CHAPTER - I
INTRODUCTION

1.1 General Background

Nepal has just become a democratic country. Prior to this, Nepal was ruled by the kings. At this period, people were involved in the government services and a few people themselves involved to their business. Then there has been two banks operated i.e. Nepal Bank Ltd., Banijya Bank, the former is the Semi government Bank and the letter is the fully owned government bank, establishing under the Commercial Bank act 2020. In that period the commercial transaction related to the banks was a few and the commercial houses had strong voices in the banks and they also were the state commercial polices makers. So there were a few financial activities in the Nepali market.

Time has been passed. Most of the people, looking for opportunities to invest their capital in the business activities. At this period some ethnic group had flown to Hongkong, Bangkok to make the business activities. The business activities were slowly growing and flourishing, seeing this trend by International banks. They were designed to establish their branches in Kathmandu.

At first Grindlays bank established after that Indosuez bank came into existence. These banks had issued shares to general public and the shares in the securities market have come in to existence since 2046.

Dividend itself is the earning/profit which is only distributed to a company's shareholders. It may be in cash, additional shares and securities as well as a combination of both.

Basically there are of two types of shares namely preference shares and equity shares.

Preference Shares mean that with a fixed amount or percentage given to the issued shares as dividend, held by the shareholders of the particular company is called preference shares which are payable as dividend prior to the general shareholders. Thus, the company is committed to provide a certain percentage to its shareholder in every year. So there is no other alternatives means to management of the company for the preference share holders.

At equity shares, they are, basically, distributed only to general public and dividends as profit on it is distributed among general shareholders to the general shareholders, profit earning or dividend is distributed vary accordingly, they have hold the shares proportionally.

When a company/firm/bank make some profits at the end of financial year, the earnings and profits should be distributed to its shareholder at the end of financial/fiscal year. How much profit to be distributed to its shareholders would be decided by the board of directs of the company/firm corporate house.

The profits or earnings to be distributed to the shareholder of a company depend on the company's/corporate policy previously adopted.

So, the policy of a company on the division of its profit to its shareholders is known as dividend policy. Sometimes Company/Corporate houses can either distributed its profit or retain its earnings for further investments. It depends on the corporate house's policy.

Firstly, the dividend is often paid in cash , if it is paid in the additional shares is called bonus share dividends. Secondly, it has to be determined how much the dividend should be. All aspects and questions related to payment of dividend are included in a dividend policy. The percentage, timing, the method of payment of dividends are also included in the dividend and stability of dividend.

There is a reciprocal relationship between cash dividend and retained earnings. If retained earnings are kept more by the company/bank, less will be dividend and vice versa. Dividend payment decision is the major decision of financial management. It is in the sense that the corporate house has to decide between distributing profits to its shareholders and plugging them back into the business/banks. This decision is based on the goals of managements for wealth maximization. The bank/corporate house will use its net profit/earnings for paying dividend to the shareholders if the payment will lead to maximization of the wealth of the owners if not, it is better to retain them to finance investment programmes. The relationship between dividend and value of the firm/bank should, therefore, be the criteria for decision making.

Therefore, the liberalization policy of government of Nepal, foreign Investors and domestic investors were attracted to invest their capital in Nepal in the joint venture form especially in banking business sector. Establishment of Commercial banks contribute significantly in the formation and mobilization internal capital and development efforts.

They furnish necessary capital needed for trade and commerce to mobilize the dispersed saving of the individuals and institutions. The increase in the opening of the joint venture banks in the commercial market has dramatically changed in the market oriented economic policy. Although the joint venture banks are enjoying

economic liberalization. Nepal Rastra Bank has been managing them through its directive and guidelines.

The first established joint venture banks was Nepal Grindlays after that Indosuez bank came into existence.

General public is more interested to invest his money in the banks/institutions for handsome dividends. Basically, corporate houses, banks running at profit is capable to pay it to their shareholders. The amount which is distributed as dividend should always be adequate to meet the general expectations/interests of shareholders. Basically, there is no uniformity in the dividend distribution practices in Nepal among the different corporate houses.

Profit made by the public government is unable to receive dividends from the public enterprises as shown in the past several years budget and economic survey published by Ministry of Finance Nepal Government, recently, the joint venture banks i.e. Himalayan bank Everest bank, Nabil bank have shown new trend in paying dividend to their shareholders.

Nowadays, some joint venture companies paying bonus share to their shareholders in Nepal are Himalayan Bank, Everest Bank and Nabil bank.

Stock split is another aspects of dividend policy which is famous in the highly developed capital markets i.e. New York, London, and Tokyo, the largest securities in the world. In a stock split there is no change in the capital market, instead, a large number of shares of common stock is issued. In a two-for one split stockholders receive two shares for each one previously held. The book value per share is a cut in half, and the par or stated; value per share of stock is similarly changed. Such market in Nepal is almost neglected in the Nepal's capital market.

However, if shares bought by the investors, the investors would become the shareholders of the concerned banks/corporate houses. They themselves involved in the capital market and in the future they would receive dividends in the forms of cash or bonus shares.

If a company/firm earns a lot profit in the future it should be distributed as dividend to its shareholders. In this period, some firms or banks either distribute their profit or reinvest in them for financing wealth. However, the shareholders are expected to receive earnings as dividends in the end of fiscal years because of their investment in the concerned business. Dividend distributions depends on the dividend policy and the stock prices are affected by dividend policy.

Ultimately, only shareholders are received profits of the concerned business. Unless they have a company of shares, they will not received profit as dividend. However, Nepal company Act 2063section 61 has prohibited company from purchasing its own shares (Nepal Company Act 2063).

Although, the actual Investors of the company are shareholders sometimes, they have paid as reasonable earnings. While, nowadays, in some companies, the dividend is not distributed to their shareholders by showing some reasons this is totally against the shareholders' expectations/interests. Most of the companies/Corporate houses now are distributing nominal profits as dividends to their shareholder for showing a position in the financial market.

Dividend policy is one of the most significant decisions of financial management since it affects the financial structure, corporate house's flow of funds, corporate liquidity and investors' attitudes. After the completion of fiscal year, having sufficient profit earned by the concerned corporate houses, management has to declare a certain portion of earnings as dividend to its shareholders. The important

aspect of dividend policy is to a fix the amount of earnings to be distributed to shareholders and the amount to be retained in the corporate house also determining the forms of dividends. i.e. cash, bonus.

Finally, this research study will examine to all relevant factors of dividend and dividend policy of NABIL, Nepal Investment and Kumari Banks.

1.1.1Profile of Selected Commercial Banks

With reference to the company registar office has registered 31 commercial banks. For our study purpose the sample banks i.e. Nepal Investment bank, Kumari bank and NABIL bank are selected among others.

Kumari Bank

Kumari Bank is established in 2056 B.S. under commercial bank act 2020 B.S. and National Commercial bank act 2021 at Putalisadak, near Shanker Dev Campus. Until now, (2066/67) it's branches are 28 around the country and the other important things is that it has 26 ATM Counters based in Durbar Marg, New road, Thamel, Baneshwor, Kumaripati, Gongabu, Chabahil and it has also the ATM Counter outside the valley namely Pokhara, Biratnagar, Morang, Birtamode, Birgunj, Baglung, Damauli, Narayanghat, Bhairahawa, Butwal, Surkhet, Nepagunj, Dang as well as Chitwan.

Its main objective is to balance the liquidity position and from its own resources, have gained a lot handsome returns distributing the shareholders from the beginning. The Kumari Bank has invested its deposits to the international share market for buying shares of the international companies or banks and also has policy to invest its deposits to the treasure bill, development debenture, national Bachat Patra issued by the Nepal Rastra Bank.

The bank with 2296.9 million rupees is always looking for the good opportunities to invest its deposits in the various fields which are the most profitable considering the facts the bank has introduced VISA Electron, SMS Banking Systems to privilege to its shareholders, accountholders and its customers.

Nabil Bank

Nabil bank which is the first joint venture commercial bank in Nepal was established in 2041 B.S. under the National Commercial Bank act 2021. Its partner bank as Dubai Bank was the initial foreign joint venture partner with 50 percent equity investment. Later on, the shares owned by Dubai bank were transferred to Emirates Bank International. Dubai Bank by virtue of its annexation bank sold its entire 50 percent equity share to the National Bank Ltd, Bangladesh. Then the National bank of Bangladesh has become managing bank in accordance with the technical services agreement signed between National Bank Ltd and Nabil bank in June 1995 has come into existence.

The main goals of bank are to collect deposits from various sources, provide loans to different business houses and trading houses and also provide modern banking facilities to its customers. Moreover, this bank has paid cash dividend plus bonus dividend in the years i.e. 062/63, 063/64, 064/65, 065/66 and 066/67.

Till now, this bank has 39 branches around Kathmandu valley and outside the valley namely, Chabahil, Balaju, Kuleswor, Satdobato, Dolakha, Khadabari, etc and this bank also has 51 ATM services have been offered/sevred in the Kathmandu Valley as well as outside the valley. In the future the bank is going to introduce E-corporate and M-Commerce facilities to its customers and stakeholders.

Nepal Investment Bank

Nepal Indosuez bank was a joint venture with France based Banque Indosuez. The Banque Indosuez and Nepali Investors had invested in the Nepal Indosuez banks and they had 50 percent share to each. From the Nepali investors side, Rastriya Banijya Bank, Rastriya Bima Sansthan and general public had invested 15 percent, 15 percent and 20 percent respectively.

Time has been passed, management has been transferred to the Nepali Investors. Now this bank has became one of the leading banks in the national development.

Taking overall the management of bank by the Nepali investors, the name of bank has been changed to Nepal Investment Bank.

The bank now has 40 branches in the Kathmandu valley and outside the Kathmandu valley and has 70 ATM counters around the country. The services offered to its customers are Internet VISA, Master Card, E-Commerce, through the Electronic Payment Gateway operation. Finally the bank has operated its remittance services to the people of the remote areas. And the bonus and cash dividend has been distributed to its shareholders and stakeholders from 062/63 B.S.

1.2 Statement of the Problem

Economic growth of any nation depends on its financial policy and performance. No any nation go further with out the proper rightful financial policy as well as performance. So capital market is affected by the financial policy of the government. In the context of Nepal, growth of any company depends upon its dividend policy. It shows the performance of any organization. Market price of any company is also affected by the dividend policy. But Neplies companies are

not seriously paying interest in their dividend policy. It is a recent phenomenon for Nepalies companies

In Nepal, most of the commercial government institutions/established under Nepal company act 2063, are not serious in dividend policy to stockholders and there is no their own any prescribed guideline to provide dividend to their shareholders.

Most of the Nepalese companies have not any consistent and clear cut policy on the dividend payment they have practiced the dividend payment on their retained earnings patterns of past dividend policy and stock price. In Nepal, dividend policy has depended pattern of the traditional concepts and company's will. Thus, the main problem of the Nepalese companies/banks is that they don't have any prescribed guideline on to dividend policy. Furthermore, it depends on the management decision or executive board of the company.

Then, most of commercial banks have followed uniform dividend policy and payments on this situation. But also the expectation of shareholder has to be met by paying regular dividends.
Therefore, the study written about the dividend policy will help to develop policy prescribed guidelines to determine the regular dividend payment to their stockholders, and the reasonable dividend payment to their stockholders.

The study deals with the various points what trend of dividend policy is adopted by the Nepalese commercial banks and what the dividend behavior is followed by Nepalese commercial banks.

1.3 Objective of the Study

The basic objective of this study is to analysis the existing practices of bankers dividend policy.

The specific study are as follows.

- To see the dividend practices of the selected banks.
- To see the profitability position of selected banks
- To provide useful suggestions on the basic of findings.

1.4 Significance of the Study

In Nepal, there are 76 finance companies, 26 development banks and 31 banks operating their services from various places. Almost all banks' services are no considerable discrepancies. However, their dividend policy and payment vary according to their dividend policy and payment vary according to their operation of business nature. And the business nature and their dividend or distribution policy also vary. Therefore, the findings of this research will be a great worth to the companys' stockholders to look into the detailed dividend policy of the three sample banks and then, this study will be helpful to investors in identifying the productivity of their investments and justify the rational investments decisions. But, this study may be benefited to the management of the concerned banks to point out the shortcomings.

Ultimately, the dividend policy and payment of the banks is of great interest to the stakeholders customers, general agencies, banks, government offices, stockbroker, development banks, interested persons and scholars. The researcher also believes that the conducted study on divided policy will be benefited to the research students.

By studying the dividend policy of the banks, how they have distributed dividends among the stockholders and how the dividends affect to the market price of share etc. These are the significance of the study.

1.5 Limitation of the Study

Research itself is a vast study that investigates the subject matter for solving the research problems. Every research has own its limitations. This research also can not escape from constraints such as time and budge.

In Nepal, many companies are listed by Nepal Stock Exchange. This study is, therefore, based on the secondary data and economic resources. Due to time limitations and the lack of experience may be other limitations of the study. Not all the listed companies in Nepal stock exchange are included in depth to study.

A Small number of companies' shares is traded regularly due to economic conditions of the country i.e. Nepal. Consequently, the small size of data of the study has also been selected from such companies. The literature about corporate divides pattern is hard to find. The study covers only five year periods.

1.6 Organization of the Study

This research study has been divided into five chapters which are as follows:-

Chapter-I: Introduction

The introduction chapter of the study will be described about the research itself, statement of the problems, objective of the study, the limitation of the study and organization of the study.

Chapter-II: Review of Literature

The second chapter of literature deals with conceptual from work of the dividend policy and will be described about the history of dividend policy in brief. Review of important study will be included as well.

Chapter-III Research Methodology

The third chapter i.e. research methodology will be presented in the third chapter deals with research design, source of data, data collection techniques, data processing and analysis tools.

Chapter-IV: Analysis and Presentation of Data

This chapter will be of interpretation, construction and analysis of the data and the major finding of the study on dividend policy

Chapter-V: Summary, Conclusion and Recommendations

This chapter, the last chapter, includes summary, conclusion and recommendations.

CHAPTER - II
REVIEW OF LITERATURE

2.1Conceptual Frame Work

The banks are issued shares to general public and they may become shareholders of the banks/firms/corporate houses. Shares are distributed proportionately after that the shareholders of the banks/must be provided some profit in investing their money/contributions. At the end of Fiscal Year the banks may distribute profit proportionately as dividend to their shareholders. The profit to be distributed is called dividend. Before distributing dividends to their shareholders by the banks, they have to formulate a policy on dividend, such policy is known as dividend policy.

Every person interested to invest his money in buying the shares of a firm with the hope of dividend and investors want to receive maximum returns on their investment. However, the dividend policy depends on the management decision that how much total profit to be distributed to the shareholders as dividend and how much profit to be retained in the existing business. These things depend on only management's decision and depend on dividend policy previously adopted and to be adopted in the future.

But, in fact that all the profit earned by firms or banks normally belong to stockholders themselves.

However, the rights of distributing profit as dividend to their shareholders depend on the management decision whether they have to distribute to profit as dividend or not. One cannot say ,sometimes banks/firms reinvest their earned profit in the business as well.

It is a very necessary matter, before adopting the sound dividend policy by banks, they have to study on previous reports in dividend policy and relevant other banks adopting dividend policy. Then, banks/firms should also consider the shareholders expectations and interests as well.

Therefore, the banks should adopt the sound dividend policy to distribute profit as dividend to their stockholders. However, if the banks adopt sound dividend policy. Then excess funds will be available and less funds will be available to invest. On the contrary, if the banks adopt strict dividend policy, then excess funds will be available for financing. So external sources of financing and internal sources of financing affect the bank's capital structure and dividend policy adopting and again this controversial questions arise in the sound dividend for policy decision for the financial manager.

In the course of earnings, how much earnings to be retained to exploit opportunity and how much earnings to be paid to the shareholders to their contribution in capital structure, this should be decided by the management. This is the controversial questions of what kinds of sound dividend policy to be adopted in the future by the banks.

Dividend policy determines the division of earnings between payments to stockholders and reinvestment in the banks/ firms, Retained earnings are one of the most significant sources of funds for financing corporate growth, but dividend constitute the cash flow that accrue to stockholders (*Weston, and Copland,1992:657).*

Many variables influence dividends. However, For example, a firm's cash flow and investment needs may be too volatile for it to set a very high regular dividend. Yet it may desire a high dividend payout to distribute funds not necessary for

reinvestment. In such a case, the directors can set a relatively low regular dividend-- low enough that it can be maintained even in low profit years or in years when a considerable amount of reinvestment is needed -- and supplement it with an extra dividend in years when excess funds are available (*Weston, and Coplan,1992:657).*

On the corporate form of business houses, the shareholders invest their capital in the expectation of a return on their capital. However, dividend policy is determined by the board of directors. Then, they have to consider the numbers of factor in determining their dividend policy and variation there in. The board of directors is subject to a serious of legal restriction which is intended to maintain the capital of the corporation and are intended to safe corporation. Besides the legal considerations the various principles underlying he dividend policy of dividend distribution system to be looked out in satisfying the corporate houses' shareholders.

2.1.1Types of Dividend

There are of different types of dividend policy adopted/determined by the management are as follows:

Cash Dividend

The portion of earnings paid in cash to the investors or shareholders in the proportion of their shareholders is called cash dividend. Most of the banks and firms pay their dividend in cash. Thus both the total assets and the net worth of the company are reduced when the cash dividend is distributed. The market price of the share drops in most cases by the amount of the cash dividend distributed *(Hasting,1996:370).*

Again “A company should have enough cash in its bank account when cash dividends are declared. If it does not have enough bank balance, arrangements should be made to borrow funds *(Hasting, 1996 :370).*

In the context of Nepal, it is true that cash dividend is very essential to the investors for their capital investments. So it is very popular among commercial Banks and other business firms. On the other hand, it depends on the earnings of bank, Government tax policy, Nepal Rastra Bank policy, and banks/firms external and internal factors and decisions.

Stock Dividend

A stock Dividend is paid in additional shares of stock instead of in cash dividend. In other words, the additional shares issued to shareholders as dividend is called stock dividend is also known as bonus shares are distributed proportionately to the shareholders. Thus a shareholder retains his proportionate ownership of the company. The declaration of the stock dividend will increase the equity share capital and reduce the reserve and surplus (retained earnings) of the company. The total net worth is no affected by the stock dividend. In fact, a stock dividend represents a recapitalization of the owners' equity portion i.e. the reserve and surplus.

Interim Dividend

Dividends are basically declared at the end of the financial year this is a regular occurrence. However, when management declares dividend before the end of the financial year, it is called interim dividend shown in the liability side of the balance sheet.

Scrip Dividend

In some conditions, corporate houses cannot pay cash dividend due to the temporary shortage cash. In such cases, corporate houses may issue scrip or notes

promising to pay dividend at the future date. This type of dividend is also known as scrip dividend. It is like a promising note promising to pay dividend to the company's shareholders at a specific date in the future. Furthermore, issuing this note indicates that the company has shortage of cash to distribute such dividend.

Property Dividend

Property dividend which is a kind of dividend is given in the form of property or assets instead of cash dividend. So, such dividend is said to be property dividend. Moreover, this dividend is rarely occurred. A Company has own its products that have been paid as property dividend to its shareholders.

Bond Dividend

By its name it is understood that dividend is distributed to shareholders in the form of a bond. Bond dividend is only distributed on those conditions when the company declares dividend to its shareholders with a view to avoid cash outflows.

Although there are various forms dividend policies in Nepal, the form of dividend policy is famous among shareholders is cash and stock or bonus dividend. Moreover, these policies are adopted by various commercial banks in Nepal. This chapter refers to the review of released studies and different aspects of the topic " A study on corporate dividend policy adopted by corporate houses in Nepal in more detail and descriptive manner. For this purpose, various book, Journals' articles, previously written thesis, some research reports, articles and memorandum of the listed companies are reviewed and consulted.

2.1.2 The Polices of Dividend Distribution

Nature of Business

The nature of the business conducted by a company has influenced on its dividend policy. Business houses are characterized on the basis of stability of earnings that may formulate a more consistent policy as to dividends than those having an

uneven flow of income usually, enterprises dealing with necessities suffer less from oscillating earnings than those dealing in luxury goods. Then, public enterprises are in much better position to adopt a relatively fixed dividend rate than the industrial concerns *(Kuikel, 2007: 7).*

Age of Corporation

The age of a company depends to determine the dividend policy. Newly established corporate houses require much of their earnings for planning improvement and expansion, while such houses have attained a lot earnings, experience can formulate a clear cut dividend policy and may even be liberal in the distribution of earnings.

Change in Government Policy

The government policy has affected on the dividend policy. Moreover, dividend policy may also be affected by the Company's by law. Sometimes the government restricts the rate of dividend declared with the variation in the fiscal years. Industrial labor control, government policies and the earnings capacity adversely/favorable affected on the dividend distribution policy.

Taxation Policy

Government's taxation policy is also the cause of lowering the earnings of the corporate houses and the rates of the dividend. Some recent studies have shown that rates of dividend may not be affected by high rates of taxes. This type of trend occurred in some Indian companies where the indices of taxes and the rates of dividend move in similar directions to show that the dividend distribution was not adversely affected by the high rate of taxes.

Corporate houses' taxes affect dividend directly, indirectly. Directly--- as much as they minimize the residual profits after tax available for shareholders and

indirectly on the distribution of dividend beyond a certain limit is itself subject to tax i.e. dividend beyond 10 percent of the paid capital are subject to 7.5 percent by way of dividend tax.

Unpredictability Business Situation

Business itself is in the cyclic variation and the earnings from it also vary and then, demand for capital investment and money market situations and conditions also vary period to period. During the boom period well managed corporate houses put good reserves for facing the crisis which follows the inflationary period. The high rates of dividend create as a tool for marketing the securities and otherwise depress the market.

In the no business years become easier to be financial solvency to be maintained more successfully if the adequate reserves have been built up to the earnings.

Additional Capital Requirements

Some financial houses retain a part of their earnings for strengthening their financial position in the market as well. The profits of the financial houses are ploughed back in the business has got a conditioning influence on the dividend policy. The income may be accumulated for meeting the increasing requirements of working capital or for future expansion. Companies with small resources possessing no other alternatives to raise finance on their growth have to depend on this.

After scrutinizing the various points which determine the dividend policy of the companies, we may study the significant stability in the rate of dividend. The regularity of dividend payment and the stability of its rate are the two main policies made by the corporate houses management. These policies are accepted as desirable for the corporate houses' credit standing and for the welfare of

shareholders. Higher earnings may be used to pay extra dividends, however, such dividend distributions should be designed as “Extra” and care should be taken to avoid the impression that the regular dividend is being increased. A stable dividend policy should not be taken to mean inflexible or rigid policy. However, it includes the payment of a fair rate of return, taking into account the normal growth of the business and the gradual impact of extra events. The stable dividend makes future financing easier. It not only enhances the credit standing of the corporate houses but also stabilizes market value of the securities outstanding. The confidence of shareholders in the corporate houses management is strengthened as well *(Pandey, 1988).*

2.1.3 Stability of Dividend

A word "Dividend Stability" refers to the consistency or lack of variability in the stream of dividends. In other words, a certain amount of dividend is paid out regularly. Stability or regularity of dividends is considered as a desirable policy by the management of the most companies. The shareholders also generally favor this policy and value stable dividends higher than the fluctuating ones. All other things being the same, stable dividends have a positive impact on the market price of the shares *(Vanhorme, 1971: 507-519).*

Stability of dividend sometimes, means regularity in paying some dividend annually, even though the amount of dividend may fluctuate from year to year and may not related with earnings. Then, stability of dividend payments is an attractive feature to many Investors. The investors favors stable dividend than the variability of dividends. By stability, the board of company maintain the position of the firm's dividend payments in relation to a trend line, preferable one that is upward slopping *(Panday, 1988:302).*

There has been no confidential study on dividend policy and there has been made some tentative study only on dividend policy on the logical grounds, a stable dividend policy leads the market price of shares. Firstly, investors are expected to high dividend than the fluctuation dividends. Since the fluctuating dividends are more riskier than stable one. Accordingly the same average amount of dividends received under a fluctuating dividend policy is likely to have a higher discount factor applied to it than is applied to dividends under a stable dividend policy. This means that a firm with a stable dividend will have a lower required rate of return or cost of equity capital than one whose dividends fluctuate. Secondly, many stockholders live on income received in the form of dividends. The stockholders are greatly inconvenienced by fluctuating dividends and they will likely pay a premium for a stock with a relatively assumed minimum dollar dividend, finally, a stable dividend from the standpoint of the both, the corporation and its stockholders are the requirement of legal listing, legal lists one permitted to invest.

One of the criteria is for placing a stock on the legal list is that dividend payments are maintained. Thus, legal listing encourages pursuance of a stable dividend policy *(Weston, & Brigham, 1972: 681).*

The Stability of Dividend are of the following three forms

1) Constant Dividend per Share

According to the stable dividend policy, when a company pays a certain fixed amount per share as dividend to its shareholders, it is called constant dividend per share policy. For instance a share with Rs. 100 face value a company pays a fixed amount, lets say, Rs 10 as dividend this 10 rupees would be paid year after year, irrespective the level of earnings. In other words, with earnings fluctuating from year to year would not affect the dividend payment. However a company follows such policy, it will distribute the dividends to its shareholders even it suffers losses in bad years. "The dividend policy of paying a constant amount of dividend per

year treats common shareholders somewhat like preferences shareholders without giving any consideration to investment opportunities with the firm and the opportunity available to shareholders." This policy is generally preferred by these persons and commercial institutions who depend in the dividend income to meet their living operating expenses increases and decreases in market value may even be of little concern to these investors and this condition tends to produce a steady long run demand that automatically stabilizes the market value of the share *(Brandit, Louis K., 1972:447).*

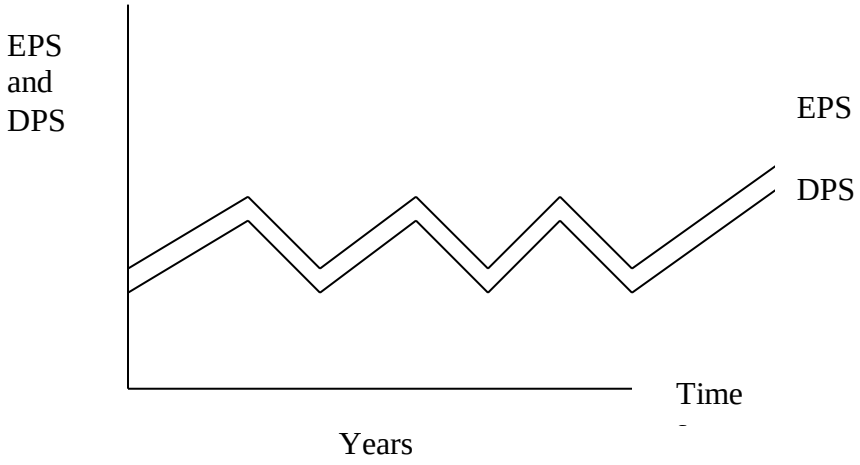
2) Constant Dividend Payout Ratio

Some companies and financial institutions follow a policy of constant payout ratio i.e. paying a fixed dividend per share in every years with a fixed percentage of net earnings is called constant dividend payout ratio. In other words, a constant dividend payout ratio implies that the percentage of net earnings will be fixed. This type of a policy may be supported by management because it is related to the company's ability to pay dividend. A few companies follow such policy. Then dividend will fluctuate proportionately in every years to come and are likely to be highly volatile in the wake of wide fluctuates in the earnings of the companies. Therefore, when the earnings of a company decline substantially and there will be loss in a given period and even the dividend will be low or zero.

"The amount of dividends to retained earning increase with increasing earning and decreasing with decreasing earnings. One of the most appealing features of this policy to some is its conservatism and its guarantee against over or under payment, since it does not allow management to pay dividends. It profits are not earned in the current/fiscal year, and it does not allow management to forego a dividend, If profits are earned"(Brandit Lousis,1972:448-49). The relationship between the earning per share (EPS) and Dividend per share on the policy of constant payout ratio in figure is given below:

Figure 2.1

Constant Dividend Payout Ratio



Sources: I.M. Panday

3) Small Regular Plus Extra

Under this policy, the companies with fluctuating earnings, the policy to pay a minimum dividend per share, is quite popular among the shareholders. The small amount of dividend is fixed by the board of directors of the companies/corporate houses, to keep their shareholder happy. However, the corporate houses/financial institutions' earnings are quite volatile. So, this policy may be the best choice to the companies' directors'. Under this policy, the corporate house usually pays a fixed amount of dividend to the shareholders. And in the periods of prosperity, additional/extra dividend is paid over the regular dividend. As soon as the normal period back, the corporate house cuts the extra dividend paying to its shareholders and starts paying the normal dividend per share.

2.1.4 Disadvantages of Stability of Dividend

"The greatest danger in adopting stable dividend policy is that once it is established, it cannot be changed without seriously affecting investors' attitude and the financial standing of the company. If a company with a pattern of stable

dividends, misses dividend payment in a year, this break will have a severe effect on investors than the failure to pay dividend by a company with unstable dividend policy. The companies with stable dividend policy create a "clientele" which depends on dividend income to meet their living and operating expenses. A cut in dividend is considered as a cut in salary. Because of the serious depressing effect on investors due to a dividend cut. The directors have to maintain stability of dividends during lean years even though financial prudence would indicate elimination of dividend or a cut in it. Consequently, to be on the safe side, the dividend rate should be fixed at a conservative figure so that it may be possible to maintain it even in a lean period of several years. To give the benefit of the company is prosperity, extra dividend can be declared. When a company fails to pay extra dividend, it does not have as depressing as effect on investors as the failure to pay a regular dividend" (*Panday, 1998:306).*

2.1.5 Factors Influencing Dividend Policy

Dividend decision is a very serious decision in the management and affected by various factors. Various factors should be considered while taking dividend decision. At this condition, the company's goodwill and its market price per share will seriously be affected. Some factors influencing dividend policy are mentioned below.

a) Legal Rules

In which a firm's finalized its dividend policy is in its operation. The legal rules regarding dividend must be paid from earnings either from the current year's earning or from past years' earnings are reflected in the left had side of the balance sheet named returned earnings *(Weston and Copeland,1992:658).*

State laws emphasize three rules: (i) the net profit rule (ii) the capital impairment rule (iii) The insolvency rule.

Net Profits Rule

In this rules, dividend is paid out of corporate house's current earnings and past retention of earnings. Then the corporate houses can not pay cash dividends greater because the corporate house will need some to future investments.

Capital Impairment Rule

The corporate house cannot pay dividends out of its paid up capital. Thus the capital of corporate houses' has been impaired again. Dividend payment can cause capital to become impaired, the dividend cannot be paid. When dividends impairs capital, the distribution of dividends is illegal. The corporate house's manager should consider that the payment of dividend is in order and he should not violate the capital impairment rule. This rule also protects creditors for forbidding the payment of dividends from capital.

Insolvency Rule

According to this rule, a corporate house should not pay dividends when it becomes insolvency. However, the corporate house' inability to pay its creditors, obligations become due. Then, the corporate house's ability is independent on its liquidity rather than its capital, when the corporate house's cash is limited, the corporate house is in constraint from favoring shareholder's desires.

Legal rules are highly significant position that they provide the boundaries within which dividend policies can be formulated within their limitations, however, financial and economic factors have influenced on dividend policy.

b) Rate of Asset Expansion

A growing firm, the greater its need for financing asset to expansion. The greater the future need for more funds, the more likely one firm is to retain earnings rather than pay them out. If a firm went to raise its funds externally, natural sources are

the present shareholders, who already know the company. However, if earnings are paid out as dividends and are subjected to high personal income tax rate only a certain portion of them will be available for reinvestment.

c) Tax Position of Stockholders

The tax position of a company's owners highly influences the desire for dividends. For instance, a company closely by a few taxpayers, in high income tax brackets is likely to pay a relatively low dividend. The owners prefer taking their earnings in the form of capital gains rather than as dividends, which are subject to higher effective personal income tax rate. But, the stockholders of a large, widely held company might prefer a high dividend payout.

At times, There is a conflict of interest in large companies between stockholders in high income tax brackets and those in low tax brackets. The former is like to see a low dividend payout and high rate of earnings retention in the hope of an appreciation in the capital stock of the company. The latter will prefer a quite high dividend payout. The dividend policy in such firms may be bargain between a low and a high payout an intermediate payout ratio-an intermediate payout ratio.

d) Stability of Earnings

A corporate house that has relatively stable earnings can predict approximately what its future earning as dividends will be distributed, such a corporate house is, therefore, more likely to payout a higher percentage of its earnings than one corporate house fluctuating earnings. The unstable corporate house is not certain that in subsequent years the hoped for earnings will be realized. So, it is likely to retain a higher proportion of current earnings. A lower dividend will be easier to maintain if earnings fall off in the future.

e) Profit Rate

The expected rate of return on assets determines the relative attractiveness of paying out earnings in the form of dividends to stockholders or using them in the present enterprise.

f) Liquidity Position

Profits, shown on the right side of the balance sheet and profits are also known as returned earnings are basically reinvested in assets required for the conduct of the business. Previously earned profits are invested in plant equipments and other forms of assets. They are not held as cash. As result, if a firm has a record of earnings, it may not be able to pay cash dividend because of its liquidity position. Indeed a growing firm, even a very profitable one, generally, has a pressing need for funds, in such a condition, the firm may select not to pay cash dividends even the firm that has a lot of profits earned, at this situation the firm will pay its earnings as dividends to its shareholders in the form of bonus dividends.

g) Need to Repay Debt

When a firm has to issue debt to finance expansion of business, such debt can be returned at the debt's maturity period. On the favorable conditions of the business houses the profit will be earned a lot . A lot profit will need to repay its debt at the debts maturity period. Hence, the payment of dividend will be influenced.

h) Restrictions in Debt Contracts

Contracts debt, long term debt that is only discussed frequently restricts firms to pay cash dividends. Such restrictions which are designed to protect the money lender, state that (1) future dividend will be paid only out of earning generated after signing the loan of agreement and state that (II) dividend will not be paid when net working capital is below a specified amount. Similarly, preferred stock

agreements generate no cash dividend on the common stock until all accrued preferred dividend will be made.

i) Access to the Capital Market

A large, well established and managed corporate house with a record of profitability and stability of earnings has an easy access to the capital markets and other forms of external financing. New ventures some small firms which are more raiser for potential investors and its ability to raise equity or debt funds from the capital markets are restricted then its more returns/earnings must be in operation. As a result, a large, well and managed corporate house is likely to have a higher dividend payout rate than new or small one.

j) Owner's Consideration

The owner's consideration affects the dividend policy of the corporate house such as:

- Dilution of ownership
- Shareholders' tax status
- Their investment opportunities.

k) Control

Another important variable is the effect of alternative sources of financing on the control situation of the firm. As a matter of policy, so the corporations expand only to the extent of their internal earnings. This policy is deferred on the ground that raising funds by selling additional common stock dilutes the control of the dominant group in that company. At the sometime, selling debt increases the risks of fluctuating earnings to the present owners of the company. Reliance on internal financing in order to maintain control reduces the dividend payout.

2.2. Legal Rules Regarding Dividend in Nepal

There are some legal procedures for dividend payment in Nepal. Nepal Company act 2063 B.S. mentioned these provisions may be described as under

Section 2(Tha) states that bonus share (stock dividend) means a share issued in the form of additional shares to the shareholders by capitalizing the surplus from the profit or the reserve fund of a company and this term includes the increase of the paid up capital of shares by capitalizing surplus or reserve fund.

Section 61 (1) subsection shows that a company cannot purchase its own share and that section also states that any company shall not supply loans against the security of its own shares.

The company act section 182 bonus shares, sub section (2) states that the company must inform office of company Registrar before issuing bonus shares and this must be done only according to a special resolution passed by the general meeting.

The section 182 Sub section (1) states that except in the following circumstances, dividend shall be distributed among the shareholders with in 45 days from the date of decision made/declared.

The section 182 (ka) In case any law prohibits the distribution of dividends (kha) In case dividends can't be distributed within the time limit mentioned above owing to the circumstances beyond anyone's control and without any fault on the part of the company.

The section 182 Sub Section (3) in case of dividends are not distributed with the time limit above mentioned in subsection (1) this will be made by adding interest at the current prescribed rate. Subsection (4) states that only the person whose

name is mentioned in the shareholders' registration book at the time of declaring the dividend will be enlisted to it *(Nepal company act, 2063:92).*

Above mentioned law of dividend payment is not enough provisions regarding dividend policy, Therefore it seems to be reasonable to review the provisions stated about dividend payment in the company act of India (*K.M. Upadhyaya, 1985: 714).*

2.3 Review of Major Studies

Linter (1956) made a significant study on the corporate houses' dividend policy in the American context. He made fifteen readily factors and characteristics that seemed or reflected, might be expected to have important beaming on dividend policy and payments. Again he reviewed the available information over 600 well established, well managed and listed corporate houses and he choose 28 corporate houses for dividend investigation *(Upadhyaya, 1985:714).*

He concluded that the major Portion of dividend of a firm could be expressed in the following ways.

$DIV \times t = P\ ESP$ ------ (i)

And,

$DIVt-DIVt-1 = a+b\ (DIVt-DIVt-1) +eq$

Where,

$DIV \times t$ = Firm's Desired payment

E PSt = Earnings

p= Targeted Payout Ratio

a= constant relating to dividend growth

b = Adjustment factor relating to the previous period's dividend and new desired level of dividends where b<1

The major findings of this study were:

- Firms generally think in term of proportion of earnings to be paid out
- Investment opportunities, liquidity position, funds flow are not considered for modifying the pattern of dividend
- Firms generally have target payout ratio in view which determining in dividend rate and dividend per share.

The Irrelevance of Dividend: Modigliani and Miller's Study (1961)

"They made the most comprehensive on dividend policy. According to Modigliani and Miller (MM) dividend policy of a firm is irrelevant as it does effect the value of the shares. They argue that the value of the firm depends on the earning which result from its irrelevant policy. Thus, dividend decision --- the division of earnings between dividends and retained earnings is of no significance in determining the value of the firm. Their study on irrelevance of dividend is based on the following assumptions" *(F. Modigliani & H. Miller, 1961: 411-433).*

- "The firm operates in perfect capital markets in which all investors are rational, information is freely available to all. Transactions and floatation costs do not exit, perfect capital market indicates that no investors can influence the market price of shares."
- "No taxes on capital gains and dividends. This means that value of a rupees of dividend as much as the market price of a share."
- "The firm has a fixed investment policy which can not be changed."
- "Risk of uncertainty does not exist. As a result, national investors can predict future prices and dividends with certainty and one discount rate is approximately applicable to all securities and all the periods."

Modigliani and Miller suggested the points in support of their argument in the following ways.

Step 1

"The market price of a share in the beginning of the period is equal to the present value of dividends paid at the end of the period plus the market price of the share at the end of the period."

Generally,

$P_o = 1/(1Ke) (D_1+P_1)$ ---------- 1

Where,

P_0 = Market price per share at the beginning or at period 0 (zero)

Ke = The cost of equity capital

Di = Dividend per share at period 1 (the end of the period)

P1= Market price per share at period 1 (the end of the period)

Step 2

"Suppose no external financing, the total value of firm would generally be the number of shares at (n) times and the price of a share at the beginning period (o) and multiply by the number of shares (n) times."

Then,

$nP_0=1/1+ke (nD_1+nP_1)$ ---------- (ii)

Step 3

"If the firm's internal sources of financing on its investment opportunities fall short of the funds-required, and Δ A is the number of new shares issued at the end of year 1 at priceP_1".

Then,

$nP_0=1/1+ke\ [nD_1+P_1\ (n+\Delta A)-\square\ \Delta P_1]$ - - -(iii)

Where,

n= the number of shares at the beginning of the period (o)

ΔA = the changes in the number of shares outstanding during the period.

Step 4

"If the corporate houses where to invest all investment, programs in a given period of time, can be financed either by retained earnings or the issuance of new shares. The amount of new shares issued will be:"

$AP_1=I-(E-nD_1)$

or

$\Delta AP_1=I(E-nD_1)$ ------- (iv)

Where,

I= Total the Investment requirement

E= Earning of the firm during the period

nD1= total Dividend paid

(E-nD1) = Retained earnings.

Step 5

If we substitute equation 4 and by equation 3, we will derive the following equation.

$nP0= nD_1+(n+\Delta A)P_1-I+E-nD_1/1+Ke$

As mentioned on the above equation there is nD1 which has negative and positive value so we cancel both.

Then,

We have the following equation

$nP0 = (n+\Delta A)P_1-I+E / 1+ke$ --------(5)

Step 6

Because there is no found dividends in the above equation, so Modigliani and Miller conclude that dividends do not have effective role in the dividend policy that has no effect on the market price of the shares.

In this way, according to Modigliani and Miller's study, it seems that on the certain conditions of perfect capital market, rational investors absence of tax discrimination between dividend income and capital appreciation given the firm's investment policy, and its investment policy will have no influence on the market price of the shares.

Walter's Model

This model was developed by professor Walter studied on dividend and stock price in 1966. This theory advocates that dividends are relevant. The investment policy of a corporate house can not be separated from its dividend policy. The investment policy of a corporate house and dividend policy are interlinked each other. So the choice of an appropriate dividend policy affects the value of an enterprise *(Walter, 1963:280-291).*

The major important points of this model are the significant relationship between the returns on corporate houses' investment or its internal rate or return (r) and its cost of capital or the required rate of return (K).

The corporate house should follow as optimum dividend policy will be determined by the relationship of r and k. In other words as long as the internal rate of return

is greater than the cost of capital, the stock price will be enhanced by the retention of earnings and will vary with dividend payout. This model is generally based on the following assumptions.

- All investment or financing is made through retained earnings. External sources of funds like debt or new equity capital are not used.
- The firms' internal rate of return(r) and Cost of Capital (k) are constant.
- All earnings are either distributed as dividends or reinvested internally immediately.
- There is never change in the beginning earnings and dividends. The values of the earnings per share E, and dividend per share. D, may be changed in the model to determine results. But any given values of E and D are assumed to remain constant forever in determining a given value.
- The firm has an infinite or very long life.

Based on the above assumptions, Walter had developed a formula in determining the market price per share. The formula is given below.

$$P= \frac{DPS}{K} + r\frac{(EPS-DPS)}{\frac{K}{K}}$$

Where,

P= The existing market price per share

DPS = Dividend per share

EPS = Earnings per share

r = Internal rate of return on the corporate house's investment

According to Walter model "The optimum dividend policy depends on the relationship between the firm's internal rate of return(r) and its cost of capital (k). It advocated various kind of firms. They are as follows:

1. Completely Developed Firms, r>K

Firms having internal rate of return (I) greater than the cost of capital are referred as growth firms. The growth firms are assumed to have ample profitable investment opportunities. These firms would reinvest retained earnings at a rate which is higher than the other rates expected by the shareholders. These firms will maximize the value of shares if they follow a policy of retaining all earnings for internal investment. Thus, the optimum payout ratio for a growth firm is zero and again the market value per share P1 increases as payout ratio declines when r>K

2. Normal Firms, r =k

Most of the firms do not have ample of investment opportunities with r>k after having exhausted such profit, firms can earn on their investment rates of return equal to the cost of capital, r=k. For the normal firms with r=k, the dividend policy has no effect on the market price of shares. Thus, such firms are classified as normal firms

3. Declining firm, r<k

Some of the firms do not have any profitable investment opportunities to invest in the availability resources to the markets. In such conditions, the market value of shares of a declining firm will be maximum when it does not retain earnings at all. Thus, In Walter model, the dividend policy of such firms depends on the availability of investment opportunities and the relationship between the firm's internal rate of return and its cost of capital. The firm should use earnings to finance investments. If a firm's rate of return is greater than its cost of capital, should distribute all earnings, when the firm's rate of return is less to its cost of capital and this firm would remain constant when the rate of return was equal to its cost of capital.

Gordon's Model (1962)

The model which was conceived by Maron Gordon, was very popular among the corporate houses which would provide dividends to their shareholders. The dividend policy of a firm affects its value. He advocated that investors were in differences between current dividends and earnings. The conclusion of his study is based on the more present dividend to the future capital dividend to the future capital gain. He pointed out that an increase in dividend out ratios would lead to increase in the stock prices with this reason investors consider the dividend yield (D_1/P_1) is less risky than the expected capital gain. Hence, Investors' required rate of return increases as the amount of dividend decrease this shows that there is a positive relationship between the amount of dividend and the stock prices. This model is based on the following assumptions *(Francis Jack Clark,1972: 352).*

- The firm is an all-equity firm.
- No external financing is available consequently, retained earning would be used to finance any expansion. Thus, Gordon's model confounds dividend and investment policy just as Walter's model did
- Internal rate of return (r) of the firm and its cost of capital (k) is constant.
- The appropriate discount rake k for the firm remains constant. Thus, Gordon's model also ignores the effect of a change in the firm's risk-class and its effect on K.
- The corporate taxes do not exit.
- The retention ratio, 'b' once decided upon, is constant. Thus the growth of rate, g = br, is constant forever
- K>br=g, if this condition the market value of share is not determined.

The Gordon's model was generally expressed as:

$P = E(1-b)/ke-br(g)$

Where,

P = Price of shares

E = Earnings per share

b = Retention ratio

1-b = Dividend payout ratio i.e. percentage of earnings distributed as dividends

k = Cost of capital

br =g = growth rate

According to the Gordon Model, the following facts are derived:

The firm's market value of shares is not affected by dividend policy and is equal to the book value of assets. i.e. when r=k, dividend policy is irrelevant. Since b, which represents the firm's dividend policy. Under the competitive conditions, k must be equal to the rate of return generally available to investors in comparable shares. This means that any fund distributed as dividends may be invested in the market at the rate equal to the firm's internal rate of return. Finally, shareholders can neither loose or not gain by any change in the company's dividend policy, and the market value of their shares must remain unchanged.

Considering the case of the declining firm where r<k, if the retention ratio b is zero or payout (1-b) is 100 percent. The value of the shares if the internal rate of return is smaller than k, which is equal to the rate available in the market, profit retention clearly becomes undesirable from the shareholders standpoint. Each additional rupees retained reduces the amount of funds that shareholders could invest at a higher rate elsewhere and thus further depress. the value of the company's shares under such conditions, the company should adopt a policy of contraction and disinvestment which would allow the owner to transfer not only the net profit but also paid in capital of it to some other, more remunerative enterprises."

Finally a growth firm where r>k, the value of a share will increase as the retention ratio. b increases under the condition of r>k. However, it is not clear that what should be the value of b to maximize the value of the share P. For example, if b=k/r reveals that denominator k-br = 0, Thus making P infinitely large, and if b=1, k-br becomes negatives, thus making P negative. These absurd result are obtained because of the assumptions, such as that r and r are constant, which underlie the model. Thus, to get the meaningful value of the share according to P (as shown in the equation) the value of b should be less than K/r.

It is clearly known that, under Gordon's model (i) the market value of the shares, P increases with the retention ratio b for firms with growth opportunities, r>k, ii) the market value of the share, P, increases with the payout ratio (1-b), for declining firms r=K and (iii) the market value of the shares is not affected by dividend policy when r=k. The Gordon's model conclusions about dividend policy are similar to the conclusion of Walter's model. This similarly is due to the similarities of assumptions which underlie both the models.

Linter (1956) made an important contribution on the corporate house dividend policy in the American context. He examined the dividend patterns of 28 companies out of 600 listed and well established companies. He made the fifteen factors and characteristics that appeared and reflected on the dividend payment and policy **(***linter John, 1956:97-113).*

The goals of the study were:-

- To identify the right times when a certain change might have been on the active consideration even though no change was occurred.
- To determine the factors which existed into the dividend decisions.

On dividend policy and the pattern different views were collected and based on company's president, vice president, treasure, finance controller and to directors opinions.

He concluded that a major portion of the dividend policy of a firm could be expressed in the following ways.

$DIVt = P_1 EPSt$ or $DIVt = P\ EPSt$ ------ (i)

and $DIVt - DIV_{t-1} = a + b\ (DIV_t - DIV_{t-1})$ eq ------(ii)

Where,

DIV_t = Firm's desired payment

EPS_t = Earnings.

P = Targeted payout ratio.

a = Constant relating to dividend growth

b = Adjustment factor relating to the previous periods of dividend and new desired level of dividends where $b<1$.

The important findings of this study were as follows:

- Firms basically think in terms of proportion of earnings to be paid out.
- Investment opportunities, liquidity position, funds flow are not taken into consideration for modifying the pattern of dividend.
- Firms generally have target payout ratio in view while determining change in dividend per share.

The Objectives of the study are:-

- To identify opportunities when a change in dividends, might well have been under the active consideration even though no change was made.
- To determine the factors which existed into the dividend decisions.

H.K. Baker and Aaron L. Philip's Study

"They, both, surveyed management views on stock dividends and included a two major research question in the survey. Firstly, why do some managers continue to support stock dividends given the apparently limited benefits of these distributions to shareholders. Secondly, does management view about the issues and motives for stock dividends differ based on the firm's trading location, the size of stock dividend or the frequency of issuing stock dividends. They collected all firms stock dividend policies that paid at least one stock dividend between 1988 and 1990, 100 NYSE/Amex firms and NASDAQ firms. The source of their stock dividend firms was the CRSP NASDAQ and combined NYSE/Amex master files. They chose the 1988-90 periods for two reasons. Firstly, they wanted the study period to span several years to avoid any potential bias of using a single year. Secondly, they wanted a period long enough to provide a large sample size, but short enough to ensure getting someone knowledgeable about the firm's must recent stock dividend to answer the questionnaire".(*Baker nd Philips, 1992: 1-7)*

The questionnaire prepared by them had divided into two parts. Part I contained 15 closed end questions on issues drawn from the finance literature about stock dividends. Part II consisted of seven questions about stock dividend decision and four questions about the respondent's profile.

They provided a survey questionnaire along with a letter to the highest-ranking financial officers of each firm in early Nov. 1991. No respondents conducted a follow up survey of the initial 312 questionnaire mailed. Only 299 questionnaire's answers were delivered Out of 299 questionnaires 136 Firms completed, and returned to them, with their responses.

The findings of their survey were as follows:

- Manager of the surveyed firms firmly agree that stock dividends have a positive psychological impact on investors receiving stock dividends.
- Managers- believe that stock dividends enable them to express their confidence in the firm's future prospects, suggesting the stock dividends may have some information content.
- The dominant motive for paying stock dividends is to maintain the firm's historical practice.
- Management's views on issues and motives about stock dividends differ a bit based on the firms trading location or the size of the stock dividends.

M.E. Holder, F.W. Langreh and Heater (1998) made study on "Dividend policy determinations". An investigation influences on stakeholders of firm's dividend policy by examining the interaction between the dividend and investment policies *(Holder, 1998: 73-82).*

The model used in the study was:-

$Dpit = B_0 + B_1Fsit + B_2 + SALE\ sit + B_3In\ sit + B_4LCSHR\ it + B_5 + FCFit + B_6 + Grow\ it + B_7STDit + Et.$

Where,

Dpit = Smoothed dividends payout ratio for a firm in fiscal year 1.

Fsit = Measure of the focus of firm 1 in year t.

LSALEsit = Nature log of sales of firm 1 in year t.

INsit = Residual of insider ownership for firm 1 in year regressed LSALES

LCSHR it = Residual of natural log of number of common shareholders for firm 1 in year regressed on LSALES

FCFit = Free cash flow for firm 1 year t

GROWit = Sales growth of firm 1 in using prior five years.

STD it = Standard deviation of monthly returns of firm 1 in year t.

They used above mentioned regressive equation on the basis of the testing their hypothesis of relationship between the NOC (Net organizational Capital) of a firm and its dividends payout. They conceived a model with data from 477 firms over an eight year period i.e. 1983-1990 for a total of 3816 observations, and decided to use a pooled time series, cross sectional analysis.

The Major findings of the study were:-

The coefficient of corporate houses focus on NOC is negative and statically significant indicating a negative inference on dividend payout ratio.

- Large firms tends to have higher payout ratios in comparison to smaller firms the former firms have easier access to the capital market and are less dependent on internal funds. As a result, they are ready to afford to pay higher dividends.
- Insider ownership negatively payout. Firms with a higher percentage of stock held by insider will have lower agency costs and lower dividend payout ratio.
- Insider levels of free cash flow have higher agency costs and need higher dividend payout ratios to reduce agency costs.
- Dividend payout ratio is lower for higher risk firms.
- Sales growth trend is negatively and significantly related to divided payout ratio. The results of the above mentioned study only conducted in the developed countries along with developed markets and big capital markets. But Nepal has a small capital market whether this study may/may not be applicable

I.M. Pandey's Study

He studied on corporate dividend behavior and analysis of dividend policy in practice "*A case study of CARSON and TOUBRO*". This study based on the mentioned companies' data collected has been conducted from 1976 to 1987. A stable payout ratio results in fluctuating dividend per share pattern, which could be a cause of uncertainly for investors. Generally, firms express their dividend policy in term of dividend per share or dividend rate. This means that payout ratio is not considered significant role by firms while determining their dividend policies. Linter's study conducted in the context of USA, found that firms basically think in proportion of earnings to be paid out. Investment requirements are not considered for modifying the pattern of dividend behavior. Therefore, firms basically have target payout ratio in view while determining change in dividend per share (dividend rate) *(Panday, 1990:305).*

Let us assume that a firm has EPS, as the expected earnings per share in the current year and past the payout ratio. If the firm strictly follow stable payout policy, The expected dividend per share DIV is:

$DIV = pEPS_t$ -------(i)

and dividend change (as compared to the dividend per share of the year DIV_0) will be:

$DIV_1 - DIV_0 = pEPS_t - DIV_0$ ----- (ii)

But in practice firms do not change the dividend per share (dividend rate) immediately with the change in the earnings per share. However, shareholders would like to have a steadily growing dividend per share. Thus, firms changes their dividends slowly and gradually even when there are immense increases in earnings. This implies that the firms have standard speed with which they attempt

to move towards the full adjustment of payout to earnings. Therefore, Linter has suggested that the change in dividends of firms is in practice.

$DIV_t - DIV_0 = b(pEPS_t - DIV_0)$ -------- (iii)

Where b is the speed of adjustment. A conservative firm will move slowly towards its target payout.

The implication of equation (iii) are (a) that firms stabilize their dividends in accordance with the level of current earnings and (b) that the change in dividends over the time do not correspond exactly with changes in earnings in the immediate time period. In other words, dividend per share depends on the firm's current earnings (EPS_t) as well as the dividend per share of the pervious year, (DIVo). The previous year's dividend per share depends on the year's earning per share and the dividend per share in the year before.

2.4 Review of Major Studies in Nepalese Perspective

Gautam (1996) observed the "*Dividend Policy in Commercial Banks*" and found out its impact on the share prices. His conclusion would be summarized below:

- Average EPS of all concerned banks is satisfactory. DPS is not satisfactory.
- Analysis of DPR shows that non of the studied banks exhibit constant DPR.
- Correlation between DPS and EPS of all concerned banks is fairly positive. However it is quite safe to say that their relationship is not significant.
- The coefficient of correlation between EPS and MPS seems to be positive in all banks, besides NGBC, Beta coefficient of NGBC, NIBC and Nabil are 9.215, 12.447 and 7.551 respectively.
- The analysis of the coefficient of correlation between current ratio and DPS suggest that the relationship is positive in NBL and NABIL whereas it is negative in NGBL

- Theoretically issue of bonus share has equal impact EPS, MPS and DPS. However, a case of three commercial banks, a significant variation in the degree of impact is observed.
- Fluctuation in EPS is rare in relation to the original numbers of shares. However, EPS seems to be rather inconsistent when observed in relation to the fluctuation of EPS due to the addition of bonus share is remarkable.

Shrestha (1992) deals about "*The Policies and Performance of Some Nepalese Companies."* On the auspicious occasion of fifth annual meetings of NABIL Bank Ltd. Shrestha presented the paper. His paper refers to the share holders' common views and problems and constraints regarding the shares of the concerned banks which are given below:

- The cost plus inflation at exorbitant rate has made the shareholders to expect higher returns from their investment.
- Erosion in purchasing power of the income has clearly made that the dividend payout ratio must be directed to enhance shareholders' purchasing power by raising dividend payout ratio on the basis of both earnings and cost theory.
- Multiple decrease in purchasing power of the Nepalese currency to extent that higher return by way of dividend is just a natural economic consequence of it.
- Indo-Nepal trade and deadlock has become to sort of economic welfare putting rise in the cost of living index to a considerable extent.
- This is one of the reasons which made the shareholders to expect higher demand for dividend
- The small amount of dividend in previous year is equally a strong enforceable reasons of bank's shareholders to expect handsome dividend policy already assured.

- One way to encourage risk taking ability and preference is to have risk-return trade off by banks' management board in a way that higher return must be the investment rule for higher risk takers that comprise bank's shareholders.

Regarding these adversities we request the bank management board to consider matters relations to payment of dividend. As the same time, we have common view points regarding suggestions to the bank's management board to follow flexible alternatives that help in accomplishing the bank's interest and that of shareholders interest which is mentioned below.

In his opinions, at the end, that the bank should try its best to satisfy both employees and the shareholders. On the auspicious occasion of six annual general meeting, he commented to the management board for neglecting shareholders' interests. He found that the dividend payout ratio is relatively lower than the seven years average growth of earnings. Then, the board of directors of Nabil bank hold that the shareholders are intelligent enough to understand that by not paying the dividend for one or two years, the bank is making its way towards prosperity, in the same time, the board convinced to its shareholders to emphasize in the considerable increase in the market price of the common equity share by the extent of Rs 250.

In the third general meeting of Nabil's report shows that some shareholders thought that the bonus payment and dividend payment were not satisfactory feelings in relation to Rs 2.85 million bonus paid to nearly 50 employees but Rs 3 million dividend to more than 5000 shareholders which was not socially justified from income sharing prospective.

Finally, he says that the shareholders are satisfied with its financial performance but for its decision to pay only 10 percent dividend (although bank management

has reflected 7.5 percent interim dividend to show that the share holders are receiving 17.5 % dividend), to its shareholders is not match the expectation of its shareholders.

Pradhan (1993) selected 17 companies from 1986 to 1990 and studied on "*Stock Market Behavior in a Small Capital Market".*

The objectives of the study were:-

- To access the stock market behavior in Nepal.
- To examine the relationship of the market equity, market value to book value, price earning and dividends with liquidity, profitability leverage, assets turnover and interest coverage.

The following model is given by him.

$V = b_0 + b_1 LIQ + b_2 LEV + b_3 EARN + b_4 TURN + b_5 CoV + U_1$

Where,

Dependent Variables

- Market equity, number of share multiplied by market price of shares (ME)
- Market value of equity to its book value (Mv/Bv)
- Price earning ratio (P/E)
- Dividend per share to market price per share (DPS/MPS)

Independent Variables

LIO = Current ratio (CR) or quick ratio (QR)

LEV = Long term debt to total assets (LTD/TA) or long term debt to total capitalization (LTD/TC)

EARN = Return on assets i.e. earnings before tax to net worth.

COV = Interest coverage ratio i.e. earnings before tax to interest.

TURN = fixed assets turn over i.e. sales to average fixed assets.

U_1= Error term.

Manandhar (1998) studied on the dividend Policy entitled *"Preliminary Test of Lagged Structure of Dividend: Empirical Test Case of Corporate Firms in Nepal"*. The aim of study was to identify some major financial variables that are significant role to the value of the firm.

The study was based on the secondary data of 7 commercial banks, 5 Finance and Insurance companies, 2 trading companies and 1 manufacturing company of the year 1995/96 published by Nepal stock Exchange.

The major findings of this study were as follows:

- The significant relationship is found between change in dividend policy in terms of dividend per share and change in lagged earnings.
- There is relationship between distributed lagged profits.
- The difference is found significantly between over all proportions of change in dividend and due to increase in decrease in earning per share during the study period.
- The overall, Increase in EPS (t) has resulted to increase in the dividend payment in 66.6% of the cases while decrease in EPS resulted decrease in dividend payments which is equal to 33.3% of the cases. It is found that Nepalese corporate houses have followed the practice of maintaining constant dividend payment per share, or, increase it irrespective of change in earnings per share reflected by the total percentage of constant and increased dividend payment of 78.33% of the cases. In other words, the corporate houses are reluctant to decrease their dividend payment.

- Basically, Nepalese corporate houses are provided reluctantly to fluctuating dividend to their shareholders. However, the continued progress and performance, sound financial position, favorable investment environment. Lower risk, ability to maintain feasible dividend policy increase the market price of shares in the securities markets.

Aryal (1997) researched on "*Dividend Policy: Comparative Study between Nepal Arab Bank Ltd. and Nepal Grindlay Bank Ltd.*

He concluded the following points.

- The relationship of dividend per share with earning per share, Net profit, net worth and stock prices is positive.
- A change in dividend per share differently affects the price of share is the different banks.
- There is a uniformity in dividend distribution policy in the studied banks.

Aryal choose two samples on his research study on dividend policy and these samples are dependent on the joint venture commercial banks. So, this study did not represent all banks. However, dividend policy has affected financial position of commercial banks and others factors as well. He used DPS, MPS, EPS, net profit and Net worth with comparatively analysis. Therefore, this study is limited for his investigation.

Katawal (2001) carried out the study on "*A Comparative Study of Dividend Policy in Commercial Banks*. He used mostly the secondary data from the concerned banks.

The major findings are as follows:

- Dividend per share of the concerned banks is satisfactory

- Average earning per share is satisfactory as well
- Relationship between DPS and MVPS is fairly positive, however the relationship between EPS and MVPS is positive as well.
- On this study, there is no specified dividend payment strategy followed by these banks. Payment of cash and stock dividend are distributed with the consent of management. This is the main reason for unstable and inadequate dividend and unequal payout ratio.

The following limitations are found while study:
The samples selected only from the concerned commercial banks are for the study so this study may not represent exact adopted policy by the concerned banks. Then the researcher did not analyze the financial position and dividend policy of the concerned commercial banks.

His study is based on the comparative analysis of six banks. However, he did find out exact position of banks and one of which bank in their best position with DPS, EPS, MVPS DPR, Dividend yield, liquidity ratio and profitability ratio is not defined.

Moreover, the earlier studies on the subject named dividend policy are not sufficient for the study purpose. So its need to be updated because of the rapid changes of financial market at present in Nepal.

CHAPTER - III

RESEARCH METHODOLOGY

This chapter deals with the research methodology, which is used in the period of research. Research means to investigate, search the problems again and again to find out something more about the problems and research is an effort to search new facts, knowledge, principle in scientific manner.

Advanced learner's Dictionary of Current English defines research "A careful investigation or inquiry specially through search for new facts in any branch of knowledge.

Similarly, methodology refers to the various steps that are basically adopted by a researcher in studying his research problems along with the research conclusions. Research methodology is the process of arriving at the solution of problem through systematic dealing with the collection, analysis and interpretation of facts and figures. Research methodology, in other words, refers to the various method or practices applied by the research in the entire aspect of the study.

"Research is a systematic method of finding right solutions for the problem whereas methodology refers to the various sequential steps to adopt by a researcher in studying a problem with certain objective in view" *(Kothari, 1989).*

The basic objective of the study is to find out a suitable dividend policy among the shareholders and to adopt the right dividend policy to the shareholders by the concerned banks. Therefore, this study will also be helpful to arrive at the meaningful recommendations so that the concerned banks will find something useful for them from this study.

3.1 Research Design

Research design is the plan structure and strategy of investigation conceived so as to obtain answers to research questions and to control variance *(Kerlinger, 1983:300).*

A research design is the specification of methods and procedures for acquiring the information needed. It is the overall operational pattern of framework, of the project that stipulates what information is to be collected from which sources by what procedures. If it is a good design, it will ensure that the information obtained is relevant to the research questions and that it was collected by objective and economical procedures *(Paul, E. Green Donalds Tull).*

The analysis of the study is based on the certain research design, keeping in mind on the objectives of this study and the research is mainly based on the secondary data and information which is already published. The annual reports are published by the concerned banks and their reports will be included in this study.

This study is generally based on two types of research design namely descriptive research and analytical research design describe the general concept of dividend policy adopted in Nepal whereas analytical research design makes analysis of collected facts and informative and tells a critical evaluation of them.

This design will help to draw and find out the problems and possibilities of formulating dividend policy for the Nepalese banks. This study is also based on yearly data 062 to 067. The data of the sample banks i.e. Kumari, Nepal Investment and Nabil have been analyzed in descriptive and analytical way with formation of suitable dividend policy to the rational investors.

The right dividend policy will provide a certain portion of dividend to their rational investors, otherwise not. The majority of shareholders are always expecting a higher dividend on their invested capital to the banks. It is their duty to provide handsome dividend to their shareholders. The shareholders who receive the right earnings as dividend are always satisfied with the banks, otherwise, they ignore investing the amount to the securities market or the banks.

3.2 Sources of Data

So as to satisfy the researcher's objective, the researcher select a relevant data of the sample banks i.e. Kumari, Nepal Investment and Nabil which will be studied interpreted and analyzed for the meaningful thesis work. In this purpose, the secondary sources of data secondary data which will be used, are collected from the sample banks, i.e. Kumari, Nepal Investment and Nabil are less expensive for the research students. So, only secondary data for this thesis work will executed, manipulated.

3.3 Population and Sample

A population of data refers to a group of banks (here in thesis) whereas sample data denotes to the bank which have been selected from the whole population banks in a few numbers. The three banks have been selected as the samples i.e. Kumari, Nepal Investment and Nabil and these bank’s present dividend policy and dividend distribution and other relevant factors related to dividend policy are examined.

In Nepal, there are 31 commercial banks whose stocks are vigorously marketed in the stock market. However these banks are played a vital role in the national development, the researcher is not able to select all these banks to this thesis study. Therefore, sampling is made from a population which is as follows:

1 Nepal Arab Bank Ltd.
2 Nepal Bank Limited
3 Nepal Investment Bank Ltd.
4 Nepal SBI Bank Ltd.
5 Everest Bank Ltd.
6 Siddhartha Bank Ltd.
7 Laxmi Bank Ltd.
8 Kumari Bank Ltd.
9 Nepal Bangladesh Bank Ltd.
10 Himalayan Bank Ltd.
11 Nepal Industrial and Commercial Bank
12 Standard Chartered Bank ltd.
13 Bank of Kathmandu Ltd.
14 Lumbini Bank Ltd.
15 Agriculture Development Bank Ltd.
16 Rastriya Banijya Bank ltd.
17 Nepal Credit and Commerce Bank Ltd.
18 Sunrise Bank Ltd.
19 Global Bank Ltd.
20 Bank of Asia
21 Prime Bank Ltd.
22 Citizen International Bank Ltd.
23 Mega Bank Ltd.
24 PCBC Bank Ltd.
25 IED Bank Ltd.
26 Kist Bank
27 Macchapuchrre Bank
28 Andep Bank
29 NIC Bank

30 Century Commercial Bank

31 Civil Bank Ltd.

The sample three banks will be namely

1 Nepal Investment bank Ltd.

2 Nabil bank Ltd.

3 Kumari bank Ltd.

Analysis and presentation of data, as mentioned earlier in this study, is based on secondary data the data obtained are manipulated according to the need of the study. The data are sorted out, classified and tabulated in a tabular form in such a way that they are finally represented some qualitative and quantitative results as the outcomes of the study. The data analysis tools, various financial and statistical tools according to the need of study are applied as simple as possible.

The main financial indicators EPS, DPS, MVPS, P/P ratio, P/E ratio, profitability ratio, liquidity radio and market value per share will be presented and calculated in this study. Likewise, statistical tools arithmetic mean, simple regression analysis, multiple regression analysis standard deviation, coefficient of correlation, , Coefficient Variance and will be shown in this study.

A. Financial Tools

Under the financial tools, the following ratios will be presented and constructed.

1. EPS (Earning Per Share)

This indicates whether the banks' earning power on per share basis have changed at the period or not. EPS is calculated by the net profit after taxes by the total number of common shares.

$$\text{EPS} = \frac{\text{Net profit after tax}}{\text{Total Number of common stock}}$$

2. Dividend per share (DPS)

DPS shows that a part of earnings is distributed to the shareholders on per share basis. It is presented mathematically by dividing the total dividend by the number of equity/ordinary shares.

$$\text{DPS} = \frac{\text{Total Dividend}}{\text{No.of ordinary,equity shares}}$$

3. Dividend Payout ratio (D/P ratio)

DP ratio indicates the percentage of profit distributed as dividend what percentage of profit is remain as reserve and surplus account for the growth of the banks. It is calculated by dividing dividend per share by earning per share.

4. Price Earning Ratio (P/E ratio) (times)

Price Earning ratio reflects the price currently paid by the market for each rupees of current earning per share (EPS). It is reflected by dividing the market value of share (MVPS) by earning per share.

$$\text{P/E ratio} = \frac{\text{Dividend Per share}}{\text{Earning per share}}$$

5. Dividend Yield Ratio (D/Y ratio)

Dividend yield ratio reflects the relationship between dividend per share(DPS) and market value per share (MPVS). It is shown by dividing dividend per share by market value per share.

Where,

$$\text{Dividend Yield Ratio(DYR)} = \frac{\text{DPS}}{\text{MVPS}}$$

6. Profitability Ratio

Profitability ratio is an indicator of efficiency of the corporate houses and this ratio measures the management overall efficiency as shown by the return generated from investment. Higher profitability ratios, higher efficiency of the management This ratio is calculated by dividing gross profit by total assets.

$$\text{Profitability ratio} = \frac{\text{Gross Profit}}{\text{Total Assets}} \quad \text{or} = \frac{\text{Net Profit after Tax}}{\text{Total Assets}}$$

7. Liquidity Ratio

Higher the current ratio shows that the bank has ability to pay its debts in time when they become due and lower the current ratio represents that the banks has insufficient liquidity to meet its debts in time when they become due. Therefore, higher ratio is preferable to the sample banks. i.e., Kumari, Nepal Investment and Nabil.

Liquidity ratio measures the short term solvency position the banks. Under this, there are two types of ratios i.e. current ratio, liquid ratio. This ratio is presented through dividend current assets by current liabilities

$$\text{Liquidity Ratio} = \frac{\text{Current Assets}}{\text{Current Liability}}$$

B. Statistical Tools

In this thesis, the researcher applies certain statistical tools and draws a meaningful conclusion regarding the subject. The tools used by the researcher are presented below:

1. Mean

The most popular and widely used measure of representing the entire data by one variable is the arithmetic mean,. Its value is obtained by adding together all the

items/variables and by dividing this total by the number of items. Mean values of the different variables represent the average value for the study period.

2. Standard Deviation

The measurement of the scatter necessary of the data from mass of figure in a series (average) is known as dispersion. The standard deviation measures the solved dispersion, the greater the amount of dispersion the greater the standard deviation. The small standard deviation means a high degree of uniformity of the observations as well as series and vice-versa.

In this thesis, the standard deviation is calculated for earnings per share, dividend per share, dividend yield and price earning ratio, dividend payout ratio, profitability ratio, liquidity ratio and market value per share.

3. Correlation Analysis

Correlation analysis is the statistical tool that can be used to describe the degree to which one variable is linearly related to other variable. In this study, simple correlation is to be used. Correlation co-efficient between the following financial data is calculated and presented in the matrix form and is constructed completely.

Simple correlation coefficient

- Between Dividend per share and Earning Per share
- Between Dividend per share and market value per share
- Between Dividend per share and dividend yield
- Between Dividend per share and dividend payout ratio
- Between Dividend per share and earning ratio
- Between Dividend per share and liquidity ratio
- Between Dividend per share and net worth
- Between Dividend per share and profitability ratio

4. Coefficient of Variation

The coefficient of variation is the relative measure of dispersion comparable across which is defined as the ratio of the standard deviation to the mean.

5. Regression Analysis

Using the relationship between a known variable and unknown variable to estimate the unknown one is termed as regression analysis. Regression analysis shows how the variable are related, In this study, regression analyses of the following variables have been calculated.

Simple Regression Analysis

This analysis describes whether earning per share (EPS) is the effective factor of market value per share or not and At what extent the EPS affect the market value per share (MVPS)

$y = a+bx$

Where,

Y = Market value per share

a = Regression constant

b = Regression Coefficient

x = Earning per Share

Market Value per share (MPVS) on Dividend per Share (DPS)

This analysis signifies the dependency of market value per share on dividend per share

$y = a+bx$

Where,

y = market value per share

a= regression constant.

b= regression coefficient

x= Dividend per share

Multiple Regression Analysis

In Multiple regression analysis, it depends on two or more independent variables that are used to estimate the unknown values of a dependent variable. For this, the following model has been developed.

$Div = a+b_1 EPS + b_2 MVPS + b_3 NWPS$

a = constant

b = Regression coefficient of the variable

PS = Earning per share

MVPS = Market value per share

NWPS = Net Worth Per Share

The above mentioned model has been developed, considering earning per share, market value per share and net worth per share as basic factors. Then, market price of share is affected by several factors like dividend per share, and earning per share. Thus, multiple regression model of MVPS (market value per share) depends on DPS and EPS described as:

$MVPS = a+b_1 DPS +b_2 EPS$

Where,

MVPS = Market value per share

DPS = Dividend per share

EPS = Earning per share

Correlation Coefficient (r)

It describes the degree which one variable is linearly related to other variables. The coefficient of correlation measures the degree of relationship between two figures. In this study, simple correlation of coefficient is used to determine the relationship of various factors (dividends) and other variables. The data related to dividend at different periods/years are arranged and their relationship with each other is presented.

6) Coefficient of Determination $(r)^2$

The coefficient of determination is a measure of the degree of liner correlation between two variables, one of which occurs to be an independent variable and other being dependent variable. The coefficient of determination value can be of ranging from zero to one. One value can occur only if the unexpected variation is zero which basically means that all the data presented in the diagram fall exactly on the regression line.

7) Regression constant (a)

The content value, which is the intercept of the diagram/model shows the average level of dependent variable when independent variable is zero. But a (constant) indicates the mean or average effect on the dependent variable of all the variables omitted from the diagram/model.

8) Regression Coefficient (b)

The regression coefficient of each variable indicates the relationship between the variable and dependent variable, taking constant the effect of all other independent variables in the regression line. In other words, the coefficient describes how change in the independent variables affects the value of dependent variables.

Standard Error of Estimate (SE)

The standard error of estimate measures the dispersion. It measures the accuracy of the estimated figures as well.

CHAPTER - IV
DATA PRESENTATION AND ANALYSIS

The section includes presentation and analysis of data. The basic objectives of this section are to analyze and evaluate the collected data on dividend policy from the various sources. i.e. annual reports, books, journals, etc. and it's impact on market price of share of the commercial banks are included. This section attempts to analyze earning per share, dividend per share dividend payout ratio, dividend yield ratio, profitability ratio liquidity ratio, market value per share, correlation between financial variables and regression equations of financial variables of the selected banks. Analysis and presentation of data is a major part of this study in order to achieve the objectives. With the help of financial and statistical tools, etc. the data is analyzed, evaluated and this section try to make a comparison among the sample selected commercial banks as well.

4.1 Earning Per share Analysis (EPS)

All the commercial banks always try to achieve their targeted profit which they have decided already on the basis of marketing strategy and the management's decision so that they can exist on the present market conditions.

The following table shows all the details regarding earning per share of the respective banks.

Table 4.1

Earning Per share Analysis (EPS)

Fiscal Year	Kumari	Nepal Investment	Nabil Bank
2062/063	16.59	59.35	129.21
2063/064	22.70	62.57	137.08
2064/065	16.35	57.87	108.31
2065/066	22.04	37.42	106.7
2066/067	24.24	52.55	78.6
Average (Mean)	20.38	53.95	111.99
Standard Deviation	3.55	8.88	20.40
Coefficient Variation	.18	0.16	0.18

Source;- Annual Report of the Respective Banks

The Table 4.1 Shows that EPS of the concerned banks from 2062/063 to 2066/67. Generally the concerned banks performances and other activities are measured in generating earnings per share. Higher earnings per share indicates higher strength/power while lower earning per share shows weaker strength of the organizations.

In the beginning of the year 2062/063, the table shows that EPS of Nabil is the highest to others banks i.e. Rs 129.21, while EPS of Nepal Investment bank and Kumari bank is 59.35 and 16.59 respectively. The date 2063/064 EPS of Kumari bank is lower(22.70) than Nepal Investment bank and Nabil bank. In this period, Nabil bank has a higher EPS i.e. 137.08.

In the Fiscal Year 2064/065, Nabil and Nepal Investment bank have higher EPS while Kumari bank has 16.35 which is the lowest among others banks. In this

period Nabil bank has lower EPS than the previous years and Kumari bank has the lowest EPS to the previous years as well.

In the Fiscal Year 2065/066 Nabil bank has higher EPS i.e. 106.76 while Nepal Investment bank and Kumari bank have 37.42 and 22.04 respectively. In this time, Kumari bank has lower EPS i.e. 22.04 than other banks.

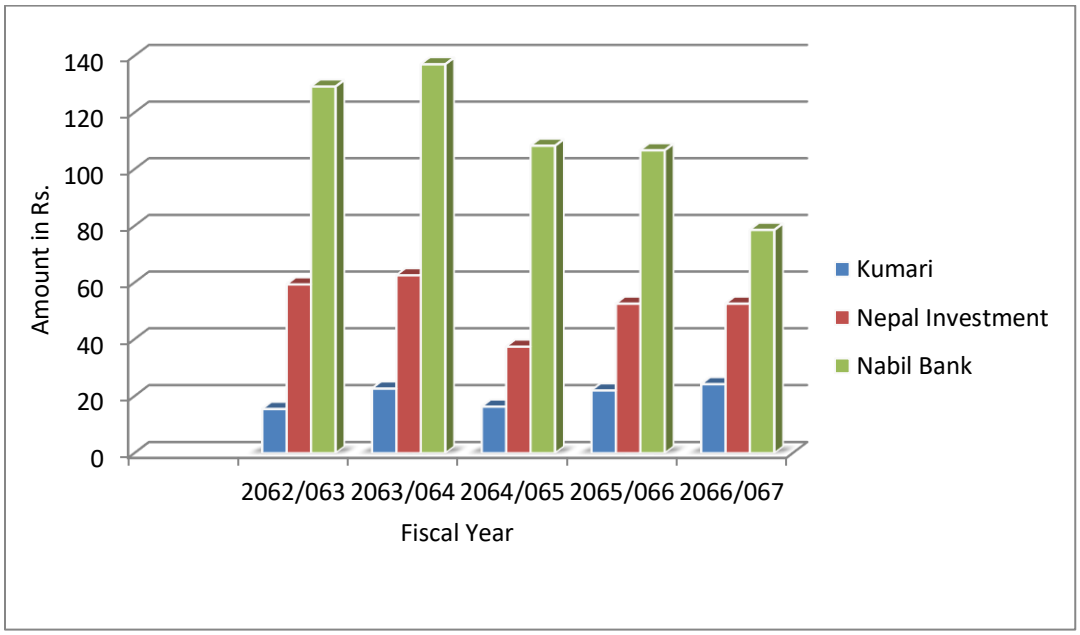
In the Fiscal Year 2066/067, ESP of Nabil and Nepal Investment is higher than the others. In other words EPS of Nabil is 78.60 and that of Nepal Investment bank's is 52.55. Nabil's EPS is higher than Nepal Investment bank and kumari bank

In average EPS of Nabil Bank is higher among the sample selected banks. The average of selected/sample banks EPS i.e. Kumari, Nepal Investment bank and Nabil is 2038, 53.95 111.99 respectively among which Nabil's EPS is higher than the other banks.

A standard deviation measures the dispersion as well as homogeneity of a series and vice versa. It is preferable to say that the rate of fluctuations with which the help of coefficient correlation of the above data vary. Here standard deviation of Kumari, Nepal Investment and Nabil are 3.55, 8.88 and 20.40 respectively. The coefficient of variation of the EPS of the sample banks (i.e. Kumari, Nepal Investment and Nabil) are 0.18, 0.16 and 0.182 respectively. However, Kumari and Nabil have no significant difference in their EPS' coefficients. It is apparent that the general analysis of EPS cannot provide true pictures of dividend policy of a bank. As a result, it is necessary to find out the other measurement tools as well.

Figure 4.1

Earning Per share Analysis (EPS)



4.2 Dividend per share Analysis (DPS)

Table 4.2

Dividend per share Analysis (DPS)

Fiscal Year	Kumari	Nepal Investment	Nabil
2062/063	21.05	55.46	85
2063/064	21.05	30	140
2064/065	10.53	40.83	100
2065/066	10.58	20	85
2066/067	12	25	70
Average	15.04	34.26	96
Standard deviation	4.93	14.48	23.96
Coefficient Variation	.33	0.42	0.25

Source: Annual Report of the Respective Banks

The above mentioned, dividend per share table shows the impact of dividend on the share price of the concerned banks and it is very important to look into the relevant data of the sample banks for the purpose of analysis/evaluation.

In the Fiscal Year of 2062/063 Nabil Bank has paid to its shareholder the highest dividend Rs. 85 per share of all. However, during this period, Kumari bank has paid Rs. 21.05, a small amount of dividend to its shareholder distributed among the studied banks.

In the Fiscal Year of 2063/064, Nabil Bank has paid higher dividend Rs. 140 to its shareholders and Kumari bank has paid Rs 21.05 as compared to Nepal Investment Bank i.e. Rs 30.

The during the Fiscal Year of 2064/065, Nabil bank has paid Rs. 100 as dividend per share to its shareholders. During this period Nepal Investment bank has paid Rs. 40.83 as dividend per share to its stockholders in comparison with kumari bank i.e. 10.53.

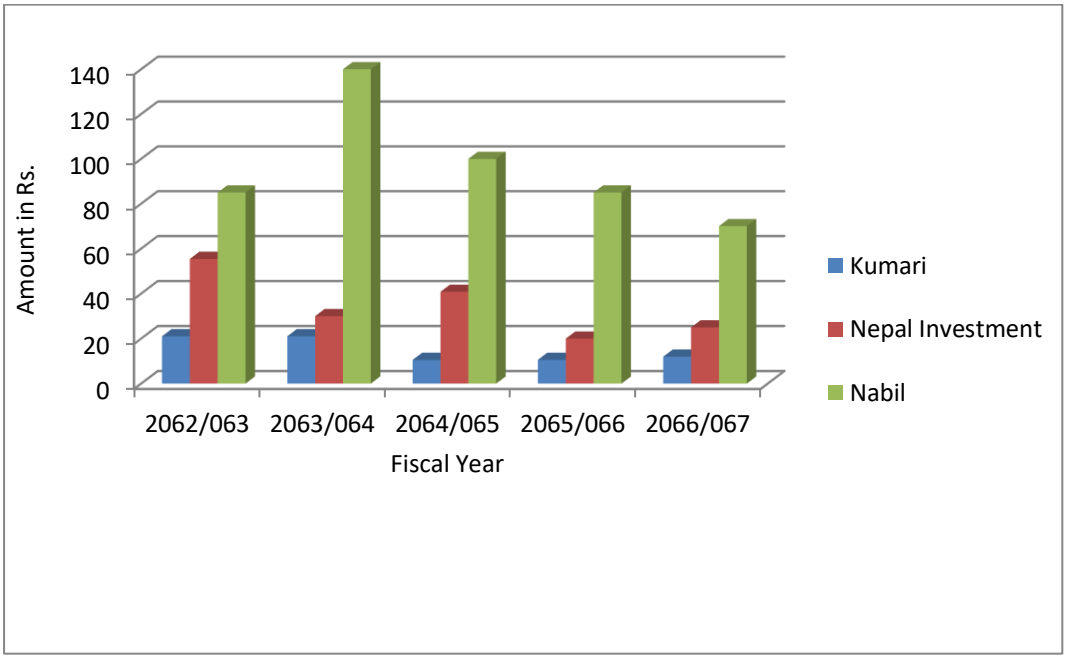
The Date relating to the year 2065/066, Nabil bank has paid Rs. 85 a higher dividend in comparison with Kumari and Nepal Investment, Rs. 10.58 and Rs 20 Respectively.

In the Fiscal Year of 2066/067, Nabil has also paid a higher dividend to its stockholders i.e. Rs 70 per share than other banks. During this period, Nepal Investment bank has paid Rs. 25 dividend to its shareholders and also during this period, Kumari bank has distributed Rs. 12 dividend to its shareholders. Again, during this period, except Nabil bank, other banks couldn't pay higher dividend to their shareholders because of World's recession, suffering no household transactions.

On the average, during these periods, Nabil bank has paid higher dividend Rs. 96 in comparison to Kumari and Nepal Investment, Rs 15.04 and Rs 34.26 respectively.

Here presented, Standard deviation of Nabil bank is 23.96 while Nepal Investment bank and kumari banks' Standard deviation are 14.48 and 4.93 respectively. The standard deviation measures the dispersion of the series and also measures the high degree of uniformity of observation. The above mentioned standard deviation of these banks vary also. However, these banks distributed dividends to their stockholder are not consistently. In other words, there is a great variance among the banks in distributing the dividend. The coefficient of covariance of Kumari and Nabil and Nepal Investment banks are 0.33, 0.25 and 0.42 respectively. In this period, Nabil Bank has higher the coefficient of covariance than the others. It is not sufficient tools to measure the dividend policy from coefficient of variance. So it needs other necessary tools to measure dividend policy.

Figure 4.2
Dividend per share Analysis (DPS)



4.3 Dividend Payout Ratio (DPR)

DPR= Dividend per share/Earning per share

Table 4.3

Dividend Payout Ratio(DPR)

Fiscal Year	Nabil	Kumari	Nepal Investment
2062/063	85/129.21=0.657	21.05/16.59=1.27	55.56/59.35=0.94
2063/064	140/137.08=1.021	21.05/22.70=0.93	30/62.57=0.479
2064/065	100/108.31=0.923	10.53/16.35=0.6440	40.83/57.87=0.71
2065/066	85/106.76=0.796	10.58/22.04=0.480	20/37.42=0.734
2066/067	70/78.61=0.890	12/24.24=0.4450	25/52.55=0.48
Average	0.84	.75	0.67
Standard deviation	.12	.21	0.27
Coefficient Variation	.15	.36	0.4

Sources: Annual Reports of the Respective Banks

The ratio itself is average between two data. This ratio measures the relationship between the earnings related to equity shareholders and dividend paid to them. This topic is also related to the dividend per share and the earnings per share paid by the concerned banks for five different fiscal years.

From the table, it shows the dividend payout ratio of the three sample banks from the Fiscal Year 2062/063 to 2066/067. In the Fiscal Year 2062/063 Nabil, Kumari and Nepal Investment banks have paid 0.657, 1.27 and 0.94 respectively while Nabil Bank has a lower dividend payout ratio than the others. In this period, Kumari Bank has 1.27 dividend payout ratio, a higher one.

In the Fiscal Year 2063/064, dividend payout ratio of Kumari, Nepal Investment and Nabil banks are of 0.93, 0.479 and 1.02 respectively. Nabil bank has higher dividend payout ratio than the two banks. In this period, Nepal Investment bank

has the lowest dividend payout ratio to the two bank. Because, in this period, Kumari bank and Nepal Investment have paid lower dividend than Nabil bank

In the Fiscal Year 2064/065, Nabil Bank has higher dividend payout ratio than the two banks i.e. Nepal Investment and Kumari. In this period, Nabil, Nepal Investment and Kumari banks have 0.923, 0.710 and 0.644 respectively. The lowest dividend payout ratio is shown by Kumari bank. In this year, again, Nabil's dividend payout ratio is decreased by (0.923-0.796) 0.127 in comparison with the last year, The Nepal Investment bank has a moderate dividend payout ratio than the two banks i.e. Nabil and Kumari.

In the Fiscal Year 2065/066, Nabil, Kumari and Nepal Investment banks have 0.769, 0.480 and 0.734 dividend payout ratios respectively. Nabil has the higher of them and Kumari bank has the lowest of them. In this year, Kumari Bank has the lowest net profit of them. Because, Kuamari bank's dividend per share and earning per share is the lowest among them i.e Nepal Investment and Nabil.

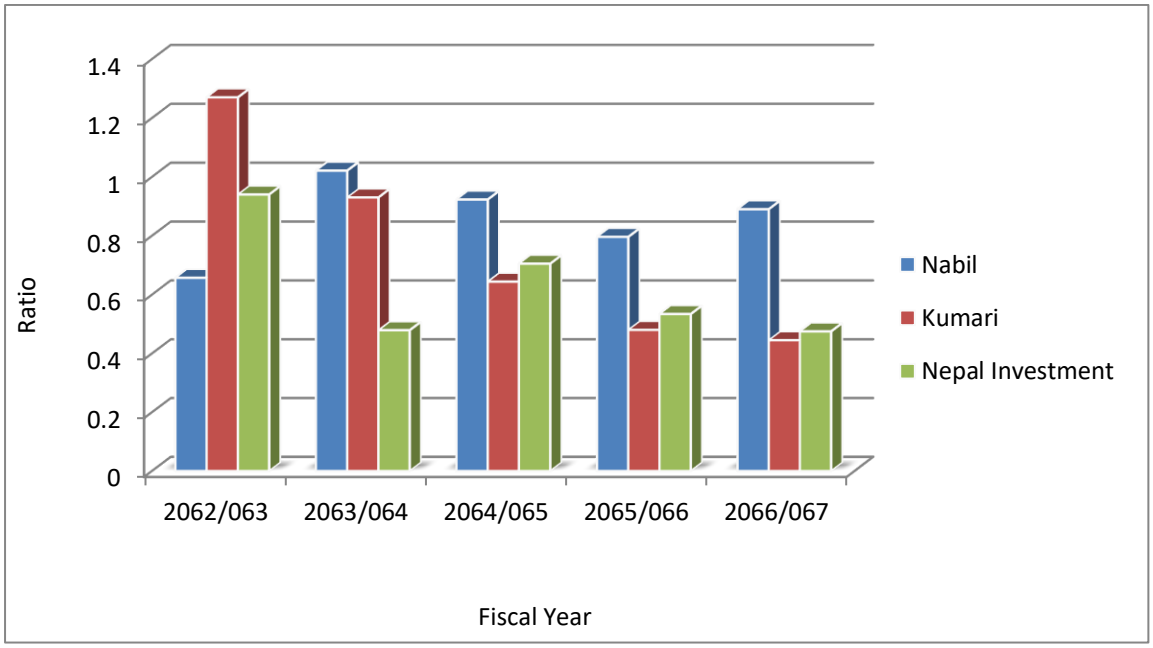
In the Fiscal Year of 2066/067, dividend payout ratio of Nabil, Kumari and Nepal Investment banks have 0.89, 0.5 and 0.48 respectively. Till date Nabil has higher DPR among them. Nepal Investment and Kumari banks have lower dividend payout ratios because of the world's recession, Nepal Rastra bank policies and directives to the concerned banks is the main reason the sample banks have lowest net profit of the year. Due to the market situation, earning from their investments is become lower day by day and then dividend payout ratios are also becoming lower.

The average of the sample banks i.e. Nabil, Nepal Investment and Kumari is 0.84, 0.67 and 0.75 respectively. Moreover, Kumari bank has higher DPR average

among the others. S.D. of Nabil, Nepal Investment and Kumari bank is 0.12, 0.27 and 0.27 respectively. In this regard, Kumari bank and Nepal investment banks have same S.D. Coefficient of variance of Nabil bank, Kumari bank and Nepal Investment bank are .15, 0.36 and 0.40 respectively. In this period, Nepal Investment bank has higher the coefficient of variance than the others and it is not sufficient tools to measure the dividend policy from the coefficient of variance DPR cannot measure the dividend policy of the sample banks. Therefore it is necessary to find out other measurement tools to dividend policy as well.

Figure 4.3

Dividend Payout Ratio(DPR)



4.4 Dividend Yield Ratio

$$\text{Dividend Yield Ratio} = \frac{\text{Dividend per Share}}{\text{Market value per Share}}$$

This ratio shows that the relationship between dividend per share and market value per share. Therefore, the ratio is calculated as follows

$$\text{DYR} = \frac{\text{DPS}}{\text{MVPS}}$$

Dividend yield ratio is greatly affected by the market value per share. In other words, this ratio greatly influences the market value per share. So a little change in dividend per share can bring about the effective change in the market value price per share. It is evaluated to on the basis of market scenarios and their price fluctuation in the context for the long run survival of companies/banks.

Table 4.4

Dividend Yield Ratio

Fiscal Year	Nepal Investment	Nabil	Kumari
2062/063	55.46/1260 = 0.044	85/2240 = 0.039	21.05/443 = 0.047
2063/064	30/1729 = 0.0173	140/5050 = 0.028	21.05/830 = 0.025
2064/065	40.83/2450 = 0.0166	100/5275 = 0.0189	10.53/1005 = 0.010
2065/066	20/1388 = 0.0144	85/4899 = 0.0173	10.58/700 = 0.015
2066/067	25/705 = 0.035	70/2384 = 0.0293	12/ 468 = 0.026
Average	.25	0.0187	0.025
Standard deviation	0.011	0.0069	0.0127
Coefficient Variation	.44	.37	0.508

Source: Annual Reports of the Respective Banks

The above table shows dividend yield ratio analysis for the Fiscal Year 2062/063 to 2066/067. In the Fiscal Year of 2062/063, dividend yield ratio of Nepal Investment and Nabil and Kumari banks has 0.044, 0.038 and 0.047, respectively. Kumari bank has higher dividend yield ratio of them. If the dividend per share is consistently higher, in this condition the market value per share will definitely be higher, therefore, the dividend per share paid should be consistent. No investors can be afraid of the market threats because the investors are receiving consistent dividends and their market value per share absolutely is higher than others. In this period, the Kumari bank has higher dividend yield ratio than the others and Nabil bank has 85 dividends per share and 2240 rupees market value of share. Its yield ratio is lower than the other banks.

In the Fiscal Year of 2063/064, dividend yield ratio of Nabil, Nepal Investment and Kumari banks have 0.028, 0.0173 and 0.025 respectively. In this period, Nepal Investment bank has a lower ratio among them. This means that bank's dividend per share is lower and the market value per share absolutely higher than its dividend paid per share.

In the Fiscal Year of 2064/065, dividend yield ratios of Nabil, Nepal Investment and Kumari banks have 0.0189, 0.0166 and 0.010 respectively. This period, Nabil bank yield is so higher than the others. The lowest is Kumari i.e. 0.010. In this period Kumari bank has paid Rs. 10.58 per share as dividend.

The Fiscal Year of 2065/066, Nabil bank has a higher dividend yield ratio i.e. 0.0173 than the others i.e. Nepal Investment (0.0144) and Kumari (0.015) respectively. In this period, Nabil bank's dividend declaration is higher i.e. Rs 85 per share and the market value per share is Rs 4899 which is the highest to them. i.e. Kumari bank and Nepal Investment bank.

In the Fiscal Year of 2066/067, Nepal Investment bank, Nabil bank and Kumari banks have 0.035, 0.0293, 0.026 dividend yield ratio respectively. In this period, Nabil bank has paid higher dividend to their shareholders i.e. Rs 70 per share in comparison with Kumari bank has paid Rs 12 per share and Nepal Investment bank Rs 25 per share.

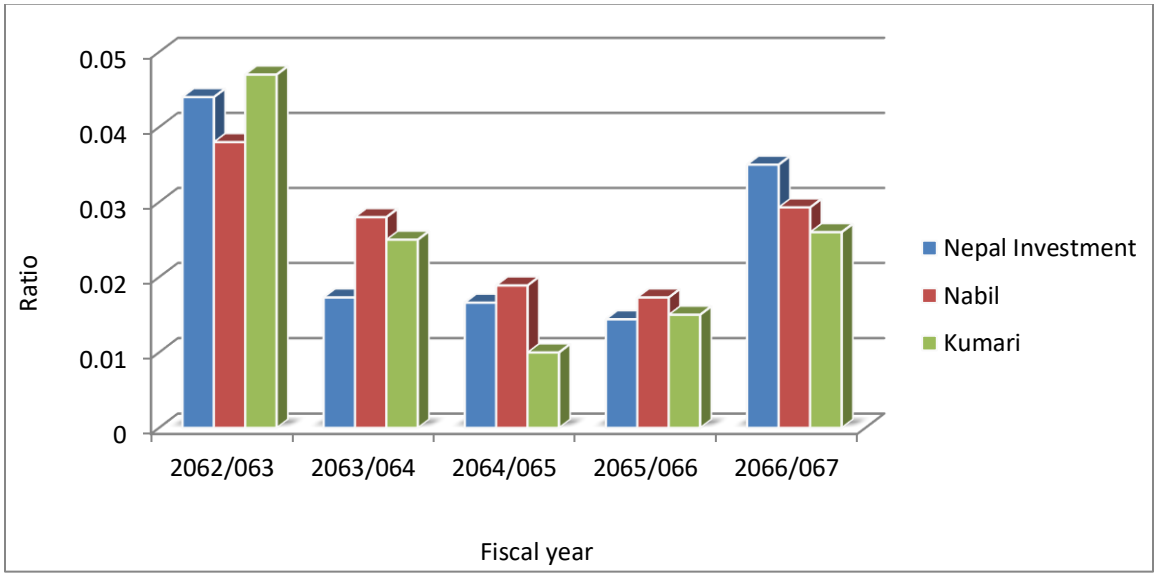
In the average, Nabil bank is DYR i.e 0.0187 is higher of all. However, dividend yield ratio of Kumari bank and Nepal investment bank is the same i.e. 0.25

S.D. of the sample banks, Nabil bank and Nepal Investment and Kumari bank is of 0.0069, 0.011 and 0.0127 respectively. The coefficient of variation of Nabil, Nepal Investment bank and Kumari banks is of 0.37, 0.44 and 0.508. The CV of

Nabil and Kumari have almost same i.e. 0.37and 0.44. Higher CV has the Kumari bank, one of the sample banks. In brief, Nabil has sufficient management for distribution of dividend on the basis of market price of share. So, this bank has lower CV. i.e. 0.0023.

Figure 4.4

Dividend Yield Ratio



4.5 Price Earning Ratio

Table 4.5

Price Earning Ratio

(In Times)

Fiscal Year	Nepal Investment	Kumari	Nabil
2062/063	21.23	26.71	17.34
2063/064	27.63	36.56	36.84
2064/065	42.33	61.47	48.7
2065/066	37.10	31.76	45.89
2066/067	13.42	19.31	30.33
Average	28.34	35.16	35.82
Standard deviation	10.45	28.26	11.31
Coefficient Variation	0.37	0.80	.032

Source: Annual Report of the Respective Banks

Mathematically,

$$PE = \frac{MVPS}{EPS}$$

This ratio depicts the concerned banks' market appraisals. From this study, the investors/shareholders' expectation towards the company policies and financial performances are evaluated. And this study also helps the investors to classify the relationship between earning per shares and the market value per share. It is also depicted in times, higher the times better the results, is expected by the respective banks of the stockholders.

In the Fiscal Year of 2062/063 PE ratio of Nabil, Kumari and Nepal Investment bank have 17.34, 26.71 and 21.23 (times) respectively. Till the date, Kumari bank has higher 26.71(times) PE ratio than the others i.e. Nabil (17.34) and Nepal Investment bank (21.23). Then the lowest PE ratio is Nabil bank, which means that market value per share and the earning per share is lower as compare to Kumari bank at this year

In the Fiscal Year 2063/064, Nabil has higher PE ratio i.e. 36.84 than the others i.e. Kumari 36.56 and Nepal Investment bank 27.63. In the year 2064/065 Kumari has 61.47 times PE ratio which is greater than the others i.e. Nepal Inverstemt and Nabil. In this period Nepal Investment and Nabil have 42.33 and 48.70 times respectively. These two banks have normal PE ratios and there is no a vast difference between them.

The Fiscal Year 2065/066, Kumari bank has the lowest PE-ratio i.e. 31.46 times to the sample banks. In this period, Nabil bank has higher PE ratio i.e. 45.89 than the sample banks. Again in this period, Nabil bank has higher the market value per share i.e. Rs. 5275 and earning per share Rs. 108.31 so it has a higher PE ratio.

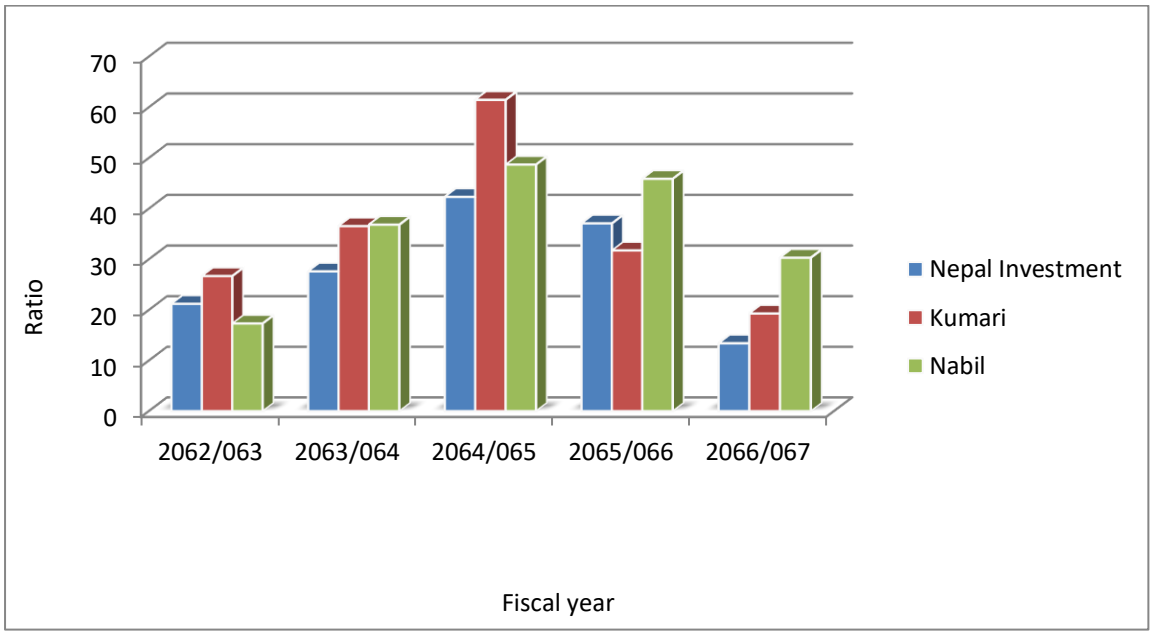
In the Fiscal Year 2066/067, Nabil has the highest PE ratio i.e. 30.33 in comparison with Nepal Investment bank and Kumari bank, 13.42, 19.31 times respectively. The intense market competition of common shareholders in buying the respective banks' shares, the world recession and the purchsasing power of consumers affect the existing market value per share. However the existing market price of shares are below the expecting price of consumers. From this reason the sample banks' shares are below the Shareholders' expectations and interests. In this period Nepal Investment has Lower PE ratio i.e. 13.42 times than the sample banks.

In the average, Nepal Investment bank's (28.34) PE ratio is lower than the Kumari bank and Nabil bank, 35.162 and 35.82 respectively and Kumari bank and Nabil bank have no greater difference on their PE ratios, 35.16 times and 35.82 times respectively. standard deviation (S.D.) of the sample banks i.e. Nepal Investment, Kumari, Nabil is of 10.45, 28.26 and 11.31 respectively. Nabil bank has higher S.D. than the others.and the standard deviation also measures the risk of the respective banks. Higher the S.D. higher the risk

The coefficient of variation analysis shows that the PE ratio of Kumari bank is the most fluctuation position by nearly 0.80 times. On the other hand, coefficient of variance (C.V.) of Nepal Investment bank has 0.37 times is more fluctuating than the others and CV of Nabil bank is lower than the other banks i.e. 0.32 times

Figure 4.5

Price Earning Ratio



4.6 Profitability Analysis

Profitability ratio is an indicator of efficiency of the business organization. This ratio measures the management over all efficiency. Higher the profitability ratio shows the efficiency of the management.

Table 4.6

Profitability Analysis

Fiscal Year	Kumari	Nepal Investment Bank	Nabil
2062/063	15.52	23.99	35.32
2063/064	19.66	25.07	32.16
2064/065	16.18	25.33	29.68
2065/066	16.54	22.97	30.56
2066/067	15.32	23.67	24.11
Total	83.17	121.03	151.83
mean	16.63	24.21	30.37
Standard Deviation	1.47	0.95	3.64
Co-variance	.09	0.04	0.12

Source: Annual Reports of the Respective Banks

In the Fiscal Year 2062/063, the data related to profitability rations of Nabil bank, Nepal Investment bank and Kumari bank are of 35.22, 23.99 and 15.52 respectively. Nabil bank has a higher ratio than the others. In this period Kumari bank has a lower ratio. Higher profatibility is the Nabil bank.

In the Fiscal Year 2063/064 Nepal Investment bank and Kumari bank have increased their profitability ratio as compared to the last year. the banks have no greater differences on their ratios in comparison with the last year, the data now are 25.33 and 19.16 while Nabil bank has decreased its profitability ratio from the last year by (35.32-32.16)=3.16.

The Fiscal Year 2064/065 of Nabil bank, Nepal Investment bank and Kumari bank data is of 29.68m 25.33 and 16.18 respectively. In this period the data of all samples banks is also decreasing trend. In spite of decreasing trend profitability ratio Nabil bank has higher profitability ratio than the other banks. It is to state that Nabil bank has the most efficient management and the shareholders of this bank are expecting more cash dividend as well as cash plus share dividends.

In the Fiscal Year of 2065/066 Nabil bank has higher profitability ratio i.e 30.56 than the other banks. In this year Kumari bank has increased its profitability ratio (16.18-16.54) by .36 while Nepal Investment bank is decreasing trend (25.33-22.97) by 2.36. Nabil bank has greater risk bearing capacity because of higher the efficiency of the management or higher the profitability.

In the Fiscal Year of 2066/067 the profitability ratio of Nabil bank and Kumari bank is of 24.11, 15.32 which are decreasing trend while Nepal Investment bank's profitability ratio i.e 23.67 increasing trend in comparison with the last year. In spite of the world market recession the sample banks have shown well efficiency of the management providing handsome dividend to their shareholders.

In the average Nabil bank has higher the profitability ratio i.e 30.37. In comparison with Nepal Investment bank and Kumari bank i.e 24.21 and 16.63 respectively. In short, Nabil bank has higher the efficiency of the management and higher risk bearing capacity in comparison with Nepal Investment bank and Kumari bank.

S.d measures the dispersion or risk. Standard deviation (s.d) of the sample banks i.e Nabil, Nepal investment bank and Kumari is of 3.64, .95 and 1.47 respectively. S.d. of Nepal investment bank is the lowest to others.

Coefficient of variance of Nabil, Nepal investment bank and Kumari bank is of .12, 0.04 and 0.09 respectively. Among them, Nepal Investment bank has the lowest.

In the Fiscal Year 2062/063, the data related to profitability ratios of Nabil and Nepal Investment bank and Kumari are 3.23, 1.61 and 1.48% respectively. Nabil has 3.23 profitability ratio while Nepal Investment and Kumari have 1.61 and 1.48 respectively. Kumari bank has lower profitability ratio than the other banks in this period. Higher profitability is the Nabil bank.

In the Fiscal Year 2063/064, Nepal Investment and Kumari Bank have increased their profitability ratio as compared to the last year. In this year, these banks have no greater differences on their ratios in comparison with the last year.

In Fiscal Year 2064/065, Nabil bank, Nepal Investment bank and Kumari bank have 2.32, 1.77 and 1.52 profitability ratios respectively. Moreover, Nabil bank has the highest profitability ratio to the other banks and lower has the Nepal Investment bank. Therefore, it is to state that Nabil bank has the most efficient

management and the shareholders of this bank are expecting more cash and plus and bonus dividend.

In the Financial Fiscal Year of 2065/066, Nabil bank has higher profitability ratio i.e. 2.55 than the others i.e. Nepal Investment and Kumari Bank. In this year, Kumari bank has increased its profitability ratio than the last year by 1.77-1.52=0.25. Nepal Investment bank has decreased the profitability ratio from 1.77 to 1.68. In this year, Nabil has greater risk bearing capacity because of higher the efficiency of the management.

In the Fiscal Year of 2066/067, the sample banks have increased their the profitability ratios than the last year. Nabil, Nepal Investment bank and Kumari have 2.37, 2.19 and 2.12 profitability ratios respectively. This year, these banks have shown greater the efficiency of the management.

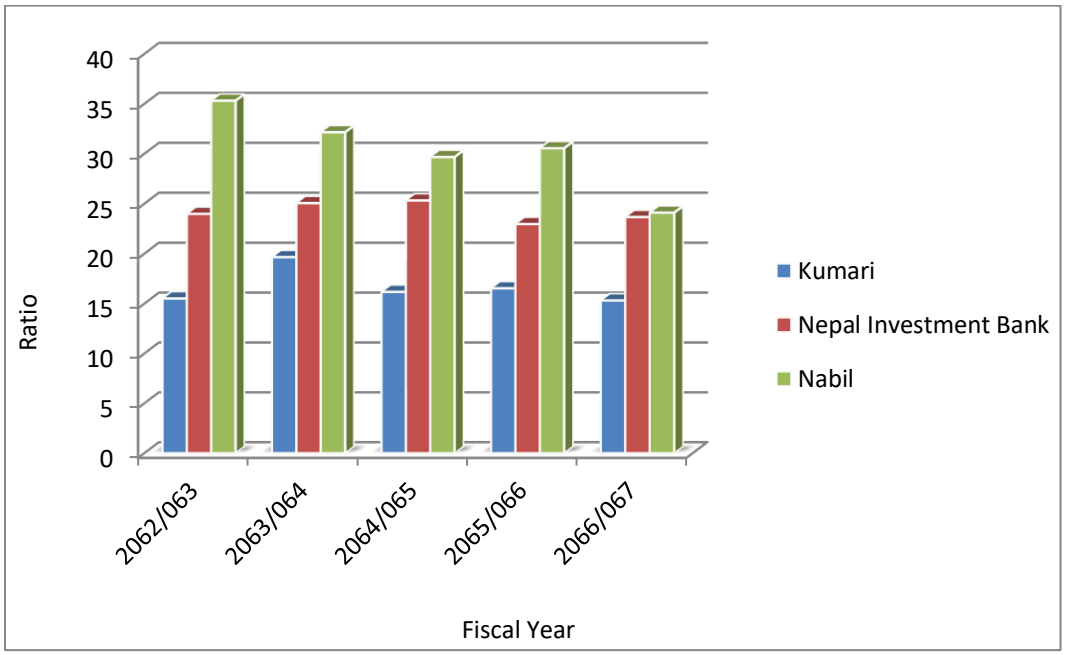
In the average, Nabil Bank has higher the profitability ratio i.e. 2.638 in comparison with Nepal Investment bank and Kumari bank i.e. 1.808 and 1.75 respectively. In short, Nabil bank has higher the efficiency of the management and higher risk taking capacity and highly efficient bank in comparison with the Nepal Investment bank and Kumari bank.

Standard deviation (S.D.) of the sample banks i.e. Nabil, Nepal Investment bank and Kumari bank is of 0.138, 0.167, 0.098 respectively. S.D. of Kumari bank is the lowest to the others banks.

Coefficient of variance (C.V.) of Nabil, Nepal Investment and Kumari banks is of 0.052, 0.092 and 0.056 respectively. Among them, Nabil has the lowest C.V to the sample banks.

Figure 4.6

Profitability Analysis



4.7 Liquidity Analysis

Table 4.7

Liquidity Analysis

(In Times)

Fiscal Year	Nabil	Nepal Investment	Kumari
2062/063	3.26	13.61	2.71
2063/064	6	10.47	3.65
2064/065	8.37	10.91	1.91
2065/066	9.03	10.32	7.13
2066/067	3.02	7.77	8.02
Average	5.936	10.62	4.68
Standard deviation	1.05	1.59	.92
Coefficient Variation	.177	0.149	.196

Source: Annual Reports of the Respective Banks

Liquidity ratio is the test of liquidity of a firm/bank. It evaluates short term debt paying ability of the firm. It measures the availability of current assets for meeting current liabilities.

The above table shows the liquidity ratios of the three sample banks. In the Fiscal Year 2062/063, the data related to liquidity ratio of Nabil, Nepal Investment and Kumari are 3.62, 13.61 and 2.71 times respectively. In this year, the Kumari Bank has the lowest liquid position i.e. 2.71 times, while Nepal Investment bank has higher liquidity position i.e. 13.61 times.

In the Fiscal Year 2063/064, Nepal Investment bank has higher liquidity ratio i.e. 10.47 times than the Nabil (6times) and Kumari (3.65 times). Nepal Investment bank has lower liquidity position in comparison to the previous year (10.47 times). In this year the Kumari bank has the lowest liquidity position 3.65 of them i.e. Nepal Investment and Nabil.

During the Fiscal Year 2064/065, Nepal Investment bank has higher liquidity position (10.91 times) than Nabil (8.37 times) and Kumari (1.91 times). Kumari bank has the lowest liquidity position to the other banks. Its liquid position decreased by (3.65-1.91) = 1.74 times to the previous year. In this period, Nabil bank has increased its liquidity position than the previous year by (8.37-6)= 2.37 times

The Fiscal Year 2065/066 shows that Nepal Investment bank has higher liquidity position (10.32 times) than Nabil (9.03 times) and Kumari (7.13 times). However, this bank has decreased its liquidity position by (10.91-10.32)= 0.59 times from the previous year and Nabil bank and Kumari bank have lower their liquidity positions than the last year.

In the Fiscal Year of 2066/067, Kumari bank has higher liquidity position (8.02 times) than the others i.e. Nepal Investment 7.77 and Nabil (3.02). In this Fiscal Year, Nepal Investment and Nabil have decreased their liquidity position in comparison with the previous years, due to the shortage of current cash flow in the market. Sometimes, such problems can be occurred in the commercial markets.

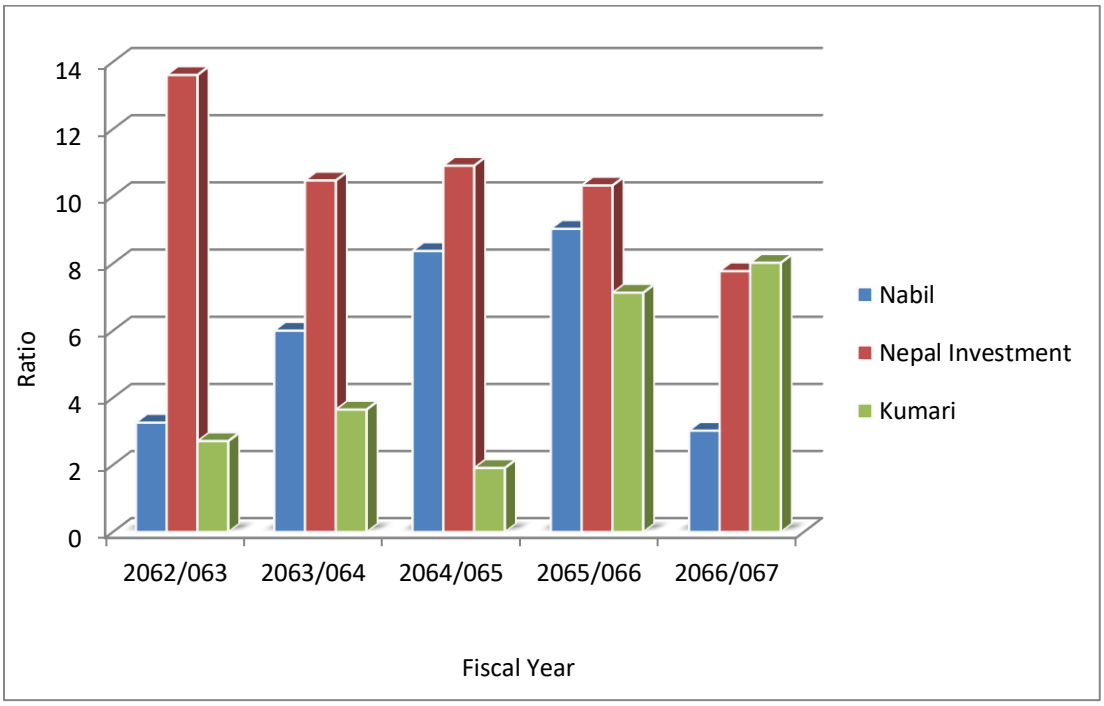
In the average, Nepal Investment bank has higher liquidity position (10.62 times) which has the most liquidity position average to the other banks i.e. Kumari (4.68), Nabil (5.936) Nepal investment bank is a position to solve the ups and downs of its liquidity position. Moreover, Kumari bank has the lowest liquidity position to the other banks. So, it cannot provide the required cash flow to its creditors in terms of loan

Standard deviation (S.D.) of the sample banks i.e. Nabil, Nepal Investment and Kumari is of 1.05, 1.59 and .92 respectively. Among them, Nepal Investment bank has a higher position of standard deviation. Kumari bank has a moderate liquidity position than the sample banks and the lowest is Nepal Investment bank i.e. .92.

The coefficient of variation (C.V.) of liquidity ratio of the sample banks i.e. Nabil, Nepal Investment and Kumari are 0.177, 0.149 and 0.196 respectively. It shows that the liquidity ratio of Kumari bank is the lowest fluctuation among the three sample banks. So, this tool is not sufficient to measure the liquidity position of the sample banks and we look further the tools to meet its requirements.

Figure 4.7

Liquidity Analysis



4.8Market Value Per Share Analysis

Table 4.8

Market Value Per Share Analysis

Fiscal Year	Nabil	Nepal Investment	Kumari
2062/063	2240	1260	1443
2063/064	5050	1729	830
2064/065	5275	2450	1005
2065/066	4899	1388	700
2066/067	2384	705	468
Average	3969.6	1506.4	689.2
Standard deviation	1885.08	1105.756	381.95
Coefficient Variation	0.47	0.73	0.55

Source: Annual Report of the Respective Banks

The above table shows that the market value price per share (MPVS) of the sample banks i.e. Nabil, Nepal Investment and Kumari is mentioned from 2062/063 to

2066/067. Market value of share means to evaluate the value of the shares by the share consumers in the market. Higher market value per share, higher consumers of shares. Most of the shareholders and share consumers are satisfied with the higher price per share held by them, whatever the position of a firm/bank is.

In the Fiscal Year 2066/063 MVPS of Nabil, Nepal Investment Kumari Banks is of Rs. 2240, Rs.1260 and Rs. 443 respectively. In this period, Nabil has higher value of the market price per share i.e. Rs. 2240 than the others. During this period, Kumari bank has the lowest the market value per share i.e. Rs. 443 to Nabil bank and Nepal Investment bank.

In the Fiscal Year 2063/064 MVPS of Nabil has increased by (5050-2240)= Rs. 2810 than the previous year. However, there are some increments to the Nepal Investment and Kumari banks Rs (1260-1729= Rs. 469.) (830-443=Rs 387) than the previous years. There are some increments to Nepal Investment (Rs. 1260-1729=Rs 469) and the Kumari bank (Rs830-443 = Rs 387) than the last year.

The data related to the year 2064/065, MVPS of Nabil bank, Nepal Investment bank and Kumari bank is Rs. 5275 Rs. 2450, Rs. 1005 respectively. In this period these banks have some increments to their in MVPS. This increment is very important to the shareholders point of view due to higher share price higher customer of shares.

In the Fiscal Year 2065/066, MVPS of Nabil bank, Nepal Investment bank and Kumari Bank is Rs. 4899, Rs1388 and Rs 700 respectively. During this period, Nabil has higher MVPS than the others, Nepal Investment and Kumari have decreased their MVPS by (2450-1388) Rs. 1062, (1005-700Rs.= Rs. 305) respectively. In this period, Nepal Investment and Kumari have declared their cash

dividend 20% and 55% respectively. So their share values have increased to some extend.

In the Fiscal Year 2066/067, MVPS of Nabil bank, Nepal Investment bank and Kumari bank is of Rs. 2384, Rs 705 and 468 respectively. Nabil bank has higher MVPS than the others. This bank has decreased its MVPS by (Rs. 4899-2384 Rs) Rs. 2515 to the previous year. However this bank has higher MVPS in comparison with others banks and MVPS of Nepal Investment and Kumari banks is Rs705 and Rs. 468 respectively and that have lower MVPS than the previous years.

MVPS mean of the Nabil bank, Nepal Investment bank and Kumari bank are of 3969.6, 1506.4 and 689.2 respectively. The higher mean is preferred by the respective bank shareholders. S.D. of Nabil, Nepal Investment and Kumari banks is 1885.08, 1105.756 and 381.95 respectively. Among them, Nabil bank has the higher S.D. to the other banks the lowest is Kumari bank. The coefficient of variation analysis shows that MVPS of Nabil, Nepal Investment and Kumari is 0.47, 0.73 and 0.55 respectively. There is not consistent among the sample banks and there is a great variance to fluctuating market prices of shares of the sample banks. So, the great variance is in the sample banks' C.V.

Figure 4.8

Market Value per Share Analysis

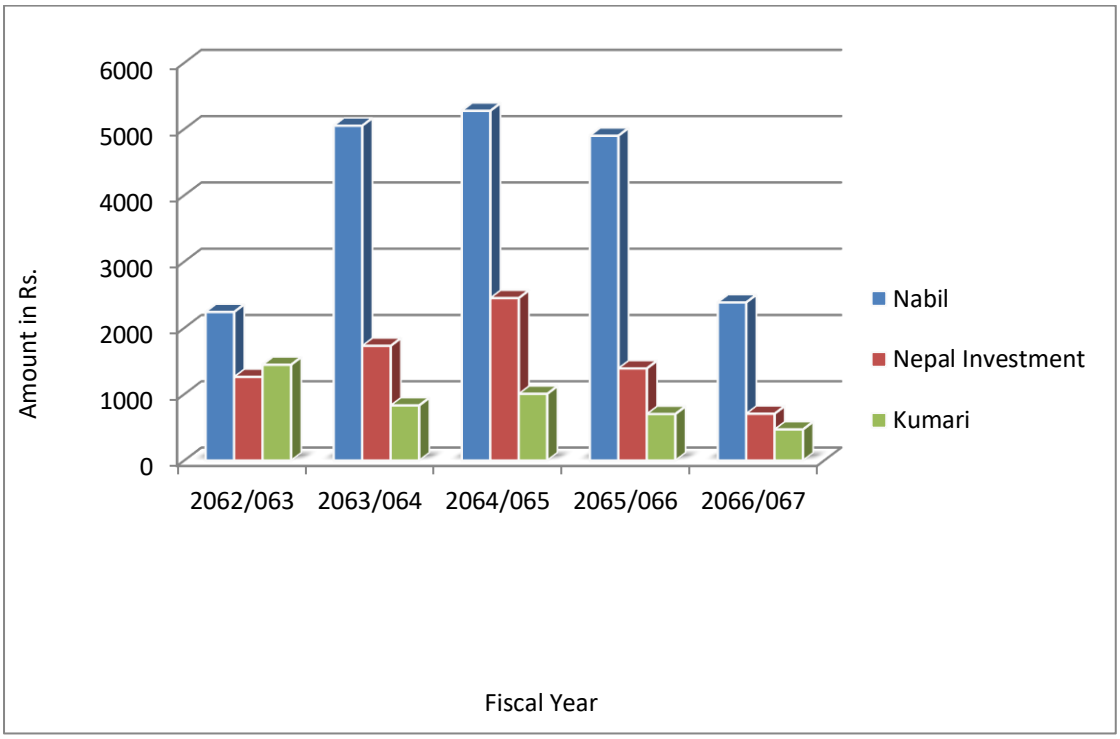


Table 4.9

Net Worth Analysis

Fiscal Year	Nabil	Nepal Investment	Kumari
2062/063	381	240	149
2063/064	418	234	137
2064/065	354	223	128
2065/066	324	162	137
2066/067	265	190	137
Average	348.4	209.8	137.6
Standard Deviation	55.59	32.51	2.069
Coefficient Variation	0.15	.15	0.015

Source:- Annual Report of the Respective Banks

Net worth is derived by dividing the value of shares by the total number of shares issued. It is a very important matter to the shareholders point of view, if the

shareholders needed a certain some of money, they could retain their shares in the other banks as pledge. The bank judge the value of net worth on the basis of market value per share. Higher the net worth, higher the credit amount sanction, otherwise no, less amount will be sanctions by the banks.

The data related to the sample banks' Net worth is presented in the tabular form. Net worth is related to a share value determined by the bank or sometimes this is determined by the Nepal Dhitopatrra Board and brokers in the markets. In the fiscal year of 062/63 Net worth of Kumari, Nepal Investment and Nabil is of Rs. 149, Rs 240 and Rs. 381 respectively. In this year, Nabil bank has the highest net worth to the other banks. The shareholders of strong net worth banks always feel security to the market i.e. market price share. In other words, higher market value per price of share is always the most preferable by the money investors in the common markets.

The Fiscal Year 2063/064, net worth of Kumari bank, Nepal Investment bank and Nabil bank is of Rs. 137, 234 and Rs. 418 respectively. In this period, Nabil bank has the highest net worth to the sample banks. Nabil bank has increased it from the previous year by Rs (418-381=Rs37). The other banks i.e. Nepal Investment and Kumari have decreased their net worth by Rs.(234-240)=Rs 6, and Rs (137-Rs149) =Rs 12 respectively, decreasing the net worth by decreasing the market value per share. It is a very important matter that the higher market value per share is always better to the money investors in the money markets.

The Fiscal Year of 2064/065, net worth of Kumari, Nepal Investment Bank and Nabil is of Rs. 128, Rs 223 and Rs. 354 respectively. In this period, Kumari bank has the lower net worth in comparison with the other banks and Kumari bank has decreased its net worth from the previous years which means that its market value per share is lower because of lower dividend offered to its stockholders.

In the Fiscal Year 2065/066, the net worth of kumari, Nepal Investment and Nabil is of Rs 137, Rs 162 and Rs 324 respectively. In this session, Nabil has the highest the net worth because of high market value per share.

In the Fiscal Year of 2066/067, the net worth of Kumari, Nepal Investment and Nabil is of Rs. 137, Rs 190 and Rs 265 respectively. In this year, the sample banks have the lower their net worth due to share market contraction. In this year, not only the sample banks are suffering from the lowering market price of shares but also the other banks except the sample banks, are suffering the same problems.

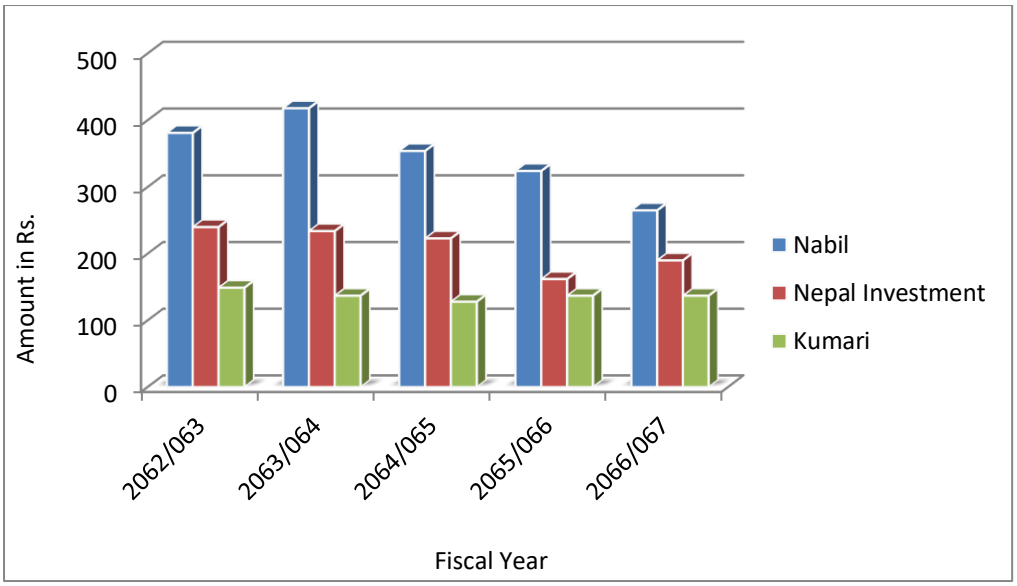
In the Fiscal Year 2066/067, the new buyers or initial public offerings (IPOs) buyers are seen in the open market. The most new buyers and IPOs buyers are in the queue in front of the issuer banks of the new bank's IPOs. Most of buyers or investors are intended in buying the IPOs issued by the newly opened banks in stead of buying the stocks from the share market. In these days, the share market of various banks is becoming a bear market condition. The bear market is often seen of after a bull market. The bear markets will be lasted from one month to over 3 years.

In Nepal, the share market is going to poor day by day. There is no more interested investors in buying the stocks from the share markets and most of the banks are not offering a reasonable cash dividend to their stockholders, considering this fact, the mean of the sample banks i.e. Nabil, Nepal Investment and Kumari is becoming lower year by year. Moreover, the mean of the sample banks i.e. Nabil, Nepal Investment and Kumari is of 348.4 209.8 and 137.6 respectively. Standard deviation (S.D) of Nabil bank Nepal investment bank and Kumari bank is 52.59, 32.57and 2.096 respectively. The highest S.D. has the Nabil bank and kumari bank has the lowest one. i.e. 2.096. coefficient variance of the sample banks i.e.

Nabil, Nepal investment as well as kumari is of .15 .15 and .105 respectively. The lowest one is the kumari bank.

Figure 4.9

Net Worth Analysis



4.10Correlation Analysis

Correlation is a statistical tool that the researcher can use to describe the degree to which one variable is linearly related to other variables. It also determines the degree of relationship between two or more variables. Its values are limited between the ranges +1 and -1 i.e. perfect positive correlation, perfect negative correlation.

Perfect positive correlation – returns on two perfectly positively correlated variables would move up and down together the variables of such would be exactly as risky as the individual stocks (variables). In other words:- If both variables move in the same fluctuation i.e. if the increase or decrease in the value of one variable results in the increase or (decrease) in the value of other variable, then the two variables are to be perfectly correlated. For Example, the expenditure

of a firm increases with the increase in the income and vice versa. Here the two variables income and expenditure are positively correlated. Perfect negative correlation --- returns on two perfectly negatively correlated variables (stocks) would move perfectly together but in exactly opposite direction . In this condition, risk can be absolutely eliminated. Perfect negative correlation almost never be found in the real world. It the value of one variable increases, then the value of other variable decreases and vice versa. For example, when the price of a commodity increase its demand decreases and vice versa.

4.10.1The Analysis of Mean, Standard Deviation and Correlation

The dividend practices among Kumari, Nepal Investment and Nabil Banks have already been described with help of financial instruments or tools in the former part of this chapter. However, in order to make the analysis more research oriented, more elaborate and extensive research, the research should be carried out more effectively.

For this purpose dividend payment made by the sample banks i.e. Kumari bank, Nepal Investment and Nabil banks should be better described through the use of statistical instruments. By using the statistical instruments, the researcher provide meaningful meaning of various variables like DPS, EPS, NP, DYR, MVPS, PR and NW . It is very useful to determine the degree of correlation between DPS and the other variables as mentioned above.

The table is presented the mean, standard deviation, coefficient of variance and correlation of coefficient among DPS, EPS, DPR, DYR, PE, MVPS, PR, LR and NW.

Table 4.10

The Analysis of Mean, Standard Deviation and Correlation

Companies	Variables	Cases	Mean	S.d.	CV	DPS	EPS	MVPS	DPR	DYR	PE	PR	LR	NW
Kumari Bank	DPS	5	15.04	4.93	0.33	1	-0.12	-0.27	0.91	0.75	0.27	0.46	-0.44	0.68
	EPS	5	20.38	3.55	0.18									
	MVPS	5	689.2	381.95	0.55									
	DPR	5	0.75	0.27	0.36									
	DYR	5	0.025	.0127	0.508									
	PE	5	35.16	28.26	0.8									
	PR	5	16.63	1.47	0.09									
	LR	5	4.68	0.92	0.196									
	NW	5	137.6	2.096	0.015									
Nepal Investment Bank	DPS	5	34.26	14.48	0.42	1	0.63	0.25	0.13	0.59	-0.06	0.43	0.83	0.81
	EPS	5	53.95	8.88	0.16									
	MVPS	5	1506.4	1105.75	0.73									
	DPR	5	0.67	0.27	0.4									
	DYR	5	0.025	0.011	0.44									
	PE	5	28.34	10.45	0.37									
	PR	5	24.21	0.95	0.04									
	LR	5	10.61	1.59	0.149									
	NW	5	209.8	32.51	0.15									
Nabil Bank	DPS	5	96	23.96	0.25	1	0.75	0.63	0.67	0.087	0.24	0.41	0.28	0.83
	EPS	5	111.99	20.40	0.182									
	MVPS	5	3969.6	1885.08	0.47									
	DPR	5	0.84	0.12	0.15									
	DYR	5	0.018	0.0069	0.37									
	PE	5	35.82	11.31	0.32									
	PR	5	30.37	3.64	0.12									
	LR	5	5.93	1.05	0.177									
	NW	5	348.4	52.29	0.15									

						Correlation with								
Companies	**Variables**	**Cases**	**Mean**	**S.d.**	**CV**	**DPS**	**EPS**	**MVPS**	**DPR**	**DYR**	**PE**	**PR**	**LR**	**NW**
Kumari Bank	DPS	5	15.04	4.93	0.33	1	-0.12	-0.27	0.91	0.75	0.27	0.46	-0.44	0.68
Nepal Investment bank	DPS	5	34.26	14.48	0.42	1	0.63	0.25	0.13	0.59	-0.06	0.43	0.83	0.81
Nabil Bank	DPS	5	96	23.96	0.25	1	0.75	0.63	0.67	0.087	0.24	0.41	0.28	0.83

4.11 Simple Regression Analysis

The regression is used to determine the statistical relationship between two or more variable and is used to predict the value of one variable on the basis of the other. The regression analysis can either simple or multiple regressions. When we take only one independent variable and predict the value of the other dependent variable, through the appropriate regression line analysis is known as simple regression analysis. The given data of regression analysis is extracted from the respective banks.

4.11.1Simple Regression Equation of MVPS on EPS

Table 4.11

Simple Regression Equation of MVPS on EPS

Banks	Constant (a)	Regression coefficient (b)	S.E. of estimates	(r)	$(r)^2$	't' value	S b
Kumari	1011.82	-15.82	267.88	-0.24	.0576	1.78	36.58
Nepal Investment	497.77	18.69	712.09	.29	.084	3.27	36.48
Nabil	1785.49	19.50	1678.67	.29	.084	3.27	36.80

Source: Annual report of the Respective Banks

Where,

a= Independent variable = EPS

b= Dependent variable = MVPS

The table depicts the outcome of simple regression analysis between earning per share (EPS), independent variable and market value per share (MVPS), dependent variables of the sample banks.

As for, the regression EPS of MVPS is concerned with regression coefficient (b) of the Kumari bank, Nepal Investment bank and Nabil bank,

The regression of the sample banks: Kumari, Nepal Investment and Nabil is y= 1011.82 + (-15-82)x, y = 497.77 + 18.69x and y = 1785.49 + 19.50 x respectively.

The regression coefficient (b) EPS and MVPS of the Kumari bank is – 15.82 which indicates that one rupee increase in EPS doesn't lead – 15.82 to increase in market value price per share or market price holding, other variable constant.

The beta regression coefficient (b) of the Nepal Investment bank, on the basis of EPS, and MVPS is Rs. 18.69 which indicates that one rupee increase in EPS leads to Rs. 18.69 increase in market price per share, similarly, the beta regression coefficient of the Nabil bank is Rs. 19.50 which depicts that one rupee increase in EPS leads to Rs. 19.50 increase in market value prices per share.

Coefficient of determination $(r)^2$ of Kumari bank, Nepal investment bank and Nabil bank is of .05 76, .084 and .084 respectively this indicates that 5.79%, 8.4% and 8.4% stock variation are explained by variation in EPS.

The constant (a) of the sample banks, Kumari, Nepal Investment and Nabil shows that MVPS will not go down below Rs. 1011.82 Rs. 497.77 and Rs. 1785.49 respectively even if the earning is zero or negative.

The test of 't' statistic concluded that among the sample banks, Kumari, Nepal Investment band and Nabil is 1.78 , 3.27, 3.27 at 5 % level of significance.

4.11.2 Simple Regression Analysis

Table 4.12

Dependent Variable Market Value per share (MVPS) and Dividend per share (DPS)

Banks	Constant (a)	Regression coefficient (b)	S.E. of estimates	(r)	$(r)^2$	't' value	S b
Kumari	866.27	-11.77	265.99	-.27	.0729	1.79	16.36
Nepal Investment	1115.05	11.42	719.60	.23	.0529	1.77	25.44
Nabil	531.42	35.81	1362.68	.63	.3969	2.23	25.43

Source: Annual Report of the Respective Banks

Where,

a = Independent variable = DPS

b = Dependent variable = MVPS

The above table describes the outcome of simple regression analysis between market value per share and dividend per share of the sample commercial banks i.e. Kumari, Nepal Investment and Nabil. The regression coefficient (b) of the two banks is positive i.e. 11.42 and 35.81 of Nepal Investment bank and Nabil bank respectively, whereas Kumari bank has native regression coefficient i.e. – 11.77, this tells that one rupee increase in dividend per share (DPS) leads to increase in market value per share (MVPS) of 11.42 and 35.81 respectively of Nepal Investment bank and Nabil bank it shows that increase in DPS leads to increase in MVPS, we can conclude that MVPS of Nepal Investment bank and Nabil bank depend on DPS.

The constant 'a' of Kumari bank, Nepal Investment bank and Nabil bank is of 866.27, 1115.05 and 531.42 respectively, even if the dividend per share is zero.

The coefficient of determination $(r)^2$ of the sample banks i.e. Kumari , Nepal Investment and Nabil is of .729, .0529 and .3969 respectively. This means that 72.9%, 5.29 % and 39.96% of stock variation are explained by variation in DPS.

The test of 't' statistic concluded that among the sample banks: Kumari, Nepal Investment and Nabil is 1.79, 1.77 and 2.23 at 5 % level of significance.

4.12Major Findings

- On the basis of earnings per share, NABIL bank has the highest average EPS i.e. 111.99 whereas Kumari bank has the lowest average EPS i.e. 20.88, the worst one. Nabil Bank has provided satisfactory results on EPS among the sample commercial banks. Out of three banks i.e. Kumari, Nepal Investment and Nabil, the average EPS of Kumari bank is lower than the sample commercial banks. So, Kumari bank should pay attention to improve its situation.
- The dividend distribution of Kumari bank, Nepal Investment bank and Nabil bank is irregular and fluctuated in study period, Nabil bank has offered a higher dividend to its shareholders and the least dividend is distributed by Kumari bank. The average of dividend per share paid out by the respective banks i.e. Kumari, Nepal Investment and Nabil is 15.04, 34.26 and 96 respectively. Higher dividend is distributed by Nabil bank. There is a great variance on the sample banks in distributing dividend payments.
- The average of dividend payout ratios of the sample banks i.e. Kumari, Nepal Investment and Nabil is of 0.84, 0.67 as well as 0.75 respectively. Nabil bank has higher dividend payout ratio than the other banks and the lowest dividend payout ratio is Nepal Investment bank. The dividend payout ratio is not consistent at the sample commercial banks. The analysis of dividend payout ratios is one of the hallmarks of our study which help us to find dividend policy adopted by the sample commercial banks.

- The average returns of share value (DYR), on basis of MVPS of the sample commercial banks i.e. Kumari, Nepal Investment and Nabil are of Nabil i.e. 0.025, 0.025 and .0187, the highest is Kumari bank and Nepal Investment bank. So, Kumari bank and Nepal Investment bank should pay proper attention to enhance their percentage of cash dividend on the basis of paid up capital. Similarly, when dividend amount is considered as returns, on the basis of the market value per share, the market value per share is the highest to the dividend per shares. The average of the market value per shares of the sample commercial banks i.e. Kumari, Nepal Investment and Nabil bank is 689.2, 1506.4 and 3969.6 respectively. Nabil bank has the highest of all banks, whereas Kumari bank has the lowest. Again, Dividend is considered as returns on the basis of dividend paid. The average of dividend paid out by the sample commercial banks is Nabil, Nepal Investment and Kumari bank i.e. 96, 34.22 and 15.04 respectively. On the basis of average, Nabil bank is the highest dividend paid out during the observed study.
- The high P/E ratio yields more capital gain to the shareholders. The higher the P/E ratio, the better the result of performance. So, the average performance of P/E ratio of Nabil bank i.e. 36.82 is considered better from the shareholders' points of view whereas, the average of PE ratios of Kumari bank and Nepal Investment bank is 35.16 and 28.26. However, there is similarity on the average between Nabil bank and Kumari bank. Therefore, Kumari bank and Nabil can yield better results while operating their daily performance and the shareholders of the banks will be more satisfied on seeing the better results and performance.
- However, Profitability (PR) ratio shows the percentage of profit or sales of the respective banks. this ratio also measures the efficiency of management of the sample commercial banks i.e. Nabil, Kumari and Nepal Investment bank. The average PR of the sample banks i.e. Nabil, Nepal Investment and Kuamri is of 30.37, 24.21 and 16.63 respectively. The highest ratio is Nabil

bank going to produce more efficient results to the shareholders during the studied period.

- Liquidity ratio (LR) measures the short term solvency position of the sample commercial banks. The current ratio of Kumari bank is decreasing trend, whereas, that of Nepal Investment is almost stable. The average of current ratio (CR) of the sample banks i.e. Nabil, Nepal Investment and Kumari is 5.936, 10.62 and 4.60 respectively. The highest CR is Nepal Investment bank, more preferable to the sample banks. However, Kumari and Nabil have lower CR positions.
- The correlation coefficient of Kumari bank's dividend per share, with DPS, EPS, MPS, DPR, DYR, PE, PR, LR and NW is of 1, 0.12, -0.27, 0.91 0.75, -0.276, 0.46, -0.44 and 0.68 respectively. There is not correlated among the selected variables/items. However, MPS (-0.27) and PE(-0.27), on the basis of dividend per share, is correlated negatively and higher correlation among the selected variable is shown. The correlation of coefficient of Nepal Investment bank's dividend per share with DPS, EPS, MPR, DPR, DYR, PE, PR, LR and NW is of 1, 0.63, 0.25, 0.13, 0.59, -0.06, 0.43, 0.83 and 0.81 respectively. There is not correlated among the selected variables/items and there is a great fluctuation among the selected variables. PE ratio is negatively correlated with dividend whereas that of Nabil bank's dividend per share, with DPS is of 1, 0.75, 0.63, 0.67, 0.087, 0.24, 0.41, 0.28 and 0.83 respectively. There is positively correlated among the selected variables. In contradiction to the general belief, the DPS is negatively correlated with EPS but here is not found in this bank. The higher positive correlation i.e. 0.75 is seen between DPS and EPS among the selected banks. So, higher the dividend per share, higher earning per share -- remains on the Nepal Investment bank and Nabil bank. Lower the earnings per share, lower the dividend per share – is found in the kumari bank.

- On the basis of Market value per share, Nabil bank has the higher average between Kumari bank and Nepal Investment bank i.e. 3969.6, 689.2 and 1506.4 respectively. So, Nabil bank, at this situation, has the favorable condition due to the world recession. So, this bank should be higher interest rates in comparison with Kumari and Nepal Investment bank.
- During the studied period, Nabil, on the basis of DPS, has higher correlation coefficient with networth between Kumari bank and Nepal Investment bank, 0.83, 0.68 amd 0.81 respectively. This shows that Nabil has higher book value of share. The shareholder can be benefited from it, by pledge shares.
- The correlation of coefficient of Nepal Investment bank and Nabil, on the basis of MVPS and EPS, is positive i.e. 0.25 and 0.63 respectively whereas Kumari bank has negative correlation of coefficient i.e. -0.27. The highest positive relationship has been found in Nabil bank i.e. 0.63 and The negative relationship is found with Kumari bank.
- The regression analysis of Nepal Investment bank and Nabil bank between EPS and MVPS is positively correlated. The regression analysis shows that one rupee. Increase in EPS leads to Rs 18.69 and Rs 19.50 increase in MVPS of Nepal Investment bank and Nabil bank respectively whereas the regression analysis shows that the Kumari bank is negatively correlation i.e. -15.82 between Nepal Investment bank and Nabil bank. So this bank cannot improve share value with negative correlation of regression coefficient.
- The regression analysis of Nepal Investment bank and Nabil bank with DPS and MVPS is positively correlated. The analysis shows that one rupees increase in DPS leads to 11.42 and 35.81 increase in MVPS of Nepal Investment bank and Nabil bank whereas the regressive analysis shows that the Kumari bank is negatively correlation i.e. -11.77 between Nepal Investment bank and Nabil. So, this bank cannot improve the market value per share on the basis of DPS.

- The market price per share of the sample banks i.e. Kumari, Nepal Investment and Nabil is of fluctuating condition or going downwards in prices. Therefore, the interest rate on the deposits amount is reluctantly going higher day by day. In other words, the uncontrollable decreases in share prices may help to increase in the interest rates of the sample commercial banks.

CHAPTER - V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The previous chapter is concluded with the presentation and data analysis required for the fulfillment of the objectives of the study. This chapter is concerned with the summary of the study conclusions, and recommendations on the basis of the findings of the study. This study is based on three divisions i.e.

5.1Summary
5.2Conclusion
5.3Recommendations

5.1Summary

Dividend policy to be adopted is the very important factor to any organization for effective objectives achievement to satisfy the shareholders. In fact, to pay dividend to shareholders, effective means to attract investors to invest in share market. While running the business houses, or corporate houses i.e. banks, firms, insurance company, there should be some earnings that should be distributed to their shareholders, the earnings as dividends of the corporate houses effects the market value of shares.

So, a well worth policy should be maintained between the shareholder expectations and interests by the corporate houses. The retained earnings as dividend, sometimes, shall not be distributed when the corporate houses' retained earnings can plough back into the expansion of their business and the excess funds or retained earnings, sometimes, can be employed elsewhere to generate the corporate houses to make more profitable.

Dividend achievement is important aspect of the corporate houses' performance for future growth and prospects. So dividend refers to that a portion of a corporate houses' net earnings that are paid out to the shareholders in return of their investment and paying dividends to shareholders is a worth way to attract new investors to the share markets. Then, the improved dividend practice is important to solve the problems between the management performance and shareholders expectations interest.

The study mainly aims to assess dividend policy in the listed companies from stock exchange specially banking sector. Among many commercial banks, three banks namely Kumari, Nepal Investment and Nabil are selected for study. The main objectives of this study are to be observed the relationship among various financial indicators as earnings per share dividend per share, dividend pay out ratio, dividend yield ratio, price earning ratio, liquidity ratio, profitability ratio, market value per share and net worth ratios. The sorted data is computed accordingly in average. The study is revealed the following facts.

Nepal has no proper rules and regulations to control over the corporate houses regarding dividend policy. Some of the commercial houses of Nepal have no produce satisfactory results on dividend policy. In general practices, every corporate houses has followed its own types of dividend policies. The relationship between dividend per share and market value per share is not matching whereas dividend per share is fluctuating occasionally, however, market value per share has upward trends. A group of investors is moving towards to the upward trends without thinking proper dividend practices adopted by the corporate houses. But they only, thinking on the share prices even if the dividend is nominal or zero.

In Nepal, there is a few companies they distribute dividends to their shareholders. Commercial banks like Joint venture banks are paying enough earnings as

dividends to their shareholders and they are not adopted appropriate/right policy. However, we know that two banks Nepal Investment and Nabil except Kumari have enough earnings they are not following just policy and they are no not distributing the dividend in equal proportion. In other words, they have not followed the consistency in dividend distribution and we cannot get uniformity of dividend payment and dividend payout ratio in the sample banks. i.e. kumari bank, Nepal Investment and Nabil bank.

5.2 Conclusion

The already mentioned findings lead this study to conclude that the sample banks have earned enough earnings. But some banks are distributing high dividend whereas other are paying small one –nominal dividend.

The financial position of high dividend distributing banks is comparatively better than that of low nominal dividend paying banks. The major findings of this study is that comparative study on dividend per share of the sample banks is not completely stable than that of dividend payout ratio, then the market value per share is highly affected by dividend distributing.

Ultimately, the sample banks have not defined a exact dividend policy and they have not followed appropriate dividend distribution policy so that there is a great variation in dividend payment. Moreover, the uniformity of dividend payout ratio of the sample banks is no consistency.

5.3Recommendations

The sample commercial banks are distributing dividend adopting without proper policy. Most of banks should have followed a specific dividend policy. The clearly specific dividend policy which help to determine a fixed policy i.e. stable dividend policy, a constant payout ratio, low constant payout ratio, low regular

dividend plus extra bonus. If it is explained in the long run, what dividend pay out ratio should be. The stable dividend policy will help to the rational investors to buy the concerned banks' shares and the fixed dividend policy will help to the investors to receive dividends as salary after his/her retirement, such policy helps to build good image in the stock market of the sample banks.

- Most of the sample commercial banks have had of a great deal of fluctuating on dividend per share, earning per share, dividend yield ratio, dividend payout ratio price earning ratio, net worth and market in terms of coefficient of variance. As a result, the sample banks should try to maintain stability on these variables.
- There is no proper rules and regulations binding the banks to distribute proper dividends. The legal rules on dividend policy are bound for good treatment to the corporate houses. Some acts on dividends keep mum. If some of the corporate house are distributing less dividend than the interest rate offered by the banks. It is necessary to enact legal rules that bind the corporate houses to pay proper dividends to their shareholders and the legal rules regulate the share market self-functioning.
- The corporate houses should have a long term vision on earnings and dividend payment that helps to cope with challenging, competitive conditions of the market.
- The corporate houses have to assess their liquidity position when they are going to declare the dividends. The corporate houses should pay proper dividends by maintaining profitability ratios, liquidity position and minimizing risk.
- The corporate houses are suggested to adopt regular dividend payment strategy that helps to the corporate houses to raise their dividend year by year. The impact on dividend paid must be studied.

- The shareholders are intellectual property. So, considering their views on the corporate strategy is a must. The corporate houses should follow the interest of the investors that enhance performance of the houses and guide to follow appropriate dividend policy as well.
- The fluctuation of earning per share and dividend payout ratio of the corporate houses is almost high. This may create confusion among shareholders' mind. The fluctuating in dividend per share and dividend payout ratio clearly indicates that the corporate houses do not have target rate of earning and target dividend payout ratios that will not help the corporate houses to create a position in the securities market.
- The investors of the corporate houses should be given an option to choose cash or bonus dividends and a combination of both before declaring the dividend policy.
- Every corporate houses should provide appropriate information on their final activities and performance to their shareholder as well as future investors so that investors can evaluate market situation and invest their money accordingly. The information regarding secondary market is always kept secret. So the concerned body should pay attention on them.
- The corporate houses should always give more preference on the shareholder expectations and interests - - - - - - - - - - - - - the Nepalese government should consider on this matter. The performance and activities of Nepal Stock Exchange and Dhito Patra Board should be made more informative to the general public and money investors can take rational decisions about the all financial position of the corporate houses.

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APPENDICES

Annex – I

Dividend per Share (DPS) and Earning Per share Analysis (EPS) of Kumari Bank

Fiscal Year	DPS X_1	EPS X_2	$X_1 2$	X_2^2	$X_1 X_2$
2062/063	21.05	16.59	443.10	275.23	349.22
2063/064	21.05	22.70	443.10	515.29	477.83
2064/065	10.53	16.35	110.88	267.32	172.16
2065/066	10.58	22.04	111.94	485.86	233.18
2066/067	12	24.24	144	557.58	290.88
Total	$\sum X_1$= 75.21	$\sum X_2$= 101.92	$\sum X_1^2$= 21253.02	$\sum X_2^2$= 2131.18	$\sum X_1 X_2$= 1523.27

Correlation (r) = $\frac{n\sum X1X2 - \sum X1.\sum X2}{\sqrt{n\sum X1^2 - (\sum X1)^2} \times \sqrt{n\sum X2^2 - (\sum X2)^2}}$

$$= \frac{5\times 1523.27 - 75.21\times 101.92}{\sqrt{5\times 1253.02 - (75.21)^2} \times \sqrt{5\times 2131.18 - (101.92)^2}}$$

r = .12

Dependent per Share Analysis (DPS) and Market value per share Analysis (MPVS)

Fiscal Year	DPS X_1	MRPS X_2	X_1^2	X_2^2	$X_1 X_2$
2062/063	21.05	1443	443.10	1196249	9325.15
2063/064	21.05	830	443.10	688900	17471.50
2064/065	10.53	1005	110.88	1010025	10582.65
2065/066	10.58	700	111.94	490000	7406
2066/067	12	468	144	219029	5616
Total	$\sum X_1$= 75.21	$\sum X_2$= 3446	$\sum X_1^2$= 1253.02	$\sum X_2^2$= 2604198	$\sum = X_1 X_2$ 50401.30

Correlation (r) = $\frac{n\sum X1.X2-\sum X1.\sum X2}{\sqrt{n\sum X1^2-(\sum X1)^2}\times\sqrt{n\sum X2^2-(\sum X2)^2}}$

$= \frac{5\times50401.30\times75.21\times3446}{5\times1253.02-(75.21)^2\times\sqrt{5\times2604198-(3446)^2}}$

r = -.27

Dividend Payout Ratio (DPR)

Fiscal Year	DPS X_1	DPR X_2	$X1^2$	$X2^2$	$X_1 X_2$
2062/063	21.05	21.05/16.59=1.27	443.10	1.161	2673.35
2063/064	21.05	21.05/22.70=0.93	443.10	.86	1957.65
2064/065	10.53	10.53/16.35=0.6440	110.88	.41	673.92
2065/066	10.58	10.58/22.04=0.480	111.94	.23	570.84
2066/067	12	12/24.24=0.4450	144	23	600
Total	$\sum X_1$= 75.21	$\sum X_2$= 382	$\sum X_1^2$= 1253.02	$\sum X_2^2$= 3.355	$\sum = X_1 X_2$ 6412.76

Correlation (r) = $\frac{n\sum X1X2-\sum X1.\sum X2}{\sqrt{n\sum X1^2-(\sum X1)^2}\times\sqrt{n\sum X2^2-(\sum X2)^2}}$

$$= \frac{5\times6412.76-75.21\times382}{\sqrt{5\times1253.02-(75.21)^2}\times\sqrt{5\times3.3678-(382)^2}}$$

r = .90

DPS and Dividend Yield (DYR) Analysis

Fiscal Year	DPS X_1	DYR X_2	X_1^2	X_2^2	$X_1 X_2$
2062/063	21.05	21.05/443 = 0.045	443.10	0.002209	99.99
2063/064	21.05	21.05/830 = 0.0254	443.10	0.000645	53.47
2064/065	10.53	10.53/1005 = 0.010	110.88	0.001	11.02
2065/066	10.58	10.58/700 = 0.015	111.94	0.00022	15.97
2066/067	12	12/ 468 = 0.026	144	0.000676	31.68
Total	$\sum X_1$=75.21	$\sum X_2$=.1249	$\sum X_1^2$= 1253.02	$\sum X_2^2$= 0.003255	$\sum X_1 X_2$= 212.13

Correlation (r) = $\frac{n\sum X1X2-\sum X1.\sum X2}{\sqrt{n\sum X1^2-(\sum X1)^2}\times\sqrt{n\sum X2^2-(\sum X2)^2}}$

$= \frac{5\times212.13-75.21\times.1249\times100}{\sqrt{5\times1253.02-39.44)^2}\times\sqrt{5\times39.44-(12.49)^2}}$

r = .80

DPS Price Earning (PE)

Fiscal Year	DPS X_1	PE X_2	X_1^2	X_2^2	$X_1 X_2$
2062/063	21.05	26.71	443.10	713.42	562.25
2063/064	21.05	36.56	443.10	1336.63	769.59
2064/065	10.53	61.47	110.88	3778.56	647.28
2065/066	10.58	31.76	111.94	1008.70	336.02
2066/067	12	19.31	144	372.87	231.72
Total	$\sum X_1$=75.21	$\sum X_2$= 175.81	$\sum X_1^2$= 1253.02	$\sum X_2^2$= 7210.19	$\sum X_1 X_2$ = 2546.86

Correlation (r) = $$\frac{n\sum X1X2-\sum X1.\sum X2}{\sqrt{n\sum X1^2-(\sum X1)^2}\times\sqrt{n\sum X2^2-(\sum X2)^2}}$$

$$= \frac{5\times2546.86-75.21\times175.81}{\sqrt{5\times1253.02-(75.21)^2}\times(\sqrt{5\times7210.19-(175.81)^2}}$$

r = -0.276

Profitability Ratio Analysis

Fiscal Year	**DPS X_1**	**PR X^2**	**X_1^2**	**X_2^2**	**$X_1 X_2$**
2062/063	21.05	15.52	443.10	240.87	326.69
2063/064	21.05	19.61	443.10	384.55	412.79
2064/065	10.53	16.18	110.88	261.79	170.37
2065/066	10.58	16.54	111.94	273.57	174.99
2066/067	12	15.32	144	234.7	193.04
Total	$\sum X_1$=75.21	$\sum X_2$=83.17	$\sum X_1^2$= 1253.02	$\sum X_2^2$= 1395.48	$\sum X_1 X_2$ = 1268.68

Correlation (r) = $\frac{n\sum X_1X_2 - \sum X_1.\sum X_2}{\sqrt{n(\sum X_1{}^2 - (\sum X_1)^2} \times \sqrt{n\sum X_2{}^2 - (\sum X_2)^2}}$

$= \frac{\mathbf{5\times 1268.68 - 75.21\times 83.17}}{\sqrt{\mathbf{5\times 1253.02 - (75.21)^2}} \times \sqrt{\mathbf{5\times 139.48 - (83.17)^2}}}$

r = 0.46

Liquidity Ratio

Fiscal Year	DPS X_1	LR X_2	$X1^2$	X_2^2	$X_1 X_2$
2062/063	21.05	2.71	443.10	7.34	57.04
2063/064	21.05	3.65	443.10	13.32	67.83
2064/065	10.53	1.91	110.88	3.65	20.11
2065/066	10.58	7.13	111.94	50.84	75.43
2066/067	12	8.02	144	64.32	96.34
Total	$\sum X_1$=75.21	$\sum X_2$= 23.42	$\sum X_1^2$= 1253.02	$\sum X_2^2$= 139.45	$\sum X_1 X_2$ = 325.65

Correlation (r) = $\frac{n\sum X_1X_2-\sum X_1.\sum X_2}{\sqrt{n(\sum X_1{}^2-(\sum X_1)^2}\times\sqrt{n\sum X_2{}^2-(\sum X_2)^2}}$

$= \frac{5\times325.65\times75.21\times23.42}{\sqrt{5\times1253.02-(75.21)^2}\times\sqrt{5\times139.45-(23.42)^2}}$

r =-0.44

Net Worth

Fiscal Year	X_1	Kumari X_2	X_1^2	X_2^2	$X_1 X_2$
2062/063	21.05	149	443.10	22201	3136.45
2063/064	21.05	137	443.10	18769	2883.85
2064/065	10.53	128	110.88	16384	1347.89
2065/066	10.58	137	111.94	18769	1449.46
2066/067	12	137	144	187169	1644
Total	$\sum X_1$=75.21	$\sum X_2$= 688	$\sum X_1^2$= 1253.02	$\sum X_2^2$= 94892	$\sum X_1 X_2$ = 10461.60

Correlation (r) = $\frac{n\sum X_1X_2 - \sum X_1.\sum X_2}{\sqrt{n(\sum X_1{}^2 - (\sum X_1)^2} \times \sqrt{n\sum X_2{}^2 - (\sum X_2)^2}}$

$= \frac{5\times 10461.60 - 75.21\times 688}{\sqrt{5\times 1253.02 - (75.21)^2} \times \sqrt{5\times 94892 - (688)^2}}$

r = .68

Annex – II

Dividend per share Analysis (DPS) and Earning Per Share Analysis (EPS) of NABIL Bank

Fiscal Year	X_1 (DPS)	(EPS) X_2	X_1^2	X_2^2	$X_1 X_2$
2062/063	85	129.21	7225	16695.22	10982.82
2063/064	140	137.08	19600	18790.92	19191.20
2064/065	100	108.31	10000	11731.05	108313
2065/066	85	106.7	7225	11397.69	9074.6
2066/067	70	78.6	4900	6179.53	5502.7
Total	$\sum X_1$=480	$\sum X_2$= 559.97	$\sum X_1^2$= 48950	$\sum X_2^2$= =64794.41	$\sum X_1 X_2$ =55582.32

Correlation (r) = $\frac{n\sum X_1X_2 - \sum X_1 . \sum X_2}{\sqrt{n(\sum X_1{}^2 - (\sum X_1)^2} \times \sqrt{n\sum X_2{}^2 - (\sum X_2)^2}}$

$= \frac{5\times 55582.32 - 480\times 559.97}{\sqrt{5\times 48950 - (480)^2} \times \sqrt{5\times 64794.41 - (559.97)^2}}$

r = 0.75

Dividend per share Analysis (DPS) Market Value Per Share (MVPS) Analysis

Fiscal Year	X_1 (DPS)	(MVPS) X_2	$X1^2$	$X2^2$	$X_1 X_2$
2062/063	85	2240	7225	5017600	190400
2063/064	140	5050	19600	25502500	707000
2064/065	100	5275	10000	27825625	527500
2065/066	85	4899	7225	24000201	416415
2066/067	70	2384	4900	5683456	166880
Total	$\sum X_1$=480	$\sum X_2$= 19848	$\sum X_1^2$= 48950	$\sum X_2^2$= 88029382	$\sum X_1 X_2$ = 2008195

Correlation (r) = $\frac{n\sum X_1X_2-\sum X_1.\sum X_2}{\sqrt{n(\sum {X_1}^2-(\sum X_1)^2}\times\sqrt{n\sum {X_2}^2-(\sum X_2)^2}}$

$= \frac{5\times2008195-480\times19848}{\sqrt{5\times48950-(480)^2}\times\sqrt{5\times88029382-(19848)^2}}$

r=0.63

Dividend per share Analysis (DPS) Dividend Payout Ratio (DPR)

Fiscal Year	**X_1 (DPS)**	**(DPR) X_2**	**X_1^2**	**X_2^2**	**$X_1 X_2$**
2062/063	85	85/129.21=0.657	7225	0.42	55.25
2063/064	140	140/137.08=1.021	19600	1.04	142.8
2064/065	100	100/108.31=0.923	10000	0.85	92
2065/066	85	85/106.76=0.796	7225	0.64	67.66
2066/067	70	70/78.61=0.890	4900	0.79	62.3
Total	$\sum X_1$=480	$\sum X_2$=4.288	$\sum X_1^2$= 48950	$\sum X_2^2$= 3.7446	$\sum X_1 X_2$ =420.35

Correlation (r) = $\frac{n\sum X_1X_2-\sum X_1.\sum X_2}{\sqrt{n(\sum X_1{}^2-(\sum X_1)^2}\times\sqrt{n\sum X_2{}^2-(\sum X_2)^2}}$

$= \frac{5\times420.35-480\times4.288}{\sqrt{5\times48950-(480)^2}\times\sqrt{5\times3.7446-(4.288)^2}}$

= 0.64

Dividend per share Analysis (DPS) and Dividend Yield Ratio (DYR) Analysis

Fiscal Year	**X_1 (DPS)**	**NABIL (DYR) X_2**	**X_1^2**	**X_2^2**	**$X_1 X_2$**
2062/063	85	85/2240 = 0.038	7225	0.0014	3.23
2063/064	140	140/5050 = 0.028	19600	0.00078	3.92
2064/065	100	100/5275 = 0.0189	10000	0.00035	1.89
2065/066	85	85/4899 = 0.0173	7225	0.00029	1.470
2066/067	70	70/2384 = 0.0293	4900	.00085	2.05
Total	$\sum X_1$=480	$\sum X_2$= 0.13	$\sum X_1^2$= 48950	$\sum X_2^2$= 00367	$\sum X_1 X_2$ =12.56

Correlation (r) = $$\frac{n\sum X_1X_2-\sum X_1.\sum X_2}{\sqrt{n(\sum {X_1}^2-(\sum X_1)^2}\times\sqrt{n\sum {X_2}^2-(\sum X_2)^2}}$$

$$= \frac{5\times12.56-480\times0.13}{\sqrt{5\times48950-(480)^2}\times\sqrt{5\times0.00367-(0.13)^2}}$$

r= 0.087

Dividend per share Analysis (DPS) and Price Earning Ratio

Fiscal Year	**X_1 (DPS)**	**(PE) X_2**	**$X1^2$**	**$X2^2$**	**$X_1 X_2$**
2062/063	85	17.34	7225	300.67	1473.9
2063/064	140	36.84	19600	1357.185	5157.6
2064/065	100	48.7	10000	2371.69	4870
2065/066	85	45.89	7225	2105.89	3900.65
2066/067	70	30.33	4900	919.90	2123.10
Total	$\sum X_1$=480	$\sum X_2$= 179.10	$\sum X_1^2$= 48950	$\sum X_2^2$= 7055.33	$\sum X_1 X_2$ =17525.25

Correlation (r) = $$\frac{n\sum X_1X_2-\sum X_1.\sum X_2}{\sqrt{n(\sum {X_1}^2-(\sum X_1)^2}\times\sqrt{n\sum {X_2}^2-(\sum X_2)^2}}$$

$$=\frac{5\times17525.25-480\times179.10}{\sqrt{5\times48950-(480)^2}\times\sqrt{5\times7055.33-(179.10)^2}}$$

r=0.24

Dividend per share Analysis (DPS) and Profitability Ratio Analysis (PR)

Fiscal Year	X_1 (DPS)	NABIL (PR) X_2	$X1^2$	$X2^2$	$X_1 X_2$
2062/063	85	35.32	7225	1247.50	3002.2
2063/064	140	32.16	19600	1034.26	4502.4
2064/065	100	29.68	10000	880.90	2968
2065/066	85	30.56	7225	933.91	2597.6
2066/067	70	24.11	4900	581.29	1687.70
Total	$\sum X_1$=480	$\sum X_2$= 151.83	$\sum X_1^2$= 48950	$\sum X_2^2$= 4677.86	$\sum X_1 X_2$ =14757.9

$$\text{Correlation (r)} = \frac{n\sum X_1X_2 - \sum X_1.\sum X_2}{\sqrt{n(\sum {X_1}^2 - (\sum X_1)^2} \times \sqrt{n\sum {X_2}^2 - (\sum X_2)^2}}$$

$$= \frac{5\times 14757.9 - 480\times 151.83}{\sqrt{5\times 48950 - (480)^2} \times \sqrt{5\times 4677.86 - (151.83)^2}}$$

r = 0.41

Dividend per share Analysis (DPS) and Liquidity Ratio

Fiscal Year	X_1 (DPS)	(LR) X_2	X_1^2	X_2^2	$X_1 X_2$
2062/063	85	3.26	7225	10.62	277.71
2063/064	140	6	19600	36	840
2064/065	100	8.37	10000	70.056	837
2065/066	85	9.03	7225	81.54	767.55
2066/067	70	3.02	4900	9.12	211.40
Total	$\sum X_1$=480	$\sum X_2$= 29.68	$\sum X_1^2$= 48950	$\sum X_2^2$= 207.34	$\sum X_1 X_2$ =2933.66

Correlation (r) = $$\frac{n\sum X_1X_2-\sum X_1.\sum X_2}{\sqrt{n(\sum {X_1}^2-(\sum X_1)^2}\times\sqrt{n\sum {X_2}^2-(\sum X_2)^2}}$$

$$= \frac{5\times2933.66-480\times(4.288\times129.68}{\sqrt{5\times48950-(480)^2}\times\sqrt{5\times207.34-(29.68)^2}}$$

= 0.28

Dividend per share Analysis (DPS) and Net Worth (NW)

Fiscal Year	X_1 (DPS)	NABIL (NW) X_2	$X1^2$	$X2^2$	$X_1 X_2$
2062/063	85	381	7225	145161	32385
2063/064	140	418	19600	174724	58520
2064/065	100	354	10000	125316	35400
2065/066	85	324	7225	104976	27540
2066/067	70	265	4900	702255	18550
Total	$\sum X_1$=480	$\sum X_2$= 1742	$\sum X_1^2$= 48950	$\sum X_2^2$= 620402	$\sum X_1 X_2$ =172395

Correlation (r) = $$\frac{n\sum X_1X_2-\sum X_1.\sum X_2}{\sqrt{n(\sum {X_1}^2-(\sum X_1)^2}\times\sqrt{n\sum {X_2}^2-(\sum X_2)^2}}$$

$$= \frac{5\times172395-480\times1742}{\sqrt{5\times48950-(480)^2}\times\sqrt{5\times620402-(1742)^2}}$$

r = 0.83

Annex – III

Dividend per share Analysis (DPS) and Earning Per Share Analysis (EPS) of Nepal Investment Bank

Fiscal Year	X_1 DPS	(EPS) X_2	X_1^2	X_2^2	$X_1 X_2$
2062/063	55.46	59.35	3075.81	3522.42	3291.55
2063/064	30	62.57	900	3915	1877.10
2064/065	40.83	57.87	1667.01	3349.94	2362.83
2065/066	20	37.42	400	1400.26	748.4
2066/067	25	52.55	625	2761.50	1313.75
Total	$\sum X_1$=171.29	$\sum X_2$= 269.76	$\sum X_1^2$= 6667.89	$\sum X_2^2$= 14948.12	$\sum X_1 X_2$=9593.63

Correlation (r) = $$\frac{n\sum X_1X_2-\sum X_1.\sum X_2}{\sqrt{n(\sum {X_1}^2-(\sum X_1)^2}\times\sqrt{n\sum {X_2}^2-(\sum X_2)^2}}$$

$$= \frac{5\times9593.63-171.29\times269.76}{\sqrt{5\times6667.89-(171.29)^2)}\times\sqrt{5\times14948.12-(269.76)^2}}$$

r = 0.63

Dividend per share Analysis (DPS) and Market Value

Per Share Analysis (MVPS) of Nepal Investment Bank

Fiscal Year	**X_1 DPS**	**X_2 (MVPS)**	**$X1^2$**	**$X2^2$**	**$X_1 X_2$**
2062/063	55.46	1260	3075.81	1587600	69879.6
2063/064	30	1729	900	2989441	51870
2064/065	40.83	2450	1667.01	6002500	100033.5
2065/066	20	1388	400	1926544	27760
2066/067	25	705	625	497025	17625
Total	$\sum X_1$=171.29	$\sum X_2$= 7532	$\sum X_1^2$= 6667.89	$\sum X_2^2$= 13003110	$\sum X_1 X_2$= 267168.1

Correlation (r) = $$\frac{n\sum X_1X_2-\sum X_1.\sum X_2}{\sqrt{n(\sum {X_1}^2-(\sum X_1)^2}\times\sqrt{n\sum {X_2}^2-(\sum X_2)^2}}$$

$$= \frac{5\times2671681-171.29\times7532}{\sqrt{5\times6667.89-(171.29)^2)}\times\sqrt{5\times13003110-(7532)^2}}$$

r = 0.25

Dividend per share Analysis (DPS) and Dividend Payout Ratio (DPR)

Fiscal Year	X_1 DPS	X_2 (DPR)	X_1^2	X_2^2	$X_1 X_2$
2062/063	55.46	55.56/59.35=0.936	3075.81	0.86	51.58
2063/064	30	30/62.57=0.479	900	0.23	14.37
2064/065	40.83	40.83/57.87=0.705	1667.01	0.50	28.78
2065/066	20	20/37.42=0.534	400	0.28	10.68
2066/067	25	25/52.55=0.475	625	0.22	11.87
Total	$\sum X_1$=171.29	$\sum X_2$= 3.12	$\sum X_1^2$= 6667.89	$\sum X_2^2$= 2.10	$\sum X_1 X_2$ =117.28

Correlation (r) = $\frac{n\sum X_1X_2-\sum X_1.\sum X_2}{\sqrt{n(\sum {X_1}^2-(\sum X_1)^2}\times\sqrt{n\sum {X_2}^2-(\sum X_2)^2}}$

$= \frac{5\times117.28-171.29\times3.12}{\sqrt{5\times6667.89-(171.29)^2)}\times\sqrt{5\times2.10-(3.12)^2}}$

r=0.13

Dividend per share Analysis (DPS) and Dividend Yield Ratio (DYR)

Fiscal Year	X_1 DPS	X_2 (DYR)	$X1^2$	$X2^2$	$X_1 X_2$
2062/063	55.46	55.46/1260 = 0.044	3075.81	.001937	2.44
2063/064	30	30/1729 = 0.0173	900	.00030	.51
2064/065	40.83	40.83/2450 = 0.0166	1667.01	.00027	.68
2065/066	20	20/1388 = 0.0144	400	.001257	.29
2066/067	25	25/705 = 0.035	625		.88
Total	$\sum X_1$=171.29	$\sum X_2$= .127	$\sum X_1^2$= 6667.89	$\sum X_2^2$= .00397	$\sum X_1 X_2$ =4.8

Correlation (r) = $\frac{n\sum X_1X_2 - \sum X_1 . \sum X_2}{\sqrt{n(\sum X_1{}^2 - (\sum X_1)^2} \times \sqrt{n\sum X_2{}^2 - (\sum X_2)^2}}$

$= \frac{5\times 4.8 - 171.29\times 12.75}{\sqrt{5\times 6667.89 - (171.29)^2)} \times \sqrt{5\times .00397 - (.12.7)^2}}$

r= 0.59

Dividend per share Analysis (DPS) and Price Earning Ratio(PE)

Fiscal Year	X_1 DPS	X_2 (PE)	X_1^2	X_2^2	$X_1 X_2$
2062/063	55.46	21.23	3075.81	450.71	1179.54
2063/064	30	27.63	900	763.41	828.9
2064/065	40.83	42.33	1667.01	1791.83	1728.33
2065/066	20	37.10	400	1376.41	742
2066/067	25	13.42	625	180.09	335.5
Total	$\sum X_1$=171.29	$\sum X_2$= 141.71	$\sum X_1^2$= 6667.89	$\sum X_2^2$= 4562.45	$\sum X_1 X_2$ =4814.27

Correlation (r) = $\frac{n\sum X_1X_2-\sum X_1.\sum X_2}{\sqrt{n(\sum {X_1}^2-(\sum X_1)^2}\times\sqrt{n\sum {X_2}^2-(\sum X_2)^2}}$

$= \frac{5\times4814.27-171.29\times141.71}{\sqrt{5\times6667.89-(171.29)^2)}\times\sqrt{5\times4562.45-(141.71)^2}}$

r=-0.06

Dividend per share Analysis (DPS) and Profitability Ratio Analysis (PR)

Fiscal Year	X_1 DPS	Nepal Investment (PR)X_2	X_1^2	X_2^2	$X_1 X_2$
2062/063	55.46	23.99	3075.81	575.52	1332.88
2063/064	30	25.07	900	628.50	752.10
2064/065	40.83	25.33	1667.01	641.60	1034.22
2065/066	20	22.97	400	527.62	459.4
2066/067	25	23.67	625	560.27	591.75
Total	$\sum X_1$=171.29	$\sum X_2$= 121.03	$\sum X_1^2$= 6667.89	$\sum X_2^2$= 2933.51	$\sum X_1 X_2$ =4170.35

Correlation (r) = $$\frac{n\sum X_1X_2-\sum X_1.\sum X_2}{\sqrt{n(\sum {X_1}^2-(\sum X_1)^2}\times\sqrt{n\sum {X_2}^2-(\sum X_2)^2}}$$

$$= \frac{5\times4170.35-171.29\times121.03}{\sqrt{5\times6667.89-(171.29)^2)}\times\sqrt{5\times2933.51-(121.03}}$$

r =0.43

Dividend per share Analysis (DPS) and Liquidity Ratio (LR)

Fiscal Year	X_1 DPS	(LR)X_2	X_1^2	X_2^2	$X_1 X_2$
2062/063	55.46	13.61	3075.81	185.23	756.17
2063/064	30	10.47	900	109.62	314.10
2064/065	40.83	10.91	1667.01	119.02	645.45
2065/066	20	10.32	400	106.50	206.40
2066/067	25	7.77	625	60.37	194.25
Total	$\sum X_1$=171.29	$\sum X_2$= 53.08	$\sum X_1^2$= 6667.89	$\sum X_2^2$= 580.74	$\sum X_1 X_2$ =1916.37

Correlation (r) = $\frac{n\sum X_1X_2 - \sum X_1.\sum X_2}{\sqrt{n(\sum X_1{}^2 - (\sum X_1)^2} \times \sqrt{n\sum X_2{}^2 - (\sum X_2)^2}}$

$= \frac{5\times1916.37 - 171.29\times53.08}{\sqrt{5\times6667.89 - (171.29)^2)} \times \sqrt{5\times580.74 - (53.08)^2}}$

r = 0.83

Dividend per share Analysis (DPS) and Net Worth (NW)

Fiscal Year	X_1 DPS	(NW)X_2	X_1^2	X_2^2	$X_1 X_2$
2062/063	55.46	240	3075.81	57600	13334.4
2063/064	30	234	900	54756	7020
2064/065	40.83	223	1667.01	49729	9105.09
2065/066	20	162	400	26244	3240
2066/067	25	190	625	36100	4750
Total	$\sum X_1$=171.29	$\sum X_2$= 1049	$\sum X_1^2$= 6667.89	$\sum X_2^2$= 224429	$\sum X_1 X_2$ =37449.49

Correlation (r) = $$\frac{n\sum X_1X_2-\sum X_1.\sum X_2}{\sqrt{n(\sum {X_1}^2-(\sum X_1)^2}\times\sqrt{n\sum {X_2}^2-(\sum X_2)^2}}$$

$$= \frac{5\times37449.49-171.29\times1049}{\sqrt{5\times6667.89-(171.29)^2)}\times\sqrt{5\times224429-(1049)^2}}$$

r = 0.81

Annex- IV

Earning per Share (EPS) of Nepal Investment Bank

Fiscal Year	(EPS) (X)	d = x – A	d^2
2062/063	59.35	1.48	2.19
2063/064	62.57	4.7	22.09
2064/065	57.87	0	0
2065/066	37.42	–20.45	418.20
2066/067	52.55	–5.32	28.30
Total	269.76	–19.59	470.78
Average (Mean)	53.95		
S.D.	8.88		
CV	0.16		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 57.87 + \left(\frac{-19.59}{5}\right)$$

$$= 53.95$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{470.78}{5} + \left(\frac{19.59}{5}\right)^2}$$

$$= 8.88$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{8.88}{53.95} = 0.16$$

Earning per Share (EPS) of Nabil Bank

Fiscal Year	Nabil Bank (EPS) (X)	d = x – A	d^2
2062/063	129.21	20.9	436.81
2063/064	137.08	28.77	827.71
2064/065	108.31	0	0
2065/066	106.7	–1.55	2.40
2066/067	78.6	–29.7	882.09
Total	559.9	18.42	2149.01
Average (Mean)	111.99		
S.D.	20.40		
CV	0.182		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 108.31 + \left(\frac{18.42}{5}\right)$$

$$= 111.99$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{2149.01}{5} - \left(\frac{18.42}{5}\right)^2}$$

$$= 20.40$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{20.40}{111.99} = 0.182$$

Earning per Share of Kumari Bank

Fiscal Year	Kumari Bank (EPS) (X)	d = x – A	d^2
2062/063	16.59	–0.83	0.69
2063/064	22.70	6.35	40.32
2064/065	16.35	0	0
2065/066	22.04	5.69	32.38
2066/067	24.24	7.89	62.25
Total	101.92	19.04	135.64
Average (Mean)	20.38		
S.D.	3.55		
CV	0.18		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$\overline{x} = 16.35 + \frac{19.04}{5} = 20.38$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$\sigma = \sqrt{\frac{135.64}{5} - \frac{(19.04)^2}{5}} = 3.55$$

$$CV = \frac{3.55}{20.30} = 0.18$$

Dividend per Share (DPS) of Kumari Bank

Fiscal Year	(DPS) (X)	d = x – A	d^2
2062/063	21.05	10.52	110.67
2063/064	21.05	10.52	110.67
2064/065	10.53	0	0
2065/066	10.58	0.05	0.0025
2066/067	12	1.47	2.1609
Total	75.21	22.56	223.50
Average	15.04		
S.d.	4.93		
CV	0.33		

Source: Annual Report of the Respective Banks

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 10.53 + \left(\frac{22.56}{5}\right)$$

$$= 15.04$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{223.5}{5} - \left(\frac{22.56}{5}\right)^2}$$

$$= 4.93$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{4.93}{15.04} = 0.33$$

Dividend per Share (DPS) of Nepal Investment Bank

Fiscal Year	(DPS) (X)	d = x – A	d^2
2062/063	55.46	14.63	214.03
2063/64	30	–10.83	117.29
2064/65	40.83	0	0
2065/066	20	–20.83	433.89
2066/067	25	–15.83	250.59
Total	171.29	–32.86	1015.8
Average	34.26		
S.d.	14.48		
CV	0.42		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 40.83 + \left(-\frac{32.86}{5}\right)$$

$$= 34.26$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{1015.8}{5} + \left(\frac{32.86}{5}\right)^2}$$

$$= 14.48$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{14.38}{34.26} = 0.42$$

Dividend per Share (DPS) of Nabil Bank

Fiscal Year	(DPS) (X)	d = x – A	d^2
2062/063	85	–15	225
2063/064	140	40	1600
2064/065	100	0	0
2065/066	85	–15	225
2066/067	70	–30	900
Total	480	–20	2950
Average	96		
S.d.	23.96		
CV	0.25		

$$= A + \frac{\sum d}{n}$$

$$= 100 - \left(\frac{20}{5}\right)$$

$$= 96$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{2950}{5} + \left(\frac{20}{5}\right)^2}$$

$$= 23.96$$

$$CV = \frac{\sigma}{\bar{x}} = \frac{23.96}{96} = 0.25$$

Dividend payout Ratio (DPR) of Nabil BanK

Fiscal Year	(DPR) (X)	d = x – A	d^2
2062/063	85/129.21=0.657	–0.26	0.068
2063/064	140/137.08=1.021	0.10	0.010
2064/065	100/108.31=0.923	0	0
2065/066	85/106.76=0.796	–0.12	0.0144
2066/067	70/78.61=0.890	–0.13	0.0169
Total	4.191	–0.41	0.109
Mean	0.84		
S.D.	0.12		
CV	0.15		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 0.92 - \left(\frac{0.41}{5}\right)$$

$$= 0.84$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{0.109}{5} + \left(\frac{0.41}{5}\right)^2}$$

$$= 0.12$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{0.12}{84} = 0.15$$

Dividend payout Ratio (DPR) of Nepal Investment Bank

Fiscal Year	(DPR) (X)	d = x – A	d^2
2062/063	55.56/59.35=0.94	0.23	0.053
2063/064	30/62.57=0.479	–0.23	0.053
2064/065	40.83/57.87=0.71	0	0
2065/066	20/37.42=0.734	0.02	0.004
2066/067	25/52.55=0.48	–0.23	0.053
Total	3.334	–0.21	0.163
Mean	0.67		
S.D.	0.27		
CV	0.40		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 0.71 - \left(\frac{0.21}{5}\right)$$

$$= 0.67$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{0.163}{5} + \left(\frac{0.21}{5}\right)^2}$$

$$= 0.27$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{0.27}{67} = 0.40$$

Dividend payout Ratio (DPR) of Kumari Bank

Fiscal Year	(DPR) (X)	d = x – A	d^2
2062/063	21.05/16.59=1.27	0.63	0.40
2063/064	21.05/22.70=0.93	0.08	0.007
2064/065	10.53/16.35=0.6440	0	0
2065/066	10.58/22.04=0.480	–0.16	0.025
2066/067	12/24.24=0.50	–0.0196	0.0038
Total	3.824	0.53	0.432
Mean	0.75		
S.D.	0.27		
CV	0.36		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 0.64 + \left(\frac{0.53}{5}\right)$$

$$= 0.75$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{0.432}{5} - \left(\frac{0.53}{5}\right)^2}$$

$$= 0.27$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{0.27}{0.75} = 0.36$$

Dividend Yield Ratio (DYR) of Nepal Investment Bank

Fiscal Year	(DYR) (X)	d = x – A	d^2
2062/063	55.46/1260 = 0.044	0.027	0.000729
2063/064	30/1729 = 0.0173	0.0007	.00000049
2064/065	40.83/2450 = 0.0166	0	0
2065/066	20/1388 = 0.0144	–0.0022	0.00000484
2066/067	25/705 = 0.035	0.018	0.000324
Total	0.127	0.0435	0.0010583
Average	0.025		
S.D.	0.011		
CV	0.44		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 0.0166 + \left(\frac{0.0435}{5}\right)$$

$$= 0.025$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{0.0010583}{5} - \left(\frac{0.0435}{5}\right)^2}$$

$$= 0.011$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{0.011}{0.025} = 0.44$$

Dividend Yield Ratio (DYR) of Kumari Bank

Fiscal Year	(DYR) (X)	d = x – A	d^2
2062/063	21.05/443 = 0.047	0.037	0.001369
2063/064	21.05/830 = 0.025	0.015	0.000225
2064/065	10.53/1005 = 0.010	0	0
2065/066	10.58/700 = 0.015	0.005	0.000025
2066/067	12/ 468 = 0.026	0.016	0.000256
Total	0.123	0.073	0.001875
Average	0.25		
S.D.	0.0127		
CV	0.508		

$$= A + \frac{\sum d}{n}$$

$$= 0.010 + \left(\frac{0.0735}{5}\right)$$

$$= 0.025$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{0.001875}{5} - \left(\frac{0.073}{5}\right)^2}$$

$$= 0.0127$$

$$CV = \frac{\sigma}{\bar{x}} = \frac{0.0127}{0.025} = 0.508$$

Dividend Yield Ratio (DYR) of Nabil Bank

Fiscal Year	(DYR) (X)	d = x – A	d^2
2062/063	85/2240 = 0.039	0.010	0.0001
2063/064	140/5050 = 0.028	0.0009	0.00000001
2064/065	100/5275 = 0.0189	0	0
2065/066	85/4899 = 0.0173	–0.0119	0.00014
2066/067	70/2384 = 0.0293	0.0001	0.00000001
Total	0.1319	–0.0009	0.00024
Average	0.01872		
S.D.	0.0069		
CV	0.37		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 0.0189 - \left(\frac{0.0009}{5}\right)$$

$$= 0.01872$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{0.00024}{5} + \left(\frac{0.0009}{5}\right)^2}$$

$$= 0.0069$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{0.0069}{0.01872} = 0.37$$

PE Ratio of Nepal Investment Bank

Fiscal Year	(PE) (X)	d = x – A	d^2
2062/063	21.23	–21.1	445.21
2063/064	27.63	–14.7	216.09
2064/065	42.33	0	0
2065/066	37.10	–5.23	27.35
2066/067	13.42	–28.91	835.79
Total	141.71	–69.94	1524.44
Average	28.34		
S.D.	10.45		
CV	0.37		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 42.33 - \left(\frac{69.94}{5}\right)$$

$$= 28.34$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{1524.44}{5} + \left(\frac{69.94}{5}\right)^2}$$

$$= 10.45$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{10.45}{24.34} = 0.37$$

PE Ratio of Kumari Bank

Fiscal Year	(PE) (X)	d = x – A	d^2
2062/063	26.71	–34.76	1208.26
2063/064	36.56	–24.91	620.51
2064/065	61.47	0	0
2065/066	31.76	–29.71	882.68
2066/067	19.31	–42.16	1777.47
Total	175.81	–131.54	14889.18
Average	35.16		
S.D.	28.26		
CV	0.80		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 61.47 - \left(\frac{131.54}{5}\right)$$

$$= 35.16$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{14889.18}{5} + \left(\frac{131.54}{5}\right)^2}$$

$$= 28.26$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{28.26}{35.16} = 0.80$$

PE Ratio of Nabil Bank

Fiscal Year	(PE) (X)	d = x – A	d^2
2062/063	17.34	–31.36	983.45
2063/064	36.84	–18.86	140.66
2064/065	48.7	0	0
2065/066	45.89	–2.81	7.90
2066/067	30.33	–18.37	337.46
Total	179.1	–64.4	1469.47
Average	35.82		
S.D.	11.31		
CV	0.32		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 48.70 - \left(\frac{64.4}{5}\right)$$

$$= 35.82$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{1469.47}{5} + \left(\frac{64.4}{5}\right)^2}$$

$$= 11.31$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{11.31}{35.82} = 0.32$$

Profitability Ratio (PR) of Nabil Bank

Fiscal Year	X	d=X-A	d^2
2062/063	35.32	5.64	31.80
2063/064	32.16	2.48	6.15
2064/065	29.68	0	0
2065/066	30.56	0.88	0.77
2066/067	24.11	-5.57	31.02
Total	151.83	3.43	69.74

$$\overline{X} = A + \frac{\sum d}{n} \qquad sd(\sigma) = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= 29.68 + \frac{3.43}{5} \qquad = \sqrt{\frac{69.74}{5} - \left(\frac{3.43}{5}\right)^2}$$

$$= 30.37 \qquad = 3.64$$

$$\text{CV} = \sigma / \overline{X} = \frac{3.64}{30.37} = 0.12$$

Profitability Ratio (PR) of Kumari Bank

Fiscal Year	X	d=X-A	d^2
2062/063	15.52	-0.66	0.435
2063/064	19.66	3.43	11.76
2064/065	16.18	0	0
2065/066	16.54	0.36	.129
2066/067	15.32	-.86	.739
Total	83.17	2.27	13.06

$$\overline{X} = A + \frac{\sum d}{n}$$

$$= 16.18 + \frac{2.27}{5}$$

$$= 16.63.$$

$$sd(\sigma) = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{13.06}{5} - \left(\frac{2.27}{5}\right)^2}$$

$$= 1.47$$

$$\text{CV} = \sigma / \overline{X} = \frac{1.47}{16.63} = 0.09$$

Profitability Ratio (PR) of Nepal Investment Bank

Fiscal Year	X	d=x-A	d^2
2062/063	23.99	-1.34	1.79
2063/064	25.07	-.26	0.067
2064/065	25.33	0	0
2065/066	22.97	-2.36	5.57
2066/067	23.67	-1.66	2.75
Total	121.03	-5.62	10.18

$$\overline{X} = A + \frac{\sum d}{n}$$

$$= 25.33 + \frac{-5.62}{5}$$

$$= 24.21$$

$$sd(\sigma) = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{10.18}{5} + \left(\frac{5.62}{5}\right)^2}$$

$$= 0.95$$

$$\text{CV} = \sigma / \overline{X} = \frac{0.95}{24.21} = 0.04$$

Liquidity Ratio (LR) of Nabil Bank

Fiscal Year	(LR) (X)	d = x – A	d^2
2062/063	3.26	–5.11	26.11
2063/064	6	–2.37	5.616
2064/065	8.37	0	0
2065/066	9.03	0.66	0.435
2066/067	3.02	–5.35	28.622
Total	29.63	–12.17	60.77
Average	5.936		
S.D.	1.05		
CV	1.77		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 8.37 - \left(\frac{12.17}{5}\right)$$

$$= 5.936$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{60.77}{5} - \left(\frac{-12.17}{5}\right)^2}$$

$$= 1.05$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{1.05}{5.936} = 0.177$$

Liquidity Ratio (LR) of Kumari Bank

Fiscal Year	(LR) (X)	d = x – A	d^2
2062/063	2.71	0.8	0.64
2063/064	3.65	1.74	3.027
2064/065	1.91	0	0
2065/066	7.13	5.228	27.248
2066/067	8.02	6.11	37.33
Total	23.42	13.87	68.245
Average	4.68		
S.D.	0.92		
CV	0.196		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 1.91 + \left(\frac{13.87}{5}\right)$$

$$= 4.68$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{68.245}{5} - \left(\frac{13.87}{5}\right)^2}$$

$$= 0.92$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{0.92}{4.68} = 0.196$$

Liquidity Ratio (LR) of Nepal Investment Bank

Fiscal Year	(LR) (X)	d = x – A	d^2
2062/063	13.61	2.7	7.29
2063/064	10.47	–0.44	0.1936
2064/065	10.91	0	0
2065/066	10.32	–0.59	0.348
2066/067	7.77	–3.14	9.859
Total	53.08	–1.47	17.690
Average	10.616		
S.D.	1.59		
CV	0.149		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 10.91 - \left(\frac{1.47}{5}\right)$$

$$= 10.616$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{17.690}{5} + \left(\frac{1.47}{5}\right)^2}$$

$$= 1.592$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{1.592}{10.616} = 0.149$$

Market Value per Share (MVPS) of Nepal Investment Bank

Fiscal Year	(MVPS)	d = x – A	d^2
2062/063	1260	–1190	1416100
2063/064	1729	–721	519841
2064/065	2450	0	0
2065/066	1388	–1062	1127844
2066/067	705	–1745	3045025
Total	7532	–4718	6108810
Average	1506.4		
S.D.	1105.756		
CV	0.73		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 2450 - \left(\frac{4718}{5}\right)$$

$$= 1506.4$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{6108810}{5} + \left(\frac{4718}{5}\right)^2}$$

$$= 1105.34$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{1105.34}{1506.4} = 0.73$$

Market Value per Share (MVPS) of Kumari Bank

Fiscal Year	(MVPS) (X)	d = x – A	d^2
2062/063	443	–562	315844
2063/064	830	–175	30625
2064/065	1005	0	0
2065/066	700	–305	93025
2066/067	468	–537	288369
Average	3446	–1579	727863
Total	689.2		
S.D.	381.95		
CV	0.55		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 1005 - \left(\frac{1579}{5}\right)$$

$$= 689.2$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{727863}{5} + \left(\frac{1579}{5}\right)^2}$$

$$= 381.95$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{381.95}{689.2} = 0.55$$

Market Value per Share (MVPS) of Nabil Bank

Fiscal Year	(MVPS) (X)	d = x – A	d^2
2062/063	2240	–3035	9211225
2063/064	5050	–225	50625
2064/065	5275	0	0
2065/066	4899	–376	141376
2066/067	2384	–2891	8357881
Total	19848	–6527	17761107
Average	3969.6		
S.D.	1885.08		
CV	0.47		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 5275 - \left(\frac{6527}{5}\right)$$

$$= 3969.6$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{17761107}{5} + \left(\frac{6527}{5}\right)^2}$$

$$= 1885.08$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{1885.08}{3969.6} = 0.47$$

Net Worth(NW) of Nabil Bank

Fiscal Year	(NW) (X)	d = x – A	d^2
2062/063	381	27	729
2063/064	418	64	4096
2064/065	354	0	0
2065/066	324	–30	900
2066/067	265	–89	7921
Total	1742	–28	13646
Mean	348.4		
Standard Deviation	52.29		
CV	0.15		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 354 - \left(\frac{28}{5}\right)$$

$$= 348.4$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{13646}{5} + \left(\frac{28}{5}\right)^2}$$

$$= 52.29$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{52.29}{348.4} = 0.15$$

Net Worth (NW) of Nepal Investment Bank

Fiscal Year	(NW) (X)	d = x – A	d^2
2062/063	240	17	289
2063/064	234	11	121
2064/065	223	0	0
2065/066	162	–61	3721
2066/067	190	–33	1089
Total	1049	–66	5220
Mean	209.8		
Standard Deviation	32.51		
CV	0.14		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 223 - \left(\frac{66}{5}\right)$$

$$= 209.8$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{5220}{5} + \left(\frac{66}{5}\right)^2}$$

$$= 32.51$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{32.51}{209.8} = 0.15$$

Net Worth (NW) of Kumari Bank

Fiscal Year	(NW) (X)	d = x – A	d^2
2062/063	149	21	441
2063/064	137	9	81
2064/065	128	0	0
2065/066	137	9	81
2066/067	137	9	81
Total	688	48	684
Mean	137.6		
Standard Deviation	2.096		
CV	0.015		

$$\overline{x} = A + \frac{\sum d}{n}$$

$$= 128 + \left(\frac{48}{5}\right)$$

$$= 137.6$$

$$\sigma = \sqrt{\frac{\sum d^2}{n} - \left(\frac{\sum d}{n}\right)^2}$$

$$= \sqrt{\frac{684}{5} - \left(\frac{48}{5}\right)^2}$$

$$= 2.096$$

$$CV = \frac{\sigma}{\overline{x}} = \frac{2.096}{137.6} = 0.015$$

Annex -V

Dependent variable, Market value per share (MVPS) with on Independent variable Earning per share (EPS) of Kumari Bank

1. Simple regressing equation is as follows

Fiscal Year	(EPS) x	y (MVPS)	x^2	y^2	xy	$(x - \bar{x})^2$
2062/63	16.59	443	275.23	196249	7349.37	14.36
2063/69	22.70	830	515.29	688900	18841	5.38
2064/65	16.35	1005	267.32	1010025	16431.75	16.24
2065/66	22.04	700	485.76	490000	15428	2.75
2066/67	24.24	468	587.58	219024	15428	14.89
	$\sum x$=101.92	$\sum y$=3446	$\sum x^2$=2131.17	$\sum y^2$= 2604198	$\sum xy$ =69394.44	$\sum(x - \bar{x})^2$ =53.62

$$a = \frac{\sum x^2 \sum y - \sum x \sum xy}{N\sum x^2 - (\sum x)^2} = \frac{2131.17 \times 3446 - 101.92 \times 69394.44}{5 \times 2131.17 - (101.92)^2} = 1011.82$$

$$b = \frac{N\sum xy - \sum x \sum y}{N\sum x^2 - (\sum x)^2} = \frac{5 \times 69394.44 - 101.92 \times 3446}{5 \times 2131.17 - (101.92)^2} = -15.82$$

$y = a + bx$

$y = 1011.82 + (-15.82)x$

$\bar{x} = 20.38$

Correlation coefficient (r) = –0.24

Coefficient of Determination (r^2) = 0.0576

Standard error of Estimate (se) = $\sqrt{\frac{\sum y^2 - a\sum y - b\sum xy}{N - 2}}$

$$= \sqrt{\frac{2604198 - 1011.82 \times 3446 - (-15.82) \times 69394.44}{5 - 2}}$$

= 267.88

Standard error of regression coefficient (sb) = $\frac{se}{\sqrt{(\sum(x - \bar{x}))^2}} = \frac{267.88}{\sqrt{53.62}} = 36.58$

$$\text{t–value} = \sqrt{\frac{N-2}{1-r^2}} = \sqrt{\frac{5-2}{1-(-0.24)^2}} = 1.78$$

2. Market value per share on Dividend per share

Let x represents dividend per share (DPS) and y represents market value per share (MVPS).

Fiscal Year	DPS (x)	MVPS (y)	xy	x^2	y^2	$(x - \bar{x})^2$
2062/63	21.05	443	9325.15	443.10	196249	36.36
2063/69	21.05	830	17471.5	443.10	688900	36.36
2064/65	10.53	1005	10582.65	110.88	1010025	20.16
2065/66	10.58	700	7406	111.93	490000	19.71
2066/67	12	468	5616	144	219024	9.12
	$\sum x=75.21$	$\sum y=3446$	$\sum xy=50401.3$	$\sum x_2=$ 1253.02	$\sum y^2=$ 2604198	$\sum (x - \bar{x})^2=121.71$

$\bar{x} = 15.04$

$y = a + bx$

$$a = \frac{\sum x^2 \sum y - \sum x \sum xy}{N\sum x^2 - (\sum x)^2} = \frac{3445 \times 1253.02 - 75.21 \times 50401.3}{5 \times 1253.02 - (75.21)^2} = 866.27$$

$$b = \frac{N\sum xy - \sum x \sum y}{N\sum x^2 - (\sum x)^2} = \frac{5 \times 50401.30 - 75.21 \times 3446}{5 \times 1253.02 - (75.21)^2} = -11.77$$

Correlation coefficient (r) = –0.27

Correlation determination (r^2) = $(-0.27)^2$ = 0.0729

$$\text{Standard error of estimate (se)} = \sqrt{\frac{\sum y^2 - a\sum y - b\sum xy}{N-2}}$$

$$= \sqrt{\frac{2604198 - 866.27 \times 3446 - (-11.77) \times 50401.30}{5-2}} = 265.99$$

$$\text{Standard error of coefficient (sb)} = \frac{se}{\sqrt{(\sum (x - \bar{x}))^2}} = \frac{267.99}{\sqrt{121.71}} = 24.11$$

$$\text{t–value} = \sqrt{\frac{N-2}{1-r^2}} = \sqrt{\frac{5-2}{1-(0.0729)^2}} = 1.79$$

Nepal Investment Bank

1).Let x represents earning per share (EPS) and y represents market value per share (MVPS)

Where,

$y = a + bx$

Fiscal Year	EPS (x)	MVPS(y)	x^2	y^2	xy	$(x - \bar{x})^2$
2062/63	59.35	1260	3522.42	1587600	74781	29.16
2063/69	62.57	729	3915	531441	45613.53	74.30
2064/65	57.87	2450	3348.93	6002500	141781.5	15.36
2065/66	37.42	1388	1400.25	1926544	51938.96	260.17
2066/67	52.55	705	2761.50	497025	37047.75	1.96
	$\sum x = 269.76$	$\sum y = 7532$	$\sum x^2 = 14948.12$	$\sum y^2 = 13003110$	$\sum xy = 413732.74$	$\sum (x - \bar{x})^2 = 380.95$

$\bar{x} = 53.95$

$$a = \frac{\sum x^2 \sum y - \sum x \sum xy}{N\sum x^2 - (\sum x)^2} = \frac{14948.12 \times 7532 - 269.76 \times 413732.74}{5 \times 14948.12 - (269.76)^2} = 497.77$$

$$b = \frac{N\sum xy - \sum x \sum y}{N\sum x^2 - (\sum x)^2} = \frac{5 \times 413732.74 - 269.76 \times 7532}{5 \times 14948.12 - (269.76)^2} = 18.69$$

Correlation coefficient (r) = 0.29

Correlation of determination (r^2) = 0.084

$$\text{Standard error of estimate (se)} = \sqrt{\frac{\sum y^2 - a\sum y - b\sum xy}{N - 2}}$$

$$= \sqrt{\frac{13003110 - 497.77 \times 7532 - 18.69 \times 413732.74}{5 - 2}} = 712.09$$

$$\text{Standard error of coefficient (sb)} = \frac{se}{\sqrt{(\sum (x - \bar{x}))^2}} = \frac{712.09}{\sqrt{380.95}} = 36.48$$

$$\text{t–value} = \sqrt{\frac{N-2}{1-r^2}} = \sqrt{\frac{5-2}{1-0.084}} = 3.27$$

2. Market value per share (MVPS) on divined per share (DPS)

Let x represents dividend per share (DPS) and y represents market value per share (MVPS)

Fiscal Year	DPS (x)	MVPS(y)	x^2	y^2	Xy	$(x - \bar{x})^2$
2062/63	55.46	1260	3075.81	1587600	69879.6	449.44
2063/69	30	729	900	2989441	51870	18.14
2064/65	40.83	2450	1667.08	6002500	100033.5	43.16
2065/66	20	1388	400	1926544	27760	203.34
2066/67	25	705	625	497025	17625	85.74
	$\sum x$=171.29	$\sum y$=7532	$\sum x^{2=}$6667.89	$\sum y^2$= 13003110	$\sum xy$= 267168.1	$\sum(x - \bar{x})^2$799.92

Where,

$\bar{x} = 34.26$

$y = a + bx$

$$a = \frac{\sum x^2 \sum y - \sum x \sum xy}{N\sum x^2 - (\sum x)^2} = \frac{6667.89 \times 7532 - 171.29 \times 267168.1}{5 \times 6667.89 - (171.29)^2} = 1115.05$$

$$b = \frac{N\sum xy - \sum x \sum y}{N\sum x^2 - (\sum x)^2} = \frac{5 \times 267168.1 - 171.29 \times 7532}{5 \times 6667.89 - (171.29)^2} = 11.42$$

Correlation coefficient (r) = 0.23

Correlation of determination (r^2) = 0.0529

$$\text{Standard error of estimate (se)} = \sqrt{\frac{\sum y^2 - a\sum y - b\sum xy}{N - 2}}$$

$$= \sqrt{\frac{13003110 - 1115.05 \times 7532 - 11.42 \times 267168.1}{5 - 2}} = 719.60$$

$$\text{Standard error of coefficient (sb)} = \frac{se}{\sqrt{(\sum(x - \bar{x}))^2}} = \frac{719.60}{\sqrt{799.82}} = 25.44$$

$$\text{t–value} = \sqrt{\frac{N-2}{1-r^2}} = \sqrt{\frac{5-2}{1-0.0529}} = 1.77$$

Nabil Bank

1. Let x Represents earning per share (EPS) and y Represents Market value per share (MVPS)

Fiscal Year	EPS (x)	MVPS(y)	x^2	y^2	xy	$(x - \bar{x})^2$
2062/63	129.21	2240	16695.22	5017600	289430.40	296.92
2063/69	137.08	5050	18790.92	25502500	692254	629.50
2064/65	108.31	5275	11731.05	27825625	571335.25	13.54
2065/66	106.76	4899	11397.69	24000201	523017.24	27.35
2066/67	78.61	3084	6179.53	5683456	242433.24	1114.22
	$\sum x$=559.97	$\sum y$=19848	$\sum x^2$= 64794.41	$\sum y^2$= 88029382	$\sum xy$= 2263443.13	$\sum(x - \bar{x})^2$= 2081.13

Where,

$\bar{x} = 111.99$

$y = a + bx$

$$a = \frac{\sum x^2 \sum y - \sum x \sum xy}{N\sum x^2 - (\sum x)^2} = \frac{64794.41 \times 19848 - 559.97 \times 2263443.13}{5 \times 64794.41 - (559.97)^2} = 1785.49$$

$$b = \frac{N\sum xy - \sum x \sum y}{N\sum x^2 - (\sum x)^2} = \frac{5 \times 2263443.13 - 559.97 \times 19848}{5 \times 64794.41 - (559.97)^2} = 19.50$$

correlation coefficient (r) = 0.29

Correlation of determination (r^2) = 0.084

Standard error of estimate (se) = $\sqrt{\frac{\sum y^2 - a\sum y - b\sum xy}{N - 2}}$

$$= \sqrt{\frac{88029382 - 1785.49 \times 19848 - 19.50 \times 2263443.13}{5 - 2}} = 1678.67$$

Standard error of coefficient (sb) = $\frac{se}{\sqrt{(\sum(x - \bar{x}))^2}} = \frac{1678.67}{\sqrt{2081.13}} = 36.80$

t–value = $\sqrt{\frac{N - 2}{1 - r^2}} = \sqrt{\frac{5 - 2}{1 - 0.0841}} = 3.27$

2. Market value per share (MVPS) on dividend per share (DPS)

Where let x represents dividend per share (DPS) and y represents market per share (MVPS)

Where,

$y = a + bx$

Fiscal year	DPS (x)	MVPS(y)	x^2	y^2	xy	$(x - \bar{x})^2$
2062/63	85	2240	7225	5017600	190400	121
2063/69	140	5050	19600	25502500	707000	1936
2064/65	100	5275	10000	27825625	527500	16
2065/66	85	4899	7225	24000201	416415	121
2066/67	70	2384	4900	5683456	166880	676
	$\sum x=480$	$\sum y=19848$	$\sum x^2=$ 48950	$\sum y^2=$ 88029382	$\sum xy=$ 2008195	$\sum(x - \bar{x})^2=$ 2870

$\bar{x} = 96$

$$a = \frac{\sum x^2 \sum y - \sum x \sum xy}{N\sum x^2 - (\sum x)^2} = \frac{48950 \times 19848 - 480 \times 2008185}{5 \times 48950 - (480)^2} = 531.42$$

$$b = \frac{N\sum xy - \sum x \sum y}{N\sum x^2 - (\sum x)^2} = \frac{5 \times 2008195 - 480 \times 19848}{5 \times 48950 - (480)^2} = 35.81$$

Correlation of coefficient (r) = 0.63

Correlation of determination (r^2) = 0.3969

Standard error of estimate (se) = $\sqrt{\frac{\sum y^2 - a\sum y - b\sum xy}{N - 2}}$

$$= \sqrt{\frac{88029383 - 531.22 \times 19848 - 35.81 \times 2008195}{5 - 2}} = 1362.38$$

Standard error of coefficient (sb) = $\frac{se}{\sqrt{(\sum(x - \bar{x}))^2}} = \frac{1362.38}{\sqrt{2870}} = 25.43$

t–value = $\sqrt{\frac{N - 2}{1 - r^2}} = \sqrt{\frac{5 - 2}{1 - 0.3969}} = 2.23$