CHAPTER –I

INTRODUCTION

1.1 GENERAL BACKGROUND OF THE STUDY

Dividend refers to the portion of earning made by the firm that is distributed to shareholders as return of investment in shares. Every investor invest in common stock of a bank with the expectation to get higher return and equally participate in management Therefore management can not thing the successful operation with out meeting the expectation of common shareholder. Dividend can be distributed in various forms and every organization can set their own dividend policy according to their stake holder's expectation. Numbers of dividend policy exists in current market situation and management can choose/adopt any of the policies to meet the market expectations.

Dividend is the final results of any organization and it largely depends upon the profitability of that bank. Therefore higher dividend is the factor of higher profit and efficient management we can say that the organization earning high profit can distribute high dividend as return to their shareholder and vice versa.

Generally dividend is distributed after meeting all obligations of company such as interest to depositors, operating expenses and tax etc and retaining certain portion for future expansion of as a part of their dividend policy. It is clear that no organization can pay dividend without getting profit. In other words the portion of profit distributed to shareholders after deducting the retained amount in business is known as dividend. When a company pays out a portion of

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its earning to shareholders in the form of a dividend, the shareholders benefit directly. If instead of paying dividends, the firm retains the funds to exploit other growth opportunities, the shareholders can expect to benefit indirectly through future increases in the price of their stock. Thus shareholder wealth can be increased through either dividends or capital gains. The policy of a company on the division of its profits between dividend and retention is known as dividend policy. All aspects and questions related to payment of dividend are contained in a dividend policy. In any company one vital question arises that how much should be distributed as dividend or how much should be retained in business. Since every firm has their own dividend policy determining the dividends to be distributed, dividend policy is one of the most important financial decisions for any company, which affects the financial structure of a firm.

There are various factor, which affects dividend policy of firm like desire of shareholders, legal rules, liquidity position, profit rate, need of repay debt, restrictions of debt contracts, stability of earning, tax position of shareholders etc. therefore every company should consider the above factor before declaring dividend and should choose the best dividend policy which satisfy their stockholders.

So far dividend policy in context of Nepal is concerned; there is no major difference between Nepal and other country. Major exercise held by management is more or less same. In Nepal there is not well practice of preference dividend. Hayat Regency Hotel is only organization who has raised their fund by issuing preference shares. There are lots of private limited companies who are providing dividend according to their dividend policy. Due to the small

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size of market we do not have big industries who manufacture goods in large scale. Besides this, we have a common practice of importing goods from abroad and sell them in the market. So, all these activities are running in small scale, they do not need to raise fund by means of common stock so they do not have any problem of dividend policy. Some large scale manufacturing organizations are providing dividend according to their earnings.

So, we can see that in manufacturing company dividend policy is less in practice. As stated above most of the goods are imported form abroad, which needs the service of bank. So, as the volume of import is increasing day by day. New banks are being opened and there is a cut throat competition between financial institutions to grasp the business. So, we can see that public limited companies are being opened and they are raising their capital by issuing common stock and naturally there is competition on dividend payouts too.

In Nepal, Dividends are paid in cash, stock and both cash and stock and capitalization of earning as an increment in paid up value of share. Dividend policy generally depends upon external environment so most of the organization in Nepal has policy to provide a costar minimum plus extra dividends depending upon earning and future expansion needs. Furthermore, it depends on NRB rules and regulations. For example NRB has just issued directives stating that paid up capital of any bank should be 1000 million by B.S.2060 so most of the banks have began to provide stock dividend to the shareholders to increase paid up capital.

So, we can see that financial institutions are very much conscious about dividend decision and hence it is highly affected by NRB rules and regulations. So, we have a situational dividend policy in Nepal which is directed towards the long run sustainability of the firm.

Banking in Nepal

Tankadhari 'a special class of people' was established to deal with the lending activities of money toward the end of fourteen century at the ruling period of king Jayasthiti Malla.

During the Prime Ministerial period of Rannodip Singh, one financial institution was established to give loan facilities to the government staff & efforted loan facilities to the public in general in the term of 5 % interest but ' Tejarath' did not accept money from public.

On 30ᵗʰ Kartik, 1994, Nepal Bank limited was established for the first time to provide banking facilities/services in organized manner. Up to 2012, NBL was the only banking service provider to general public and other government/non-government bodies as an organized banker. Later, NRB act 2012 was prepared and issued to establish NRB as a central bank to manage, control and develop monetary system in Nepal. NRB was formally established on 14ᵗʰ Baisakh 2013 & its capital at the starting time was NRs. 10 million. Similarly, Rastriya Banijya Bank was established in 2022 Magh 10 as 100% state owned bank to fulfill the growing needs of the economy. The birth of this bank brought a new landmark in the history of banking facility in the Nepal. Like other developed countries, Nepal also took the policy of open economy to develop good competition in the banking field. Hence, the private sector Banking Company policy is taken for study. Today, 26 commercial banks are operating to provide modern banking services & facilities to boost the economic condition of the country.

The financial sector reform was initiated in mid-1980s under the liberal economic policy of GON. Under this policy, GON first opened the banking sectors to foreign investors. In July 1985, commercial banks were allowed, for the first time to accept current and fixed deposits on foreign currency (U.S. dollar and sterling pound). On May 26, 1986, NRB deregulated the interest rate regime and authorized commercial banks to fix interest rate at any level above its minimum prescribed levels.

Banking plays significant role in the economic development of a country. Bank is a resource for the economic development which maintains the self- confidence of various segments of society and extends credit to the people. So, commercial banks are those financial institutions mainly dealing with activities of the trade, commerce, industry and agriculture that seek regular financial and other helps from them for growing and flourishing, the objectives of commercial banks is to mobilized idle resources into the most profitable   sector after collecting them from scattered sources commercial bank contributes significantly n the formation and mobilization of internal capital and development effort.

Introduction of the Sample Banks:

Everest Bank Ltd.

Everest Bank Limited (EBL) started its operations in 1994 with a view and objective of extending professionalized and efficient banking services to various segments of the society. The bank is providing customer-friendly services through its Branch Network. All the branches of the bank are connected through Anywhere Branch Banking System (ABBS), which enables customers for operational transactions from any branches of the bank inside Nepal.

With an aim to help Nepalese citizens working abroad, the bank has entered into arrangements with banks and finance companies in different countries, which enable quick remittance of funds by the Nepalese citizens in countries like UAE, Kuwait, Bahrain, Qatar, Saudi Arabia

Bank has set up its representative offices at New Delhi (India) to support Nepalese citizen remitting money and advising banking related services.

Capital Structure of Everest Bank:

Promoters: 40.66%

Other Institutions: 9.34%

Public Shareholders: 30%

Punjab National Bank: 20%

Himalayan Bank Ltd.

Himalayan Bank was established in 1993 in joint venture with Habib Bank Limited of Pakistan. Despite the cut-throat competition in the Nepalese Banking sector, Himalayan Bank has been able to maintain a lead in the primary banking activities- Loans and Deposits.

Legacy of Himalayan lives on in an institution that's known throughout Nepal for its innovative approaches to merchandising and customer service. Products such as Premium Savings Account, HBL Proprietary Card and Millionaire Deposit Scheme besides services such as ATMs and Tele-banking were first introduced by HBL. Other financial institutions in the country have been following our lead by introducing similar products and services. Therefore, we stand for the innovations that we bring about in this country to help our Customers besides modernizing the banking sector. With the highest deposit base and loan

portfolio amongst private sector banks and extending guarantees to correspondent banks covering exposure of other local banks under our credit standing with foreign correspondent banks, we believe we obviously lead the banking sector of Nepal. The most recent rating of HBL by Bankers' Almanac as country's number 1 Bank easily confirms our claim.

All Branches of HBL are integrated into Globus (developed by Temenos), the single Banking software where the Bank has made substantial investments. This has helped the Bank provide services like 'Any Branch Banking Facility', Internet Banking and SMS Banking. Living up to the expectations and aspirations of the Customers and other stakeholders of being innovative, HBL very recently introduced several new products and services. Millionaire Deposit Scheme, Small Business Enterprises Loan, Pre-paid Visa Card, International Travel Quota Credit Card, Consumer Finance through Credit Card and online TOEFL, SAT, IELTS, etc. fee payment facility are some of the products and services. HBL also has a dedicated offsite 'Disaster Recovery Management System'. Looking at the number of Nepalese workers abroad and their need for formal money transfer channel; HBL has developed exclusive and proprietary online money transfer software- HimalRemitTM. By deputing our own staff with technical tie-ups with local exchange houses and banks, in the Middle East and Gulf region, HBL is the biggest inward remittance handling Bank in Nepal. All this only reflects that HBL has an outside-in rather than inside-out approach where Customers' needs and wants stand first.

Capital Structure of Himalayan Bank Ltd:

Habib Bank of Pakistan: 20%

Other Licensed Institution: 14%

Promoters: 51%

General Public: 15%

Bank of Kathmandu

Bank of Kathmandu Limited has become a prominent name in the Nepalese banking sector. We would like to express our sincere gratitude to our customers, shareholders, employees and other stakeholders for their support and co-operation for leading the bank to the present height of achievements. We wish to reiterate here that whatever activity we undertake; we put in conscious efforts to glorify our corporate slogan, "We make your life easier".

We would also like to elucidate that Bank of Kathmandu is committed to delivering quality service to customers, generating good return to shareholders, providing attractive incentives to employees and serving the community through stronger corporate social responsibility endeavor.

Bank of Kathmandu Limited (BOK) has today become a landmark in the Nepalese banking sector by being among the few commercial banks which is entirely managed by Nepalese professionals and owned by the general public.

BOK started its operation in March 1995 with the objective to stimulate the Nepalese economy and take it to newer heights. BOK also aims to facilitate the nation's economy and to become more competitive globally. To achieve these, BOK has been focusing on its set objectives right from the beginning. To highlight its few objectives:

To contribute to the sustainable development of the nation by mobilizing domestic savings and channeling them to productive areas

- To use the latest banking technology to provide better, reliable and efficient services at a reasonable cost
- To facilitate trade by making financial transactions easier, faster and more reliable through relationships with foreign banks and money transfer agencies
- To contribute to the overall social development of Nepal.

Capital Structure of Bank of Kathmandu:

Promoters: 42%

Other Institutions: 2%

General Public: 58%

Nabil Bank Ltd.

Nabil Bank Limited, the first foreign joint venture bank of Nepal, started operations in July 1984. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Pursuing its objective, Nabil provides a full range of commercial banking services through its 19 points of representation across the

kingdom and over 170 reputed multinational and foreign correspondent banks across the globe.

Nabil, as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal as it started an era of modern banking with customer satisfaction measured as a focal objective while doingbusiness.

Operations of the bank including day-to-day operations and risk management are managed by highly qualified and experienced management team. Bank is fully equipped with modern technology which includes ATMs, credit cards, state-of-art, world-renowned software from Infosys Technologies System, Banglore, India, Internet banking system and Telebanking system.

Capital Structure of Nabil Bank:

Foreign Entity: 50%

Other Licensed Institutions: 6.15%

Other Entities: 10.41%

Individuals: 3.44%

General Public: 30%

Nepal Bangladesh Bank Ltd:

Nepal Bangladesh Bank Ltd. was established in June 1994 with an authorized capital of Rs. 240 million and Paid up capital of Rs. 60 million as a Joint Venture Bank with IFIC Bank Ltd. of Bangladesh. Its Head Office is situated at New Baneshwore, BijuliBazar, Kathmandu.

The prime objective of this Bank is to render banking services to the different sectors like industries, traders, businessmen, priority sector, small entrepreneurs and weaker section of the society and every other people who need Banking Services. During the period of 15 years, it has accommodated large number of clients and able to provide excellent services to its clients.

Bank has a network of 17 branches. The Bank has earned the glory of making available the services to almost all the top business houses of the country and it occupies one of the leading positions among the Joint Venture Banks in Nepal. The Bank is still pursuing to accommodate as many new banking customers all over Nepal as far as possible.

Top Exporters and Importers of the country have established banking relationship with the Bank with a substantial volume of foreign business which has enhanced the Bank's popularity in the International Trade front. Bank has developed Agency and Correspondent relationship with more than 200 prominent Foreign and Multinational reputed Banks in the world.

With the continuous support of our valued customers the Bank has made all round progress in every sphere of its operation. As per NRB Instruction, Currently Bank is being Handled by Mr. Govind Babu Tiwari (Acting General Manager)

Capital Structure of Nepal Bangladesh Bank:

Promoters: 51%

General Public: 49%

NIB Bank Ltd.

Nepal Investment Bank Ltd. (NIBL), previously Nepal Indosuez Bank Ltd., was established in 1986 as a joint venture between Nepalese and French partners. The French partner (holding 50% of the capital of NIBL) was Credit Agricole Indosuez, a subsidiary of one the largest banking group in the world.

With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, has acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Ltd.

The name of the bank has been changed to Nepal Investment Bank Ltd. upon approval of bank's Annual General Meeting, Nepal Rastra Bank and Company Registrar's office with the following shareholding structure.

Capital Structure of NIB Bank Ltd:

- A group of companies holding 50% of the capital
- Rashtriya Banijya Bank holding 15% of the Capital.
- Rashtriya Beema Sansthan holding the same percentage.
- The remaining 20% being held by the General Public (which means that NIBL is a Company listed on the Nepal Stock Exchange).

NIC Bank Ltd.

Nepal Industrial & Commercial Bank Limited (NIC Bank) commenced its operation on 21 July 1998 from Biratnagar. The Bank was promoted by some of the prominent business houses of the country. The current shareholding pattern of the Bank constitutes of promoters

holding 51% of the shares while 49% is held by the general public. NIC Bank has over 34,000 shareholders. The shares of the Bank are actively traded in Nepal Stock Exchange with current market capitalization of about NPR 10,493 million.

The Bank has grown rapidly with 22 branches throughout the country while several branches are planned to be opened this year. All branches are inter-connected through V-Sat and are capable of providing real time on-line transactions.

The Bank is the first commercial Bank in Nepal to have received ISO 9001:2000 certification for quality management system. Furthermore, NIC Bank became the 1st Bank in Nepal to be provided a line of credit by International Finance Corporation (IFC), an arm of World Bank Group under its Global Trade Finance Program, enabling the Bank's Letter of Credit and Guarantee to be accepted/ confirmed by more than 200 banks worldwide.

Capital Structure of NIC Bank Ltd:

Promoters: 65%

General Public: 35%

Nepal SBI Bank Ltd.:

Nepal SBI Bank Ltd. (NSBL) is the first Indo-Nepal joint venture in the financial sector sponsored by three institutional promoters, namely State Bank of India, Employees Provident Fund and Agricultural Development Bank of Nepal through a Memorandum of Understanding signed on 17th July 1992. NSBL was incorporated as a public limited company at the Office of the Company Registrar on April 28, 1993 under Regn. No. 17-049/50 with an Authorized Capital of Rs.12 Crores and was licensed by Nepal Rastra Bank on July 6, 1993 under license No. NRB/l.Pa./7/2049/50. NSBL commenced operation with effect from July 7, 1993 with one full-fledged office at Durbar Marg, Kathmandu with 18 staff members. The staff strength

has since increased to 325. Under the Banks & Financial Institutions Act, 2063, Nepal Rastra Bank granted fresh license to NSBL classifying it as an "A" class licensed institution on April 26, 2006 under license No. NRB/I.Pra.Ka.7/062/63. The Authorized and Issued Capitals have been increased to Rs. 200 Crores and Rs. 87.45 Crores, respectively. The management team and the Managing Director who is also the CEO of the Bank are deputed by SBI. SBI also provides management support as per the Technical Services Agreement. Fifty five percent of the total share capital of the Bank is held by the State Bank of India, fifteen percent is held by the Employees Provident Fund and thirty percent is held by the general public.

Capital Structure of Nepal SBI Bank Nepal Ltd.

State Bank of India: 70%

General Public: 30%

Standard Chartered Bank Nepal Ltd.

Standard Chartered Bank Nepal Limited has been in operation in Nepal since 1987 when it was initially registered as a joint-venture operation. Today the Bank is an integral part of Standard Chartered Group having an ownership of 75% in the company with 25% shares owned by the Nepalese public. The Bank enjoys the status of the largest international bank currently operating in Nepal.

Standard Chartered has a history of over 150 years in banking and operates in many of the world's fastest-growing markets with an extensive global network of over 1750 branches (including subsidiaries, associates and joint ventures) in over 70 countries in the Asia Pacific Region, South Asia, the Middle East, Africa, the United Kingdom and the Americas. As one of the world's most international banks, Standard Chartered employs almost 75,000 people,

representing over 115 nationalities, worldwide. This diversity lies at the heart of the Bank's values and supports the Bank's growth as the world increasingly becomes one market.

With 17 points of representation, 18 ATMs across the country and with more than 350 local staff, Standard Chartered Bank Nepal Ltd. is in a position to serve its customers through an extensive domestic network. In addition, the global network of Standard Chartered Group gives the Bank a unique opportunity to provide truly international banking services in Nepal.

Capital Structure of Standard Chartered Bank Nepal Ltd.

Foreign Institutions: 75%

General Public: 25%

1.2 FOCUS OF THE STUDY

A country's prosperity largely depends upon the economic activities of that country and the financial institutions play a vital role to smoothen the economic activities. In contest of Nepal, Commercial banks are the pioneer and market dominant in respect of trade of capital market and security instruments. In the light of this statement we can say that the successful operation of commercial banks is inevitable for the economic development of Nepal in present scenario but The current political scenario is instable and security has been the major issue of country which has compelled the lots of manufacturing company to close down there business. This is not good sign for banks because most of manufacturing concern utilize bank loan to finance their current assets as well as for their expansion project. If the situation persists the borrower would not be able to repay their loan and interest in time which

obviously decrease the profitability of banks and creates problem to de clear dividend. Recent example of Nepal Bangladesh Bank can be taken as an example. Nepal Rastra Bank has taken over the management of the bank and the bank has not been able to declare dividend since 2004.

Now day's commercial banks have a great challenge due to adverse situation of country in the one hand they have to make profit out of adverse economic situation and in the other hand they have to secure the return of investor by providing reasonable return every year. Therefore Dividend policy has been major financial decision, which affects the value of the firm. Every rational investor does not invest in stock without knowing the dividend policy of the firm. This study is mainly focused on the dividend behavior of nine commercial banks listed in NEPSE.

In Nepalese context, most of the investors are investing in the stock without the knowledge of company's performance and policies. This is due to the lack of availability of research about these banks' performances. In this study we have tried to find out the appropriate Dividend policy of these banks and their performances regarding the dividend payment. It is believed that this study will be useful to those investors who are interested to have knowledge about the performances of listed banks.

1.3   THE STATEMENT OF PROBLEM

The Dividend decision is a critical decision that affects the liquidity position, capital structure, growth, and value of the firm. It deals with how much to pay to shareholders from earnings.

Dividend payout reduces the amount of earnings retained in the business, which affects the internal financing of the firm. It is still confusing whether Dividend payment affects the value of the firm or not.

Different financial experts have introduces the Dividend payment models which present their view towards Dividend payment. Among them, MM model tells that Dividends are irrelevant to the value of the firm. It believes that earnings should be retained only for getting benefit from investment opportunities. If there is no investment opportunity, all the earnings should be distributed as dividend.

James Walter had propounded relevant theory of dividend. He proposed a model for share valuation. According to him, the Dividend policy of the firm affects the value of the shares. His model supports that Dividends are relevant. He argues that the choice of Dividend polices almost always affect the value of an Enterprise. The Investment policy of a firm can not be separated from its Dividend policy according to him both are interlinked which is just opposite to Modigliani and Miller approach. Walter's model shows clearly the importance of the relationship between the return on a firm's investment or its internal rate of return (r) and its cost of capital or the required rate of return (k) in determining the Dividend policy. As long as the internal rate greater than the cost of capital, the share price will be enhanced by retention and will vary inversely with dividend payment. In this way Walter's model's in also known as "Optimal Theory of Dividend".

Likewise other Financial Experts have their own view toward Dividend payment such as stable dividend policy, Constant payout ratio, Low regular plus extras. So, different experts view but none of these are completely satisfactory.

In Nepalese context, after the establishment of Nepal Stock Exchange Limited, had brought new atmosphere in the nation's capital market. But there still very slow growth in exchange of securities due to various factors like lack of Brokers, lack of knowledge about capital market among the investors etc. However the activities in capital market in recent years have taken momentum and symptoms of growth.

Different banks have adopted different policies and Dividends are paid in different forms such as cash dividend, stock dividend etc. Nowadays stock dividend is being more popular in Nepal especially in banking sector. But there is no rigid rule for Dividend payment because few Banks are generating profit and they are focusing toward reinvestment opportunities.

In the research it is tried to get the answer of the following questions:

i.   What are the prevailing dividend policies of the listed banks?

ii. What is the impact of dividend policy on share price of the stock?

iii. Are all listed commercial bank adopting same dividend policy?

iv. Is there any relationship between dividend per share (DPS), Earning Per share (EPS) and Market price per share (MPS)?

v.   Is there any consistency in DPS and DPR of listed banks?

1.4 OBJECTIVES OF THE STUDY

As sighted earlier the main threat to the commercial bank of Nepal is to earn sufficient profit to ensure the reasonable Dividend to their stockholders. Dividend decision is a managerial perspective and each firm adopts dividend policy as per their portfolio, stake holder's requirements and their expansion opportunity. This study has aimed to have deep insights about the dividend policy of nine listed commercial banks of Nepal. The main objectives of the study are as under:

a. To examine the dividend policies of listed banks.

b. To analyze the relationship between dividends per share (DPS), earning per share (EPS) and marker price per share (MPS).

c. To provide suggestions to the listed banks for the improvement of their dividend policies on the basis of findings.

1.5 SIGNIFICANCE OF THE STUDY

The main objective of the study is to examine the dividend policy of listed commercial banks and establish relationship between DPS, EPS and MPS. In context of Nepal investor are still compel to invest in with out any proper analysis of company due to lack of information and policies adopted by such companies .This study is significant to those rational investor who wants to invest their money as per their require trade off of risk and return likewise management of commercial banks can also analysis the dividend policy adopted by other banks and adopt the optimal policy in their company.

Actually Dividend policy is an effective way to attract new investors, retain present investors and to maintain goodwill and the desired controlling position of the firm. In Nepal, the earning capacity of people is very low as a result they can hardly save the money to invest in profitable sector. This research will help them to choose profitable bank, which will provide higher return on their investment. Actually the return of investment in share is dividend provided by the Commercial Banks. So, this study will help them to choose better bank for investment. This research will also be useful to management to point out the loopholes and suggest the remedies about the appropriate dividend policy and also for stockbrokers, financial agencies, policy makers and other interested person.

1.6 LIMITATIONS OF THE STUDY

The study focuses the sensitive part of the Bank which resultants the management a little bit hesitation to come up with open view regarding the Dividend policy and payment procedure. Therefore the study has been conducted on the basis of annual reports of selected banks, published and unpublished material, NRB publications.. Therefore the strength of findings will largely depends upon the correctness of input information. Since the study has been conducted by developing assuming about various factors it has following limitations

a. The analysis is limited only to the nine listed commercial banks of Nepal and real situation of other commercial banks may be different.

b. The analysis covers the time duration of only five years 2003 to 2007.

c. Only cash dividend is considered for analysis.

All Data are taken from Secondary source (website) depends on the accuracy of Information provided by the website used. The commercial banks need to maintain certain level of cash reserve ratio as per NRB directives. Since, NRB believes that maintaining this reserve fulfills the liquidity need of the banks and in fact banks do maintain this reserve, liquidity ratios are not calculated.

1.7 ORGANIATION OF THE STUDY

This study is been divided into five different chapters. The titles of these chapters are as follows.

Chapter One   - Introduction

Chapter Two   - Review of Literature

Chapter Three   - Research Methodology

Chapter Four   - Presentation and Analysis of Data

Chapter Five   - Summary, Conclusion and Recommendations.

Chapter One contains the introductory part of the study which includes the general background, statement of problems, objective of the study and significance of the study.

Chapter Two mainly focuses on the theories about Dividend policy, types of Dividend, types of Dividend policy, factors affecting Dividend policy and impacts of Dividend policy.

Chapter Three describes the Research methodology used to conduct the research. This chapter also contains the sample selection, Data collection procedure, the model of analysis, definition of financial variable and statistical tools and limitation of the methodology.

Chapter Four is the main part of the study which presents and analyzes data to find out the appropriate Dividend policy of the listed Banks.

Chapter Five includes the major findings and conclusion of the study. This chapter deals with the summery and conclusion of the study and gives recommendations for improvement in the Dividend behavior of the listed Banks.

CHAPTER -II

REVIEW OF LITERATURE

2.1 DIVIDEND DECISION

Dividend decision is not only important for the shareholders but also firm's internal growth. Dividends are desirable from shareholder's point of view as it helps to increase their current wealth. It is desirable from company's point of view, as it will help growth of the firm. The Dividend policy determines the amount of earnings to be distributed to shareholders and reinvested in the firm. There is a reciprocal relationship between retained earning and cash dividends. If retained earning is kept more by the company less will be dividend and vice versa. Dividend is a portion of earnings which is distributed to shareholders in return of their investment in share capital. Most Shareholders expect two forms of return from the purchases of common stock. These are capital gain and Dividends. Capital gain may be defined as the profit resulting from the sale of common stock. The shareholders expect an increase in the market value of common stock over time. The shareholders expect, at some point, a distribution of the firm's earnings in the form of a Dividend. From mature and stable firm, most investors expect regular dividends to be declared and paid on the common stock. Conceptually speaking, the difference between Dividend and Dividend policy is only of degree but not of kind itself. The Dividend policy affects the over-all financing decisions of the firm. "Dividend implies to the portion of earnings that is paid to the shareholders while dividend policy refers to the guidelines that management uses in establishing portion of retained earnings that is paid to the shareholders in the form of dividend" *(Mathur, 1979 :297).*

"Dividend refers to that portion of a firm's net earning which is paid out to the shareholders". *(Khan. and Jain, 1992: 543).*

Dividend is generally paid in cash. Therefore it reduces the cash balance of the company. Dividend policy affects the financial structure the flow of funds, corporate liquidity, and investors' attitudes. Thus, it is one of the central decision area related to policies seeking to maximize the value of firm's common stock.

"Dividend policy of the firm, thus, affects both the long term financing and the wealth of shareholders. As a result, the firm's decision to pay Dividends may be shaped by two possible view points." *(Pande, 1982: 296).*

If the firm increases the retained earnings, shareholder's dividend decreases and the market price of the share increased. Thus, dividend decision is always a matter of dispute.

2.1.1   OBJECTIVES / MOTIVES OF DIVIDEND DECLARATION

Firms enjoy the funds of others shareholders as investors want their funds to be utilized in productive sectors so that the returns from there will enough to compensate the shareholders. The shareholders like to have fair return on their investment. Dividend is one of widely used means of providing returns to shareholders. The firms declare and provide dividend for following motives:

Increase Market Price of Share

Dividend scheme followed by the firm greatly affects the market price of share. Stable Dividend policy have a positive impact on the market price of share shareholders will likely to pay a premium for a stock with a relatively assured minimum stable Dividend. The price of shares with stable Dividend is higher than that with fluctuating Dividend. No firms or shareholders would like to have lower share prices. Hence, one of the motives of providing Dividend is to maintain or increase the market value of shares.

To Provide Fair Return to Shareholders

Shareholders are the owner of the firms. The firms must compensate them in return for the use of their fund. The return paid by the firm is said to be fair, if it is higher than the return that could be earned if the investment were made anywhere else. This motive is also concerned with the market price of share. It is the shareholders who pay extra amount for shares and thereby increase the share price. If the firm is able to meet shareholders' expectation, the price of shares of such firm will never decline. Hence to provide fair return to shareholders must be one of the motives of providing Dividend.

To Be Competitive in the Market

There are various firms which are producing/providing similar products and/or services. Only those firms could sustain in the market which can compete other firms of similar nature. Similarly, the competition compels the firms to pay dividend to shareholders. Non-payment of dividend may have negative impact on share price and reputation of a firm, if its competitive

firms are providing dividend to their shareholders. Hence, the firms pay dividend to be competitive in the market.

In addition to the above three motives, the firms could have several reasons of providing dividend. The firm prefers to pay dividend if it has enough fund and no investment opportunities. The firms pay dividend to foster its reputation in the market.

2.1.2 DIVIDEND

Dividend is the periodic payment made to stockholders to compensate them for their wealth and investment funds. Dividends are pro rata distributions of retained earning to shareholders. They can be in the form of cash, stock or property. Generally, corporation can only declare Dividends out of earnings, although they might declare Dividends from sources other than earnings. In fact, Dividend is the portion of the net earnings, which is distributed to shareholders by a company. After successfully completing the business activities of a company, if its financial statements show the net profit, the Board of Directors (BOD) decides to declare Dividend to stockholders. Therefore, the payment of corporate Dividend is at the direction of the BOD.

The funds a firm can be use due to lack of investment opportunities should better be paid as Dividends. Viewed thus, Dividend is left over earnings prospective after exhausting all investment opportunities. So it is a case of financing decision, in which dividend payment may range from 0 to 100 percent depending of investment programs of corporate firms. Evidently, Dividend decision impacts on shareholders' wealth either through their current

income in the form of Dividend or though future capital gain from appreciation in market price of stocks. There may be effect on market value of stocks either paying Dividend or with holding the earnings for financing growth.

2.1.3 TYPES OF DIVIDENDS:

Corporate firm chooses to make the payment of Dividends in view of its objective, need and policies. Different Dividends the firm may choose to pay are briefly explained below:

Cash Dividend:

Cash dividend is proportion of earning paid in cash to the shareholders in proportion to their shareholdings. The cash account and the reserve account of a Company reduce thereby reducing the total assets and the net worth of the company. The market price of share drops in most case by the amount of cash dividend distributed. The firm has to maintain adequate balance of cash for the payment of cash dividend otherwise funds to be borrowed for this purpose may be difficult. Cash planning is useful for the company paying stable dividend.

Stock Dividend:

A stock dividend is a payment in the form of additional share of stock instead of cash. In other word it is the payment of dividend in the form of stock proportionate to their shareholdings. It is popularly known as bonus share. Payment of stock dividend increases the number of outstanding shares to the company.

Stock Split and Reverse Split:

Stock split is an accounting action to increase the number of shares outstanding. Reverse split decreases the number of shares outstanding. Both affect only the par value and the number of outstanding shares and change the capital structure of the company.

Property Dividend:

Property dividend, in extra ordinary circumstances, is paid other than cash such as corporate firm's own product or securities of subsidiaries.

Bond Dividend:

Company declares dividend in form of fits own bond with a vies to avoid cash out flows.

In general, the form of dividends popular in Nepal is cash and stock dividends.

2.1.4   DIVIDEND POLICY:

Dividend policy determines the division of earnings between payments to stockholders and reinvestment in the firm. Retain earnings are one of the most significant sources of fund for fund for financing corporate group, but Dividends constitute the cash flow accrue to stockholders.

The third major decision of the firm is its Dividend policy, the percentage of earnings it pays in cash to its stockholders. Dividend payout, of course, reduce the amount of earnings retain in the firm and affect the total amount of internal financing. The Dividend payout ratio

obviously depends on the way earnings are measured for ease of exposition, we use account net earnings but assume that these earnings can form true economic earnings. In practice, net earnings may not conform and may not be an appropriate measure of the ability of the firm to pay Dividends *(Van Horne, 2000: 305).*

Dividend Policy refers to the issue of how much of the total profit a firm should pay to its stockholders and how much to retain for investment so that the combined present and future benefits maximize the wealth of stockholders. The Dividend Policy however not only specifies the amount of dividend, but also form of Dividend Payment procedure etc.

In general, Dividend Policy is concerned with the following matters:

- Amount of Dividend to be paid - the Policy outlines the basis to determine the amount of Dividend to be paid.

- Form of Dividend - Cash Dividend / Stock Dividend

- Payment Procedure

- Stock repurchases and stock splits

2.1.5 TYPES OF DIVIDEND POLICY

The Dividend amount payment out of profit, both from past and present, is guided by Dividend Policy the firm follows. Generally, Dividend Policy can be categorized as conservative, liberal, moderate and progressive Dividend Policy. What ever the Dividend Policy followed by corporate firm, it is the concept that resolves the apparent conflict by finding optimal Dividend payout that balance the need of the shareholders for their current

income and expected future growth of the corporate firms so as to maximize the value of the firm. Within the framework of types of Dividend Policy mentioned above, the corporate firm may choose to follow any of the dividend policy mentioned below:

2.1.5.1 REGULAR AND STABLE DIVIDEND POLICY

Regular and stable Dividend Policy is mostly used by most of the corporate firms, is based on maintaining fix annual cash Dividend rate for several years in a row, increasing it only when future earnings look sufficiently strong and permanent to support a new higher level of Dividends. In essence, Dividends are flat for a while, they then move up in step fashion with the permanent increase in earnings. Irrespective of fluctuations in earnings ,Dividend per share remains relatively stable unless payout ratio drops below minimum of earning per share. The corporate firms that adopt regular and stable Dividend Policy regard the payment of Dividend is an important variable in the stock valuation process.

2.1.5.2 REGULAR PLUS EXTRA DIVIDEND POLICY

The policy refers to the combination of regular Dividend with the payment of additional Dividends whenever earnings are significantly high to warrant it. Under this policy, low level of Dividend rate is set first and then extra Dividend in the time of final announcement of annual Dividend. The policy is undertaken to give the shareholders the impression of corporate firms' intention of paying regular Dividends. Corporate firm pursuing this policy emphasizes on need to pay regular Dividends and at the same time need to retain earnings to meet long-term financial requirement.

2.1.5.3 FIXED PAYOUT POLICY:

Corporate firms following fixed payout policy establish fix percentage of profits that will be paid out each year as dividends. Dividend Payout Ratio (DPR) relatively remains constant and may increase with the increase in profit. Dividend per share fluctuates from year to year while it may lead to erratic market prices for the corporate firms' stocks.

2.1.5.4 EARNING BASED DIVIDEND POLICY:

Corporate firms following this policy pay dividend based on a constant payout ratio so long as level of earnings remain stable resulting constant dividend per share. Corporate firm's increased the payout ratio if earning increase is found permanent and thus increase the dividend per share. This policy is undertaken by the corporate firm with the objective of giving impression to the shareholders that they are paid more dividends as earnings increases.

2.1.6 FACTORS INFLUENCING DIVIDEND POLICY:

Other than allocation of current earnings, Dividend Policy of the corporate firm is also concerned with the legal provisions relation to payment of Dividends, liquidity, control, stability of Dividend payout, such as stock Dividends and stock splits, stock repurchase and administrative considerations (Horne Van James C, 2000 :P.494). In other words, dividend policy is affected by number of factors. The factors affecting the extent to pay out dividends instead of retaining earnings are briefly outlined below:

2.1.6.1 LEGAL RULE:

The legal rules provide the framework within which dividend policy can be formulated. Legal rules emphasize three rules *(Weston and Copeland, 1992: 659)*

a. **The net profit rule**:

    The net profit rule provides the payment of Dividend from past and present earnings only.

b. **The capital impairment rule**:

    This rule prohibits the payment of liquidating Dividend would mean distributing Dividend from investment rather than the earnings.

c. **The insolvency rule**:

    This rule prohibits the payment of Dividend while the firm in insolvent condition where liabilities are greater than assets.

2.1.6.2 LIQUIDITY POSITION:

As payment of Cash Dividends involves paying out cash, the liquidity position must be strong enough to pay the Dividend announced. If liquidity position is weak, the firm may not be able to pay Cash Dividend even if there is profit. In such situation, the firm may select not to pay Cash Dividend.

2.1.6.3 DEBT REPAYMENT AND RESTRICTION OF DEBT CONTRACT:

The Dividend Policy of the corporate firm using debt is also affected by decision to repay debt on or before maturity, generally require more retention of earnings lowering the Dividend rate. Some time long term debt contract may specify certain restrictions such as

payment as Dividend from profits only after signing debt contract and requiring maintaining to desired level of not working capital. These restrictions certainly affect Dividend Policy.

2.1.6.4 ASSETS EXPANSION THROUGH INTERNALLY GENERATED FUND:

Corporate firm's policy to finance assets expansion from retained earnings in order to reduce the financing cost necessarily lowers the Dividend payment and affects the Dividend Policy.

2.1.6.5 EARNING RATE AND ITS STABILITY:

Dividend Policy followed by corporate firm to a greater extent depends on rate of earnings and its stability in several years. Corporate firm, if earnings are high and stable, would likely to gradually increase the percentage of earnings for Dividend payment and at the same time retaining substantial amount of earnings for reinvestment within the firm.

2.1.6.6 ACCESS TO THE CAPITAL MARKET:

A large and well-established corporate firm with a record of continuous profitability for several years and stability in earnings has easy access to capital market and other sources of external financing. Such firm may follow moderate, progressive or liberal dividend policy. On the other hand, corporate firms with lower rate and fluctuating earnings may not enjoy such facility and thus has to stick on conservative Dividend Policy retaining more earnings to finance its operation.

2.1.6.7 CONTROL

Raising additional funds by hissing new stocks tend to dilute the control of dominant group of shareholders while raising debt increases risk. So as a matter of policy, if the corporate firms desire to maintain control and not to increase the risk, such firms have to expand only to the extent of their internal earnings that necessitates going for low Dividend payout.

2.1.6.8 TAXES ON EARNINGS:

Tax required to pay at higher rater on corporate earnings also is supposed to affect Dividend policy and lower the DPR as tax payment involves cash outflow leaving smaller amount of profit for Dividend payment by the firm.

2.1.6.9 CLIENTELE EFFECTS:

If corporate firm is closely held, majority of shareholders will be of higher tax bracket. Such corporate firm would like to retain more out of earning. But if corporate firm is widely held, majority of shareholders will be of small tax brackets. Then such corporate firm would like to consider paying more Dividends to their shareholders. It follows that Dividend Policy followed by the corporate firm also determine the types of shareholders which have the effect on Dividend Policy of the corporate firm, know as clientele effects on Dividend Policy.

2.1.7 IMPACTS OF DIVIDEND POLICY:

Dividend Policy followed by the corporate firm in terms of target payout ratio affects cash flows. With the increase in payout ratio, Dividend rises to cause major cash outflows in the form of Cash Dividends to the shareholders leaving fewer funds for reinvestment in the firm.

On the other hand, with the low payout ratio more funds will be available for reinvesting in the firm, to affect the growth of the firm.

Dividend Policy decision of a firm also impacts on the firm's financing decision by not distributing Dividend and increasing the retained earnings. Retained earnings are a source of internal financing. It is also true that as payment of Dividend affects cash flows of the firm, only the firm, which has adequate liquidity, can pay the Dividends to its owners. As such Dividend payment also has been looked as firm's strong liquidity. On the one hand distributing Dividend is a tangible evidence of the firm's ability to generate adequate liquidity.

Dividend decision is a critical decision thereby affecting its cash position, capital structure growth and value. When Dividend is paid it increases the value of common stock also. When a corporate firm adopts a policy of paying out more dividends, Dividend will increase and tend to increase the price of the stock. However, more Cash Dividend is paid, less money will be available for reinvestment as a result an expected growth rate will be lowered which will depress the price of the stock. Thus change in Dividend Policy has two opposing effects. If Dividend is increased it may affect favorably on the price and unfavorably on growth and expansion and vice versa. That is why Dividend Policy is only subject of financing policy because amount of earnings it retains will impact on its needs for externally raised capital. In financial literature the study of impacts of Dividend Policy still has occupied its importance as no such consistent results has been arrived yet. Besides, Dividend Policy decision has not been given importance compared to investment and financing decision in financial management practice.

2.2 LEGAL RULES REGARDING DIVIDEND:

Human is governed by natural rules and human works are governed by their rules and regulations. Companies are approved by constitutional provision of the country. Company's decisions are based on their rules and regulations. But in Nepalese context, companies do not have any rules and regulation regarding Dividend Policy. There are some provision regarding Dividend in the Company Ordinance, 2062 (2007). These provisions may be seen as under:

Section 2 (q) states that bonus share mean a share issued as an additional share to the shareholders by capitalizing saving earned from profit or reserve fund and also includes a circumstances where paid up value of the shares is increased by capitalizing the said surplus and reserve fund *("Companies Ordinance 2062",2007).*

Section 179 Bonus shares (1) may be issued by a company to its shareholders out of the amount available for the distribution of dividends after adopting a special resolution to this effect in the general meeting. Sub-section (2) the Company shall have to inform the office before issuing bonus shares under sub-section. (1)

Section 182: Dividend as follows.

1. Except in the following circumstances, the dividend shall be distributed to the shareholders within 45 days of the decision made to provide the Dividend:
   a. If any law prohibits the distribution of Dividend.
   b. If the right to receive Dividend is subject to any dispute.

c. If, without the fault on the part of the company, the Dividend cannot be distributed within the above- mentioned time-limit due to any god's act.

2. A company wholly or partly owned by His Majesty's government shall distribute Dividend only with prior approval of HMG and HMG may issue necessary directives in relation to distribution of such Dividend.

3. If Dividend is not paid stipulated is sub section (1) the same shall be paid together with the interest at the rate as prescribed.

4. The shareholders in whose name the share is registered in the shareholder registers the time of declaration of the dividend or his successor shall be entitled for the payment of the Dividend.

5. A company shall not pay or distribute Dividend except from profit allocated for the purpose.

A company shall eliminate pre-incorporation expenses, deduct the amount depreciation as per the accounting standard prescribed by competent authority under the law enforced and allocate any amount to be allocated or paid out of profit under the law enforced and eliminate the accumulated loss of the preceding years before the payment or distribution of Dividend out of the profit in a particular year.

Provided that a company which is required to transfer any amount out of the profit to certain reserve fund under the law in force, Dividend shall not be reserve fund.

In Company Act of India, there are some provisions regarding Dividends.

- Dividend should be paid only out of profit available after providing for depreciation as per rules and after transferring 10 percent or more of profits to reserve.

- Unpaid Dividend should be transferred to 'unpaid Dividend Account' with 7days of the expiry of 42 days of dividend declarations. If not, the company shall pay an interest of 12 percent per annum.

- Any unpaid Dividend declared before enforcement of this Act should also be transferred to the 'Unpaid Dividend Account' within six month from the commencement of this Act.

- Dividend remained unpaid or unclaimed for 3 years from the date of transfer to 'Unpaid Dividend Account' must be transferred to the general reserve account of the central Government. The claimants still apply to the government.

- On transfer of the unpaid dividend to the general account the company must also furnish a statement in the prescribed from setting forth the nature of sums, the names and addresses of the concerned persons the amount to which each is entitled and the nature of his claim there to.

2.3   REVIEW OF MAJOR STUDIES.

2.3.1 REVIEW OF MAJOR INTERNATIONAL STUDIES.

There are so many studies made by different persons and institution for Dividend Policy and stock price. There are two opinions regarding to Dividend payout and Market price of share.

The first point of views is Dividends are irrelevant and the amount of Dividend payment does not affect the market value of the share. The other is Dividends are relevant and the amount of Dividend paid affect the market price of the shares. Always a critical and confused question has arose, whether Dividend Policy affect the market value of the shares or not. To put light in these matter different studies made by different international scholars and researcher should be over viewed. This study draws heavily from these studies to carry it out.

Franco Modigliani and Merton Miller first propounded the major argument indicating that dividends are irrelevant in 1961. It is popularly known as M-M approach. It is sometimes termed as "Dividend Irrelevance Model".

Through an article "Dividend Policy, growth and valuation of shares they advocated that Dividend Policy does not affect the value of the firm i.e. dividend policy has no effect on the share price of the firm. The M-M approach focuses the irrelevant effect of dividend policy in the firm valuation arguing that, the value of the firm is determined only by its basis earnings power and its business risk, thus, the value of the firm depends on the income firm it assets and not on how this income is split between dividend and retain earnings.

The M - M approach of irrelevance Dividend based on the following critical assumptions.

- Perfect capital market in which all investors are rational. Information available to all at no cost, instantaneous transaction without costs, infinitely divisible securities and no investor large enough to affect the market price of the security.

- There is no transaction cost. The securities can be purchased and sold without payment any commission or brokerage etc.

- Taxes do not exist.

- A given investment policy for the firm, no subject to change.

- Perfect certainty by every investor as to future investment and profits of the firm (But M-M dropped this assumption later)

M-M had tried to prove their theory by different models. Of those some are explained below.

Market value / price of share

The market value of share at the beginning of the period is equal to the present value of dividend paid at the end of the period plus at the market price at the end of the period i.e.

$$\frac{D_1 + P_1}{1 + Ke} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (1)$$

Where,

P_o = Market price at the beginning (zero period)

D_1 = Dividend per share to be received at the end of the period

P_1 = Market price of the share at the end of period

K_e = Cost of equity capital (assumed constant)

No external financing

Assuming that the firm does not resort to any external financing, the market value of the firm can be computed as follows:

$$\frac{n (D_1 + P_1)}{1 + K_e}$$

Where,

n = Number of equity shares at zero period.

New shares

Assuming that the retain earning is not sufficient to finance the investment needs of the funds, in that case issuing new shares is the other alternative. Say (n) is the number of newly issued equity share at the price of (P_1).

$$Npo = \frac{nD_1 + (n + \Delta n) P1 - \Delta nP_1}{1 + Ke} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots(iii)$$

Where,

  n   = No. of equity shares at the end of the years.

n   = No. of shares at the beginning

Total number of shares

The issuing of new stock is determined by the amount of investment in period 1 not financed by retained earnings. The total numbers of new shares can be found out by the following way.

     $\Delta nP1 = I - (E - nD1)$

or $\Delta nP1 = I - E + nD1$ ………………………(vi)

Where,

  $\Delta nP1$ = The amount obtained from the sale of new shares to finance capital budget

I   = Total new investment requited

E   = Earning of the firm during the period.

nD_1 = Total dividend paid

$(E - nD_1)$ = Retained earning

Conclusion,

By substituting the value of nP1 from equation (IV) to the equation (III),

We find,

$$nP_o = \frac{nD_1 + (n+ n)P_1 - (1-E+nD_1)}{1+Ke}$$

or, $$nPo = \frac{nD_1 + (n+ n)P_1 - I + E - nD1}{1+Ke}$$

or, $$nPo = \frac{(n+ n)P_1 - I + E}{1+ Ke} \dots\dots\dots\dots\dots\dots\dots(v)$$

In such a way, M-M approach concludes its result, that there is no any role of dividend (D_1) in the above equation. So M-M conclude that dividend policy is irrelevant and Dividend Policy has no effect on the shares price.

Gordon M. (1962) in his study "The investment, Financing and Valuation of Corporation" (Homewood III, Richard Irwin, 1962) concluded that Dividend Policy of a firm affects its value. In this model, he pleaded that investors are not indifferent between current dividends and retention of earnings. The conclusion of this study is that investors value the present Dividend more than future capital gain. His argument insisted that an increase in Dividend payout ration leads to increase in the stock prices for the reason that investors consider the Dividend yield (D1 / Po) is less risky than the expect capital gain.

Hence, investors required rate of return increases as the amount of Dividend decreases. This means there is a positive relationship between the amount of Dividend and the stock prices.

Gordon's Model is based on the following assumptions:

- The firm is an all equity firm.

- No external financing is available

- Internal rate of return, (r) appropriate discount rate (k) are constant.

- The firm and its stream of earnings are perpetual.

- The corporate taxes do not exit.

- The retention ratio (b) ones decided upon is Constant. Thus, the growth rate $g = br$, is constant forever.

- The discount rate is grater than growth rate, $k > br = g$

Based on the above assumptions, Gordon provided the following formula (which is a simplified version of the original formula) to determine the market value of a share.

$$\frac{E\,(1-b)}{k - br}$$

Where,

P   = Price of share

E   = Earning per share

b   = Retention ratio or percentage of earning retained

l-b   = Dividend payment ratio i.e. percentage of earning distributed as dividend.

E (l-b) = Dividend per share

K   = Capitalization rate or cost of capital

br   = Growth rate in r, i.e., rate of return on investment of an all equity firm.

According to his model, the following facts are revealed.

1. r > k (Growth Firm)

In the case of growth firm, share price tends to decline in correspondence with increase in payout ratio or decreases in retention ratio, i.e. high Dividend corresponding to earnings leads to decrease in share prices. Therefore Dividends and stock prices are negatively correlated in growth firm.

2. r = k (Normal firm)

In the case of normal firm, share value remains constant regardless of changes in Dividend Policies. It means Dividend and stock prices are free from each other in normal firm.

3. r = k (declining firm)

In the case of declining firm, share price tend to rise in correspondence with rise in Dividend payout ratio. It means Dividend and stock prices are positively correlated with each other in a decline firm.

In conclusion:

- Investors give more value to the current Dividend than the future capital gain.

- Investors pose those views because they do not want to bear the future uncertainty rather then enjoying the current earnings (dividend)

- Payment of more Dividends increases the market value of the share (i.e. investors find more Dividend yield)

James E. Walter has propounded a model for share valuation. According to his journal of Finance published in March 1966 entitled "Dividend Policy and Common Stock Prices" the Dividend Policy of the firm affects the value of the shares. His model supports that dividends are relevant. He argues that the choice of dividend polices almost always affect the value of an enterprise. The investment policy of affirm can not be separated from its dividend policy; according to him both are interlinked which is just opposite to Modigliani and Miller approach. Walter's model shows clearly the importance of the relationship between the return on a firm's investment or its internal rate of return (r) and its cost of capital or the required rate of return (k) in determining the dividend policy. As long as the internal rate greater than the cost of capital, the share price will be enhanced by retention and will vary inversely with dividend payment. In this way Walter's model's in also known as "optimal theory of dividend". The basic assumptions of the Walter's model are as follows.

- The firm finances all investment through retained earning. The external sources if funds like debt or new equity capital are not used.
- Firm's internal rate of return (r) and cost of capital (k) are constant.
- All earnings are either distributed as dividend or reinvested internally.
- There is no change in value of earning per share (E) and dividend per share (D). The value of 'E' and 'D' remain constant, although there may be change in the model for determining the result.
- The firm has a perpetual or infinite life.

Based on above assumptions, formula determining to find the market price per share is as follows.

$$\frac{DPS}{k} + \frac{r\,(EPS - DPS)/K}{k}$$

or,

$$\frac{DPS + (r/k)\,(EPS - DPS)}{k}$$

Where,

       P   = Market price per share

     DPS   = Dividend per share

     EPS   = Earning per share

      r   = Firm's internal rate of return

      k   = Firm's cost of capital or capitalization rate.

Walter's model shows that there are three probable conditions of the firm for comparing the relationship between 'r' and 'k'

1. r > k (Growth Firm)

If the internal rate of return is greater than cost of capital, it is better to retain earnings. These are able to reinvest earnings at a rate ®, which is higher than the rate expected by shareholders (k). They will be maximizing the value per share, if they follow a policy of retaining all earning for internal investment. The market value per share increases by

decreasing the dividend in such a condition. The market value for share will be maximum at zero dividends.

2. r = k (Normal Firm)

If internal rate of return is equal to cost of capital to dividend payout does not affect the value of share. Such an enterprise can be called as a normal firm. Whether the earning are retained or distributed, it is a matter of indifference for a normal firm. The market price of share will remain constant for all dividend payout ration from zero to hundred. There is no optimum dividend policy for such firm. The market value per share is not affected by the payout ratio when r=k.

3. r < k= (Declining firm)

If internal rate of return (r) is less than cost of capital (k), it indicates that the shareholders can earn a higher return by investing elsewhere. In such case for maximizing the value of shares dividend also should be maximized. By distributing the entire earning as Dividend, the value of the shares will be at optimum value. The Dividend payout ratio would give on optimum Dividend Policy. The market value per share increases as payout ratio increases when r<k.

Conclusion:

- (r>k) = Dividends are negatively correlated with stock price.

- (r=k) = Dividend is indifferent to variation in the market price of the share.

-(r<k) = Dividends are positively correlated with stock price.

Horne V. and Donald Mc. Conducted a more comprehensive study on dividend policy and new equity financing. There Journal on finance namely "Dividend policy and new equity

financing" Vol. XXVI 26 published in 1971 has investigate the combined effect of dividend policy and new equity financing decision on the market value of the firm's common stocks. They are using a well-known valuation model, i.e. cross section regression model during the year end 1968 performed the empirical test. The required data were collected from 86 electric utility firms included on the COMPUSTAT utility data tape and firm in the electronics and electronic component industries as listed on the COMPUSTAT industrial data tape. They tested two regression models for the utilities industries.

First Model was, where,

Po/Eo $= ao + a_1 (g) + a_2 (Do/ Eo) + a_3 (Lev) + u1$

$PoEo$ $=$ Closing market price in 1968 divided by average EPS for 1967 and 1968

G $=$ Expected growth rate measured by the compound annual rate of growth in assets per share for1960 through 1968.

$Do/ Eo =$ Dividend payout, measured by cash dividend in 1968 dividend by earnings in 1968.

Lev $=$ Financial risk, measured by interest charges divided by the difference of operating revenues and operating expenses.

U $=$ Error term

Second Model Was

Po/Eo $= ao+a_1 (g) a_2 (Do/Eo) + a_3 (Lev) + a_4 (Fa) + a_5 (Fb) + a_6 (Fc) + a_7 (Fd) +u.$

Where, Fa, Fb, Fc and Fd are dummy variables corresponding to "New issue Ratio"(NIR) groups A through D.

It is noted that they had grouped the firms in five categories A, B, C, D and E by NIR. For each firm the value of Dummy variables representing its NIR group is one and the values of remaining dummy variables are zero.

Again, they tested the following regression equation for electronic components industry.

$Po/Eo = ao + a_1 (g) + a_2 (Do/Eo) + a_3 (Lev) + a_4 (OR) + u$

Where,

Lev = Financial-risk, measured by long-term debt plus preferred stock dividend by net worth as of the end of 1968.

OR = Operating risk, measured by the standard error for the regression of operating earnings per share on time for 1960 through 1968, and rest are as in First Model above. By using these models of methodology, they compared the result obtained for the firm, which both pay dividends and engage in new equity financing with other firms in an industry sample. They concluded that for electric utility firms in 1968, share value was not adversely affected by new equity financing in the presence of cash dividends, except for those in the highest new issue group and it made new equity a more costly form of financing than the retention of earnings. They also indicated that the payment of dividends through excessive equity financing reduces share prices. For electronics, electronic-components industry, a significant relationship between new equity financing and value was not demonstrated.

Regarding the behavioral aspects of dividend policy in the American contest of 28 companies in 1956. Linter made an important study. His study was related to partial adjustment model with respect to dividend patterns of American Companies. The author concluded that a major portion of dividend of a firm could be expressed in the following way.

DIV*t = pEPSt... (i)

And, DIVt-DIVt-1 = a+b(DIV*t-DIVt-1)+e1................................(ii)

or, DIVt = a+bDIV*t +(a+b)DIVt-1+e1...(iii)

Where,

DIV*t = Firms desired Payment

EPS = Earnings

P = Targeted pay-out ratio

A= constant relating to dividend growth

B = Adjustment factor relating to the previous periods dividend and desired level or dividend where b<1.

The major finding of this study where as follows:

- Firms generally think in terms of proportion of earning to be paid.
- Investment requirements are not considered for modifying the patterns of dividend behavior.
- Firms generally have target pay out ratios in view while determining change in dividend rate or dividend per share.

Friend and Puckeet's(1964) conducted a study on the relationship between dividend and stock price running regression analysis on the date of 110 firms from five industries in the year 1956 and 1958. These five inustries were chemicals, electric utilities, eletronics, food and steel. These industries were selected to permit a distinction made between the results for the growth and non growth industries and to prove a basic for comparison with results by author for earlier years. They also considered cyclical and non - cyclical industries. Which they covered. The study period covered a boom year. For the economy when stock price leveled off after risk (1956) and a somewhat depressed year for the economy when stock prices however rise strongly (1958).

They used Dividends , retained earnings and price earnings ratios as independent variables in their regression model of price function. They used supply function, i.e. dividend function also.In their Dividend function, earnings , last years dividends and price earnings are independent variables.They quoted that the Dividend supply function (equation) was developed by adding to the vast type of relationship develop by Linter.

Symbolically , their price function and Dividend supply function are ,

Price function : $p_t = a + bD_t + CR_t + dh(E/P)_{t-1}$

Where,

 Pt   = per share price at a time t

Dt   = Dividends at time t

Rt   = retained earning at time t

(E/P)t = legged earnings price ratio

Dividend Supply function $D_t = e + fE_t + gD_{t-1} + d(E/P)_{t-1}$

Where

Et   = Earnings Per Share at time t

D_{t-1} = Last year Dividend

Their study was based on the following assumptions:

)   Dividend does react to year to year fluctuation in earnings.

)   Price doesn't contain speculative in earnings.

)   Earnings fluctuation may not sum zero over the sample.

Their regression results based on the equation of $p_t = a+bD_t+CR_t$ shows the customary strong Dividend and relatively weak retained earnings effect in three of the five industries. i.e. chemicals, foods, and steels. Again they tested other regressions equation by adding lagged. Earning price ratio to above equation and resulted   the following equation $p_t = a_t+bD_t+CR_t+d(E/P)_{t-1}$. They found the following results . They found that more than 80% of the variation in the stock prices could be explained by three independent variables. dividend have a predominant influence on the stock prices in the same three out of five industries but they found the differences between the dividend and retained earnings coefficient are not quite so marked as in the first set of regression. They also found that the Dividends and retained earnings coefficient are closer to each other for all industries in both years except for steels in 1956, and the correlation are higher again expect for steels.

They also calculated Dividend supply equation, i.e. $D_t+fE_t+gD_{t-1}+h(E/P)_{t-1}$ and the derived price equation for four industries groups in 1958. In their derived price equation it seems that

there was no significant Changes from those obtained from the single equation approach as explained above. They argued that the stock price or more accurately the price earnings ratio doesn't seem to have a significant effect on dividend payout. On the other hand, they noted that the retained earnings effect is increased relatively in three of the four cases tested. further, they argued that their result suggest price effects on dividend supply are probably not a serious source of bias in customary derivation of dividend and retain earnings effect on stock price, through such a   bias mind be marked in the distribution effect on short run income movements are sufficiently great.

Further , They used lagged price as a variable instead of lagged earnings price retain and showed that more than 90% of variation and retain earnings received greater relative weight than dividend in the most of the cases. They only expectations were steels and food in 1958.They considered chemicals, eletronic and utilities, as growth industries, in these groups and retains earnings effect was longer than the dividend effect for both years covered. For other two industries , namely food and steel , there was no significant systematic differences between the retained earnings and dividend coefficient. Similarly , they tested the regression equation of $Pt = a+bDt+eRt$ by using normalized earning again. They obtain normalized retain earning by subtracting dividends from normalized earning. That normalized procedure was based on the period 1950-1961.Again they added the price year's normalized earnings price variable and they compared the results. Comparing the result , they found that there was significant role of normalized earning and retain earning but effect of normalized price earning ratio was constant. When examined the later equation, they found that the different between dividend and retain earning coefficient disappeared Finally they concluded that

management might be able to increase prices somewhat by rising dividends in foods, and steel industries.

They conducted more detailed examination of chemical samples. That examination disclosed that the results obtained largely reflected the undue regression weightily given the three firms with price deviating most from the average price in the sample of 20 firms and retains earnings as price determinate.

Finally, Friend and Puckett concluded that , it is possible that management might be able , at least in some measure , to increase stock prices in none growth industries by raising dividends and in growth industries by greater retention, i.e. low dividend.

2.3.2 REVIEW OF THESIS:

There are a few studies in Nepal which have looked into corporate dividend behavior. Some studies are made which are going to be reviewed here.

Dr Radheshyam Pradhan, (1992), had conducted a study on "market behavior of stock in Nepal" in his study he took the sample of 17 enterprises covering the years between1986 to 1990. The objectives of his study were to assess the stock market behavior in Nepal, to examine the relationship of market equity, market value to book value, price-earning, and dividend with liquidity, profitability, leverage, assets turnover, and interest coverage.

After his study he found that higher earning enables the organization higher dividend payments and higher dividend payments increases the Market price per share.

Gautam, R. R. (1996), had conducted a study entitled ""Dividend Policy in Commercial Banks" A Comparative Study of; NGBL, NIBL, and NABIL."He examined impact of dividend on share price and concluded that Average EPS of all concerned Banks is satisfactory whereas DPS is not satisfactory. Likewise none of the bank exhibits constant DPR and Correlation between DPS and EPS of all concerned bank is fairly positively. But it is fairly safe to say that the relationship is not significant.

His analysis of coefficient of correlation between current ration and DPS suggest that the relationship is positive in NIBL and NABIL where as it is negative in NGBL the interesting thing in his finding is that issue of bonus share has not significant impact on EPS, MPS and DPS

Sadakar Timilsena, (1997) had conducted a study entitled "Dividends and stock price an empirical study"; he used multiple regression models of three independent variables. Besides this he also tried to highlight the relationship between stock price and other independent variables separate simple linear regression equations. The sectors chosen for the study ware manufacturing and trading sector and banking & insurance sector. Mr.Timilsena chose 16 enterprises as sample and his study covers the data from 1990 to 1994 for analysis.

The main objectives of this study was to test the relationship between dividend per share and stock price, to determine the impact of dividend policy on stock prices and identify whether it is possible to increase the market value of the stock changing dividend policy or payment ratio.

After his study he found out that there is positive correlation between dividend per share and stock price of the sample companies and dividend affects the stock price. Likewise, dividend policy or dividend per share might help to increase the market price of the share because there is negative relationship between stock prices and lagged earning price ratio.

N. Adhikari, (1999), had conducted a research entitled "Corporate Dividend Practices in Nepal" The study had covered the period of 1990 to 1996 with the total observation of 47 firms in financial sector and 30 in non-financial sector. His main objectives of the study was to examine the relationship between dividend and stock price, analyses the properties of portfolio forms on dividends and to survey the opinion of financial executives on corporate dividend practices.

After research he found that Stock with large ratio of dividend per share to book value per share has higher liquidity, Stock with large ratio of dividend per share to book value per share has higher profitability. Likewise there is Positive relationship between the ratio of dividend per share to book value per share and turnover ratio.

There is positive relationship between the ratio of dividend per share to the book value per share and interest coverage ratio and There is positive relationship between dividend payout ratio and current ratio whereas the negative relationship between dividend payout and quick ratio likewise there is negative relationship between dividend payout and the earnings before tax to net worth and there is positive relationship between dividend payout and interest coverage ratio.

Dr. K.D. Manandhar, (2000), a research of had published in Management Dynamics entitled to "Preliminary test of Lagged structure of Dividend" Dr. Manandhar, had tried to test whether Nepalese Corporate firms consider the lagged earning and dividend paid to pay the dividend in current year. To carry out the test he had considered 17 corporate companies as samples and set different hypothesis.

After this study Dr. Manandhar found that there is significant relationship between change in dividend policy in terms of DPS and change in lagged earning and there is a positive relationship between change in lagged consecutive earning and DPS.

In addition to this there is relationship between distributed lagged profit and dividend when change in lagged consecutive earning is grater than zero, in 65% case, change in DPS and increase in EPS has resulted to the increase in dividend payment in 66.66% of the cases while decrease in EPS resulted decrease in dividend payment.

Likewise Nepalese corporate firms have followed the practice of maintaining constant dividend payment per share.

Y. B. Katawal, (2003), had conducted a research entitled "A Comparative study of Dividend Policy in Commercial Bank". The main objective of the study was to examine the impact of dividend on share prices and find out the relationship between DPS, EPS, DPR, PE ratio, Liquidity ratio and Profitability ratio on MVPS. In addition to this the study aimed to examine if there is any uniformity among DPS, EPS and DPR on six sample joint venture banks. Main conclusion of the study are Sample banks have got sufficient earning but some of the banks are paying high dividend and other are paying low dividend, DPS is not relatively more stable then DPR, MPS is attracted by dividend and also dividend policy is not clearly defined.

S. Kharel, (2007), a research of had published entitled to "Dividend Policy of Commercial Banks" She had tried to test the prevailing dividend practices of sample banks. There seems instability and inconsistency in dividend payment by the banks, every year EPS and MPS highly fluctuation. The CV of EPS has highly ranged. Similarly MPS are also fluctuating; Government has not clear policy towards dividend and to improve the efficiency of the companies.

S. B. Chand, (2007), had conducted a study entitled "Relevant theory of Dividend with reference to some listed commercial banks" His main objective of this study was critical analysis of some important theories representing the contradiction of relevancy of dividend theory, relationship between dividend and stock market price, factors affecting dividend

policy and provide information to the future researchers and also analyze the relevant theory of dividend with reference to some commercial banks.

S. Gautam, (2007), had conducted a study entitled to "Dividend policy and practices in commercial Banks" the main objectives of her study was to examine the dividend policy of listed bank and analyze the relation ship between EPS,DPS, PE Ratio, Earning Yield Dividend Yield and MPS and analyze the factor affecting dividend policy.

He concluded that market price of share is affected by the dividend policy therefore market price of high dividend paying company is higher than the other company likewise he also found that commercial banks has not clear.

2.4 THE INFORMATIONAL CONTENT OF DIVIDENDS

It has often been pointed out that a company that raises its dividends often experiences an increase in its stock price and that a company that lowers its dividends has a falling stock price. This seems to suggest that dividends do matter, in that they affect stock price. This causal relationship has been refuted by several researchers on the grounds that dividends per se do not affect stock prices; rather, it is the informational content of dividends that affects stock prices. Since management may have greater insight than the rest of the market as to the level of present and future earning power, they may use dividend payments as the medium through which their expectations are conveyed. (*R. Richardson Pettist, 1976 : 86*)

2.5 RESEARCH GAP

There are hundreds of researches related to banking sector a lot of study covers the dividend policy of commercial bank. Going through the research related to dividend policy of commercial banks I found that most of them are either studying the dividend policy of very few banks or say their sample size is very small or they covers the data related to few years back. Hence this study has been carried out to fill the gap by taking reference of almost half of commercial banks in Nepal and latest dividend policy of commercial banks. This research will be helpful to understand some aspects of dividend policy of commercial banks of Nepal and provides present scenario of dividend payments.

CHAPTER –III

RESERCH METHODOLOGY

Research methodology is a way to systematically solve the research problem. It refers to the various sequential steps to adopt by a researcher in studying the problem with certain objectives. It describes the method and process applied in the entire aspect of the study. In this chapter, the research design, data collection procedure and procedures concerning analysis of data are described thoroughly. Analysis is conducted by using appropriate financial and statistical tools and the findings are presented in a systematic way.

3.1 RESEARCH DESIGN

This research is based on secondary data. It is simply an analytical and descriptive research. It covers the five years data from 2003 to 2007. The collected data are analyzed by using financial as well as statistical tools such as profitability ratios, arithmetic mean, standard deviation etc.

3.2 POPULATION AND SAMPLE

Population refers to the entire group people, events or things of interest that a researcher wishes to investigate. As this study is about Dividend policy of commercial banks, all 26 commercial banks of Nepal are taken into account as population. Out of the total population i.e. 26 banks, following 9 commercial banks are selected as samples for this study by using judgmental sampling method. The selected sample banks are:

1) Bank of Katmandu

2) Everest Bank Limited

3) Himalayan Bank Limited

4) Nabil Bank Limited

5) Nepal Bangladesh Bank Limited

6) Nepal Investment Bank Limited

7) Nepal Industrial and Commercial Bank Limited

8) Nepal SBI Bank Limited

9) Nepal Standard Charted Bank Limited

3.3 DATA COLLECTION PROCEDURE

All the analysis is based on secondary data. The secondary data sources are the publications of Nepal Rastra Bank, annual reports of the respective banks, Trading Report published by Nepal Stock Exchange and Economic survey. Besides this related web sites of all listed banks and Nepal Stock Exchange are also used for data collection.

3.4 METHOD OF ANALYSIS

Specific financial and statistical tools are used in this research. The analysis of data is done according to pattern of data available. The calculated results are tabulated under different heading for ease of reading, and then they are compared with each other to interpret results.

The financial tools used are the ratios related to earning per share, dividend per share , return on equity, dividend yield, dividend payout ratio and the market price per share. The statistical

tools that are used are arithmetic mean, standard deviation, coefficient of correlation, coefficient of determination, regression equation, and trend analysis.

We have also analyzed the trends regarding earnings, dividends and market prices to forecast the earning, dividends and market prices for the next year, i.e. 2007 we have also compared cash dividend with the stock price and the profit to find the relationship among them.

3.5 DATA ANALYSIS TOOLS:

3.5.1 FINANCIAL TOOLS USED FOR ANALYSIS

To evaluate the financial position and performance of any firm ratio is used as a key tool of financial analysis. "Financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the items of the balance sheet and profit and loss account". Financial analysis is the use of financial statements to analyze a company's financial position and performance and to assess future financial performance.

1. Earning per share (EPS)

EPS is calculated to know the earning capacity and to make comparison between concerned banks. EPS is helpful to know the return on investment to the stock holders. Dividend decision largely depends upon the earning of the bank therefore analysis of EPS provides understanding about the possible dividend to the investor.

It is defined as the result received by dividing net profit after taxes by no. of common stock outstanding.

$$EPS \ X \frac{Net\ Profit\ after\ Taxes}{Number\ of\ common\ stock\ outstanding}$$

2. Dividend per share (DPS)

Dividend is the amount investor receives as a return on their investment therefore DPS has significant impact in market price of share. It is the part of earning distributed to the shareholders. DPS is the major determinant of the share price in the market .High DPS tends to increase the price of share and vice versa.

Analysis of DPS gives a deep understanding of dividend policy of bank and investor can chose their type of investment portfolio. As we know the dividend earning of investor needs to pay tax and every investor has their own tax bracket. Therefore analysis of DPS gives information of future cash flow to shareholder and they can choose the banks of their own interest to invest.

DPS is calculated by dividend with total number of share outstanding.

$$DPS \ X \frac{Total\ Dividend}{Number\ of\ common\ stock\ outstanding}$$

4. Return on Shareholder's Equity (ROE)

ROE tells us the earning power on shareholder's book investment. This ratio is frequently used to compare two or more companies as it considers the utilization of assets, profitability, and the equity multiplier associated with the use of debt.

$$\text{ROE X } \frac{\text{Net profit after tax}}{\text{Net worth (shareholder's equity)}}$$

5. Dividend Yield

Dividend yield shows the return of investor in relation to current market price of share Dividend yield. Since DPS is only the amount per share distributed to stockholders. It can not show the actual return of those shareholders, who has purchased the share from market in higher price than the book value. Therefore analysis of DY is important. It is the result obtained by dividing DPS by MVPS.

$$\text{Dividend Yield X } \frac{\text{Dividend per share}}{\text{Market value per share}}$$

6. Dividend Pay-out Ratio (DPR)

The percentage of the profit on share that is distributed as dividend is called dividend pay-out ratio (DPR).DPR indicates the dividend policy of the banks and it also informs the investment opportunities held with the company. High DPS indicated low growth rate and vice versa

It is the result obtained by dividing DPS by EPS.

$$\text{DPR X} \frac{\text{Dividend per share (DPS)}}{\text{Earning per share (EPS)}}$$

7. Market Price per Share (MPS)

It reflects per unit price of the share traded in the market. It is calculated by

$$\text{MPS X} \frac{\text{Market Price}}{\text{No. of Common Stock}}$$

3.5.2 Statistical Tools Used For Analysis

Statistical tools are the mathematical technique used to analysis and interpret of performance. It is used to describe the relationship between variables and interpret the result. Statistic is also used to test the hypothesis that is set to know the information of population.

 The research holds various statistical tools, which are defined as follows.

1. Mean (X)

The arithmetic mean or average is the sum of total values to the number of observations in the sample. It represents the entire data which lies almost between the two extremes. For this reason an average is frequently referred to as a measure of central tendency. In this study it is used in data related to dividend of sample banks over five years. It is calculated as:

$$\text{Mean X} \frac{\text{Sum of Total Values}}{\text{No. of values}}$$

2. Standard Deviation (S.D.)

The measurement of the scatter ness of the mass of figures in a series about an average is known as dispersion. S.D. is an absolute measurement of dispersion in which the drawbacks present in other measures of dispersion are removed. The high amount of dispersion reflects high standard deviation. The small standard deviation means the high degree of homogeneity of the observations. It is calculated for selected dependent and independent variable specified. It is the positive square root of mean squared deviation from the arithmetic mean and is denoted by

$$SD \; X \sqrt{\frac{(x \, Z \, \overline{x})^2}{n \, Z1}}$$

3. Coefficient of Variation (CV)

CV reflects the relation between standard deviation and mean. The relative measure of dispersion based on the standard deviation is known as coefficient of standard deviation. The coefficient of dispersion based on standard deviation multiplied by 100 is known as C.V. It is used for comparing variability of two distributions. If the X be the arithmetic mean and   the standard deviation of the distribution, then the C.V. is defined as,

C.V. = (SD/Mean) × 100%. Less the C.V. more will be the uniformity; consistency and more the C.V. less will be the uniformity and consistency.

4. Coefficient of Correlation (r)

Correlation Analysis is the statistical tools that we can use to describe the degree to which one variable is linearly related to another. Coefficient of Correlation is the measurement of the

degree of relationship between two casually related sets of figures whether positive or negative. Its value lies somewhere ranging between -1 to +1. If both variables are constantly changing in the similar direction, the value of coefficient will be +1 indicative of perfect positive correlation. When the value coefficient will be -1 two variables take place in opposite direction. The correlation is said to be perfect negative. In this study, simple coefficient of correlation is used to examine the relationship of different factors with dividend and other variables. The data regarding dividend over different years are tabulated and their relationship and their relationship with each other are drawn out. In practical life, the possibility of obtaining either perfect positive or perfect negative correlation is very remote.

$$r = \frac{n \ X_1 X_2 \ Z \ X_1 X_2}{\sqrt{n \ X_1^2 \ Zf \ X_1 \ \text{\AA}}\sqrt{n \ X_2^2 \ Zf \ X_2 \ \text{\AA}}}$$

5. Coefficient of Determination (r^2)

The coefficient of determination is the measure of the degree of linear association or correlation between two or more independent variables. It measures the percentage total variation in dependent variables explained by independent variables. If r^2 has a zero value then, it indicates that there is no correlation which means all the data points in scatter diagram fall exactly on the regression line. If it has the value equal to one then it indicates that there is perfect correlation and as such the regression line is the perfect estimator. But in most of the cases the value of r^2 will lie somewhere between these two extremes of 1 and 0. One should remember that r^2 close to one indicates a strong correlation between two variables and r^2 near to zero means there is little correlation.

6. Regression Analysis

Regression analysis is the development of the statistical model that can be used to predict the values of the dependent variable based upon the values of at least one independent variable.

The simple linear regression analysis would be

$Y = bo + b_1X_1$

Where,

Y is the dependent variable

X is the independent variable

Yi is the predicted value for observation I and X_1 is the value of X for observation I.

bo is the average value of Y when X equals zero.

b1 is the expected change in Y per unit change in X

7. Probable Error

The Probable Error (PE) of correlation coefficient is an old measure of testing of reliability of an observed correlation coefficient .The Probable Error of the correlation coefficient is the basis for the interpretation of its value.It is Calculated By

$$PE = 0.6745 \times \frac{1 Z r^2}{\sqrt{n}}$$

Where,

r = The Value of correlation coefficient

n = no of pairs of observation

PE is used in interpretation whether the calculated value of r is significant or not.

) If r<PE than it is insignificant or there is no evidence of correlation.

) If r >6PE than, it is significant.

) If PE<r<6PE than, nothing can be concluded.

8. Trend Analysis

The Arrangement of Statistical data chronologically (According to occurrence of time) is known as time series and the statistical analysis of these chronological variation is termed as Trend Analysis. It helps to know the past behavior of data in certain span of time interval. On the basis of these past trends, one can make plan in forthcoming days.

This Least square method is the most popular and widely used mathematical method of measuring trend. This is frequently used for future prediction. There are various types of curves that may be used to describe the given data but in this text, an attempt has been made to discuss only the fitting of linear trend by the least square method.

Let, the equation of Trend Analysis would be,

$$Y = a + bx$$

Where,

Y = the given value of the variable in time series. It is a dependent variable.

a = Intercept of trend line or y-intercept.

b = Slope of Trend Line.

x= Time Varible

CHAPTER – IV

PRESENTION AND ANALYSIS OF DATA

The purpose of this chapter is to carry out secondary data analysis. In this chapter, the relevant data and information regarding dividend policy of commercial banks are presented and analyzed comparatively. The chapter begins with the descriptive analysis of earnings per share, dividend per share, Market price per share, dividend yield, and price earning ratio analysis of the sample banks is done first and then explanatory and hypothetical analysis is followed. The financial as well as statistical tools are used for the comparison of the financial indicators. At the end of this chapter correlation and regression analysis of the sample firm is done and data are presented in a systematic tabulated form.

4.1 Dividend Policy of the Sample Banks

All the listed Banks in NEPSE are adopting somewhat similar dividend policy. Most of the banks are following Earning Based Dividend policy. Under this policy the banks distribute the dividend on the basis of their Earnings. This policy is adopted to give an impression to the shareholders of the banks.

Sample Banks	Dividend Policy
BOK	Earning based Policy
EBL	Regular and Stable Policy
HBL	Regular and Stable Policy
NABIL	Regular and Stable Policy
NBBL	Earning based Policy
NIB	Earning based Policy
NIC	Earning based Policy
SBI	Earning based Policy
SCBNL	Regular and Stable Policy

4.2. ANALYSIS OF DPS:

Dividend per share (DPS) is that amount, which is paid to common shareholders on a per share basis. DPS shows that what exactly do the ordinary shareholders receive. It is calculated by dividing the dividend to equity shareholders by the total number of equity shares.

Table 4.1

Analysis of DPS of Nine Listed Banks

NAME	2003	2004	2005	2006	2007	AVERAGE	SD	CV
BOK	-	10.00	5.00	10.00	15.00	8.00	5.70	71.26
EBL	-	-	20.00	20.00	25.00	13.00	12.04	92.63
HBL	27.50	25.00	1.31	-	11.25	13.01	12.87	98.94
NABIL	40.00	30.00	50.00	65.00	70.00	51.00	16.73	32.81
NBBL	5.04	-	-	-	-	1.01	2.25	223.61
NIB	-	-	20.00	15.00	12.50	9.50	9.08	95.61
NIC	10.00	-	-	-	10.00	4.00	5.48	136.93
SBI	-	-	8.00	-	-	1.60	3.58	223.61
SCBNL	100.00	100.00	110.00	110.00	130.00	110.00	12.25	11.13
Average	20.28	18.33	23.81	24.44	30.42			

Source: Annual Reports of the Respective Banks

The table 4.1 shows the dividend per share of nine listed commercial banks from the year 2003 to 2007. It is clear to see that average DPS of SCBNL is the highest Rs.110 dividend per share where as NBBL has the lowest of average dividend per share of 1.01. BOK has a moderate dividend per share of Rs.8 in average it has SD of 5.70% which shows that there is a chance to decrease in dividend payment by 5.70%.

In the year 2003 and 2004 EBL has not paid any dividend but in the year 2005 till 2007 its dividend is increasing. It has average DPS Rs.13 and SD of 12.04 and CV 92.62%. Which indicate 92.62% chance of fluctuation in DPS. HBL has Rs.13.01 of average DPS. Its SD is 12.87 and it can be fluctuated by 98.94%. In 2003 till 2006 it has decreasing trend. In year 2004 it's DPS is Rs. 25 but in 2005 its DPS suddenly decreased to Rs.1.31 than after 0 and in 2007 it increased to Rs.11.25.

NABIL bank has second highest position in average DPS Rs.51. In 2003 it has Rs.40 DPS than after in 2004 it dropped to Rs.30 from 2005 to 2007 DPS of NABIL has increasing trend. SD is 16.73 and CV is 32.8%. It's Co-efficient of variation shows that there is 32.8% fluctuation on DPS

NBBL is in last position among other bank. It has Rs.5.04 of DPS in year 2003 till 2007 it has 0 DPS. The average DPS is Rs.1.008 and SD is 2.53 and CV is 223.60% which show that DPS may dropped to zero too.

NIB has average DPS of Rs.9.5. it has 9.08 of SD and CV is 95.61%.The fluctuation on DPS is 95.61%. In 2003 & 2004 it has 0 DPS than 2005, 2006; and 2007 it has Rs. 20, Rs.15 and Rs. 12.5 respectively.

The average DPS of NIC is Rs.4. Its SD is 5.47 and CV is 136.93%. It shows high fluctuation on DPS of NIC. It has Rs.10 in 2003, 2004, 2005 and 2006 it has 0 DPS. In 2007 it has Rs.10 DPS.

SBI has also low average DPS it has Rs.1.6 average DPS from the year 2003-2007. In 2005 it has Rs.8 DPS otherwise 2003, 2004 and SBI has also low average DPS it has Rs. 1.6 average DPS from the year 2003-2007. In 2005 it has Rs.8 DPS otherwise 2003, 2004, 2006 and 2007. it has no DPS. Its SD is Rs. 3.57.

The average DPS of SCBLN is Rs.110; which is the highest DPS among nine listed bank. In 2003 and 2004 it has same DPS of Rs.100 in 2005 and 2006 it has same DPS of Rs.100. In 2005 and 2006 it has same DPS of Rs.110 and In2007 it increased to Rs.130. its SD is 12.24 and CV is 11.13. Which indicate 11.13% fluctuation on DPS.

From the table we can see that in the five years SCBNL have the highest amount of dividend paid per share while NBBL have paid the least amount .NABIL bank has continuously paid the dividend in the five year period while in the case of other banks, we can see that there is an irregularly in paying up the dividends. In the five year interval the highest dividend paid in year 2007 in which all the banks on aggregate paid a dividend of 30.41%.

4.3 MARKET PRICE PER SHARE (MPS)

Market price of share is that value of stock, which can be received by firm or equity holders selling it in capital market. The capital market determines MPS. In this analysis MPS is calculated by taking the average of the highest and the lowest market price of NEPSE Index. The market price per share depicts the perception of the market relating to the performance of a company. MPS is the current price at which the stock is traded.

Table 4.2

Analysis of MPS of Nine Listed Banks.

NAME	2003	2004	2005	2006	2007	Average	SD	CV
BOK	1,270.00	537.50	247.50	242.50	430.00	545.50	423.95	77.72
EBL	1,260.00	532.50	419.50	561.50	870.00	728.70	340.70	46.75
HBL	2,025.50	1,070.50	850.00	805.00	920.00	1,134.20	508.31	44.82
NABIL	1,805.50	982.50	787.50	855.00	1,505.00	1,187.10	445.90	37.56
NBBL	2,190.00	770.00	438.00	385.50	354.00	827.50	779.58	94.21
NIB	1,905.00	862.50	762.50	843.50	930.00	1,093.38	542.82	49.65
NIC	596.50	307.00	227.50	189.00	366.00	337.20	160.45	47.58
SBI	1,924.50	950.00	332.50	269.00	335.00	762.20	706.51	92.69
SCBNL	2,485.50	1,550.00	1,570.00	1,660.00	3,775.00	2,208.10	958.23	43.40
Average	1,718.06	840.28	626.11	645.67	1,069.38			

Source: Annual Reports of the Respective Banks

The table 4.2 shows the market price of nine listed commercial banks for the period of 2003 to 2007. The table shows that SCBNL has highest average MPS and NIC has lowest one. Reviewing the SD and CV NABIL bank has least variability in MPS. BOK falls in second last position in respect of average MPS which is Rs. 545.5.Where as it has high SD and CV which shows the high risk of fluctuation in MPS.

EBL falls in third last position in respect of average MPS i.e. Rs. 728.7. Its SD is Rs.340.69 and CV is 46.75%. The CV of the bank indicates that there is 46.75% chances of fluctuation in MPS.

The average MPS of HBL is Rs. 1,134.2 which is in third position. Its SD is 508.30 and its CV is 44.8% which indicates there is chance of 44.8% fluctuation on MPS from its average market price per share.

NABIL bank is in second highest position which has average MPS of Rs.1, 187. Its SD is Rs.445.90 and its CV is 37.56%. Which indicate 37.56% fluctuation on MPS. From the year 2003 till 2005 MPS of SCBNL is decreasing trend and after 2006 till 2007 it is in increasing trend.

The average MPS of NBBL is Rs. 827.5. Its SD is 779.58 and CV is 94.20% it has the highest fluctuation in MPS among other nine banks. In the year 2003 its MPS is Rs. 2,190 and next year its MPS suddenly dropped down on Rs. 770 after that it has decreasing trend.

NIB has average MPS is Rs. 1,093.37 which is on fourth position. Its SD is Rs. 542.81 and CV is 49.64%. In 2003 to 2005 it is also decreasing trend in its MPS but in 2006 its MPS is slightly high.

NIC bank is second last position which has average MPS of Rs. 337.2. Its SD is Rs.160.44 and CV is 47.58% which indicate 47.58% of fluctuation in MPS. The average MPS of SBI bank is Rs. 762.2. Its SD is 706.50 and C.V. is 92% which indicate second highest CV among other bank. It indicates SBI bank's MPS is high fluctuating. In the year 2003 its MPS is 1,924.5 and suddenly fall down to Rs. 950 in year 2004. Than after it has decreasing trend till 2006 and it slightly increased in 2007.

SCBNL has the highest average MPS among the listed bank. Which is Rs. 2,208.1? Its SD is Rs. 958.22 and CV is 43.39%. By looking at the 4.1 table we can see the market price of SCBNL on an average is best of all the banks being considered. Apart from SCBNL, NABIL

and HBL are also performing well in the market. It shows that these banks are able to fulfill market expectations.

In addition, looking at the variations of the market prices the deviations in market price of these banks are the least of all.

 4.4. ANALYSIS OF EPS

Earning per share (EPS) is one of the most important financial indicators, which measure the earning capacity of a firm. It measures the profit available to the ordinary shareholders on a per share basis. EPS is calculated by dividing net income available to the common stockholders by the total number of common shares outstanding.

Table 4.3

Analysis of EPS of Nine Listed Banks.

NAME	2003	2004	2005	2006	2007	AVERAGE	SD	CV
BOK	27.97	2.00	17.73	27.50	30.10	21.06	11.68	55.44
EBL	31.56	32.91	29.90	45.58	54.22	38.83	10.61	27.31
HBL	93.56	60.26	49.45	49.05	47.91	60.05	19.39	32.29
NABIL	59.26	55.25	84.66	92.61	105.49	79.45	21.63	27.23
NBBL	83.45	18.41	19.87	0.74	0.73	24.64	34.14	138.57
NIB	33.17	33.59	39.56	51.70	39.50	39.50	7.48	18.94
NIC	9.66	1.36	5.19	13.66	22.75	10.52	8.25	78.43
SBI	8.69	9.61	11.47	14.26	13.29	11.46	2.36	20.59
SCBNL	126.88	141.13	149.30	143.55	143.14	140.80	8.35	5.93
Average	52.69	39.39	45.24	48.74	50.79			

Source: Annual Reports of the Respective Banks

The table 4.3 shows the earning per share of the nine listed banks from the year 2003 to 2007. From the above table it is clear that SCBNL has the highest EPS of Rs. 140.8 where as NIC has the lowest EPS of Rs. 10.52 only.

BOK has average EPS of Rs. 21.06 and its SD is 11.67 and CV is 55.44%. This indicates 55.44% fluctuation in EPS. BOK has high variability in EPS ranging from Rs.2 in 2004 to Rs.30.1 in year 2007.

The average EPS of EBL is Rs.38.83. its SD is 10.60 and CV is 27.31%. EPS of EBL is in growing trend but in 2005 it decreased to Rs.29.9 than after 2006 till 2007 it is increasing.

The average EPS of HBL is Rs.60.04 which is in 3rd position. Its SD is 19.38 and the coefficient of variation is 32.28%. CV indicates the fluctuation in EPS is 32.28%. EPS of HBL has decreasing trend from the year 2003 to 2007.

Average EPS of NABIL bank is in second highest position. Its SD is 21.63 and CV is 27.22% which shows the fluctuation of EPS is 27.22%. In the year 2003 NABIL has 59.26 EPS but it decreased to Rs.55.25 in 2004. After 2005 till 2007 it has increasing trend.

NBBL has average EPS is Rs.24.64. SD is Rs.34.14 and it has highest CV among other banks which is 138.56%. It indicates 138.56% fluctuation in EPS. Which indicate high risk. In 2003 EPS is Rs.83.45. But in 2004 it suddenly dropped down to Rs.18.41.it is Rs.19.87, Rs.0.74 and Rs.0.73 in the year 2005, 2006 and 2007 respectively.

NIB has average EPS is Rs.39.50. Its SD is 7.48 and its CV is 18.93%. It indicates 18.97% fluctuation in EPS. From year 2003 to 2006 EPS of NIB has growing trend but in 2007 EPS it has decreased.

EPS of NIC is in last position among other banks. It has average EPS of Rs.10.52. SD is 8.25 and CV is second highest position i.e. 78.42%. This indicates high risk and fluctuation of EPS.

The average EPS of SBI is Rs.11.46. its SD is 2.36 and CV is 20.58% which indicates that there is 20.58% fluctuation in EPS of the bank. From the year 2003 to 2006 it's EPS is in growing trend but in 2007 it has decreased to 11.46. SCBNL is highest position among other banks. Its average EPS is Rs140.8. its SD is Rs.8.35 and CV is 5.93%/ Which indicate 5.93% fluctuation on EPS of this Bank. It's CV also lower position among other banks. This indicates low risk. SCBNL EPS has growing trend in 2003 to 2005 but in 2006 and 2007 it has slightly decrease.

The data related to the year 2004 shows that EPS of EBL, NIB, SBI. And SCBNL have increased than the previous years. But there is a remarkable decrease in EPS of BOK, HBL, NBBL, NIC. But in year 2005, EPS of all the banks except EBL has increase. But in the year 2006, EPS of BOK, EBL, NABIL, NIB, NIC, SBI has increased while EPS of all other banks have decreased. Finally in the year 2007 EPS of BOK, EBL, NABIL and NIC have increased while EPS of other banks have decreased.

With out considering the rate of fluctuation the analysis of EPS cannot be completed for this we can observe the co-efficient of variation (CV). It can be observed that the CV of the banks ranges from 5.93% to 138.56%.This implies that there is high fluctuation in the EPS of there banks which demonstrates the performance is not consistent and satisfactory.

Conclusion

The profitability of a company affects the market price of the stock and the ability of the company to pay dividends. The profitability ratios indicate how well management is using the resources as its disposal to earn a return on the funds invested by shareholders and various other groups.

EPS is one of the measures of profitability of a firm. It measures the profit available to the ordinary shareholders on a per share basis. Analyzing the EPS of all the nine listed commercial banks we found that SCBNL has the highest EPS of all banks in all the five years looking at the average EPS, it is the SCBNL which has the highest EPS of all the banks in all the five years.. The average EPS of SBI being the second lowest among these banks indicates that this bank is also not performing well.

4.5. ANALYSIS OF DIVIDEND PAYOUT RATIO

Dividend payout ratio (DPR) indicates the percentage of actual earnings of the bank received by the ordinary shareholders. It is calculated by dividing the dividend per share to ordinary shareholders by the earning per share (EPS).

Table 4.4:

Analysis of DPR of Nine Listed Banks

NAME	2003	2004	2005	2006	2007	AVERAGE	SD	CV
BOK	-	499.57	28.22	36.37	49.83	122.80	211.41	172.16
EBL	-	-	66.90	43.88	46.11	31.38	30.02	95.67
HBL	29.39	41.49	2.66	-	23.48	19.40	17.76	91.50
NABIL	67.49	54.30	59.06	70.19	66.36	63.48	6.58	10.37
NBBL	6.04	-	-	-	-	1.21	2.70	223.61
NIB	-	-	50.56	29.01	31.65	22.24	21.94	98.64
NIC	103.48	-	-	-	43.96	29.49	45.53	154.41
SBI	-	-	69.76	-	-	13.95	31.20	223.61
SCBNL	78.81	70.86	73.68	76.63	90.82	78.16	7.69	9.84
Average	31.69	74.02	38.98	28.45	39.13			

Source: Annual Reports of the Respective Banks

The table 4.4 shows the dividend pay-out ratio (DPR) of nine listed commercial bank. From the above table it is clear that BOK has the highest average DPR of 122.80 where as NBBL has the lowest average DPR of 1.20. BOK has a wide rang of fluctuation in DPR. In 2003 It has not paid any dividend where as in 2004.It has the highest DPR of almost 500% after 2004. It's DPR has decreased making around 50% in 2007. BOK has 172.16% CV , which shows inconsistency in dividend payment.

EBL has more or less constant PE ratio of averaging 31.40% as 66% CV shows EBL has inconsistency in DPS. It may be due to non payment of dividend during 2003 and 2004. HBL

has average DPR of 19.40% which is in third position in the group. It has highest DPS of 41.49% in 2004 and rest of the period it has paid below 30% of its earning. It has a Policy to retain its profit for future growth 91.50% of CV indicates fluctuation in DPR of HBL.

NABIL has the third highest average DPR among the banks. It has a policy to pay more than 50% of earning its earning as dividend which shows moderate growth opportunity. 10.37% CV indicates less risk of getting fewer dividends from past years which shows safety to investor from earning side.

NBBL has the lowest PE ratio of 1.21%. It has paid dividend to It's shareholder only in 2003. After this it has not paid any dividend .223.6% CV show it has great chance not to pay dividend in coming year too which indicates risk to investor. NIB has moderate 22.24% DPR. During 2003 to 2004 it has not paid any dividend but after it has paid 50.56% of it's earning as dividend and than 29.1 and 31.64 in year 2006 and 2007 respectively. 98.63% of CV indicates high risk in dividend payments. But that may be due to zero dividends in early two years. Seeing dividend payout ratio of past three years there is positive indication to share holder.

NIC has fluctuation trend in its DPR Starting from 103.48 DPR in year 2003 it fails to pay any dividend in subsequent three years. After that it has paid dividend only in year 2007. 154.41% of CV indicates probability of non receipt of dividend in coming years SBI has also fluctuation trend in it's dividend payment. It has paid dividend only in year 2005 it has the highest variation of 223.61% which indicates high risk to investor.

SCBNL has higher average DPR of 78.16%. It has paid dividends in each year and all DPR is 2/3 of its earning. High DPR in one hand indicate less future growth and in the other hand it provides positive indications to market.

4.6 DIVIDEND YIELD (DY)

DY for a stock relates the annual dividend to share price. Typically, companies with good growth potential retain a high proportion of earnings and have a low dividend yield, whereas companies in more mature industries pay out high portion of their earnings and have a relatively high dividend yield.

Table 4.5

Analysis of DY of Nine Listed Banks

NAME	2003	2004	2005	2006	2007	Average
BOK	-	1.86	2.02	4.12	3.49	2.30
EBL	-	-	4.77	3.56	2.87	2.24
HBL	1.36	2.34	0.15	-	1.22	1.01
NABIL	2.22	3.05	6.35	7.60	4.65	4.77
NBBL	0.23	-	-	-	-	0.05
NIB	-	-	2.62	1.78	-	1.10
NIC	1.68	-	-	-	2.73	0.88
SBI	-	-	2.41	-	-	0.48
SCBNL	4.02	6.45	7.01	6.63	3.44	5.51

Source: Annual Reports of the Respective Banks

The table 4.5 shows the dividend yield of listed commercial banks for the period of five year starting from 2003 to 2007.From the above table it is clear that SCBNL has the highest average dividend yield and NBBL has the lowest one. Table shows that BOK has increasing trend in its DY it started from zero in year 2003 and continuously increased till 2006 reaching 4.12 than after it decreased to 3.49 in 2007.

EBL has decreasing trend in its dividend yield. It started from zero in year 2003 and remained same in next year too than after it has dividend yield of 4.77 in year 2005 after that it continuously decreased reaching 2.87 in year 2007.

 HBL has fluctuating trend in DY it started from 1.36 in year 2003 and increased to 2.34 in 2004 than after is again decreased to 0.15 in 2005.In 2006 it has not paid any dividend and in 2007 it has a DY of 1.22. Nabil has the second highest DY of 4.77.It has increasing trend in DY it started from 2.22 in 2003 and increased to 4.65 in 2007 which shows high dividend paid to stockholders.

NBBL has the lowest dividend yield among all other banks. It has paid dividend only in 2003 and after that it has not paid any dividend which indicated low return to investor. NIB has also low dividend yield in relation to other banks it has paid dividend only in 2005 and 2006 which generates the DY of 2.62 and 1.78 respectively. Lower dividend yield of NIBL shows the less return received by the investor of NIBL in relation to share price.

NIC and SBI arte also not in better position in respect of DY. NIC has paid dividend only in year 2003 and 2007 and SBI has paid dividend only in year 2005 which shows inconsistency in yield to investor which indicates high risk to investor. SCBNL has the highest average yield among the bank studied. It started from 4.02 in year 2003 and made highest average DY of 5.51.High DY of SCBNL indicates that the investor of SCBNL are getting better return.

4.7 CORRELATION ANALYSIS

The correlation coefficient shows the relationship between two variables. Its value ranges from -1 for perfect negative correlation up to +1 for perfect positive correlation. To find out the relationship between DPS and MPS and DPS and EPS, We have computed correlation between these two set of variables.

4.7.1 CORRELATION BETWEEN DPS AND MPS

The correlation between DPS and MPS is illustrated in the table below.

Table: 4.6

Correlation Coefficient Between DPS and MPS

Name	Correlation	Relation
BOK	(0.6550)	High degree of Negative relation
EBL	(0.3654)	Moderate degree of Negative relation
HBL	0.7693	High degree of Positive relation
NABIL	(0.0240)	Low degree of Negative relation
NBBL	0.9770	High degree of Positive relation
NIB	(0.6175)	High degree of Negative relation
NIC	0.8196	High degree of Positive relation
SBI	(0.3400)	Moderate degree of Negative relation
SCBNL	0.7487	High degree of Positive relation

Source: Annex II

By analyzing the correlation coefficient between DPS and MPS, we find that DPS and MPS of HBL, NBBL, NIC and SCBNL are positively correlated   which indicates a change in dividend payment resultants change in market price of share. DPS and MPS of rest of the

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banks are negatively correlated which indicated the dividend decision negatively effects the market price of share. Among these banks, the DPS and MPS of SBI and SCBNL are highly correlated. And, there is not much correlation between DPS and MPS of NABIL.

4.7.2 CORRELATION BETWEEN DPS AND EPS

Correlation between DPS and EPS is illustrated in the table below.

Table 4.7

Correlation Coefficient Between DPS and EPS

Name	Correlation	Relationship
BOK	(0.0272)	Low degree of Negative relation
EBL	0.6672	High degree of Positive relation
HBL	0.7778	High degree of Positive relation
NABIL	0.9698	High degree of Positive relation
NBBL	0.9629	High degree of Positive relation
NIB	0.6770	High degree of Positive relation
NIC	0.6283	High degree of Positive relation
SBI	0.0014	Low degree of Positive relation
SCBNL	0.4464	Low degree of Positive relation

(Details in Appendix II)

By analyzing the correlation coefficient between DPS and EPS, we find that DPS and EPS of BOK, is negatively correlated which indicates earning do not impact the dividend decision of these bank where as and DPS and EPS of rest of the banks are positively correlated. Among

these banks, the DPS and EPS of NBBL, HBL and NABIL are highly correlated which shows these bank's dividend decision largely depends upon the earning of the bank.

Conclusion

The correlation coefficient explains the relationship between two variables; whether they are positively related, negatively related, or not related at all. High degree, moderate degree, and low degree are the three categories of correlation.

While analyzing the correlation coefficient between DPS and MPS we found that MPS and DPS of most of the banks are negatively correlated. Thus, any increase in cash dividend does not increase the MPS of all these banks except HBL, NBBL, NIC and SCBNL. Also DPS and MPS of SCBNL, HBL, NBBL and NIC are highly correlated DPS and MPS of BOK, EBL, NIB and SBI are moderately correlated, and there is low degree correlation between DPS and MPS of NABIL.

While analyzing the correlation coefficient between DPS and EPS we found that DPS and EPS of all banks are positively correlated except BOK. Thus, any increase in earnings increases the cash dividends of all these banks except BOK. Also, DPS and EPS of NABIL, HBL and NBBL are highly correlated, DPS and EPS of EBL, NIB, NIC and SCBNL are moderately correlated, and there is low degree correlation between DPS and MPS of BOK and SBI.

4.7.3 CORRELATION BETWEEN EPS AND MPS

Calculation of the correlation between MPS and EPS is presented in the table underneath

Correlation between MPS and EPS

Bank	Correlation	Relationship
BOK	0.1593	Low Degree of Positive Relationship
EBL	0.076519	Low Degree of Positive Relationship
HBL	0.991539	High Degree of Positive Relationship
NABIL	-0.14796	Low Degree of Negative Relationship
NBBL	0.978959	High Degree of Positive Relationship
NIB	-0.48055	Negative Relationship
NIC	0.09915	Low Degree of Positive Relationship
SBI	-0.85964	High Degree of Negative Relationship
SCBNL	-0.22933	Low Degree of Negative Relationship

Source: Annex II

By analyzing the above table it can be concluded that the correlation coefficient between MPS and EPS of BOK is positively low. It means that earning of the bank does not impact the price of the stock of BOK. Similarly the correlation coefficient of the EBL is also positively low. It also indicates that the earning of the bank does not much impact the price of the stock.

The correlation coefficient of HBL and NBBL is 0.9915 and 0.9785 respectively. It indicates that the earning of the HBL and NBBL directly impacts the market price of the bank and vice versa.

The correlation coefficient of NABIL, NIB, SBI and SCBNL is (0.14796), (0.48055), (0.85964) and (0.22933) respectively. It indicates that the earning of the bank has an inverse relationship with the market price of the bank which is questionable in itself.

4.8 SIMPLE LINER REGRESSION ANALYSIS

The regression analysis is used in determining the strength of relationship between two variables. We have used this analysis to describe the average relationship between DPS and MPS, and DPS and EPS.

4.8.1. SIMPLE REGRESSION ANALYSIS OF DPS AND MPS

To describe the average relationship between DPS and MPS. We have performed the regression analysis of all the nine banks. In this analysis, we have performed the regression analysis assuming that MPS is depended on cash dividend DPS. The summary of the regression analysis is presented in the table below.

Table 4.8

Simple Regression Analysis of DPS and MPS

Banks	Intercept (b_o)	Slope(b_1)	Coefficient Determination(r^2)	Proable Error (PE)
BOK	935.19	(48.71)	0.43	0.1722
EBL	863.08	(10.34)	0.13	0.2614
HBL	738.99	30.37	0.59	0.1231
NABIL	1,219.68	(0.64)	0.00	0.3014
NBBL	486.88	337.92	0.95	0.0137
NIB	1,400.15	(32.29)	0.38	0.1866
NIC	241.17	24.01	0.67	0.0990
SBI	869.63	(67.14)	0.12	0.2668
SCBNL	(4,235.15)	58.58	0.56	0.1325

Source: Annex III

From the analysis we find that, the slopes (b_1) of HBL, NBBL, NIC and SCBNL positive. Thus for any increase in DPS, the value of MPS is estimated to increase by an average of Rs.30.37, Rs.337.92, Rs.24.01 and Rs.58.58 respectively. The intercept (b_0) of these banks are 738.98, 486.88, 241.67 and -4235.15. These values are the average prices of MPS when DPS are zero. Similarly in the case of BOK, EBL, NABIL, NIB and SBI their slopes (b_1) are -48.71, -10.34, -0.64, -32.29 and -67.14. These prices represent the average decrease in MPS for any increase in DPS. Their intercept (b_o) are the average prices of MPS when DPS are zero.

The coefficient of Determination (r^2) measures the proportion of variation that is explained by the independent variable in the regression model. In the case of NBBL 95% of the variation in their MPS is explained by its DPS. In the case of NABIL it has 0% of variation in their MPS is explained by its DPS since the co-efficient of determination of other banks range from 67% to 12%.

4.8.2 Simple Regression Analysis of DPS and EPS

To describe the average relationship between DPS and EPS, we have performed the regression analysis of all the nine banks. In this analysis, we have performed the regression analysis assuming that DPS is depended on EPS. The summary of the regression analysis is presented in the table below.

Table 4.9

Simple Regression Analysis of DPS and EPS

Banks	Intercept (b_o)	Slope(b_1)	Coefficient Determination (r^2)	Probable Error (PE)
BOK	21.51	(0.06)	0.00	0.3014
EBL	31.19	0.59	0.45	0.1673
HBL	44.80	1.17	0.60	0.1191
NABIL	15.52	1.25	0.94	0.018
NBBL	9.94	14.59	0.93	0.022
NIB	34.21	0.56	0.46	0.1634
NIC	6.74	0.95	0.39	0.1826
SBI	11.46	0.00	0.00	0.3016
SCBNL	107.31	0.30	0.20	0.2415

(Details in Appendix II)

From the analysis we find that, the slopes (b_1) of EBL, HBL, NABIL, NBBL, NIB, NIC, SBI and SCBNL all the banks except BOK are positive. Thus for any increase in EPS, the value of DPS is estimated to increase by an average of Rs.0.59, 1.17,1.25,14.59, 0.56, 0.95, 0.0009 and 0.30 respectively. The intercept (b_o) of these banks are 31.19, 44.80, 15.51, 9.93, 34.20, 6.73, 11.46, and 107.30 respectively. These values are the average prices of DPS when EPS are zero. Similarly in the case of BOK slopes (b_o) are -0.055. These prices represent the average decrease in DPS for any increase in EPS. Their intercept (b_o) are the average prices of DPS when EPS are zero.

4.9 TREND ANALYSIS

Trend analysis is an analysis of financial ratio over time used to determine the pattern of growth .Trend Analysis informs about the future expected values of studied variables. It gives a glimpse of future expected value if the same growth level is achieves. This information is crucial for management to make decision regarding future. This method is widely used in practice. The least square method has been used to measure the trend behavior of these selected banks.

4.9.1 TREND ANALYSIS OF MPS

Trend analysis of MPS shows the pattern of market price per share growth. It may be positive or Negative. Trend helps the investor to estimate its future market value of share and make decision regarding purchase or sale the share decision. Following table No 13 shows the pattern of MPS of listed commercial banks

Table 4.10

Trend Analysis MPS

			Actual	Forecasted		
NAME	A	B	2007	2008	2009	2010
BOK	545.50	(198)	430	348	151	(47)
EBL	728.70	(75)	870	654	579	503
HBL	1,134.20	(248)	920	887	639	391
NABIL	1,187.10	(73)	1,505	1,114	1,041	969
NBBL	827.50	(406)	354	422	16	(389)
NIB	1,094.70	(163)	1,100	932	769	606
NIC	337.20	(58)	366	279	221	164
SBI	762.20	(386)	335	376	(10)	(396)
SCBNL	2,208.10	269	3,775	2,477	2,746	3,015

Source: Annex IV

Table 4.12 shows the trend of MPS of selected commercial banks for coming Three years. It is clear to see that all banks have Decreasing trend of MPS except SCBNL. NBBL, SBI, and BOK have higher negative trend which indicates that these banks share will decrease to zero if same trend of market continues. Actually it is more or less impossible to decrease the share price zero but trend shows this result. Like wise other banks except SCBNL have negative trend of share price which indicates expected value of these share may go down.

SCBNL is the only bank who shows the positive trend in marker price. Table shows that if the trend of SCBNL's share continues it will reach to 3,015 in year 2009. The trend of MPS have been presented to have eagle eye on future trend

Figure 4.1

Trend MPS

4.8.2 TREND ANALYSIS OF EPS

Trend analysis of EPS shows the pattern of earning per share. Trend of EPS helps the investor to estimate its future dividend. Following table No 14 shows the pattern of EPS of listed commercial banks

Table 4.11

Trend Analysis EPS

			Actual	Forecasted		
NAME	A	B	2007	2008	2009	2010
BOK	21.06	3	30	24	27	30
EBL	38.83	6	54	45	50	56
HBL	60.05	(10)	48	50	40	29
NABIL	79.45	13	105	92	105	118
NBBL	24.64	(18)	1	6	(12)	(30)
NIB	39.50	3	40	43	46	49
NIC	10.52	4	23	14	18	22
SBI	11.46	1	13	13	14	16
SCBNL	140.80	3	143	144	148	151

Source: Annex IV

Table 4.13 exhibits the future trend of EPS of selected commercial banks for coming Three years. It is clear to see that earning of all banks have in increasing trend except HBL and NBBL.

HBL and NBBL show the negative growth in earning per share. If earning of these banks continues the past trend the earning of HBL is expected to reduce by around fifty percent from market price of 50 of 2007. And NBBL's share may go to zero even.

Likewise other banks have positive growth in earning per share and if the trend continues there earning tends to increase.

The trend of EPS have been presented to have eagle eye on future trend

Figure 4.2

Trend of EPS

4.9   Major Findings:

In this segment we analyze various aspects of dividend and summarize the major findings for easy reference

- Market price of SCBNL on an average is best of all the banks being considered. Apart from SCBNL, NABIL and HBL are also performing well in the market. It shows that these banks are able to fulfill market expectations.

- In addition, looking at the variations of the market prices the deviations in market price of these banks are the least of all.

- Almost all Banks have increasing EPS except NBBL and SCNBNL has the highest average EPS and lowest variation in EPS during review period

- SCBNL have the highest amount of dividend paid per share while NBBL have paid the least amount .NABIL bank has continuously paid the dividend in the five year period

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while in the case of other banks, we can see that there is an irregularly in paying up the dividends. In the five year interval the highest dividend paid in year 2007 in which all the banks on aggregate paid a dividend of 30.42%. BOK has the highest average DPR of 122.80 where as NBBL has the lowest average DPR of 1.21.

- BOK has a wide rang of fluctuation in DPR. In 2003 it has not paid any dividend where as in 2004. It has the highest DPR of almost 500% after 2004. It's DPR has decreased making around 50% in 2007. BOK has 172.16% CV in PE ratio which shows inconsistency in dividend payment.

- Correlation coefficient between DPS and MPS indicates that MPS and DPS of most of the banks are negatively correlated. Thus, any increase in cash dividend does not increase the MPS of all these banks except HBL, NBBL, NIC and SCBNL likewise DPS and MPS of SCBNL, HBL, NBBL and NIC are highly correlated DPS and MPS of BOK, EBL, NIB and SBI are moderately correlated, and there is low degree correlation between DPS and MPS of NABIL.

- While analyzing the correlation coefficient between DPS and EPS we found that EPS and DPS of all banks are positively correlated except BOK. Thus, any increase in earnings increases the cash dividends of all these banks except BOK. In addition to this DPS and EPS of NABIL, HBL and NBBL are highly correlated, DPS and EPS of EBL, NIB, NIC and SCBNL are moderately correlated, and there is low degree correlation between DPS and MPS of BOK and SBI.

CHAPTER -V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 SUMMARY

Dividend distribution is the very important factor to any organization for effective goal achievement to satisfy the shareholders. Actually, paying dividend to shareholders is an effective way to attract new investors to invest in share. Due to decision of earnings of a company between dividend payout and retention of earning, its effect on market value and shares is a crucial question. So, a wise policy should be maintained between shareholder's interest and corporate growth from internally generated funds. The fund sometimes couldn't be used in case of lack of investment opportunities. In such a situation distribution of dividend distribute to shareholders. It is taken as a best because shareholders have greater investment opportunities to employ elsewhere.

Dividend policy determines the division of earnings between payments to stockholders and reinvestment in the firm. It is a very critical and the third major decision of the firms. Dividends as returns to shareholders are quoted on annual basis. Firms pay dividend in two forms; cash and stock. Various factors such as legal rules, liquidity position, earnings, investment need, and tax position of stockholders influence the dividend policy. Banks can follow different dividend payout schemes depending upon the influencing factors. Cash dividends are widely used form of dividends. Few banks pay stock dividends too. This research mainly aims at analyzing the dividend policies of different listed banks and identifies

the regularity of dividend distribution of different listed banks nine banks have been chosen as sample to complete the study.

All Banks have increasing trend in EPS except NBBL among them SCNBNL has the highest average EPS and lowest variation in EPS which secures the interest of investors in terms of regular dividend

Market price of SCBNL is highest among the banks considered. Apart from SCBNL, NABIL and HBL are also performing well in the market. This shows that these banks are able to fulfill market expectations.

Since Nepalese stock market is not perfect competitive .Share price of stock do not moves as per the risk and return of that share. Therefore it has also found that the correlation coefficient between DPS and MPS of most of the banks are negatively correlated. Correlation coefficient between DPS and EPS it has been found that EPS and DPS of all banks are positively correlated. Which obviously proves the higher earning enables the banks higher dividend and vice versa.

5.2 CONCLUSION

The above mention summery has lead this study to conclude that earning per share of banks are increasing which indicates that banks in Nepal are doing well .

SCBNL has become the top bank in various aspects they are top in utilization of shareholders equity and provide a reasonable return to stockholders likewise NABIL and HBL are also doing well and one can choose these two banks for comparatively higher return than SCBNL because SCBNL has comparatively low return and low variation in DPS.

Commercial banks of Nepal prefer cash dividend rather than stock dividend because it is easy and low operation cost to distribute likewise they prefer to provide fair return to Shareholders because in the one hand they have to increase their capital base by year 2060 and in the other hand they have to retain the market image as well.

Another interesting conclusion is the share price in Nepal affected by various other factors rather than the earning and dividend of those banks. SCBNL and HBL are the banks whose share price tends to move according to dividend per share and earning per share otherwise other banks shows unjustifiable trend on stock price.

5.3. RECOMMENDATIONS

This study is basically to analysis the dividend policy of commercial banks therefore various aspects of commercial banks have been scrutinize to come into conclusion. All banks have their own resources structure and in the basis of that resources management try to get optimal result. Various managerial skill as well as other set ups obviously effect the banking progress therefore it is essential to analysis the performance of banks by bringing the common variables of all banks in similar respect and draw conclusion.

This study has tried to find out some real facts about dividend policy and other inter related variables with dividend policy of different commercial banks .Based on the above summery and conclusions following recommendation have been provided.

- Dividend policy is the only mirror of management perspective to shareholders return therefore all banks should have to come up with clear view regarding dividend policy .Current uncertain scenario should be eliminated and a proper disclosure in required to strength the Nepalese stock market.

- Legal rules relating to dividend policy indeed helps the central banks to protect the interest of depositors but there are still some loopholes in legal rules regarding to dividend declaration therefore NRB should come up with more monitoring tools to strengthen the banking system in country.

- Dividend policy means to determine the portion of net profit after tax to be distributed and decide to retain the amount for future growth prospects. But Nepalese banks do not seem to have clear vision regarding dividend declaration neither any capital Budgeting procurers are followed to come up with the retention decision. This increases the confusion of shareholders and they may hesitate to be part of capital market and ultimate effect could be the economic slow down therefore commercial banks should feel the reality.

- Companies should have long term vision regarding earnings and dividend payment that helps to cope with challenging competitive situation of present world. Companies should define their vision clearly considering their future plans, expansion in business, future

economy of the country. Considering various internal and external factors, companies should choose whether to adopt stable dividend policy or constant payout ratio or low plus extra or leaving dividend as residual.

- Each and every company should provide the information regarding their activities and performance, so that investors can analyze the situation and invest their money in the best company. On the other hand, NEPSE should provide all the necessary information regarding the company's activities. The information regarding secondary market and capital market is not duly flash out today. Therefore concerning body should timely provide all the information about this factor.

- The activities of Nepal Stock Exchange Ltd. and Security Board of Nepal should be made wide and these organizations should be revitalized equipping them with facilities. It will be collect the information by use of computer system.

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Appendix –I

1. Calculation of Standard Deviation

Bank   of Katmandu (BOK)

Year	X	x= (x-$\bar{x}$)	(x-$\bar{x}$)^2
2003	1270.00	724.5	524900.25
2004	537.50	-8	64.00
2005	247.50	-298	88804
2006	242.50	-303	91809
2007	430.00	-115.5	13340.25
	x=2727.50		(x-$\bar{x}$)^2= 718917.5

$$\bar{x} = 545.5$$

Than, Standard Deviation S.D $= \sqrt{\dfrac{(x \, Z \, \bar{x})^2}{n \, Z1}}$

$$= \sqrt{\dfrac{718917.5}{5 \, Z1}}$$

$$= 423.95$$

2. Calculation of Standard Deviation

Everest Bank Ltd. (EBL)

Year	X	x= (x-$\bar{x}$)	(x-$\bar{x}$)^2
2003	1260	531.5	282492.25
2004	532.50	-196.2	38494.44
2005	419.50	-309.2	95604.64
2006	561.50	-167.2	27955.84
2007	870.00	141.2	19965.69
	x=3643.5		(x-$\bar{x}$)^2= 464512.86

$$\bar{x} = 728.70$$

Than , Standard Deviation S.D $\quad = \sqrt{\dfrac{(x Z \overline{x})^2}{n Z 1}}$

$$= \sqrt{\dfrac{464512.86}{5 Z 1}}$$

$$= 340.70$$

3. **Calculation of Standard Deviation**

Himalayan Bank Limited

Year	X	$x = (x - \overline{x})$	$(x - \overline{x})^2$
2003	2025.50	891.3	794415.69
2004	1070.50	-63.7	4057.69
2005	850.00	-284.2	80769.64
2006	805.00	-329.2	108372.64
2007	920.00	-214.2	45881.64
	x=5671		$(x - \overline{x})^2 =$ 1033497

$\overline{x} = 1134.20$

Than, Standard Deviation S.D $\quad = \sqrt{\dfrac{(x Z \overline{x})^2}{n Z 1}}$

$$= \sqrt{\dfrac{1033497}{5 Z 1}}$$

$$= 508.31$$

4. Calculation of Standard Deviation

NABIL Bank Limited

Year	X	$x = (x - \bar{x})$	$(x - \bar{x})^2$
2003	1805.50	618.4	382418.56
2004	982.50	-204.6	41861.16
2005	787.50	-399.6	159680.16
2006	855.00	-332.1	110290.41
2007	1505.00	317.9	101060.41
	x=5935.5		$(x - \bar{x})^2 = 795310.7$

$\bar{x} = 1187.10$

Than, Standard Deviation S.D $\quad = \sqrt{\dfrac{(x Z \bar{x})^2}{n Z 1}}$

$\qquad\qquad = \sqrt{\dfrac{795310.7}{5 Z 1}}$

$\qquad\qquad = 445.90$

5. Calculation of Standard Deviation

Nepal Bangladesh Bank Limited

Year	X	$x = (x - \bar{x})$	$(x - \bar{x})^2$
2003	2890.00	1362.5	1856406.25
2004	770.00	-57.5	3306.25
2005	438.00	-389.5	151710.25
2006	385.50	-442.00	195364.00
2007	354.00	-473.5	224202.25
	x=4137.5		$(x - \bar{x})^2 =$ 2430989

$\bar{x} = 827.50$

Than , Standard Deviation S.D $\quad = \sqrt{\dfrac{(x Z \overline{x})^2}{n Z 1}}$

$$= \sqrt{\dfrac{2430989}{5 Z 1}}$$

$$= 779.58$$

6. Calculation of Standard Deviation

Nepal Investment Bank Limited

Year	X	$x = (x - \overline{x})$	$(x - \overline{x})^2$
2003	1905.00	811.62	658727.024
2004	862.50	-230.88	53305.58
2005	762.50	-330.88	109481.58
2006	843.50	-249.88	62440.014
2007	930.00	-163.38	26693.024
	x=5466.9		$(x - \overline{x})^2 =$ 910647.222

$\overline{x} = 1093.38$

Than, Standard Deviation S.D $\quad = \sqrt{\dfrac{(x Z \overline{x})^2}{n Z 1}}$

$$= \sqrt{\dfrac{910647.222}{5 Z 1}}$$

$$= 542.82$$

7. Calculation of Standard Deviation

Nepal Industrial and Commercial Bank Limited

Year	X	$x = (x - \bar{x})$	$(x - \bar{x})^2$
2003	596.50	259.3	67236.49
2004	307.00	-30.2	912.04
2005	227.50	-109.7	12034.09
2006	189.00	-148.20	21963.24
2007	366.00	28.80	829.44
	x=1686		$(x - \bar{x})^2 =$ 102975.3

$\bar{x} = 337.20$

Than, Standard Deviation S.D $= \sqrt{\dfrac{(x \, Z \bar{x})^2}{n \, Z1}}$

$= \sqrt{\dfrac{102975.3}{5 \, Z1}}$

$= 160.45$

8. Calculation of Standard Deviation

Nepal SBI Bank Limited

Year	X	$x = (x - \bar{x})$	$(x - \bar{x})^2$
2003	1924.50	1162.3	1350941.29
2004	950.00	187.8	35268.84
2005	332.50	-429.7	184642.09
2006	269.00	-493.2	243246.24
2007	335.00	-427.2	182499.84
	x=3811		$(x - \bar{x})^2 =$ 1996598.3

$\bar{x} = 762.20$

Than , Standard Deviation S.D $= \sqrt{\dfrac{(x \, Z \, \overline{x})^2}{n \, Z 1}}$

$= \sqrt{\dfrac{1996598.3}{5 \, Z 1}}$

$= 706.51$

9. Calculation of Standard Deviation

Nepal Standard Charted Bank Limited

Year	X	$x = (x - \overline{x})$	$(x - \overline{x})^2$
2003	2485.50	277.4	76950.76
2004	1550.00	-658.1	433095.61
2005	1570.00	-638.1	407171.61
2006	1660.00	-548.10	300413.61
2007	3775.00	1566.90	2455175.61
	x=11040.5		$(x - \overline{x})^2 =$ 3672807

$\overline{x} = 2208.10$

Than , Standard Deviation S.D $= \sqrt{\dfrac{(x \, Z \, \overline{x})^2}{n \, Z 1}}$

$= \sqrt{\dfrac{3672807}{5 \, Z 1}}$

$= 958.23$

Appendix II

Calculation of Correlation Coefficient between DPS & MPS

Bank of Kathmandu (BOK)

Calculated table of Correlation Coefficient between DPS & MPS

Year	DPS(X1)	MPS (X2)	X_1 X_2	X_1^2	X_2^2
2003	-	1270	0	-	1612900
2004	10	537.50	5375	100	288906.25
2005	5	247.50	1237.5	25	61256.25
2006	10	242.50	2425	100	58806.25
2007	15	430.00	6450	225	184900
	$X_1 = 40$	$x_2 = 2727.5$	$X_1 X_2 = 5487.5$	$X_1^2 = 450$	$X_2^2 = 2206768.75$

$$r = \frac{n \ X_1 X_2 \ Z \ X_1 X_2}{\sqrt{n \ X_1^2 \ Zf \ X_1 \text{\AA}} \sqrt{n \ X_2^2 \ Zf \ X_2 \text{\AA}}}$$

$$= \frac{5x15487.5 \ Z \ 40x2727.5}{\sqrt{5x450 \ Zf40\text{\AA}} \sqrt{5x2206768.75 \ Zf27275\text{\AA}}}$$

$$= \frac{77437.5 \ Z \ 109100}{25.4950 \mid 1895.939}$$

$$= \frac{Z31662.5}{48336.98369}$$

r = - 0.6550

Appendix III

Simple Liner Regression Analysis:

Bank of Kathmandu (BOK)

Simple Linear Regression eqnation of Y on x is Given by

$\quad$ Y= bo+ b$_1$X$_1$……………………… (i)

$\quad$ Y = Dependent

$\quad$ Y = nb0 + b$_1$ $\quad$ x…………………….. (ii)

$\quad$ xy= b0 $\quad$ x+ b$_1$ $\quad$ x^2…………………….(iii)

Calculation of Simple Liner Regression between MPS& DPS

Year	Y(MPS)	X (DPS)	XY	X^2
2003	1270	-	0	-
2004	537.50	10	5375	100
2005	247.50	5	1237.5	25
2006	242.50	10	2425	100
2007	430	15	6450	225
	Y =2727.5	X = 40	XY= 15487.5	X^2 =450

$\quad$ Y = Dependent (MPS)

$\quad$ Putting the Calculated Value On equation (ii) & (iii),

$\quad$ Than , We get

$\quad$ $2727.5 \, X5b0 \, \Gamma \, 40b_1$ …………………………..(iv) | 8

$\quad$ $\underline{15487.5 = 40b0 + 450b_1}$ ……………………………..(v)

$\quad$ Again , Multiply the equation (iv) By 8 And Substract equation (v) from (iv)

Than , We get

$21820 = 40b0 + 320b_1$

$\underline{15487.5 = 40b0 \pm 450b_1}$

_____

$6332.5 = -130b_1$

$: b_1 = -48.71$

Putting the Calculated Value of b_1 at equation (v) , than we get

$15487.5 = 40b0 + 450 \mid -48.71$

$b0 = 935.195$

Appendix-IV

Trend Analysis of MPS

Bank of Kathamndu (BOK

Year (X)	X= X-A (2005)	Y (M P S)	X^2	XY
2003	-2	1270	4	-2540
2004	-1	537.50	1	-537.50
2005	0	247.50	0	0
2006	1	242.50	1	242.50
2007	2	430	4	860
	X = 0	Y= 2727.5	X^2 =10	XY= -1975

Here,

Y= a+bx ------------------------i

since, $x = O$, $a = \dfrac{y}{n} = \dfrac{2727.5}{5} = 545.5$

$b = \dfrac{XY}{X^2} = = \dfrac{Z1975}{10} XZ197.5$

= (198)

Putting the value of a& b on eq^n i we get,

Y = a + bx

= 545.5-198 x …………………………(ii)

Putting the Value of x in equation (ii) than

Now, We get,

Y 2007 = 545.50- 198X= 348

Y 2008 = 545.50- 198X= 151

Y 2009= 545.50- 198X= -47