes Annual Statement Studies. Sixteen ratios are computed for more than 300 lines of business, as well as a percentage distribution of items on the balance sheet and income statement (common size financial statements).

(2) Trend Analysis : A firm's present ratio is compared with its past and expected future ratios to determine whether the company's financial condition is improving or deteriorating overtime.

After completing the financial statement analysis, the firm's financial analyst will consult with management to discuss plans and prospects, any problem areas identified in the analysis, and possible solutions. Given below is a list of widely used financial ratios.

Financial Statement Analysis List of Ratios

Liquidity

Net Working Capital

Current Assets – Current Liabilities

Current Ratio

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Quick Ratio

$$\frac{\text{Cash} + \text{Marketable Securities} + \text{Receivable}}{\text{Current Liabilities}}$$

Activity

Accounts Receivable Turnover

$$\frac{\text{Net Credit Sales}}{\text{Average Accounts Receivable}}$$

Average Collection Period

$$\frac{365}{\text{Accounts Receivable Turnover}}$$

Inventory Turnover

$$\frac{\text{Cost Of Goods Sold}}{\text{Average Inventory}}$$

Average Age of Inventory

$$\frac{365}{\text{Inventory Turnover}}$$

Total Asset Turnover

$$\frac{\text{Net Sales}}{\text{Average Total Assets}}$$

Leverage

Debt Ratio

$$\frac{\text{Total Debt}}{\text{Total Assets}}$$

Debt/ Equity Ratio

$$\frac{\text{Total Liabilities}}{\text{Stockholders' Equity}}$$

Times Interest Earned

$$\frac{\text{Earning Before Interest \& Taxes}}{\text{Interest Expenses}}$$

Profitability

Gross Profit Margin	$\frac{\text{Gross Profit}}{\text{Net Sales}}$
Profit Margin	$\frac{\text{Net Income}}{\text{Net Sales}}$
Return On Total Assets	$\frac{\text{Net Income}}{\text{Average Total Assets}}$
Return On Common Equity	$\frac{\text{Net Income}}{\text{Common Equity}}$

Market Value

Earning Per Share	$\frac{\text{Net Income} - \text{Preferred Dividends}}{\text{Common Stock Outstanding}}$
Price/Earning Ratio	$\frac{\text{Market Price Per Share}}{\text{Earning Per Share}}$
Book Value Per Share	$\frac{\text{Stockholder's Equity} - \text{Preferred Stock}}{\text{Common Stock Outstanding}}$
Dividend Yield	$\frac{\text{Dividends Per Share}}{\text{Market Price Per Share}}$
Dividend Payout	$\frac{\text{Dividends Per Share}}{\text{Earnings Per Share}}$

Business Encyclopedia : Financial Statement Analysis

Financial statement analysis is the process of examining relationships among financial statement elements and making comparisons with relevant information. It is a valuable tool used by investors and creditors, financial analysts, and others in their decision making processes related to stocks, bonds and other financial instruments. The goal in analyzing financial statements is to assess past performance and current financial position and to make predictions about the future performance of a company. Investors who buy stock are primarily interested in a company's profitability and their prospects for earning a return on their investment by receiving dividends and / or increasing the market value of their stock holdings. Creditors and investors who buy debt securities, such as bonds are more interested in liquidity and solvency: the company's short and long run ability to pay its debts. Financial analysts, who frequently specialize in

following certain industries, routinely assess the profitability, liquidity and solvency of companies in order to make recommendations about the purchases or sales of securities such as stocks and bonds.

Analysis can obtain useful information by comparing a company's most recent financial statements with its results in previous years and with the results of other companies in the same industry. Three primary types of financial statement analysis are commonly known as horizontal analysis, vertical analysis, and ratio analysis.

Horizontal Analysis

When an analyst compares financial information for two or more years for a single company, the process is referred to as horizontal analysis, since the analyst is reading across the page to compare any single line item, such as sales revenues. In addition to comparing dollar amounts, the analyst computes percentage changes from year to year for all financial statement balances, such as cash and inventory. Alternatively, in comparing financial statements for a number of years, the analyst may prefer to use a variation of horizontal analysis called trend analysis. Trend analysis involves calculating each year's financial statement balances as percentage of the first year, also known as the base year. When expressed as percentage, the base year figure are always 100 percent, and percentage changes from the base year can be determined.

Vertical Analysis

When using vertical analysis, the analyst calculates each item on a single financial statement as a percentage of a total. The term vertical analysis applies because each year's figures are listed vertically on a financial statement. The total used by the analyst on the income statement is net sales revenue, while on the balance sheet it is total assets. This approach to financial statement analysis also known as component percentages produces common size financial statements. Common size balance sheets and income statements can be more easily compared, whether across the years for a single company or across different companies.

Ratio Analysis

Ratio analysis enables the analyst to compare items on a single financial statement or to examine the relationships between items on two financial statements. After calculating ratios for each year's financial data, the analyst can then examine trends for the company across years. Since ratios adjust for size, using this analytical tool facilitates inter company as well as intra company comparisons. Ratios are often classified using the following terms: Profitability ratios (also known as operating ratios), liquidity ratios, and solvency ratios. Profitability ratios are gauges of the company's operating success for a given period of time. Liquidity ratios are measures of the short term ability of the company to pay its debts when they come due and to meet unexpected needs for cash. Solvency ratios indicate the ability of the company to meet its long term obligations on a continuing basis and thus to survive over a long period of time. In judging how well on a company is doing, analysts typically compare a company's ratios to industry statistics as well as to its own past performance.

Caveats

Financial statement analysis, when used carefully, can produce meaningful insights about a company's financial information and its prospects for the future. However, the analyst must be aware of certain important considerations about financial statements and the use of these analytical tools. For example, the dollar amounts for many types of assets and other financial statement items are usually based on historical costs and thus do not reflect replacement costs or inflationary adjustments. Furthermore, financial statements contain estimates of numerous items, such as warranty expenses and uncollectible customer balances. The meaningfulness of ratios and percentages depends on how well the financial statement amounts depict the company's situation. Comparisons to industry statistics or competitors' results can be complicated because companies may select different although equally acceptable, methods of accounting for select different although equally acceptable, methods of accounting for inventories and other items. Making meaningful comparisons is also hampered when a company or its competitors have widely diversified operations.

The tools of financial statement analysis, ratio and percentage calculations are relatively easy to apply. Understanding the content of the financial statements, on the other hand, is not a simple task. Evaluating a company's financial status, performance, and prospects using analytical tools requires skillful application of the analyst's judgment.

(<http://www.answers.com/topic/financial-statement-analysis>)

Basically the Ratio Analysis Technique is used in financial statement analysis and ratios are the tools for measuring liquidity, solvency, profitability and management efficiency of a firm and it is also equally useful to the internal management, prospective investors, creditors and outsiders etc. The roles of accounting ratios are very significant to increase the efficiency of the management. As such it is very important tool of management accounting also. (Paul: 1994:5.6)

Ratio is simply one number expression of relationship spelt out by dividing one figure into another. Ratio analysis of business enterprises canters measures or guides concerning the expected capacity of the firm to meet its future financial obligations or expectations. Present and past data are used for the purpose and what explanations appear necessary they are made to provide and indication of future performance. (Goyal and Man Mohan, 1997: 416–417)

Ratio Analysis is widely used tool of financial statements so that the strength and weakness of a firm as well as its historical performance and current financial condition can be determined. The term ratio refers to the numerical and quantitative relationship between two items/variables. The relationship can be expressed as; (i) Percentages (ii) Fractions (iii) Proportions of number. Alternative methods of expressing items, which are related to each other, are for the purpose of financial analysis referred to as ratio analysis. Ratio reveals the relationship in a meaningful way so as to enable to draw conclusions from them. A rationale of ratio analysis lies in the fact that it makes related information comparable. Single figure by itself has no meaning but when expressed in terms of a related figure, it yield significance instances. (M.k. Khan and Jain 1996:60)

Ratio can be classified for purpose of exposition into four broad groups.

Liquidity Ratio

Liquidity is the pre-requisite for the very survival of a firm. The importance of adequate liquidity in the sense of the ability of a firm to meet current or short term obligations, when they become due for payment. The short term creditors of a firm to meet its short term obligations and reflect the short term financial strength/solvency of a firm. (Khan and Jain 1996:66)

Capital Structure/Leverage Ratio

The capital structure / Leverage ratios may be defined as financial ratios, which throw light on the long term solvency of a firm reflected in its ability to assure the long term creditors with regard to (a) periodic payment of investors during the period of the loan and (b) payment of principal on maturity or in pre-determined instalments at due dates. There are two aspects of the long term solvency of the firm. (Khan and Jain, 1996: 98)

Profitability Ratio

A company should earn profit to service and grow over a long period of time. Profits are essential, but it would be wrong to assume that every action initiated by management of a company should be aimed at maximizing profits irrespective of social consequences. It is unfortunate that the world profit is looked upon as a term of abuse since some firms always wants to maximize profit at the cost of employees, customers and society. Except such infrequent cases, it is a fact that sufficient profits must be earned to sustain the operations of the business to be able to obtain funds from investors for expansion and growth to contribute towards the social overheads for the welfare of the society. (Drucker, 1968:99 - 100)

Profit is the difference between revenues and expenses over a period of time. Profit is the ultimate output of a company and it will have no future if it fails to make sufficient profits. Therefore, the financial manager should continuously evaluate the efficiency of its company. Generally, two major types of profitability ratios are calculated. (Pandey, 1997:124-125)

Activity Ratio

Funds of creditors and owner are invested in various assets to generate sales and profits. The better the management of assets, larger the amounts of sales. Activity ratios are employed to evaluate the efficiency with which the firm managers and utilized its assets. These ratios are also called turnover ratios because they indicate the speed with which assets are being converted or turned over into sales. Activity Ratios, thus involve a relationship between sales and assets. A proper balance between sales and assets generally reflects that assets are managed well several activity ratios can be calculated to judge the effectiveness of asset utilization. (Pandey, 1997: 119 - 123)

2.2.11 TOOLS OF LONG TERM INVESTMENT ANALYSIS

Capital budgeting (or investment appraisal) is the planning process used to determine whether a firm's long term investments such as new machinery, replacement machinery, new plants, new products, and research and development projects are worth pursuing.

Many formal methods are used in capital budgeting, including the techniques such as:

- Net Present Value
- Profitability Index
- Internal Rate of Return
- Modified Internal Rate of Return, and
- Equivalent Annuity

These methods use the incremental cash flows from each potential investment, or project. Techniques based on accounting earning and accounting rules are sometimes used- through economists consider this to be improper- such as the *accounting rate of return* and *return on investment*. Simplified and hybrid methods are used as well, such as *payback period* and *discounted payback period*.

Net Present Value

Each potential project's value should be estimated using a discounted cash flow (DCF) valuation, to find its net present value (NPV). (First applied to Corporate Finance by Joel Dean in 1951: see also Fisher separation theorem, John Burr Williams: Theory) This valuation requires estimating the size and timing of all of the incremental cash flows from the project. These future cash flows are then discounted to determine their present value. These present value are then summed, to get the NPV. See also Time Value of Money. The NPV decision rule is to accept all positive NPV projects in an unconstrained environment, or if projects are mutually exclusive, accept the one with the highest NPV (GE).

The NPV is greatly affected by the discount rate, so selecting the proper rate- sometimes called the *hurdle rate* - is critical to making the right decision. The hurdle rate is the minimum acceptable return on an investment. It should reflect the friskiness of the investment, typically measured by the volatility of cash flows, and must take into account the financial mix. Managers may use models such as the CAPM or the APT to estimate a discount rate appropriate for each particular project, and use the weighted average cost of capital (WACC) to reflect the financing mix selected. A common practice in choosing a discount rate for a project is to apply a WACC that applies to the entire firm, but a higher discount rate may be more appropriate when a project's risk is higher than the risk of the firm as a whole.

Internal Rate of Return

The internal rate of return (IRR) is defined as the discount rate that gives a net present value (NPV) of zero. It is a commonly used measure of investment efficiency.

The IRR method will result in the same decision as the NPV method for independent (non- mutually exclusive) projects in an unconstrained environment, in the usual cases where a negative cash flow occurs at the start of the project followed by all positive cash flows. In most realistic cases, all independent projects that have an IRR higher than the hurdle rate should be accepted. Nevertheless, for mutually exclusive projects, the decision rule of taking the project with the highest IRR– which is often used - may select a project with a lower NPV.

In some cases, several zero NPV discount rates may exist, so there is no unique IRR. The IRR exists and is unique if one or more years of net investment (Negative Cash Flow) are followed by years of net revenues. But if the signs of the cash flows change more than once, there may be several IRRs. The IRR equation generally cannot be solved analytically but only via iterations.

One shortcoming of the IRR method is that it is commonly misunderstood to convey the actual profitability of an investment. However, this is not the case because intermediate cash flows are almost never reinvested at the project's IRR, and therefore, the actual rate of return is almost certainly going to be lower. Accordingly a measure called Modified Internal Rate of Return (MIRR) is often used.

Despite a strong academic preference for NPV, surveys indicate that executives prefer IRR over NPV, although they should be used in concert. In a budget constrained environment, efficiency measures should be used to maximize the overall NPV of the firm. Some managers find it intuitively more appealing to evaluate investments in terms of percentage rates of return than dollars of NPV.

Equivalent Annuity Method

The *equivalent annuity* method expresses the NPV as an annualized cash flow by dividing it by the present value of the annuity factor. It is often used when assessing only the costs of specific projects that have the same cash inflow. In this form it is known as the *equivalent annual cost* (EAC) method and is the cost per year of owning and operating an asset over its entire lifespan.

It is often used when comparing investment projects of unequal lifespan. For example if project A has an expected lifetime of 7 years, and project B has an expected lifetime of 11 years it would be improper to simply compare the net present values (NPVs) of the two projects, unless the projects could not be repeated.

The use of the EAC method implies that the project will be replaced by an identical project.

Alternatively the *chain* method can be used with the NPV method under the assumption that the projects will be replaced with the same cash flows each time. To compare projects of unequal length, say 3 years and 4 years, the projects are *chained* together, i.e. four repetitions of the 3 year project are comparing to three repetitions of the 4 year project. The chain method and the EAC method give mathematically equivalent answers.

The assumption of the same cash flows for each link in the chain is essentially an assumption of zero inflation, so a real interest rate rather than a nominal interest rate is commonly used in the calculations.

Real Options

Real options analysis has become important since the 1970s as option pricing models have gotten more sophisticated. The discounted cash flow methods essentially value projects as if they were risky bonds, with the promised cash

flows known. But managers will have many choices of how to increase future cash inflows, or to decrease future cash outflows. In other words, managers get to manage the projects – not simply accept or reject them. Real options analysis tries to value the choices - the option value- that the manager will have in the future and adds these values to the NPV.

Ranked Projects

The real value of capital budgeting is to rank projects. Most organizations have many projects that could potentially be financially rewarding. Once it has been determined that a particular project has exceeded its hurdle then, it should be ranked against peer projects (e.G. highest Profitability index to lowest Profitability index). The highest ranking projects should be implemented until the budgeted capital has been expended.

(<http://www.wiki.answers.com/capital-budgeting>)

Capital Budgeting is the process of planning and controlling the strategic (long - term) and tactical (short term) expenditure for expansion and contraction of investment in operating (fixed) assets. (Welsch, Hilton and Gordon, 1992: 394)

Conceptually, capital budgeting has three aspects. It ranks various proposals by measuring their profitability before considering the cost of capital in descending order, uses the company's minimum desired rate of return (average cost of capital) as the cut off point for determining whether projects should be accepted or rejected. In doing so, the limitation imposed by top management decision on the total volume of investment to be made has also to be taken into account. Though these three aspects are interwined it is extremely difficult to weave them together in one harmonious whole so, that the way may be passed for optimum investment decision. (Goyal and Man Mohan, 1997:101)

The methods of appraising capital expenditure proposals can be classified into two broad categories such as unsophisticated or traditional method and sophisticated or time adjusted method. The latter are more popularly known as

discounted cash flow techniques as they take the time factor into account. The first category includes; Pay back period method (PBP) and Average rate of return (ARR). The second category includes; Net Present Value Method (NPV), Internal Rate of Return (IRR) and Profitability Index (PI). (Khan and Jain, 1996: 100)

Pay Back Period Method (PBP)

The pay back period method is the traditional method of capital budgeting. It is the simplest and perhaps the most widely employed quantitative method for appraising capital expenditure decision. This method answers the questions; how many years will it take for the cash benefit to pay the original cost of an investment, normally dis-regarding salvage value. Cash benefit here represents CFAT, ignoring interest payment. Thus, PBP measures the numbers of years requires for the CFAT to pay back the original outlay required in an investment proposal.

There are two ways of calculating PBP. The first method can be applied when the cash flow stream is in the nature of annuity for each year of the projects life i.e. CFAT are uniform. In such a situation the initial cost of the investment is divided by the constant annual cash flow.

$$\text{PBP} = \frac{\text{investment}}{\text{Constant Annual Cash Flow}}$$

The second method is used when projects cash flows are not equal but vary from year to year. In such a situation, PBP is calculated by the process of cumulating cash flows till the time when cumulative cash flows become equal to the original investment outlay.

Accept - Reject Criterion

The payback period can be used as a decision criterion to accept or reject investment proposals. One application of this technique is to compare the annual payback with a pre-determined payback i.e. the pay back set up by the

management in terms of the maximum period during which initial investment must be recovered. If the actual payback period is less than the pre-determined pay back, project would be rejected. Alternatively the pay back can be used as a ranking method. When mutually exclusive projects are under consideration, they may be ranked according to the length of the pay back period.

Thus, the project having the shortest pay back may be assigned rank one, followed in that order so that the project with the longest pay back would be ranked last. The term mutually exclusive refers to proposal out of which only one can be accepted to the exclusion of others. Obviously projects with shorter pay back period will be selected. (Khan and Jain, 1996: 192)

Average Rate of Return (ARR)

The average rate of return (ARR) method of evaluating proposed capital expenditure is also known as the accounting rate of return method. It is based upon accounting information rather than cash flow. There is no unanimity regarding the definition of the rate of return. There are a number of alternative methods for calculating the ARR. The most common usage of the average rate of return (ARR) expresses it as follows;

$$\text{ARR} = \frac{\text{Average Annual Profit After Tax}}{\text{Average Investment Over the Life Of The Period}} \times 100$$

The average profit after tax is determined by adding up the after tax profits expected for each year of the projects life and dividing the result by the number of years. In case of annuity the average after tax profits are equal to any years profit. (Khan and Jain, 1996: 199)

Accept - Reject Criterion

With the help of the ARR, the financial decision maker can decide whether to accept or reject the investment proposal. According to the ARR, as an accept reject criterion the actual ARR would be compared with pre determined or a minimum required rate of return or cut off rate. A project would qualify to be accepted if the actual ARR is higher than the minimum desired ARR. Otherwise

it is liable to be rejected. Alternatively the ranking method can be used to select or reject proposals. Thus the alternative proposals under consideration may be arranged in the descending order of magnitude, starting with the proposals with the highest ARR and ending with the proposal having the lowest ARR. Obviously, Projects having the higher ARR would be preferred to projects, which have lower ARR. (Khan and Jain, 1996: 191)

Net Presents Value (NPV)

The net present value (NPV) method is a discounted cash flow approach to capital budgeting that discounts all expected future cash flows to the present using a minimal desired rate of return. To apply the NPV method to a proposed investment proposal a manager first determines some minimum desired rate of return. The minimum rate is called the required rate of return, hurdle rate, discount rate or cost of capital. Then all expected cash flows from the project are discounted to the present using this minimum desired rate. If the sum of the present values of the cash flows is zero, or positive, the project is desirable and if negative it is undesirable. When choosing among several investments, the one with the largest net present value is the most desirable. (Horngreen, 1991: 392)

This method requires determination of three items for a project:

- Initial cash outflow
- Future Net Cash Inflow and
- Target Rate Of Return

If the computed amount difference between the initial net cash investment (the present value cash paid for the investment) and the computed present value of the net cash inflows from the investment is favourable (i.e. positive) to the net cash inflows, the project will earn more than the target rate of return. If the difference is not favourable to the net cash inflows the project will not earn the target rate of return. When ranking competing projects the one with the highest net present value is ranked first. (Welsch, Hilton and Gordon 1992: 409-411)

Accept–Reject Criterion

The decision for a project under NPV is to accept the project if the NPV is positive and reject if it is negative. Zero NPV implies that the firm is indifferent between accepting and rejecting the project. However in practice it is rare if ever such a project will be accepted as such a situation simply implies that only the original investment has been recovered. As a decision criterion this method can also be used to make a choice between mutually exclusive projects. On the basis of the NPV method, the various proposals would be ranked in order of the net present values. The project with the highest NPV would be assigned the first rank, followed by others in the descending order. (Khan and Jain, 1996:201)

Internal Rate of Return (IRR)

The internal rate of return is defined as that discount rate which forces the present value of the projects expected cash in flows to equal the present value of the projects expected costs.

PV Inflows = PV investment cost transposing, we obtain

PV Inflows = PV investment cost = 0

$$\text{or, } \frac{CF_1}{(1 + IRR)^1} + \frac{CF_2}{(1 + IRR)^2} + \dots + \frac{CF_n}{(1 + IRR)^n} - I_0 = 0$$

$$\text{or, } \sum_{t=1}^n \frac{CF_t}{(1 + IRR)^t} - I_0 = 0$$

(Weston and Brigham, 1990: 568)

IRR technique is also known as yield on investment marginal efficiency of capital, marginal productivity of capital, marginal efficiency of capital rate of return, time adjusted rate of return and so on. Like the present value method, this method also considers the time value of money by discounting the cash streams. The basis of the discount factor however is different in both cases. In the case of the present value method the discount rate, usually the cost of capital, its determinants are external to the proposal under consideration. The IRR on the other hand, is based on facts, which are internal to the proposals. In other words,

while arriving at the required rate of return for finding out present values the cash flows-inflows as well as outflows are not considered. But the IRR depends entirely on the initial outlay and the cash proceeds of the projects which are being evaluated for acceptance or rejection. It is, therefore appropriately referred as internal rate of return.

The internal rate of return is usually the rate of return that a project earns. It is defined as the discount rate, which equates the aggregate present value of the net cash flow (CFAT) with the aggregate present values of cash out flows of a project. In other words, it is that rate which gives the project NPV zero. (Khan and Jain, 1996:204)

Accept- Reject Criterion

The use of the IRR, as a criterion to accept the capital investment decision involves a comparison of the actual IRR with the required rate of return also known as the cut off rate or hurdle rate. The project would qualify to be accepted if the IRR (r) exceeds the cut-off rate (k). If the IRR are required rate of return are equal the firm is indifferent as to whether to accept or reject the project. (Khan and Jain, 1996:204)

Profitability Index (PI) or Benefit Cost Ratio

Yet another time adjusted capital budgeting technique is the profitability index (PI) or Benefit Cost Ratio. It is similar to the NPV approach. PI approach measures the present value of return per rupee invested, while the NPV is based on the difference between the present value of future cash inflows and the present value of the cash outlays. Profitability index may be defined as a ratio which is obtained by dividing the present value of future cash inflows by the present value of cash outlays. Mathematically,

$$PI = \frac{\text{Present Value of Cash Inflow}}{\text{Present Value of Cash Outflow}}$$

This method is also known as the B/C Ratio because the numerator measures benefits and the denominator costs.

Accept–Reject Criterion

Using the profitability index, a project will qualify for acceptance if its profitability index exceeds one. When profitability index equals to one (1), the firm is indifferent to projects. When profitability index is greater, equal to, or less than one, the net present value is greater, equal or less than zero respectively. In other words, NPV will be positive when profitability index is greater than one; will be negative when the profitability index is less than one. Thus, the NPV and profitability index approaches give the same results regarding the investments proposals. The selection of the projects with the profitability index method can be done on the basis of ranking too. The highest rank will be given to the project with the highest profitability index followed by others in the same order. (Khan and Jain, 1996:213)

2.2.12 RESPONSIBILITY ACCOUNTING

Collection, summarization and reporting of financial information about various decision centres (responsibility centres) throughout an organization also called activity accounting or profitability accounting. It traces costs, revenues, or profits to the individual managers who are primarily responsible for making decisions about the costs, revenues, or profits in question and taking action about them. Responsibility accounting is appropriate where top management has delegated authority to make decisions. The idea behind responsibility accounting is that each manager's performance should be judged by how well he or she manages those items under his or her control.

Responsibility and Cost Centres

The concept of responsibility accounting has emerged to accommodate the need for management information at a more specific level of detail than can be provided by financial accounting procedures. Responsibility accounting attempts to report results (actual performance) in such a way that M (1) significant variances from planned performance can be identified, (2) reasons for variances

can be determined, (3) responsibility can be fixed, and (4) timely action can be taken to correct problems.

Under this approach, pertinent costs and revenues are assigned to various organizational units- departments, bureaus, and programs- designated as responsibility centres. In the private sector, responsibility forms:

1. A cost centre is the smallest segment of activity or area of responsibility for which costs are accumulated.
2. A profit centre is a segment of a business, often called a division that is responsible for both revenue and expenses.
3. An investment centre, like a profit centre, is responsible for both revenue and expenses, but also for related investments of capital.

Outside of relatively large corporations, the cost centre is the most common building block for responsibility accounting. In fact, the terms cost centre and responsibility centre are often used interchangeably.

Responsibilities accounting placing emphasis on specific costs in relation to well defined area of responsibility, Managers often inherit the effect of their predecessor's decisions. Long term effects of such costs as depreciation, long term lease arrangements, and the like, seldom qualify as controllable costs on the performance report of a specific manager.

Most models that measure performance in the private sector are tied to profits for example, profit percentage (Profit divided by sales), return on investment (Profit divided by initial investment), or residual income (Profit minus a deduction for capital costs). Profits are seldom a viable measure at the cost centre level, however. Rather, performance is most often measured by comparing actual costs against a budget. A variance is defined as the difference between the amounts budgeted for a particular activity and the actual cost of carrying out that activity

during a given period. Variances may be positive (under budget) or negative (over budget).

Performance data can be developed for management purposes independent of the budget and control accounts. This kind of performance reporting has been used in the justification of resource requests and in the assessment of cost and work progress where activities are fairly routine and repetitive. Under this approach, units of work are identified, and changes in quantity (and, on occasion quality) of such units are measured as a basis for analyzing financial requirements. The impacts of various levels of service can be tested, and an assessment can be made of changes in the size of the client groups to be served. This approach is built on the assumption that certain fixed costs remain fairly constant regardless of the level of service provided and that certain variable costs change with the level of service or the size of the clientele group served. Marginal costs for each additional increment of service provide can be determined through such an approach. With the application of appropriate budgetary guidelines, these costs can then be converted into total cost estimates.

Variances, budgeted results, and other techniques of responsibility accounting are relatively neutral devices. When viewed positively, they can provide managers with significant means of improving future decisions. They can also assist in the delegation of decision responsibility to lower levels within an organization. These techniques, however, are frequently misused as negative management tools as means of finding fault or placing blame. This negative use stems, in large part, from a misunderstanding of the rationale of responsibility accounting.

(<http://wiki.answers.com/responsibility-accounting>)

2.3 A BRIEF REVIEW OF PREVIOUS RESEARCH WORK

In Nepal, Researches in the area of management accounting practices in Nepalese context are not made before the year 2002. But in the academic year 2002, Mr. Sagar Sharma has conducted a research in the topic, "Management Accounting

Practices in the listed Companies of Nepal" in the partial fulfilment of MBS Degree, Beside this, many researches have been made in the area of profit planning and control in Nepalese context. As profit planning and control covers some of the aspects of management accounting, researches made on these areas are taken into account for the sake of review to examine how profit planning and control practices in Nepalese Companies specially in Banking and Financial Institutions. Many of the researches have been made of manufacturing concerns and except a few most of them are not profound. An attempt is made here to review some of the researches, which have been conducted in profit planning and control in the context of Nepal. The focus is made to those researches which are directly related to Management Accounting Practice. Similarly, those researches which are exclusively made in Banking and Financial Institutions.

2.3.1 Mr. Suraj Maharjan (2008) had conducted a research in the topic "E-Banking Practices and its Impact on Banking Market." This research of Mr. Maharjan was mainly focused to examine the opportunities of the e-banking in the context of Nepalese Commercial Banks, the security threats in e-banking system, the adventures of e-banking to the Nepalese people and the impacts of e-banking or banking market.

This was a descriptive study on e-banking and its impact on banking market. The whole study was based on the opinion survey of different professionals which may not be free from limitation due to individual response. In this research Mr. Maharjan has pointed out various findings and recommendations. Some remarkable finding and recommendations were as follows.

- According to the survey done by the researcher only 5% are satisfied with the traditional banking system. Rest of the 95% respondents wants immediate technical improvements in their service system.
- Due to the time factor e-banking services seems invisible in the banking sector.

- SWIFT, ATM and ABBS are the services which are used by all the commercial banks while debit card facility was given by almost all banks.
- Continuous innovation and up gradation is the only way that Nepalese commercial banks can succeed in the field of E-banking and provide their customers with the highest level of service.

Major Recommendations

- E-banking should be used as a cost cutting measure.
- The security issues in E-banking need to be looked into on the basis of the role of commercial banks as well as the role of government and law forming authorities.
- Cyber law should be implemented.
- Prompt and reliable service and appropriate technology should be used.

2.3.2. Ms Sheela Maharjan (2008) had conducted a research in the topic, "Profit Planning in Nepal Investment Bank Limited." This research of Ms. Maharjan was mainly focused to highlight the current profit planning premises adopted and its effectiveness in NIB, observe NI Bank's profit planning on the basis of overall bank, analyze the variance of budgeted and actual achievement and study the growth of the business of the bank over the period.

The research was mainly based on secondary data and which covered the related data of the bank from 2059/060 to 2063/2064. In this research Ms. Maharjan had pointed out various findings and recommendations. Some remarkable finding and recommendations were as follows:

- Customer deposit collection is the main resources mobilization of the bank.
- Loan, allowance and bills purchasing hold the highest outlet of resources deployment.

- There is no significance relationship between budgeted and actual LABP.
- There is no continuity in letter of credit amount.
- Interest expenses are highest portion among in other cost.
- The highest revenue comes from the interest income among the other revenue.
- The average current ratio of the bank is 1.05 times.
- The analysis of cash flow statement shows that the bank has the strong cash position in terms of the sources and application of cash.

Major Recommendations

- In the internal management and personal part; level wise specific job description and responsibility assignment should be mentioned. Bank management should adopt the policy of appropriate authority delegation at all levels of management in order to save the valued time of CEO for the productive use. Employee training at advance level should be given more focus in order to keep the manpower updated with the changing practices and the technology. It is suggested to the bank to form a specific planning and research department which shall be responsible for developing new innovative products, further development and upgrading of existing product, which in turn ensure better profitability business for the bank, Branch monitoring and controlling mechanism should be made at the regional level also in order to ensure the better functioning of the branch offices located at such location, which are far from the head office, objectives of the bank should be clearly defined in order to avoid the risk of it being misinterpreted.
- In the business part; the average cost of deposit of the bank is high, therefore bank should try to lower it by mobilizing more and more low cost free deposits there by reaching the interest cost because due to high

cost of deposit, bank is forced to invest its liquid and obviously risky for the bank. Similarly, the bank should improve its position from lowering the deposit cost and increase the investment in liquid assets although they are of low yield. Expenses should be optimized and should be related with the income generation activities. Net profit of the bank is the amount which is obtained by subtracting the amount of net burden cost, by increasing the other income and decreasing the other expenses. At the same time it should take policy to make the interest margin at the maximum extent as allowed by the central bank's norm.

2.3.3 Mr. Bishnu Prasad Bhatt (2008) has conducted a research in the topic "Profit Planning and Control of Lumbini Bank Limited in Nepal." This research of Mr. Bhatta was mainly focused to examine the trend of budgeted and actual deposit collection and investment of LBL, the trend of budgeted and actual interest incomes and expenses of LBL analyze the financial position of the LBL.

The study had confined only to Lumbini Bank Limited and the study was mainly based on secondary data. The study was carried out for the period of five years. Mr. Bhatta had pointed out various finding and recommendations. Some remarkable finding and recommendations were as follows.

- Interest income of the bank is increasing rapidly from the beginning of FY and interest income of the bank is also increasing.
- Expenses such as interest expenses, operating expenses, staff expenses and office expenses are in increasing trend.
- Investment of the bank is increasing in each year but the bank has not generating more profit.
- Fixed assets of the bank are in increasing trend. But these assets are not utilized properly so the return on assets is in decreasing trend.
- Total deposit of the bank is in increasing trend. Increasing deposit may increase interest expenses or interest income.

Major Recommendations

- Objectives of the bank should be clearly defined by focusing broad objectives, Mission, Vision and Ethical Character of the company.
- Profit planning manuals should be communicated from the top level to lower level.
- LBL should reduce its expenses such as operating expenses interest expenses and overhead expenses.
- The bank must utilize and mobilize these funds to increase the overall profitability.
- The bank must find new area of investment and increasing lending activities to utilize available fund in profitable sector.
- Earning Per Share and Dividend Per Share are very low. Bank should try to increase its net income for high EPS and DPS.
- The bank has to make proper plan for profit.

2.3.4 Mr. Prabin Bhattarai (2007) had conducted a research entitled "A Comparative Study on Profit Planning of Nepal NABIL Bank Ltd. And Everest Bank Ltd." Mr. Bhattarai had focused his study in the examination for the profit planning and its impact on the performance and the importance of budget in profit planning in the reference banks.

The data and necessary information were basically collected through secondary sources. He had used secondary data for analysis purpose. Only the profit planning aspects of the two banks had been analyzed but other areas of banking and financial institutions were uncovered. Mr. Bhattarai had pointed out various finding and recommendations. Some remarkable finding and recommendations were respectively.

- Average net profit margin, the average value of return on assets, the average value of ROE, return on total deposit average ratio, the position of marginal return to equity, loan and advances to fixed deposit average ratio, investment to total deposit ratio, yield of fund

average ratio, personal expenses to total income ratio, the average coverage ratio, the average interest spread position of NBL is greater or higher than EBL.

- The average interest earned to total asset ratio, the average value of loan and advances to total deposit loan and advances to saving deposit average ratio, the average factor ratio, holding cash balance in NRB, expenses of EBL is higher than NBL.
- The current ratio of both the bank is below standard ratio, interest income is the major sources of income for both the banks, rend analysis depicts that both the banks profit, loan and advances and total deposit trend is increasing every year in present as well as future.
- He had recommended that they had to improve income for sound performance, identify new investment areas, maintain optimum conversion ratio, cost control, minimize debt financing, maintain standard current ratio, invest Banks idle NRB cash balance, improve linear relationship between variables, lower the BEP, maintain provision of loan loss and reduce current practices of focusing in Central Development region.

2.3.5 Mr. Sagar Sharma (2002) had conducted a research entitled "Management Accounting Practice in Listed Companies in Nepal". Mr Sharma had focused his study in the management accounting practice in the listed companies in Nepal among those which were listed in Nepal Stock Exchange.

Mr. Sharma had taken various management accounting tools for survey of management accounting practice in Nepalese Companies. However his study was mainly focused toward the manufacturing concerns and less importance was given in Banking and Financial Institutions. He had applied primary method for collection of data and information for research purpose. Mainly, he had conducted his survey by taking target populations and sample among target population. Similarly, as per the nature of the study, survey research design was followed with

descriptive and analytical approach. Data were mainly collection from the primary sources. Primary data and information, all the data and information was collected developing a scheduled questionnaire and distributing it to managers and finance head that were available. To check whether questions could be understood or not by the respondents, questionnaires were distributed to five different companies for pre test purpose. As positive and clear responses were received, questionnaires were distributed to rest of the companies afterwards.

Similarly, to get more reliable information, discussions were also conducted with managers and finance chief. Information collected in this way was noted down to use during analysis and interpretation of data. Simple percentage was used as an arithmetical tool to interpret data. Chi- Square test was used as statistical tool to test null hypothesis.

This was probably the first research in this field in the history of research in Nepal as per the claim of Mr. Sharma. In this research, Mr Sharma had pointed our various findings and recommendations. Some remarkable and essential findings were respectively.

- While examining the tools practiced in the listed companies for planning, controlling and decision making it was found that "capital budgeting, cash flow, ratio analysis and annual budgeting were widely practices management accounting tools in the listed companies of Nepal.
- Regarding long term investment decision making and fixed assets purchase decision making, companies mostly practiced "Pay Back Period" and NPV technique of capital budgeting.
- To carryout operational activities properly, companies mostly practiced preparation of master budget. More than 70% of the companies prepared master budget. Some companies managed their activities with "cash budget" also. There were 23% of such companies, who prepared only cash budget.

- While preparing budget most of the companies prepared it on the basis of actual past expenses. But there were no practiced of "Zero Based Budgeting and Activity Based Budgeting".
- While examining the budget preparation system, almost all of the companies, committee prepared the budget but a few companies, chief of finance division prepared the budget.
- While preparing the budget, there was no practice of taking consultancy service. Except in some manufacturing companies, in all the listed companies practices of hiring outside expert was almost nil for the preparation of budget.
- Regarding type of budget practiced in the listed companies in Nepal, it was found that 90% of companies prepare short term budget while in few companies prepare long term budget.
- Regarding performance measurement and control, most of the companies followed profit and loss criteria. Beside these, budgetary control was another practiced tool for measuring and controlling activities.
- Ratio analysis was also practiced by some of the companies. Nearly, 23% of the companies practiced ratio analysis while some of the companies practiced standard costing tools to measure and control the performance.
- For pricing of the product and services, most of the companies followed cost based pricing method. Except some manufacturing companies others were not found practicing "activity based costing" pricing.
- Joint cost allocation practice was found only in manufacturing companies.
- Regarding cost segregation into fixed and variable, it was found that number of companies practicing different method of cost segregation was very few.
- The technique of "least square method" was not practiced by any of the companies in Nepal to segregate mixed cost into fixed and variable.

- Regarding cost and revenue estimation, 100% companies forecasted coming year cost and revenue on the basis of past trend analysis. But practice of zero bases was almost nil in this regard. Practice of market survey was almost nil in banking, trade and hotel companies to estimate cost and revenue.
- In different companies, different types of administrative and technical decision were made. Administrative decisions were governed by policy, rule and regulation of the company. In conclusion, while examining different companies, it was found that management accounting tools were in practice in one way or the other but companies were practicing most of the privileged tools of management accounting.
- Similarly, from the open - end analysis, it was found that the major difficulties for application of new advance management accounting tools were respectively:
 - Lack of information
 - Lack of cognizance about the tools
 - Lack of expertise
- From hypothesis test, it was found that companies were independent in practicing management accounting tools.

Thus to overcome these difficulties, managers of different companies requested academicians to bring such tools and techniques into light through different media.

2.4 RESEARCH GAP

There is the gap between this research and the previous researches. Previous researches conducted on accounting on profit planning and control mostly covered the budgeting practices in manufacturing companies and also the banking institution especially in public enterprises. They were either a case study of a particular company or a comparative study of two different companies.

Similarly, the findings of the previous researchers were mainly based on secondary data. In some researches private data were also used.

There is a rare study made by a researcher based on primary data and information relating to accounting practices. If we find a research work, they are mainly focused toward manufacturing and trading concern. Regarding management accounting practices, Mr Sagar Sharma (2002) had conducted a research entitled "Management Accounting Practices in the Nepalese Listed Companies". But less importance had given to the banking and financial institutions which are showed in his research report. The study was mainly focused in manufacturing and trading concern rather than banking and financial institution.

The previous research did not disclose which of the management accounting tools are in practice and which aren't and why especially in the banking and financial institutions. Thus, focusing this reason, to fill up these gaps the current research is conducted. This research is a survey type of research. It is completely based on the primary source of data and information which are collected through questionnaires and opinions of banker as well as discussions with various employees of concern companies. It examines the current practices of management accounting tools in the banking and financial institutions of Nepal licensed under Nepal Rastra Bank Act, which includes commercial Banks, Development Banks, Finance Companies and Micro - credit Development Banks and other Financial Institutions. It has disclosed the reason about the tools which aren't practiced by the companies has suggested applying new tools such as ZBB, ABB, Pricing Methods of Services, and Market survey in managerial activities of planning, controlling and decision making, Decision making Methods. Probably this might be the first research study carried on this topic in this stream in Nepal.

CHAPTER III

RESEARCH METHODOLOGY

3.1. INTRODUCTION

Research methodology is a systematic, scientific and organized way to solve the research problem. In other words research methodology describes the methods and process applied in the entire process of the study. It may be understood as a science of studying how research has been done scientifically. In this chapter, efforts have been made to present and explain the specific research design for the sake of getting research objectives which includes research design, nature of data, data gathering procedure, population and sample and data processing procedures.

3.2 RESEARCH DESIGN

Research design is the plan structure and strategy to obtain answers to research questions through investigation and analysis. As per the nature of the study survey research design was followed with descriptive and analytical approach.

3.3 RESEARCH POPULATION AND SAMPLE

Research population was all the Licensed Banking and Non-Banking Financial Companies with Nepal Rastra Bank (NRB). Out of them, the banks and financial companies which were in existence and head office located in Kathmandu valley were considered as target population for the study. The banking and financial institutions will be categorized into five groups as done by the Nepal Rastra Bank.

Total of 235 companies were listed but companies with head office in Kathmandu were 82 numbers. And only those companies operating

3.4. SOURCE AND TYPE OF DATA

Data and information will be collected from the primary sources. Primary data will be collected through questionnaire, interview and discussion. various published and unpublished secondary data and information will also collect for the research purpose.

3.5 DATA GATHERING PROCEDURE

As the research study is based on primary data and information, all the data and information will collected by developing a scheduled questionnaire and distributing it.

3.7. RESEARCH VARIABLE

Major Management accounting tools such as CVP Analysis, Budgeting, Ratio Analysis, Capital Budgeting, Activity Based Budgeting, Zero Based Budgeting, Flexible Budgeting, Decision Making Techniques and Performance Report were the major variable.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

4.1 INTRODUCTION

The main objective of this research was to examine and study the practice of management accounting tools in the banking and financial companies in Nepal and to identify the areas where management accounting tools can be applied to strengthen the Banking and Financial Companies. This chapter presents the analysis and interpretation of the data and information which was found with the help of questionnaire, discussions and interviews as well as Open End opinions with Chief of Finance Division and Other Decisional employee.

To meet the state objectives of the study, all the licensed Banking and Financial Companies having head-office in Kathmandu valley who were in operation were taken as target population. The companies were categorized into five groups as done by the NRB as per the class categorized by Central Bank which was used as strata for the study.

Questionnaires were distributed to more than 30 companies out of which responses could be received from 25 companies. Besides this interview and discussion with Chief Executive Office, Branch Manager, Chief of Finance Division and Other Decisional Employees of the companies were made of get more information about the present practice of management accounting tools, to identify the areas where management accounting tools can be applied to strength the banking and financial companies and to identify the difficulty in applying management accounting tools in Nepalese banking and financial companies. Opinion and views of Chief Executive Officer, Branch Manager, Chief of Finance Division and Other Decisional Employees are also included in this chapter.

Similarly, raw data were properly processed, tabulated and analyzed. They were presented into various tables. Tables were developed based on question asked to the concern person and department of sampled companies. Open-end questions were also arranged in a descriptive pattern. Hypothesis was tested with chi-square statistical tools to test null hypothesis finding out the relationship between the types of the company and practiced of management accounting tools. Simple percentage method will be used as an arithmetical tool to interpret data and information.

4.2 ANALYSIS OF MANAGEMENT ACCOUNTING PRACTICE ON THE BASIS OF PERCENTAGE ON TECHNIQUE OF ARITHMETIC

Table 4.1

Practice of Management Accounting Tools in the Nepalese Banking and Financial Companies

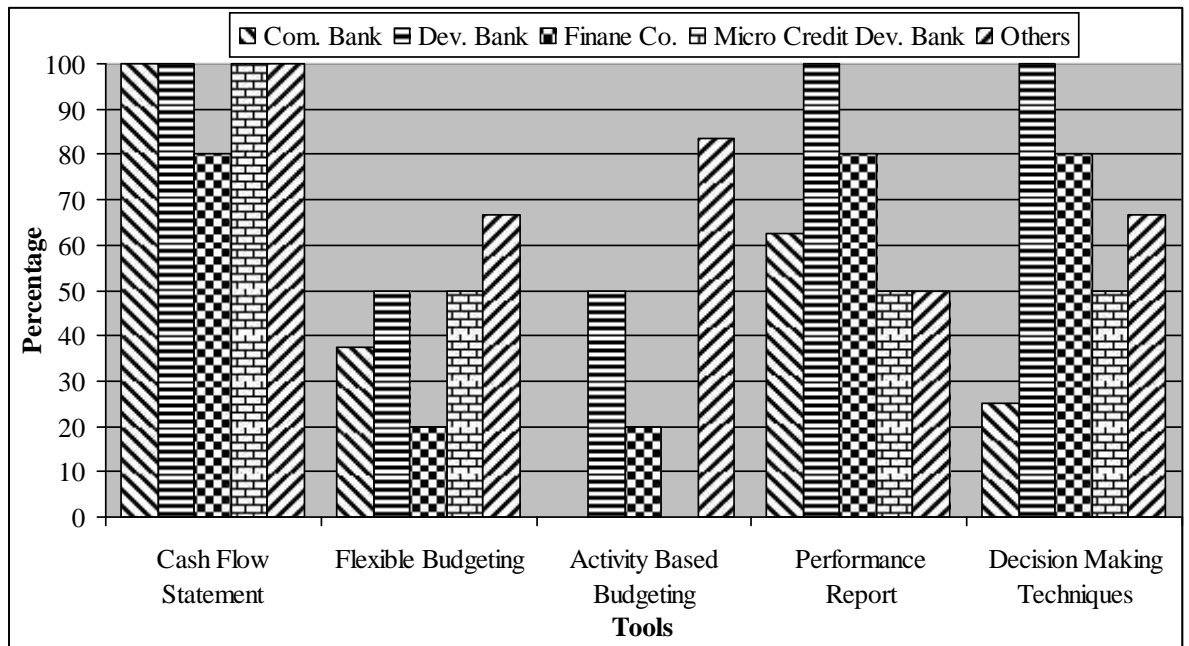
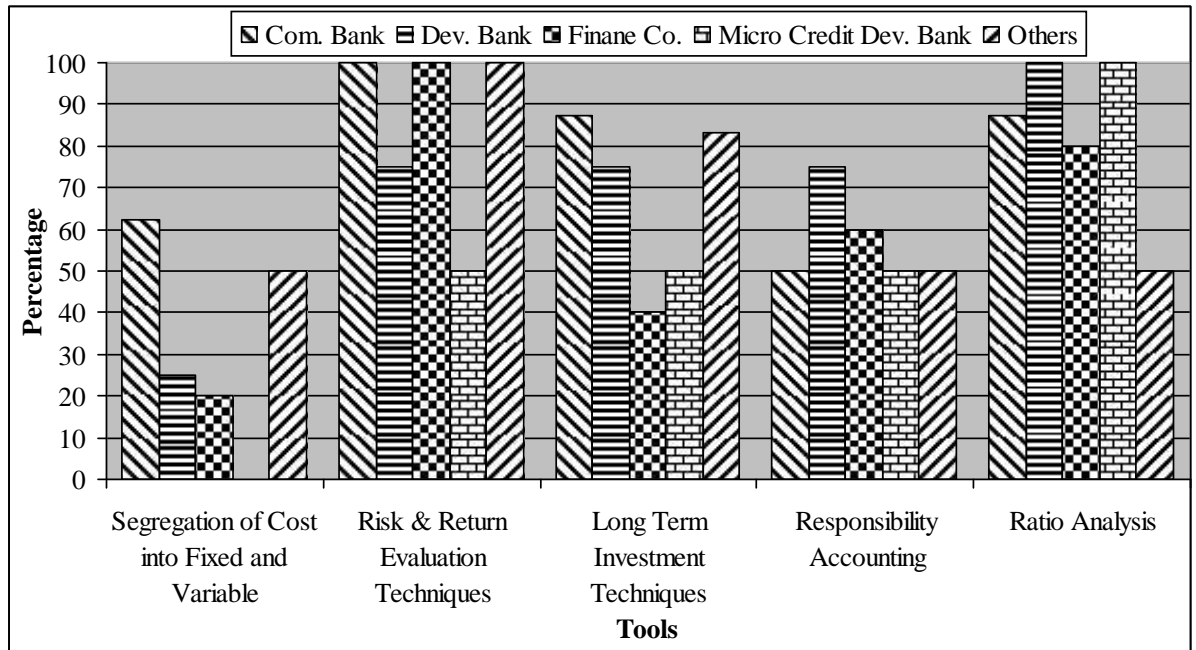
Tools	Segregation of Cost into Fixed and Variable			Risk & Return Evaluation Techniques			Long Term Investment Techniques			Responsibility Accounting			Ratio Analysis		
	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	5	63	8	8	100	8	7	88	8	4	50	8	7	88
Dev. Bank	4	1	25	4	3	75	4	3	75	4	3	75	4	4	100
Finane Co.	5	1	20	5	5	100	5	2	40	5	3	60	5	4	80
Micro Credit Dev. Bank	2	0	0	2	1	50	2	1	50	2	1	50	2	2	100
Others	6	3	50	6	6	100	6	5	83	6	3	50	6	3	50
Total	25	10	40	25	23	92	25	18	72	25	14	56	25	20	80

Practice of Management Accounting Tools in the Nepalese Banking and Financial Companies

Tools	Cash Flow Statement			Flexible Budgeting			Activity Based Budgeting			Performance Report			Decision Making Techniques		
	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	8	100	8	3	38	8	0	0	8	5	63	8	2	25
Dev. Bank	4	4	100	4	2	50	4	2	50	4	4	100	4	4	100
Finane Co.	5	4	80	5	1	20	5	1	20	5	4	80	5	4	80
Micro Credit Dev. Bank	2	2	100	2	1	50	2	0	0	2	1	50	2	1	50
Others	6	6	100	6	4	67	6	5	83	6	3	50	6	4	67
Total	25	24	96	25	11	44	25	8	32	25	17	68	25	15	60

Practice of Management Accounting Tools in the Nepalese Banking and Financial Companies

Figure : 4.1



The above table and figure 4.1 shows the practice of management accounting tools in the Nepalese banking and financial companies. The tools practiced by different companies have been expressed in percentage.

From the above table it is obvious that 100% of commercial banks were found practicing the management accounting tools like Risk & Return Evaluation Techniques, Cash Flow Statement etc. to carry out different managerial activities. 88% of commercial banks practice Long Term Investment Techniques and Ratio Analysis. While 63% of commercial banks practice Segregation of Cost and Performance Report. Only 50%, 38% and 25% of commercial banks use Responsibility Accounting, Flexible Budgeting and Decision Making Techniques respectively. But none of commercial bank uses Activity Based Budget.

In development bank, 100% banks practice Ratio Analysis, Cash Flow Statement, Performance Report and Decision Making Techniques, 75% of development bank practice Risk & Return Evaluation Techniques, Long Term Investment Techniques and Responsibility Accounting, 50% practice Flexible Budget and Activity based Budgeting. Only 25% of development bank use Segregation of Cost into Fixed and Variable.

Likewise in Finance Companies, 100% of the companies were found practicing Risk & Return Evaluation Techniques. Similarly, 80% of financial companies practice Cash Flow Statement, Performance Report, Decision Making Techniques and Ratio Analysis. 60% use Responsibility Accounting, 40% use Long Term Investment Techniques. Only 20% of Financial Companies use Segregation of Cost into Fixed and Variable, Flexible Budget and Activity Based Budgeting.

In Case of Micro Credit Development Bank, 100% use Ratio Analysis and Cash Flow Statement. 50% of those companies use Risk & Return Evaluation Techniques, Long Term Investment Techniques, Responsibility Accounting, Flexible Budget, Performance Report and Decision Making Techniques. None of Micro Credit Development Bank uses Segregation of Cost into Fixed and Variable and Activity Based Budgeting.

In other financial companies, 100% of companies use Risk & Return Evaluation Techniques and Cash Flow Statement. 83% uses Long Term Investment Techniques and Activity Based Budgeting. 67% use Flexible Budgeting and Decision Making Techniques. And 50% use Segregation of Cost into Fixed and Variable, Responsibility Accounting and Performance Report.

Thus, out of total Nepalese banking and financial companies , 96% of Companies were found practicing Cash Flow Statement, 92% of Companies were found practicing Risk & Return Evaluation Techniques, 80% of Companies were found practicing Ratio Analysis, 72% of Companies were found practicing Long Term Investment, 68% of Companies were found practicing Performance Report, 60% of Companies were found practicing Decision Making Techniques, 56% of Companies were found practicing Responsibility Accounting, 44% of Companies were found practicing Flexible Budgeting and 40% of Companies were found practicing Segregation of Cost into Fixed and Variable.

In brief, practice of Cash Flow Statement, Risk & Return Evaluation Techniques Ratio Analysis and Long Term Investment Techniques were common in major companies. Whereas other Segregation of Cost into Fixed and Variable, Responsibility Accounting, Flexible Budgeting, Activity Based Budgeting, Performance Report and Decision Making Techniques are not commonly used in Nepalese banking and financial companies. The major reasons behind not practice of those tools were lack of knowledge about tools, lack of expert manpower, resources and no information about tools.

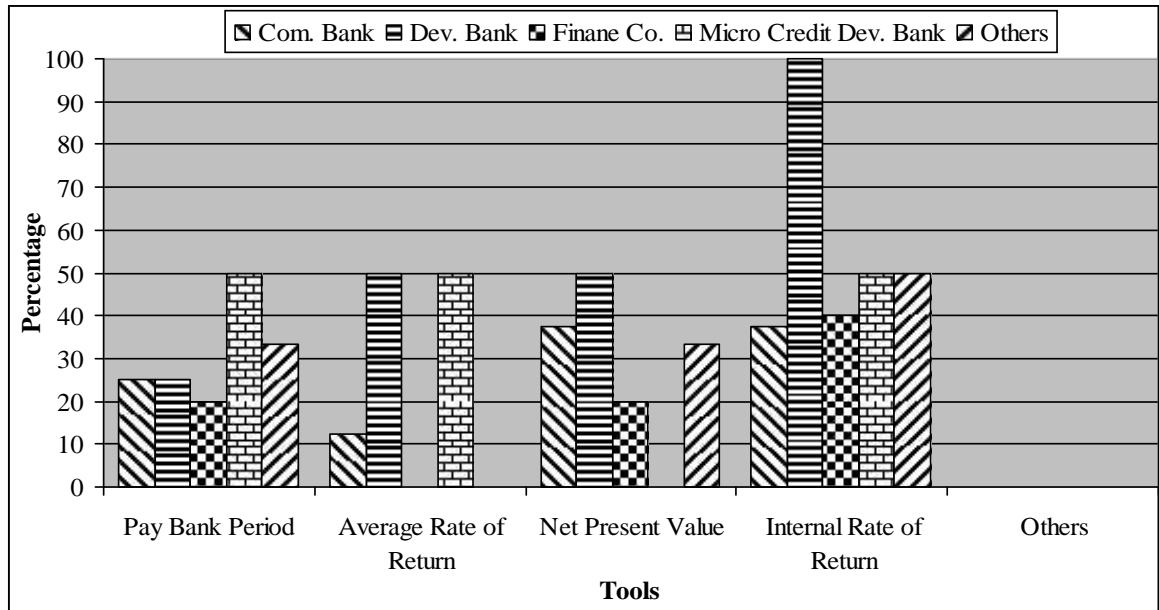
Use of Management Accounting is not sufficient in Nepalese Banking and Financial Companies. This decrease effectiveness of management decision making and control. Thus the Nepalese Banking and Financial Companies' business performance and profitability are also not satisfactory. Companies need to provide training to their staff so that their efficiency will increase and enhance the operating efficiency of the bank.

Table 4.2**Practice of Long Term Investment Techniques in Purchasing Fixed Assets or Making Decision in the Nepalese Banking and Financial Co.**

Tools	Pay Bank Period			Average Rate of Return			Net Present Value			Internal Rate of Return			Others		
	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	2	25	8	1	13	8	3	38	8	3	38	8	0	0
Dev. Bank	4	1	25	4	2	50	4	2	50	4	4	100	4	0	0
Finane Co.	5	1	20	5	0	0	5	1	20	5	2	40	5	0	0
Micro Credit Dev. Bank	2	1	50	2	1	50	2	0	0	2	1	50	2	0	0
Others	6	2	33	6	0	0	6	2	33	6	3	50	6	0	0
Total	25	7	28	25	4	16	25	8	32	25	13	52	25	0	0

Practice of Long Term Investment Techniques in Purchasing Fixed Assets or Making Long Term Investment Decision in the Nepalese Banking and Financial Companies

Figure 4.2



The above table and figure 4.2 shows the present practice of long term investment techniques in purchasing fixed assets or making long term investment decision in Nepalese banking and financial companies. From the table it shows that the 38% of commercial bank practice Net Present Value (NPV) and Internal Rate of Return (IRR) criteria of Long Term Investment, 25% practice Pay Back Period (PBP), 13% practice Average Rate of Return (ARR).

In case of Development Bank, 100% practice IRR, 50% use ARR and NPV, only 25% uses PBP while making Long Term Investment Decision.

Similarly, 40% Financial Companies practice IRR, 20% practice NPV and PBP. None of them use ARR.

Likewise in Micro Credit Development Bank 50% practice PBP, ARR & IRR.

In other financial companies 50% practice IRR and 33% practice PBP and NPV.

Thus, out of total Nepalese Banking and Financial Companies, 28% practice PBP, 16% practice ARR, 32% practice NPV and 52% practice IRR.

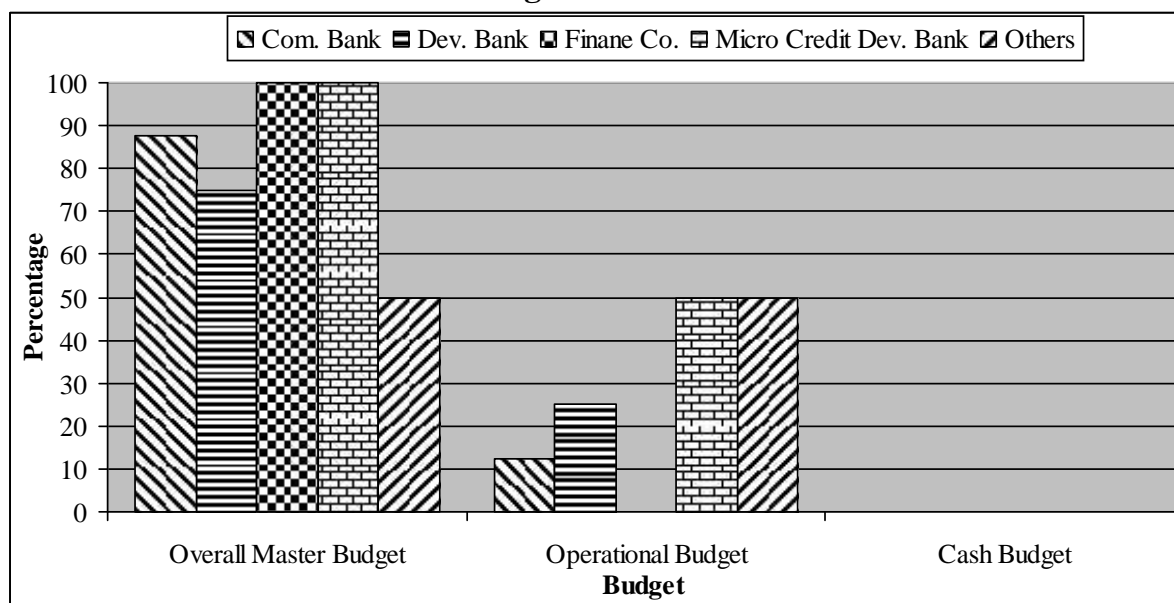
From the above factual table it is found that IRR and NPV are the most practiced criteria in the Nepalese banking and financial companies, whereas PBP and ARR are used partially in those companies. It is because of its drawback.. It doesn't consider the time value of money. Beside that Bank have to increase the practice of NPV to know whether the project where they are investing is profitable or not. Since the use of NPV is not satisfactory as seen in above table, the loan defaults are increasing in banking and financial sector.

Table 4.3
Budget Practice in the Nepalese Banking and Financial Companies

Budget	Overall Master Budget			Operational Budget			Cash Budget		
Companies	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	7	88	8	1	13	8	0	0
Dev. Bank	4	3	75	4	1	25	4	0	0
Finane Co.	5	5	100	5	0	0	5	0	0
Micro Credit Dev. Bank	2	2	100	2	1	50	2	0	0
Others	6	3	50	6	3	50	6	0	0
Total	25	20	80	25	6	24	25	0	0

Budget Practice in the Nepalese Banking and Financial Companies

Figure 4.3



The above table and figure 4.3 shows the practice of the types of budget in the Nepalese Banking and Financial Companies. Here as above table, 88% of the commercial banks practice Overall Master Budget and 13% of commercial bank practice operational budget.

Similarly, 75% of Development Banks were found practicing overall master budget, whereas 25% were practicing operational Budget to carry out operational activities.

Regarding finance companies 100% practice Overall Master Budget.

In case of Micro Credit Development Banks, 100% uses Overall Master Budget. At the same time 50% of them also use operational Budget.

Other Financial companies, 50% companies use overall Master Budget and 50% practice Operational Budget.

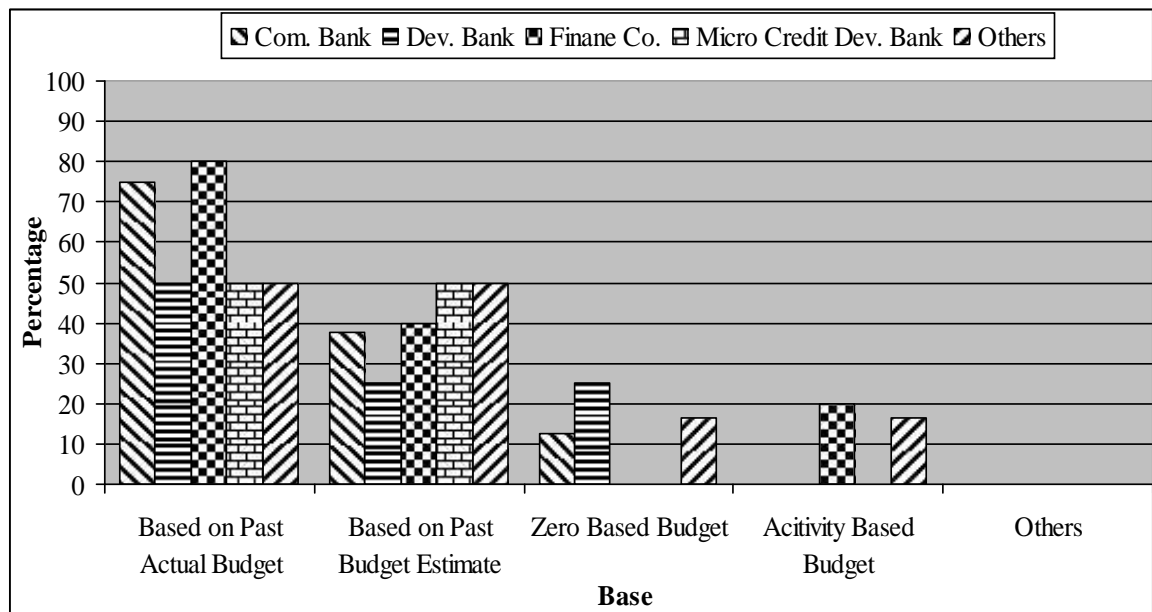
Thus, out of total banking and financial companies, 80% of the companies practice overall master budget and 24% practice Operational budget, none of them practice Cash Budget. Therefore, from the table it is found that overall master budget is mostly practicing tools in the Nepalese Banking and Financial Companies. But use of Cash Budget is nill. Nepalese Banking and Finance Companies should use Cash Budget also to overcome liquidity problem. Liquidity Problem is current happening problem of commercial banks which can be eliminate by the use of Cash Budget.

Table 4.4
Base For Budget Preparation in the Nepalese Banking and Financial Companies

Base	Based on Past Actual Budget			Based on Past Budget Estimate			Zero Based Budget			Acitivity Based Budget			Others		
Companies	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	6	75	8	3	38	8	1	13	8	0	0	8	0	0
Dev. Bank	4	2	50	4	1	25	4	1	25	4	0	0	4	0	0
Finane Co.	5	4	80	5	2	40	5	0	0	5	1	20	5	0	0
Micro Credit Dev. Bank	2	1	50	2	1	50	2	0	0	2	0	0	2	0	0
Others	6	3	50	6	3	50	6	1	17	6	1	17	6	0	0
Total	25	16	64	25	10	40	25	3	12	25	2	8	25	0	0

Base For Budget Preparation in the Nepalese Banking and Financial Companies

Figure 4.4



The above table and figure 4.4 shows the base of budget preparation in the Nepalese banking and financial companies. From the table, it shows that 75% of commercial banks practice "Past Actual Budget", 38% of them practice "Past Budget Estimate", while only 13% practice "Zero Based Budget". None of commercial banks practice "Activity Based Budget".

Similarly, 50% of Development Bank were found practicing "Past Actual Budget" and other 25% of Development Bank practice "Past Budget Estimate", "Zero Based Budget".

Regarding , finance companies, 80% were found practicing "Past Actual Budget", and other 40% were found practicing "Past Budget Estimate".

Likewise in micro credit development banks, 50% use "Past Actual Budget", and other 50% use "Past Budget Estimate".

Incase of other financial companies, 50% were found practicing "Past Actual Budget" and "Past Budget Estimate". While 17% were found practicing "Zero Based Budget" and "Activity Based Budget" as base of budget preparation.

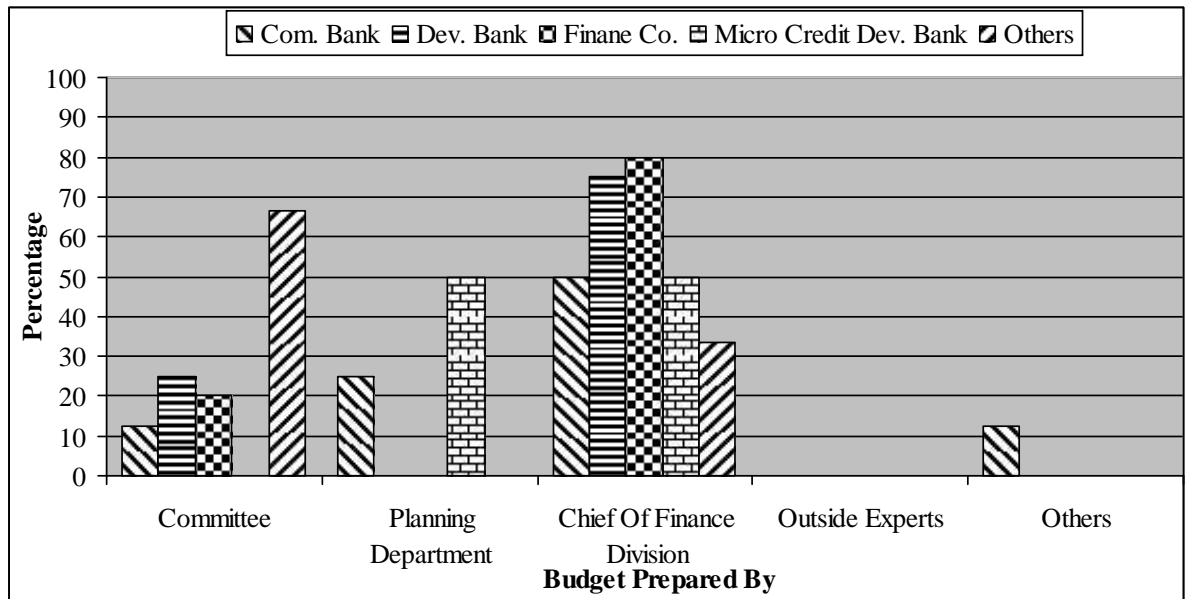
Thus, out of total Nepalese banking and financial companies, it is found that 64% of companies practice "Past Actual Budget" and 40% of companies practice "Past Budget Estimate" as the base of budget preparation. The practice of Zero Based Budget and Activity Based Budget was nominal in comparison to other. It is simply because of lack of knowledge and information about the tools. Along with above mentioned base, other environmental factor needs to be taken into consideration so that budget could be implemented effectively in those companies.

Table 4.5
Budget Preparation System in the Nepalese Banking and Financial Companies

Budget Prepared By	Committee			Planning Department			Chief Of Finance Division			Outside Experts			Others		
Companies	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	1	13	8	2	25	8	4	50	8	0	0	8	1	13
Dev. Bank	4	1	25	4	0	0	4	3	75	4	0	0	4	0	0
Finane Co.	5	1	20	5	0	0	5	4	80	5	0	0	5	0	0
Micro Credit Dev. Bank	2	0	0	2	1	50	2	1	50	2	0	0	2	0	0
Others	6	4	67	6	0	0	6	2	33	6	0	0	6	0	0
Total	25	7	28	25	3	12	25	14	56	25	0	0	25	1	4

Budget Preparation System in the Nepalese Banking and Financial Companies

Figure 4.5



The above table and figure 4.5 shows the budget preparation system practiced in the Nepalese banking and financial companies. From the table it is clear that in 50% of commercial bank, it is Chief of Finance Division that prepares the budget. In 25% of commercial bank Planning Department prepares the budget. 13% of commercial bank prepare Budget by Other Department.

Regarding Development Banks, In 75% of development banks Chief Of Finance Division prepares the budget. In Other 25% of development banks Committee prepares the budget.

In case of Finance companies 80% of those companies prepares the budget by Chief Of Finance Division while 20% of those companies, it is prepared by Committee.

In Micro Credit Development Bank 50% of them prepares budget by Planning Department and other 50% prepares budget by Chief of Finance Division.

In other financial companies, in 67% of those companies, the budget is prepared by committee. In 33% of those companies, the budget is prepared by Chief of Finance Division.

Thus out of total Nepalese banking and financial companies, in 56% of those companies the budget is prepared by Chief Of Finance Division. In 28% of those companies the budget is prepared by Committee. Whereas in 12% of those companies the budget is prepared by Planning Department. Only 4% of companies prepares budget by others.

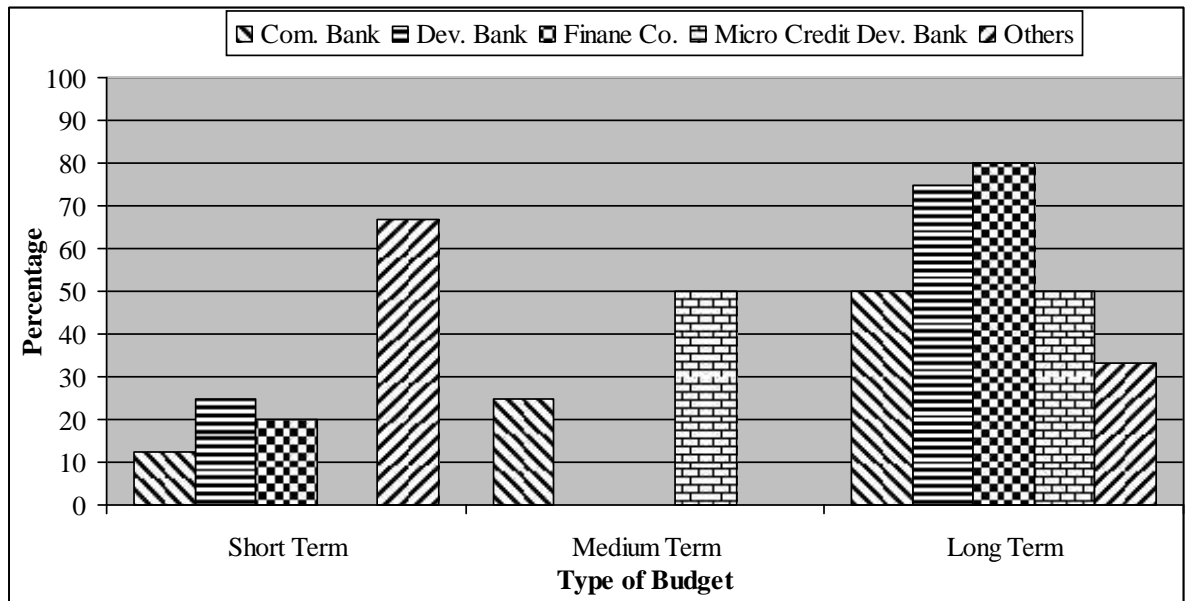
By above facts, it is concluded that practice of hiring outside experts for preparing budget is almost nil in the Nepalese Banking and Financial Companies because they had no separate fund for such cases so companies were using internal experts or intellectual manpower to prepare budget.

Table 4.6
Type of Budget Practice in the Nepalese Banking and Financial Companies

Type of Budget	Short Term			Medium Term			Long Term		
Companies	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	1	13	8	2	25	8	4	50
Dev. Bank	4	1	25	4	0	0	4	3	75
Finane Co.	5	1	20	5	0	0	5	4	80
Micro Credit Dev. Bank	2	0	0	2	1	50	2	1	50
Others	6	4	67	6	0	0	6	2	33
Total	25	7	28	25	3	12	25	14	56

Type of Budget Practice in the Nepalese Banking and Financial Companies

Figure 4.6



The above table and figure 4.6 shows the types of budget practice in the Nepalese banking and financial companies. From the table it is obvious the 50 % of commercial bank practice long term budget other 25 % and 13 % of commercial bank practice medium term budget and short term budget respectively.

Similarly 75 % of development bank practice long term budget whereas 25 % of those company prepare short term budget.

In case of financial company 80 % of those company long term budget whereas 20 % practice short term budget

Regarding micro credit development bank 50 % of that bank prepare long term budget and another 50 % practice media term budget.

In other financial company 67 % of those company practice short term budget whereas 33 % practice on long term business.

Thus out of total company 56 % of those company practice long term budget whereas 28 % practice short term budget and only 12 % practice medium term budget.

In general long term budget should be prepared at the stage of establishment of company for the purpose of informing shareholder about the future target, goal, objective and mission. Mainly in banking and financial company prepared long term budget and make necessary variance at the end of each month. But Preparation of Budget for short term is more beneficial due to uncertain political, economical environment of Nepal.

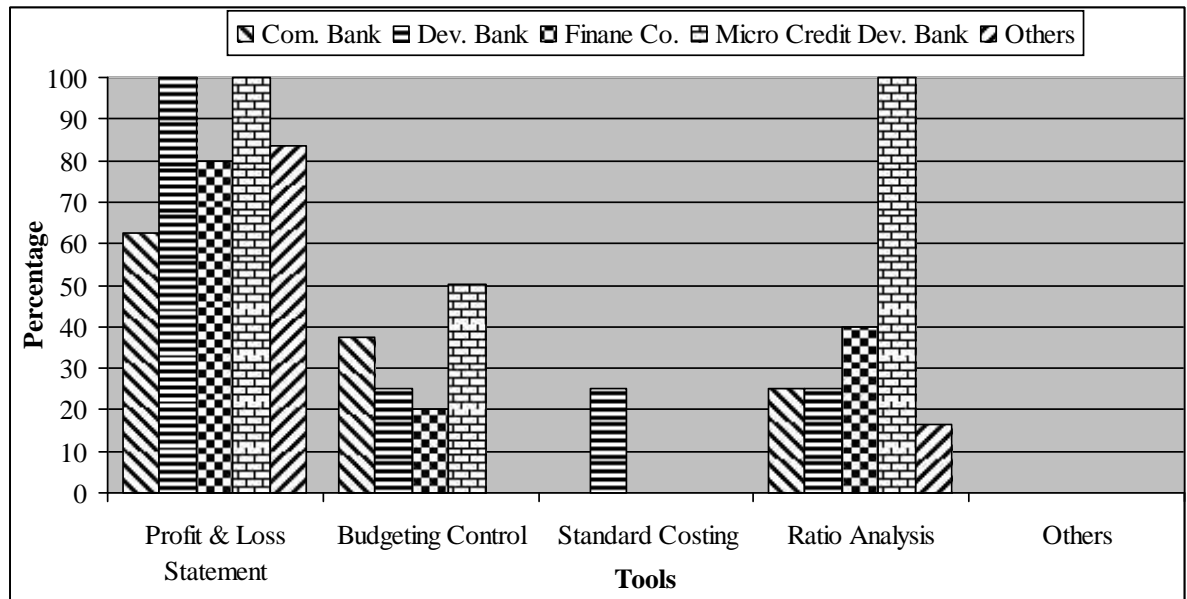
Table 4.7

Tools Practiced In Nepalese Banking and Financial Companies For Measuring and Controlling the Overall Performance

Tools	Profit & Loss Statement			Budgeting Control			Standard Costing			Ratio Analysis			Others		
Companies	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	5	63	8	3	38	8	0	0	8	2	25	8	0	0
Dev. Bank	4	4	100	4	1	25	4	1	25	4	1	25	4	0	0
Finane Co.	5	4	80	5	1	20	5	0	0	5	2	40	5	0	0
Micro Credit Dev. Bank	2	2	100	2	1	50	2	0	0	2	2	100	2	0	0
Others	6	5	83	6	0	0	6	0	0	6	1	17	6	0	0
Total	25	20	80	25	6	24	25	1	4	25	8	32	25	0	0

Tools Practiced In Nepalese Banking and Financial Companies For Measuring and Controlling the Overall Performance

Figure 4.7



The above table and figure 4.7 shows the tools practiced by the Nepalese banking and Financial Companies for measuring and controlling the performance. From the table it is obvious the 63% of commercial bank practice "Profit & Loss Statement", whereas 38% of those banks practices budgeting control and 25% of those banks practice Ratio Analysis for controlling and measuring performance.

In case of development banks, 100% practice "Profit & Loss Statement", whereas 25% of development bank practice "Budgeting Control, Standard Costing and Ratio Analysis " criteria for measuring and controlling performance of company.

Similarly, 80% of finance companies practice "Profit & Loss Statement", whereas 40% of those companies practice "Ratio Analysis" and other 20% of those companies practice "Budgeting Control".

In case of Micro Credit Development Bank, 100% practice "Profit & Loss Statement" & "Ratio Analysis" and 50% of them practice "Budgeting Control".

In Other Financial Companies, 83% practice "Profit & Loss Statement" and 17% practice "Ratio Analysis" criteria for measuring and controlling the performance of the company.

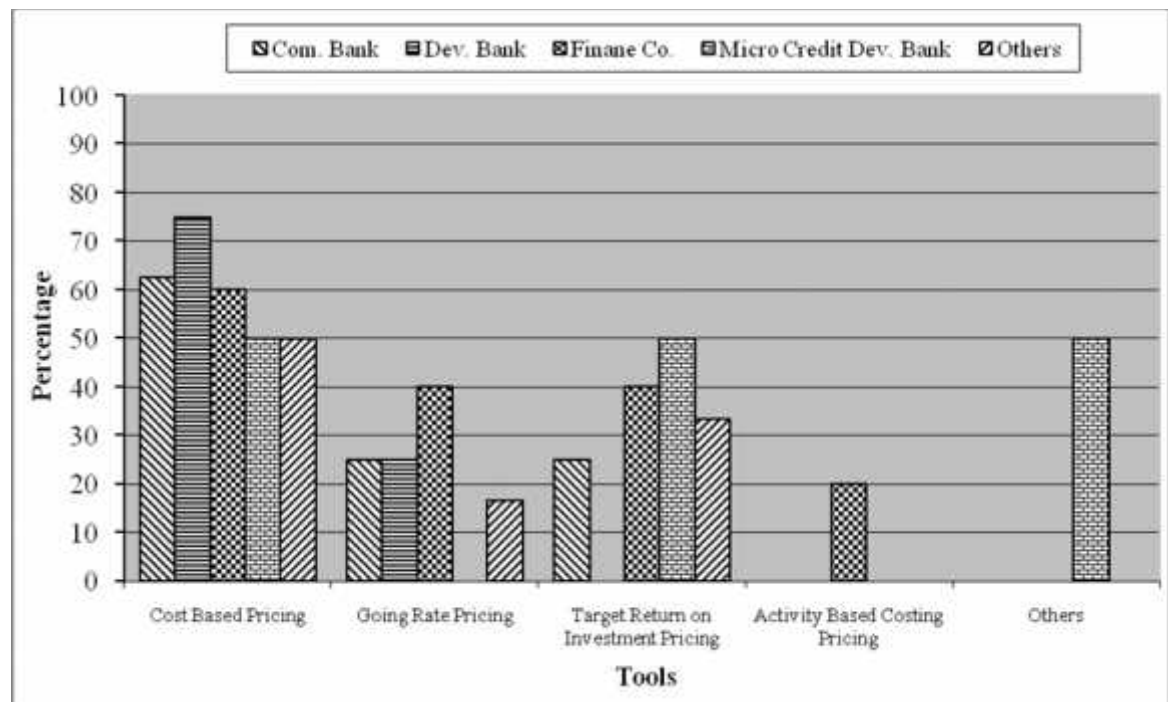
Thus, out of total banking and financial companies, 80% practice "Profit & Loss Statement" and 32% practice "Ratio Analysis" and other 24% and 4% of these companies practice Standard Costing and Ratio Analysis respectively for measuring and controlling the performance of the company. Therefore "Profit & Loss Statement" made by the companies during a year had been used as major criterion for measuring and controlling the performance by the Nepalese banking and financial companies.

Table 4.8
Practice of Pricing Of Services in the Nepalese Banking and Financial Companies

Pricing Techniques	Cost Based Pricing			Going Rate Pricing			Target Return on Investment Pricing			Activity Based Costing Pricing			Others		
	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	5	63	8	2	25	8	2	25	8	0	0	8	0	0
Dev. Bank	4	3	75	4	1	25	4	0	0	4	0	0	4	0	0
Finane Co.	5	3	60	5	2	40	5	2	40	5	1	20	5	0	0
Micro Credit Dev. Bank	2	1	50	2	0	0	2	1	50	2	0	0	2	1	50
Others	6	3	50	6	1	17	6	2	33	6	0	0	6	0	0
Total	25	15	60	25	6	24	25	7	28	25	1	4	25	1	4

Practice For Pricing of Services In Nepalese Banking and Financial Companies

Figure 4.8



The above table and figure 4.8 shows the practice for pricing of services in the Nepalese Banking and financial companies. From the table it is obvious that 63% of commercial bank practice Cost Based Pricing, whereas 25% of those bank practice Going Rate Pricing and Target Return on Investment Pricing.

In case of development bank, 75% of those banks practice Cost based Pricing and 25% practice Target Return on Investment Pricing.

Similarly, in the case of finance companies 60% of those companies practice cost Based Pricing and 40% of those companies practice Going Rate Pricing and Target Return on Investment Pricing and other 20% practice Activity Based Costing Pricing.

In Micro Credit Development bank, 50% practice Cost Based Pricing and other 50% practice Target Return on Investment Pricing and others.

Regarding other financial companies, 50% of those companies practice Cost Based Pricing, 17% practice Going Rate Pricing and 33% practice Target Return on Investment Pricing.

Thus out of total Nepalese banking and financial companies, 60% of those companies practice Cost Based Pricing, 24% of those companies Going Rate Pricing, 28% practice Target Return on Investment Pricing and 4% practice Activity Based Costing and Other.

In brief, the widely used criteria for pricing of service in the Nepalese Banking and Financial Companies is Cost based Pricing, Going Rate Pricing and Target Return on Investment Pricing. Only few of them practice Activity Based Costing Pricing and Other due to lack of information and knowledge about the techniques .But practicing of Activity Based Costing in Banking and Financial companies is illogical so these are not adopted by many banks.

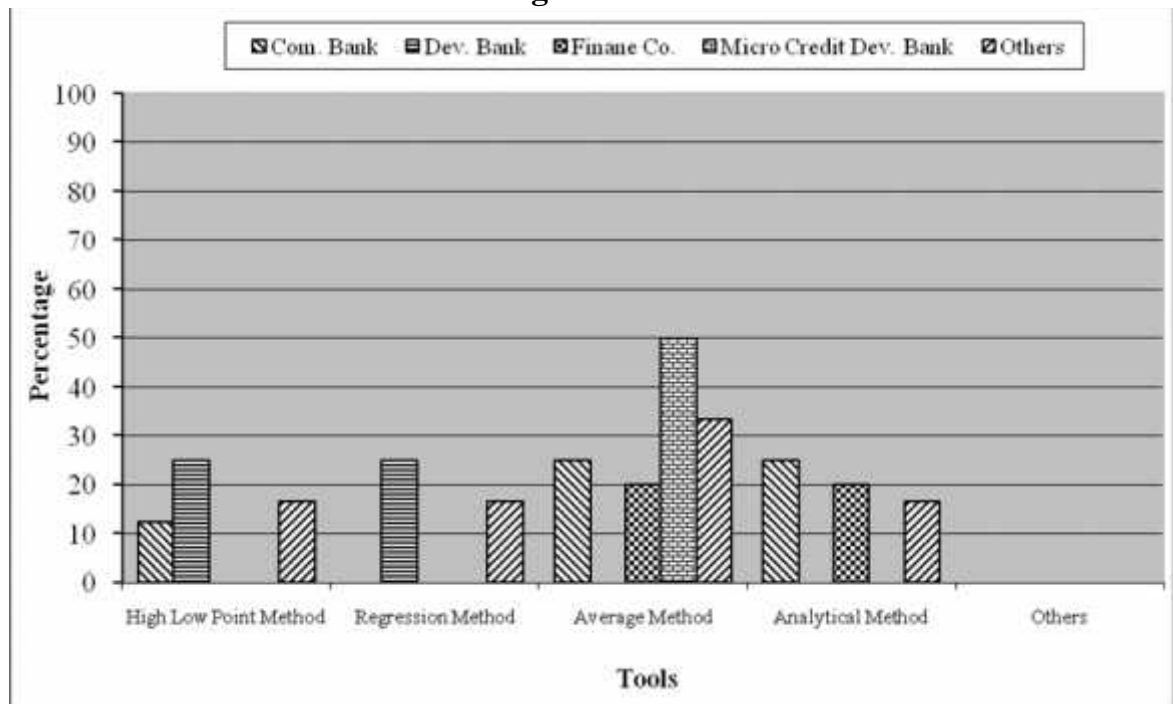
Table 4.9

Method of Segregating Mixed Cost into Fixed and Variable in the Nepalese Banking and Financial Companies

Methods	High Low Point Method			Regression Method			Average Method			Analytical Method			Others		
Companies	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	1	13	8	0	0	8	2	25	8	2	25	8	0	0
Dev. Bank	4	1	25	4	1	25	4	0	0	4	0	0	4	0	0
Finane Co.	5	0	0	5	0	0	5	1	20	5	1	20	5	0	0
Micro Credit Dev. Bank	2	0	0	2	0	0	2	1	50	2	0	0	2	0	0
Others	6	1	17	6	1	17	6	2	33	6	1	17	6	0	0
Total	25	3	12	25	2	8	25	6	24	25	4	16	25	0	0

Method of Segregating Mixed Cost into Fixed and Variable in the Nepalese Banking and Financial Companies

Figure 4.9



The above table and figure 4.9 shows that the practice of method of segregating mixed cost into fixed and variable in the Nepalese banking and financial companies. By the above table it is obvious that 25% of commercial bank practice Average Method and Analytical Method. Only 13% practice High Low Point Method.

In case of development bank 25% of those bank practice High Low Point Method and Regression Method to segregate mixed cost into fixed and variable.

In Finance company 20% of those companies practice Average Method and 20% practice Analytical Method.

Similarly in Micro Credit Development Bank 50% practice Average Method.

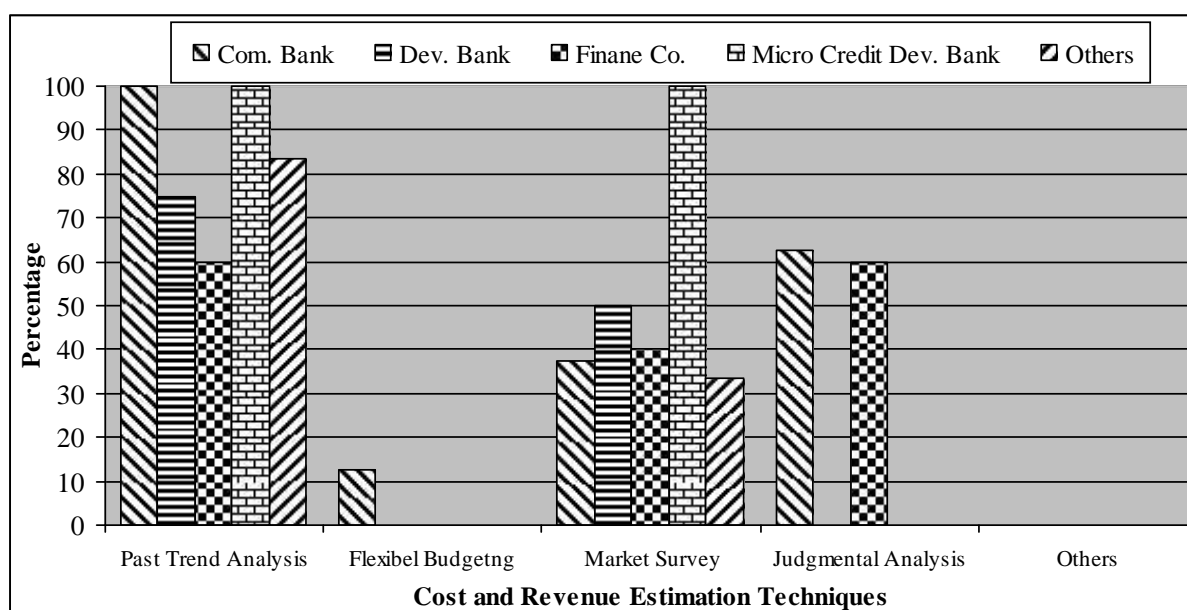
Regarding Other financial companies, 33% of those bank practice Average Method, and 17% of them practice High Low point, Method, Regression Method, Analytical Method to segregate mixed cost into fixed and variable.

Thus out of total banking and financial companies most of them practice Average Method and Analytical method. According to the information, practice of regression method is nominal due to its difficulties for application as it is a statistical method.

Table 4.10
Cost and Revenue Estimation Practice in the Nepalese Banking and Financial Companies

Cost and Revenue Estimation Technique	Past Trend Analysis			Flexibel Budgetng			Market Survey			Judgmental Analysis			Others		
	No of Sampl e	No of Practitioner	%	No of Sampl e	No of Practitioner	%	No of Sampl e	No of Practitioner	%	No of Sampl e	No of Practitioner	%	No of Sampl e	No of Practitioner	%
Com. Bank	8	8	100	8	1	13	8	3	38	8	5	63	8	0	0
Dev. Bank	4	3	75	4	0	0	4	2	50	4	0	0	4	0	0
Finane Co.	5	3	60	5	0	0	5	2	40	5	3	60	5	0	0
Micro Credit Dev. Bank	2	2	100	2	0	0	2	2	100	2	0	0	2	0	0
Others	6	5	83	6	0	0	6	2	33	6	0	0	6	0	0
Total	25	21	84	25	1	4	25	11	44	25	8	32	25	0	0

**Cost and Revenue Estimation Practice in the Nepalese Banking
and Financial Companies**
Figure 4.10



The above table and figure 4.10 shows the cost and revenue estimation practice in Nepalese Banking and Financial Companies. From the above table it is clear that 100% of commercial banks were practicing "Past Trend Analysis" while 63 % of those companies are practicing Judgmental Analysis, 38% practice Market Survey and 13% practice Flexible Budgeting.

In case of Development Banks, 75% of those bank practice "Past Trend Analysis", 50% practice " Judgmental Analysis ". Other Flexible Budgeting , Market Survey and other are practice by none in Development Banks.

Regarding Finance company 60% of those companies were practicing "Past Trend Analysis and Judgmental Analysis" and only 40% practice "Market Survey".

Similarly, 100% of Micro Credit Development Bank practice "Past Trend Analysis" and " Market Survey ".

In case of Other Financial Companies, 83% of those companies practice "Past Trend Analysis" and 33% practice "Judgmental Analysis ".

Thus, Out of total Nepalese Banking and Financial Companies, 84% of those companies practice "Past Trend Analysis", 44% of those companies practice "Market Survey ", 32% of those companies practice "Judgmental Analysis " and 25% of those companies practice "Flexible Budgeting".

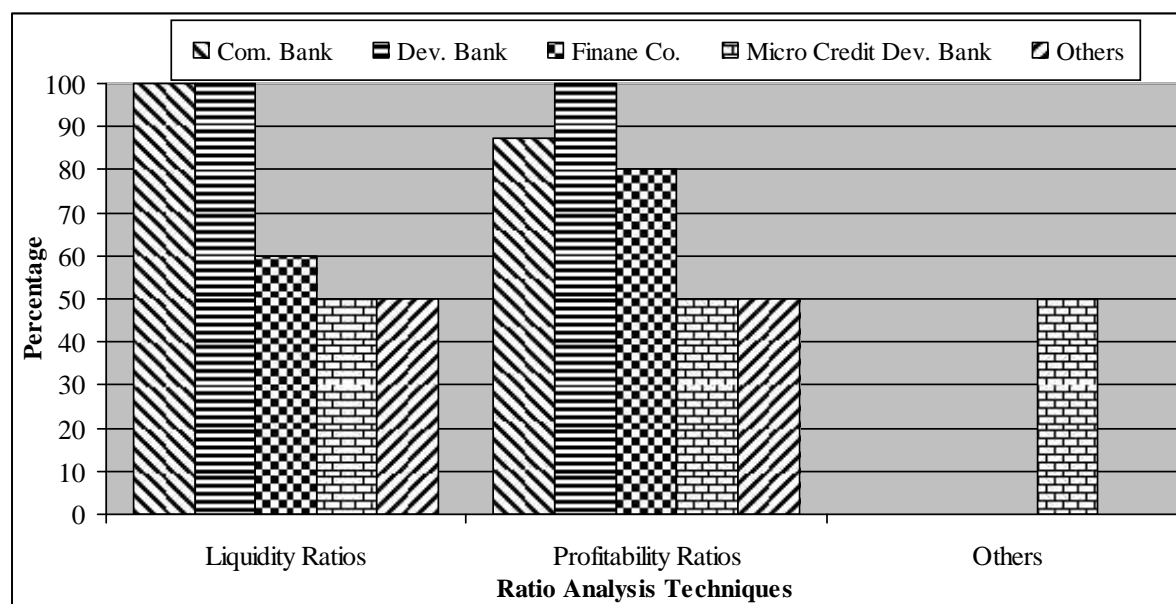
From the survey it was found that "Past Trend Analysis" is the most widely applied technique to forecast cost and revenue of the company. "Past Trend Analysis" is the most widely used than Market Survey and Judgmental Analysis. Because Market Survey and Judgmental Analysis consume more time, which is the most unavailable factor for banking sector. But Market Survey and Judgmental Analysis is more reliable to estimate cost and revenue.

Table 4.11
Practice of Ratio Analysis Techniques in the Nepalese Banking and Financial Companies

Ratio Analysis Techniques	Liquidity Ratios			Profitability Ratios			Others		
	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	8	100	8	7	88	8	0	0
Dev. Bank	4	4	100	4	4	100	4	0	0
Finane Co.	5	3	60	5	4	80	5	0	0
Micro Credit Dev. Bank	2	1	50	2	1	50	2	1	50
Others	6	3	50	6	3	50	6	0	0
Total	25	19	76	25	19	76	25	1	4

Practice of Ratio Analysis Techniques in the Nepalese Banking and Financial Co.

Figure 4.11



The above table and figure 4.11 shows the practice of ratio analysis technique in the Nepalese Banking and Financial companies. From the table it is obvious that 100% of commercial banking and Development bank, 60% of Finance Company, 50% of Micro Credit Development Bank and other Financial Companies Practice Liquidity Ratio.

Profitability Ratio is practice by 88% in Commercial bank, 100% in Development Bank, 80% in Financial companies and 50% in both Micro Credit Development Bank and Others financial companies.

In case of Others Ratio Analysis Techniques, only Micro Credit Development Bank use them by 50%.

Thus in total both Liquidity Ratios and Profitability Ratios are use by 76% in Nepalese Banking and Financial companies only 4% is used Other Ratio Analysis Techniques in Nepalese Banking and Financial companies.

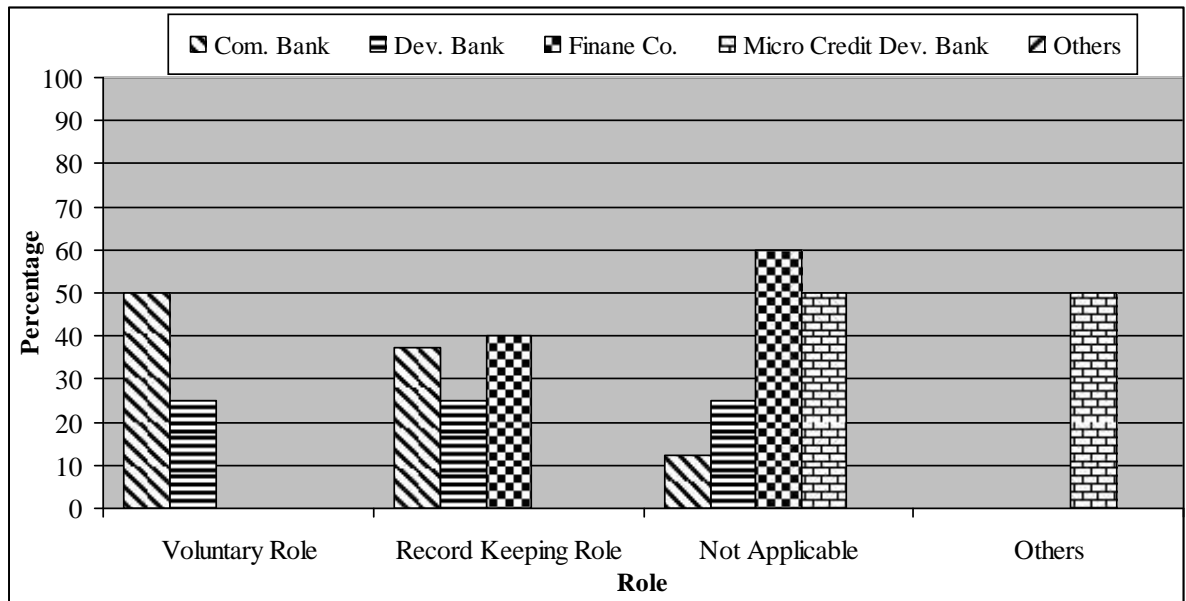
Table 4.12

Application of Management Accounting Tools as a Different Assumption in the Nepalese Banking and Financial Co.

Role	Voluntary Role			Record Keeping Role			Not Applicable			Others		
Companies	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	4	50	8	3	38	8	1	13	8	0	0
Dev. Bank	4	1	25	4	1	25	4	1	25	4	0	0
Finane Co.	5	0	0	5	2	40	5	3	60	5	0	0
Micro Credit Dev. Bank	2	0	0	2	0	0	2	1	50	2	1	50
Others	6	0	0	6	0	0	6	0	0	6	0	0
Total	25	5	20	25	6	24	25	6	24	25	1	4

Application of Management Accounting Tools as a Different Assumption in the Nepalese Banking and Financial Co.

Figure 4.12



The above table and figure 4.12 shows the view of banking and financial personal regarding role of management accounting tools. From the table it is clear that 50% of commercial banker expressed their argument in use of management accounting tools as voluntary role, 38% among them express their view as Record Keeping Role and 13% expressed their view that management accounting tools is not applicable in such type of organization.

Regarding development banks, all 25, 25 percent of the bankers showed their argument for voluntary role , record keeping role and other 25% among them viewed that management accounting tools is not applicable in such type of organization.

In case of employee of finance companies, 60% viewed for a not applicable and 40% among them expressed their view for Record Keeping Role.

Similarly, in case of Micro Credit Development Bank, 50% among them expressed their argument for others Management Accounting Tools and another 50% expressed their argument for Not Applicable in such type of organization.

Thus out of total banking and financial companies, 24% of those companies accepted management accounting tools as a Record Keeping Role, 20% of those companies accepted management accounting tools as Voluntary Role , 4% of those companies expressed their view for others and 24% of those companies expressed their view as not applicable for those companies.

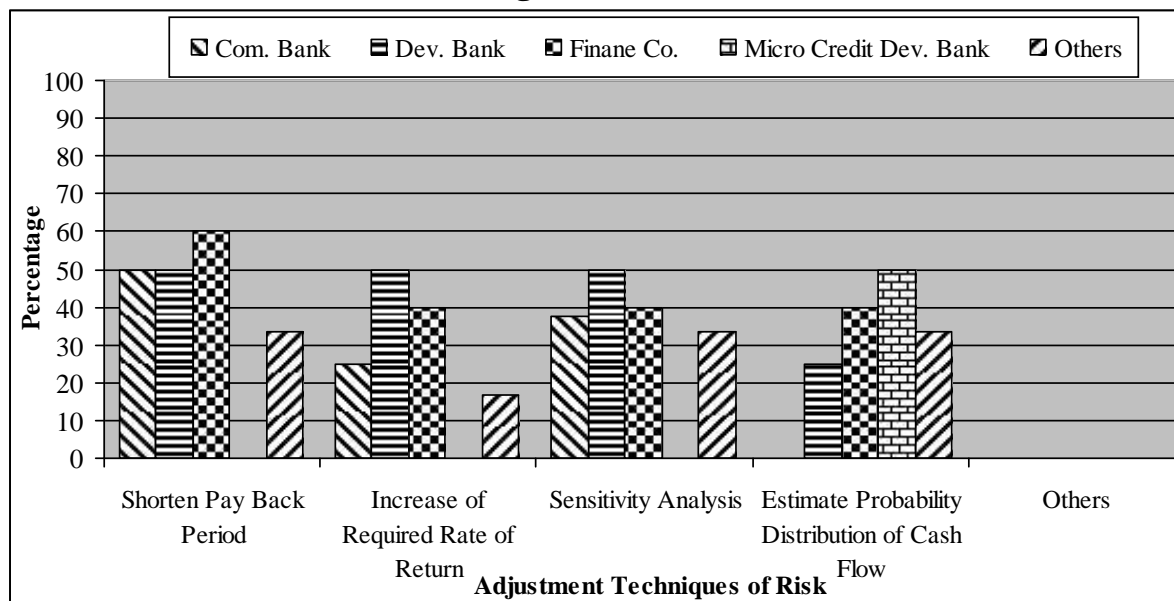
Table 4.13

Practice of Risk Adjustment Techniques While Evaluating Capital Investment by the Nepalese Banking and Financial Co.

Adjustment Techniques	Shorten Pay Back Period			Increase of Required Rate of Return			Sensitivity Analysis			Estimate Probability Distribution of Cash Flow			Others		
	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	4	50	8	2	25	8	3	38	8	0	0	8	0	0
Dev. Bank	4	2	50	4	2	50	4	2	50	4	1	25	4	0	0
Finane Co.	5	3	60	5	2	40	5	2	40	5	2	40	5	0	0
Micro Credit Dev. Bank	2	0	0	2	0	0	2	0	0	2	1	50	2	0	0
Others	6	2	33	6	1	17	6	2	33	6	2	33	6	0	0
Total	25	11	44	25	7	28	25	9	36	25	6	24	25	0	0

Practice of Risk Adjustment Techniques While Evaluating Capital Investment by the Nepalese Banking and Financial Co.

Figure 4.13



The above table and figure 4.13 shows the practice of risk adjustment techniques while evaluating capital investment in the Nepalese banking and financial companies. From the table it is clear that 50% of commercial bank practiced shorten payback period, 38% of commercial bank practiced Sensitivity Analysis, 25% practiced Increase of Required Rate of Return to adjust risk while evaluating capital investment.

Similarly 50% of the development banks practiced shorten pay back period, Increase of Required Rate of Return and Sensitivity Analysis. At the same time 25% of those banks practice Estimate Probability Distribution of Cash Flow for risk adjustment techniques while evaluating capital investment.

In case of Finance Companies, 60% practice shorten payback period, 40% practiced Sensitivity Analysis, Increase of Required Rate of Return and Estimate Probability Distribution of Cash Flow for risk adjustment techniques while evaluating capital investment.

Likewise in Micro Credit Development Banks, only 50% practice Estimate Probability Distribution of Cash Flow. Other risk adjustment techniques while

evaluating capital investment are practice by none of micro credit development banks.

Regarding other financial companies, 33% practice Shorten Payback period, Sensitivity Analysis and Estimate Probability Distribution of Cash Flow, only 17% practice Increase of Required Rate of Return for risk adjustment techniques while evaluating capital investment.

Thus out of total companies, 44% practice shorten pay back period, 36% practice Sensitivity Analysis, 28% practice Increase of Required Rate of Return and 24% practice Estimate Probability Distribution of Cash Flow for risk adjustment techniques while evaluating capital investment.

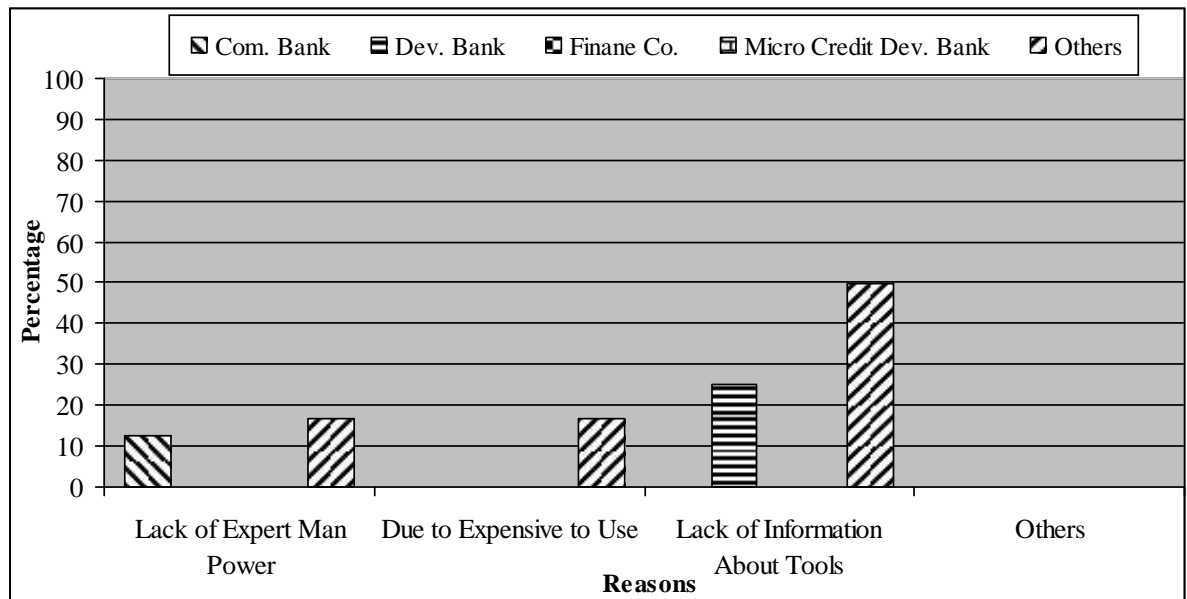
Table 4.14

Application of Management Accounting Tools as a Different Assumption in the Nepalese Banking and Financial Co.

Reasons	Lack of Expert Man Power			Due to Expensive to Use			Lack of Information About Tools			Others		
Companies	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	1	13	8	0	0	8	0	0	8	0	0
Dev. Bank	4	0	0	4	0	0	4	1	25	4	0	0
Finane Co.	5	0	0	5	0	0	5	0	0	5	0	0
Micro Credit Dev. Bank	2	0	0	2	0	0	2	0	0	2	0	0
Others	6	1	17	6	1	17	6	3	50	6	0	0
Total	25	2	8	25	1	4	25	4	16	25	0	0

Application of Management Accounting Tools as a Different Assumption in the Nepalese Banking and Financial Co.

Figure 4.14



The above table and Figure 4.14 shows the reason behind difficulties in practice of management accounting tools in the Nepalese Banking and Financial companies. From the above table it is clear that only 13% of commercial bank feel that it is due to lack of expert man power.

Similarly, in development banks 25% get difficulties due to lack of information.

In case of Finance Companies and Micro Credit Development Bank, 100% of those companies were found difficulties to adopt management accounting tools due to lack of expert manpower, due to expensive to use and due to lack of information about tools.

In case of other financial companies, 50% of those companies feel difficulties to adopt management accounting tools due to lack of information about tools, 17% of those companies feel difficulties due to lack of expert manpower and due to expensive to use.

Thus, out of total Nepalese banking and financial companies, 16% were not practicing management accounting tools due to Lack of Information About Tools, 8% of those companies were not practicing management accounting tools

due to Lack of Expert Manpower and only 4% of those companies were not practicing management accounting due to Expensive to Use.

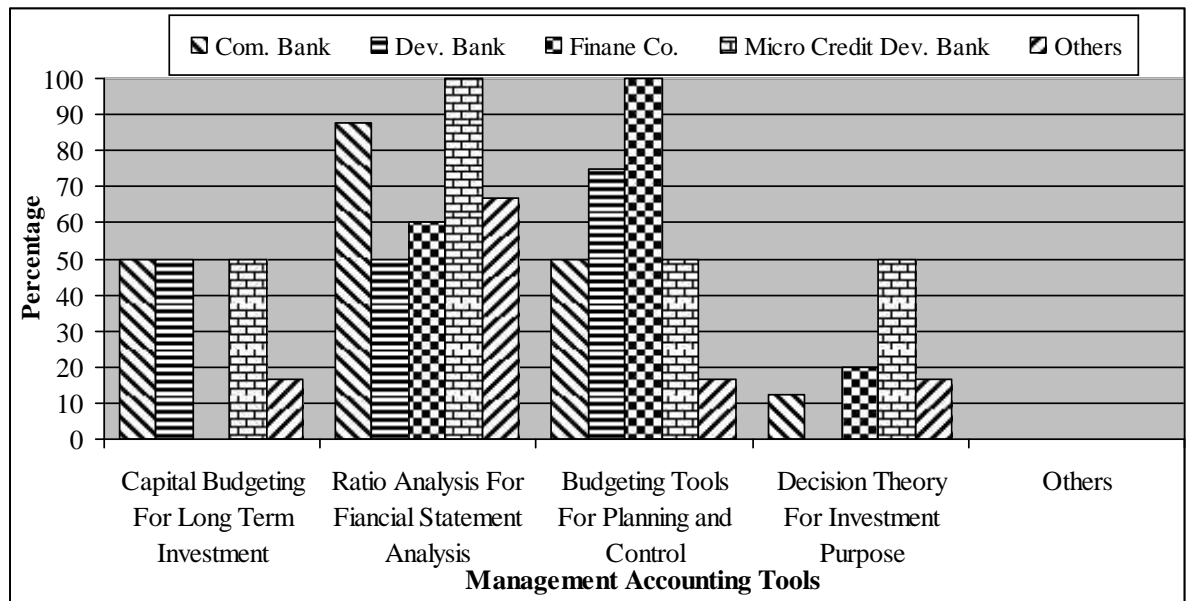
In brief, most of the Nepalese banking and financial companies were not practicing management accounting tools due to lack of information about tools and due to lack of expert manpower.

Table 4.15**Highly Applicable Management Accounting Tools in the Nepalese Banking and Financial Co.**

Management Accounting Tools	Capital Budgeting For Long Term Investment			Ratio Analysis For Financial Statement Analysis			Budgeting Tools For Planning and Control			Decision Theory For Investment Purpose			Others		
	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%	No of Sample	No of Practitioner	%
Com. Bank	8	4	50	8	7	88	8	4	50	8	1	13	8	0	0
Dev. Bank	4	2	50	4	2	50	4	3	75	4	0	0	4	0	0
Finane Co.	5	0	0	5	3	60	5	5	100	5	1	20	5	0	0
Micro Credit Dev. Bank	2	1	50	2	2	100	2	1	50	2	1	50	2	0	0
Others	6	1	17	6	4	67	6	1	17	6	1	17	6	0	0
Total	25	8	32	25	18	72	25	14	56	25	4	16	25	0	0

Highly Applicable Management Accounting Tools in the Nepalese Banking and Financial Co.

Figure 4.15



The above table and figure 4.15 shows that the mostly applicable management accounting tools in the Nepalese banking and financial companies. From the table it is obvious that 88% of commercial banks feel easy to practice Ratio Analysis for Financial Statement analysis, 50% of commercial banks feel easy to practice Capital Budgeting for Long Term Investment and Budgeting Tools for Planning and Control and 13% of them feel easy to practice Decision Theory For Investment Purpose.

In case of development bank, 75% of those companies feel easy to practice Budgeting Tools for Planning and Control, 50% of those companies feel easy to practice Capital Budgeting for Long Term Investment and Decision Theory For Investment Purpose.

Regarding finance companies, 100% of those companies feel easy to practice Budgeting Tools for Planning and Control, 60% of those companies feel easy to practice Ratio Analysis For Financial Statement Analysis, and 20% of those companies feel easy to practice Decision Theory For Investment Purpose.

In case of Micro Credit Development Bank, 100% of those bank feel easy to practice Ratio Analysis For Financial Statement Analysis, and 50% of those

companies feel easy to practice Capital Budgeting For Long Term Investment, Budgeting Tools For Planning and Control and Decision Theory For Investment Purpose.

Thus, out of total Nepalese banking and financial companies, 72% practice Ratio Analysis for Financial Statement Analysis, 56% practice Budgeting Tools For Planning and Control, 32% practice Capital Budgeting For Long Term Investment and 16% practice Decision Theory For Investment Purpose.

In brief most of banking and financial companies feel easy to practice Ratio Analysis for Financial Statement Analysis and Budgeting Tools For Planning and Control, whereas Capital Budgeting For Long Term Investment and Decision Theory For Investment Purpose are quite difficult to use without expert manpower.

4.3 ANALYSIS OF THE OPINION OF CHIEF EXECUTIVE OFFICER, BRANCH MANAGER, CHIEF OF FINANCE DIVISION AND OTHER FINANCIAL EMPLOYEES

A number of questions were asked and discussions made with the CEO's, branch managers, chief finance division as well as other departmental heads and decision making employees of the Nepalese banking and financial companies during the period of study to find their views and opinion to identify the highly applicable management accounting tools and suggestions from them for the application of such tools in those companies. Some of their opinions and views, which were considered to be fruitful, are mentioned here:

Regarding the difficulties in application of management accounting tools and highly applicable management accounting tools in the Nepalese banking and financial companies, the summary of opinions and views of CEO's , branch managers, chief of finance division as well as other departmental heads and decision making employees were as following:

- Management accounting tools like : Segregation of Cost into Fixed and Variable, Responsibility Accounting, Flexible Budgeting, Activity Based Budgeting, Performance Report and Decision Making Techniques are not in cognizance due to lack of knowledge about tools, lack of expert manpower, resources and no information about tools.
- Regarding segregation of mixed cost into fixed and variable, application of regression method is not found in practice in most of the banking and financial companies. The main difficulty in the application of it is that it is purely a statistical tool and which required expert manpower in statistic. But companies are not in position to hire expert from outside due to extra burden of cost. Due to those reasons they were not in situation to hire expert manpower to apply management accounting tools. Neither could they send their employees for training program.
- In case of performance report system, Nepalese banking and financial companies are not practicing this tool as most of them felt that is unnecessary burden for employees in term of time. Due of lack of knowledge about the essentialities of the tools, they are not practicing such tools.
- According to the views of them, most of the decisional employee under finance cum account department are not well known about management accounting tools. Most of the banking and financial companies are not practicing even if some management accounting tools are highly useful to them. Most of the commercial bank, Development Bank and Finance companies are highly interested and capable to adopt management accounting tool if applicable. But for small scale financial organization they are not capable to adopt such tools even if they are applicable, due to lack of availability of proper fund and manpower. The major bankers said that management accounting tools should be highly applicable to improve the competitiveness of Nepalese Banking and financial companies.

- According to their opinion management accounting tools can be the supplementary of management team of banking and financial companies to formulate policies and plan as well as controlling purpose. They are also ready to take an action to recruit a separate decisional employees and management accounting controller to improve the strength and productivity of banking and financial company.
- Similarly about the importance of management accounting tools in Nepalese banking and financial companies they view that as a effective management is the key to success of banking and financial company. Management accounting tools should play pivotal tools to compete with Competitors Company as well.
- But some of low scale financial company is not practicing management accounting tools though they know its importance due to under capacity in terms of manpower, information and fund to implement them as well as due to nature and size of business.
- In brief, by the opinion and views of CEO's, Finance manager and other decisional employee, it become clear that the reason of not implementing management accounting tools are due to lack of information and knowledge and cognizance about the tools. Beside these, nature and scope and size of business, limited market, ignorance by investor and management team, cost burden, time consuming and not applicability character of some tools are other factor that they considered as cause of difficulty in the implementation process of management accounting tools. Their suggestion
- Their suggestions and opinions to improve the application of management accounting tools were cited as follows:
 - Management accounting specialized efficient manpower should be produced in the country.
 - Various academic and training institutes should be developed to produce such manpower.

- Academicians should put effort to bring the new techniques and tools in light which are important but not practiced yet.
- Highly applicable advance techniques should be discussed through popular and different media.
- Campaigns should be organized to increase about the importance of such tools.
- Workshop, seminar, discussion program, a short training program should be conducted for companies, managers and employees so that they could be acquainted with different tools and its use and benefits.
- CEO's and finance in chief of all the small scale financial companies should be involved in a seminar, workshop and training as well as discussion program so that they would be aware about low cost management accounting tools which would be practical and affordable to implement in such organization.

From the opinions, suggestions and expectations of CEO's, branch managers, chief of finance divisions and other decision making employees to implement the management accounting tools in those companies, it is clear and obvious that information and knowledge about tools and its cost and benefits should be disseminated to them. They also viewed that, on the basis of cost and benefit analysis, if any tools suit to the company, they are ready to implement such tools.

4.4 ANALYSIS OF HYPOTHESIS TEST

Hypothesis 1

H_0 : There is no significant relationship between the types of the company and practice of the NPV Techniques of Long Term Investment or Capital Budgeting. (Practicing of NPV and type of the companies are independent)

H_1 : There is significant relationship between the types of the company and practice of the NPV Techniques of Long Term Investment or Capital Budgeting. (Practicing of NPV and type of the companies are dependent).

Solution

Table 4.16
2×2 Contingency Table
Practicing Of NPV Tool

Licensed Banking and Financial Companies		Yes	No	
	Non Banking	a 5	b 12	17 r ₁
	Banking	c 3	d 5	8 r ₂
		8 c ₁	17 c ₂	25 N

Correction should be made by adding and subtracting 0.5 at each cell respectively since frequencies are not greater \geq than 5, starting from 'b' cell, we get.

Licensed Banking and Financial Companies		Yes	No	
	Non Banking	a 5.5	b 11.5	17 r ₁
	Banking	c 2.5	d 5.5	8 r ₂
		8 c ₁	17 c ₂	25 N

Now,

$$X^2 = \frac{(ab - bc)^2 \times N}{r_1 \times r_2 \times c_1 \times c_2} = \frac{(5.5 \times 11.5 - 11.5 \times 2.5)^2 \times 25}{17 \times 8 \times 8 \times 17}$$

$$= \frac{1190.25 \times 25}{18496} = \frac{29756.25}{18496} = 1.61$$

$$d.f = (r - 1) (c - 1) = (2-1) (2 - 1) = 1$$

Tabulated value of X^2 at 5% level of significance for 1 d.f. is 3.840

The calculated value of $X^2 = 1.61$

Result,

Since calculated value of X^2 (=1.61) is less than tabulated value of X^2 at 5% level of significant for 1 d.f. is 3.840, null hypothesis is accepted. It means that practicing of NPV tool and the types of the companies are dependent or there is significant relationship between the type of company and practice of the NPV techniques of Long Term Investment or Capital Budgeting. (Practicing of NPV and the types of Companies are dependent)

Hypothesis 2

H_0 : There is no significant relationship between the types of the company and practice of Ratio Analysis Techniques of Financial Statement. (Practicing of Ratio Analysis Techniques and type of the companies are independent)

H_1 : There is significant relationship between the types of the company and practice of Ratio Analysis Techniques of Financial Statement. (Practicing of Ratio Analysis Techniques and type of the companies are dependent).

Solution

Table 4.17
2×2 Contingency Table
Practicing Of Ratio Analysis Tool

Licensed Banking and Financial Companies		Yes	No	
	Non Banking	a 11	b 6	17
Banking	c 7	d 1	8	r_2
	18 c_1	7 c_2	25	N

Correction should be made by adding and subtracting 0.5 at each cell respectively since frequencies are not greater \geq than 5. Now, we get.

Licensed Banking and Financial Companies		Yes	No	
	Non Banking	a 10.5	b 6.5	17 r ₁
	Banking	c 7.5	d 0.5	8 r ₂
		18 c ₁	7 c ₂	25 N

Now,

$$X^2 = \frac{(ab - bc)^2 \times N}{r_1 \times r_2 \times c_1 \times c_2} = \frac{(10.5 \times 6.5 - 6.5 \times 7.5)^2 \times 25}{17 \times 8 \times 18 \times 7}$$

$$= \frac{9506.25}{17136} = 0.5547$$

$$d.f = (r - 1) (c - 1) = (2-1) (2 - 1) = 1$$

Tabulated value of X^2 at 5% level of significance for 1 d.f. is 3.840

The calculated value of $X^2 = 0.5547$

Result,

Since calculated value of $X^2 (=0.5547)$ is less than tabulated value of X^2 at 5% level of significant for 1 d.f. is 3.840, null hypothesis is accepted. It means that practicing of Ratio Analysis Techniques and the types of the companies are dependent or there is significant relationship between the type of company and practice of Ratio Analysis Techniques of Financial Statement (Practicing of Ratio Analysis Techniques and the types of Companies are dependent)

4.5 MAJOR FINDINGS

On the basis of comprehensive analysis of the information and data, the research study concludes the following findings:

- Regarding the tools practiced in the Nepalese banking and financial companies for decision making, planning and controlling it is found that annual budgeting , capital budgeting, cash flow, ratio analysis are the major management accounting tools practiced in those companies widely. Almost companies practiced these tools in carrying out operational activities. Similarly Responsibility Accounting, Flexible Budgeting, Activity Based Budgeting, Performance Report and Decision Making Techniques are not in use due to lack of knowledge about tools, lack of expert manpower, resources and no information about tools
- In case of long term investment decision making, Nepalese banking and financial companies mostly practice ‘Internal Rate of Return’ and Net Present Value’ techniques while making capital budgeting decision.
- To implement operational activities properly, banking and financial companies mostly practice Overall master budget. Some companies manage their activities with ‘ Operational Budget’. But none of them practice Cash Budget.
- While preparing budget, out of total banking and financial companies, it is found that 64% of companies practice "Past Actual Budget" and 40% of companies practice "Past Budget Estimate" as the base of budget preparation. The practice of Zero Based Budget and Activity Based Budget was nominal in comparison to other. It is simply because of lack of knowledge and information about the tools.
- While examining the budget preparation system, 56% of those companies the budget is prepared by Chief Of Finance Division. In 28% of those companies the budget is prepared by Committee. Whereas in 12% of those

companies the budget is prepared by Planning Department. Only 4% of companies prepares budget by others.

- While examining the types of practice in the Nepalese banking and financial companies, it is found that most of those companies prepares long term budget and short term budget.
- Regarding performance measurement and control criteria, 80% practice "Profit & Loss Statement" and 32% practice "Ratio Analysis" and other 24% and 4% of these companies practice Standard Costing and Ratio Analysis respectively. Therefore "Profit & Loss Statement" made by the companies during a year had been used as major criterion for measuring and controlling the performance by the Nepalese banking and financial companies.
- Similarly, for the pricing of service, widely used criteria in the Nepalese Banking and Financial Companies is Cost based Pricing, Going Rate Pricing and Target Return on Investment Pricing. Only few of them practice Activity Based Costing Pricing and Other due to lack of information and knowledge about the techniques.
- Regarding the segregation of mixed cost into fixed and variable, most of the banking and financial companies practice Average Method and Analytical method. According to the information, practice of regression method is nominal due to its difficulties for application as it is a statistical method. Again it requires expert manpower in statistical methodology. Thus, companies are not ready to hire expert to segregate mixed cost. It is also sue to extra burden of cost which they are not ready to bear.
- From the survey, it is found that in Nepalese Banking and Financial Companies, 84% of those companies practice "Past Trend Analysis", 44% of those companies practice "Market Survey ", 32% of those companies practice "Judgmental Analysis " and 25% of those companies practice "Flexible Budgeting".

- Regarding practice of ratio analysis technique in the Nepalese Banking and Financial companies, it is found that most of them are practicing both liquidity and profitability ratios to analyze financial statement.
- Regarding the role of management accounting tools, out of total banking and financial companies, 24% of those companies accepted management accounting tools as a Record Keeping Role, 20% of those companies accepted management accounting tools as Voluntary Role , 4% of those companies expressed their view for others and 24% of those companies expressed their view as not applicable for those companies.
- In case of risk adjustment techniques, while evaluating capital investment, 44% practice shorten pay back period, 36% practice Sensitivity Analysis, 28% practice Increase of Required Rate of Return and 24% practice Estimate Probability Distribution of Cash Flow.
- From the survey, reason behind difficulties in practice of management accounting tools in the Nepalese Banking and Financial companies are due to lack of information about tools and expert manpower.
- While asking questions about the mostly applicable management accounting tools in the Nepalese banking and financial companies, most of them feel easy and useful to practice Ratio Analysis for Financial Statement Analysis and Budgeting Tools For Planning and Control. Capital Budgeting for Long Term Investment, Decision Theory For Investment Purpose and other newly innovated tools are quite difficult of use without expert manpower and proper budget.
- In brief, while examining different banking and financial companies with specific question, it is concluded that management accounting tools are practicing in one way or other but they are just practicing privileged and tools relating to finance and managerial subjects such as sensitivity analysis, judgmental analysis, capital budgeting, ratio analysis, decision theories. Past actual expenses basis, break even analysis etc for various purposes. But they

are not practicing new and innovative technique of management accounting such as, activity based costing, target costing, responsibility accounting and performance reporting system etc.

- From the discussions with open-end analysis, it is found that the major difficulties for application of new advance and innovative management accounting tools are respectively:
 - Lack of information
 - Lack of knowledge about the tools
 - Lack of expert manpower.
 - Expensive to use
 - Size and scope of company
 - Nature of business
- Therefore to overcome these difficulties, CEO's, branch managers, chief of finance division and other decisional employees of different banking and financial companies requested academicians to conduct various short term training program, seminar, workshops and occasional tools into light among the Nepalese banking and financial companies.

CHAPTER V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 SUMMARY

Management is a key to success of any organization. It achieves its objectives through the efficient and effective use of available resources in a changing environment. Dynamic business environment always create risky and uncertain moment in its life. It is obvious that future is uncertain and it always creates risk. For the reduction of risk and uncertainty, the only applicable and reliable weapon or mean is efficient and effective management.

Nepalese banking and financial companies that carryout the various services and economic activities are the foundation and backbone of the economy. Their activities and performance impact the economy in various ways. They have the limited and scarce resources. To utilize those limited resources in an efficient manner, different tools and techniques have been developed. Among the various tools and techniques, management accounting tools have proved beneficial in different aspect of managerial activities, whereas the main objective of management accounting is to help managers in overall managerial activities by providing information and helpful in decision making, planning and controlling. This play as a strategic business partner in support of management role in decision making. In brief, management accounting system is the presentation of accounting information in such a way as to assist management in the creation of policy and the day to day operation of an uncertainty. Thus, it supports to the management to the use of accounting date and information for the purpose of policy formulation, planning, controlling and decision making by the management.

The main objective of the present research was to examine the present practice of management accounting tools, to identify the areas where management accounting tools can be applied to strengthen the banking and financial companies and to identify the difficulties in applying management accounting tools in Nepalese banking and financial companies.

Due to the nature of the study, survey type research design is followed with descriptive and analytical approach. Surveys of different banks and financial companies are made. Questionnaires were distributed and table talks were made to gather data and information. Information is tabulated as per the requirement of the study. Opinions and views of different Managerial Personnel, CEO, Departmental Head, Branch Manager and Decisional Employees were taken into account while collecting and processing necessary information and data in the research process. As per the requirement of the research, all the information is tabulated and stated in a well organized manner and systematically.

By the analysis of tabulated and systematically stated information it is found that those management accounting tools which are privileged and relating to financial management and managerial subject such as capital budgeting, cash flow statement, ratio analysis, annual budgeting, sensitivity analysis and judgmental analysis, decision making techniques are the mostly practiced tools while practice of new, an innovative and recently developed tools such as zero based budgeting, activity based budgeting, responsibility accounting, performance report system and target costing are almost nil but some of the successful commercial and development banks have started to practice zero based budgeting and performance report system recently. Lack of information, knowledge, expensive to use, lack of expertise to use, size and nature of business are the main reasons behind not practicing such tools. From the hypothesis test, it was found that all the Nepalese banking and financial companies were independently practicing the management accounting tools. There was no significance relationship between the types of the banking and financial companies and practice of management accounting tools.

5.2. CONCLUSIONS

In the Nepalese banking and financial companies, accounting tools are used as a record keeping purpose only. Most of the Nepalese banking and financial companies are found quite serious about the application of accounting reports and they are following double entry book keeping system, cost and financial accounting tools seriously. But the research study concludes that they are almost

unknown about the applicable and innovative management accounting tools, which are taught in the universities, are not found applied practically by the Nepalese banking and financial companies. It shows the tremendous gap between the theory and practice. Moreover, during the research period, on open end discussion, all the focused decisional and policy making employee including CEO's are not being able to describe the usefulness and difficulties of using new and an innovative management accounting tools properly. However, tools like capital budgeting, budgeting, ratio analysis and cash flow statement are in regular practice as those tools are the subject to study in other areas such as financial management and financial accounting. But application of new, innovative and recent development of management accounting tools is not found in cognizance to them and obviously not in practice as well.

In the Nepalese banking and financial companies, practice of using expert manpower of carrying out different activities such as research and development purpose is almost nil beside certain area such as law and economics. Even today, Nepalese banking and financial companies are in infant stage in practicing of management accounting tools. None of the financial companies are applying management accounting tools by knowing its usefulness in management. No where in those companies one can find management accounting expert. They are with the concept that management accounting is similar to financial accounting. Most of the successful banking and financial companies are viewing that trade and finance manager are well known about mostly used tools such as capital budgeting and ratio analysis but they are unknown about other innovative and recent developed management accounting tools such as performance reporting system, zero based budgeting, responsibility accounting, ABC costing, target costing, value engineering. Those recently developed tools have been used around the globe but practice of those tools is almost nil in the Nepalese banking and financial companies. But some of the commercial banks and development banks have started to use ZBB, ABB and other such tools in the recent years. Among several reasons behind the application of such tools, lack of information, cognizance about and problem in application of management accounting tools, size and nature of business, cost burden, illusion regarding its application are the

main factors as they expressed their opinion through questionnaire and open end discussion. However, the most important and notable point is the most of the commercial and development banks and some of the finance companies are quite serious and highly interested to apply those tools as they are being informed about the importance of tools, in effective and efficient management of economic activities with similar nature of banking and financial companies around the globe. Recent financial crisis in the world economy and failure of various leading banking and financial companies shows the importance of management accounting tools as the main cause of such crisis in inefficient and ineffective management that the operation of huge transaction without proper assessment and measurement of result. Some of the CEO's of Nepalese banking and financial companies viewed that effective implementation of management accounting tools should be the supplementary for the sustainable and regular success of banking and financial companies.

5.3 RECOMMENDATIONS

As Nepal has already got a membership of WTO, Nepalese banking and financial companies are trying to fit with the global environment. Standard service must meet as per the global business environment. Economic Liberalization, dynamic and complex business environment, globalization, open market economy, investment of highly developed world leading organization in the national economy are the major factors that the Nepalese banking and financial companies should develop best fit managerial strategies. The management team, CEO's and decisional employees should think in a global perspective with the consideration of above mentioned factors not only to success but also to sustain. As management accounting tools are the recent development of supplementary tools for management in the field of accounting and most successful companies are practicing such tools, Nepalese banking and financial companies should be updated accordingly for the better utilization of the limited resources and achieving goal through cutthroat competition and application of advance, recent and innovative management accounting tools can be of backbone for successful management. Recommendations, therefore based on the major finding of the research study are cited as following:

- The use of advance, fruitful and an innovative management accounting tools are recommended to use for carrying out managerial activities as to strengthen the competitiveness of Nepalese banking and financial companies while implementing such tools, it is recommended to analyze cost and benefit of the tools.
- For the sake of congenial environment to implement the advance tools, either separate management accounting department should be established within an organization or a management account experts should be recruited within the finance and account department. Those companies who are not been able to establish a separate department. If the company unable to hire and recruit such expert, it can provide and environment to take short term training to its existing finance and

account officer. If that also is not possible for them, they are recommended to get service form fee based consultant.

- ☛ As management accounting tools need internal and external information to implement, Nepalese banking and financial companies are recommended to keep management accounting information system. They are also recommended to update their skill with every changes taking place around the external environment.
- ☛ As management accounting tools are the emerging concept of management, not only in Nepal but around the globe, those companies are recommended to create an environment of interactions between the specialized academician and the companies. It would be an opportunity to get benefit from their knowledge and skills.
- ☛ Management accounting scholar should put effort to create efficient manpower in the country to develop various academic and training institute to produce such manpower, to bring the new techniques and tools in light which are important but not practiced yet, to organize campaign to increase the importance of such tools and to conduct workshop, seminar, discussion program, a short term training package on management accounting so that bankers could be acquainted with cost and benefit of such tools.
- ☛ Nepalese banking and financial companies are recommended to use the highly applicable, new, advance and modern management accounting tools such as zero based budgeting, target costing, responsibility accounting, performance reporting system, activity based budgeting etc for the smooth operation of the activities and decision making, planning and controlling purposed instead depending upon traditional tools.
- ☛ To take a decision regarding long term investment or purchasing fixed asset, companies are recommended to apply NPV tools of capital budgeting than other to get accurate result.

- ☛ Banking and financial companies should hire or should get consultancy service with professional expert while preparing budget, planning activities and taking a critical decision.
- ☛ Nepalese banking and financial companies are recommended to practice short term budget so that they might be able to reformulate their budget planning as per the changes in dynamic and complex business environment.
- ☛ While preparing budget environmental factors should be taken into account along with actual past expenses and future estimated expenses because what happen in past might not occur in the future.
- ☛ Similarly, while measuring the performance, they are suggested not to rely completely as 'profit and loss' criteria such as activity, liquidity, productivity and present performance of the company in comparison to past performance.
- ☛ Regarding pricing of services, though they have difficulties due to price ceiling stipulated by central bank, they are recommended to consider the various pricing techniques of management accounting.
- ☛ While estimating cost and revenue for future period, Nepalese banking and financial companies should not be based on 'past trend' only because what happened in past might not happen in future. So they are recommended to practice 'zero based', marked survey' and other statistical tools. This also helps the company to reach to correct estimation.
- ☛ Academic scholars, who are well known about the importance and role of management accounting, should put effort to bring advance and innovative management accounting tools into the light so that the related person and companies can get more information about the applicability and cost and benefits of such tools.
- ☛ To gain competitive advantage, in this modern, complex and dynamic

business environment, research and development is only the best way. So that Nepalese banking and financial companies are recommended to allocate some portion their profit each year for research and development by which they would be able to adopt and implement emerging and innovative tools and techniques of management accounting in those organizations.

- ☛ To increase the market area and sustain in the competitive environment small scale financial companies should also adopt low cost management accounting tools with the help of management accounting consulting.
- ☛ As activities performed based on traditional management accounting tool are through helpful, they are not sufficient in the competitive age. The Nepalese banking and financial are recommended that they should think are develop new methods and techniques so that cost minimization can be exercised and better quality can be delivered to the people with modern banking services.
- ☛ Nepalese banking and financial companies are recommended to update with new and modern tools that are practiced around the globe in most successful and best performing companies. For cost reduction, process restructuring.
- ☛ Value engineering, JIT Management, TQM, Target costing, Life cycle costing, Keizen costing, Bench marking and management audit should be practiced.
- ☛ At last, Nepalese banking and financial companies are recommended to adopt suitable management accounting tools whatever they felt feasible in terms of cost and benefit, which of course add competitive advantage in this dynamic, complex and competitive business environment.

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APPENDICES

APPENDIX -1

Objective Type of Questions

This questionnaire is prepared to collect the data for a research to undertake in the partial fulfillment of MBS 2nd year program, Tribhuvan University. The data collected from this questionnaire will be kept confidential and will be used for research work only. It does not have any commercial purpose. So, I kindly request you to help for this research work by providing your valuable time to fill up this questionnaire.

Research Questionnaire

Research Topic: A Survey of Management Accounting Tools Used in the Nepalese Banking and Financial Companies.

For : Banking and Financial Companies

Name of the Institution:

1. On the category your company belongs to:

- a. Commercial Banks (Class A) []
- b. Development Banks (Class B) []
- c. Finance Companies (Class C) []
- d. Micro Credit Development Banks (Class D) []
- e. Other (Saving and Credit Co-operatives) []

2. Kindly mention that which of the following mentioned planning, controlling and decision making tools of management accounting are practiced in your company?

Management Accounting Tools	Yes	No
Segregation of Cost into Fixed and Variables	[]	[]
Long term investment techniques	[]	[]
Responsibility Accounting	[]	[]
Ratio Analysis	[]	[]
Cash Flow Statement	[]	[]
Flexible Budgeting	[]	[]
Activity Based Budgeting	[]	[]
Decision Making Techniques	[]	[]
Performance Report System	[]	[]
Risk and Return Evaluation Techniques	[]	[]

- 3. If your company has not practiced any of above mentioned tools, what might be the reasons?**
- a. Lack of expert manpower []
 - b. Due to expensive to practice []
 - c. Lack of information about the tools []
 - d. Other, Please specify.....
- 4. While purchasing fixed assets and making long term investment decision which of the following capital budgeting techniques are practiced?**
- a. Pay Back Period (PBP) []
 - b. Average Rate of Return (ARR) []
 - c. Net Present value (NPV) []
 - d. Internal Rate of Return (IRR) []
 - e. Other, Please specify.....
- 5. How does your company adjust for risk while evaluating capital investment?**
- a. Shorten pay back period []
 - b. Increase the required rate of return []
 - c. Sensitivity analysis []
 - d. Estimate probability distribution of future cash flow []
 - e. Other, Please specify.....
- 6. What types of the budget does your company practice?**
- a. Short term budget (1 Year or Less) []
 - b. Medium term budget (1 year to 3 year) []
 - c. Long term budget (5 year or More) []
 - d. Other, Please specify.....
- 7. Who prepare the budget in your company?**
- a. Management Committee []
 - b. Planning Department []
 - c. Chief of finance division []
 - d. Outside experts []
 - e. Other, Please specify.....
- 8. What type of budget does your company practice?**
- a. Overall master budget []
 - b. Operational budget only []
 - c. Cash budget only []
 - d. Other, Please specify.....

- 9. On what basis, does your company prepare budget?**
- a. Based on past actual budget []
 - b. Based on past budget estimates []
 - c. Zero base []
 - d. Activity base []
 - e. Other, Please specify.....
- 10. How does the company measure and control overall performance at the end of the accounting years?**
- a. Profit and Loss made by the company []
 - b. Budgeting Control []
 - c. Standard Costing []
 - d. Ratio Analysis []
 - e. Other, Please specify.....
- 11. What techniques does the company practice for pricing of services?**
- a. Cost- based pricing []
 - b. Going rate pricing []
 - c. Target return on investment policy []
 - d. ABC Pricing []
 - e. Other, Please specify.....
- 12. What techniques does the company practice to segregate the mixed cost into variable and fixed?**
- a. High Low point method []
 - b. Regression Method []
 - c. Average Method []
 - d. Analytical Method []
 - e. Other, Please specify.....
- 13. What technique does the company practice for cost and revenue estimation/forecast?**
- a. Past trend analysis []
 - b. Flexible budgeting []
 - c. Market Survey []
 - d. Judgment Analysis []
 - e. Other, Please specify.....
- 14. What kind of ratio analysis technique is mostly applicable to measure the performance of customer (in case of business house) for investment purpose?**
- a. Liquidity ratios []
 - b. Profitability Ratios []
 - c. Other, Please specify.....

15. How the management accounting serves company to increase overall performance of the company?

- a. By providing voluntary role []
- b. By Record keeping only []
- c. Not applicable []
- d. Other, Please specify.....

16. What kind of management accounting tools is highly applicable for banking and financial companies?

- a. Capital budgeting for long term investment []
- b. Ratio analysis for financial statement analysis []
- c. Budgeting tools for planning and control []
- d. Decision theory for investment purpose []
- e. Other, Please specify.....

Form Filled Up By :

Designation :

*Requested By : Nagima Shrestha, MBS 2nd Year, Shanker Dev Campus,
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