IMPACT OF FIRM SPECIFIC FACTORS ON FIRM VALUE IN NEPALESE COMMERCIAL BANKS

A Thesis

Submitted

By

Kabita Singh

Central Department of Management

Roll No.: 7320/18

Registration No.: 7-2-551-95-2013

In Partial Fulfilment of the Requirements for the Degree of

Masters of Business Studies (MBS)

In the

Faculty of Management

Tribhuvan University

Kathmandu, Nepal

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Certification of Authorship

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled “Impact of Firm Specific Factors on Firm Value in Nepalese Commercial Banks”.The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor it has been proposed and presented as part of requirements for any other academic purposes.

The assistance and cooperation that I have received during this research work has been acknowledged. In addition, I declare that all information sources and literature used are cited in the reference section of the dissertation.

Kabita Singh

11-07-2021

Report of Research Committee

Ms. Kabita Singh has defended a research proposal entitled "Impact of Firm Specific Factors on Firm Value in Nepalese Commercial Banks" successfully. The research committee has registered the dissertation for further progress. It is recommended to carry out the work as per and submit the thesis for evaluation.

Gopal Krishna Shrestha, Phd
Supervisor

Dissertation Proposal Defended Date:

Bikash Shrestha
Supervisor

Dissertation Submitted Date:

Gopal Krishna Shrestha, Phd
Head of Research Committee

Dissertation Viva Voce Date:

Approval Sheet

We have examined the dissertation entitled "Impact of Firm Specific Factors on Firm value in Nepalese Commercial Banks" presented by Ms. Kabita Singh for the degree of Masters of Business Studies. We hereby certify that the dissertation is acceptable for the award of degree.

Dissertation Supervisor

Internal Examiner

External Examiner

Chairperson Research Committee

Acknowledgements

This study entitled “Impact of Firm Specific Factors on Firm Value in Nepalese Commercial Banks” has been prepared for partial fulfillment of requirements for the degree of Masters of Business Studies (MBS).It is directed towards the trend of firm’s value affected by dividend policy, profitability, company size and company growth made by five studied commercial banks for the past five years.This would not have been possible without the kind support and help of many individuals. Therefore, I would like to thank all the members who directly or indirectly helped and supported me while completing this report.

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Kabita Singh

July, 2021

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Abbreviations

AHP: Analytical Hierarchy Process

BFI: Banking and Financial Institution

CAMEL: Capital adequacy,Asset quality, Management, Earnings, Liquidity

CAR: Capital Adequacy Ratio

DIT: Dividend-Irrelevance Theory

DPR: Dividend Payout Ratio

GDP: Gross Domestic Product

GROWTH: Company Growth

Ln: natural Logarithm

MBR: Market Book Value

MBS: Masters of Business Studies

MM: Merton Miller

NEPSE: Nepal Stock Exchange

NIM: Net Interest Margin

NPA: Net Present Assets

NPV: Net Present Value

NRB: Nepal Rastra Bank

PBV: Price Book Value

PER: Price-Earnings Ratio

ROA: Return on Asset

ROE: Return on Equity

SEBON: Security Board of Nepal

SIZE: Company Size

SPSS: Statistical Package for the Social Sciences

VAIC: Value-Added Intellectual Coefficient

Abstract

The purpose of this study was to estimate and analyze the effect of dividend policy, profitability, firm size, and growth on firm value in commercial banks listed on Nepal Stock Exchange from 2015 to 2019. A quantitative method is used for this research with five companies as research object, measured by purposive sampling techniques.Thedescriptive, correlational and regressionhas been employed in this study. Firm value(Tobin's Q) was taken as dependent variables and whereas Company growth(GROWTH), dividend policy(DPR), profitability(ROA) and firm size(SIZE) were independent variables.The results show that firm size, dividend policy, profitability and growth have significant effect on firm value in financial sector companies in the period 2015-2019.Simultaneous results also show that dividend policy, profitability, firm sizeand growth had some effects on firm value.The data were collected from the Banking and Financial Statistics and Supervision Report published by Nepal Rastra Bank, and annual reports of selected banks. The regression models were estimated to test the effect of bank specific variables on performance of Nepalese financial institutions.The study recommended that the commercial banks board of directors, chief executive officer and marketing officer, stakeholders are taken carefully decision about company growth, firm size, profitability and dividend policy variable to increase the firm value.

Key words: Firm value, company growth, firm size, profitability, dividend policy

CHAPTER I
INTRODUCTION

1.1 Background of the study

Each company must take into account the advantages obtained, as well as with investors who want to profit from the capital that they grow in the company. A company can be said to be included in the company an attractive one from the company's ability not only generate a profit, but also able to maintain and increase profits. This advantage is known as corporate profits. Management of the company believes and is confident that consistent profits to attract and retain investors to invest in the company, which in turn will increase Firm Value. Investors are more interested in a company that can generate profits continuously rather than companies without earnings. According to Rosada&Idayati (2017), firm value is very important because of the high value of the company which will be followed by a high prosperity shareholder. Hanafi & Halim (2009) stated that the company's value can be measured by the ratio of the market. Market ratio is the ratio that measures the market price relative to book value. There are several ratios to measure the market value of companies, one of which is the Tobin's Q Tobin's Q is considered to give the best information for Tobin's Q include all elements of debt and share capital of the company, including common stock, the equity of the company, as well as all company assets.

Putri&Fidiana (2017) found that the growth opportunity does not affect Firm Value. However, Deli, &Kurnia (2017) found that the growth of the company significant positive effect on firm value. This suggests that the effect of the growth of the company to Firm Value is still varied. Mahendra, Artini, &Suarjaya (2012) found that the profitability of significant positive effect on Firm Value, but when moderated by dividend policy is able to increase Firm Value when profitability. There is positive significant profitability dividend policy is able to moderate the relationship with the company's profitability (Martini, 2015). This suggests that the effect of profitability on the value of companies with dividend policies still vary moderated. Shabrina (2015) found that the growth opportunity negatively affects Firm Value, but can be moderated dividend policy. This means that the higher Firm Growth led to the declining value of the company because they tend to use more debt than companies

with low growth. Butwhen moderated dividend policy, an increase in Firm Growth to enhance shareholder value.

As to the knowledge of researcher, there are few studies in Nepal in relation to financial performance analysis. Distinctly studied by different researchers such as, (Pradhan, 1986) studied entitled A study of financial ratios in public corporations of Nepal. Jha, & Hui (2012) studied on a comparison of financial performance of commercial banks: A case study of Nepal. The impact of bank specific and macroeconomic variables on performance of Nepalese commercial banks by defining Return on Asset (ROA) as the performance measure (Bhattarai, 2018). Rai, Ojha, Singh, Gyawali, & Gupta (2015) studied entitled: Determinants of financial performance in Nepalese financial institutions taking the data of 2005 to 2014.

The ultimate objective of any firm is to augment (maximize) its shareholders' wealth or value. Shareholder's wealth can be augmented by either getting dividends or having capital gains (i.e., the difference between sale price and purchase price of a stock). Firm value can be influenced by endogenous as well as exogenous factors. As firm management has no control over the exogenous factors, this study emphasizes the endogenous (firm specific) factors. Tobin's Q is used as a method to assess a fair firm value. Tobin's Q is first introduced by Kaldor as the ratio between a physical asset's market value and its replacement value (reproduction cost). In 1968, it was reintroduced by William and Tobin. The letter Q did not appear until Tobin published an article titled a general equilibrium approach to monetary theory in the Journal of Money, Credit and Banking in 1969.

Profitability is an extremely important creator of value within the firm; a firm can attain profitability by taking advantages of economics of scale, exploring avenues of cost reduction, exterminating all overheads that fail to add value to the product and rendering costs that do not enhance the consumer needs (Rappaport, 1987). Profitability affects the firm's value because it is a measure of firm's performance as measured by the profit generated. Firms that succeed in gaining ever-increasing profit indicate that the firm has a good performance, therefore creating positive response from investors and encouraging a rise in the firm's stock price. High profitable firms mean that the managers corporates wealth effectively and efficiently (Manu, Alhabsji, Rahayu, &Nuzula, 2019).

According to Brigham & Houston (2001), there are several ratio analyses approaches to assess market value, such as price-earnings ratio (PER), price-book value ratio (PBV), market book ratio (MBR), dividend yield ratio and dividend payout ratio (DPR). This study uses PBV to measure the company's value. The company's value is a measure of the success of the implementation of financial functions. The company's value can be interpreted as the expected value of shareholders' investment (equity market price) and /or expectations of total enterprise value (market value of equity plus the market value of the debt, or the expectations of market prices of assets. Company's book value or price-book value (PBV), shows the level of the company's ability to create value relative to the amount of capital invested. Higher PBV means that the company has a higher stock price compared to the book value per share. The higher the stock price, the more successful companies create value for shareholders.

1.2 Problem statement

The main objective of the commercial bank is to collect deposits as much as possible from the customer and to mobilize into the most profitable and preferable sector. Due to the profit driven objective of the business, establishment of these of the banks have concentrated only in urban area which has raised certain questions. This application is notable to contribute the socio- economic development of the country where around 70% people live in rural and majority of the population depends upon agriculture. These banks should expand their operation in rural areas. NRB, as the central bank has ruled that joint venture banks should invest 10% of their total investment in the rural areas. However, these banks are inclined to pay fines rather than investing their resources to such less profitable sector.

However, Given the rapid development of financial markets, banks are facing intense competition. According to NRB Monthly Banking & Financial Statistics – 2076, There are total of 144 BFIs, in which twenty-seven of them are Commercial Banks. On the other hand, the banking sector has experienced weighty changes mostly due to technological innovations and the unstoppable forces of globalization have continued to create expansion opportunities as well as challenges to bank's managers to ensure their bank remain profitable and competitive. So, the managers in the industry must know and understand variables that significantly influence the profitability of the bank. This is crucial considering the fact that banks play a crucial role in the development of the economy.

Murerwa (2015) observed that several factors affect profitability of bank. The profitability performance and changes in profitability of a bank, regardless of its ownership are determined by internal variables and external variables. The internal variables are related to the bank itself and they are influenced by the working and performance of the management. The external variables are the result of the macroeconomic environment in which the bank is operating. What are the exact factors that influence the performance in terms of profitability of commercial banks in Nepal? Basically, this study has focused on the financial performance of sample banks. In Nepal, many banks and financial companies were opened up within a span of few years. However, after the promulgation of Merger Laws 2011 and bylaws 2015, the number of bank and financial institutions are decreasing. Although joint venture banks have managed to perform better than other local commercial banks within the short period of time, they have been facing a neck competition against one another.

Therefore, by analyzing the determinants of performance of the commercials banks in Nepal would be the good to know for its stakeholders like-creditors/depositors, investors, mangers etc. Thus, the present study seeks to explore the factors affecting the firm value of sample banks. This financial performance analysis of the banks would be highly beneficial for finding out the determinants of financial performance and set the strategies for better performance.

This study is directed to resolve the following issues:

1. What are the main factors that influence the value of the firm?

2. What is the trend of firm's value affected by dividend policy, profitability, company size and company growth made by five studied commercial banks for the past five years?

1.3 Objectives of the study

Our activities should be motivated to achieve specific goals, which is a desired outcome. The main objective of this study is to examine the determinants of financial performance of commercial bank in Nepal with reference to NABIL, NIBL, PCBL, EBL and HBL and the extent to which they impact on performance.The main objective of this study is to empirically identify the main factors determining the value of the firm. It seeks to empirically examine the relationships between firm value

(the dependent variable) and a wide range of independent (explanatory) variables. This study analyzes the influence of Company Size, Dividend Policy, Company Growth, Profitability of listed companies in the Nepal Stock Exchange (NEPSE).

In addition, the study intends to examine the direction (tendency) of influence the independent variables have on the value of the firm. The study has excluded some of the variables stated in the literature as determinants or drivers of firm value as they have multicollinearity and/or similarity with each other. For example, variables like net margin, earning per share, dividend per share, and price earnings ratios are all measures of profitability.

Therefore, the main objective of the study is:

1. To identify the main factors (dividend policy, profitability, company size and company growth) determining the value of the commercial banks.

2. To examine the existing position of selected bank performance indicators, bank specific factors.

1.4 Hypothesis of the study

The focus of research based on the formulation of the problem and the hypothesis of this study is the relationship between variables, which indicate a causal relationship complex and tiered. These relationships involve endogenous variables, namely the size, growth, profitability and dividend policy; exogenous variables, namely firm value.

1.4.1 The influences of the dividend policy to firm's value

Mokaya (2013) sought to determine the impact of dividend policy on the share market value in the banking industry in Kenya. They collected data using a structured questionnaire. They used descriptive as well as inferential statistics to analyze the data. Using Pearson's Moment Correlation to test the hypotheses they found significant positive correlation between market share value and each of dividend payout, dividend growth rate and dividend policy.

H1: Dividend Policy (DPR) has positive effect of firm value in financial sector companies in the period 2015- 2019.

H2: There is significant correlation between Dividend Policy (DPR) and firm value in financial sector companies in the period 2015- 2019.

1.4.2 The influences of the profitability to firm's value

Profitability represents the firm's ability to obtain profit in relation to sales, assets, and equity. It is the ratio of the effectiveness of management based on the returns generated from sale and investments (Kontesa, 2015). High profitability affects firm's financial flexibility, so that the firm is able to pay dividends and obtained a positive rating in capital market (Manu, Alhabsji, Rahayu, &Nuzula, 2019). Profitability allows investors to see how efficiently a firm spends its fund for its operational activities to earn higher profits. High profit reflects excellent corporate prospects, which attract investors to raise the demand upon firm's shares. A higher demand upon firm's share increases the firm's value (Rahayu, Saif, &Saif, 2019). Profitability has a positive effect on firm's value (Manu, Alhabsji, Rahayu, &Nuzula, 2019). Similarly, the profitability is positively related to firm's value (Al-Najjar& Al-Najjar, 2017). The documentation that there is a positive effect of profitability on firm's value (Kontesa, 2015). Highly profitable firms are more likely to have higher values (Chen, Chung, Hsu, & Wu, 2010).

According to Husnan and Pudjiastuti (2011) an investment is said to be, if the investment could make investors wealthier. In other words, the investor becomes greater in prosperity after investing. This understanding is consistent with the objective of maximizing the value of the company. The most important thing for the company is how to maximize the profit of shareholders, and not how much profit is generated by the company. Profitability is the company's ability to make a profit. The investors have shares in other to get a return. The higher the ability of the company to make profit, the greater the expected return of investors, making the value of the company better.

H3: Profitability (ROA) has positive effect of firm value in financial sector companies in the period 2015- 2019.

H4: There is significant correlation between Profitability (ROA) and firm value in financial sector companies in the period 2015- 2019.

1.4.3 The influences of the size to firm's value

According to Dewi and Wirajaya (2013), the size of a company increases from the fact that large companies have large market capitalization; book value is large and high profit too. Investors tend to be more interested in companies with large scale.

This is because large companies tend to have a more stable condition. This stability attracts investors to own shares in the company, and this will cause a rise in share price in the capital market. It can be said that size has an influence on company values.

H5: Company Size (SIZE) has positive effect of firm value in financial sector companies in the period 2015- 2019.

H6: There is significant correlation between Company Size (SIZE) and firm value in financial sector companies in the period 2015- 2019.

1.4.4 The influences of the growth to firm's value

Growth is the impact of cash flow of the company's operational changes due to increase or decrease in business volume. Companies with high potential growth rate have a tendency to generate high cash flows in the future and high market capitalization that will attract investors to invest. The value of the company formed by indicators of stock market value is influenced by investment opportunities. The existence of investment opportunities can provide a positive signal about the company's growth in the future, so as to enhance shareholder value. It can be said that growth has influence on company values.

H7: Company growth (GROWTH) has positive effect of firm value in financial sector companies in the period 2015- 2019.

H8: There is significant correlation between Company growth (GROWTH) and firm value in financial sector companies in the period 2015- 2019.

1.5 Rationale of the study

The study attempted to examine the factors affecting the value of firm in Nepalese commercial banks. The findings may provide more elaborate and contemporary evidence that is supportive to corporate managers when formulating corporate policies that are likely to increase firm value. It also examines the maximization of value of firm by determining firm value. The study will work as framework for the provide practitioners and academicians to understand the value determinants for Nepalese companies. The significance of the studies is:

1. The study may well provide more elaborate and contemporary evidence that is supportive to corporate managers when formulating corporate policies that are likely to increase firm value.

2. It helps to maximize the value of the firm by understanding the factors determining firm value.
3. This study will provide practitioners and academicians with a synopsis of the applicability of value determinants for Nepalese companies that may produce higher firm values.

1.6 Limitations of the study

This study is conducted for the partial fulfillment of Master Degree in Business Studies (MBS). So, it possesses some limitations of its own kind which is constraints of data, information etc. The main limitations of the study will be as:

1. This study will be focused only on financial aspects and not on the operational aspects of the sample banks. So, the conclusion derived from this study will solely depend upon financial aspects but will be completely free from operational aspects.
2. The study has been conducted among few commercial banks. Thus, the findings may not be generalizable for the whole commercial banks.
3. The study deals with only certain financial tools such as profitability ratio and statistical tools.
4. Only four independent variables i.e. Dividend Policy, Profitability, Company Size and Company Growth have been considered in the entire study.
5. The study is carried out within limited time period.
6. The study is based on secondary data.

1.7 Chapter plan

This study has been divided into five chapters: Introduction, literature review, research methodology, results and discussion, summary and conclusion. The first chapter includes the introduction part of the study. It includes background of the study, problem statement, objectives of the study, hypothesis of the study, rationale of the study, limitation of the study and chapter plan of the study. The second chapter deals with conceptual framework of study and reviews of major empirical work in the area. This study is based on the framework provided by the chapter. The third chapter carries out research design, nature and source of data, data gathering process, population and sample and tools for data analysis. The fourth chapter presents he

analysis of data and discussion in the form of variables and figures and fifth chapter summarizes the whole spectrum of the study. It also offers recommendation for the improvement in future.

Likewise, at the front part of the study, table of contents, acknowledgement, list of tables and figures, abbreviation are included where bibliography and annexure are included at the end of the study.

CHAPTER II
LITERATURE REVIEW

A literature review is a comprehensive summary of previous research on a topic. The literature review surveys scholarly articles, books, and other sources relevant to a particular area of research. It reviews the main banking profitability and performance theories that have been developed and used by the researchers and discuss their relevance to this study. So that past studies, their conclusions and deficiencies may be known and for further research to be conducted. It consists of review of empirical literature and related theories of the research. The main reason for a full review of research is to know the outcomes of those research in areas where similar concepts and methodologies had been used successfully. This Chapter highlights the literature that is available in concerned subject as to my knowledge, research work, and relevant study on this topic, review of journals and articles and review of thesis work that has previously performed. It enables a researcher to find out about the existing bodies of knowledge on the topic of his/her interest. It helps to find out the areas yet to be studied in the concerned topic and need for additional research. It states the findings from previous researches hence enabling a researcher to generate the hypothesis for the research.

2.1 Theoretical review

The theories that are reviewed in this study are: Dividend-Irrelevance Theory (DIT), Theory of Capital Structure and profitability/ value of a firm.

2.1.1 Dividend-irrelevance theory

The concept of dividend-irrelevance policy was developed by Franco Modigliani and Merton Miller (MM) in their 1961 publication. They refined their thesis rejecting the broadly supported Gordon's theory that share prices are determined by the level of dividends paid. Modigliani and Miller are considered one of the first scientists to apply rigorous analytical methods for solving financial problems (Modigliani & Miller, 1958). The basis for the development of the model of irrelevance of dividend policy is grounded in an earlier publication which demonstrates that under certain conditions, the total value of the company is independent of its capital structure, respectively debt/equity ratio. In their initial study MM argue that if: for the market participants there are possibilities for effective arbitrage, perfect capital market exists,

which includes zero fees, taxes and bankruptcy costs, there is a universal constant rate to lend and borrow money both for companies and investors, and unlimited opportunities for credit, then a firm's debt-equity ratio does not affect its market value MM subsequently applied similar approaches to analyze the dividend policy. Their main thesis is that in perfect capital markets the value of the company does not depend on its dividend policy. They reiterate their important assumptions. Perfect capital market – includes behavior of -price taking where neither the seller nor the buyer can directly influence the price of the shares; free access to information about prices; zero transaction costs and commissions to financial intermediaries; lack of tax differentiation between dividend payments and capital gains.

Rational behavior – means that investors are oriented to maximize their wealth and do not distinguish between dividends and capital gains. Transparency of information – suggests that there is no information asymmetry between company's insiders and external shareholders, actual data for future cash flows and profits are known to investors. The joint stock company follows long term investment policy that is not influenced by changes in dividend payments. A major postulate of MM's theory is that optimal investment policy of a company is defined for a long-term period. This provision allows stocks and bonds to be treated as equivalent sources of funds. Sometimes we provisionally accept the assumption that firms are just equity financed (only by issuing shares), i.e. not using an external debt capital.

Under these pre-conditions, MM use the following fundamental principle to assess the company's value: all outstanding shares in the market, characterized by the same level of risk, will have the same return (sum total of dividends and capital gain per unit invested) at any point in time. On perfect capital markets this is achieved through the mechanism of arbitration. Given that a set of shares bear equal risk, investors will sell shares with lower returns and buy those with higher returns, to increase their wealth. As a result of this process, the price of the first group of shares will decline, while the second – will increase until the difference in returns is eliminated.

2.1.2 Theory of capital structure and profitability/ value of a firm

Ross (2003) states that a corporation can raise money (cash) from lenders or from shareholders. If it borrows, the lenders contribute the cash, and the corporation promises to pay back the debt plus a fixed rate of interest. If the shareholders put up

the cash, they get no fixed return, but they hold shares of stock and therefore get a fraction of future profits and cash flow. The shareholders are equity investors, who contribute equity financing. The choice between debt and equity financing is called the capital structure decision. Capital refers to the firm's sources of long-term financing.

Corporations raise equity financing in two ways. First, they can issue new shares of stock. The investors who buy the new shares put up cash in exchange for a fraction of the corporation's future cash flow and profits. Second, the corporation can take the cash flow generated by its existing assets and reinvest the cash in new assets. In this case the corporation is reinvesting on behalf of existing stockholders. No new shares are issued. What happens when a corporation does not reinvest all of the cash flow generated by its existing assets? It may hold the cash in reserve for future investment, or it may pay the cash back to its shareholders. Business is inherently risky. The financial manager needs to identify the risks and make sure they are managed properly. For example, debt has its advantages, but too much debt can land the company in bankruptcy (Brealey, Myers, & Allen, 2011).

Financing arrangements determine how the value of the firm is sliced up. The firm can determine its capital structure. That is, the firm might initially have raised the cash to invest in its assets by issuing more debt than equity; now it can consider changing that mix by issuing more equity and using the proceeds to buy back some of its debt. Financing decisions like this can be made independently of the original investment decisions. The decisions to issue debt and equity affect how the pie is sliced (Ross, 2003). A number of theories have been advanced in explaining the capital structure and profitability / value of firms. The existing theories of capital structures and profitability/ firm value are explained as follows.

2.1.2.1 Modigliani and Miller (MM) theory

In corporate finance theories, the seminal work by (Modigliani & Miller, 1958)in capital structure provided a basis for the development of the theoretical framework within which various theories were about to emerge in the future. Modigliani & Miller (1958) concluded to the broadly known theory of capital structure irrelevance where financial leverage does not affect the firm's value. However, Modigliani & Miller (1958) their theory was based on very restrictive assumptions that do not hold in the

real world. These assumptions include no taxes, no transaction costs, homogenous expectations, and perfect capital markets. The existence of bankruptcy costs and tax advantageous of interest payments lead to the concept of an optimal capital structure which maximizes the value of the firm, and hence minimizes its total cost of capital.

Modigliani & Miller (1958) reviewed their earlier position by incorporating tax benefits as determinants of the capital structure of firms. The key feature of taxation is that interest is a tax-deductible expense. These assumptions include no taxes, no transaction costs, homogenous expectations, and perfect capital markets. A firm that pays taxes receives a partially offsetting interest tax-shield in the form of lower taxes paid. Hence, proposed to use as much debt capital as possible in order to increase profitability and hence maximize the value of firms.

2.1.2.2 Static trade-off theory

Capital structure theories have diverse views on the relationship between leverage and profitability. The trade-off theory argues that firms generally prefer debt for tax considerations. Profitable firms would, therefore, employ more debt because increased leverage would increase the value of their debt tax shield (Myers, 1984). It states also that firms seek debt levels that balance the tax advantages of additional debt against the costs of possible financial distress. Apart from the tax advantage of debt, agency and bankruptcy costs may encourage highly profitable firms to have more debt in their capital structure. This is because highly profitable firms are less likely to be subject to bankruptcy risk because of their increased ability to meet debt repayment obligations. Thus, they will demand more debt to maximize their tax shield at more attractive costs of debt. For these considerations, the trade-off theory predicts a positive relationship between leverage and profitability.

2.1.2.3 Pecking order theory

The pecking order theory argues in the contrary of static trade-off theory. It advocates also that the firm will borrow, rather than issuing equity, when internal cash flow is not sufficient to fund capital expenditures (Myers &Majluf, 1984). Thus, the amount of debt will reflect the firm's cumulative need for external funds. It concludes a negative association between leverage and profitability because high profitable firms will be able to generate more capitals through retained earnings and then have less leverage. The pecking order theory states that a company should prefer to finance

itself first internally through retained earnings. If this source of financing is unavailable, a company should then finance itself through debt. Finally, and as a last resort, a company should finance itself through the issuing of new equity. Therefore, it is expected that there is negative relationship between leverage and profitability ratio.

2.1.2.4 Agency cost theory

Agency theory focused on the costs which are created due to conflicts of interest between shareholders, managers and debt holders. The three types of agency costs which can help explain the relevance of capital structure (Harris &Raviv, 1991) as follows; Asset substitution effect: As D/E (Debt/ Equity) increases, management has an increased incentive to undertake risky (even negative NPV) projects. This is because if the project is successful, shareholders get all the upside, whereas if it is unsuccessful, debt holders get all the downside. If the projects are undertaken, there is a chance of firm value decreasing and a wealth transfer from debt holders to shareholders.

Underinvestment problem: If debt is risky (e.g. in a growth company), the gain from the project will accrue to debt holders rather than shareholders. Thus, management has an incentive to reject positive NPV projects, even though they have the potential to increase firm value. Free cash flow: unless free cash flow is given back to investors, management has an incentive to destroy firm value through empire building and perks etc. Increasing leverage imposes financial discipline. The free cash flow theory says that dangerously high debt levels will increase value, despite the threat of financial distress, when a firm's operating cash flow significantly exceeds its profitable investment opportunities. The free cash flow theory is designed for mature firms that are prone to overinvest. Due to the free cash flow theory agency cost theory supports a positive relationship between capital structure and profitability (Jensen, 1986).

2.1.2.5 Dividend policy

Dividend policy of a firm becomes the choice of financial strategy when investment decisions are taken as given. However, it is also imperative to know whether the firm will go for internal or external source of financing for its investment project. Dividend policies appears differently for different countries because of different tax policies,

rules, regulations and different institutions and capital markets which suggest that a number of internal factors would possibly influence dividend policy decisions of a firm. These factors are but not limited to investor's preference, earnings, investment opportunities; annual vs. target capital structure, flotation costs, signaling, stability, Government policies and taxation. In the presence of asymmetric information, signaling is one of the crucial factors that influence the market. Dividends may convey very vital information about the company, more so that it suggests the possibility of its influence on the stock market. Paying large dividends reduces risk and thus influence stock price and is a proxy for future earnings (Baskin, 1989).

Dividends have been seen differently by different writers. According to Arthur and Sheffrin, (2003) they are payments by a corporation to its shareholder members; it forms part of corporate profits that are paid out to shareholders. In the light of this, we can say that when a corporation earns a profit or surplus, that money can be put to two uses: it can either be re-invested in the business, or it can be distributed to shareholders. Research studies that supports two ways to distribute cash to shareholders which includes: share repurchases or dividends. They posit that managers avoid reduction in dividend because of the sticky signal it sends to the investors and shareholders. Odia and Ogiedu (2013) viewed it as a tip of an iceberg of future failure even while it remains a hallmark of incompetent management (Baskin, 1989).

Dividend decisions are company's decisions that determine what percentage of the profit is given to shareholders or investors. Dividend policy in this study will be measured by dividend payout ratio, which compares the value of dividend payments per share with the value of the company's net profit per share. The calculation is as follows: $DividendPayoutRatio$ (DPR) = $DividendperShare$ /$EarningperShare$

2.1.2.6 Profitability

The concept of profitability is often used as an indicator of the company's fundamental performance represents performance management, according to research developments in financial management, profitability dimensions generally have a causal relationship to the value of the company. While the value of the company as a concept can be explained by the value determined by the price of the stock traded capital markets. Causality shows the dimensions of profitability and good condition; it

will have a positive impact on the decisions of investors in the capital market; the case will also affect the creditor's decision in relation to the company through debt financing. In concept it can be concluded that the company's fundamental performance proxy by the dimension of the company's profitability has a causal relationship to the value of the company through stock price indicators and capital structure of the company with respect to the amount of the composition of the company's debts. Profitability also is the end result of a number of policies and decisions of the management company. Companies that have a high level of profitability each year, have a tendency to use their own capital as compared with using debt, another assumption states with return on a high asset, which means that the net profit of the company is high.

Profitability ratio is the ratio to assess the company's ability to make a profit; this ratio also provides a measure of the effectiveness of management of a company. It is intended by the profits generated from sales and investment income; the point is the use of this ratio indicates the efficiency of the company. The empirical evidence shows that profitability has a positive and significant effect on the firm. While other studies indicate that the value-added intellectual coefficient (VAIC), capital employee efficiency (VACA), human capital efficiency (VAHU) positive and significant impact on financial performance and structural capital efficiency (STVA) positive and significant impact on the financial performance (Farah &Arief, 2006). Profitability is the company's ability to earn profits and an overview of the company's performance in managing the company (Daeli&Endri, 2018). Profitability in this study is measured using the ratio of return on assets (ROA), namely by comparing the value of net income with the total assets of the company. The calculation is as follows: $ReturnOnAssets$ (ROA) =$NetIncomeAfterTax$ /$TotalAssets$

2.1.2.7 Company size

Firm size seen from the total assets owned by the company can be used for the activities of the company, if the company had assets that great then the company can freely use existing assets in the company, a large company would easily access the capital requirements on the capital market, with the ease that it means that the company has easy access to capital and this capital can be operated on the activities of the company, which thereby generating higher earnings. The results support the findings of previous investigators, that profitability has a positive and significant

effect on firm value. The size of the company is the average net sales for the year to several years. Company size is an assessment of how large or small a company is represented by a company's assets (Benyamin &Endri, 2019) . Firm size is a proxy of the volatility of operational and inventory controllability supposed economies of scale size of the company demonstrated achievement of current operations and inventory control. In this case the sale is greater than the variable costs and fixed costs, it will obtain the amount of income before taxes. Conversely, if the sale is smaller than the variable costs and fixed costs, the company will suffer a loss. The size of the company described the size of a company showing by total assets, total sales, average total sales and average total assets; thus, the size of the company is the size or magnitude of the assets owned by the company.

Past studies that analyze the effect of firm size on the business risk the company found that the size of the risks affecting the business, that small firms have the risk and returns higher than large companies. Similar results have proved that the size of the company and significant positive effect on firm value. Company size is partially positive and significant impact on the value of the company, the larger the size of the company from a company it also increases the value of the company, and Leverage partially significant positive effect on Company Value. There is positive and significant correlation between the sizes of the company to profitability. Firm size has a positive and significant effect on the bank's performance as measured by ROA. The size of the company in this study was measured using the value of the natural logarithm (Ln) of the company's total assets. The calculation is as follows: $SIZE = NaturallogofTotalAssets$

2.1.2.8 Company growth

Growth ratio is a ratio that aims to measure a company's ability to maintain its position in economic and industrial growth. Firm Growth shows the extent of the company's ability to grow and develop one of the growths of the company's assets. If the management company can take advantage of the company's assets optimally, it will increase corporate profits. The more efficient use of corporate assets, the lower the cost required to fund the operation of the asset. The more effective use of corporate assets, the lower the chance of assets unused. Assets not used can be sold, so the company will receive additional funds. In assessing the growth of the company can use the calculation of Total Assets Growth (TAG). Total assets showed growth

projections company's growth potential between the current year with the previous year.

Another factor that can affect company value is the size of the company (firm size), where larger companies will be relatively stable and able to generate profits. There is a positive relationship between firm size on firm value, meaning that increasing company size will make it easier for companies to obtain funding which can then be used by management for the purpose of increasing company value. Different results were found where the size of the company proxied by natural log of total assets is proven to have no significant influence on firm value. Different results were found by Benyamin and Endri (2019), namely the company size which is an important factor in influencing changes in firm value. In line with this, the research findings show that company size is an important factor that drives the value of the company proxies with Tobin's Q. Different opinions expressed that the size of a large company cannot guarantee high corporate value, because large companies may not have dared to invest only related to expansion, before the obligations (debt) have been repaid. The results indicate that the size of the company does not significantly influence the value of the company.

Management of the company will be more pleased when the assets of big companies, they would be free to manage the expectations of the gains will increase. If the company is also expanding the business in the near future, the management need to use specific strategies to remain in control of company operations in order not to lose besides the fixed production runs. Business expansion is usually encouraged because the company is in a growth phase, where production is getting bigger, getting the full confidence of investors and creditors, and business growth opportunities elsewhere are favorable. Growth in this study was measured using the growth rate of company assets by comparing the difference between the current year's total assets and last year's total assets, divided by last year's total assets. The calculation is as follows: $Growth = (TotalAsset_{t} - TotalAsset_{t-1}) / TotalAsset_{t-1}$

2.1.2.9 The value of the company

Firm value is very important because of the high value of the company which will be followed by a high prosperity shareholder, the higher the stock price, the higher the value of the company. Common firm value indicated by the price to book value. Price

to book value high above will make the market believe the company's prospects in the future. The ratio of stock price to book value or price-book value (PBV) indicates the level of the company's ability to create value relative to the amount of capital invested. The high PBV is reflects the stock price than the book value per share. The higher the stock price, the more successful the company to create value for shareholders. The company's success is certainly creating value gives hope to the shareholders in the form of greater profit anyway. The company's value can be measured by the share price in the market, based on the formation of the company's stock price in the market, which is a reflection of the public's vote by the company's performance in real.

The ratio used in assessing the ratio of enterprise value is price-earnings ratio (PER) is the ratio between the market price per to earnings per share and earnings per share is a form of granting benefits granted to the shareholders of each share of stock. The empirical evidence shows that the intellectual capital or value-added intellectual coefficient (VAIC), capital employee efficiency (VACA) and capital efficiency (STVA) and human capital efficiency (VAHU) have a negative and insignificant effect on firm value (Farah &Arief, 2006). Company value is the present value of a series of incoming cash flows that the company will produce in the future (Daeli&Endri, 2018). The value of the company in this study is measured by the Tobin's Q ratio, where this ratio is the market ratio used compared with the market value of the company's stock with the book value of the company's equity or the value of the replacement of company assets. The calculation is as follows: Tobins Q = (Market Share Price * Outstanding Shares) / Total Assets

2.2 Empirical review

The study is carried out to demonstrate the factors affecting on firm value among commercial banks. These studies supported that the value of firm depends on various factors such as dividend policy, profitability, company size, company growth. The study has reviewed some of the articles on related subject matter. The summary of the major articles on this subject matter is presented in *Table 1*.

Table 1

Review of empirical studies

Study	Major findings

Jha (2014)	● Revealed the capital adequacy ratio positively influenced the return on equity but net interest margin had no significant effect on return on equity
Yesmine &Bhuiyah (2015)	● Found that assets utilization and operating efficiency has significant positive impact on the financial performance of bank and credit risk has significant negative impact of the financial performance of bank
Rai, Ojha, Singh, Gyawali, & Gupta (2015)	● Found the result that higher the capital adequacy ratio, management efficiency and liquidity management, higher would be the return on equity and return on assets
Maharjan (2016)	● Studied that return on assets, return on equity and net interest margin are positively related with capital adequacy, credit risk, and bank size ● Identified that inflation and gross domestic product have positive relationship with bank profitability but negative on net interest margin
Pradhan &Parajuli (2017)	● Found the evidence for a positive relationship of bank size with return on asset (ROA) ● Observed that there is a negative relationship of capital adequacy, equity capital with ROA
Bhattarai (2018)	● Revealed that cost per loan assets was significantly negatively associated with banks' profitability ● Found significantly negatively associated to profitability
Rai, Ojha, Singh, Gyawali, & Gupta (2018)	● Found the result that higher the capital adequacy ratio, management efficiency and liquidity management, higher would be the return on equity and return on assets ● Examined that higher the GDP growth rate and inflation rate, higher would be the return on equity and return on assets
Teshome, Debela, & Sultan (2018)	● Concluded that capital adequacy ratio, credit interest income, and size of the bank has significant positive impact non-performing loans, loan loss provision, leverage ratio ● Observed that the operational cost efficiency has significant negative impact on the financial performance of the private commercial bank of Ethiopia
Gwachha (2019)	● Concluded that asset size and deposit to asset have a significant positive effect, and loans portfolio have a significant negative impact on profitability of bank ● Found a positive impact of real interest rate and stock market capitalization on the performance of banks
Juhandi, Fahlevi, Abdi, &Noviantoro (2019)	● Observed that size to value, financial related factors, size and risk factor are found to be significant ● Indicated that dividend policy has a negative and significant effect on firm value, liquidity and
Sondakh (2019)	● Justified that firm size partially influence positively significantly on firm value while profitability is not appropriate and not significant to firm value

Markonah, Salim, &Franciska (2020)	• Identified that profitability and leverage have significant effect to company value variable.

A study by Gaver& Kenneth (1993) about capital structure, using two variables, size of the company and the company's growth, as the independent variable. The results of their study are the size of the company has significant positive effect to the structure of capital, but the company's growth appear has significant negative effect of capital structure. The profitability, liquidity has significant negative effect of capital structure. While the variable size of the companies, tangibility and company growth a significant positive effect on capital structure. And non-tax debt has no effect against the capital structure. The profitability of the negative effect in accordance with the theory of the pecking order that States that the higher the profitability of companies, then the company will prefer internal funding rather than external funding. The liquidity effect is negative because the banking companies tend to keep liquidity remains high, so it can produce a high cash flow, then the excess cash can be used to finance their projects. The companies with high liquidity, less dependent on debt compared to companies with low liquidity. This is in accordance with the trade of theory which States that larger companies can provide a greater amount of debt in its capital structure because it has a more consistent cash flow and a smaller risk.

Jaggi& Ferdinand (1999) also doing research that was held in Hong Kong. Their research using the multiple regression analysis, and found that each of the size of the company and free cash flow has positive effect to the structure of capital. The argument was that free cash flow has positive effect especially when growth opportunities is low. The results of the research also indicate that there is a positive relationship between debt and growth on corporate FCF is low, especially in large companies. The higher debt levels, the more funds needed and more companies will choose to go to the market for debt rather than equity markets. The reason was because the debt will be relatively cheaper for them. In addition, it would be easier to regulate the debt because of the risk of bankruptcy is relatively low.

Hence, determinants of firm value within the banking industry can either be internal or external to the organization in line with the strategic plan of the company, the internal environment and the external environment of the company. Shareholders in companies with high or low payout ratio can reap the benefit of the company's profits when they sell their shareholding. Huselid, Jackson, & Schuler (1997) cite cash flow, effectiveness and productivity and market value as some of the determinants of a firm value.

Research conducted by Shieh (2001), state that debt interest, profit, and the growth of the company's significant positive will give influence to the structure of capital. But when they add tax credits in their study, the result said that there is negative effect the profitability of capital structure. Whereas the tariff margin corporate taxes have no effect against the capital structure. Tarus (2001) in their research from Kenyan Firms Listed, show that profitability and liquidity will have a significant negative influence to the structure of capital. As for the variable size of the companies in his work generate no effect significantly to capital structure.

The value of a firm in computerized business gaming simulations can be determined through five different measures: book value, market value, capitalized value, deductive judgment, and adjusted net worth (Thavikulwat, 2004). The firm's book value may be an unreasonable measure of its true value because of the idiosyncrasies of accounting. True market value may be unavailable or unreliable. The capitalized value measure requires an arbitrary parameter, the deductive judgment measure requires subjective judgment, and the adjusted net worth measure requires detailed knowledge of the gaming simulation's model. Developers are in the best position to

apply the adjusted net worth measure, so they should code it into their simulation's computer programs.

Prabansari&Kusuma (2005) has been conducting quantitative research about capital structure using size, the company's growth, profitability, risk and ownership structure. The study stated that the size, sales growth, profitability, and the structure of ownership has significant positive effect to the structure of capital. But the risk has a significant negative effect of capital structure. The company will have a higher sales growth when the company using more debt in their capital structure. Thedeterminants of firm value within the banking industry include market price, capital structure, dividend ratio because of the critical position they hold in shaping the activities and potentials of the firm with regard to the various stakeholders within the banking industry (Renee & Mehran, 2005). Higher dividend payout ratios lead to a lower retained earnings and capital gains, and vice versa, leaving shareholders wealth unaffected. The value is the measure of a company's value, often used as an alternative to straightforward market capitalization. Firms may maintain target dividend payout ratio and adjust their determinants of firm value within the banking industry to this target as well as pursue a stable determinants of firm value within the banking industry and gradual increase dividends given the target payout ratio as a way of dealing with the firm value in line with (Brav, Graham, Harvey, &Michaely, 2005).

Thapa (2009) completed a thesis entitled: A financial performance of five banks in Nepal (SCBL, NABIL, HBL, EBL & NIBL) with the objective of analyzing and comparing liquidity, profitability, stability and market value positions among top five commercial banks and to examine how the performance position of commercial banks in Nepal. In the study, He found that except SCBNL, all remaining bank had been maintaining lower capital adequacy ratio as per the directive of central bank. SCBNL is successful to generate cheaper fund, which has helped SCBNL to perform better. Moreover, NABIL and SCBNL having higher Capital Adequacy Ratio has managed to produce higher ROA.

Nakarmi (2010) conducted a thesis research on the topic: Non-performing assets and profitability of commercial banks in Nepal. He found that the Correlation coefficient between NPA and ROA mostly came out to be negative. This shows that increase in profitability is affected by the amount on Non-Performing Assets. These finding supports the theory that, higher the NPA lower will be the ROA and vice-versa.

Zhang (2010) using profitability, growth company, tangibles, the size of the company, and the company's capital structure against age. He was doing his research in Beijing, China. His study concludes that the fifth independent variables have no effect significantly to capital structure. Therefore, higher the profitability, higher will be the firm value and vice- versa.

According to shareholder's wealth, growth, dividend-payout, ratio and leverage are key determinants of firm value (Shin & Hui, 2011). This, in effect, delegates the determinants of firm value within the banking industry from the board to the individual shareholder. Payment of a dividend can increase the borrowing requirement, or leverage, of a company. In the context of Turkey, Anbar &Alper (2011) concluded that assets size and non-interest income have significant positive and credit portfolio and loans under follow-up have significant negative impact on profitability of bank. They further concluded that the macroeconomic variable, the real interest rate affects positively on performance of bank. Therefore, it has significant positive relation with firm value.

Jha& Hui (2012) conducted research entitled: A comparative financial performance analysis of public sector, joint venture and private sector commercial banks in Nepal. With the objective of a study on a comparison of financial performance of commercial banks in the context of Nepal of different ownership structured commercial banks. They focused their study to examine and study the comparative financial performance of 18 commercial banks taken as sample. They have used CAMEL framework as a financial tool for financial performance measurement purpose. They had used the data period from 2005-2010. They found that public sector banks were significantly less efficient than their counterparts. Domestic private banks were equally efficient to foreign-owned (joint venture) banks. Their estimation results revealed that return on assets was significantly influenced by capital adequacy ratio (CAR), interest expenses to total loan and net interest margin (NIM), likewise, capital adequacy ratio had considerable effect on return on equity.

Mahendra, Artini, &Suarjaya (2012) found that the profitability of significant positive effect on Firm Value, but when moderated by dividend policy is able to increase Firm Value when profitability. Different from Martini (2015) found that positive significant profitability dividend policy is able to moderate the relationship with the company's profitability. This suggests that the effect of profitability on the value of companies

with dividend policies still vary moderated. Mahendra, Artini, &Suarjaya (2012) found that liquidity is not a significant positive effect on firm value, and dividend policy cannot be moderated. While Wijaya&Purnawati (2014) found that liquidity significant negative effect on Firm Value, and cannot be moderated dividend policy. This suggests that the effect of liquidity on the value of companies with dividend policies still vary moderated. Mahendra, Artini, &Suarjaya (2012) found that leverage significant negative effect on Firm Value, and was not able to moderate dividend policy. Martini (2015) and Deli &Kurnia (2017) found that the positive effect of debt policy on corporate value, and can be moderated dividend policy. This suggests that the effect of liquidity on the value of companies with dividend policies still vary moderated.

Similarly, Karim &Alam (2013) concluded that bank size, credit risk, operational efficiency and asset management have significant impact on the financial performance of the commercial bank of Bangladesh. Ongore&Kusa (2013) analyzed the effect of bank specific factors and macroeconomic variables on the financial performance of commercial banks of Kenya. Using the linear multiple regression model and generalized least square model on panel data, Ongore and Kusa identified that bank specific factors except liquidity variable affects significantly the financial performance of commercial banks of Kenya. Further, Ongore and Kusa concluded that management efficiency has significant positive impact and assets quality has significant negative impact on the financial performance. Further they found significant negative impact of inflation and insignificant negative impact of GDP and liquidity on the financial performance of commercial banks of Kenya. Likewise, they found significant positive impact of capital ratio on ROA and NIM and significant negative impact on ROE.

Research of Suresha&Shefali (2013) used five independent variables, such as liquidity, size of company, product variability, profitability, and tangibles. For variable liquidity, size, product, and variability, and tangibility have no significant effect to capital structure. But for the profitability has significant negative effect on capital structure. Large companies have more long-term debt. Large companies reflect the low level of risk and a stable rate of return on the lender, because the big companies can borrow more funds. The company's credibility is higher because of the possibility of default is lower. The more debt, corporate resources will be increased

and this can cover any losses on a greater extent so as to allow the company do more loan. The loan will significantly reduce taxes.

Pontoh&Ventje (2014) found in his study of capital structure using growth of the company, tangibles, the size of the company, and the influence of the level of operations as independent variables. The results obtained in the study that all the dependent variable have no effect against the capital structure. Big companies would give priority to internal funding. This aims to create a more stable cash flow. In addition, to cope with business risks, big companies will keep its capital structure and does not use debt. Size of company has positive effect on value of firm. Higher the size of company, higher will be the value of firm. Similarly, lower the size of company, lower will be the value of firm. Firm value depends upon the size of firm.

Gathogo& Mary (2014) concluded research in Kenya stated that the variable size of the company and the risk has significant positive effect to the capital structure. While the profitability, liquidity have significant negative effect of capital structure. The cost of debt and growth do not affect significantly to capital structure. Influential business risk due to a positive culture of investors in Kenya that tend to avoid risks and less trusting to investors from foreign countries. So, when business increases risk, then investors will stay away from the shares so that the company will be hard-pressed to increase the amount of equity of the stock market.

Jha (2014) completed her Doctor of Management dissertation entitled: Performance appraisal of commercial banks and linkage financial indicators with economic growth in Nepal. With the objective of examining the current state of the Nepalese commercial banks, whether or not does efficiency difference in the commercial banks due to its ownership, whether or not commercial banking financial variables, risk management factors based on CAMEL framework and efficiencies reason to economic growth etc. The study revealed that the capital adequacy ratio, interest expenses to total loan and net interest margin were significant but had a negative effect on return on assets (ROA) whereas non-performing loan and credit to deposit ratio did not have any substantial effect on return on assets. The capital adequacy ratio positively influenced the return on equity but net interest margin had no significant effect on return on equity. Moreover, the study found evidence that bank specific factors contribute to ROA and ROE performance.

Bhandari &Nakarmi (2014) conducted research entitled: Performance evaluation of commercial banks in Nepal using AHP. On their study, they have focused to explore the determinants of performance exposed by the financial ratios and determine the financial performance of commercial banks in Nepal through Analytical Hierarchy Process (AHP) based on their financial characteristics. The financial parameters were derived by segregating five major criteria, which were Liquidity, Efficiency, Profitability, Capital Adequacy and Assets Quality. The performance evaluation was done for 13 commercial banks for financial data from year 2008/09 to 2011/12. The paper emphasizes financial decision problems to have strong multi criteria character, establishes priorities for performance parameters of 16 commercial banks among financial indicators identified, and ranks banks according to those indicators. They found through a sensitivity analysis that an apparent Capital Adequacy risk for Nepal Bank Limited and Rastriya Banijya Bank which has to be improved significantly.

Pandey (2014) examined the impact of corporate governance on firm performance on twenty-two commercial banks in Nepal with data of 2010 to 2014. The return on assets and return on equity were selected as bank's performance variables for this study as the dependent variables. Board size, independent directors and female directors were the independent variables. Leverage and firm size were the control variables. The regression models were used to examine the Impact of board structure on financial performance of Nepalese commercial banks. They found that larger the firm size, higher would be the ROA. Board size and presence of female directors were negatively related to ROE. Therefore, larger the board size and larger the female directors, lower would be the ROE. The result also shows that greater the number of independent directors, higher will be the ROE.

Kattel (2014) studied on the commercial bank of Nepal entitled, Evaluating the Financial Solvency of Selected Commercial Banks of Nepal: An Application of Bankometer. For this study, he as sample 6 joint venture bank and 22 private sector commercial banks in Nepal. The major keywords focused on the study were Bankometer, capital adequacy, financial soundness and solvency. The aim of this study was to evaluate the financial soundness of joint venture banks and private sector banks in Nepal by using Bankometer model for the period covering secondary data from 2007-2012. The study concludes that private sector banks are in sound solvency position in comparison to joint venture banks.

Furthermore, in the context of Central and Eastern European Countries, Capraru&Ihnatov (2014) concluded that management efficiency and capital adequacy growth have significant impact on the return on assets, return on equity and net interest margin whereas credit risk and inflation determine the return on assets and return on equity only. Lawal (2014) observed that debt instrument plays significant role for the Nigerian commercial banks from 2007 to 2012. Assets, capital structure, cash flows, dividend ratio are found to be statistically significant.

Similarly, Yesmine, &Bhuiyah (2015) analyzed the determinants of the performance of national and local private commercial banks of Bangladesh. The study of Yesmine and Bhuiyah used ten local private commercial banks (PCB) and all nationalize commercial banks (NCB) for the period of 2008 to 2014. Yesmine and Bhuiyah found that assets utilization and operating efficiency has significant positive impact on the financial performance of bank and credit risk has significant negative impact of the financial performance of bank. Further they concluded that assets utilization is the most critical factor for financial performance of PCB. Similarly, they concluded that 1 taka increase in credit risk decreases the return by 0.968 taka of NCB.

Murerwa (2015) conducted a thesis research from Kenyan commercial banks, Nepal is also one of the developing countries like Kenya, the findings of the African developing country can be relatable to Nepalese banking industry. Main objective of his thesis was to evaluate the macroeconomic factors which influence the financial performance of the commercial banks in Kenya. On the basis of his study, he concluded that industry specific factors are regarded as a critical pointer of the financial performance of the Kenyan commercial banks. External market structure indeed affects the financial performance of the Kenyan banks. Moreover, he argues that the impact posed macroeconomic factors on the financial performance is minimal.

Rai, Ojha, Gyawali, & Gupta (2015) studied return on asset (ROA), return on equity (ROE) and net interest margin (NIM) as the dependent variables while capital adequacy ratio, assets quality, management efficiency, liquidity management, GDP growth rate and inflation were chosen as independent variables with the data of 2005 to 2014. They found the result that higher the capital adequacy ratio, management efficiency and liquidity management, higher would be the return on equity and return on assets. Likewise, higher the GDP growth rate and inflation rate, higher would be

the return on equity and return on assets. The study also indicates that higher the assets quality lower would be the return on equity and return on assets. The study also revealed that larger the capital adequacy ratio and assets quality, higher would be the net interest margin. It also shows that higher the management efficiency, liquidity management, GDP growth rate and inflation rate, higher would be the net interest margin.

Giang& Tuan (2016) studied the relationships between dividend payment and the market value of listed firms in the food and drink industry in the period 2010 to 2014 in Vietnam. The research finds empirically applicable factors in corporate finance and the management of stock listings in the stock exchange. The research finds empirically applicable factors in corporate finance and the management of stock listings in the stock exchange. The research develops an exploratory model reflecting the market value of the firms in the food and drink industry in the Vietnamese stock market in relation to their financial performance and dividend payments. The research also finds that in the food and drink industry in Vietnam, firms will be more attractive in the stock exchange if they pay dividends in cash, achieve high gross margins, and mobilize a low debt ratio at a low mobilization cost.

Maharjan (2016) concluded in his research that capital adequacy and liquidity position are the major determinants of profitability of Nepalese commercial banks. He has conducted the research to examine the impact of bank specific and macroeconomic variables on profitability of Nepalese commercial banks. The banks‟ profitability performance was measured by return on assets, return on equity and net interest margin. Capital adequacy, credit risk, liquidity position and bank size are used as bank specific variables and macroeconomic variables include inflation and gross domestic product growth rate. The study was based on secondary data of 19 banks with 114 observations for the period of 2009 to 2014. The result shows that return on assets, return on equity and net interest margin are positively related with capital adequacy, credit risk, and bank size. Likewise, inflation and gross domestic product have positive relationship with bank profitability measure return on assets and return on equity but negative relationship with net interest margin.

Pradhan &Parajuli (2017) studied about the effect of capital adequacy and cost income ratio on the performance of Nepalese commercial banks. They had found the evidence for a positive relationship of bank size with return on asset (ROA), which

mean larger the banks, higher would be the ROA. On the other hand, the study observed that there is a negative relationship of capital adequacy, equity capital with ROA. This means that higher the capital adequacy lower would be ROA. The result also showed that there is a positive relationship of capital adequacy, bank size and debt to equity ratio with ROE. This means that higher the capital adequacy, higher would be ROE. Similarly, the study also observed that larger the bank, higher would be the ROE. This study was based on the secondary data collected from 20 Nepalese commercial banks through 2009-10 to 2014-15 leading to a total of 120 observations.

Firm value of the BSE listed Indian hospitality firms have been evaluated by Aggarwal &Padhan (2017) from 2001-15. The significant factors are leverage, liquidity, size and economic growth. Gharaibeh&Qader (2017) investigated the endogenous (firm-specific) determinants of firm value, as measured by Tobin's Q for companies listed on the Saudi Stock Exchange (TADAWUL). The Ordinary Least Square (OLS) found the relationships between firm value and each of the hypothesized nine explanatory variables. The results of the OLS regression found that market capitalization, growth opportunities, profitability, and solvency of the firm have statistically significant relationships with firm value. Kusiyah&Arief (2017) examined the impact of investment decisions, financing decisions and dividend policy on firm value. The secondary data were used from six public banking financial services company of the period of 2011 to 2015. The results revealed that the investment decisions and dividend policy affected the firm value. Jacob &Taslim (2017) invented the impacts of liquidity, activity and profitability towards the company value with dividend policy as intervening variables. The result shows that liquidity (CR) gives positive impact to the company value. Tobin's-Q, liquidity (CR) also gives significant impacts to the company value through dividend policy (DPR) with negative direction.

Gunawan, Pituringsih, &Widyastuti (2018) analyzed the effect of capital structure, dividend policy, company size, profitability and liquidity of the company's listed on Indonesia Stock Exchange. The results showed that the capital structure, dividend policy, company size, profitability and liquidity and significant positive effect on firm value. Mbugua, Oluoch, &Ndambiri (2018) revealed positive and significant relationship between profitability, investment decision, financing decision and firm size on firm value. Noormansyah, Seviyani, & Takada (2018) highlighted how market

evaluates the firm as a whole for the banks listed in the Indonesia Stock Exchange. This research uses secondary data by collecting information from 45 financial data sources. This research concludes that partially, Dividend Payout Ratio, Firm Size, Return on Equity, Price Earnings Ratio has significant influence to firm values.

Bhattarai (2018) studied by defining return on asset (ROA) as performance measure variable with the annual data period of 2011 o 2016. While default risk, capital adequacy ratio and cost person assets as bank specific independent variables. Likewise, annual growth rate of GDP, exchange rate and inflation rate as the macroeconomic independent variables. He has used regression models to test the impact of importance of bank specific and macroeconomic variables on bank performance. In his study, the estimated regression models revealed that cost per loan assets was significantly negatively associated with banks' profitability. However, exchange rate was found significantly negatively associated to profitability. Therefore, he has concluded that the commercial banks profitability in Nepal is mainly influenced by cost per loan assets. The macroeconomic variables were not found significant determinant during his study period.

Rai, Ojha, Singh, Gyawali, & Gupta (2018) studied return on asset (ROA), return on equity (ROE)and net interest margin (NIM) as the dependent variables while capital adequacy ratio, assets quality, management efficiency, liquidity management, GDP growth rate and inflation were chosen as independent variables with the data of 2005 to 2014. They found the result that higher the capital adequacy ratio, management efficiency and liquidity management, higher would be the return on equity and return on assets. Likewise, higher the GDP growth rate and inflation rate, higher would be the return on equity and return on assets. The study also indicates that higher the assets quality lower would be the return on equity and return on assets. The study also revealed that larger the capital adequacy ratio and assets quality, higher would be the net interest margin. It also shows that higher the management efficiency, liquidity management, GDP growth rate and inflation rate, higher would be the net interest margin.

The financial performance of private commercial banks of Ethiopia, is analyzed by Teshome, Debela, & Sultan (2018). Using the secondary data of 16 private commercial banks for the period of 2007 to 2016 Teshome et al. concluded that capital adequacy ratio, credit interest income, and size of the bank has significant

positive impact non-performing loans, loan loss provision, leverage ratio and operational cost efficiency has significant negative impact on the financial performance of the private commercial bank of Ethiopia.Return on Asset and Return on Equity are the selected dependent variables while non-performing loan, capital adequacy ratio, bank size, leverage ratio, credit interest income, loan loss provision ratio and operation cost efficiency were the independent variables.

Similarly, the impact of bank specific factors and macroeconomic variables on the profitability of Indian commercial banks, is analyzed by Al-Homaidi, Tabash, Farhan, &Almaqtari (2018). They used return on assets, return on equity and net interest margin as proxy of profitability, bank size, assets quality, capital adequacy, liquidity, operating efficiency, deposits, leverage, assets management and number of branches as proxy of bank specific factors and gross domestic product, inflation rate, interest rate and exchange rate as proxy of macroeconomic variables. They concluded that all bank specific factors accept the number of branches has significant impact on profitability measured by net profit margin. Further they concluded that all the macroeconomic variables used in the study have significant negative impact on profitability. Finally, they concluded that bank size, number of branches, assets management ratio and leverage ratio have significant impact on profitability of Indian commercial banks measured by return on assets.

Triani&Tarmidi (2019) found the effect of funding decisions and dividend policies on the firm value. Investment decisions are not found to be significantly associated. Liquidity found to be significantly affected the firm. The result has shown significant impact of liquidity. The effect of all the independent variables on the same dependent included in this study has been studied. The results of this study indicate that dividend policy has a negative and significant effect on firm value, liquidity and firm size partially influence positively and significantly on firm value while profitability is not appropriate and not significant to firm value. Therefore, dividend policy has negative and significant effect on firm value whereas firm size has partially positive and significant effect.

Similarly, Gwachha (2019) has analyzed bank-specific and macroeconomic determinants of the profitability of Nepalese banking sector over the time period from 2004 to 2013. Gwachha used return on assets (ROA), return on equity (ROE) and net interest margin (NIM) to measure the profitability of the bank and used total asset,

ratio of equity capital to total assets, ratio of total loan to total assets, ratio of total deposit to total assets, ratio of total liquid assets to total assets as bank specific factors and used gross domestic product, consumer price index, real interest rate and stock market capitalization as macroeconomic factors. Gwachha concluded that asset size and deposit to asset have a significant positive effect, and loans portfolio have a significant negative impact on profitability of bank. Furthermore, Gwachha found a positive impact of real interest rate and stock market capitalization on the performance of banks. Juhandi, Fahlevi, Abdi, &Noviantoro (2019) considered the banks listed on the Indonesia stock exchange using the purposive sampling technique. Size to value, financial related factors, size and risk factor are found to be significant. Ebenezer, Islam, Junoh, &Yusoff (2019) highlighted the non-performing credit and bank solvency. The analysis of panel data has been computed for commercial banks in Nigeria and Malaysia from 2009 to 2017. The bank solvency has been found to be influenced by NPLs, loan growth and leverage. The firm value for Malaysian banks is getting affected by solvency, loan growth, leverage, efficiency, size, GDP and inflation.

Bank profitability is usually expressed as a function of internal and external determinants. The internal determinants originate from bank accounts (balance sheets and profit and loss accounts) and therefore could be termed micro or bank-specific determinants of profitability. The external determinants are variables that are not related to bank management but reflect the economic and legal environment that affects the operation and performance of financial institutions. However, the profitability, which is an important criterion to measure the performance of banks in addition to productivity, financial and operational efficiency, has come under pressure because of changing environment of banking. An efficient management of banking operations aimed at ensuring growth in profits and efficiency requires up-to-date knowledge of all those factors on which the bank is profit depends.

Accordingly, in this paper we have made an attempt to identify the key determinants of profitability of Commercial Banks in Nepal. Bank size is usually measured either through total assets or total deposits. In this study, bank size is determined on the basis of total assets of the Nepalese banks. It usually has a positive impact on profitability. The capital adequacy shows the money invested in the bank. It is calculated as a ratio of total equity in the bank divided by total assets. The expected

impact of capital is positive. Loan is one of the sources of income generated by the banks. Loan can have either positive or negative impact depending upon the interest rate and liquidity. It can be expressed as dividing total loans over total assets. Liquidity represents the degree to which bank assets or securities can be purchased or sold in the market without influencing the price of the asset. Liquidity can affect the profitability in both ways. It has a positive impact if the bank is successful in holding liquidity or otherwise it has a negative impact on profitability. Gross Domestic Product (GDP) represents the economic growth of any country. The upward or downward impact of national Gross domestic product (GDP) has a positive or negative impact on bank profitability. The inflation rate means the rate of changes in the price of any commodity. Inflation has an inverse relationship to profitability because an increase in inflation means lowering the profitability of banks due to higher prices.

Juhandi, Fahlevi, Abdi, &Noviantoro (2019) considered the banks listed on the Indonesia stock exchange using the purposive sampling technique. Size to value, financial related factors, size and risk factor are found to be significant. Ebenezer, Islam, Junoh, &Yusoff (2019) highlighted the non-performing credit and bank solvency. The analysis of panel data has been computed for commercial banks in Nigeria and Malaysia from 2009 to 2017. The bank solvency has been found to be influenced by NPLs, loan growth and leverage. The firm value for Malaysian banks is getting affected by solvency, loan growth, leverage, efficiency, size, GDP and inflation.

Triani&Tarmidi (2019) found the effect of funding decisions and dividend policies on the firm value. Investment decisions are not found to be significantly associated. Liquidity found to be significantly affected the firm, has been found to be a study conducted by Mareta&Yanti (2019) The result has shown significant impact of liquidity. The effect of all the independent variables on the same dependent included in this study has been studied by Sondakh (2019). The results of this study indicate that dividend policy has a negative and significant effect on firm value, liquidity and firm size partially influence positively and significantly on firm value while profitability is not appropriate and not significant to firm value.

Markonah, Salim, &Franciska (2020) have found the effect of profitability, leverage and liquidity on corporate value in food and beverage Jakarta Stock Exchange enlisted

manufacturing companies. With fixed effect model showed that profitability and leverage have significant effect to company value variable. Renaldi, Pinem, &Permadhy (2020) have conducted research on the Manufacturing Industry Company because of fluctuations in stock prices with the signaling theory, trade-off theory, and dividend policy theory. The data used are secondary data with a sample collection method using purposive sampling. All the above-mentioned studies conclude that there is a significant impact of internal and external factors on the financial performance of commercial banks. It is, therefore, relevant to examine whether the bank specific factors make any impact or not on the financial performance of commercial banks in Nepalese context.

CHAPTER III
RESEARCH METHODOLOGY

A research method is a systematic plan for conducting research. Sociologists draw on a variety of both qualitative and quantitative research methods, including experiments, survey research, participant observation, and secondary data. Quantitative methods aim to classify features, count them, and create statistical models to test hypotheses and explain observations. Qualitative methods aim for a complete, detailed description of observations, including the context of events and circumstances. Research methodology is the specific procedures or techniques used to identify, select, process, and analyze information about a topic. In a research paper, the methodology section allows the reader to critically evaluate a study's overall validity and reliability. The methodology section answers two main questions: How was the data collected or generated? How was it analyzed?

3.1 Research framework and definition of the variables

A research framework has been used to help focus on the variables in the study. Firm value is a function of independent variables such as dividend policy, profitability, company size, company growth. The concept of analysis of the factors is explained by the following framework:

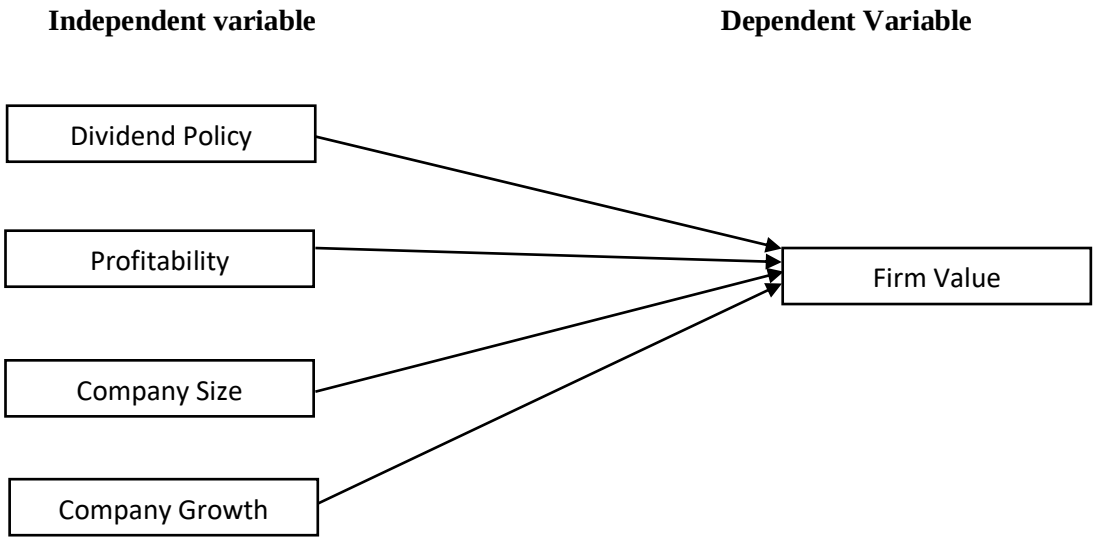

Figure 1. Research framework of the study

3.1.1 Dividend policy

Dividend decisions are company's decisions that determine what percentage of the profit is given to shareholders or investors. Dividend policy in this study will be measured by dividend payout ratio, which compares the value of dividend payments per share with the value of the company's net profit per share. The dividend policy decision whether the profits from the company will be distributed to shareholders as dividends or will be retained in the form of retained earnings to finance investment in the future (Sartono, 2001). The dividend distribution is divided into two, namely the cash dividend and stock dividend, but in Indonesia prefer cash dividends. The dividend policy relating to the determination of the dividend payout ratio, i.e. the percentage of the amount of net profit after tax which is distributed as dividends to shareholders (Sudana, 2015). Parliament proxy can be calculated by comparing the dividend per share to earnings per share for the company.

3.1.2 Profitability

Profitability is the company's ability to earn profits and an overview of the company's performance in managing the company (Daeli&Endri, 2018). Profitability in this study is measured using the ratio of return on assets (ROA), namely by comparing the value of net income with the total assets of the company. Companies with a high net profit signifies that the company is able to generate a profit by utilizing the resources of the company. Management of the company will try their best to be able to control the resources that exist to generate profits. Funds from investors who enter will be processed in such a way that sufficient to fund the company's operations. These funds will be included in the company's equity. That is the position of the owner of the company is getting stronger, and vice versa. ROE can be obtained by comparing the net income by the total equity of the company.

3.1.3 Company size

Firm size is a proxy of the volatility of operational and inventory controllability supposed economies of scale size of the company demonstrated achievement of current operations and inventory control. The size of the company is the average net sales for the year to several years. In this case the sale is greater than the variable costs and fixed costs, it will obtain the amount of income before taxes. Conversely, if the sale is smaller than the variable costs and fixed costs, the company will suffer a loss. The size of the company described the size of a company showing by total

assets, total sales, average total sales and average total assets; thus, the size of the company is the size or magnitude of the assets owned by the company.

Past studies that analyze the effect of firm size on the business risk the company found that the size of the risks affecting the business, that small firms have the risk and returns higher than large companies. Similar results have proved that the size of the company and significant positive effect on firm value. Company size is partially positive and significant impact on the value of the company, the larger the size of the company from a company it also increases the value of the company, and Leverage partially significant positive effect on Company Value. There is positive and significant correlation between the sizes of the company to profitability. Firm size has a positive and significant effect on the bank's performance as measured by ROA. Company size is an assessment of how large or small a company is represented by a company's assets (Benyamin &Endri, 2019). The size of the company in this study was measured using the value of the natural logarithm (Ln) of the company's total assets.

3.1.4 Company growth

Growth ratio is a ratio that aims to measure a company's ability to maintain its position in economic and industrial growth (Benyamin &Endri, 2019). Growth in this study was measured using the growth rate of company assets by comparing the difference between the current year's total assets and last year's total assets, divided by last year's total assets. Firm Growth shows the extent of the company's ability to grow and develop one of the growths of the company's assets. If the management company can take advantage of the company's assets optimally, it will increase corporate profits. The more efficient use of corporate assets, the lower the cost required to fund the operation of the asset. The more effective use of corporate assets, the lower the chance of assets unused. Assets not used can be sold, so the company will receive additional funds. In assessing the growth of the company can use the calculation of Total Assets Growth (TAG). Total assets showed growth projections company's growth potential between the current year with the previous year.

3.1.5 The value of the company

Company value is the present value of a series of incoming cash flows that the company will produce in the future (Daeli&Endri, 2018). The value of the company in this study is measured by the Tobin's Q ratio, where this ratio is the market ratio

used compared with the market value of the company's stock with the book value of the company's equity or the value of the replacement of company assets. One model of financial analysis used to assess the performance of the company is the ratio of Tobin's Q. This ratio is used to determine the performance of the company through the potential development of the stock price, the potential ability of managers to manage the assets of companies and potential investment growth. Investors need information on Tobin's Q to determine whether the company in growing conditions, not growing or even declining, so that they can decide what to do in these conditions.

3.2 Research design

Creswell (2014) suggests that in an investigative study there are three familiar types of research approaches to business and social research namely- inquiry within qualitative, qualitative and mixed method approach. Though, each approach has its own strengths and limitations. Moreover, certain types of social research problems call for specific approaches. Hence, in selecting an approach one should take in to account that nature of the research problem, the personal experience of the researcher and the audience for whom the report will be written. Considering the research problem and objectives, the quantitative nature of the data collected, quantitative research approach found to be appropriate for this study. Descriptive and analytical research designs have been used in this study.

This study uses a quantitative approach and is included in the type of explanatory research. The independent variables in this study were dividend policy (X1, DPR), profitability (X2, ROA), company size (X3, Size), and company growth (X4, Growth). While the dependent variable in this study is the value of the company (Y, Tobins' Q). The type of data in this study uses secondary data types, namely annual report data that has been available on the Nepal Stock Exchange (NEPSE). Data collection was performed by recording each data needed in the annual reports of each company. The data used is a company performance report that has been registered and published from 2015 to 2019. The population of this study were all financial sector companies listed on the Nepal Stock Exchange (NEPSE) for the period 2015-2019. The sampling technique uses a non-probability sampling method with a purposive sampling technique with the following criteria: Financial sector companies that consistently publish annual reports for the period 31 December 2015- 2019. The company makes a dividend payment during the year of observation.

Based on these criteria, the number of companies that can be used as samples in this study is five companies. The data analysis technique used is descriptive statistical analysis and panel data regression analysis. In the regression model estimation method using panel data can be done through three approaches, namely pooled least square, fixed effect model, and random effect model. For the selection of the right model, several tests need to be done. After selecting the panel data regression model, the next step is to test the hypothesis. Hypothesis testing aims to find out how far the hypotheses that have been prepared can be accepted based on the data that has been collected. Hypothesis test analysis does not test the truth, but examines whether or not the hypothesis is accepted.

3.3 Population and sample, and sampling design

The population of this study were all manufacturing companies listed in Nepal Stock Exchange from 2015 to 2019. The samples taken to represent the population were all sectors in the stock exchange. Samples were five companies collected by purposive sampling by considering the representativeness of each banking sector. At present, there are 27 commercial banks operating in Nepal. They constitute the total population for the study. Out of them, five commercial banks namely Nabil Bank ltd, Nepal Investment Bank Ltd., Prime Commercial Bank Ltd., Everest Bank Ltd. And Himalayan bank Ltd. Are selected as a sample representative for the study of determinants of financial performance analysis as a sample.

While selecting the banks for the study, convenience sampling technique has been adopted. Convenience sampling is a type of non-probability sampling that involves the sample being drawn from that part of the population that is close to hand. Although, there are some limitations, convenience sampling can be used by almost anyone and has been around for generations. One of the reasons that it is most often used is due to the numerous advantages it provides. This method is extremely speedy, easy, readily available, and cost effective, causing it to be an attractive option to most researchers. In view of speedy collection and cost effective, this study has adopted convenience sampling technique in order to select the banks as sample. Moreover, the reason behind choosing of the latest five year from 2014/15 to 2018/19 period is to include a fresh data in the analysis.

3.4 Nature and sources of data, and the instrument of data collection

The study is based on secondary data. Various Journals, books, magazines, newspapers, articles, etc. are the sources of secondary data. The necessary data for the companies based on listed companies of Nepal Stock Exchange are obtained from Nepal Stock Exchange (NEPSE), Security Board of Nepal (SEBON), and Nepal Rastra Bank. The annual report of sample banks is the main source as well as their official website and other information related to Nepalese banking industries. Therefore, the major sources of data include: Annual reports of the selected sample banks, Related bulletins, circulars and directives, reports, periodically published by various government bodies like: Nepal Rastra Bank, Central Bureau of Statistics etc.

Since this study is using the secondary data as per its need and nature of study, the data have been obtained from various official websites and records of the related banks. Since, various data obtained through different sources can't be used directly for the analysis in their original form. So, they have been re-evaluated, edited and tabulated to bring them into appropriate form for the analysis as per the demand of nature of study. The researcher has made the collected data trust worthier getting them form authorized sources. All the gathered data have been used according to the need and requirement of this study.

3.5 Methods of analysis

This section consists of presentation, interpretation of available data. The data collected from annual report were in the form of raw. They are simplified and converted into the necessary format form according to research objective in understandable manner and shown in appendices. Mainly, the profitability ratio will be calculated and tested with the bank specific variables with the statistical tool correlation and regression analysis to find out their relationships.The data are analyzed with some statistical concepts, formulas and models. In this research study mean, standard deviation, correlation analysis and regression analysis are used to analyze collected data.

3.5.1 Mean ($\bar{x}$)

Mean is the average of sum of total values to the number of observations in the given sample. The arithmetic mean is the most commonly used to derive the central tendency of the data. It is determined by adding all the data points in a population and

then dividing the total number of points. It represents the entire data, which lies almost between the two extremes. For this reason, a mean is frequently referred as a measure of central tendency. In this study, mean is calculated to find out the average of the data of different variables. It is calculated with following relationship:

Mean **(**$\bar{x}$**)**= $\frac{x1 + x2 + x3 + x4 \ldots\ldots\ldots\ldots + xn}{n}$

Where,

$\bar{x}$**)** = Arithmetic Mean return

x1, x2, x3, x4 …… xn = Set of Observation

x = Sum of given Observation

n = Total number of Observationss

3.5.2 Standard deviation

Standard deviation is a statistical tool that measures the ranges and size of deviance from the middle or mean. It measures the absolute dispersion. Higher the standard deviation higher will be the variability and vice versa. In other words, it helps to analyze the quality of data regarding its variability. It is calculated as:

Standard Deviation (S.D.) = $\sqrt{\frac{(x-\underline{x})^2}{n}}$

Where,

$\bar{x}$ = Arithmetic Mean return

x = Set of Observation

n = Total number of Observations

3.5.3 Coefficient of correlation analysis

Coefficient of correlation is widely used in to measure the degree of relationship between two variables. Two variables are said to have correlation when the value of one variable is accompanied by the change in the value of the other. There is some major principle of correlation analysis. The relation between dependent and independent variables whether the relation is positive or negative with each other. Correlation value falls between -1 to +1. Values close to +1 indicates a high degree of positive correlation, and values to -1 indicates a high-degree of negative correlation.

We have adopted Karl Pearson's Coefficient analysis method for this study. It is calculated by the following formula relationships of two variables and denoted by small 'r'.

Correlation Coefficient I = $\frac{n\sum xy - \sum x \Sigma y}{\sqrt{n\Sigma x^2 - (\Sigma x)^2}\sqrt{n\Sigma y^2 - (\Sigma y)^2}}$

Where,

r = coefficient of correlation

ΣXY = Sum of product of two series.

Σx^2 = Sum of squared of X series

Σy^2 = Sum of squared of Y series

n = Sample size

3.5.4 Multiple regressions analysis

Regression analysis is widely used for prediction and forecasting where its use has substantial overlap with the field of machine learning. Multiple linear regression attempts to model the relationship between two or more explanatory variables and a response variable by fitting a linear equation to observed data. Every value of the independent variable x is associated with a value of the dependent variable y. On this regression analysis, Firm Value (dependent) will be tested for the relationship with explanatory variables. The explanatory variables are independent variables, which are taken from bank specific factors such as Dividend Payout Ratio (DPR), Profitability (ROA), bank size (SIZE), Company Growth (GROWTH).

CHAPTER IV

RESULTS AND DISCUSSION

This chapter includes analysis of collected data and their presentation. The purpose of this chapter is to analyze and explain the collected data to achieve the objective of the study following conversion of unprocessed data to an understandable presentation. In this chapter, the data have been analyzed and interpreted using financial and statistical tools following the research methodology discussed in the third chapter. In the part of analysis, various tables have been used to present the data collected from various sources that have been converted into the required tables according to their homogeneity. The calculated results of the analysis have been presented in the suitable forms. For this purpose, required secondary data were collected and analyzed in a systematic way so as to derive the empirical findings and determine the determinants of firm value.

4.1 Analysis of data

This study primarily relies on the analysis of secondary data to derive the empirical findings on the study. Data that has been collected were tabulated and shown on figure for greater visibility and clarity. Data has been presented with time period of last five years from 2015 to 2019. And it has been analyzed using mean, median, standard deviation, correlation and regression analysis. For analyzing the relationship between dependent and independent variables, Correlation and Regression Analysis were used. The sources of tables presented below are output from SPSS software and edited in excel. This simple line chart presents the trend of the specific factors of firm value of commercial banks in Nepal from 2014/15 to 2018/19. The following figure 2, 3, 4, 5 and figure 6 shows the trend of the five commercial banks' financial performance for five fiscal years as expressed by firm value. Similarly, bank specific factors return on asset (ROA), bank size (SIZE), dividend payout ratio (DPR), and company growth (GROWTH).

The data related to profitability, company size, company growth, dividend policy and firm value were collected and analyzed through various methods in order to answer the various research questions. Data are being analyzed in order to know the significant or insignificant impact of profitability (ROA) on firm value, to know the significant or insignificant impact of company size (SIZE) on firm value, to know the

significant or insignificant impact of company growth (GROWTH) on firm value and to know the significant or significant impact of dividend policy (DPR) on firm value. The pattern of yearly DPR, ROA, SIZE, GROWTH, firm value of year 2015, 2016, 2017, 2018 and 2019 are presented below with figures.

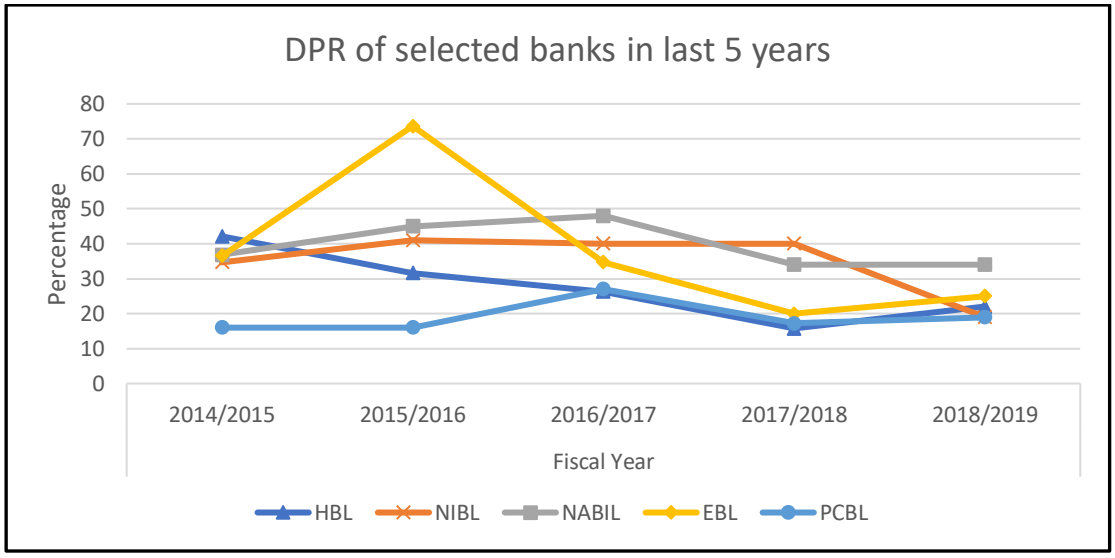

Figure 2. Existing position of dividend policy of selected banks in last 5 years

Figure 2 shows the pattern of dividend policy between five selected banks: Himalayan Bank Ltd. (HBL), Nepal Investment Bank Ltd. (NIBL), Nabil Bank Ltd. (NABIL), Everest Bank Ltd. (EBL), Prime Commercial Bank Ltd. (PCBL). As it can be seen in figure 2 that the dividend policy is measured by DPR (Dividend Payout Ratio) of all selected banks which shows downward trend. Based on figure 2, the (independent variable) dividend policy represented by Dividend Payout Ratio (DPR) of all the selected banks are dropping downward which shows negative impact on firm value. Higher the dividend policy higher will be the value of firm and vice-versa.

In HBL, the dividend policy drastically falls from 42.1 to 31.57 to 26.31 to 15.78% in year 2015, 2016, 2017 and 2018 respectively whereas slowly increases by 22% in year 2018. It elaborates that the dividend policy of Himalayan bank is slightly showing positive response in final year. NIBL slowly increases its DPR in year 2015 to 2016 by 34.74% to 41% and maintain constant in year 2017, 2018 by 40%, 40% respectively. It dramatically drops in fast pace by 19% in year 2019. Talking about NABIL, it also shows positive from year 2015, 2016 and 2017 by 36.84%, 45% and 48% where it shows constant trend in year 2018 and 2019 by 34 and 34%

respectively. The dividend policy of EBL is sky rocketing in year 2015 to 2016 by 36.57 to 73.67% which is significant positive impact on value of firm and drastically drops to 34.74% and 20% in year 2017 and 2018 respectively. Finally, the DPR of EBL is constant in year 2019 by 25%. The DPR of PCBL is constant at the beginning of the year 2015 and 2016 by 16% and 16%. Then it shows positive impact and rise to 27% in year 2017. After that, the DPR slops downward to 17.25% in 2018 and make slightly increase in 2019 by 18.95%.

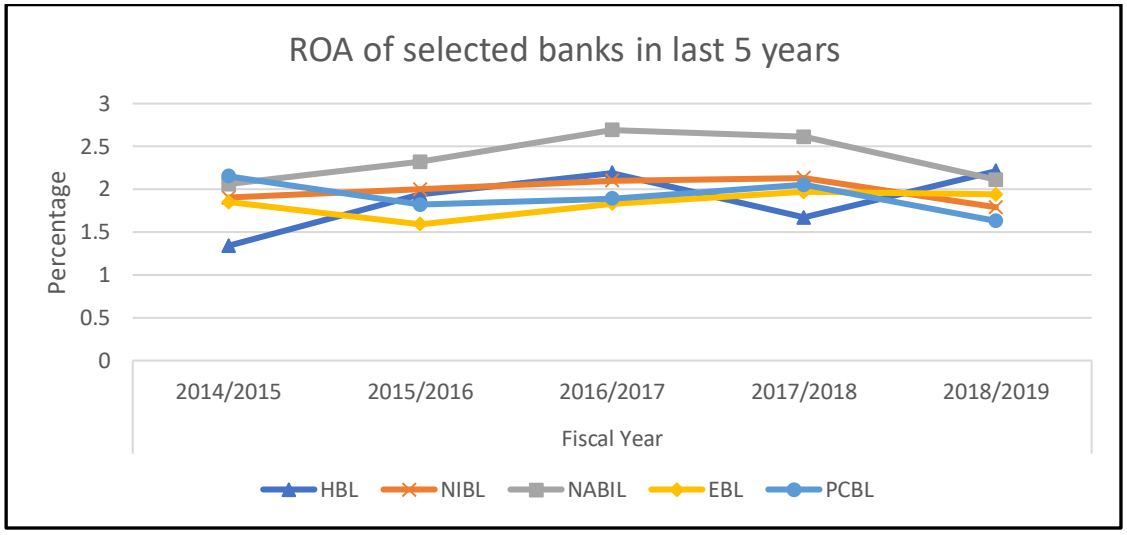

Figure 3. Existing position of ROA of selected banks in last 5 years

Figure 3 shows the pattern of profitability between five selected banks: Himalayan Bank Ltd. (HBL), Nepal Investment Bank Ltd. (NIBL), Nabil Bank Ltd. (NABIL), Everest Bank Ltd. (EBL), Prime Commercial Bank Ltd. (PCBL). As it can be seen in figure 3 that the profitability is measured by ROA (Return on Assets) of all selected banks which shows downward trend. Return on asset (ROA) represents efficiency in asset utilization and shows how much net income is generated out of assets. It indicates the ability of bank management to generate profits by utilizing the available assets of the bank. Thus, if the ratio of ROA is high, it indicates that it is better performance in order to generate profit.

It elaborates that the profitability of Himalayan bank is high in 2015 to 2017 year by 1.34, 1.94 and 2.19% respectively where the profitability degrades by 1.67% in year 2018. Again, it shows the increase in ROA by 2.21% in year 2019. NIBL increases its profitability gradually by 1.9, 2, 2.1, 2.13% in year 2015, 2016, 2017 and 2018

respectively.It can be said the profitability of the company is a company's ability to generate net income from the activities carried out in the accounting period. In year 2019, its ROA degrades to 1.79%. Likewise, NABIL also shows positive towards profitability from year 2015, 2016, 2017 and 2018 by 2.06, 2.32, 2.69% respectively. Profitability can be an important consideration for investors in their investment decisions, because the greater the dividend (dividend payout) will save the cost of capital, on the other hand managers (insider) can be increased its power even increase its stake due to the receipt of dividends as a result of high profits. For the companies that have high profitability it can also increase the value of his company. But it shows negative trend from 2.61% and 2.11% in year 2018 and 2019.

ROA of Everest bank drops at 1.59% in 2016 from 1.85% in year 2015. Afterward, there in rise in ROA from year 2017 and 2018 by 1.83, 1.97% simultaneously and make constant by 1.94% in year 2019.Profitability ratio is the ratio to assess the company's ability to make a profit also provides a measure of the effectiveness of management of a company. Finally, Prime bank shows negative slop in year 2015 to 2016 by 2.15 to 1.82% and make slightly increase in year 2017 to 2018 by 1.89 to 2.05%. Again, it declines by 1.63% in year 2019.

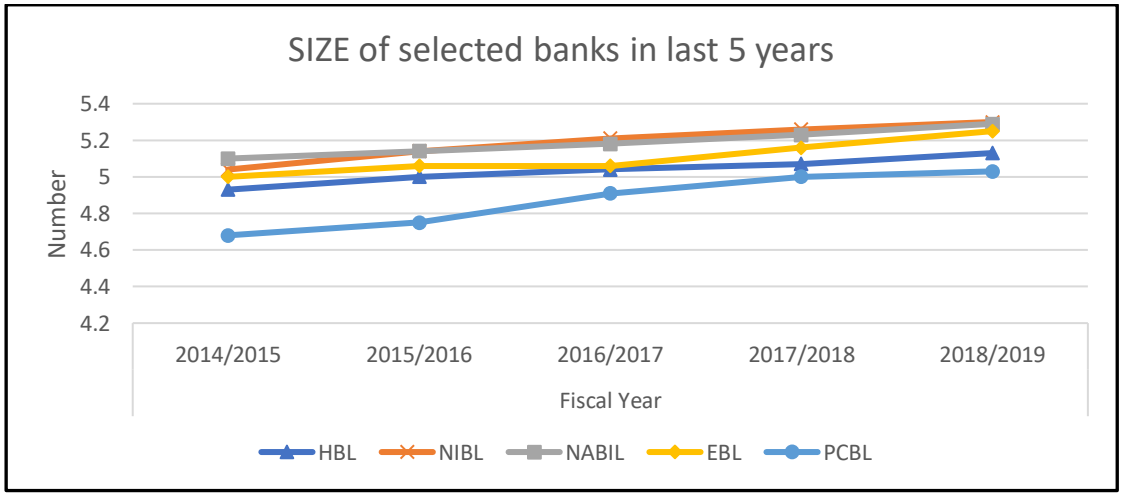

Figure 4. Existing position of SIZE of selected banks in last 5 years

Figure 4 shows the pattern of profitability between five selected banks: Himalayan Bank Ltd. (HBL), Nepal Investment Bank Ltd. (NIBL), Nabil Bank Ltd. (NABIL), Everest Bank Ltd. (EBL), Prime Commercial Bank Ltd. (PCBL). As it can be seen in figure 6 that the company size is measured by SIZE of all selected banks which shows

upward trend. Company size is independent variable and this figure shows how much firm value affect the selected banks in last five years. Large or small size companies will mainly describe the company. A lot of things that can be seen to describe the size of a company. Among other things is to look at the total sales, and total assets. Total assets or total net assets are used to describe a firm's size. When it comes to the size of a mutual fund, bigger is not necessarily better. The key to a fund's investment quality, in terms of the amount of money under management, lies in the compatibility of a fund's asset size and its investment style.

According to the above figure, the size of HBL gradually rises from 4.93, 5, 5.04, 5.07, 5.13 numbers in year 2015, 2016, 2017, 2018 and 2019 respectively. It elaborates that the size of Himalayan bank is positively affecting the value of firm. It can be a positive signal for the market in which investors would prefer to invest in large companies because of the financial condition of the company stronger and more profitable operations better. NIBL also increases in year 2015, 2016, 2017, 2018, 2019 by 5.04, 5.14, 5.21, 5.26 and 5.3 numbers respectively.It also reflects that the company is relatively more stable and better able to generate profits than firms with small total assets. Likewise, NABIL also shows positive from year 2015 to 2019 by 5.1, 5.14, 5.18, 5.23 and 5.29 numbers. Similarly, EBL slightly increases from 5, 5.06, 5.06, 5.16 and 5.25 numbers in year 2015, 2016, 2017 ,2018 and 2019 respectively where it shows positive trend towards the value of firm. Lastly, PCBL also shows its increase of company size from 4.68, 4.75, 4.91, 5, 5.03 numbers from year 2015 to 2019 respectively.

In conclusion, the size of all the selected commercial banks are heading upward to the right. It shows the positive attitude towards the value of firm. Higher the company size, higher will the value of firm and vice-versa.

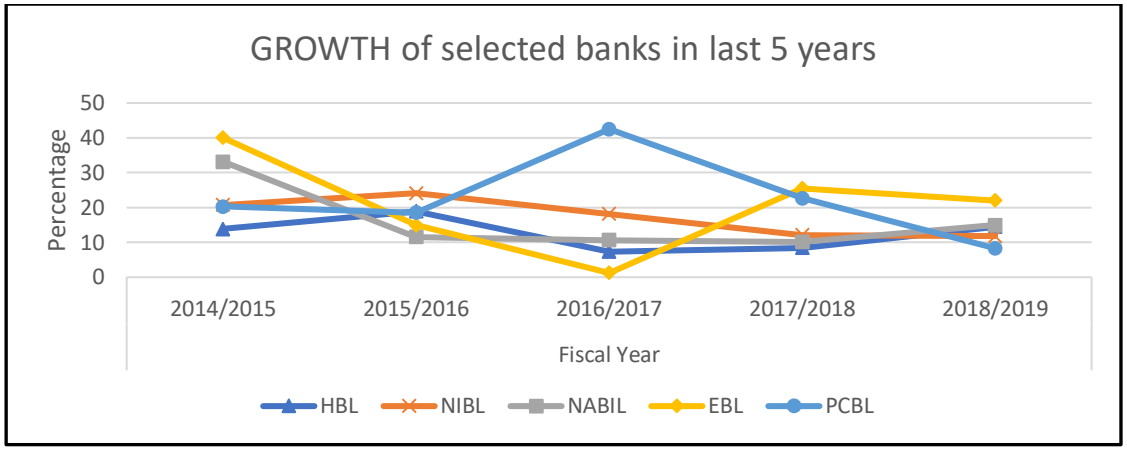

Figure 5. Existing position GROWTH of selected banks in last 5 years

Figure 5 shows the pattern of company growth between five selected banks: Himalayan Bank Ltd. (HBL), Nepal Investment Bank Ltd. (NIBL), Nabil Bank Ltd. (NABIL), Everest Bank Ltd. (EBL), Prime Commercial Bank Ltd. (PCBL). As it can be seen in figure 5 that the company growth is measured by GROWTH of all selected banks which shows increase trend. This is associated with the fact that the bigger the size of the bank, the lower the cost of raising capital for that bank and thus the higher the profitability ratios. According to previous studies that an increase in the bank's size has a positive influence on the financial performance of that bank due to the fact that the cost of seeking capital for that bank is reduced significantly. The size of the commercial bank or any other business entity in terms of the assets is a very significant determinant of profitability due to various issues. Commercial banks that have a large asset size are able to expand their operations geographically to regions where competition is not very high or to regions where the market is largely untapped.

According to the above figure 5, the growth of HBL rises from 13.87% to 18.88% in year 2014/2015 and 2015/2016 respectively whereas drastically degrades from 7.31% to 8.41% in year 2016/17 and 2017/18 respectively. Again, in year 2019, it slops upward to 14.47%. NIBL shows positive in company growth in year 2015 to2016 by 20.72% to 24.12% and gradually declining of firm growth in year 2017, 2018 and 2019 by 18.19%, 12.09% and 11.8% respectively. Talking about NABIL, it slopes extremely downward to right from year 2015 to 2016 by 33.16% to 11.58% where it shows constant trend from 10.6% and 10.1% in year 2017 and 2018.

Finally, the growth of company shows upward I year 2019 by 14.93%. The growth of EBL is highly slopping downward from 40% to 14.95% to 1.21% in year 2015, 2016

and 2017. It has high dropping rate in year 2017. It increases in year 2018 by 25.49%. Again, it shows negative slope in year 2019 by 22.01%. PCBL indicates slightly decrease by 20.31%, 18.49% in year 2015 to 2016. In year 2017, it has increased up to 42.5% which shows positive impact in firm value. Again, it extremely drops from 22.68% to 8.31% in year 2018 and 2019 respectively.

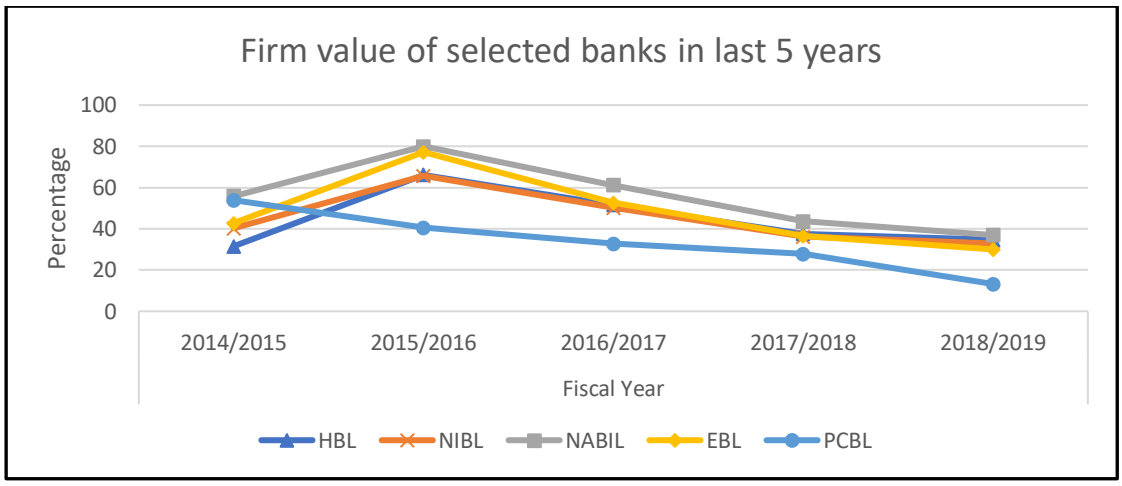

Figure 6. Existing position of firm value of selected banks in last 5 years

Figure 6 shows the pattern of firm value between five selected banks: Himalayan Bank Ltd. (HBL), Nepal Investment Bank Ltd. (NIBL), Nabil Bank Ltd. (NABIL), Everest Bank Ltd. (EBL), Prime Commercial Bank Ltd. (PCBL). As it can be seen in figure 6 that the value of firm is measured by Tobin's Q of all selected banks which shows downward trend. Firm value is dependent variable and this figure shows how much firm value affect the selected banks in last five years. Firm value is very important because of the high value of the company which will be followed by a high prosperity shareholder, the higher the stock price, the higher the value of the company.

Talking about HBL, the value of firm rises from 31.56% to 66.12% in year 2014/2015 and 2015/2016 respectively whereas gradually degrading from 51.51%, 37.66% and 34.6% in year 2016/17, 2017/18 and 2018/19 respectively. NIBL also facing increase in year 2015 and 2016 by 40.23% to 65.7% and finally declining of firm value in year 2017 by 50.23%, 2018 by 36.21% and 2019 by 32.9%. Likewise, NABIL also shows positive from year 2015 to 2016 by 55.96% to 80.03% where it shows negative trend from 61.14%, 43.66% and 36.97% in year 2017, 2018 and 2019 respectively. Therefore, all the selected commercial banks headed towards negative impact in firm value.

In conclusion, almost all selected commercial banks slops upward at the beginning of the selected years and finally slops downward at the ending year which shows decrease in profitability of firm. Despite, Himalayan bank increases at beginning of the year and decreases in the middle of the year and finally increases at the ending of the year. In overall, Himalayan bank has good profitability ratio at the final year which shows that profitability has positively affected the value of firm.

4.1.1 Descriptive statistics

This table provides descriptive statistic for dependent variable firm value. The independent variables are profitability, dividend policy, growth, firm size. The descriptive statistics used in this study includes mean, standard deviation, minimum and maximum value of variables and N is the number of observations.

Table 2

Descriptive statistics for all samples

Variables	N	Minimum	Maximum	Mean	Std. Deviation
DPR	25	15.78	73.67	31.8208	13.26247
ROA	25	1.34	2.69	1.9912	.29609
SIZE	25	4.68	5.30	5.0788	.15333
GROWTH	25	1.21	42.50	17.8472	9.83374
TobinQ	25	13.24	80.03	45.2640	16.01826

Source: SPSS result

Table 2 present the descriptive statistics of Nepalese commercial banks. The study period is 2015 to 2019 associated with 5 commercial banks. The average value of Firm value (Tobin's Q) of Nepalese commercial bank is 45.2640 with the standard deviation of 16.01826 and the minimum and maximum range from 13.24 to 80.03. Likewise, the average value of ROA of Nepalese commercial bank is 1.9912 with the standard deviation of 0.29609 and the minimum and maximum range from 1.34 to 2.69. Similarly, the average of DPR is 31.8208 with the standard deviation of 13.26247 but it has minimum value 15.78 and maximum value 73.67. The GROWTH has average value of 17.8472 with the standard deviation of 9.83374 and the minimum and maximum range from 1.21 to 42.50. The SIZE has minimum value of 4.68 to maximum 5.30 with a mean of 5.0788 and standard deviation of 0.15333.

4.1.2 Correlation analysis

A correlation matrix is a table showing correlation coefficients between variables. Each cell in the table shows the correlation between two corresponding variables. A correlation matrix is used as a way to summarize data. For example, height and weight related: taller people tend to be heavier than shorter people. The relationship isn't perfect. Correlations are useful because they can indicate a predictive relationship that can be exploited in practice. This allows us a glance of which variables have correlation in which level of strength and significance. Correlation matrix is presented as following in Table 5. The correlation coefficients are calculated for the period of 2015 to 2019 on dividend payout ratio (DPR), return on assets (ROA), company size (SIZE), company growth (GROWTH), Firm value (Tobin Q).

Table 3

Relationship between variables for all samples

This table shows the results of correlation analysis for the period of 2015 to 2019. Dependent variable is the TobinQ and independent variables are DPR, ROA, SIZE, GROWTH. All variables are defined as described in chapter 1. The table presents correlation analysis of whole sample. The values in parentheses are p-value.

Variables		DPR	ROA	SIZE	GROWTH	TobinQ
DPR	Pearson Correlation	1				
	Sig. (2-tailed)					
ROA	Pearson Correlation	.047	1			
	Sig. (2-tailed)	(0.825)				
SIZE	Pearson Correlation	.258	.322	1		
	Sig. (2-tailed)	(0.213)	(0.116)			
GROWTH	Pearson Correlation	-.046	-.091	-.252	1	
	Sig. (2-tailed)	(0.827)	(0.665)	(0.224)		
TobinQ	Pearson Correlation	.650**	.301	-.019	-.064	1
	Sig. (2-tailed)	(0.000)	(0.144)	(0.929)	(0.761)	

**. Correlation is significant at the 0.01 level (2-tailed).

Table 3 indicates the relationship of independent variables with dependent variable. Here the independent variables are DPR, ROA, SIZE and GROWTH whereas the dependent variable is Firm value. It shows the impact of DPR, ROA, SIZE and GROWTH on the firm value. Table 3 shows the Pearson correlation coefficient between variables taken in the study. It reveals that the firm value is positively related with return on asset, dividend payout ratio. It reveals that higher the return on asset, dividend payout ratio, higher would be firm value. On the other hand, firm value is

negatively related with company growth and company size. It indicates that higher the company growth and company size lower would be firm value.

Dividend payout ratio and firm value also are found to be having positive relations. They show the positive correlation of 0.650. The correlation result is positive which means that there is positive relation of dividend payout ratio with firm value. It shows that if the dividend payout ratio increases, the firm value also increases. Return on assets and firm value are found to be having positive relations. They show the positive correlation of 0.301. The correlation result is positive which means that there is positive relation of return on assets with firm value. If the return on assets increases, the firm value also increases. Table 3 shows the significant negative relationship of company growth with the firm value. The correlation between the company growth and firm value has been found to be -0.064. The negative relationship indicates that change in independent variable will inversely affect dependent variable. The negative correlation denotes that if the company growth increases, firm value will decrease and if the company growth decreases, firm value will increase. The Pearson correlation coefficient between company size and firm value is negative relation with -0.19. The relationship between firm value and company size indicates that higher the company size lowers the value of the firm. This means that if the value of firm size increases, then the value of firm decreases.

4.1.3 Regression analysis

Regression analysis helps to find out the impact of independent variables on the dependent variables. The regression analysis is conducted for the whole sample. In the study, regression analysis is done for the different determining factors on specific firm value on Nepalese commercial banks. The factors affecting firm value under study are profitability, dividend payout ratio, company size, company growth.

This section presents the overall analysis and results of the regression analysis on the determinants of firm value. In this study ROA, GROWTH, SIZE and DPR were used as a main performance measure. The reason for using those variables as the measurement of firm value was because those independent variables reflects the overall ability of a bank's management to generate profits from the bank's assets and also indicates how effectively the bank's assets are managed to generate revenues. Independent variables are selected as bank specific variables, which is also termed as internal variables. Return on assets (ROA), company growth (GROWTH), dividend

payout ratio (DPR) and bank size (SIZE) have been taken as the representative independent variables from internal bank specific factors.

The researcher conducted a moderated regression analysis to explain the effect of various factors on the firm value Nepalese commercial banks. The scores to be regressed were computed through factor analysis (data reduction) and then saved as variables. Regression analysis was conducted using Statistical Package for Social Sciences (SPSS).

4.1.3.1 Multivariate Regression Model

Multivariate regression model is an extension of simple linear regression. It is used to predict the value of a dependent variable based on the value of two or more dependent variables.

Table 4

Impact of variables for all samples

This table shows the results of correlation analysis for the period of 2015 to 2019. Dependent variable is the TobinQ and independent variables are DPR, ROA, SIZE, GROWTH. All variables are defined as described in chapter 1. The table presents correlation analysis of whole sample. The values in parentheses are p-value.

Coefficients	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	F	Sig.	Adjusted R^2
	B	Std. Error	Beta					
(Constant)s	162.998	81.789		1.993	.060			
DPR	.867	.179	.718	4.835	.000			
ROA	20.042	8.193	.370	2.446	.024	7.182	0.001	0.507
SIZE	-35.990	16.823	-.345	-2.139	.045			
GROWTH	-.137	.241	-.084	-.567	.577			

a. Dependent Variable: TobinQ

In this case, all the predictor variables except GROWTH (p= 0.577) produced statistically significant results p< 0.05 (ROA (p= 0.024), DPR (p= 0.000) and SIZE (p= 0.045). In this table 8, the beta values indicated the direction of the relationship. A positive or negative sign indicates the nature of the relationship. The significant values (p-value) under sig. column indicate the statistical significance of the relationship or the probability of the model giving a wrong prediction. A p-value of less than 0.05 is recommended as it signifies a high degree of confidence. The results of the regression equation show that if all the predictor variables were rated 0.060,

value of the firm in Nepalese commercial banks would be 162.998. However, except GROWTH and SIZE, the predictors had a positive relationship with the dependent variable. A unit increase in ROA would lead to improved value of firm by 20.042 while a unit increase in DPR would improve firm value by 0.867. A unit decrease in the GROWTH would negative effect on firm value by -0.137. A unit decrease in SIZE would lead to -35.990 negative impact in firm value. In the table, the R value is used to indicate the strength and direction of the relationship between the variables. The closer the value gets to 1, the stronger the relationship. In this case as shown in model 1 in Table 6, R= 0.768. This means there was an overall strong and positive relationship between the variables. The R-Square in the study was found to be 0.590. This value indicates that the independent variables (dividend payout ratio, profitability, company size, company growth) can explain 59% of the variance in the performance of Nepalese commercial banks and rest with other independent variables

At 95% confidence interval, a significant value (p-value) of 0.001 and F-value of 7.182 was registered as shown in Table 4. This shows that the regression model has a probability of less than 0.001 of giving the wrong prediction as its significance value(p-value) is less than 5% (i.e. 0.05). Hence, the regression model used above is a suitable prediction model for explaining the factors influencing the value of Nepalese commercial banks Likewise, the beta coefficient of company growth (GROWTH) and company size (SIZE) are negative to Firm Value, which implies that larger the beat coefficient of GROWTH and SIZE lower would be value of firm. Since the p-value of ROA, DPR and SIZE are less than 5 percent (i.e. 0.05), these results are statistically significant at 1 percent whereas p-value (Sig.) of GROWTH is 0.577 which is greater than 0.05. Therefore, the company growth has significant negative effect with firm value which means that the hypothesis is rejected. The R^2 is 0.590 or 59 percent which means 59 percent of the variation in firm value is explained by the predictors like profitability, dividend payout ratio, company size, company growth.

4.2 Discussion

This study is conducted to identify the specific factors affecting the firm value in Nepalese commercial banks. The major independent variables used for the study are return on assets (ROA), company growth (GROWTH), firm size (SIZE), dividend payout ratio (DPR). The finding of the study reveals that ROA has positive significant impact on the firm value which matches with the findings of Mbugua, Oluoch and

Ndambiri (2018). Similarly, bank size has positive impact on the firm value which matches with the finding of Pradhan and Parajuli (2017). Dividend payout ratio (DPR) has also positive impact on firm value which matches with the finding of (Baker & Powell, 1999). Company growth has negatively insignificant impact on value of firm which matches with the finding of (Benyamin &Endri, 2019).

The effect of Profitability on Firm value has affected the Firm value with the coefficient of 20.042 means that the higher profitability of the influence the increase in value of the company. The condition occurs because the firm value has positive on the achievement of profit to justify the payment of dividends. Descriptive analysis results showed that during the period 2015-2019. Based on a description of bank specific factors in Tables 9 shows growth in Tobin's Q by 45.2640%, Return on Assets (ROA) grew by 1.9912%, Dividend Payout Ratio (DPR) grew by 31.8208%, Company Growth (GROWTH) grew by 17.8472% and Company Size (SIZE) expanded by 5.0788%. The maximum condition on a Return on Assets (ROA) of 2.69 and a minimum average of 1.34. Then the description of the company's value based on Table 9 shows the ratio Tobins'Q positive average of 45.2640% with a maximum condition 80.03, minimum 13.24, and standard deviation is 16.01826. Dividend Payout Ratio (DPR) has average 31.8208% to a maximum of 73.67 conditions, minimum 15.78, and standard deviation of 31.8208. Similarly, Company Growth (GROWTH) has average 17.8472% to a maximum of 42.50 conditions, minimum 1.21, and standard deviation of 9.83374. Company SIZE (SIZE) has average 5.0788% to a maximum of 5.30 conditions, minimum 4.68, and standard deviation of 0.15333.

This study is in line with Mbugua, Oluoch and Ndambiri (2018) proved that the greater profitability of the company more profits are distributed and are distributed to shareholders, thus the value of the company is expected to be higher. FurthermoreMaharjan (2016) states that the positive effect on the profitability of the company's value. Gunawan, Pituringsih and Widyastuti (2018) stated that profitability and significant positive effect on firm value. Mbugua, Oluoch and Ndambiri (2018) empirically find that profitability and significant positive effect on firm value, while Bhattarai (2018) empirically find that profitability and significant positive effect on firm value. Bank profitability is usually expressed as a function of internal and external determinants.

There is significant positive impact of profitability i.e. return on assets (ROA) towards the firm value. From the results derived through regression analysis, it can be observed that it has positive relation with firm value. The negative relation states that if the return on assets increases, value of firm will decrease and if ROA decreases, value of firm will increase. Hypothesis regarding significant positive impact of profitability i.e. ROA towards the Firm value has been proven right. High profitability affects firm's financial flexibility, so that the firm is able to pay dividends and obtained a positive rating in capital market. Profitability allows investors to see how efficiently a firm spends its fund for its operational activities to earn higher profits.

There is significant positive impact of dividend policy i.e. dividend payout ratio (DPR) towards the firm value. From the results of regression analysis, it can be observed that it has positive relation with firm value. The negative relation states that if the DPR increases, value of firm will decrease and if DPR decreases, value of firm will increase. Hypothesis regarding no significant impact of profitability i.e. DPR towards the Firm value has been proven right. The dividend policy decision whether the profits from the company will be distributed to shareholders as dividends or will be retained in the form of retained earnings to finance investment in the future.

Likewise, there is significant negative impact of company growth (GROWTH) towards the firm value. According to the results of regression analysis, it can be observed that it has negative relation with firm value. The positive relation states that if the GROWTH increases, value of firm will decrease and if GROWTH decreases, value of firm will increase. Hypothesis regarding significant negative impact of GROWTH towards the Firm value has been proven wrong. We expect a significant relation between firm value and growth since growth opportunities impact capital structure of the firm. Talking about company size, there significant negative impact of company size (SIZE) towards the firm value. As per the regression analysis, it can be observed that it has negative relation with firm value. Firm size seen from the total assets owned by the company can be used for the activities of the company, if the company had assets that great then the company can freely use existing assets in the company, a large company would easily access the capital requirements on the capital market, with the ease that it means that the company has easy access to capital and this capital can be operated on the activities of the company, which thereby generating

higher earnings. Therefore, the hypothesis of H1, H2 and H3 are accepted whereas H4, H5, H6, H7 and H8 are rejected.

CHAPTER V

SUMMARY AND CONCLUSION

5.1 Summary

In recent decades, Nepal has come through various instable politically, economically and more. Commercial banks are one of the major core components of modern economy, yet, they were not unaffected by those situations. On the other hand, bank and financial institutions are in tight competition with one another within the industries as well. At this situation, the commercial banks should be more competitive. They should become financially healthy and must have growth potentiality. In addition, they have to shape their plans and strategies accordingly. This study is directed to resolve the following issues: What are the main factors to determine the value of the commercial banks? What is the existing position of selected bank performance indicators, bank specific variables? What is the bank specific factors that influencing bank performance/value?

This study was undertaken with the objective of examining the impact of firm specific factors on firms' value in Nepalese commercial banks. The specific objectives of this study were as: to identify the main factors determining the value of the commercial banks. To examine the existing position of selected bank performance indicators, bank specific factors and to examine the direction (tendency) of influence the independent variables have on the value of the firm. The study is based on secondary data available on annual reports on official websites of selected sample banks, Nepal Rastra Bank, Sharesansar.com and investopaper.com. In this study, only selected tools are used. The study covers only five years' period, i.e. from 2014/15 to 2018/19. The accuracy of secondary data absolutely relies on the annual report of sample banks. There are several determining factors of performance of commercial banks. The study has carried out only one dependent variable Firm value. Likewise, four independent variables such as Return on Assets (ROA), Bank size (SIZE), Dividend Payout Ratio (DPR), and Company Growth (GROWTH) were selected from bank specific.

The study has been organized in five major chapters- (i) Introduction, (ii) Literature review, (iii) Research Methodology, (iv) Results and discussion and (v) Summary and conclusion. As per the nature of study, secondary data were used to perform the

analysis of the bank specific factors. The data were collected as per the requirement study from the annual reports published on official website of selected sample banks, periodical reports of Nepal Rastra Bank, ShareSansar.com, Investopaper.com. The data comprised of five consecutive fiscal years of 2014/15 to 2018/19. As an analysis tool, descriptive statistics were used to examine the data according to the requirement of the objective of the study. Correlation analysis and regression analysis were performed to test the relationship between dependent and independent variables. The Firm value was selected as the dependent variables. Total four independent variables were chosen as explanatory variables- bank size (SIZE), company growth (GROWTH), return on assets (ROA), dividend payout ratio (DPR) were from bank specific variables.

The regression models were estimated to test the effect of bank specific factors on firm value in Nepalese commercial banks. The reveals that higher the return on assets (ROA), higher would be the firm value and it was found that the ROA had the positive and significant coefficient with firm value. The study also reveals that the bank specific independent variables have half contribution in value of Nepalese commercial banks, since their coefficients were found to be significant with firm value. However, still there are many more internal factors that affect the value of commercial banks which was expressed by regression analysis through R square values.

5.2 Conclusion

The objective of this study was to examine the factors or determinants that influence and impact on bank value/performance by defining firm value was used as dependent variable. And four variables were used as the independent variables such as: return on assets (ROA), company growth (GROWTH), dividend payout ratio (DPR) and bank size (SIZE) as the bank specific independent variables for the year 2014/15 to 2018/19. Value trend of the commercial banks as presented by firm value and profitability (ROA) has been found in downward continuously throughout the study period which shows negative impact on value of firm. Whereas company growth (GROWTH), dividend payout ratio (DPR) and bank size (SIZE) were in upward trend, the reason of this inverse and weak relationship is because of provision came through Merger and Acquisition Act 2011 and its bylaws 2015/16. Due the mandatory provision of raising paid-up capital to 8 billion, banks were unable to convert

increased fund and assets into profit in proportion. However, this will help banks to become stronger apparently.

By using the analysis tools Coefficient of Correlation test and Multiple Regression models, return on assets (ROA) and dividend payout ratio (DPR) has positive relationship with firm value. This result indicates that higher the return on assets (ROA) and dividend payout ratio (DPR), higher would be the value of the commercial banks in Nepal. However, to the small extent and uneven way, there is the influence of internal variables- company growth (GROWTH) and bank size (SIZE) as well. However, it indicates that the independent variables (dividend payout ratio, profitability, company size, company growth) can explain 59% of the variance in the performance of Nepalese commercial banks and rest with other independent variables.

5.3 Implications

Based on the findings, discussions and conclusions made in this research, it appears evident that this research could have improved its objectivity by also utilizing a qualitative research approach. The study may well provide more elaborate and contemporary evidence that is supportive to corporate managers when formulating corporate policies that are likely to increase firm value. It helps to maximize the value of the firm by understanding the factors determining firm value. This study will provide practitioners and academicians with a synopsis of the applicability of value determinants for Nepalese companies that may produce higher firm values. The limitation in this is that the firm specific factors that affect the firm value of commercial banks though they may exist could have changed the intensities in which they affect the banks. This implies that the archived data from the central bank may not be effective in modern-day firm specific factors that affect the value of the commercial banks. Therefore, future research should also focus on primary research in developing a more current analysis of the firm specific factors affecting the value of firm of Nepalese commercial banks.

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Appendix

Appendix 1

Calculation of bank specific internal variables of Himalaya Bank Ltd

Particular	Unit	Fiscal Years 2014/15	2015/16	2016/17	2017/18	2018/19
Tobin's Q= (o/s share * market share price) / total assets	%	31.55932825	66.12322479	52.51584992	37.65822819	34.60599362
ROA=Net Income After Tax / Total Assets	%	1.34	1.94	2.19	1.67	2.21
DPR=Dividend per share / Earning per share	%	42.1	31.57	26.31	15.78	22
SIZE= log (Total Assets)	no.	4.933759017	5.008867223	5.039496647	5.074555054	5.133240388
GROWTH= (Total Assetst-Total Assetst-1) / Total Assetst-1	%	13.86840112	18.87983861	7.307338604	8.407269815	14.46832657
Total Assets	in million	85853.7	102062.74	109520.81	118728.52	135906.55
o/s shares		33327000	44991450	64916235	81145294	85202558
Share price (market share value)		813	1500	886	551	552

Source: Annual report of Himalayan Bank Ltd

Appendix 2

Calculation of bank specific internal variables of Nepal Investment Bank Ltd

Particular	Unit	Fiscal Years 2014/15	2015/16	2016/17	2017/18	2018/19
Tobin's Q= (o/s share * market share price) / total assets	%	40.23105748	65.69908791	50.23036386	36.20712477	32.90363036
ROA=Net Income After Tax / Total Assets	%	1.9	2	2.1	2.13	1.79
DPR=Dividend per share / Earning per share	%	34.74	41	40	40	19
SIZE= log (Total Assets)	no.	5.045490795	5.13932318	5.21191202	5.261467665	5.30749362

GROWTH= (Total Assetst-Total Assetst-1) / Total Assetst-1	%	20.71625572	24.11731862	18.19220631	12.08710311	11.17981721
Total Assets	in million	111,043	137,823	162,897	182,586	202,999
o/s shares		63,457,007	87,066,118	106,264,357	106,455,990	128,697,491
Share price (market share value)		704	1,040	770	621	519

Source: Annual report of Nepal Investment Bank Ltd

Appendix 3

Calculation of bank specific internal variables of Nabil Bank Ltd

Particular	Unit	Fiscal Years				
		2014/15	2015/16	2016/17	2017/18	2018/19
Tobin's Q= (o/s share * market share price) / total assets	%	55.95632453	80.034427	61.140672	43.6659291	36.97487034
ROA=Net Income After Tax / Total Assets	%	2.06	2.32	2.69	2.61	2.11
DPR	%	36.84	45	48	34	34
SIZE= log (Total Assets)	no.	5.096386807	5.14397462	5.187745	5.22954693	5.28999706
GROWTH= (Total Assetst-Total Assetst-1) / Total Assetst-1	%	33.15817036	11.5803748	10.603884	10.1037029	14.9344266
Total Assets	in million	124,849.50	139,307.54	154,079.55	169,647.29	194,983.14
o/s shares		36,576,540	47,565,696	61,855,070	80,432,210	90,118,454
Share price (market share value)		1,910	2,344	1,523	921	800

Source: Annual report of Nabil Bank Ltd

Appendix 4

Calculation of bank specific internal variables of Everest Bank Ltd

Particular	Unit	Fiscal Years				
		2014/15	2015/16	2016/17	2017/18	2018/19
Tobin's Q= (o/s share * market share price) / total assets	%	42.75399737	77.2042807	52.62421013	36.43954205	30.0001322
ROA=Net Income After Tax / Total Assets	%	1.85	1.59	1.83	1.97	1.94
DPR=Dividend per share / Earning per share	%	36.57	73.67	34.74	20	25
SIZE= log (Total Assets)	no.	5.000148503	5.06065003	5.065867717	5.164486485	5.250896928
GROWTH= (Total Assetst-Total Assetst-1) / Total Assetst-1	%	39.99764884	14.9480278	1.208663493	25.49278789	22.0142185
Total Assets	in million	100034.2	114987.34	116377.15	146044.93	178195.58
o/s shares		20173877	26226041	45264269	80268633	80268633
Share price (market share value)		2120	3385	1353	663	666

Source: Annual report of Everest Bank Ltd

Appendix 5

Calculation of bank specific internal variables of Prime Commercial Bank Ltd

Particular	Unit	Fiscal Years				
		2014/15	2015/16	2016/17	2017/18	2018/19
Tobin's Q= (o/s share * market share price) / total assets	%	53.87452787	40.46450785	32.798722	27.74911201	13.24251076
ROA=Net Income After Tax / Total Assets	%	2.15	1.82	1.89	2.05	1.63
DPR=Dividend per share / Earning per share	%	16	16	27	17.25	18.95
SIZE= log (Total Assets)	no.	4.682013233	4.75570156	4.909515379	4.998308695	5.032978013

GROWTH= (Total Assetst-Total Assetst-1) / Total Assetst-1	%	20.31456423	18.49180832	42.49965688	22.68552229	8.310190047
Total Assets	in million	48,085	56,977	81,192	99,611	107,889
o/s shares		93,186,267	80,332,989	63,254,322	37,052,623	31,400,528
Share price (market share value)		278	287	421	746	455

Source: Annual report of Prime Commercial Bank Ltd

Appendix 6

Descriptive data of sample banks

S.N	CODE	YEAR	DPR	ROA	SIZE	GROWTH	TobinQ
1	HBL	2015	42.1	1.34	4.93	13.87	31.56
2	HBL	2016	31.57	1.94	5.01	18.88	66.12
3	HBL	2017	26.31	2.19	5.04	7.31	51.51
4	HBL	2018	15.78	1.67	5.07	8.41	37.66
5	HBL	2019	22	2.21	5.13	14.47	34.6
6	NIBL	2015	34.74	1.9	5.04	20.72	40.23
7	NIBL	2016	41	2	5.14	24.12	65.7
8	NIBL	2017	40	2.1	5.21	18.19	50.23
9	NIBL	2018	40	2.13	5.26	12.09	36.21
10	NIBL	2019	19	1.79	5.3	11.8	32.9
11	NABIL	2015	36.84	2.06	5.1	33.16	55.96
12	NABIL	2016	45	2.32	5.14	11.58	80.03
13	NABIL	2017	48	2.69	5.18	10.6	61.14
14	NABIL	2018	34	2.61	5.23	10.1	43.66
15	NABIL	2019	34	2.11	5.29	14.93	36.97
16	EBL	2015	36.57	1.85	5	40	42.75
17	EBL	2016	73.67	1.59	5.06	14.95	77.2
18	EBL	2017	34.74	1.83	5.06	1.21	52.62

19	EBL	2018	20	1.97	5.16	25.49	36.44
20	EBL	2019	25	1.94	5.25	22.01	30
21	PCBL	2015	16	2.15	4.68	20.31	53.86
22	PCBL	2016	16	1.82	4.75	18.49	40.46
23	PCBL	2017	27	1.89	4.91	42.5	32.8
24	PCBL	2018	17.25	2.05	5	22.68	27.75
25	PCBL	2019	18.95	1.63	5.03	8.31	13.24

Appendix 7

Result of hypothesis test

Hypothesis	Results	Tools	Significance level
H1: Dividend Policy (DPR) has positive effect of firm value in financial sector companies in the period 2015- 2019.	Accepted	Regression	0.001
H2: There is significant correlation between Dividend Policy (DPR) and firm value in financial sector companies in the period 2015- 2019.	Accepted	Correlation	0.000
H3: Profitability (ROA) has positive effect of firm value in financial sector companies in the period 2015- 2019.	Accepted	Regression	0.001
H4: There is significant correlation between Profitability (ROA) and firm value in financial sector companies in the period 2015- 2019.	Rejected	Correlation	0.144
H5: Company Size (SIZE) has positive effect to the firm value in financial sector companies in the period 2015- 2019.	Rejected	Regression	0.001
H6: There is significant correlation between Company Size (SIZE) and firm value in financial sector companies in the period 2015- 2019.	Rejected	Correlation	0.929
H7: Company growth (GROWTH) has positive effect on firm value in financial sector companies in the period 2015- 2019.	Rejected	Regression	0.001

H8: There is significant correlation between Company Growth (GROWTH) and firm value in financial sector companies in the period 2015- 2019.	Rejected	Correlation	0.761