IMPACT OF TAXATION, LEVERAGE, GROWTH AND PROFITABILITY ON DIVIDEND POLICY OF NEPALESE COMMERCIAL BANKS

A Dissertation submitted to the Office of the Dean, Faculty of Management in partial fulfillment of the requirements for the Master's Degree

by

Ramchandra Adhikari
Campus Roll No.270/074
Exam Roll No. 5063/18
Registration No.: 7-2-31-763-2013
Public Youth Campus

Kathmandu, Nepal
December, 2021

TRIBHUVAN UNIVERSITY
Faculty of Management
Public Youth Campus
Tel: 4251025, E-mail: info@pyc.edu.np
Dhobichaur, Kathmandu, Nepal.

Ref.No..... Date:.....

For Thesis/Project Report Only

RECOMMENDATION

This is to certify that the dissertation

Submitted by

Ramchandra Adhikari

Entitled

IMPACT OF TAXATION, LEVERAGE, GROWTH AND PROFITABILITY ON DIVIDEND POLICY OF NEPALESE COMMERCIAL BANKS

Has been prepared as approved by this department in the prescribed format of faculty of management. This dissertation is forwarded for evaluation.

.....……....	.....……....
Sagar Das Ranjit	Assot. Prof. Jeetendra Dangol, Phd
Thesis Supervisor	**Head, Research Committee**

.....

Bala Ram Thapa

Campus Chief

CERTIFICATION OF AUTHORSHIP

I hereby corroborate that I have researched and submitted the final draft of dissertation entitled **"IMPACT OF TAXATION, LEVERAGE, GROWTH AND PROFITABILITY ON DIVIDEND POLICY OF NEPALESE COMMERCIAL BANKS".** The work of this dissertation has not been submitted previously for the purpose of conferral of any degrees nor has it 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.

……..

Ramchandra Adhikari

Date:…….

TRIBHUVAN UNIVERSITY
Faculty of Management
Public Youth Campus
Tel: 4251025, E-mail: info@pyc.edu.np
Dhobichaur, Kathmandu, Nepal.

Ref.No..... Date:.....

For Thesis/Project Report Only

Report of Research Committee

Mr. Ramchandra Adhikari has defended research proposal entitled **"IMPACT OF TAXATION, LEVERAGE, GROWTH AND PROFITABILITY ON DIVIDEND POLICY OF 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.

……..

Sagar Das Ranjit. **Dissertation Proposal Defended Date:**

Supervisor

…….

Sagar Das Ranjit**.** **Dissertation Submitted Date:**

Supervisor

……..

Jeetendra Dangol, PhD **Dissertation Viva Voice Date:**

Head of Research Committee

TRIBHUVAN UNIVERSITY
Faculty of Management
Public Youth Campus
Tel: 4251025, E-mail: info@pyc.edu.np
Dhobichaur, Kathmandu, Nepal.

Ref.No..... Date:.....

For Thesis/Project Report Only

Approval Sheet

We have examined the dissertation entitled **"IMPACT OF TAXATION, LEVERAGE, GROWTH AND PROFITABILITY ON DIVIDEND POLICY OF NEPALESE COMMERCIAL BANKS"** Presented by **Ramchandra Adhikari** a candidate for the degree of **Master of Business Studies** (MBS). 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 taxation, leverage, growth and profitability on dividend policy of Nepalese commercial banks"** has been conducted to satisfy the partial requirements for the degree of Master in Business Studies, Tribhuban University.

First and foremost, I offer my sincerest gratitude to my supervisor, Mr. Sagar Das Ranjit, professor of Public Youth Campus, for his valuable supervision and guidance in completing this study. I am ineffably indebted and very thankful for his continuous support and constructive suggestions for finalization of this research project.

Furthermore, I would like to express my deepest appreciation for Pro. Dr. Jeetendra Dangol, head of research committee of Public Youth Campus, for valuable suggestions, inspirations and guidance during study period. I would also like to thank Public Youth Campus for providing the resources for research work and providing library and computing support without which knowledge and assistance of this study would have not been successful. At last, I would also like to thank my parents, family, relatives, friends and all those who helped me during the research work. However, I accept the sole responsibility for any errors and discrepancies that might have occurred in this report.

Ramchandra Adhikari
December, 2021

Table of contents

List of tables

List of figures

List of abbreviations

ADBL	Agricultural Development Bank Limited
BOKL	Bank of Kathmandu Limited
BS	Bank Size
CBIL	Citizens Bank International Limited
CBL	Civil Bank Limited
DIVA	Proposed Dividend
DYR	Dividend Yield Ratio
EBL	Everest Bank Limited
GIBL	Global IME Bank Limited
GO	Growth Opportunities
HBL	Himalayan Bank Limited
LEV	Leverage
MBL	Machhapuchchhre Bank Limited
MBNL	Mega Bank Nepal Limited
NABIL	Nabil Bank Limited
NBBL	Nepal Bangladesh Bank Limited
NIBL	Nepal Investment Bank Limited
NICA	NIC Asia Bank Limited
NMBL	NMB Bank Limited
NSBL	Nepal SBI Bank Limited
PCBL	Prime Commercial Bank Limited
PRABHU	Prabhu Bank Nepal Limited
ROA	Return on assets
SANIMA	Sanima Bank Limited
SBL	Siddhartha Bank Limited
SCBL	Standard Chartered Bank Nepal Limited
SRBL	Sunrise Bank Limited
TAX	Taxation

Abstracts

Dividend policy refers to the proportion of earnings distributed as a dividend and the rest kept for further investment i.e. retained earnings. Dividend policy is a strategy used by a company to determine the amount and timing of dividend payments.

The major objective of this study is to examine the impact of taxation, leverage, growth and profitability on dividend policy of Nepalese commercial banks. Besides the major objectives, the specific objectives of this study is to determine the relationship between taxation, leverage, growth, profitability and bank size on dividend yield ratio and proposed dividend.

The study is based on the secondary data which are gathered for 21 commercial banks in Nepal for the period of 8 years from 2012/13 to 2019/20. The secondary data and information have been collected from the annual reports of selected commercial banks, banking and financial statistics, NEPSE annual report and bank supervision report published by Nepal Rastra Bank. The research design adopted in this study is descriptive and causal comparative research design.

The major finding of the study is that, the correlation analysis reveals taxation, growth, profitability and bank size is positively related to dividend yield ratio and proposed dividend. Similarly, the result also shows that leverage is positively related to dividend yield ratio and negatively related to proposed dividend. The regression analysis reveals that taxation, growth, profitability and bank size has the positive beta coefficient. It means positive and a significant impact on the dividend yield ratio and purposed dividend. Similarly, leverage has a positive beta coefficient to dividend yield ratio and negative beta coefficient to purposed dividend. It means positive and a significant impact on dividend yield ratio and negative and a significant impact on purposed dividend.

The major conclusion of the study is that taxation, leverage, growth, return on assets and bank size influence dividend yield ratio and proposed dividend. Of these factors, return on assets is the most important factor.

The Implications have been forwarded that the banks are recommended to increase their total assets, market to book ratio, return on assets and should decrease their debt to equity ratio to increase dividend yield ratio.

Chapter I

Introduction

1.1 General background

Dividend policy refers to the proportion of earnings distributed as a dividend and the rest kept for further investment i.e. retained earnings. Dividend policy is a strategy used by a company to determine the amount and timing of dividend payments. The dividend policy framed by an organization is one of the crucial issues in corporate finance. The key objective of a firm is to determine the dividend policy that will maximize the market price of the shares of the firm. Financial management is mainly concerned with the raising of funds, minimizing the cost of capital and allocating the funds in long term investment. It involves capital budgeting decision. The next important decision is dividend decision (Kandpal & Kavidayal, 2015).

Dividend policy remains one of the most debatable matters in corporate finance. Financial economists have engaged in designing and investigate corporate dividend policy. Dividend policy is of two types; one is managed second is residual. In residual dividend policy, dividend is paid cash left after the firm makes attractive investments using net present value basis. The manager must apply managed dividend policy if investors are satisfied and it reflects in share price. According to Gill *et al.,* (2010), dividend payout is crucial to existing and potential investors as dividends will predict the financial health of the company.

The majority of managers set themselves some long-term coefficient-objective for the distribution of dividends in relation to the profits of the period (target payout ratio). But they do not mechanically apply this ratio to each year's profits as they try to avoid brusque fluctuations which could provoke movements in investors' positions in imperfect markets. Although there are many studies which analyzed companies' dividend policy, they are inconclusive. Nowadays the existence or lack of an optimum decision on the distribution of dividends is a puzzle whose pieces do not fit together perfectly. The importance of the problem lies in discovering the level of distribution of dividends which permits equilibrium between the internal resources, the company needs to finance part of its investments and the interests of shareholders (Esteban & de Foronda Perez, 2001).

Dividend policy means some kind of consistent approach to the distribution versus retention decision rather than making the decision on the purely ad-doc basis from period. So, what and how much it is desirable to pay dividend is always a controversial topic because shareholders always expect higher dividend, but the firm ensures towards setting aside funds for maximizing the shareholders wealth (Dickens *et al.,* 2002). The residual theory views dividend as payout to shareholders from the residual amount or left after all acceptable investment opportunities have been undertaken (Gitman, 2001).

The profitability of a firm determines what dividend policy is going to be adopted. The dividend policy determines the share of earnings to be given to be shareholders by dividend and retained profits to be ploughed to business (Arumba, 2014). Payment of dividends by firms is a key indicator of financial strength, future stability and growth potential. Dividends do have an impact on investor's tax liability but it does not change the taxes that they have to pay no matter they receive dividend or capital gains (Brealey *et al.,* 1995). Michaely and Roberts (2011) suggested that the scrutiny of public capital markets, ownership structure and incentives altogether play key roles in shaping firm dividend policy.

Miller and Modigliani (1961) stated that in perfect market conditions, the value of the firm is not dependent on dividend decisions. It depends on the firm's present and future earnings (Black & Scholes, 1974; Miller & Scholes, 1982). Bhattacharya (1979) supported signaling theory which states that, under information asymmetry, dividend announcement plays an important role in communicating information related to the future of the firm.

Distortions caused by taxation and other factors increasing the imperfectness of markets may make dividend payout a very crucial financial decision. Shareholders with a high marginal tax rate are content with a lower rate of return on investment than shareholder's with a low marginal tax rate. Abstaining from or postponing dividend payout may thus cause costs to a firm, the scale of which will depend on the shareholders' marginal tax rates. Therefore, firms following different dividend policies will form different 'clienteles' (groups of shareholders). A change in dividend policy may result in changes in the structure of ownership. The higher an investor's

marginal tax rate, the more likely he will want the firm to reinvest its profits rather than distributing dividends (Brav *et al.,* 2003).

Berzins *et al*. (2019) concluded that the causal effect of taxes on dividends is strongly moderated by the relationship between agency costs and dividends. In particular, the study showed that dividend depends on the tradeoff between an important cost of dividend payments and an important benefit. Chuang Chen *et al.* (2018) showed that the dividend payout ratios decreased after the tax reform was reduced, indicating that companies used this tax reform to enact tax planning for stockholders. Nnadi and Akpomi (2005) found a significant correlation between taxes and dividend structure of the banks and also suggested that profit was a major variable in the formation of dividend policy of the organizations. Bell and Jenkinson (2002) confirmed significant changes in the valuation of dividend income after the reform, in particular for high-yielding companies. Rizqia and Sumiati (2013) examined and analyzed the effect of managerial ownership, financial leverage, profitability, firm size, and investment opportunity on dividend policy. The study analyzed the effect of all that variables on firm value which showed that managerial ownership and investment opportunity effect on dividend policy, while financial leverage, profitability, and firm size has no effect on dividend policy.

Casey *et al.* (1999) argued that higher the forecasted revenue growth, the lower the dividend ratio, assuming maintenance of a target capital structure. Fama and French (2001) found that the firms with many investments become much less likely to pay dividends after 1978, but dividends also become less likely among firms with fewer investments. Mui and Mustapha (2016) surprisingly showed a significant positive relationship between the two variables which suggested that the companies with a positive growth opportunity preferred to pay dividends.

Nyandumo (2016) concluded that the correlation analysis showed dividend policy is positively correlated with profitability as shown by the correlation coefficient of 0.4263. Ahmed (2015) examined the impact of liquidity and profitability on the dividend policy and argued that the dividend payout ratio has a significant and positive correlation with liquidity but negative and insignificant correlation with profitability. Gunawan *et al.* (2018) showed that the capital structure, dividend policy, company size, profitability and liquidity had a significant positive effect on firm

value. According to McCabe (2011), companies with consistent high profit levels tend to pay high dividends to the shareholders.

Patra *et al.* (2012) examined the determinants of corporate dividend policy and found that the size, profitability and liquidity factors increased the probability to pay dividends. Uwuigbe *et al.* (2012) revealed that ownership structure and firm's size has a significant impact of the dividend payout of firms. Firm size tend to have a significant positive impact on firms dividend payout ratio since larger firms have better access to the capital markets and also can easily raise funds at lower cost.

Al-Malkawi (2008) examined corporate dividend decisions of publicly traded companies which concluded that factors such as size, profitability, and age increase the likelihood to pay dividends which shows the positive impact on dividend. Financial leverage decreased the probability to pay dividends. Adhikari (2015) showed a positive relationship between profitability and payout in the entire sample. Mandandhar (1998) found a positive relationship between dividends and market capitalization. Dividend per share and return on equity has positive impact on the market capitalization, while earnings per share, price earnings ratio have negative impact on dividend yield.

Higgins (1972) argued that payout ratio is negatively related to a firm's need for funds to finance growth opportunities. Amidu and Abor (2006) found a positive relationship between corporate profitability and dividend payout ratios. Similarly, the study found a negative relationship between market-to-book ratio and dividend payout ratio. Anil and Kapoor (2008) indicated that profitability has always been considered as a primary indicator of dividend payout ratio.

Swamy and Rao (1975), Dhameja (1978), and Khurana (1985) corroborated that there is an impact of investment demand on dividend payout. Khurana (1985) argued that liquidity position of the enterprise is an important determinant of dividend policy. Nigam and Joshi (1962) showed that higher the level of profits as a percentage of paid-up capital, the higher the rate of dividend record. The study implied that investment demand, cash flow, lagged dividend, liquidity, and net profits are the determinants of dividend payout.

In the context of Nepal, the appreciation in the market value of share provides an adequate sense of protection to shareholders (Shrestha, 1992). According to the Adhikari (2015), the dividend policy of an enterprise tends to depend on net profits, total assets, lagged dividends, liquidity, risk, investment opportunity set, and number of shareholders. The primary aim of a company is to grow and maximize the shareholders' wealth besides profit motive (Pandey, 2015). Investors in underdeveloped countries like Nepal mostly took at the profitability of the firm while purchasing equity shares from the secondary market. Since dividend aid to the shareholders is one of the best indicators of profitability, it is generally believed that dividend plays a crucial role in determining market price of the corporate share (Khadka, 2012).

Firms that perform better than others have higher stock prices and can raise additional funds (both debt and equity) in more favorable terms. Therefore, it is important to identify the factors that determine the market price of equity shares of any organization. Financial institutions, including commercial banks in Nepal, are the institutions that mobilize monetary resources in the society. During 1990s along with the economic liberalization in Nepal many joint venture banks were established in the private sector, which mandatorily subscribed shares widely to the general public. Commercial banks appeared as the most profitable business and therefore in the beginning the price of shares of commercial banks continuously went up. However, the stock market had been much volatile in Nepal during the last decade because of internal conflict, political instability, poor corporate governance, and various other reasons (Dhungel, 2013). The stock market of Nepal is still in infancy having an expansionary growth in the recent years. A comprehensive study of dividend practices of commercial banks of Nepal taking a time series data for a considerable period is strength of the study. Time series analysis can only explain the plausible relationship between dividend practices and financial indicators (Bhandari & Pokharel, 2012).

The above discussion shows that the studies dealing with determinants of dividend policy are of greater significance. Though there are these findings in the context of different countries, no such findings using more recent data exist in the context of Nepal. Hence, this study attempts to analyze the relationship between different dependent and independent variables in Nepalese commercial banks.

1.2 Problem statement

The term commercial bank comes from commerce. Commerce is the financial transaction related to selling and buying activities of goods and services. Therefore, commercial banks are those banks, which work from commercial viewpoint. Dividends follow economic trend in positive direction and information disclosure practice of the listed enterprises is poor. The most important motive of paying stock dividends is to increase the equity capital base of the enterprise and stock dividend announcement is the most preferred corporate event.

Lintner (1956) indicated that dividends represent the primary and active decision variable in most situations. The study showed that dividend decision is based upon the current profitability and in part on the dividends of the previous year. Since then there has been an on-going debate on dividend policy and the results are mixed. Hassan *et al.* (2013) concluded that the firm size and profitability are positively related to the dividend payout policy. However, the study showed the insignificant relationship between the tax shield and leverage on the dividend payout policy.

Gordon (1959) explained that the discounted value of near future dividends is higher than the present value of distant dividends. The study argued that the dividends to be received in future have much uncertainty as compared to the dividends in the near future. Since, the shareholders would prefer certain returns; the stock prices would be higher for the dividend paying stocks as compared to the companies paying lesser dividends.

In 1961, Miller and Modigliani came up with the dividend irrelevance theory in a perfect market, without taxes and transaction costs. MM argued that the dividend decision has no impact on the value of the firm so it is an irrelevant decision. The capital gains would be equivalent to dividends in a perfect market without tax considerations or attached transaction costs. The MM theory states that shareholder wealth will remain unaffected by dividend policy in that without tax as a consideration, investors place equal weight in receiving returns as dividends or capital gains as long as the firm's investment policy is not affected by dividend policy (Shapiro, 1990).

Pettit (1977) studied the clientele effect of dividends. Retired investors and pension funds, for example, tend to prefer cash income and may therefore want the firm to pay out a high percentage of its earnings. On the other hand, shareholders in their peak earning years prefer the reinvestment of cash and low dividend payments. Similarly, Kania (2005) found the impact of profitability, growth, risk, liquidity and expansion on the dividend decision policy of a corporation. The study concluded that the dividend payout ratio is significantly affected by the profitability (return on equity), growth (sales growth), risk (beta), liquidity (current ratio), control (insider ownership) and expansion (growth in capital spending).

Fama and French (2001) empirically analyzed the importance of firm size, profitability and growth opportunities in the firm's decision to pay dividends. Booth and Cleary (2001) indicated that a firm's dividend policy is affected by profitability, size, debt, risk, tangibility and growth. Likewise, Ho (2003) conducted a comparative study of dividend policies. The study supported the agency, signaling and transactions cost theories of dividend policy. The study concluded that out of all the regressed variables of profitability, size, liquidity, leverage, risk, asset mix and growth, the dividend policies are affected positively by size in Australia and liquidity in Japan and negatively by risk in Japan only. An industry effect was also found to be significant in both Australia and Japan which indicated the importance of the industry in which a firm competes.

Gill *et al*. (2010) analyzed the American service and manufacturing firms and found that the dividend payout ratio is a function of profit margin, sales growth, debt-to-equity ratio and tax. For the services industry, the dividend payout ratio is a function of profit margin, sales growth, and debt-to-equity ratio. For manufacturing firms, the dividend payout ratio is a function of profit margin, tax and market-to-book ratio.

Debt-to-equity is has a negative and associated, however, the past investment opportunities are positively associated with dividend payout policy (Balachandran *et al.,* 2017). The study also found that the leverage ratio was significantly and positively related to the decision to pay a dividend. However, the study found a significant and negative relation with the payout ratio, indicating that firms with higher leverage pay dividends but at lower levels to protect bondholders' wealth.

Ahmed and Javid (2009) found out the determinants of dividend payout policy of non-financial firms listed in the Karachi Stock Exchange during the period of 2001 to 2006. The study supported Linter's policy. The study clearly demonstrated that the firms rely on both current earnings per share and past dividend per share to set their dividend payments. The profitability, market liquidity and ownership have positive impacts on the dividend payout whereas market capitalization and size of the firms have negative impact on dividend payout policy which clearly showed that the firms preferred to invest in their assets rather than pay dividends to shareholders.

Dividend related factors were examined that could be relied upon while determining the value of the firm. The results indicated that growth firms had significantly lower dividend yields than non-growth firms. It indicated that changes in dividend policy played a role in explaining firm stock returns especially of the growth firms (Foong *et al.,* 2007). A signaling model explored the complex relationship between the "Dividends, managerial incentives and firm value". The study considered a dual role for dividends. Dividends provided a signal of current income and also affected the firm's ability to invest in a new project (Fairchild, 2010).

The probability of increase in future value of firm decreases exponentially with the increase in leverage whereas, it increases with the rise in profitability of the firm. Shareholders did influence the dividend policy and companies with high level of the largest shareholding had higher dividend payouts (Ramli, 2010). Theories of behavioral biases suggested that dividends were an efficient way to consume capital gains and avoid the mental costs associated with selling stock. Social-based theories on the other hand, proposed that dividends became a signal of firm stability and a tool for valuation to many investors, and thus there was a demand for dividends by investors and pressure on firms to distribute them (David, 2010).

In the context of Nepal, Manandhar (1998) found that dividend per share and return on equity have positive impact on market capitalization while earning per share, price earnings ratio and dividend yield have negative impact. It also found a positive relationship between dividends and market capitalization. Dividend payment is more important as opposed to retained earnings in Nepal. Despite more than four decades of planned development, the Nepalese economy is persistently suffering from general

poverty and stagnation. Because of internal conflict of this country, resource mobilization is still poor which doesn't meet the growing expenditure of nation.

Commercial banks have to try their best to induce Nepalese people to save and deposit their savings in banks and to utilize such deposits to the maximum possible extent. There are also some problems in collection of income tax from joint venture banks. Some joint venture banks have appealed to revenue tribunal from time to time. It showed that there are some weaknesses in tax assessment of such joint venture banks. There are differences in financial position of high dividend paying and low dividend paying companies. The study revealed that there is a positive relationship between dividends and stock prices. Further, the coefficient of dividends was found to be higher as compared to the coefficient of retained earnings (Chhetri, 2008).

The problems of the dual income taxation system consist in the large gap between the highest marginal tax rates on earned income and the capital income tax rate as well as the formulaic division of business income and dividends from small limited firms into earned income and capital income. When capital income is taxed more lightly than earned income, the system encourages the conversion of earned income into capital income, such as dividends or capital gains the amount of taxes paid by a taxpayer depends not only on their total income but also on the allocation of income to capital and earned income. The customary strong dividends effect and a very weak retained earning effect indicating the attractiveness of dividends among Nepalese investors. The findings of the study suggested that Nepalese stock market has not started recognizing the impact of retained earnings (Pradhan, 2003).

A great deal of interest has been attached to the impacts of dual income taxation on firms' investment behavior, financial decisions and the position of different organizational forms. Firms' tax-based investment incentives are due to the distribution model in the dual income taxation scheme. When the capital income proportion is calculated on the basis of the net wealth of a firm, an incentive emerges for shareholders to invest more assets generating net wealth in the firm. It was also analyzed that dividend per share has greater effect on stock prices than retained earnings per share. Both dividend and retained earnings per share effect stock prices of banking and non-banking sector (Joshi, 2011).

The above discussion shows that empirical evidences are not consistent. Therefore, in order to support one view or the other, there is a need to conduct this study. Hence, this study deals with the following issues in the context of the impact of taxation and profitability on the dividend yield ratio and proposed dividend in Nepal:

1. What is the structure and pattern of dividend yield ratio and proposed dividend in the case of Nepalese commercial banks? How have they changed over the study period?
2. What is the structure and pattern of taxation, leverage, growth, profitability and bank size? How have they changed over the study period?
3. Is there any correlation of taxation, leverage, growth, profitability and bank size with dividend yield ratio and proposed dividend of Nepalese commercial banks?
4. What is the influence of taxation, leverage, growth, profitability and bank size on dividend yield ratio and proposed dividend?

1.3 Objectives of the study

The major objective of this study is to examine the impact of taxation, leverage, growth, profitability and bank size on dividend yield ratio and proposed dividend in the Nepalese commercial banks. The specific objectives of this study are:

1. To analyze the structure and pattern of dependent variables (dividend yield ratio and proposed dividend) and independent variables (taxation, leverage, growth, profitability and bank size).
2. To determine the relationship between taxation, leverage, growth, profitability and bank size on dividend yield ratio and proposed dividend in Nepalese commercial banks.
3. To analyze the impact of taxation, leverage, growth, profitability and bank size on dividend yield ratio and proposed dividend.
4. To identify the most significant factor affecting the dividend yield ratio and proposed dividend of the Nepalese commercial banks.

1.4 Hypotheses of the study

This section deals with the hypotheses of the variables that have been used in this study. To find out the impact of taxation, leverage, growth and profitability on

dividend policy of Nepalese commercial banks, the study has used dividend yield and proposed dividend as the dependent variables while taxation, leverage, growth, profitability and bank size are used as independent variables. The Hypotheses of the study are as following:

Taxation (TAX)

Arif and Akbar (2013) showed that profitability, size and investment opportunities are positively related, whereas taxation is negatively related to dividend policy. Masulis and Trueman (1988) identified that the taxes affect organizational corporate dividend policy. The study further explained that the changes in income tax policy by the government would influence corporate dividend payout (Wu, 1996). However, such findings are not applicable in the banking industry. Linter (1956) asserted that the major determinants of dividend policy are the anticipated level of future earnings and the pattern of past dividend. Tax had a marginal effect on dividend policy (Baker *et al*., 2001). Litzenberger and Ramaswamy (1979) showed that taxes and dividends has positive relationship. Based on it, the study develops the following hypothesis:

H_1: There is a positive relationship between taxation and dividend policy.

Leverage (LEV)

The empirical evidence regarding the relationship of leverage with dividend payout is mixed. The higher the leverage of the firm the lower is the dividend payout; this could be because of the debt covenants. Nizar Al-Malkawi (2007) confirmed that the firm's financial leverage is significantly and negatively related to its dividend policy, whereas Kania (2005) have found a significant positive relationship, bringing out the fact that the firms have higher debt funds to pay off dividends. Rizqia and Sumiati (2013) found that managerial ownership, financial leverage, profitability, firm size, investment opportunity, and dividend policy affect firm value. Based on it, the study develops the following hypothesis:

H_2: There is a negative relationship between leverage and dividend policy.

Growth

Mui and Mustapha (2016) indicated that growth opportunity, liquidity and firm size significantly influence the dividend policy of the firm. The study result showed a significant positive relationship between the two variables which suggested that the

companies with a positive investment opportunity preferred to pay dividends. Based on it, the study develops the following hypothesis:

H_3: There is a positive relationship between growth opportunities and dividend policy.

Return on assets (ROA)

Similarly, Kania (2005) found that the higher the return on equity, the greater is the firm's retained earnings for reinvestment or the lower is the dividend payout. Profitable firms with more stable net earnings can afford larger free cash flows and therefore pay larger dividends. The higher profitable firms pay higher dividends. Aivazian *et al.* (2003), and Li and Lie (2006) indicated that firms are more likely to raise their dividends if they are large and profitable. Based on it, the study develops the following hypothesis:

H_4: There is a positive relationship between ROA and dividend policy.

Bank size

Rajan and Zingales (1995) stated that larger firms tend to be more diversified than smaller firms, therefore less prone to the risk of bankruptcy. Harris and Ravivs (1990), Rajan and Zingales (1995), and Boot and cleary (2001) showed a positive relationship between company size and dividend. Based on it, the study develops the following hypothesis:

H_5: There is a positive relationship between bank size and dividend policy.

1.5 Rationale of the study

Dividend policy is about the decision of the management regarding distribution of profits as dividends. This policy is probably the most important single area of decision making for finance manager. Action taken by the management in this area affects growth rate of the firm, its credit standing, share prices and ultimately the overall value of the firm. Erroneous dividend policy may plunge the firm in financial predicament and capital structure of the firm may turn out unbalanced. Progress of the firm may be hamstrung owing to insufficiency of resources which may result in fall in earnings per share. Stock market is very likely to react to this development and share

prices may tend to sag leading to decline in total value of the firm. Extreme care and prudence on the part of the policy framers is, therefore, necessary.

If strict dividend policy is formulated to retain larger share of earnings, sufficiently larger resources would be available to the firm for its growth and modernization purposes. This will give rise to business earnings. In view of improved earning position and robust financial health of the enterprise, the value of shares will increase and a capital gain will result. Thus, shareholders earn capital gain in lieu of dividend income; the former in the long run while the latter in the short run. The reverse holds true if liberal dividend policy is followed to pay out high dividends to share-holders. As a result of this, the stockholders' dividend earnings will increase but possibility of earning capital gains is reduced.

Investors desirous of immediate income will greatly value shares with high dividend. The stock market may, therefore, respond to this development and the value of shares may soar. Thus, it is evident that in retention of earnings lies capital gain while distribution of income increases dividend earnings. Owing to varying notions and attitudes of shareholders due to differences with respect to age, sex, tax bracket, security, income habits, preferences and responsibilities, some are primarily concerned with the short run returns, others think in terms of long range returns; still others seek a portfolio which balances their expectations overtime.

The findings of this study will redound to the benefit of commercial banks considering that dividend policy plays an important role in Banking and Financial Institutions today. The greater demand for higher dividend paying BFIs justifies the need for more effective and efficient dividend paying approach. Thus, commercial banks that apply the recommended approach derived from the results of this study will be able to pay higher dividend to their shareholders. The study will help the commercial banks to uncover critical areas in distribution of the dividend that many researchers were not able to explore. Moreover, the study is beneficial for policy makers, shareholders and management in setting and making a viable dividend policy. The study helps to explain various factors affecting dividend policies of banks in Nepal. Further, the study provides valuable findings for further researchers in this area. Moreover, the study is worthwhile for making investment decisions.

The study will enhance the proper understanding of the intricacies of the dividend theories and the effects of their application on the organizations. Past findings and contributions to the subject have made inroads to shaping and providing a better understanding of how companies should view and any policy relating or affecting their dividend. Hence, the study is yet another contribution to the existing literature in the study of dividend policy.

1.6 Limitations of the study

Although the research reached at meaningful conclusion from the study, there are some unavoidable limitations. Every study has limitations due to diverse factors of institutions, study period, reliability of statistical data, tools, techniques and variances. Following are the key limitations of this study:

1. The data of some of the banks could not be collected from the reliable and related sources therefore, the data on such fiscal year has been excluded from calculations and average has been taken from the available data only.
2. There are all together 27 commercial banks operating in the country, only 21 commercial banks are taken for the observation period of 2012/13 to 2019/20, leading to only 168 total observation.
3. In attaining its objective, the study was limited to 21 commercial banks in Nepal. Micro finance institutions, development bank and insurance companies were excluded since their operation is different from the one of commercial banks. The study could not therefore incorporate the impact on these of companies.
4. There are other various models to analyze the collected data but only regression model is used to analyze the panel data to examine the effect of taxation, leverage, growth, profitability and bank size on dividend policy.
5. Bank specific variables used in the study are taxation, leverage, growth, profitability and bank size. The study has excluded some other bank specific variables like return on equity, liquidity, market price per share, managerial ownership, capital gain tax, etc.
6. The study is based on the assumption of linear relationship between dependent and independent variables. Thus, this study has not considered the non-

linearity biases those are normally characterized in markets of emerging countries.

7. The findings of the study are only based on the banking sector so it could not be generalized to manufacturing and trading enterprises.

1.7 Chapter plan

The study is organized into a total of five chapters. Chapter one contains general background of the study including statement of the problem, objective of the study, hypothesis of study, rationale of the study, limitations of study and chapter plan. The chapter two consist theoretical review of literatures, empirical review with review of journal articles, previous thesis and summary of article and thesis related to taxation, leverage, growth, profitability and bank size. This chapter ends up with research gap. The chapter three covers the research design, population sample and sampling design, nature and sources of data, data collection procedure and instrument, data processing procedure and data analysis method with models used for data analysis. This chapter ends up with research framework and definition of variables. The chapter four focuses on the systematic presentation, analysis and discussion of data. The chapter five provides summary of overview on all works that carried out in chapter one through four including major conclusions. This chapter also includes a separate section for recommendations and scope for future study based on major findings of the study and bibliography and appendices are also presented at the end of the study.

Chapter II

Literature Review

2.1 Introduction

This chapter deals with review of empirical studies associated with impact of taxation, profitability, growth and leverage on dividend policy. It is divided into three sections. First section is theoretical review of related literature which provides description of the literature that have been carried out previously in context of both the developed and the underdeveloped countries regarding the banks specific factors and the performance of the banks. Second section presents the empirical review on which Review of journal articles, review of previous theses and summary of articles and theses are include. Now finally the third section presents research gap of the study. The details about these sections deal in the following chapter.

2.2 Theoretical review

This chapter deals with defines the key concept of the research. There are various researches that conducted on the topic of impact of taxation, leverage, growth and profitability on dividend policy. Theoretical review helps to focus on the research theoretical concept and theory based on impact of taxation, leverage, growth and profitability on dividend policy. There are some theoretical reviews as follows.

2.2.1 A Theory of Dividends Based on Tax Clienteles

Allen and Welch (2000) explained why some firms prefer to pay dividends rather than repurchase shares. When institutional investors are relatively less taxed than individual investors, dividends induce “ownership clientele” effects. Firms paying dividends attract relatively more institutions, which have a relative advantage in detecting high firm quality and in ensuring firms are well managed. The theory is consistent with some documented regularities, specifically both the presence and stickiness of dividends, and offers novel empirical implications, e.g., a prediction that it is the tax difference between institutions and retail investors that determines dividend payments, not the absolute tax payments.

2.2.2 Miller and Modigliani theory on Dividend Policy

Modigliani and Miller's (1961) theory argued that dividends are irrelevant to the firm's value under perfect capital markets since they have no effect on either the price of a firm's stock or on its cost of capital. They suggested that a firm's value is determined by its investment policy and thus the manner in which earnings are split between retained earnings and dividends does not affect the firm's value (Stulz, 2000). The assumptions advanced here are: there exist perfect capital markets without taxes or transactional cost, the market price cannot be influenced by a single buyer or seller and free and costless access to information about the market; that investors are rational and that they value securities based on the value of discounted future cash flow to investors; that managers act as the best agents of shareholders; and that there is certainty about the investment policy of the firm, with full knowledge of future cash flows. They argued that in theory, shareholders are able to replicate any dividend streams that corporations might be able to pay such that if dividends are lower than desired, investors can sell part of their shares to obtain their desired dividends and if the dividends are higher than desired, they can use the unwanted dividends to purchase additional shares in the company (home-made dividends). Since these home-made dividends are perfect substitutes to corporate dividends and can be achieved without incurring costs, the firm's dividend policy is irrelevant. However, MM's (1961) theory has heavily been criticized for being unrealistic in the real world where there are a lot of imperfections (Dhanani, 2005). In general, financial markets do not satisfy the strict conditions of perfect capital markets. This has led to development of a number of dividend theories such as signaling effect, tax differential, clientele effect, agency and dividend preference theories of dividends.

2.2.3 Dividend Preference or Bird-In-Hand Theory

Bird in hand theory proposes that a relationship exists between firm value and dividend payout. It states that dividends are less risky than capital gains since they are more certain. Gordon (1963) argued that investors prefer to receive dividends 'today' than in future because current dividends are more certain than future capital gains that might be realized from investing retained earnings in growth opportunities. In a world of uncertainty and information asymmetry, dividends are valued differently from retained earnings (capital gains): "A bird in hand (dividend) is worth more than two in

the bush (capital gains)". It is because of this uncertainty that investors prefer current dividends (even if at a lower required rate of return on equity) to future capital gains because something paid today is more certain to be received than something expected in the future (Mayo, 2007). Investors would therefore prefer dividends to capital gains (Amidu, 2007). Because dividends are supposedly less risky than capital gains, firms should set a high dividend payout ratio and offer a high dividend yield to maximize stock price.

2.2.4 Tax Differential Theory

Litzenberger et al. (1979) propositioned that investors prefer one dividend policy to another because of the tax effect on dividend receipts. This theory states that shareholders prefer capital gains to dividends. The preference of capital gains is occasioned by the high effect of taxes on dividends compared to the low tax effect on 16 capital gains. Therefore, the value of a firm with a low payout ratio should be higher than the one with a higher payout ratio. Because of this, Litzenberger (1979) argued that MM's assumption that taxes do not exist is farfetched. Individual investors pay higher ordinary income taxes on dividends but lower tax rates on long term capital gains. Moreover, taxes on dividends must be paid in the same year when dividends are received whereas capital gains (where taxed) are not until investments are sold. Depending on an investor's tax position; he may prefer either payout of current earnings as dividends or capital gains associated with the stock value. Even if dividends and capital gains are taxed equally, the taxes paid on dividends will be far much more compared to the taxes paid on capital gains due to time value of money. A shilling worth of tax today is more in value than the shilling in the future hence capital gains in future are preferred to dividends today (Litzenberger (1979).

2.3 Empirical review

There are various researches that conducted on the topic of impact of taxation, leverage, growth and profitability on dividend policy. Empirical review helps to focus on these researches and practical work done based on impact of taxation, leverage, growth and profitability on dividend policy. In this section researcher has covered the review of journal and article, review of thesis and summary of journal articles and thesis.

2.3.1 Review of Journal articles

Articles, journal and bulletins are of greater significance of this writing so various published article by different management experts and journal bulletins relating to topic have been considered.

Chuang, chen, & lee (2018) investigated whether dividend payouts are influenced by the tax reform. The study intended to examine whether the dividend payout ratios are influenced by this tax reform. Further the study analyzed whether the companies known for stable dividends have changed their dividend payout ratios. The study selected the dividend distributions in 2014-2015 as the research period and the prior year 2013-2014 for financial data. The study sampled the companies listed in Taiwan Stock. The empirical model was established on the basis of the literature review and the estimates are made with ordinary least squares (OLS). The model examined the dividend payout ratio before and after the reduction of tax credits. The result of the study showed that the dividend payout ratios decreased after the tax reform was reduced, indicating that companies used this tax reform to enact tax planning for stockholders. The study also found that companies offering stable dividends maintain similar dividend policies in the dividend payout ratios. The study findings suggested that the dividend payout ratios declines following the reduction in tax credits, implying that the sampled companies do facilitate the tax planning for shareholders during the tax reform. Meanwhile, the study found that the companies offering stable dividends do not engage in tax planning before and after the cut in tax credits by altering their dividend payout ratios.

Nnadi and Akpomi (2005) explored the impact of taxes on the dividend policy of Nigerian banks. It underscores the theoretical assumptions of the M & M theory. The study identified pattern of past dividends, concern about maintaining a target capital structure, current degree of financial leverage, shareholder needs for dividend income, legal rules and constraints; such as impairment of capital, the desire to send favorable signals to investors, the desire to conform to the industry's dividend payout among factors influencing dividend policy of banks. Secondary data obtained from the financial reports of the banks over a period of 5 years was used. The study population consisted of 50 banks in Nigeria that are quoted in the Nigerian Stock Exchange (NSE). The study sample was selected using the systematic sampling technique. The

choice of the systematic sampling technique is in order to get convenient samples that will be an adequate representation of the study. The analysis of the study showed a significant correlation between taxes and dividend structure of the banks and also suggested that profit is a major variable in the formation of dividend policy of the organizations. This is supported by the hypothesis, which showed significant effect of profit on dividend and a positive correlation between profit, tax and dividend.

Kazmierska-Jozwiak (2015) examined cash dividend payments of Polish listed companies. In this study, panel data analysis was applied to investigate the determinants of dividend policies of Polish companies. The data employed was derived from the Thompson Reuters database covered the period from 2000 to 2012. The nature of the data allowed the study to use panel techniques. To estimate the mentioned model the study used two techniques: fixed effects approach, random effects approach. The Hausman test indicated that the random effects model was more appropriate than the fixed effects model. The paper also explained the impact of different factors on dividend policy on Polish market. Moreover, it tried to examine whether the same factors (profitability, liquidity, size, leverage of the firm) affected dividend payout decisions on Polish market as on developed countries. The analysis also provided the evidence of a significant negative relationship between firm's leverage (LEV) and its dividend payout ratio (DPO). This indicated that analyzed Polish companies with high leverage ratio are, as expected, less likely to pay dividends. The results indicated that Polish nonfinancial companies listed on Warsaw Stock Exchange follow the same determinants of dividend policy as suggested by the developed markets.

Denis and Osobov (2008) investigated that whether the likelihood of paying dividends was associated with firm size, growth opportunities, and profitability. The sample was constructed using World scope data collected via Thomson One Banker Analytics. The study analyzed dividend polices in the selected countries over the 1989–2002 time period. These data limitations pose two empirical challenges. First, the shorter sample period limited the ability to fully address changes in the propensity pay dividends over time (though our ability to analyze cross-sectional determinants is not affected). The study measured such changes over a 9-year period (1994–2002) as opposed to the Fama and French (2001) 21-year period (1978–1998). The study found

that dividend payers tend to be larger and more profitable firms. However, the relation between dividend payments and growth opportunities is not uniform across countries. In the US, Canada, and the UK, dividend payers tend to have less valuable growth opportunities. In Germany, France, and Japan, however, the evidence is much more mixed. It appeared that dividend payers tend to have more valuable growth opportunities. These findings confirm similar evidence on dividend payouts in LLSV (2000).

Fama and French (2001) investigated the impact of profitability, growth opportunities, and size on the dividend policy of the firms. The study also showed that regardless of their characteristics, firms have become less likely to pay dividends. This lower propensity to pay is at least as important as changing characteristics in the declining incidence of dividend-paying firms. The CRSP sample included NYSE, AMEX, and NASDAQ securities with CRSP share codes of 10 or 11. A firm must have market equity data (price and shares outstanding) for December of year t to be in the CRSP sample for that year. The study excluded utilities (SIC codes 4900-4949) and financial firms (SIC codes 6000-6999) from both samples. The study used logic regressions and a portfolio approach to document that characteristics and propensity to pay make large separate contributions to the decline in the percent of payers. The evidence suggested that three fundamentals i.e. profitability, growth opportunities, and size are factors in the decision to pay dividends. Dividend payers tend to be large, profitable firms with earnings on the order of growth outlays. Firms that have never paid are smaller and they seem to be less profitable than dividend payers, but they have more growth opportunities (higher asset growth rates, higher market value of assets to their book value, and higher R&D expenditure), and their growth outlays are much larger than their earnings.

Berzins *et al.* (2019) investigated the causal effect of taxes on dividends by exploiting a regulatory shock in Norway in 2006 that increased the dividend tax rate for individuals from 0% to 28%. Because the tax shock is large, any change in dividend policy around the time of the shock is likely to be driven by taxes. Because the shock is unusually clean, with a flat tax rate both before and after, the study avoids complications due to multiple tax brackets. Because dividends and capital gains are taxed identically and share repurchases are negligible, the study can limit to just cash

dividends. The data set covered the period 2000–2012. The study included several years on both sides of the tax reform in order to capture permanent shifts in dividend policy rather than just one-off temporary effects. The dating system used the accounting year rather than the payout year, which is the year after. According to this logic, the last year before the tax reform is 2004 (payout in 2005), while the first year after is 2005 (payout in 2006). The study applied several filters to build the sample of economically active firms from the population of all limited-liability firms. The existing literature reports both first-order effects and minor effects of taxes on dividends. The study tested H1 by comparing the average firm's payout ratio and payout propensity before and after. The study defined the pre-reform period as 2000–2003, which is before the tax reform was announced. The study used a multivariate model in the second test of H2, examining the effect on dividends of taxes, potential agency conflicts, the interaction between the two, and control variables. Exploiting a large and clean regulatory shock to dividend taxation, the study found that the tax effect is first-order. The major result of the study was that the causal effect of taxes on dividends is strongly moderated by the relationship between agency costs and dividends. In particular, the study shows that dividends depend on the tradeoff between an important cost of dividend payments (higher taxes, which depend on whether ownership is direct or indirect) and an important benefit (lower shareholder conflicts, which depend on the controlling shareholder's equity stake).

Bell and Jenkinson (2002) examined the impact of a major change in dividend taxation introduced in the United Kingdom in July 1997. The reform was structured in such a way that the immediate impact fell almost entirely on the largest investor class in the United Kingdom, namely pension funds. The study had a sample period of 30 months before and after this date (January 1, 1995, to December 31, 1999). Initially the study included all companies quoted on the London Stock Exchange that paid at least one dividend during our sample period and for whom data was available on Data stream. Foreign corporations and investment trusts were then eliminated. For the remaining 1,785 companies, information was gathered on all dividend payments over the sample period. The Elton and Gruber statistic has been employed to document the behavior of ex-day share prices. Elton and Gruber (1970) base their analysis on the average drop-off ratio. The study found significant changes in the valuation of dividend income after the reform, in particular for high-yielding companies. The

results provided strong support for the hypothesis that taxation affects the valuation of companies, and that pension funds were the effective marginal investors for high-yielding companies.

Zagonel *et al.* (2018) analyzed the influence of taxes and corporate governance on the dividend policy of Brazilian companies. The study identified the changes of the tax legislation in Brazil in the period 1986-2011 and checked their effect on corporate dividend policies for preferred and common shares. The sample was made up of companies whose shares are traded in SãoPaulo Stock Exchange (Bovespa), in the period 1986-2011. The final sample comprised 672 companies in the period 1986-2011, making up a total of 1,159 traded stocks of both common and preferred classes. The study also included companies with multiple classes of preferred stock, but kept in the sample only those whose dividend rights are similar, for homogeneity. As the study used annual data frequency, the total sample contained 30,134 observations over the sample period. The study used panel data Probit and Tobit estimation to verify the probability of companies to pay dividends under different tax regimes. A panel data analysis was performed according to the model described in the study. The study results suggested that changes in the tax legislation have a significant influence on dividend payments. Also, firms do not follow target payout ratios, but dividends are moderately dependent on past payments. Dividend payouts are affected by stock voting rights, privatization and dividend deductibility. Changes in regulation that reduce the agency problems among shareholders affect positively payout ratios. For managers, maximizing shareholders' value requires taking into account the consequences of the taxation when designing financial policies for the firm. For investors, stock portfolio selection should take into account payout behavior and how changes in dividend taxation affect stocks' value. For policymakers, the effects of changes in the tax code on corporate behavior are of utmost importance to stimulate private investment and economic growth. There are several tax law changes in Brazil within the period analyzed, creating a good opportunity to study the effect of taxation on dividend policy and its dynamics over time.

Rizqia and Sumiati (2013) examined and analyzed the effect of managerial ownership, financial leverage, profitability, firm size, and investment opportunity on dividend policy, and effect of all that variables on firm value. The study was explanatory with quantitative approach. It used secondary data from manufacturing

company that go-public at Indonesia Stock Exchange (IDX) and Indonesian Capital Market Directory (ICMD). Secondary data used were annual financial statements issued by company from 2006-2011 periods. The study populations were manufacturing company listed on Indonesia Stock Exchange (IDX) during 2006-2011 periods. This was census research or saturated sampling. All members of population become sampled because population was relatively small. Amount saturated samples obtained were 15 manufacturing companies. Research results showed that managerial ownership and investment opportunity affect on dividend policy, while financial leverage, profitability, and firm size has no effect on dividend policy. The results further explained that research variables, namely managerial ownership, financial leverage, profitability, firm size, investment opportunity, and dividend policy affect firm value. The study result provided implications and contributions to business practice, including manufacturing companies listed on Indonesia Stock Exchange. They committed to payout dividend policy, to consider stability of its dividend payment policy. Corporate dividend policy brings information about firm's prospects for profit growth in future. Such information may invite a response from investors, so that will affect firm value.

Balachandran *et al*. (2017) analyzed that the firms are more likely to pay dividends with higher payout ratios in an imputation environment. The effects of profitability and contributed capital mix on the decision to pay dividends and dividend payout are weaker for firms following imputation tax system than traditional tax system. The study used the Data Analysis, Securities Industry Research Centre of Asia Pacific (SIRCA), Datastream and Thomson Reuters Global Equity Ownership databases to construct the sample. The study obtained insider ownership and board independence data from the SIRCA corporate governance database. The coverage on governance data started from 2001 in the SIRCA corporate governance database with the consequence that the sample period was 2002–2013. The relevant accounting variables are collected from Data Analysis. The study used Thomson Reuters Global Equity Ownership database to obtain institutional ownership for both domestic and foreign investors and Datastream to calculate the standard deviation of weekly stock returns. The leverage ratio was significantly and positively related to the decision to pay a dividend whereas it is significantly and negatively related to the payout ratio, indicating that firms with higher leverage pay dividends but at lower levels to protect

bondholders' wealth. The size of the firm, volatility of earnings and leverage are negatively related to insider ownership. For the leverage equation, the study found that the decision to pay a dividend and the payout ratio are both positively related to leverage. Further, the study found that insider ownership volatility of earnings profitability and investment are negatively related to leverage, whereas the tangibility was positively related to the leverage variable. Leverage itself was found to negatively affect insider ownership and to positively affect both the decision to pay a dividend and the payout ratio, while the probability of paying a dividend and the payout ratio positively influence both insider ownership and leverage. Taken together, the results was strongly indicative of the dividend decision (both the decision to pay and the level of payout), insider ownership and leverage being simultaneously determined.

Gul (1999) investigated the relationship between investment opportunities sets and capital structure and dividend policy of listed Japanese firms. The study further provided additional evidence on contracting theory arguments for the relation between growth opportunities, capital structure and dividend policies. The sample consisted of 5308 observations of listed Japanese firms between the years 1988– 1992. To avoid the problems of using cross-sectional proxies for time-sequenced variables, the study used pooled cross-sectional time-series analysis and time-series analysis with a one-year lag for the dependent variables. The results showed significant negative relations between growth opportunities and levels of both debt financing and dividend yields after controlling for firm size, profitability, firm keiretsu affiliations and industry regulation. The results are consistent with contracting cost arguments for corporate finance and dividend policies and confirmed the importance of growth opportunities in corporate finance theory.

Ardestani *et al*. (2013) examined the impact of investment opportunity set and corporate finance on dividend payout policy. The sample population of the study was comprised of 62 dividend paying companies listed in the Bursa Malaysia Stock Exchange for the industrial products sector for the time period over 2006 and 2008. There were three main sources where the data needed for the study was collected namely, Datastream, Bloomberg and the Star newspaper. The study employed the panel data multiple regression models. Statistical software STATA 12 was used to analyze the data. The data analysis of the study comprised of assumptions of multiple

regression analysis, descriptive statistic, correlation analysis, and robustness tests. The results suggested that investment opportunity set and debt maturity are the factors that significantly influence dividend payout policy of the sample firms. Although all the companies had positive investment opportunities, they all opted to payout dividends. The general perception is that as investment opportunities rise, the firms usually cut off payouts in order to keep the financial resources available for reinvestment. The result of the study implied that proper operations and good governance of these companies have provided them with the possibility of investing in new projects while at the same time disbursing the remaining free cash flows to the investors.

Kouki and Guizani (2009) identified and analyzed the influence of shareholder ownership identity on dividend policy for a panel of Tunisian firms from 1995 to 2001. The sample was chosen from all Tunisian firms listed on the stock exchange (TSE) for the period 1995 to 2001. The data used in the analysis were collected from the annual reports of the official bulletins of the Tunisian stock exchange and from the Tunisian bank association. The final sample contained 203 firm-observations. Besides, the sample contained 18 financial institutions and 11 industrial companies. The data analysis of the study comprised of assumptions of multiple regression analysis, descriptive statistic and correlation analysis. The study found that the firms with better investment opportunities are more likely to pay dividends and firms with high leverage tend to distribute a lower level of dividends. In sum, the study increased the understanding of the relation between block holders identity, ownership concentration and dividend policy. The findings indicated that dividend policy is not irrelevant as argued by Miller and Modigliani (1961), but rather is a response for the preference of the large shareholders.

Gunawan *et al.* (2018) analyzed the effect of capital structure, dividend policy, company size, profitability and liquidity of the company's value manufacturing in Indonesia Stock Exchange. The population of the research was manufacturing companies listed and was still active in the Indonesian Stock Exchange (BEI) for 2014 through 2016 amounted to 146 companies. Sampling sample then determined criteria and gained 15 companies for 3 years who meet the criteria specified sample. The data was analyzed using multiple regressions. The results showed that the capital structure, dividend policy, company size, profitability and liquidity had a significant positive effect on firm value. In order to increase the value of the company, the

company was expected to maintain the condition of an optimal capital structure through the use of debt. For investors and prospective investors the companies listed in Indonesia Stock Exchange in order to more carefully and also the aspect of dividend policy, company size, profitability and liquidity as a consideration in making investment.

According to McCabe (2011), the profitability of a company was the most essential and reliable indicator of financial performance. The purpose of the study was to understand the relationship between dividends, investment, and financing. Profitability provided a broad indication that a firm has the ability to raise its income level. The data consisted of the 112 firms on the annual Compustat tapes which had complete data for the variables of interest for 1966-1973. Single company industries were then eliminated. The study fit the model in cross-section for each of the years 1966 through 1973 and then combined all of the years for a combined cross-section, time-series sample. The model basically followed the D-K funds flow approach where the study hypothesized that the firm must raise funds from profits and outside financing and allocate them between investment and dividend. The sample data set was selected from Compustat for the years 1967-1971 using more stringent criteria (availability of data on research and development). With the three-year lag, the study ended up using allowed fitting of equations for 1969, 1970, and 1971 as contrasted to the years used here 1966, 1967, 1968, 1969, 1970, 1971, 1972, and 1973. The result showed that the companies with consistent high profit levels tend to pay high dividends to the shareholders. This can explain why higher profitability persistence is witnessed in larger companies because they are more flexible to changes than the small sized firms in similar markets.

Hassan *et al.* (2013) added a new dimension by investigating the relationship between taxation and payout ratio and some other variables of dividend policy. For the study a sample penal data of 33 companies listed at Karachi Stock Exchange (KSE) had been collected for the period of six years i.e. from 2005-2010. Companies were listed at KSE during years 2005 to 2010. Panel regression was among the widely used technique to investigate the impact of firm specific characteristics on dividend. The study used the same estimation technique to analyze the impact of ownership structures and cash flow characters on dividend behavior of companies listed in KSE Pakistan. The conclusion was that the firm size and profitability are positively related

to the dividend payout policy. However, the study showed insignificant relationship between the tax shield and leverage on the dividend payout policy. Positive results mean that, if the company size and profitability increase, the company will pay more dividends whereas the tax shield and leverage will not affect the dividend policy. The study supported some studies and also does not support some research findings. The study was limited to the KSE and may not apply the other countries and the sample showed the results and other study may find the different results, more sample size may show the difference results.

Pradhan and Rajbhandari (2016) examined the impact of growth prospect, leverage and firm size on dividend behavior of Nepalese commercial banks. The data are collected from annual reports of selected commercial banks and bank supervision reports published by Nepal Rastra Bank while the data for inflation has been extracted from the World Bank reports. The study was based on 146 observations from 19 commercial banks in Nepal from 2006-2014.The result showed that there is a positive relationship of dividend payouts with size, profitability and lagged dividends.

2.3.2 Review of previous thesis

Nyandumo (2016) investigated the effect of profitability on dividend policy of manufacturing firms listed in NSE. Descriptive research design was used in the study and secondary data from the audited financial reports of the manufacturing firms form 2011-2015 were heavily relied on. The study conducted a census of all the firms listed at the NSE. Data collection sheets were used as tools to gather the data and prepare it for data analysis. The data analysis was performed by use of MS Excel and SPSS then presented using tables. The results of the correlation analysis indicated that dividend policy is positively correlated with profitability as shown by the correlation coefficient of 0.4263. The results also provided negative correlation coefficients for liquidity, earnings and firm size. This revealed that the dividend policy will increase when the liquidity, earnings and size of the firm declines. The strongest predictor of dividend policy established in the study was profitability with a coefficient of +0.426. This means that when profitability increases, the company's ability of profit distribution in form of dividends also increases.

Manandhar (2002) assessed factors accepting dividend policy of banking and non-banking enterprises. The study was based on descriptive and causal comparative research design. The study used secondary data which was collected from 19 commercial banks in Nepal for the period 2006/07- 2013/14. The study concluded that dividend per share and return on equity had positive impact on the market capitalization while earnings per share, price earnings ratio have negative impact on dividend yield. The study also found a positive relationship between dividend and market capitalization.

Khadka (2006) examined the relationship between leverage and cost of capital in the context of Nepalese capital markets. The main objective of the study was to determine whether the firms' overall cost of capital and cost of equity decline with the increasing use of leverage. The results showed a negative but insignificant beta value of the relationship between leverage and the overall cost of capital. Therefore, the leverage may not be regarded as contributing variable to the cost of capital function for Nepalese firms.

Arumba (2014) investigated the determinants of dividend payout for companies listed at Nairobi Stock Exchange. The target population of the study was 61 companies. The study was based on judgment sampling. The study period was six years from 2008-2013. The study was based on secondary data collected from published financial statements of Companies listed at Nairobi Stock Exchange. Correlation and multiple regression analysis statistical technique was used to assess the nature and extent of data. The study found that there is a positive relationship of earnings, company size and profitability with dividend payout. However liquidity has a negative impact on dividend payout. The study concluded that company profitability is a significant variable and largely influences the dividend payout for firms listed at the NSE.

2.2.3 Summary of articles and thesis

This chapter deals with summary of empirical review which is include review of journal articles and review of previous thesis. Table 2.1 present the summary of articles and theses.

Table 2.1: Summary of articles and thesis

Date and writer	Research Objectives	Methodology	Results and Conclusion
Chuang, Chen, Lin, & Lee, (2018)	To examine whether the dividend payout ratios are influenced by this tax reform.	The study used ordinary least square method.	The study found that companies offering stable dividends maintain similar dividend policies in the dividend payout ratios.
Nnadi & Akpomi (2005)	To explore the impact of taxes on the dividend policy of Nigerian banks.	The study used correlation to know the relationship between taxes and dividend.	Significant correlation between taxes and dividend structure of the banks and also suggested that profit is a major variable in the formation of dividend policy of the organizations.
Kazmierska-Jozwiak (2015)	To examine the relationship between leverage and dividend payout ratio.	The Hausman test indicated that the random effects model.	Significant negative relationship between firm's leverage (LEV) and its dividend payout ratio (DPO).
Denis & Osobov (2008)	To find why do firms pay dividends, International evidence on the determinants of dividend policy.	Multivariate analysis and univariate analysis and logit regression model.	The relation between dividend payments and growth opportunities is not uniform across countries, dividend payers tend to have less valuable growth opportunities.
Fama & French (2001)	To determine the impact of profitability, growth opportunities, and size on the dividend policy of the firms.	Logit regressions and a portfolio approach.	The evidence suggested that three fundamentals i.e. profitability, growth opportunities, and size are factors in the decision to pay dividends.
Berzins *et al.* (2019)	To investigate the causal effect of taxes on dividends.	The study tested average firm's payout ratio and payout propensity before and after and multivariate model.	There is a causal effect of taxes on dividends and it is strongly moderated by the relationship between agency costs and dividends.
Bell & Jenkinson (2002)	To identify the impact of dividend taxation and on the identity of the marginal investor.	Regression correlation technique.	The results provided strong support for the hypothesis that taxation affects the valuation of companies, and that pension funds were the effective marginal investors for high-yielding companies.
Zagonel *et al.* (2018)	To identify the impact of tax legislation on corporate dividend policies for preferred and common shares.	Panel data Probit and Tobit estimation to verify the probability of companies to pay dividends.	Changes in the tax legislation have a significant influence on dividend payments. Also, firms do not follow target payout ratios, but dividends are moderately dependent on past payments.

Table 2.1 Continue

Date and writer	Research Objectives	Methodology	Results and Conclusion
Rizqia & Sumiati (2013)	To examine the relationship between managerial ownership and financial leverage.	Regression correlation technique.	Managerial ownership and investment opportunity affect on dividend policy, while financial leverage, profitability, and firm size has no effect on dividend policy.
Balachandran *et al*. (2017)	To examine the Insider ownership and dividend policy in an imputation tax environment.	Regression correlation technique to know the relationship between variables.	The leverage ratio is significantly and negatively related to the payout ratio whereas it was significantly and positively related to the decision to pay a dividend, indicating that firms with higher leverage pay dividends but at lower levels to protect bondholders' wealth.
Gul (1999)	To examine the relationship between investment opportunities sets and capital structure and dividend policy.	Pooled cross-sectional time-series analysis.	Significant negative relations between growth opportunities and levels of both debt financing and dividend yields after controlling for firm size, profitability, firm keiretsu affiliations and industry regulation.
Ardestani *et al*. (2013)	To examine the impact of investment opportunity set and corporate finance on dividend payout policy.	Panel data multiple regression models.	Investment opportunity set and debt maturity are the factors that significantly influence dividend payout policy of the sample firms.
Kouki & Guizani (2009)	To examine the ownership structure and dividend policy evidence.	Multiple regression analysis, descriptive statistic and correlation analysis.	Firms with better investment opportunities are more likely to pay dividends and firms with high leverage tend to distribute a lower level of dividends.
Gunawan *et al.* (2018)	To examine effect of capital structure, dividend policy, company size, profitability and liquidity on company value.	Multiple regressions technique.	The capital structure, dividend policy, company size, profitability and liquidity are significant positive effect on firm value.
McCabe (2011)	To understand the relationship between dividends, investment, and financing.	Regression correlation technique.	Companies with consistent high profit levels tend to pay high dividends to the shareholders.

Table 2.1 Continue

Date and writer	Research Objectives	Methodology	Results and Conclusion
Hassan *et al.* (2013)	To examine relationship between taxation, payout ratio and dividend policy.	Regression correlation.	The study showed insignificant positive relationship between the tax shield and leverage on the dividend payout policy.
Pradhan & Rajbhandari (2016)	To examine impact of growth prospect, leverage and firm size on dividend behavior.	Regression correlation to know The impact of growth prospect, leverage and firm size on dividend behavior.	There is a positive relationship of dividend payouts with size, profitability and lagged dividends.
Nyandumo (2016)	To examine effect of profitability on dividend policy.	Regression correlation.	There is positive relationship between profitability, ability of profit distribution and dividends policy.
Manandhar (2002)	To examine affecting factors of dividend policy.	Regression correlation.	Dividend per share and return on equity had positive impact on the market capitalization while earnings per share, price earnings ratio have negative impact on dividend yield.
Khadka (2006)	To determine relationship between leverage and cost of capital.	Regression and correlations.	There is a negative but insignificant beta value of the relationship between leverage and the overall cost of capital.
Arumba (2014)	To examine the relationship between earnings, liquidity, company size and profitability with dividend payout.	Regression and correlations to determine the impact and relationship between earnings, liquidity, company size and profitability with dividend payout.	Company profitability is a significant variable and largely influences the dividend payout for firms listed at the NSE.

2.4 Concluding remarks

Many empirical studies have been conducted in order to examine the effect of taxation, leverage, growth and profitability on dividend policy across the countries over different time period. All theoretical and empirical works serve as basis for further studies in the area of taxation, leverage, growth and profitability on dividend policy because there is no uniformity in the findings. Thus, the empirical results found in the other country cannot be generalized in the context of Nepal.

Berzins *et al.* (2019) investigated the causal effect of taxes on dividends by exploiting a regulatory shock in Norway. The study revealed that the causal effect of taxes on dividends is strongly moderated by the relationship between agency costs and dividends. McCabe (2011) identified that the profitability of a company was the most essential and reliable indicator of financial performance. The result showed that the companies with consistent high profit levels tend to pay high dividends to the shareholders. Bhandari and Pokharel (2012) examined the dividend practices of commercial banks of Nepal. The result concluded that there is a positive relationship of dividend payouts with size, profitability and lagged dividends.

This study has attempted to carry out distinctly from other previous studies in terms of sample size, nature of the sample firms and the research methodology used. This study has covered 21 banks with 8 years' data. Thus, it is been believed that this study is different from earlier studies of Nepalese context. This study is primarily incorporated to fill the gap of similar studies in Nepalese context. The importance of this study may view from its contribution to fill an important gap in literature and also findings of this study can add value to the existing body of the literature.

Very few researches has been done in Nepalese context because it is relatively new concept in Nepal. They use short term, old and few data to analyze the research question. This study is to fill the gap by use long period, maximum sample and recent data.

Chapter III

Research Methodology

3.1 Introduction

Research methodology is a systematic way to solve a problem. It is a science of studying how research is to be carried out. Essentially, the procedures by which researchers go about their work of describing, explaining and predicting phenomena are called research methodology. It is also defined as the study of methods by which knowledge is gained. Its aim is to give the work plan of research. The purpose of research methodology is to explain how the research has been conducted. Research methodology is a way of reaching towards the solution of a problem through a planned and systematic dealing with the collection, analysis and interpretation of facts and figures. The importance of research methodology is that different research methods are compatible with different situations, and therefore it is important to know which method is best suitable for use with a particular hypothesis or question.

This chapter has been divided into six sections. Section one provides a description of research plan and design used in this study. Second section describes the population and sample along with the selection of enterprise for the purpose of study. Section three describes nature and sources of data and data collection procedure. Section four explains the data processing procedure and method of analysis of data, Model specification along with the measurement of variables is presented in chapter five. Finally, section six presents the research framework and definition of variables.

3.2 Research design

This research study has employed descriptive and causal-comparative research designs to deal with the issues associated with effect of taxation, leverage, growth, profitability and bank size on dividend policy of the commercial banks in the context of Nepal. The descriptive research design has been adopted for fact finding and searching adequate information about effect of taxation, leverage, growth, profitability and bank size on dividend policy of the commercial banks in the context of Nepal. It is used to describe the accurate results and further describe about the characteristics of the sample. The study also used causal comparative research design to establish the cause and effect relationship between variables under consideration

(taxation, leverage, growth, profitability and bank size with proposed dividend and dividend yield ratio) in Nepalese commercial banks. The general objective of this study is to measure the tax effect and profitability on dividend policy of commercial banks in Nepal based on their financial characteristics and identifies the determinants of performance exposed by the financial ratios. Besides, an effort has also been made to describe return on assets, liquidity, growth, size of the bank, proposed dividend and dividend yield ratio indicators of 21 commercial banks consisting of 168 observations from fiscal year 2012/13 to 2019/20. The financial ratios are used to examine effect bank specific variables on dividend policy.

3.3 Population, sample, and sampling design

Table 3.1: List of banks selected for the study along with the study period and number of observations

S.N	Name of banks	Study period	Observation
1	Nabil Bank Limited	2012/13 to 2019/20	8
2	Nepal Investment Bank Limited	2012/13 to 2019/20	8
3	Standard Chartered Bank Nepal Limited	2012/13 to 2019/20	8
4	Himalayan Bank Limited	2012/13 to 2019/20	8
5	Nepal SBI Bank Limited	2012/13 to 2019/20	8
6	Nepal Bangladesh Bank Limited	2012/13 to 2019/20	8
7	Everest Bank Limited	2012/13 to 2019/20	8
8	Bank of Kathmandu Limited	2012/13 to 2019/20	8
9	NIC Asia Bank Limited	2012/13 to 2019/20	8
10	Machhapuchchhre Bank Limited	2012/13 to 2019/20	8
11	Siddhartha Bank Limited	2012/13 to 2019/20	8
12	Agricultural Development Bank Limited	2012/13 to 2019/20	8
13	Global IME Bank Limited	2012/13 to 2019/20	8
14	Citizens Bank International Limited	2012/13 to 2019/20	8
15	Prime Commercial Bank Limited	2012/13 to 2019/20	8
16	Sunrise Bank Limited	2012/13 to 2019/20	8
17	NMB Bank Limited	2012/13 to 2019/20	8
18	Prabhu Bank Nepal Limited	2012/13 to 2019/20	8
19	Mega Bank Nepal Limited	2012/13 to 2019/20	8
20	Civil Bank Limited	2012/13 to 2019/20	8
21	Sanima Bank Limited	2012/13 to 2019/20	8
Total number of observations			168

Thus, the study is based on the 168 observations.

In order to observe the effect of taxation, leverage, growth, profitability and bank size on dividend policy of commercial banks of Nepal, There are altogether 27 commercial banks in Nepal. All the 27 banks are the population of this study out of them 21 commercial banks is selected as a sample for the time period of 2012/13 to 2019/20, leading to a total of 168 observations. The sample is selected on the bases of random sampling technique because of access to the subject and time, cost and resources limitation. Table 3.1 presents the list of sample selected banks along with study period and number of observations.

3.4 Nature and sources of data

The study is based on the secondary data which are gathered for 21 commercial banks in Nepal for the period of 8 years from 2012/13 to 2019/20. The secondary data and information have been collected from the annual reports of selected commercial banks, banking and financial statistics, NEPSE annual report and bank supervision report published by Nepal Rastra Bank. The variables used in the study are categorized into bank and control independent variables such as (taxation, leverage, growth, profitability and bank size) and dependent variables (proposed dividend and dividend yield ratio). The data have been employed to understand and analyze the effect of taxation, leverage, growth, profitability and bank size on dividend policy of Nepalese commercial banks.

3.5 Data collection procedure and instrument

The study mainly based on secondary data, which was collected from annual reports of respective commercial bank during the period 2012/13 to 2019/20. The secondary data and information have been collected from the annual reports of selected commercial banks, banking and financial statistics, NEPSE annual report and bank supervision report published by Nepal Rastra Bank.

3.6 Data processing procedure and data analysis method

The main purpose of data analysis in this study is to analyze the effect of taxation, leverage, growth, profitability and bank size on dividend policy of selected commercial banks in the context of Nepal. Thus, this section deals with statistical and econometric models used for the determination of analysis of secondary data. Descriptive, correlation and regression methods of analysis are used in the study. The

data are examined by using statistical package for social science (SPSS 25). The descriptive statistics include mean, standard deviations; minimum and maximum values of the variables are used to describe the characteristics of selected banks during the period 2012/13 to 2019/20. Correlation analysis is used to evaluate the direction of relationship between the dependent and independent variables. Along with this, regression analysis is used to find out the influence of independent variable over dependent variable exclusively and combined with other variables.

3.6.1 Model specification

The econometric models estimate in this study to analyze the relationship between the independent variables which are categorized into bank specific and control variables and the dependent variables which dividend payout ratio and dividend yield ratio. The study used multiple linear regression models to measure the empirical impact of bank specific variables and control variables dividend payout ratio and dividend yield ratio of selected Nepalese commercial banks. Thus, the following model equation is designed to test the hypothesis:

Model 1:

$$DYR_{it} = \alpha_0 + \beta_1 TAX_{it} + \beta_2 LEV_{it} + \beta_3 GO_{it} + \beta_4 ROA_{it} + \beta_5 BS_{it} + e_{it} \ldots\ldots\ldots (I)$$

Model I attempts to discover the impact of taxation, leverage, growth, profitability and bank size on dividend yield ratio.

Model 2:

$$DIVA_{it} = \alpha_0 + \beta_1 TAX_{it} + \beta_2 LEV_{it} + \beta_3 GO_{it} + \beta_4 ROA_{it} + \beta_5 BS_{it} + e_{it} \ldots\ldots\ldots (II)$$

Model II attempts to discover the impact of taxation, leverage, growth, profitability and bank size on proposed dividend.

Where,

TAX_{it} = Income Tax payable of bank i at time t

LEV_{it} = Leverage of bank i at time t

GO_{it} =Growth opportunities of bank i at time t

ROA_{it} = Return on assets of bank i at time t

BS_{it} = Bank size i at time t

DYR_{it} = Dividend yield ratio of bank i at time t

$DIVA_{it}$ = Proposed dividend of bank i at time t

e = Error term

α_0 is the constant term and β_1, β_2, β_3, β_4, β_5, β_6 are the coefficients of variable.

The description of the variables used in the study is presented in Table 3.2

Table 3.2:

Description of variables

Variables	Description	Measurement
Dependent Variables		
Dividend yield ratio	DYR	Dividend per share by market value per share
Proposed dividend	DIVA	Proposed dividend
Independent Variables		
Taxation	TAX	Income tax liability
Leverage	LEV	Total debt to total equity ratio
Growth	GO	Market to book ratio
Profitability	ROA	Net income by total assets
Bank size	BS	Natural logarithm of total assets

3.6.2 Analysis plan

This section discusses how the analysis has been conducted in chapter four. It is necessary to follow certain steps and procedures in analyzing data in to understand the results and generalize findings. The analysis of secondary data intends to study the relationship between the variables. This section is divided into various subsections first of which deal with the descriptive statistics of the sample observations including the mean, standard deviation, minimum and maximum values of the observations. Correlation analyses have been carried out in the second followed by the regression analysis. Test of significance and standard error of estimate have also been tested to make the results more valid. All the observed relationship and findings has been interpreted to derive the meaningful conclusion regarding the effect of taxation, leverage, growth, profitability and bank size on dividend policy of Nepalese commercial banks.

3.7 Research framework and definition of variables

This section provides the conceptual framework of study and describes about variables. Definition of variables section deals with the operational definition of the variables that have been used in this study.

3.7.1 Conceptual framework

A conceptual framework is an analytical tool with several variations and contexts. Conceptual framework of the study describes the systematic explanation of the relationship among the dependent and independent variables for the purpose of clarifying the impact of taxation, leverage, growth and profitability on dividend policy of Nepalese commercial banks. It helps to define the focus and goal of the research problem. Based on the objective of the study and the literature review following conceptual framework is framed to summarize the main focus and scope in terms of variables included.

This section provides the conceptual framework of study and describes about variables that have been used in study and the relationship between the variables. In this study, dependent variables are dividend yield ratio and proposed dividend of Nepalese commercial banks. The independent variables are taxation, leverage, growth, profitability and bank size. Thus, the following conceptual model is framed to summarize the main focus and scope of this study in terms of variables included. The conceptual frameworks that describe the dependent and independent variables used in the study are shown in the Figure 3.1.

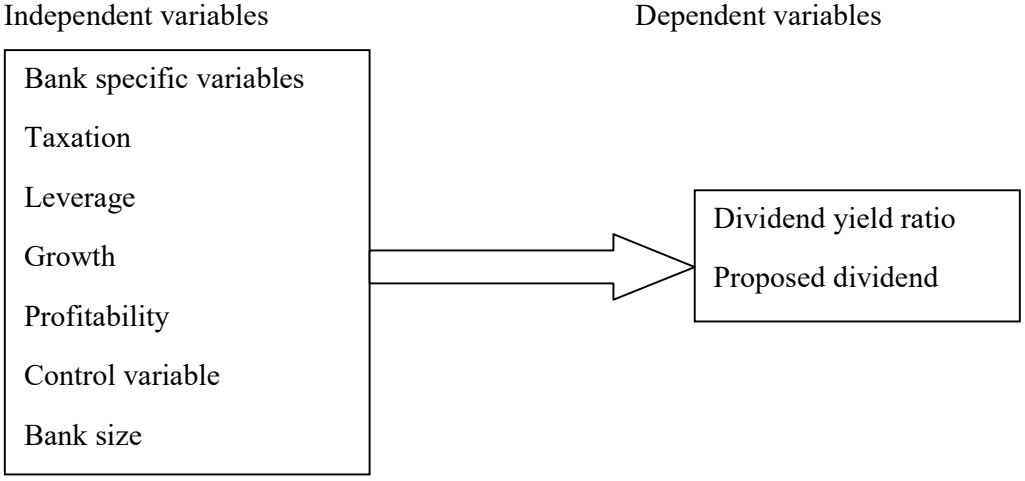

Figure 3.1: Conceptual framework

The variables used in this study are selected from studying different literatures (Pradhan & Rajbhandari , 2016; Khadka , 2006; Denis & Osobov, 2008; Fama & French; 2001). The above figure shows the bank specific and control variables used in this study to measure the impact on dependent variables. Five variables are used as independent variable. Bank specific variables are measured with the help of independent variables as taxation, leverage, growth, profitability and bank size as control variable are used. Dependent variable is measured with the help of the dividend yield ratio and proposed dividend. The conceptual framework shown in figure 3.1 elaborates the impact among independent variables and dependent variables.

3.7.2 Definition of variables

This section deals with the operational definition of the variables that have been used in this study. To find out the impact of taxation, leverage, growth and profitability on dividend policy of Nepalese commercial banks, the study has used dividend yield as dependent variable while taxation, leverage, growth, profitability and bank size are used as independent variables and proposed dividend as the dependent variables while taxation, leverage, growth, profitability and bank size as the independent variables. These variables have been defined and discussed as below:

Dependent variables

Dividend yield ratio (DYR)

Dividend Yield Ratio is calculated by dividing the dividend per share by market price per share. The ratio shows the dividend received by the investors in relation to market value per share of the firm. The ratio is expected to increase due to increase in dividend per share and market value of share when the earlier increases faster. If DYR increases due to the decline in market value of the share, it is considered as an unwanted and therefore does not explain the health of stock market. Since dividend per share and market value per share are closely related, they influence each other. Pandey (2015) postulated that a company's dividend payment decisions are important in the financial management.

Black and Scholes (1974) pointed out that unexpected dividend announcement can lead to short term price fluctuations, but such effect is not apparent in the longer

timeframe. McQueen *et al.* (1997) found that high dividend-yield is linked to a long term and positive abnormal return dividend yields increase if the taxation of dividends is harsher than the taxation of capital gains. Secondly, there may be considerable differences in the marginal tax rates on dividend income received by investors. Therefore, investors have different preferences for dividend payout policies (Auerbach, 1979).

Proposed dividend (DIVA)

Lintner (1956) found that firms maintain a target payout ratio and adjust their dividend policy to this target with a specific speed of adjustment and firms pursue a stable dividend policy in a long-run and that managers believe that investors should prefer companies with stable dividend policy. In an empirical study, Mullah (2001) reported that the major determinants of dividend payout policy of firms' are the size of the firm, the debt ratio, collate realizable assets and the level of inside ownership and supports the agency cost and transaction cost hypotheses.

Fama and French (2001) found that dividend paying firms are larger, more profitable and have few investment opportunities than the non-dividend paying firms which are smaller, less profitable, have more investment opportunities, and their investment outlays are much larger than their earnings. Examining the dividend payout policies of firms. Manos (2001) found that the major determinants of dividend payment decisions are the level of ownership structure and growth rate in sales. The study found evidence in support of an agency cost and transaction cost hypotheses. Aivazian *et al*. (2003) found that the firms with relatively less debt in total capital are more likely to pay dividends as they have greater financial slack and are able to maintain their dividends and thus, support the fact that financial constraints can affect dividend payment decisions.

Independent variables

Taxation (TAX)

Taxation is defined as the corporate tax paid by the commercial banks. A fee charged by a government on a product, income, or activity is called tax. If tax is levied directly on personal or corporate income, then it is a direct tax. If tax is levied on the price of a good or service, then it is called indirect tax. The purpose of taxation is to finance government expenditure. Since public goods and services do not allow a non-payer to

be excluded, or allow exclusion by a consumer, there cannot be a market in the good or service, and so they need to be provided by the government or a quasi-government agency, which tend to finance themselves largely through taxed (Hassan *et al.,* 2013).

Hamid *et al.* (2012) concluded that tax rate is an important factor while determining the dividend policy. Gul *et al.* (1999) investigated the factors that influenced corporate dividend policy especially taxes and dividend. The results showed that DPS had positive relationship with liquidity, size and profitability whereas negative relationship with leverage while there is no relation with growth. In addition, there was positive but insignificant link between the taxes and dividend policy. Hassan *et al*. (2013) showed that there was negatively insignificant relationship between dividend policy and leverage as well as tax shield while positive relation with size and profitability.

Leverage (LEV)

Borrowing in order to expand or invest is called leverage. The goal of a bank is to amplify the loan into a greater value for the firm or shareholders. Leverage is defined as the ratio of total debt to shareholder's equity. Relationship between financial leverage with dividends policy arises from restrictive debt covenants (including restrictions of dividends payment) of creditor to protect its interests (Taranto, 2002). A company's leverage has been analyzed in the literature as an important factor for the dividend policy decisions. Rozeff (1982) argued that high leverage increase the transaction costs and the risk of the firm. Firms with high leverage ratio have high fixed payments for using external financing. Therefore, the higher the leverage ratio, the lower the chance for dividend as a consequence leverage is negatively related to dividends. This result is supported by the agency cost theory of dividend policy. Leverage influences the dividend behaviors of the firm. If the level of leverage is high, the firm is more risky in the cash flow.

The negative effect of leverage on dividend payment is revealed from the study conducted by Higgins (1972) and Rozeff (1982). The study found that the firms with higher leverage pay lower dividends in order to evade the cost of raising external capital of the firms. Firms that finance their activities mostly with debt rather than equity put pressure on their liquidity. Debt principal and interest payments reduce the ability of firms to have residual income to guarantee dividend payment.

Consequently, it is expected that, there is always negative relationship between debt and amount of dividend paid for a period. Kowaleski *et al*. (2007) argued that more obligated firms favor to pay lower dividends.

Growth

Growth opportunity means the chance to make an exceptional return on an investment. The proxy used for the growth opportunity is market value of assets to book value of assets (French and Poterba, 1991) (Growth = Market value of equity + Book value of debt / Book value of equity + Book value of debt). Growth opportunities are considered in terms of the proportion of firm value accounted for by assets-in-place; the lower the fraction of firm value represented by assets-in-place, the greater are the firm's growth opportunities. The common assumption of growth opportunity set is making a capital expenditure to produce a new product or expand an existing production line (Kallapur & Trombley, 2001). As a matter of fact, growth opportunities are potentially profitable projects that firms should discover and utilize them for economic rents.

Normally, a firm is financed by either debt or equity (Nizar Al-Malkawi, 2007). Thus, a company can obtain capital by debt which is external financing from creditors like banks or retains a portion of the profit as internal financing. Growth may impact dividend policy of the firms. Higher growth firms have greater need for external financing. Therefore, in order to insure access to external equity capital, the firm may be motivated to establish a good reputation with stock holders through higher dividend payout (La Porta *et al.,* 2000).

Ardestani *et al.* (2013) investigated that growth opportunity set and debt maturity are the factors that significantly influence dividend policy of the firms. The study also implied that proper operations and good governance of these companies have provided the firm with the possibility of investing in new projects while at the same time disbursing the remaining free cash flows to the investors.

Return on assets (ROA)

ROA is calculated by dividing net profit after tax by total assets. It is recorder as the primary indication of firms to pay dividends as dividends are paid out of annual profits gained by a firm. Pani (2008), Adesola and Okwong (2009), Ahmed and Javid

(2009), and Al-Kuwari (2010) used profit after tax as independent variable in their studies and found positive relation between dividend payout and profit after tax.

Bank size

Bank size represents total assets of the banks in any fiscal year. The natural logarithm of total assets is being used as a proxy for size in the study. The previous literature assumed that there is a relationship between the firm's size and its dividend policy. The big size companies pay higher dividends and smaller size companies pay less dividends, as they found it difficult to raise funds, as compared to large companies who have easier access to the capital market and hence are less dependent on the internal funds, leading to more capability to pay the dividends (Denis & Osobov, 2008).

A large firm typically has better access to capital markets and finds it easier to raise funds with lower cost and fewer constraints compared to a small firm. Large firms are more likely to afford paying higher dividends to shareholders. The size is a significant determinant of a firm's dividend policy, and that it is positively related to dividends (Lloyd *et al*., 1985; Holder *et al.,* 1998; Fama & French, 2001).

Large enterprises are more likely to be mature and thus have easier access to capital markets, and should be able to pay more dividends. This relationship is supported by the transaction cost explanation of dividend policy (Holder *et al*., 1998; Manos *et al.,* 2001; Ho, 2003; Aivazian *et al*., 2003; Eije & Megginson, 2006; Kowalewski *et al*., 2007; Mehta, 2012). Sawicki (2005) illustrated that dividend payouts can help to indirectly monitor the performance of managers in large enterprises. Hence, it is hypothesized that larger the enterprise higher the dividends.

Firm size will determine achievement of profitability and stability, easier access to capital markets, and smaller transaction costs when compared to small and new companies (Weston & Copeland, 1992). Large companies tend to rate higher dividends than smaller and new companies. Lloyd *et al*. (1985) showed that firm size plays a role to explain dividend payout ratio of company. Easy access to various external funding, profitability and stability were records that owned by large corporations. Positive response from investors can increase firm value (Suranta & Midiastuty, 2003).

Chapter IV

Results and Discussion

The basic steps in the analytic process consist of identifying issues, determining the availability of suitable data, deciding on which methods are appropriate for answering the questions of interests, applying the methods and evaluating, summarizing and communicating the results. Data analysis is a process of inspecting, cleansing, transforming, and modeling data with the goal of discovering useful information, informing conclusions, and supporting decision-making. The main objectives of this chapter is to provides systematic presentation and analysis of data collected from secondary data to deal with the various issues related to effect of taxation, growth, leverage, profitability and size of the commercial banks in Nepal. The purpose of this chapter is to analyze and interpret the data collected during the study. Various statistical tools described in chapter three have been used for this purpose.

This chapter is divided into five sections. The first section deals with structure and pattern analysis of data, second section deals with descriptive statistics, third section deals with the correlation analysis, fourth section deals with step wise regression analysis and the final section wraps up this chapter with concluding remarks about the result derived from the secondary data.

4.1 Structure and pattern analysis of dependent and independent variables in Nepalese commercial banks

This section of the study deals with the structure and pattern of selected dependent and independent variables in Nepalese commercial banks for the period of 2012/13 to 2019/20. Table (4.1 to 4.7) is used to analyze the mean and standard deviation of each individual bank separately as shown in the following table.

4.1.1 Structure and patterns of dividend yield ratio in percentage

This section deals with the structure and pattern of dividend yield ratio for the study period of 2012/13 to 2019/20 has been presented in table 4.1.

The structure and pattern of dividend yield ratio for Nepalese commercial banks indicated that average dividend yield ratio is highest for PRABHU (5.21 percent) followed by GIME (5.91 percent), BOKL (5.08 percent),SBL (4.76 percent), PCBL

(4.76 percent), NIBL (4.64 percent), NMBL(4.59 percent),NBBL (4.56 percent), NICA(4.55 percent), SRBL (4.23 percent), ADBL (4.12 percent), SANIMA (3.83 percent), MBNL (3.77 percent), CBL (3.71 percent), MBL (3.52 percent), CBIL (3.44 percent), NABIL (3.21 percent), HBL (3.15 percent), EBL (2.58 percent), SCBL (2.49 percent), NSBL (2.44 percent).

Table 4.1:

The structure and pattern of dividend yield ratio of selected Nepalese commercial banks for the period of 2012/13to 2019/20

(The table shows the dividend yield ratio of 21 Nepalese commercial banks for the study period of 2012/13 to 2019/20. DYR (dividend yield ratio defined as dividend per share divided by market value per share, in percentage) and bank wise mean and standard deviation in the row and year wise in column.)

Banks	2013	2014	2015	2016	2017	2018	2019	2020	Mean	S.D
NABIL	3.58	2.56	1.93	1.92	3.15	3.69	4.25	4.61	3.21	0.94
NIBL	4.46	4.17	4.93	3.94	5.19	6.44	3.66	4.29	4.64	0.83
SCBL	2.8	1.84	2.28	0.98	4.59	2.32	3.3	1.84	2.49	1.02
HBL	2.14	2.23	5.18	2.11	2.97	2.87	3.99	3.7	3.15	1.01
NSBL	2.35	1.7	3.2	1.57	1.77	3.16	3.59	2.18	2.44	0.73
NBBL	5.96	3.14	5.16	3.92	3.93	4.92	5.41	4.03	4.56	0.89
EBL	3.77	2.36	1.65	2.07	2.44	3.02	3.77	1.56	2.58	0.81
BOKL	2.67	1.94	4.79	4.96	2.87	9.43	6.67	7.31	5.08	2.43
NICA	5.5	4.5	6.65	3.43	4.7	3.3	4.7	3.62	4.55	1.06
MBL	0	2.19	2.99	3.21	4.17	4.78	6.06	4.73	3.52	1.75
SBL	7.37	2.86	3.1	4.49	2.89	4.39	7.94	5.07	4.76	1.84
ADBL	1.5	1.98	3.7	2.73	4.83	6.69	7.33	4.16	4.12	1.97
GIME	3.47	3.91	4.8	3.11	5.15	5.52	8.88	6.69	5.19	1.77
CBIL	3.86	2.58	2.63	1.19	4.39	2.65	4.16	6.06	3.44	1.39
PCBL	4.63	3.43	3.3	2.3	6.41	5.6	5.8	5.9	4.67	1.40
SRBL	4.9	0	5.73	4.5	3.8	5	6.4	3.5	4.23	1.83
NMBL	3.97	4.09	1.66	2.47	2.9	8.38	9.16	4.08	4.59	2.55
PRABHU	-	-	-	-	-	4.5	6.33	4.8	5.21	0.80
MBNL	2.05	2.81	2.67	3.06	3.32	4.2	5.52	6.5	3.77	1.44
CBL	3.38	5.7	2.15	1.19	4.39	2.65	4.16	6.06	3.71	1.59
SANIMA	4.05	2.47	3.79	2.11	3.71	4.32	6.05	4.12	3.83	1.12
Mean	3.62	2.82	3.61	2.76	3.88	4.66	5.58	4.51		
S.D	1.62	1.21	1.42	1.15	1.09	1.83	1.70	1.52		

Sources:- Annual reports of concern sample banks(2012/13 to 2019/20)

The table also shows that dividend yield ratio varies widely within the individual banks also. It increased from 3.58 percent in 2012/13 to 4.61 percent in 2019/20 for NANIL, from 2.14 percent to 2.7 percent for HBL, from 2.67 percent to 7.31 percent for BOKL, from 0 percent to 4.73 percent for NMB, from 1.5 percent to 4.16 percent

for ADBL, from 3.47 percent to 6.69 percent for GIME, from 3.86 percent to 6.06 percent for CIBL, from 4.63 percent to 5.9 percent for PCBL, from 3.97 percent to 4.08 percent for MMBL, from 0 percent to 4.08 percent for PRABHU, from 2.05 percent to 6.5 percent for MBNL, from 3.38 percent to 6.06 percent for CBL and from 4.05 percent to 4.12 percent for SANIMA.

On the other hand, dividend yield ratio decreased from 4.46 percent to 4.29 percent for NIBL, from 2.9 percent to 1.84 percent for SCBL, from 2.35 percent to 2.18 percent for NSBL, from 5.96 percent to 4.03 for NBBL, from 3,77 percent to 1.56 percent for EBL, from 5.5 percent to 3.62 percent for NICA, from 7.37 percent to 5.07 percent for SBL, from 4.9 percent to 3.5 percent for SRBL.

The variation in as dividend yield ratio indicated by standard deviation is lowest for NSBL followed by PRABHU, EBL,NIBL, NBBL, NABIL, SBL, SCBL, NICA, SANIMA, CBIL, PCBL, MBNL, CBL, MBL, GIME, SRBL, SBL, ADBL, BOKL, NMBL.

Figure 4.1 shows the trend of average dividend payout ratio of Nepalese commercial banks (in percent).

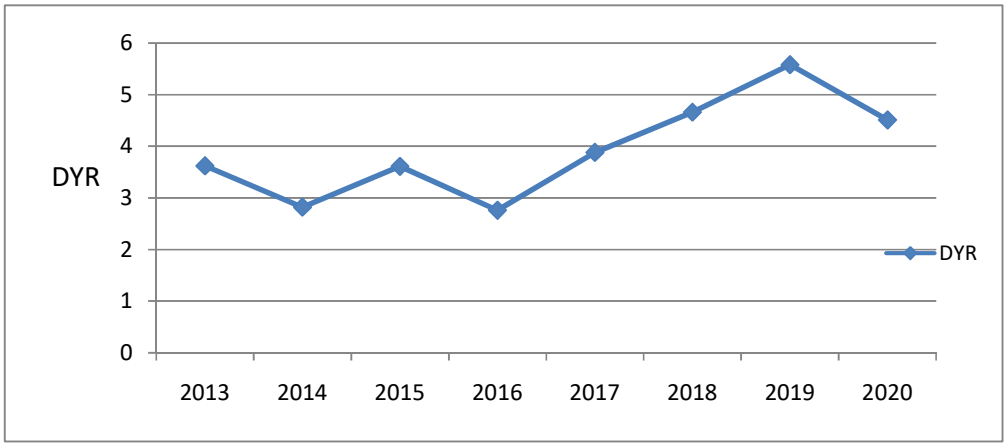

Figure 4.1: Pattern of average dividend yield ratio

Figure 4.1 shows the comparative pattern of dividend yield ratio of Nepalese commercial banks from year 2012/13 to 2019/20. The figure indicates several fluctuations over the study period. The graph shows that average dividend yield ratio has increase from 3.62 percent in 2012/13 to 4.51 percent in 2019/20. Dividend yield ratio is in declining trend on the year 2013/14, 2015/16, 2019/20 except this dividend

yield ratio is in inclining trend till the year 2018/19. Overall, the graph shows dividend yield ratio is in increasing trend from year 2012/13 to year 2019/20.

4.1.2 Structure and pattern of proposed dividend

The structure and pattern of return on assets for the study period of 2012/13 to 2019/20 has been presented in table 4.2. The structure and pattern of proposed dividend of Nepalese commercial banks indicated that average proposed dividend is highest for ADBL (Rs.9014.33 million) followed by NIBL (Rs.1264.25 million), NABIL (Rs.1244.52 million), SCBL (Rs.734.13 million), EBL (Rs.726.29 million), GIBL (Rs.449.90 million), HBL (Rs.412.85 million), NMBL (Rs.367.02 million) SBL (Rs.340.84 million), MBL (Rs.333.38 million), NSBL (Rs.326.87 million), MBNL (Rs.324.12 million), NBBL(Rs.320.45 million), SANIMA (Rs.301.65 million), NICA (Rs.266.55 million), SRBL (Rs.209.09 million), CBIL (Rs.196.34 million), CBL (Rs.128.18 million), PRABHU (Rs.54.67 million), PCBL (Rs.27.25 million), BOKL (Rs.13.06 million).

The table also shows the proposed dividend varies widely within the individual banks also. It increased from Rs.974.74 million in fiscal year 2012/2013 to Rs.1983 million in fiscal year 2019/20 for NABIL, from Rs.276 million in fiscal year 2012/2013 to Rs.562 million in fiscal year 2019/20 for HBL, from Rs.177 million in fiscal year 2012/2013 to Rs.310.8 million in fiscal year 2019/20 for NSBL, from Rs.159 million in fiscal year 2012/2013 to Rs.205.7 million in fiscal year 2019/20 for NBBL, from Rs.0 million in fiscal year 2012/2013 to Rs.258 million in fiscal year 2019/20 for MBL, from Rs.164 million in fiscal year 2012/2013 to Rs.293 millionin fiscal year 2019/20 for SBL, from Rs.0 million in fiscal year 2012/2013 to Rs.22 million in fiscal year 2019/20 for ADBL, from Rs.0 million in fiscal year 2012/2013 to Rs.2419 million in fiscal year 2019/20 for GIBL, from Rs.315 million in fiscal year 2012/2013 to Rs.336 million in fiscal year 2019/20 for CBIL, from Rs.12 million in fiscal year 2012/2013 to Rs.222.4 million in fiscal year 2019/20 for SRBL, from Rs.300 million in fiscal year 2012/2013 to Rs.446.4 million in fiscal year 2019/20 for NMBL, from Rs.0 million in fiscal year 2012/2013 to Rs.54.7 million in fiscal year 2019/20 for PRABHU, from Rs.210 million in fiscal year 2012/2013 to Rs.400.7 million in fiscal year 2019/20 for MBNL, from Rs.11 million in fiscal year 2012/2013 to Rs.316.9 million in fiscal year 2019/20 for SANIMA.

Table 4.2:

Structure and pattern of proposed dividend of selected Nepalese commercial banks for the period of 2012/13 to 2019/20.

(The table shows the proposed dividend of 21 Nepalese commercial banks for the study period of 2012/13 to 2019/20. DIVA (dividend amount defined as proposed dividend by the bank in respective years, in rupees millions) and bank wise mean and standard deviation in the row and year wise in column.)

Banks	2013	2014	2015	2016	2017	2018	2019	2020	MEAN	S.D
NABIL	974.74	1371.23	250.26	713.4	1114	1769.51	1780	1983	1244.52	557.25
NIBL	942	1036.68	82.87	1523.7	2310	2342.03	1093	783.7	1264.25	718.86
SCBL	741.56	847.29	431.88	49.3	211	1402	1802	388	734.13	564.92
HBL	276	175	237	71	85	874.8	1022	562	412.85	342.29
NSBL	177	186	43	57	57	868.26	915.89	310.8	326.87	337.06
NBBL	159	424	32	51	274	851.7	566.2	205.7	320.45	262.33
EBL	820	920	141	106	110	1621.37	1621.37	470.6	726.29	593.84
BOKL	12	11	29	0	0	23.1	23.1	6.3	13.06	10.29
NICA	462	347	55	63	71	42.56	976.18	115.64	266.55	305.29
MBL	0	16	28	42	443	994	886	258	333.38	379.07
SBL	164	202	21	0	0	690.69	1356	293	340.84	438.81
ADBL	0	943	0	0	677	2097.67	68375	22	9014.33	22446.67
GIBL	0	166	0	0	808	0	206.2	2419	449.90	787.02
CBIL	315	125	27	40	69	131.75	527	336	196.34	166.40
PCBL	117	26	30	45	0	0	0	0	27.25	37.67
SRBL	12	0	28	0	0	937.54	472.8	222.4	209.09	316.85
NMBL	300	21	17	54	0	1520.66	577.09	446.4	367.02	482.28
PRABHU	-	-	-	-	-	34.6	74.7	54.7	54.67	16.37
MBNL	210	15	14	28	0	704.56	1220.7	400.7	324.12	411.09
CBL	115	40	10	7	0	294	525.8	33.6	128.18	175.92
SANIMA	11	18	27	36	0	1120.18	884.14	316.9	301.65	420.04
MEAN	290.42	344.51	75.20	144.32	311.45	872.43	4043.10	458.50		
S.D	316.76	417.60	107.39	350.21	552.11	703.28	14394.63	601.71		

Sources:- Annual reports of concern sample banks(2012/13 to 2019/20)

On the other hand, proposed dividend decreased, from Rs.942 million in fiscal year 2012/2013 to Rs.783.7 million in fiscal year 2019/20 for NIBL, from Rs.741.56 million in fiscal year 2012/2013 to Rs.388 million in fiscal year 2019/20 for SCBL, from Rs.820 million in fiscal year 2012/2013 to Rs.470.6 million in fiscal year 2019/20 for EBL, from Rs.12 million in fiscal year 2012/2013 to Rs.6.3 million in fiscal year 2019/20 for BOKL, from Rs.462 million in fiscal year 2012/2013 to Rs.115.64 million in fiscal year 2019/20 for NICA, from Rs.117 million in fiscal year

2012/2013 to Rs.0 million in fiscal year 2019/20 for PCBL, from Rs.115 million in fiscal year 2012/2013 to Rs.33.6 million in fiscal year 2019/20 for CBL.

The variation in as proposed dividend indicated by standard deviation is lowest for BOKL followed by PRABHU, PCBL, CBIL, CBL, NBBL, NICA, SRBL, NSBL, HBL, MBL, MBNL, SANIMA, SBL, NMBL, NABIL, SCBL, EBL, NIBL, GIBL and ADBL.

The trend of average proposed dividend of Nepalese commercial banks is presented in figure 4.2

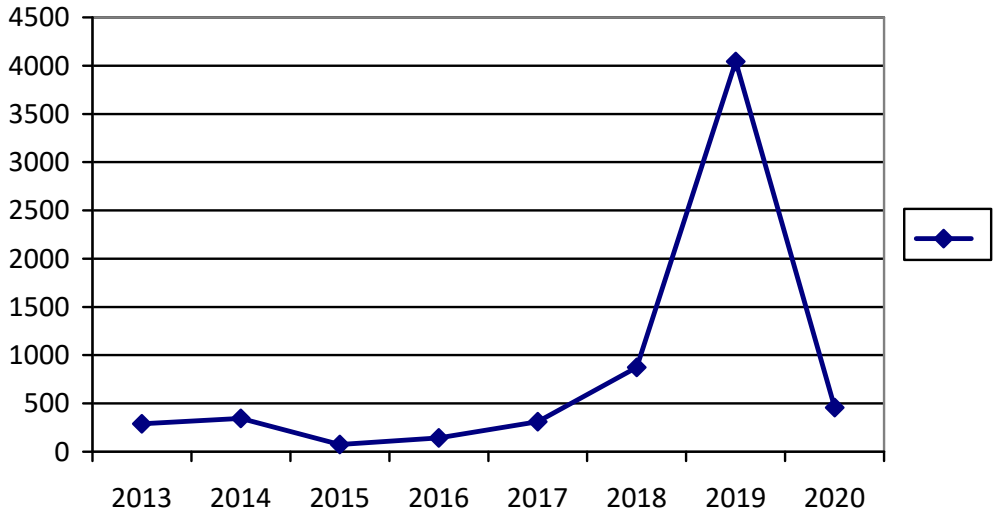

Figure 4.2: Trend of average proposed dividend

Figure 4.2 shows the trend of proposed dividend of Nepalese commercial banks from year 2012/13 to 2019/20. The figure indicates various fluctuations over the study period. The graph shows that average dividend have increased from Rs.290.42 million in the fiscal year 2012/13 to 458.50 million in the fiscal year 2019/20. The proposed dividend has decreased from Rs.344.51 million in 2013/14 to Rs.75.20 million in 2014/15. However, in the fiscal year 2015/16, the dividend has increased to Rs.144.32 million, to Rs.311.45 million in 2016/17 and to 4043.10 million in 2018/19. Similarly, the proposed dividend has fluctuated over the period. The proposed dividend has decreased from Rs.4043.10 million in year2018/19 to Rs.458.50 million in the fiscal year 2019/20. However, the proposed dividend has increased in 2013/14, 2015/16, 2016/17, 2017/18 and 2018/19. Overall, the graph shows proposed dividend is increasing in trend over the study period except for the year 2014/15 and 2019/20.

4.1.3 Structure and pattern of taxation

The structure and pattern of average taxation for the study period of 2012/13 to 2019/20 has been presented in table 4.3.

Table 4.3:

Structure and pattern of average taxation of selected Nepalese commercial banks for the period of 2012/13 to 2019/20

(The table shows the taxation of 21 Nepalese commercial banks for the study period of 2012/13 to 2019/20. TAX (taxation defined as income tax payable of the bank, in rupees millions) and bank wise mean and standard deviation in the row and year wise in column.)

Banks	2013	2014	2015	2016	2017	2018	2019	2020	MEAN	S.D
NABIL	950.68	982.93	887.51	1188.42	1566	1675.45	1802	1632	1335.62	348.02
NIBL	822.55	826.87	855.55	1156.56	1364	1280.9	1162	1089	1069.68	197.98
SCBL	524.06	565.95	580.97	524.65	607	831.6	1040	850	690.53	179.30
HBL	433	662	343	813	924	889.57	1169	971.66	775.65	261.49
NSBL	338	389	492	588	652	777.03	1023.7	688.5	618.53	207.25
NBBL	160	148	245	418	483	466.1	696.8	557.8	396.84	183.58
EBL	630	666	673	804	857	1100.4	1294	1066	886.30	226.85
BOKL	267	124	158	505	592	572.04	883.5	652.13	469.21	247.22
NICA	252	358	290	466	615	475.74	1417.47	1298.75	646.62	425.52
MBL	69	189	290	395	558	466.1	730.21	595.87	411.65	206.72
SBL	204	300	333	537	579	825.96	1041.8	985.01	600.72	299.37
ADBL	662	474	710	860	171	1522.01	1068	1532	874.88	449.55
GIBL	203	313	440	580	884	810.61	1172	1559.2	745.23	428.59
CBIL	157	173	301	459	496	472.76	337.7	324	340.06	122.11
PCBL	205	237	320	481	627	721.18	950.7	1017.1	569.87	292.72
SRBL	146	112	196	421	470	474.3	799.8	587.5	400.83	222.18
NMBL	136	174	212	488	623	712.53	990.8	722	507.29	289.81
PRABHU	114.1	128.9	387.6	488.6	812.1	383.5	328.6	567.6	401.38	214.04
MBNL	76	131	151	24	335	525.64	693.3	658.5	324.31	251.93
CBL	52	101	99	142	76	265.35	363.3	324	177.83	113.48
SANIMA	132	188	261	421	559	717.83	962.1	753.5	499.30	279.48
Mean	311.11	344.94	391.70	560.01	659.53	760.31	948.89	877.72		
S.D	253.80	251.35	222.21	272.02	332.20	360.88	348.68	372.20		

Sources:- Annual reports of concern sample banks(2012/13 to 2019/20)

The table shows the taxation varies widely within the individual banks. It increased from Rs.950.68 million in fiscal year 2012/2013 to Rs.1632 million in fiscal year 2019/20 for NABIL, from Rs822.55 million in fiscal year 2012/2013 to Rs.1089 million in fiscal year 2019/20 for NIBL, from Rs.524.06 million in fiscal year

2012/2013 to Rs.850 million in fiscal year 2019/20 for SCBL, from Rs.433 million in fiscal year 2012/2013 to Rs971.66 million in fiscal year 2019/20 for HBL, from Rs.338 million in fiscal year 2012/2013 to Rs.688.5 million in fiscal year 2019/20 for NSBL, from Rs.160 million in fiscal year 2012/2013 to Rs.557.8 million in fiscal year 2019/20 for NBBL, from Rs.630 million in fiscal year 2012/2013 to Rs.1066 million in fiscal year 2019/20 for EBL, from Rs.267 million in fiscal year 2012/2013 to Rs.652.13 million in fiscal year 2019/20 for BOKL, from Rs.252 million in fiscal year 2012/2013 to Rs.1298.75 million in fiscal year2019/20 for NICA, from Rs69 million in fiscal year 2012/2013 to Rs.595.87 million in fiscal year 2019/20 for MBL, from Rs.204 million in fiscal year 2012/2013 to Rs.985.01 million in fiscal year 2019/20 for SBL, from Rs.662 million in fiscal year 2012/2013 to Rs.1532 million in fiscal year 2019/20 for ADBL, from Rs.203 million in fiscal year 2012/2013 to Rs.1559.2 million in fiscal year 2019/20 for GIBL, from Rs.157 million in fiscal year 2012/2013 to Rs.324 million in fiscal year 2019/20 for CBIL, from Rs.205 million in fiscal year 2012/2013 to Rs.1017.1 million in fiscal year 2019/20 for PCBL, from Rs.146 million in fiscal year 2012/2013 to Rs.587.5 million in fiscal year 2019/20 for SRBL, from Rs.136 million in fiscal year 2012/2013 to Rs.722 million in fiscal year 2019/20 for NMBL , from Rs.114.1 million in fiscal year 2012/2013 to Rs.567.6 million in fiscal year 2019/20 for PRABHU, from Rs.76 million in fiscal year 2012/2013 to Rs.658.5 million in fiscal year 2019/20 for MBNL, from Rs.52 million in fiscal year 2012/2013 to Rs.324 million in fiscal year 2019/20 for CBL, from Rs.132 million in fiscal year 2012/2013 to Rs.753.5 million in fiscal year 2019/20 for SANIMA.

The structure and pattern of taxation of Nepalese commercial banks also indicated that average taxation is highest for NABIL (Rs.1335.62 million) followed by NIBL (Rs.1069.68 million), EBL (Rs.886.30 million), ADBL (Rs.874.88 million), HBL (Rs.775.65 million), GIBL (Rs.745.23 million), SCBL (Rs.690.53 million), NICA (Rs.646.62) NSBL (Rs.618.53 million) SBL (Rs.600.72 million), PCBL (Rs.569.87 million), NMBL (Rs.507.29 million), SANIMA (Rs.499.30 million), BOKL (Rs.469.21 million), MBL (Rs.411.65 million), PRABHU (Rs.401.38 million), SRBL (Rs.400.83 million), NBBL (Rs.396.84 million), CBIL (Rs.340.06 million), MBNL (Rs.324.31 million), CBL (Rs.177.83 million).

The variation in as taxation indicated by standard deviation is lowest for CBL followed by CBIL, SCBL, NBBL, NIBL, MBL, NSBL, PRABHU, SRBL, EBL, BOKL, MBNL, HBL, SANIMA, NMBL, PCBL,SBL, NABIL, NICA, GIBL and ADBL.

The trend of average taxation of Nepalese commercial banks is presented in figure 4.3.

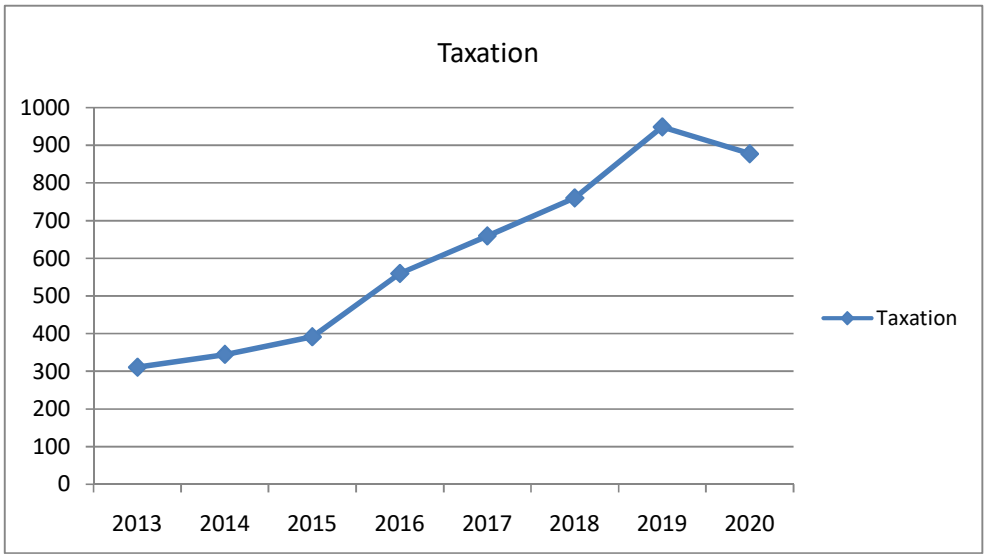

Figure 4.3: Trend of average taxation

Figure 4.3 shows the trend of taxation of Nepalese commercial banks from the fiscal year 2012/13 to 2019/20. The figure indicates various fluctuations over the study period. Tax paid by the commercial banks is in increasing trend except in 2019/20 where, the banks paid an average of Rs.311.11 million in the fiscal year 2012/13 which increased to 877.72 in the fiscal year 2019/20. Overall, the graph shows taxation is in inclining trend over the study period.

4.1.4 Structure and pattern of leverage

The structure and pattern of leverage for the study period of 2012/13 to 2019/20 has been presented in table 4.4.

The structure and pattern of leverage for Nepalese commercial bank showed that average leverage is highest for NICA (11.08 times), followed by EBL (10.62 times), SBL (10.46 times), NSBL (9.91 times), PRABHU (9.89 times), MBL (9.38 times),

HBL (9.18 times), NABIL (8.99 times), GIBL (8.97 times), SANIMA (8.60 times), NMBL (8.54 times), BOKL (8.29 times), PCBL (8.24 times), SRBL (8.18 times), CBIL (7.97 times), NIBL (7.70 times), SCBL (7.31 times), MBNL (6.78 times), CBL (6.69 times), NBBL (5.64 times) ,ADBL (5.42 times).

Table 4.4:

Structure and pattern of leverage of selected Nepalese commercial banks for the period of 2012/13 to 2019/20

(The table shows the leverage of 21 Nepalese commercial banks for the study period of 2012/13 to 2019/20. LEV (leverage defined as total debt divided by total equity, in times) and bank wise mean and standard deviation in the row and year wise in column.)

Banks	2013	2014	2015	2016	2017	2018	2019	2020	MEAN	S.D
NABIL	9.95	10.42	11.23	9.98	8.96	7.85	7.25	6.25	8.99	1.61
NIBL	9.42	9.87	9.64	6.97	7.06	5.91	6.27	6.47	7.70	1.55
SCBL	8.88	9.48	9.91	7.66	5.52	5.04	5.25	6.71	7.31	1.84
HBL	10.54	11.1	10.9	10.32	8.16	7.24	7.32	7.86	9.18	1.57
NSBL	16.06	12.47	9.5	10.35	8.6	7.01	7.35	7.95	9.91	2.86
NBBL	5.1	6.51	7.07	6.73	4.45	4.23	5.14	5.9	5.64	1.00
EBL	12.62	11.91	13.39	12.38	9.09	7.98	8.65	8.93	10.62	2.02
BOKL	8.85	10	10.67	9.37	8.26	6.31	6.22	6.67	8.29	1.62
NICA	9.6	9.57	10.01	9.9	8.81	13.65	13.58	13.53	11.08	1.97
MBL	9.83	11.59	11.22	10.13	6.96	7.19	8.4	9.75	9.38	1.61
SBL	12.48	12.43	12.52	10.92	8.1	7.75	9.07	10.39	10.46	1.85
ADBL	4.34	5.64	5.23	5.01	4.82	8.72	4.32	5.29	5.42	1.32
GIBL	11.08	8.8	8.45	9.07	9.31	8.27	8.3	8.5	8.97	0.87
CBIL	9.92	10.7	10.09	9.38	5.97	6.06	5.15	6.5	7.97	2.11
PCBL	9.98	9.51	9.57	9.07	7.24	7.48	6.63	6.41	8.24	1.35
SRBL	9.66	9.99	10.17	8.53	6.55	6.16	6.71	7.69	8.18	1.53
NMBL	9.81	9.74	11.54	9.87	7.1	5.82	6.8	7.6	8.54	1.84
PRABHU	10.6	10.6	14.5	8.1	8.9	7.9	8.62	9.9	9.89	2.00
MBNL	6.1	6.5	7.03	8.54	6.78	5.5	6.2	7.6	6.78	0.89
CBL	7.94	7.29	8.25	8.79	5.22	4.27	5.2	6.53	6.69	1.54
SANIMA	8.07	9.37	10.75	9.45	6.73	7.51	8.1	8.85	8.60	1.18
Mean	9.56	9.69	10.08	9.07	7.27	7.04	7.17	7.87		
S.D	2.49	1.85	2.09	1.56	1.44	1.93	1.95	1.86		

Sources:- Annual reports of concern sample banks(2012/13 to 2019/20)

Table 4.4 shows that the leverage varies widely within the individual banks also. The leverage increased from 5.1 times in fiscal year 2012/2013 to 5.9 times in fiscal year 2019/20 for NBBL, from 9.6 times in fiscal year 2012/13 to 13.53 times in the fiscal year 2019/20 for NICA, from 4.34 times fiscal year 2012/13 to 5.29 times in the fiscal

year 2019/20 for ADBL, from 6.1 times in fiscal year 2012/13 to 7.6 times in fiscal year 2019/20 for MBNL, from 8.07 times in fiscal year 2012/13 to 8.85 times in fiscal year 2019/20 for SANIMA.

On the other hand, leverage decreased from 9.95 times in 2012/13 to 6.25times in 2019/20 for NABIL, from 9.42times in 2012/13 to 6.47times in 2019/20 for NIBL, from 8.88 times in 2012/13 to 6.71 times in 2019/20 for SCBL, from 10.54 times in 2012/13 to 7.86 times in 2019/20 for HBL, from 16.06 times in fiscal year 2012/13 to 7.95 times in fiscal year 2019/20 for NSBL, from 12.62 times in fiscal year 2012/13 to 8.93 times in fiscal year 2019/20 for EBL, from 8.85 times in fiscal year 2012/13 to 6.67 times in fiscal year 2019/20 for BOKL, from 9.83 times in fiscal year 2012/13 to 9.75 times in fiscal year 2019/20 for MBL, from 12.48 times in fiscal year 2012/13 to 10.39 times in fiscal year 2019/20 for SBL, from 11.08 times in fiscal year 2012/13 to 8.5 times in fiscal year 2019/20 for GIBL from 9.92 times in fiscal year 2012/13 to 86.5 times in fiscal year 2019/20 for CBIL, from 9.98 times in fiscal year 2012/13 to 6.41 times in fiscal year 2019/20 for PCBL, from 9.66 times in fiscal year 2012/13 to 7.69 times in fiscal year 2019/20 for SRBL, from 9.81 times in fiscal year 2012/13 to 7.6 times in fiscal year 2019/20 for NMBL, from 10.6 times in fiscal year 2012/13 to 9.9 times in fiscal year 2019/20 for PRABHU, from 7.94 times in fiscal year 2012/13 to 6.53 times in fiscal year 2019/20 for CBL.

The variation in as leverage indicated by standard deviation is lowest for GIBL, MBNL, NBBL, SANIMA, ADBL, PCBL, SRBL, CBL, NIBL, HBL, NABIL, MBL, BOKL, SCBL, NMBL, SBL, NICA, PRABHU, EBL, CBIL and NSBL.

The trend of average leverage of Nepalese commercial banks is presented in figure 4.4.

Figure 4.4 shows the trend of leverage of Nepalese commercial banks from year 2012/13 to 2019/20. The figure indicates various fluctuations over the study period. Leverage is in increasing trend up-to the year 2014/15 where the average leverage of the commercial banks was 9.56times in the fiscal year 2012/13, which increased to 10.08times in the fiscal year 2014/15. After the year 2014/15, the leverage is in decreasing trend and it fell down to 7.07 times in the fiscal year 2017/18. Overall, the graph shows leverage is increasing till 2014/15 and has decreasing till 2017/18 again has start to increasing up-to over the study period.

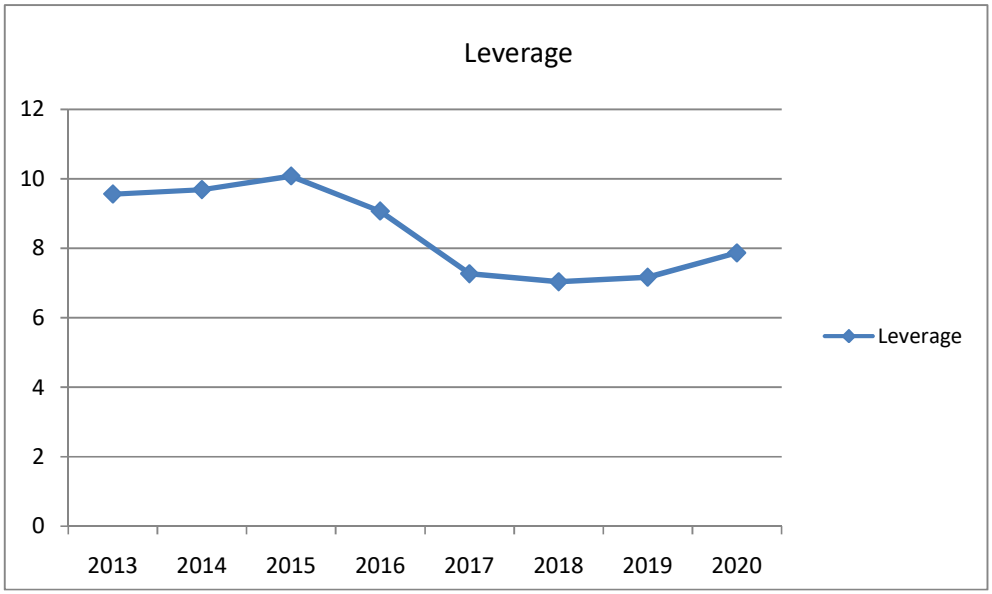

Figure 4.4: Trend of average leverage

4.1.5 Structure and pattern of growth

The structure and pattern of growth for the study period of 2012/13 to 2019/20 has been presented in table 4.5.

The structure and pattern of growth for Nepalese commercial bank showed that, growth decreased from 6.6 times in 2012/13 to 2.99 times in 2019/20 for NABIL, from 4.64 times in fiscal year 2012/13 to 2.26 times in fiscal year 2019/20 for NIBL, from 7.31 times in fiscal year 2012/13 to 3.41 times in fiscal year 2019/20 for SCBL, from 3.65 times in fiscal year 2012/13 to 2.88 times in fiscal year 2019/20 for HBL, from 5.27 times in fiscal year 2012/13 to 2.63 times in fiscal year 2019/20 for NSBL, from 1.7 times in fiscal year 2012/13 to 1.36 times in fiscal year 2019/20 for NBBL, from 5.47 times in fiscal year 2012/13 to 3.07 times fiscal year 2019/20 for EBL, from 2.82 times in 2012/13 to 1.31 times in 2017/18 for BOKL, from 2.03 times in 2012/13 to 1.6 times in 2019/20 for MBL, from 1.94 times fiscal year 2012/13 to 1.81 times in the fiscal year 2019/20 for SBL, from 3.72 times in fiscal year 2012/13 to 1.34 times in the fiscal year 2019/20 for GIBL, from 2.36 times in fiscal year 2012/13 to 1.09 times in the fiscal year 2019/20 for CBIL, from 2.83 times in fiscal year 2012/13 to 1.73 times in the fiscal year 2019/20 for PCBL, from 1.91 times in fiscal year 2012/13 to 1.57 times in the fiscal year 2019/20 for SRBL, from 1.9 times in

fiscal year 2012/13 to 1.5 times in the fiscal year 2019/20 for PRABHU, from 1.46 times in fiscal year 2012/13 to 1.09 times in fiscal year 2019/20 for CBL.

Table 4.5:

Structure and pattern of growth of selected Nepalese commercial banks for the period of 2012/13 to 2019/20

(The table shows the growth of 21 Nepalese commercial banks for the study period of 2012/13 to 2019/20. GO(growth opportunities defined as market price per share divided by book value per share, in times) and bank wise mean and standard deviation in the row and year wise in column.

Banks	2013	2014	2015	2016	2017	2018	2019	2020	Mean	S.D
NABIL	6.6	10.1	7.73	9.61	6.07	3.57	3.11	2.99	6.22	2.65
NIBL	4.64	5.96	4.56	5.56	3.98	2.65	4.62	2.26	4.28	1.20
SCBL	7.31	11.24	7.33	13.43	10.09	4.04	3.67	3.41	7.57	3.52
HBL	3.65	4.48	3.89	7.65	4.6	2.92	2.94	2.88	4.13	1.48
NSBL	5.27	7.48	4.8	10.44	5.33	2.98	3.14	2.63	5.26	2.46
NBBL	1.7	4.14	3.17	5.7	2.64	1.39	1.44	1.36	2.69	1.47
EBL	5.46	8.88	6.32	10.58	5.03	3.05	3.05	3.07	5.68	2.64
BOKL	2.82	3.05	3.14	3.44	2.69	1.52	1.47	1.31	2.43	0.80
NICA	2.92	4.6	2.65	4.99	2.7	1.87	2.65	3.4	3.22	0.99
MBL	2.03	5.44	4.1	4.92	2.59	1.5	1.89	1.6	3.01	1.47
SBL	1.94	4.92	3.68	4.21	2.58	1.77	1.88	1.81	2.85	1.17
ADBL	0.87	2.81	0.86	2.57	1.56	1.22	1.3	1.29	1.56	0.69
GIBL	3.72	5.65	4.03	4.23	2.77	1.83	2.11	1.34	3.21	1.36
CBIL	2.36	4.11	4.04	5.62	2.99	1.59	1.25	1.09	2.88	1.51
PCBL	2.83	4.25	3.28	5.12	2.89	1.97	1.93	1.73	3.00	1.12
SRBL	1.91	4.23	3.64	6.45	2.96	1.52	1.65	1.57	2.99	1.62
NMBL	2.08	3.66	3.67	5.09	3.24	1.97	1.43	2.24	2.92	1.13
PRABHU	1.9	3.7	3.02	3.8	2.9	1.2	1.7	1.5	2.47	0.95
MBNL	0	3.82	3.35	4.39	3.53	1.24	1.64	1.47	2.43	1.44
CBL	1.46	3.14	2.53	2.17	2.03	1.22	1.25	1.09	1.86	0.68
SANIMA	2.38	5.49	4.13	6.2	3.2	2.18	2.2	2.4	3.52	1.48
Mean	3.04	5.29	4.00	6.01	3.64	2.06	2.21	2.02		
S.D	1.83	2.25	1.53	2.78	1.80	0.81	0.89	0.76		

Sources:- Annual reports of concern sample banks(2012/13 to 2019/20)

On the other hand average growth is highest for SCBL (7.57 times), followed by NABIL (6.22 times), EBL (5.68 times), NSBL (5.26 times), NIBL (4.28 times), HBL (4.13 times), SANIMA (3.52 times), NICA (3.22 times), GIBL (3.21 times), MBL (3.01 times), PCBL (3.00 times), SRBL (2.99 times), NMBL (2.92 times), CBIL (2.88 times), SBL (2.85 times), NBBL (2.69 times), PRABHU (2.47 times), BOKL (2.43 times) , MBNL (2.43 times), CBL (1.86 times) and ADBL (1.56 times).

Table 4.5 shows that the growth varies widely within the individual banks also. The growth increased from 2.92 times in fiscal year 2012/13 to 3.4 times in fiscal year 2019/20 for NICA, from 0.87 times in fiscal year 2012/2013 to 1.29 times in the fiscal year 2019/20 for ADBL , from 2.08 times in fiscal year 2012/13 to 2.24 times in fiscal year 2019/20 for NMBL, from 0 times in fiscal year 2012/13 to 1.47 times in fiscal year 2019/20 for MBNL and from 2.38 times in fiscal year 2012/13 to 2.4 times in fiscal year 2019/20 for SANIMA.

The variation in as growth indicated by standard deviation is lowest for CBL followed by ADBL, BOKL, PRABHU, NICA, PCBL, PCBL, NMBL, SBL, NIBL, GIBL, MBNL, NBBL, MBL, HBL, SANIMA, CBIL, SRBL, NSBL, EBL, NABIL and SCBL.

The trend of average growth of Nepalese commercial banks is presented in figure 4.5.

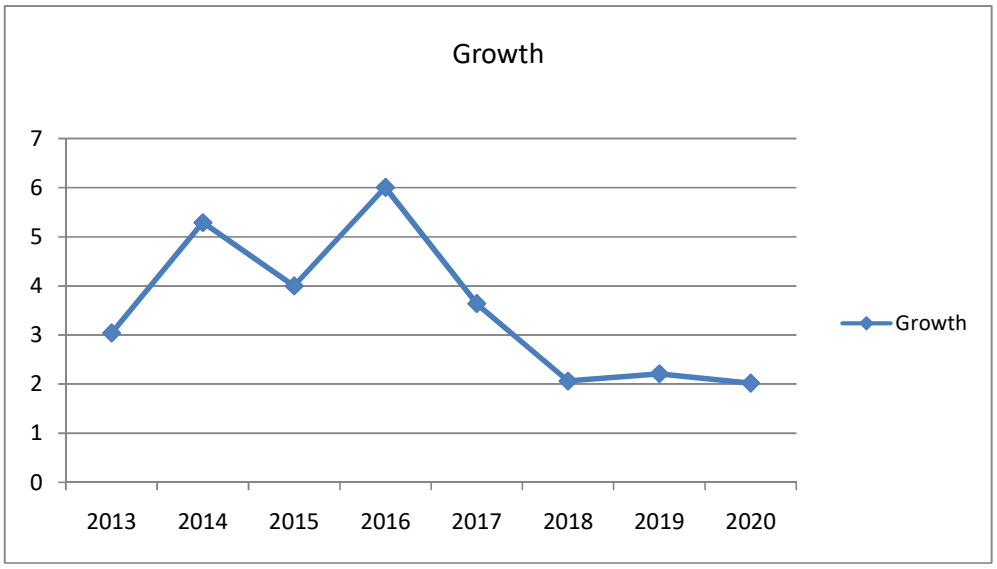

Figure 4.5: Trend of average growth

Figure 4.5 shows the trend of growth opportunities of Nepalese commercial banks from year 2012/13 to 2019/20. The figure indicates various fluctuations over the study period. The graph shows that the growth has increased in the year 2013/14 to 5.29 times from 3.04 times in the fiscal year 2012/13. Then after, it decreased to 4.00 times in the fiscal year 2014/15. Then it increased to 6.01 in the fiscal year 2015/16 there after it has decreased till the fiscal year 2019/20 except in the fiscal year 2018/19. Overall, the graph shows growth is fluctuating highly over the study period.

4.1.6 Structure and pattern of return on assets

The structure and pattern of return on assets for the study period of 2012/13 to 2019/20 has been presented in table 4.6.

Table 4.6:

Structure and pattern of return on assets of selected Nepalese commercial banks for the period of 2012/13 to 2019/20

(The table shows the return on assets of 21 Nepalese commercial banks for the study period of 2012/13 to 2019/20. ROA (return on assets defined as net income divided total assets, in percentage) and bank wise mean and standard deviation in the row and year wise in column.)

Banks	2013	2014	2015	2016	2017	2018	2019	2020	Mean	S.D
NABIL	3.03	2.66	1.81	2.21	2.57	2.47	2.11	1.58	2.31	0.44
NIBL	2.62	2.25	1.88	1.97	2.06	2.13	1.79	1.19	1.99	0.38
SCBL	2.67	2.51	1.99	1.98	1.84	2.61	2.61	1.71	2.24	0.37
HBL	1.54	1.3	1.34	1.94	2.03	1.61	2.08	1.66	1.69	0.28
NSBL	1.19	1.51	1.8	1.7	1.53	1.97	1.94	1.17	1.60	0.29
NBBL	3.57	2.4	2.06	2.57	2.11	1.86	2.08	1.39	2.26	0.60
EBL	2.24	2.2	1.59	1.52	1.72	1.78	1.94	1.42	1.80	0.28
BOKL	1.9	0.65	0.74	1.37	1.58	1.45	1.88	1.33	1.36	0.43
NICA	1.38	1.62	1.12	1.33	1.48	0.78	1.56	1.32	1.32	0.25
MBL	0.49	1.12	1.26	1.51	1.89	1.86	1.61	1.03	1.35	0.44
SBL	1.43	1.74	1.51	1.69	1.54	1.59	1.49	1.17	1.52	0.16
ADBL	2.75	1.76	3.57	2.27	2.02	2.54	2.77	1.86	2.44	0.56
GIBL	1.15	1.62	1.39	1.58	1.72	1.67	1.82	1.06	1.50	0.26
CBIL	1.59	1.55	1.74	1.96	1.65	0.01	1.13	0.72	1.29	0.60
PCBL	1.47	1.45	1.63	2.05	1.89	1.82	2.15	1.48	1.74	0.26
SRBL	1.19	0.83	1.26	1.62	1.65	1.78	1.8	1.17	1.41	0.33
NMBL	1.43	1.36	1.21	1.49	1.74	1.65	1.79	0.7	1.42	0.33
PRABHU	-3.43	-1.44	2.19	1.64	1.76	0.86	1.29	0.71	0.45	1.79
MBNL	1.02	1.49	1.4	1.92	1.74	1.61	1.68	1.64	1.56	0.25
CBL	0.66	0.94	0.76	0.93	0.88	1.21	1.13	0.72	0.90	0.18
SANIMA	1.39	1.46	1.55	1.78	1.86	1.85	2.07	1.41	1.67	0.24
Mean	1.49	1.48	1.61	1.76	1.77	1.67	1.84	1.26		
S.D	1.35	0.84	0.58	0.36	0.31	0.59	0.40	0.34		

Sources:- Annual reports of concern sample banks(2012/13 to 2019/20)

The structure and pattern of return on assets for Nepalese commercial bank showed that average return on assets is highest for ADBL (2.44 percent), followed by NABIL (2.31 percent), NBBL (2.26 percent), SCBL (2.24 percent), NIBL (1.99 percent), EBL (1.80 percent), PCBL (1.74 percent), HBL (1.69 percent), SANIMA (1.67 percent), NSBL (1.60 percent), MBNL (1.56 percent), SBL (1.52 percent), GIBL (1.50 percent), NMBL (1.42 percent), SRBL (1.41 percent), BOKL (1.36 percent), MBL

(1.35 percent), NICA (1.32 percent) ,CBIL (1.29 percent), CBL (0.90 percent) and PRABHU (0.45 percent).

Table 4.6 also shows that the return on assets varies widely within the individual banks also. The average return on assets increased from 1.54 percent in fiscal year 2012/13 to 1.66 percent in fiscal year 2019/20 for HBL, from 0.49 percent in fiscal year 2012/13 to 1.03 percent in fiscal year 2019/20 for MBL, from 1.47 percent in fiscal year 2012/13 to 1.48 percent in fiscal year 2019/20 for PCBL, from -3.43 percent in fiscal year 2012/13 to 0.71 percent in fiscal year 2019/20 for PRABHU, from 1.02 percent in fiscal year 2012/13 to 1.64 percent in fiscal year 2019/20 for MBNL, from 0.66 percent in fiscal year 2012/13 to 0.72 percent in fiscal year 2019/20 for CBL, from 1.39 percent in fiscal year 2012/13 to 1.41 percent in fiscal year 2019/20 for SANIMA.

On the other hand, return on assets decreased from 3.03 percent in fiscal year 2012/13 to 1.58 percent in fiscal year 2019/20 for NABIL, from 2.62 percent in fiscal year 2012/13 to 1.19 percent in fiscal year 2019/20 for NIBL, from 2.67 percent in fiscal year 2012/13 to 1.71 percent in fiscal year 2019/20 for SCBL, from 1.19 percent in fiscal year 2012/13 to 1.17 percent in fiscal year 2019/20 for NSBL, from 3.57 percent in fiscal year 2012/13 to 1.39 percent in fiscal year 2019/20 for NBBL, from 2.24 percent in fiscal year 2012/13 to 1.42 percent in fiscal year 2019/20 for EBL, from 1.9 percent in fiscal year 2012/13 to 1.33 percent in fiscal year 2019/20 for BOKL, from 1.38 percent in fiscal year 2012/13 to 1.32 percent in fiscal year 2019/20 for NICA, from 1.43 percent in fiscal year 2012/13 to 1.17 percent in fiscal year 2019/20 for SBL, from 2.75 percent in fiscal year 2012/13 to 1.86 percent in fiscal year 2019/20 for ADBL, from 1.15 percent in fiscal year 2012/13 to 1.06 percent in fiscal year 2019/20 for GIBL, from 1.59 percent in fiscal year 2012/13 to 0.72 percent in fiscal year 2019/20 for CBIL, from 1.19 percent in fiscal year 2012/13 to 1.17 percent in fiscal year 2019/20 for SRBL, from 1.43 percent in fiscal year 2012/13 to 0.7 percent in fiscal year 2019/20 for NMBL.

The variation in as return on assets indicated by standard deviation is lowest for SBL followed by CBL, SANIMA, NICA, MBNL, GIBL, PCBL, HBL, EBL, NSBL, SRBL, NMBL, SCBL, NIBL, BOKL, NABIL, MBL, ADBL, NBBL, CBIL and PRABHU.

The trend of average return on assets of Nepalese commercial banks is presented in figure 4.6.

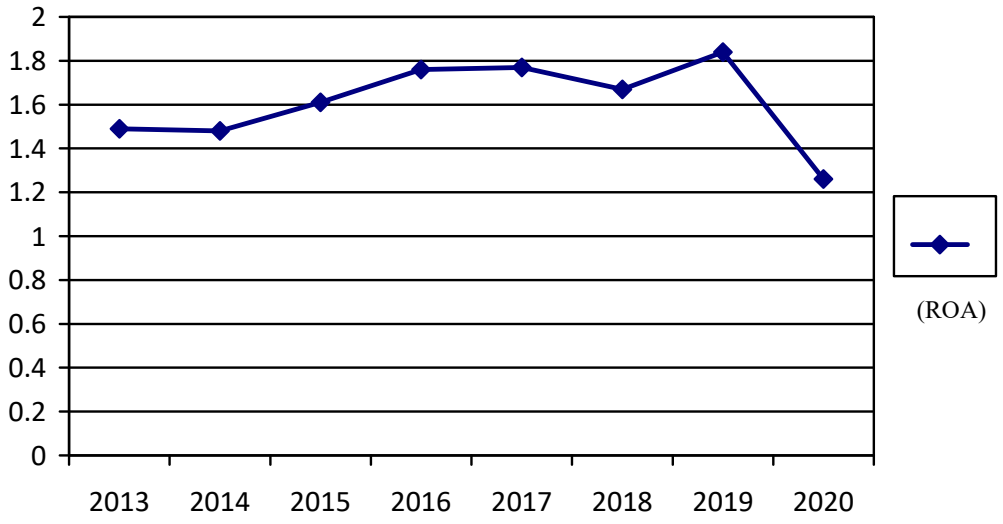

Figure 4.6 trend of average return on assets

Figure 4.6 shows the trend of average return on assets of Nepalese commercial banks from year 2012/13 to 2019/20. The average return on assets has decreased from 1.49 percent in fiscal year 2012/13 to 1.48 percent in fiscal year 2013/14 after that it has increased till 2016/17 up-to 1.77 percent, it has decreased from 1.77 percent in fiscal year 2016/17 to 1.67 percent in fiscal year 2017/18, there after it has increase to 1.84 percent in fiscal year 2018/19 again decrease to 1.26 percent in fiscal year 2019/20. Overall, the graph shows average return on assets is fluctuating over the study period.

4.1.7 Structure and pattern of bank size

The structure and pattern of bank size for the study period of 2012/13 to 2019/20 has been presented in table 4.7.

The structure and pattern of bank size Nepalese commercial banks indicated that average bank size is highest for NABIL (Rs.142.99 billion) followed by NIBL (Rs.138.13 billion), NICA (Rs.122.55 billion), ADBL (Rs.121.93 billion), EBL (Rs.120.71 billion), GIBL (Rs.115.49 billion), HBL (Rs.103.78 billion), SBL (Rs92.85 billion), NSBL (Rs.89.59 billion), PRABHU (Rs.85.95 billion), NMBL (Rs.85.69 billion), SCBL (Rs.75.03 billion), PCBL (Rs.74.74 billion), BOKL (Rs.72.95 billion), SANIMA (Rs.68.08 billion), MBL (Rs.67.41 billion), SRBL

(Rs.64.61 billion), NBNL (Rs.60.45 billion), CBIL (Rs.54.65 billion), NBBL (Rs.52.89 billion), CBL (Rs.42.82 billion)

Table 4.7:

The structure and pattern of bank size of selected Nepalese commercial banks for the period of 2012/13 to 2019/20

(The table shows the bank size of 21 Nepalese commercial banks for the study period of 2012/13 to 2019/20. BS (bank size defined as natural logarithm of total assets, in rupees billion) and bank wise mean and standard deviation in the row and year wise in column.)

Banks	2013	2014	2015	2016	2017	2018	2019	2020	Mean	S.D
NABIL	73.24	87.27	115.99	127.3	140.33	160.98	201.139	237.68	142.99	51.99
NIBL	73.15	86.17	104.35	129.78	150.82	171.89	185.84	203.02	138.13	44.61
SCBL	45.63	53.32	64.93	65.19	77.41	84.03	93.26	116.44	75.03	21.41
HBL	61.15	73.59	82.8	99.86	107.26	116.46	133.2	155.9	103.78	29.45
NSBL	64.8	61.08	59.28	78.52	99.83	102.54	118.3	132.4	89.59	25.98
NBBL	21.8	30.87	39.48	46.68	56.92	61.38	76.3	89.72	52.89	21.40
EBL	65.74	70.45	99.15	113.89	116.51	144.81	170.08	185.02	120.71	40.67
BOKL	32.55	39.03	44.97	81.75	83.62	91.21	100.92	109.58	72.95	27.87
NICA	46.54	51.5	60.52	80.46	99.27	170.94	220.59	250.59	122.55	75.28
MBL	30.3	40.72	48.75	59.46	68.93	61.38	105.25	124.52	67.41	30.07
SBL	33.69	40.28	50.65	74.4	89.9	119.87	183	151	92.85	50.78
ADBL	82.16	86.51	100.89	112.71	126.87	135.42	151.57	179.32	121.93	31.11
GIBL	39.02	60.02	69.19	87.7	116.59	125.85	151.65	273.88	115.49	69.23
CBIL	25.98	32.22	41.49	55.06	65.41	77.71	62.47	76.85	54.65	18.37
PCBL	32.41	38.03	45.8	54.4	77.7	95.04	102.3	152.2	74.74	38.03
SRBL	26.13	29.66	37.39	58.56	71.46	82.78	94.6	116.29	64.61	30.47
NMBL	25.13	30.21	41.34	74.61	86.86	112.39	135.5	179.5	85.69	51.03
PRABHU	23.44	37.21	46.51	69.8	92.6	112.6	137.9	167.5	85.95	47.70
MBNL	17.41	20.57	24.71	39.87	45.64	82.06	97.8	155.5	60.45	45.08
CBL	18.23	25.43	30.42	35.43	41.74	51.93	62.5	76.9	42.82	18.53
SANIMA	21.98	29.38	40.3	55.97	70	91.82	109.06	126.1	68.08	35.63
Mean	40.98	48.74	59.47	76.26	89.79	107.29	128.25	155.23		
S.D	20.16	20.93	25.71	26.66	28.48	34.19	43.76	52.77		

Sources:- Annual reports of concern sample banks(2012/13 to 2019/20)

The table also shows the bank size varies widely within the individual banks also. It increased from Rs.73.24 billion to Rs.237.68 billion for NABIL, from Rs.73.15 billion to Rs.203.02 billion for NIBL, from Rs.45.63 billion to Rs.116.44 billion for SCBL, from Rs.61.15 billion to Rs.155.9 billion for HBL, from Rs.64.8 billion to Rs.132.4 billion for NSBL, from Rs.21.8 billion to Rs.89.72 billion for NBBL, from Rs.65.74 billion to Rs.185.02 billion for EBL, from Rs.32.55 billion to Rs.109.58 billion for BOKL, from Rs.46.54 billion to Rs.250.59 billion for NICA, from Rs.30.3

billion to Rs.124.52 billion for MBL, from Rs.33.69 billion to Rs.151 billion for SBL, from Rs.82.16 billion to Rs.179.32 billion for ADBL, from Rs.39.02 billion to Rs.273.88 billion for GIBL, from Rs.25.98 billion to Rs.76.85 billion for CBIL, from Rs.32.41 billion to Rs.152.2 billion for PCBL, from Rs.26.13 billion to Rs.116.29 billion for SRBL, from Rs.25.13 billion to Rs.179.5 for NMBL, from Rs.23.44 billion to Rs.167.5 for PRABHU, from Rs.17.41 billion to Rs.155.5 for MBNL, from Rs.18.23 billion to Rs.76.9 for CBL and from Rs.21.98 billion to Rs.126.1 for SANIMA.

The variation in as bank size indicated by standard deviation is lowest for CBIL followed by CBL, NBBL, SCBL, NSBL, BOKL, HBL, MBL, SRBL, ADBL, SANIMA, PCBL, EBL, NIBL, MBNL, PRABHU, SBL, NMBL, NABIL, GIBL and NICA. When bank size is compared over the period of time for individual banks, it can be seen that bank size has increased in the all of the selected bank.

The trend of average bank size of Nepalese commercial banks is presented in figure 4.7.

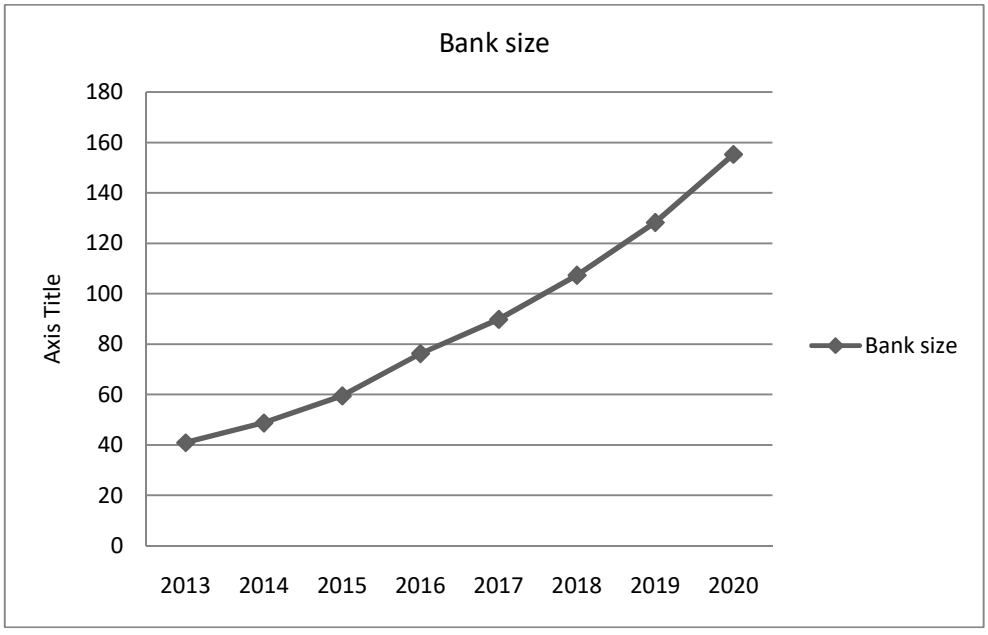

Figure 4.7: Trend of average bank size

Figure 4.7 shows the trend of bank size of Nepalese commercial banks from fiscal year 2012/13 to 2019/20. The figure indicates various fluctuations over the study period. Bank size has increased more than triple since 2012/13 from average total

assets of Rs.40.98 billion to Rs.76.26 billion in 2015/16. Similarly, over the fiscal year the bank size has increased significantly and was recorded to be Rs.155.23 billion in the fiscal year 2019/20 which is almost 4 times the total assets recorded in the year 2012/13. Overall, the graph shows bank size is in upward trend over the study period.

4.2 Descriptive statistics

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. It is used in this study consists of minimum, maximum, mean and the standard deviation associated with variables under consideration.

The descriptive statistics used in this study consists of mean, standard deviation, minimum and maximum values associated with variables under consideration. The descriptive statistics of dependent variables (proposed dividend and dividend yield ratio) and independent variables (taxation, leverage, growth, profitability and size) for selected Nepalese commercial banks is presented in Table 4.8.

Table 4.8:

Descriptive statistics of all selected Nepalese commercial banks

(The table shows the descriptive statistics for dependent and independent variables of 21 Nepalese commercial banks for the study period of2012/13 to 2019/20. The dependent variables are DYR(dividend yield ratio defined as dividend per share dividend by market value per share, in percentage)and DIVA(dividend amount defined as proposed dividend by the bank in respective years, in rupees millions) and independent variables are TAX (taxation defined as income tax payable of the bank, in rupees millions), LEV(leverage defined as total debt divided by total equity, in times), GO(growth opportunities defined as market price per share divided by book value per share, in times), ROA(return on assets defined as net income divided total assets, in percentage.), BS(bank size defined as natural logarithm of total assets, in rupees billion).

Descriptive Stati**stics**

Variables	Minimum	Maximum	Mean	Std. Deviation
DYR	0.00	9.43	3.83	1.83
DIVA	0.00	68375.00	810.55	5273.03
TAX	24.00	1802.00	592.40	378.12
LEV	4.23	16.06	8.47	2.26
GO	0.00	13.43	3.53	2.23
ROA	-3.43	3.57	1.61	0.71
BS	17.41	273.88	88.25	50.29

Source: SPSS output result outcome

The result presents the descriptive statistics of dependent and independent variables for the selected commercial banks. Dividend yield ratio ranges from a minimum of 0 percent to a maximum of 9.43 percent, leading to an average of 3.83 percent. Likewise, the proposed dividend ranges from a minimum of Rs. 0 million to a maximum of Rs. 68375.00 million, leading to an average of Rs. 810.55 million. Likewise, the taxation ranges from a minimum of Rs 24.00 million to a maximum of Rs. 1802.00 million, leading to an average of Rs. 592.40 million. Similarly, the leverage ranges from a minimum of 4.23 times to a maximum of 16.06 times, leading to an average of 8.47 times. Likewise, Growth ranges from a minimum of 0 times to a maximum of 13.43 times, leading to an average of 3.53 times. Similarly, the return on assets ranges from a minimum of -3.43 percent to a maximum of 3.57 percent, leading to an average of 1.61 percent. Finally, bank size ranges from a minimum of Rs. 17.41 billion to a maximum of Rs. 273.88 billion, leading to an average of Rs. 88.25 billion.

4.3 Correlation analysis

Correlation is a statistical measure that indicates the extent to which two or more variables fluctuate together. It is used for checking directional relationship between variables. Having indicated the descriptive statistics, Pearson correlation coefficients are computed and the results are presented in Table 4.9. More specifically, it shows the correlation coefficients of dependent and independent variables for selected Nepalese commercial banks.

Table 4.9 shows the Pearson's correlation coefficients for dependent and independent variables for selected Nepalese commercial banks. The result reveals that taxation is positively correlated to dividend yield ratio, which indicates that higher the tax paid by the banks, higher would be the dividend yield ratio. The leverage is positively correlated to dividend yield ratio. This indicates that higher the leverage, higher would be the dividend yield ratio. Similarly, the growth opportunities are positively correlated to dividend yield ratio. It states that higher the growth opportunity, higher would by the dividend yield ratio. Likewise, the ROA is positively correlated to dividend yield ratio. It states that increase in ROA leads to increase in dividend yield ratio. Similarly, the result reveals that bank size is positively correlated to dividend yield ratio, which indicates that larger the bank size, larger would be the dividend yield ratio.

Table 4.9:

Pearson's correlation coefficients matrix for the dependent and independent variables for selected Nepalese commercial banks

(This table presents the bivariate Pearson's correlation coefficients between different variables used in the study. The correlation coefficients are based on the data from of 21 commercial banks with 168 observations for the period of 2012/13 to 2019/20.The dependent variables are DYR(dividend yield ratio defined as proposed dividend divided by market value , in percentage)and DIVA(dividend amount defined as proposed dividend by the bank in respective years, in rupees millions) and independent variables are TAX (taxation defined as income tax payable of the bank, in rupees millions), LEV(leverage defined as total debt divided by total equity, in times), GO(growth opportunities defined as market price per share divided by book value per share, in times), ROA(return on assets defined as net income divided total assets, in percentage.), BS(bank size defined as natural logarithm of total assets, in rupees billion).

Correlations

Variables	DYR	DIVA	TAX	LEV	GO	ROA	BS
DYR	1						
DIVA	0.173*	1					
TAX	0.235**	0.167*	1				
LEV	0.307**	-0.164*	-0.235**	1			
GO	0.437**	0.079	0.042	0.402**	1		
ROA	0.163*	0.159*	0.398**	-0.225**	0.239**	1	
BS	0.312**	0.153*	0.758**	-0.109	0.152*	0.133	1

Note: The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent levels respectively.

Further, the result reveals that taxation is positively correlated to proposed dividend, which indicates that higher the tax paid by the banks, higher would be the proposed dividend. However, the leverage is negatively correlated to proposed dividend. This indicates that lower the leverage, higher would be the proposed dividend. The growth opportunities are positively correlated to proposed dividend. It states that higher the growth opportunity, higher would by the proposed dividend. Likewise, the ROA is positively correlated to proposed dividend. It states that increase in ROA leads to increase in proposed dividend. Similarly, the result reveals that bank size is positively correlated to proposed dividend, which indicates that larger the bank size, larger would be the proposed dividend.

4.4 Regression analysis

Regression analysis shows the change in the typical value of the dependent variable when any one of the independent variables is varied, while the other independent variables are held fixed. Most commonly, regression analysis estimates the conditional expectation of the dependent variable given the independent variables.

The estimated regression results of taxation, leverage, growth, profitability and bank size on dividend yield ratio indicating the Pearson's correlation coefficients is shown in Table 4.10.

Table 4.10:

Estimated regression results of taxation, leverage, growth, profitability and bank size on dividend yield ratio

(*The result is based on panel data of 21 commercial banks with 168 observations for the period of 2012/13 to 2019/20 by using linear regression model. The model is* $DYR_{it} = \alpha_0 + \beta_1 TAX_{it} + \beta_2 LEV_{it} + \beta_3 GO_t + \beta_4 ROA_{it} + \beta_5 BS_{it} + e_{it}$ *where the dependent variable is DYR(dividend yield ratio defined as proposed dividend per share divided by market value per share , in percentage)and independent variables are TAX (taxation defined as income tax payable of the bank, in rupees millions), LEV(leverage defined as total debt divided by total equity, in times), GO(growth opportunities defined as market price per share divided by book value per share, in times), ROA(return on assets defined as net income divided total assets, in percentage) and BS(bank size defined as natural logarithm of total assets, in rupees billion*).

		Regression coefficients of							
Models	Intercept	TAX	LEV	GO	ROA	BS	Adj R^2	SEE	F-Value
1	3.158	0.001					0.05	1.781	9.735
	(12.337)**	(3.120)**							(0.002)
2	5.935		0.248				0.089	1.74	17.306
	(11.344)**		(4.160)**						(0.001)
3	5.096			0.358			0.186	1.6482	39.269
	(21.371)**			(6.266)**					(0.001)
4	3.15				0.423		0.021	1.808	4.558
	(9.04)**				(2.135)*				(0.034)
	2.833					0.011	0.092	1.742	17.848
5	(10.415)**					(4.225)**			(0.001)
6	5.163	0.001	0.216				0.112	1.72	11.52
	(8.384)**	(2.301)*	(3.554)**						(0.001)
7	4.95	0.001	0.07	0.337			0.248	1.58	19.378
	(8.715)**	(3.328)**	(1.135)	(5.560)**					(0.001)
8	4.076	0.001	0.022	0.395	0.533		0.275	1.556	16.848
	(6.397)**	(2.3)*	(0.35)	(6.23)**	(2.664)**				(0.001)
9	3.882	0	0.051	0.353	0.602	0.008	0.29	1.54	14.619
	(5.995)**	(0.225)	(0.789)	(5.367)**	(3.00)**	(2.08)*			(0.001)

Notes:

i. *Figures in parenthesis are t-values*
ii. *The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.*
iii. *Dividend yield ratio is dependent variable.*

Table 4.10 shows that the beta coefficients for taxation are positive with dividend yield ratio. It indicates that taxation has a positive impact on the dividend yield ratio and is significant at 1% level of significance. This finding is consistent with the findings Akpomi (2005). Similarly, the beta coefficients for leverage are positive with dividend yield ratio. It shows that leverage has a positive impact on dividend yield

ratio. This finding is consistent with the findings of Kazmierska-Jozwiak (2015). Likewise, the beta coefficients for growth opportunity are positive with dividend yield ratio. It shows growth opportunity has a positive effect on dividend yield ratio and is significant at 1% level of significance. This finding is consistent with the findings Gul (1999). Similarly, the beta coefficients for return on assets is positive with dividend yield ratio. It indicates that return on assets has a positive impact on dividend yield ratio at 5% level of significance. The finding is consistent with the findings McCabe (2011). Similarly, the beta coefficients for bank size is positive with dividend yield ratio. It indicates that bank size has a positive effect on dividend yield ratio at 1% level of significance. This finding is consistent with the findings of Hassan *et al*. (2013).

The estimated regression results of taxation, leverage, growth, profitability and bank size on proposed dividend indicating the Pearson's correlation coefficients is shown in Table 4.11.

Table 4.11 shows that the beta coefficients for taxation is positive. It indicates that taxation has a positive effect on the proposed dividend and is significant at 5% level of significance. This finding is consistent with the findings Zagonel *et al.* (2018). However, the beta coefficients is negative for leverage. It indicates that leverage has a negative impact on the proposed dividend. And it is significant at 5% level of significance. This finding is consistent with the findings of Khan *et al.* (2017). However, the beta coefficients for growth opportunity is positive. It shows growth opportunity has a positive but insignificant effect on proposed dividend. The finding is consistent with the findings Kouki and Guizani (2009). Similarly, the beta coefficients for return on assets is positive. It indicates that return on assets has a positive impact on proposed dividend at 5% level of significance. The finding is consistent with the findings Patra *et al*. (2012). Similarly, the beta coefficient for bank size is positive. Thus, there is a positive effect of bank size on proposed dividend at 5% level of significance. The finding is consistent with the findings of Al-Malkawi (2008).

Table 4.11:

Estimated regression results of taxation, leverage, growth, profitability and bank size on proposed dividend

(*The result is based on panel data of 21 commercial banks with 168 observations for the period of 2012/13 to 2019/20 by using linear regression model. The model is* $DIVAit = \alpha_0 + \beta_1 TAX_{it} + \beta_2 LEV_{it} + \beta_3 GO_t + \beta_4 ROA_{it} + \beta_5 BS_{it} + e_{it}$*, where the dependent variable is DIVA(dividend amount defined as proposed dividend by the bank in respective years, in rupees millions)and independent variables are TAX (taxation defined as income tax payable of the bank, in rupees millions), LEV(leverage defined as total debt divided by total equity, in times), GO(growth opportunities defined as market price per share divided by book value per share, in times), ROA(return on assets defined as net income divided total assets, in percentage) and BS(bank size defined as natural logarithm of total assets, in rupees billion*).

		Regression coefficients of							
Models	Intercept	TAX	LEV	GO	ROA	BS	Adj R2	SEE	F-Value
1	-568.876	2.329					0.022	5214.64	4.761
	(0.759)	(2.182)*							(0.031)
2	4047.016		-382.171				0.021	5217.419	4.579
	(2.586)**		(2.14)*						(0.034)
3	1470.853			186.935			0	5272.285	1.047
	(1.928)			(1.023)					(0.308)
4	-1104.53				1188.878		0.019	5221.489	4.313
	(1.098)				(2.077)*				(0.039)
5	-603.147					16.019	0.017	5226.791	3.968
	(0.739)					(1.992)*			(0.048)
6	2292.051	1.896	-307.566				0.033	5186.044	3.825
	(1.235)	(1.736)	(1.684)						(0.024)
7	2234.179	1.975	-267.877	92.001			0.028	5198.449	2.609
	(1.199)	(1.783)	(1.325)	(0.462)					(0.053)
8	781.905	1.453	-188.328	187.318	884.301		0.033	5186.442	2.406
	(0.362)	(1.238)	(0.895)	(0.887)	(1.327)				(0.052)
9	524.071	0.207	-226.113	132.133	976.883	11.014	0.031	5191.656	2.055
	(0.24)	(0.108)	(1.048)	(0.595)	(1.444)	(0.82)			(0.074)

Notes:

i. Figures in parenthesis are t-values

ii. The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.

iii. Proposed dividend is the dependent variable.

4.5 Major findings

This chapter mainly focused on the impact of taxation, leverage, growth, profitability and size on the dividend policy of Nepalese commercial banks. This study considered

the variables: taxation, leverage, growth, return on assets and bank size. The dependent variables are measured in terms of dividend yield ratio and proposed dividend. The results are based on the secondary data which are collected from 21 commercial banks during the period 2012/13 to 2019/20. The result has been derived by using descriptive statistics, correlation analysis and multiple regression analysis.

Based on the analysis of data, the major findings are summarized as under:

1. The analysis of structure and pattern of dividend yield ratio shows that average dividend yield ratio is highest for PRABHU (5.21 percent) and lowest for NSBL (2.44 percent). It has been found that dividend yield ratio has been increasing for Nepalese commercial banks during the majority of the study period.
2. The analysis of structure and pattern of proposed dividend shows that average proposed dividend is highest for ADBL (Rs.9014.33 million and lowest for BOKL (Rs.13.06 million). It has been found that proposed dividend has been increasing for Nepalese commercial banks during the majority of the study period.
3. The analysis of structure and pattern of taxation shows that average taxation is highest for NABIL (Rs.1335.62 million) and lowest for CBL (Rs.177.83 million). It has been found that taxation has been increasing for Nepalese commercial banks during the study period.
4. The analysis of structure and pattern of leverage shows the average total debt to equity ratio is highest for NICA (11.08 times) and lowest for ADBL (5.42times). It has been found that total debt to equity ratio been decreasing for Nepalese commercial banks during the study period.
5. The analysis of structure and pattern of growth opportunity shows average growth is highest for SCBL (7.57 times) and lowest for ADBL (1.56 times). It has been found that growth opportunity been decreasing for Nepalese commercial banks during the majority of the study period.
6. The analysis of structure and pattern of profitability shows average return on assets is highest for ADBL (2.44 percent) and lowest for CBL (0.45 percent).It has been found that return on assets has been increasing for Nepalese commercial banks during the study period.
7. The analysis of structure and pattern of bank size shows average bank size is largest for NABIL (Rs.142.99 billion) and smallest for CBL (Rs.42.82

billion). It has been found that the bank size has been increasing for Nepalese commercial banks during the whole study period.

8. The descriptive analysis shows that average dividend yield ratio is 3.83 percent and average proposed dividend is Rs.810.55 million of selected Nepalese commercial banks.
9. The descriptive analysis also indicate that the average taxation is Rs.592.40 million, average debt to equity ratio is 8.47 times, average market to book value ratio is 3.53 times, average return on assets is 1.61 percent, and average bank size is Rs.88.25 billion.
10. The correlation analysis reveals that taxation is positively related to dividend yield ratio and proposed dividend, which indicates that, increase in tax paid by the bank leads to increase in dividend yield ratio and proposed dividend.
11. Similarly, the result shows that leverage is positively related to dividend yield ratio, which indicates that, increase in debt to equity ratio leads to increase in dividend yield ratio.
12. Likewise, market to book ratio is positively related to dividend yield ratio and proposed dividend, which indicates that, better the growth opportunity, higher would be the dividend yield ratio and proposed dividend.
13. The result further shows that return on assets is positively related to dividend yield ratio and proposed dividend, which indicates that, higher the return on assets, higher would be the dividend yield ratio.
14. Similarly, the correlation result also shows that bank size is positively related to dividend yield ratio, which indicates that, larger the size of the bank, higher would be the dividend yield ratio.
15. Likewise, the results reveal that the leverage is negatively related to proposed dividend, which indicates that, increase in debt to equity ratio leads to decrease in proposed dividend.
16. Finally, the correlation result indicates that the bank size is positively related with proposed dividend.
17. The regression analysis reveals that taxation has the positive beta coefficient. It means that the taxation has a positive and a significant impact on the dividend yield ratio.

18. Similarly, the analysis shows that leverage has the positive beta coefficient. It means that the leverage has a positive and a significant impact on the dividend yield ratio.
19. Likewise, the analysis concludes that growth opportunity has a positive beta coefficient. It means that the growth opportunity has a positive and a significant impact on the dividend yield ratio.
20. In the same way, the analysis reveals that return on assets has a positive beta coefficient. It means that the return on assets has a positive and a significant impact on the dividend yield ratio.
21. Similarly, the analysis reveals that bank size has a positive beta coefficient. It means that the bank size has a positive and a significant impact on the dividend yield ratio.
22. Comparably, the regression analysis discloses that the taxation has a positive beta coefficient. It means that the taxation has a positive and a significant impact on the proposed dividend.
23. Similarly, the analysis unveil that the leverage has a negative beta coefficient. It means that the leverage has a negative and a significant impact on the proposed dividend.
24. Likewise, the analysis reveals that growth opportunity has a positive and insignificant impact on proposed dividend.
25. In the same way, the analysis shows that return on assets has a positive beta coefficient. It means that the return on assets has a positive and a significant impact on proposed dividend
26. Finally, the regression analysis unveil that bank size has a positive beta coefficient. It means that the bank size has a positive and a significant impact on proposed dividend.

Chapter V

Summary and Conclusion

This chapter contents the brief summary of the entire study and highlights of major findings of the study. In addition, the major conclusions are discussed in separate section of this chapter which is followed by some implications and the recommendations regarding the impact of taxation, leverage, growth, profitability and size on the dividend policy. Finally, the chapter ends with the scope of the future research in the same field.

5.1 Summary

Banks plays a vital role in the allocation of resources. The health of the company is closely related to the soundness of its banking system. Financial institutions play a catalyst role for resource mobilization and capital formation to facilitate the process of economic development of the country. A competitive banking system promotes the efficiency and therefore is important for growth of the whole economy (Northcott, 2004). Dividend policy is the key decision area in the field of corporate financial management. Firms view dividend policy very important because it determines what funds flow in investors and what funds are retained by the firm for reinvestment. According to Lease *et al.* (2000), dividend policy refers to the practice that management follows in making dividend payout decision or, in other words, the size and pattern of cash distributions over time to shareholders. Dividend payout policy decision is one of the controversial issues in Financial Management, Corporate Finance and Financial Economics.

Capstaff *et al*. (2004) defined dividend policy under the relevance theory as a practical approach, which treats dividends as an active decision variable and retained earnings as the residue. The part of earnings which is distributed among the shareholders is called dividend. Dividend policy determines how much of a company's earnings will be paid to the shareholders and how much will be retained. The return on a shareholder's investment comprise the dividends receive and the capital gain or loss during the period of share are held. Therefore, a dividend is an important element of shareholders' return.

Corporate dividend policy has long been an issue of interest in the financial literature and, despite the vast studies on the topic, it remains an open subject. Rozeff (1982) and Lloyd *et al*. (1985) suggested that firms having higher level of market risk will payout dividends at lower rate. Ho (2003) opined that the dividend policies are affected positively by size in Australia and liquidity in Japan and negatively by risk in Japan only. Nizar Al-Malkawi (2007) found out that size, age and profitability of the firms where major determining factors of corporate dividend policy.

According to Foong *et al.* (2007), the investments made by a firm determine the future earnings and future potential dividends, and dividend policy influences the cost of capital. In making these interrelated decisions, the goal is to maximize shareholder wealth.

Mui and Mustapha (2016) revealed a significant positive relationship between the two variables which suggests that the companies with a positive investment opportunity preferred to pay dividends. Berzins *et al*. (2019) showed that the causal effect of taxes on dividends is strongly moderated by the relationship between agency costs and dividends. Adhikari (2014) identified growth of enterprises' earnings patterns, patterns of past dividends, availability of investment opportunities; managers having emphasize on the stable dividend policy as the most important determinants in determining the dividend policy of Nepalese enterprises.

The main purpose of this study is to analyze the impact of taxation, leverage, growth and profitability on dividend policy of the Nepalese commercial banks while bank size is taken for the control measures. The study takes a sample of 21 commercial banks for the period of 2012/13 to 2019/20. The study attempts to find out how the variables shape the dividend payment behavior of the Nepalese commercial banks and also find out the magnitude of the impact by these variables. The dividend behavior of the commercial banks was measured as the indexes of dividend yield ratio (DYR) and proposed dividend (DIVA). Other variables used are taxation, leverage, growth, profitability and bank size that are supposed to be influencing the dividend behavior as shown by the previous literatures. The statistical methods used in the analysis are descriptive statistics, correlation analysis and regression analysis.

5.2 Conclusion

Dividend policy has become one of the most complicated and important financial decisions that corporate manager encounter. Financial institutions are important for achieving the basic objective of a company's economic and social progress. Financing, investment and dividend decisions are the basic components of corporate financial management policy.

The major conclusion of the study is that taxation, leverage, growth, return on assets and bank size influence dividend yield ratio and proposed dividend. Of these factors, return on assets is the most important factor. Bank's dividend policy is influenced by return on assets though it also get influenced by taxation, leverage, growth and bank size.

The study concludes that the taxation has positive and a significant impact on the dividend yield ratio. Thus, higher the amount of tax paid by the banks, higher would be the dividend yield ratio. Similarly, the result shows that leverage has positive and a significant impact on dividend yield ratio. Thus, higher the debt to equity ratio, higher would be the dividend yield ratio. Likewise, the result reveals that growth opportunity has a positive and a significant impact on the dividend policy. Thus, higher the growth opportunity, higher would be the dividend yield ratio. Similarly, return on assets has a positive and a significant impact on the dividend yield ratio. It indicates that higher the return on assets, higher would be the dividend yield ratio. Likewise, bank size has a positive and significant impact on the dividend yield ratio. It reveals that larger the size of the bank, higher would be the dividend yield ratio.

The study also concludes that the taxation has positive and a significant impact on the proposed dividend. Thus, higher the amount of tax paid by the banks, higher would be the proposed dividend. Similarly, the result shows that leverage has negative and a significant impact on proposed dividend. Thus, higher the debt to equity ratio, lower would be the proposed dividend. Likewise, the result reveals that growth opportunity has a positive but insignificant impact on the dividend policy. Thus, higher the growth opportunity, higher would be the proposed dividend. Similarly, return on assets has a positive and a significant impact on the proposed dividend. It indicates that higher the return on assets, higher would be the proposed dividend. Likewise, bank size has a

positive and significant impact on the proposed dividend. It reveals that larger the size of the bank, higher would be the proposed dividend.

5.3 Implication

Based on the findings of the study, the following Implications have been forwarded:

1. The study revealed positive impact of bank size on dividend yield ratio. Hence, the banks are recommended to increase their total assets in order to increase dividend yield ratio.
2. The study observed a negative impact of leverage on proposed dividend. Hence, the banks willing to pay more dividends to the shareholders should decrease their debt to equity ratio.
3. The study showed positive impact of growth opportunity on dividend yield ratio. Therefore, the banks are suggested to increase the market to book ratio in order to increase the dividend yield ratio.
4. The study found that there is positive impact of return on assets on the proxy of dividend policy. Hence, the bank willing to increase the dividend payment to the shareholders should increase their return on assets.
5. Similarly, the study revealed that positive impact of bank size on the proposed dividend. Hence, in order to increase the proposed dividend, the bank should increase the size of the total assets.

References

Adesola, W. A., & Okwong, A. E. (2009). An empirical study of dividend policy of quoted companies in Nigeria. *Global Journal of Social Sciences*, *8*(1), 85-101.

Adhikari, N. (2014). Managers' Views on dividend policy of Nepalese enterprises. *NRB Economic Review*, *26*(1), 98-104.

Adhikari, N. (2015). Determinants of corporate dividend payout in Nepal. *NRB Economic Review, 1*(1), 53-74.

Ahmed, H., & Javid, A. (2009), *Dynamics and determinants of dividend policy in Pakistan* (Evidence from Karachi Stock Exchange Non-Financial Listed Firms). Working Paper, no. 37342, Pakistan Institute of Development Economics, Islamabad, Pakistan.

Ahmed, I. E. (2015). Liquidity, profitability and the dividends payout policy. *World Review of Business Research*, *5*(2), 73-85.

Aivazian, V. (2003). Do emerging market firms follow different dividend policies from US firms? *Journal of Financial Research*, *26*(3), 371-387.

Al-Kuwari, D. (2010). To pay or not to pay: Using emerging panel data to identify factors influencing corporate dividend payout decisions. *International Research Journal of Finance and Economics*, *42*(1), 88-102.

Allen, F., Bernardo, A. E., & Welch, I. (2000). A theory of dividends based on tax clienteles. *The Journal of Finance*, *55*(6), 2499-2536.

Al-Malkawi, H. A. N. (2008). Factors influencing corporate dividend decision: Evidence from Jordanian panel data. *International Journal of Business*, *13*(2), 178-192.

Amidu, M., & Abor, J. (2006). Determinants of dividend payout ratios in Ghana. *The Journal of Risk Finance, 7*(2), 136-145.

Anil, K., & Kapoor, S. (2008). Determinants of dividend payout ratios-a study of Indian information technology sector. *International Research Journal of Finance and Economics*, *15*(1), 63-71.

Ardestani, H. S., Rasid, S. Z. A., & Mehri, R. B. M. (2013). Dividend payout policy, investment opportunity set and corporate financing in the industrial products sector of Malaysia. *Journal of Applied Finance and Banking*, *3*(1), 123-136.

Arif, A., & Akbarshah, F. (2013). Determinants of dividend policy: A sectoral analysis from Pakistan. *International Journal of Business and Behavioral Sciences*, *3*(9), 16-33.

Arumba, O. G. (2014). *Determinants of dividend payout for companies listed at the Nairobi securities exchange.* Unpublished doctoral dissertation submitted to school of business, university of Nairobi, Kenya

Auerbach, A. J. (1979). Share valuation and corporate equity policy. *Journal of Public Economics*, *11*(3), 291-305.

Baker, H. K., Veit, E. T., & Powell, G. E. (2001). Factors influencing dividend policy decisions of Nasdaq firms. *Financial Review*, *36*(3), 19-38.

Balachandran, B., Khan, A., Mather, P., & Theobald, M. (2017). Insider ownership and dividend policy in an imputation tax environment. *Journal of Corporate Finance 54*(1), 153-167.

Bell, L., & Jenkinson, T. (2002). New evidence of the impact of dividend taxation and on the identity of the marginal investor. *The Journal of Finance*, *57*(3), 1321-1346.

Berzins, J., Bohren, O., & Stacescu, B. (2019). Dividends and taxes: The moderating role of agency conflicts. *Journal of Corporate Finance*, *58*(1), 583-604.

Bhandari, B., & Pokharel, T. (2012). Corporate dividend policy: A study of commercial banks of Nepal. *Administration and Management Review*, *24*(2), 24-44.

Bhattacharya, S. (1979). Imperfect information, dividend policy, and "the bird in the hand" fallacy. *Bell Journal of Economics*, *10*(1), 259-270.

Black, F., & Scholes, M.S., 1974. The effect of dividend yield and dividend policy on common stock prices and returns. *Journal of Financial Economics*, *1*(3), 1–22.

Booth, L., & Cleary, S. (2001). Do firms in emerging markets follow different dividend policies from those in the US: Evidence from firms in eight emerging countries. *Journal of Financial Research*, *26*(3), 175-188.

Brav, A. (2003). *Payout policy in the 21st century.Working paper, no. 2138,* National Bureau of Economic Research, Cambridge, USA.

Brealey, R, Myers, & S. (1995). *Fundamentals of Corporate Finance*. *5*(2), 433-487.

Capstaff, P. (2004). Share price reaction to dividend announcements: Empirical evidence on the signaling model from the Oslo stock exchange. *Multiational Finance Journal*, *8*(1/2), 115.

Casey, K. M., Anderson, D. C., Mesak, H. I., & Dickens, R. N. (1999). Examining the impact of the 1986 tax reform act on corporate dividend policy: A new methodology. *Financial Review*, *34*(3), 33-46.

Chhetri, G. R. (2008). *Dividend and Stock Prices: A Case of Nepal*. Unpublished M. Phil. Thesis Submitted to Tribhuvan University, Kathmandku, Nepal.

Chuang, S. T., Chen, Y. H., Lin, C. C., & Lee, W. C. (2018). The Impact of Tax Deduction Ratio Reduction on Dividend Payouts Under the Integrated Tax System: Evidence From Taiwan. *International Journal of Financial Research*, *9*(3), 26-35.

David, I. (2010). Dividend policy decisions. *Behavioral Finance*, *5*(2), 435-451.

DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2006). Dividend policy and the earned/contributed capital mix: a test of the life-cycle theory. *Journal of Financial Economics*, *81*(2), 227-254.

Denis, D. J., & Osobov, I. (2008). Why do firms pay dividends? International evidence on the determinants of dividend policy. *Journal of Financial Economics*, *89*(1), 62-82.

Dhameja, N. L. (1978). Control of companies and their dividend practices. *Margin*, *10*(2), 30-41.

Dhungel, A. (2013). Impact of Dividend on Share Pricing in Commercial Banks of Nepal. *Banking Journal*, *3*(2), 21-36.

Dickens, R. N., Casey, K. M., & Newman, J. A. (2002). Bank dividend policy: explanatory factors. *Quarterly Journal of Business and Economics*, *41*(12), 3-12.

Eije, H. V., & W. Megginson, 2006. Dividend policy in the European Union, *Financial Management*, *21*(1), 1-41,

Elton, E. J., & Gruber, M. J. (1970). Marginal stockholder tax rates and the clientele effect. *The Review of Economics and Statistics*, *57*(3), 68-74.

Esteban, J. M. D., & de Foronda Perez, O. L. (2001). *Dividend Policy of European Banks*. Departamento de Economía y Administración de Empresas: Universidad de Burgos.

Fairchild, R. (2010). Dividend policy, signalling and free cash flow: an integrated approach. *Managerial Finance*, *36*(5), 394-413.

Fama, E. F., & French, K. R. (2001). Disappearing dividends: Changing firm characteristics or lower propensity to pay? *Journal of Financial Economics*, *60*(1), 3-43.

Foong, S. S. (2007). Firm performance and dividend-related factors: The case of Malaysia. *Labuan Bulletin of International Business and Finance, 5*(1), 97-111.

French, K. R., & Poterba, J. M. (1991). Were Japanese stock prices too high? *Journal of Financial Economics, 29*(2), 337-363.

Gill, B., (2010). Stock Market Liquidity and Firm dividend policy. *The Open Business Journal*, *3*(5), 8-14.

Gitman, L. J. (2001). *Fundamentals of investing*. India: Pearson Education.

Gordon, M. J. (1959). Dividends, earnings, and stock prices. *The Review of Economics and Statistics*, *41*(2), 99-105.

Gordon, M.J., (1963). Optimal investment and financing policy. *Journal of Finance, 18* (2), 264–272.

Gul, F. A. (1999). Growth opportunities, capital structure and dividend policies in Japan. *Journal of Corporate Finance*, *5*(2), 141-168.

Gunawan, I. M. A. (2018) . The effect of capital structure, dividend policy, company size, profitability and liquidity on company value. International *Journal of Economics, Commerce and Management*, *6*(6), 405-406.

Hamid, Z. (2012). The effect of taxes on dividend policy of banking sector in Pakistan. *African Journal of Business Management*, *6*(8), 2951-2954.

Harris, M. & Raviv, A., (1990). Capital structure and the informational role of debt. *Journal of Finance*, *45*(2), 321-49.

Hassan, A. (2013). Tax shield and its impact on corporate dividend policy: evidence from Pakistani stock market. *International Business*, *5*(4), 184-190.

Higgins, R. C. (1972). The corporate dividend-saving decision. *Journal of Financial and Quantitative Analysis, 7*(2), 1527-1541.

Ho, H. (2003). Dividend policies in Australia and Japan. *International Advances in Economic Research*, *9*(2), 91-100.

Holder, M. E. (1998). Dividend Policy Determinants: An Investigation of the Influences of. *Financial Management*, *27*(3), 73-82.

Joshi, P. (2011). Return and volatility spillovers among Asian stock markets. *Sage Open*, *1*(1), 1-8.

Kallapur, S., & Trombley, M. A. (2001). The investment opportunity set: Determinants, consequences and measurement. *Managerial Finance*, *27*(3), 3-15.

Kandpal, V., & Kavidayal, P. C. (2015). A study of dividend policy and its effect on market value of shares of selected banks in India. *Journal of Business and Management*, *17*(1), 41-44.

Kania, S. L. (2005). What factors motivate the corporate dividend decision? *American Society of Business and Behavioral Sciences E-Journal, 1*(1), 22-36.

Kazmierska-Jozwiak, B. (2015). Determinants of dividend policy: evidence from polish listed companies. Procedia economics and finance, *23*(2), 473-477.

Khadka, H. B. (2006). Leverage and the Cost of Capital: Some tests using nepalese data. *Journal of Nepalese Business Studies*, *3*(1), 85-91.

Khadka, K. (2012). *Effect of Dividend on Share Pricing in Nepal*. Unpublished Master's thesis Submitted to Shankardev Campus, Tribhuvan University, Nepal.

Khan, N. U. (2017). Impact of taxation on dividend policy: Evidence from Pakistan. *Research in International Business and Finance*, *42*(5), 365-375.

Khurana, P.K. 1985. *Corporate dividend policy in India*. New Delhi: Panchheel Publishers.

Kouki, M., & Guizani, M. (2009). Ownership structure and dividend policy evidence from the Tunisian stock market. *European Journal of Scientific Research*, *25*(1), 42-53.

Kowaleski, O. (2007). Corporate governance and dividend policy in Poland. *Working Paper*, no. 07-09.

La Porta, R. (2000). Agency problems and dividend policies around the world. *The Journal of Finance*, *55*(1), 1-33.

Lease, R. C. (2000). Dividend policy: Its impact on frirm value.

Li, W., & Lie, E. (2006). Dividend changes and catering incentives. *Journal of Financial Economics*, *80*(2), 293-308.

Lintner, J. (1956). Distribution of incomes of corporations among dividends, retained earnings, and taxes. *The American Economic Review*, *46*(2), 97-113.

Litzenberger, & Krishna Ramaswamy. (1979). The effect of personal taxes and dividends on capital asset prices: Theory and empirical evidence. *Journal of Financial Economics*, *7*(2), 163-195.

Lloyd, W. P. (1985). Agency costs and dividend payout ratios. *Quarterly Journal of Business and Economics*, *24*(3), 19-29.

Manandhar, K. D. (1998). A study of dividend policy and value of the firm in small stock market: *A case of Nepal. Management Dynamics*, *8(*1), 15-20.

Manandhar, K. D. (2002). *Corporate dividend policy and practice in Nepal.* Kathmandu: PhD Dissertation: Faculty of Management, Tribhuvan University.

Manos, R. (2001). Business groups and dividend policy: Evidence on Indian firms. *Institute for Development Policy and Management*, *33*(1), 1-51.

Masulis, R. W., & Trueman, B. (1988). Corporate investment and dividend decisions under differential personal taxation. *Journal of Financial and Quantitative Analysis*, *23*(4), 369-385.

McCabe, G. M. (2011). The empirical relationship between investment and financing: a new look. *Journal of Financial and Quantitative Analysis*, *14*(1), 119-135.

McQueen, G. (1997). Does the 'Dow-10 investment strategy' beat the dow statistically and economically? *Financial Analysts Journal*, *53*(4), 66-72.

Mehta, A. (2012). An empirical analysis of determinants of dividend policy-evidence from the UAE companies. *Global Review of Accounting and Finance*, *3*(1), 18-31.

Michaely, R., & Roberts, M. R. (2011). Corporate dividend policies: Lessons from private firms. *The Review of Financial Studies*, *25*(3), 711-746.

Miller, M. H., & Scholes, M. S. (1982). Dividends and taxes: Some empirical evidence. *Journal of Political Economy*, *90*(6), 1118-1141.

Miller, M.H. & Modigliani, F. (1961) Dividend policy, growth, & the valuation of Shares. *Journal of Business*, *34*(4), 411-433.

Mui, Y. T., & Mustapha, M. (2016). Determinants of dividend payout ratio: Evidence from Malaysian public listed firms. *Journal of Applied Environmental and Biological Sciences*, *6*(1S), 48-54.

Mullah, A. S. (2001). *Dividend Policy And Behaviour, And Security Price Reaction To The Announcement Of Dividends In An Emergency Market: A Study Of Companies Listed On The Dhaka Stock Exchange.* Unpublished Doctoral Dissertation Submitted to Leeds University Business School, University of Leeds, United Kingdom.

Nigam, R. K., & N.D. Joshi. 1962. Rational of dividend policy-A critical study of dividend criteria with reference to public enterprises in India. *The Indian Journal of Commerce, 15*(52), 1-24.

Nizar Al-Malkawi, H. A. (2007). Determinants of corporate dividend policy in Jordan: an application of the Tobit model. *Journal of Economic and Administrative Sciences*, *23*(2), 44-70.

Nnadi, M. A., & Akpomi, M. E. (2005). The effect of taxes on dividend policy of banks in Nigeria. *International Research Journal of Finance and Economics*, *19*(1), 1450-2887.

Northcott, C. (2004). Competition in banking: A review of the literature. *Working Paper*, no. 4-24, Bank of Canada, Canada.

Nyandumo, E. O. (2016). *The Effect of Profitability on Dividend Policy for Manufacturing Companied Listed at the Nairobi Securities Exchange.* Unpublished Doctoral Dissertation Submitted to School of Business, University of Nairobi, Kenya.

Pandey, I. M. (2015). *Essentials of Financial Management*, New Delhi: Vikas Publishing House.

Pani, U. (2008). Dividend policy and stock price behaviour in Indian corporate sector: A panel data approach. *Retrieved from Indian Institute of Technology: http://ssrn. com/abstract,1216171.*

Patra, T. (2012). Determinants of corporate dividend policy in Greece. *Applied Financial Economics*, *22*(13), 1079-1087.

Pettit, R. R. (1977). Taxes, transactions costs and the clientele effect of dividends. *Journal of Financial Economics*, *5*(3), 419-436.

Pradhan, R. S. (2003). *Effects of dividends on common stock prices: The Nepalese evidence*. Research in Nepalese Finance, Kathmandu: Buddha Academics.

Pradhan, R.S., & Rajbhandari. R. (2016). Impact of growth prospectus, leverage and size on dividend policy of Nepalese commercial bank. *Nepalese Journal of Management*, *3*(4), 1-12.

Rajan, R.G., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance*, *50*(5), 1421-1460.

Ramli, N. M. (2010). Ownership structure and dividend policy: Evidence from Malaysian companies. *International Review of Business Research Papers*, *6*(1), 170-180.

Rizqia, D. A., & Sumiati, S. A. (2013). Effect of Managerial Ownership, Financial Leverage, Profitability, Firm Size, and Investment Opportunity on Dividend Policy and Firm Value. *Research Journal of Finance and Accounting*, *4*(11), 120-130.

Rozeff, M. S. (1982). Growth, beta and agency costs as determinants of dividend payout ratios. *Journal of Financial Research*, *5*(3), 249-259.

Sawicki, J. (2005). An investigation into the dividend of firms in East Asia. *Working Paper*, Nanyang Technological University, Singapore.

Shapiro, AC 1990, *Modern Corporate Finance*. New York: Macmillan Publishing Co.

Shrestha, M. K. (1992). *Shareholders' democracy and annual general meeting feedback*. Portfolio analysis publications.

Suranta, E., & Midiastuty, P. P. (2003). Analisis hubungan struktur kepemilikan manajerial, Nilai perusahaan dan investasi dengan model persamaan linear simultan. *The Indonesian Journal of Accounting Research*, *6*(1), 54-68.

Swamy & Rao. (1975). The flow of funds in Indian manufacturing sector. *Sankhya*, *37*(4), 185-220.

Taranto, M. A. (2002). Capital structure and market reactions to dividend initiation. *Journal of Financial Economics*, *5*(6), 187-192.

Uwuigbe, U., Jafaru, J., & Ajayi, A. (2012). Dividend policy and firm performance: A study of listed firms in Nigeria. *Accounting and Management Information Systems*, *11*(3), 442-454.

Weston, J. F., & Copeland, T. E. (1992). *Managerial finance*. Dryden: HBJ.

Wolmaran, H. P. (2003). Does lintner model explain South African dividend payments. *Meditari Accountancy Research*, *11*(8), 255-58.

Wu, C. (1996). Taxes and dividend policy. *International Review of Economics & Finance*, *5*(3), 291-305.

Zagonel, T. (2018). Taxation, corporate governance and dividend policy in Brazil. *RAUSP Management Journal*, *53*(3), 304-323.

Appendix

BANK	YEAR	DYR	DIVA	TAX	LEV	GO	ROA	BS
NABIL	2013	3.58	974.74	950.68	9.95	6.6	3.03	73.24
	2014	2.56	1371.23	982.93	10.42	10.1	2.66	87.27
	2015	1.93	250.26	887.51	11.23	7.73	1.81	115.99
	2016	1.92	713.4	1188.42	9.98	9.61	2.21	127.30
	2017	3.15	1114	1566	8.96	6.07	2.57	140.33
	2018	3.69	1769.51	1675.45	7.85	3.57	2.47	160.98
	2019	4.25	1780	1802	7.25	3.11	2.11	201.14
	2020	4.61	1983	1632	6.25	2.99	1.58	237.68
NIBL	2013	4.46	942	822.55	9.42	4.64	2.62	73.15
	2014	4.17	1036.68	826.87	9.87	5.96	2.25	86.17
	2015	4.93	82.87	855.55	9.64	4.56	1.88	104.35
	2016	3.94	1523.7	1156.56	6.97	5.56	1.97	129.78
	2017	5.19	2310	1364	7.06	3.98	2.06	150.82
	2018	6.44	2342.03	1280.9	5.91	2.65	2.13	171.89
	2019	3.66	1093	1162	6.27	4.62	1.79	185.84
	2020	4.29	783.7	1089	6.47	2.26	1.19	203.02
SCBL	2013	2.8	741.56	524.06	8.88	7.31	2.67	45.63
	2014	1.84	847.29	565.95	9.48	11.24	2.51	53.32
	2015	2.28	431.88	580.97	9.91	7.33	1.99	64.93
	2016	0.98	49.3	524.65	7.66	13.43	1.98	65.19
	2017	4.59	211	607	5.52	10.09	1.84	77.41
	2018	2.32	1402	831.6	5.04	4.04	2.61	84.03
	2019	3.3	1802	1040	5.25	3.67	2.61	93.26
	2020	1.84	388	850	6.71	3.41	1.71	116.44
HBL	2013	2.14	276	433	10.54	3.65	1.54	61.15
	2014	2.23	175	662	11.1	4.48	1.3	73.59
	2015	5.18	237	343	10.9	3.89	1.34	82.80
	2016	2.11	71	813	10.32	7.65	1.94	99.86
	2017	2.97	85	924	8.16	4.6	2.03	107.26
	2018	2.87	874.8	889.57	7.24	2.92	1.61	116.46
	2019	3.99	1022	1169	7.32	2.94	2.08	133.20
	2020	3.7	562	971.66	7.86	2.88	1.66	155.90
NSBL	2013	2.35	177	338	16.06	5.27	1.19	64.80
	2014	1.7	186	389	12.47	7.48	1.51	61.08

	2015	3.2	43	492	9.5	4.8	1.8	59.28
	2016	1.57	57	588	10.35	10.44	1.7	78.52
	2017	1.77	57	652	8.6	5.33	1.53	99.83
	2018	3.16	868.26	777.03	7.01	2.98	1.97	102.54
	2019	3.59	915.89	1023.7	7.35	3.14	1.94	118.30
	2020	2.18	310.8	688.5	7.95	2.63	1.17	132.40
NBBL	2013	5.96	159	160	5.1	1.7	3.57	21.80
	2014	3.14	424	148	6.51	4.14	2.4	30.87
	2015	5.16	32	245	7.07	3.17	2.06	39.48
	2016	3.92	51	418	6.73	5.7	2.57	46.68
	2017	3.93	274	483	4.45	2.64	2.11	56.92
	2018	4.92	851.7	466.1	4.23	1.39	1.86	61.38
	2019	5.41	566.2	696.8	5.14	1.44	2.08	76.30
	2020	4.03	205.7	557.8	5.9	1.36	1.39	89.72
EBL	2013	3.77	820	630	12.62	5.46	2.24	65.74
	2014	2.36	920	666	11.91	8.88	2.2	70.45
	2015	1.65	141	673	13.39	6.32	1.59	99.15
	2016	2.07	106	804	12.38	10.58	1.52	113.89
	2017	2.44	110	857	9.09	5.03	1.72	116.51
	2018	3.02	1621.37	1100.4	7.98	3.05	1.78	144.81
	2019	3.77	1621.37	1294	8.65	3.05	1.94	170.08
	2020	1.56	470.6	1066	8.93	3.07	1.42	185.02
BOKL	2013	2.67	12	267	8.85	2.82	1.9	32.55
	2014	1.94	11	124	10	3.05	0.65	39.03
	2015	4.79	29	158	10.67	3.14	0.74	44.97
	2016	4.96	0	505	9.37	3.44	1.37	81.75
	2017	2.87	0	592	8.26	2.69	1.58	83.62
	2018	9.43	23.1	572.04	6.31	1.52	1.45	91.21
	2019	6.67	23.1	883.5	6.22	1.47	1.88	100.92
	2020	7.31	6.3	652.13	6.67	1.31	1.33	109.58
NICA	2013	5.5	462	252	9.6	2.92	1.38	46.54
	2014	4.5	347	358	9.57	4.6	1.62	51.50
	2015	6.65	55	290	10.01	2.65	1.12	60.52
	2016	3.43	63	466	9.9	4.99	1.33	80.46
	2017	4.7	71	615	8.81	2.7	1.48	99.27
	2018	3.3	42.56	475.74	13.65	1.87	0.78	170.94

	2019	4.7	976.18	1417.47	13.58	2.65	1.56	220.59
	2020	3.62	115.64	1298.75	13.53	3.4	1.32	250.59
MBL	2013	0	0	69	9.83	2.03	0.49	30.30
	2014	2.19	16	189	11.59	5.44	1.12	40.72
	2015	2.99	28	290	11.22	4.1	1.26	48.75
	2016	3.21	42	395	10.13	4.92	1.51	59.46
	2017	4.17	443	558	6.96	2.59	1.89	68.93
	2018	4.78	994	466.1	7.19	1.5	1.86	61.38
	2019	6.06	886	730.21	8.4	1.89	1.61	105.25
	2020	4.73	258	595.87	9.75	1.6	1.03	124.52
SBL	2013	7.37	164	204	12.48	1.94	1.43	33.69
	2014	2.86	202	300	12.43	4.92	1.74	40.28
	2015	3.1	21	333	12.52	3.68	1.51	50.65
	2016	4.49	0	537	10.92	4.21	1.69	74.40
	2017	2.89	0	579	8.1	2.58	1.54	89.90
	2018	4.39	690.69	825.96	7.75	1.77	1.59	119.87
	2019	7.94	1356	1041.8	9.07	1.88	1.49	183.00
	2020	5.07	293	985.01	10.39	1.81	1.17	151.00
ADBL	2013	1.5	0	662	4.34	0.87	2.75	82.16
	2014	1.98	943	474	5.64	2.81	1.76	86.51
	2015	3.7	0	710	5.23	0.86	3.57	100.89
	2016	2.73	0	860	5.01	2.57	2.27	112.71
	2017	4.83	677	171	4.82	1.56	2.02	126.87
	2018	6.69	2097.67	1522.01	8.72	1.22	2.54	135.42
	2019	7.33	68375	1068	4.32	1.3	2.77	151.57
	2020	4.16	22	1532	5.29	1.29	1.86	179.32
GIBL	2013	3.47	0	203	11.08	3.72	1.15	39.02
	2014	3.91	166	313	8.8	5.65	1.62	60.02
	2015	4.8	0	440	8.45	4.03	1.39	69.19
	2016	3.11	0	580	9.07	4.23	1.58	87.70
	2017	5.15	808	884	9.31	2.77	1.72	116.59
	2018	5.52	0	810.61	8.27	1.83	1.67	125.85
	2019	8.88	206.2	1172	8.3	2.11	1.82	151.65
	2020	6.69	2419	1559.2	8.5	1.34	1.06	273.88
CBIL	2013	3.86	315	157	9.92	2.36	1.59	25.98
	2014	2.58	125	173	10.7	4.11	1.55	32.22

	2015	2.63	27	301	10.09	4.04	1.74	41.49
	2016	1.19	40	459	9.38	5.62	1.96	55.06
	2017	4.39	69	496	5.97	2.99	1.65	65.41
	2018	2.65	131.75	472.76	6.06	1.59	0.01	77.71
	2019	4.16	527	337.7	5.15	1.25	1.13	62.47
	2020	6.06	336	324	6.5	1.09	0.72	76.85
PCBL	2013	4.63	117	205	9.98	2.83	1.47	32.41
	2014	3.43	26	237	9.51	4.25	1.45	38.03
	2015	3.3	30	320	9.57	3.28	1.63	45.80
	2016	2.3	45	481	9.07	5.12	2.05	54.40
	2017	6.41	0	627	7.24	2.89	1.89	77.70
	2018	5.6	0	721.18	7.48	1.97	1.82	95.04
	2019	5.8	0	950.7	6.63	1.93	2.15	102.30
	2020	5.9	0	1017.1	6.41	1.73	1.48	152.20
SRBL	2013	4.9	12	146	9.66	1.91	1.19	26.13
	2014	0	0	112	9.99	4.23	0.83	29.66
	2015	5.73	28	196	10.17	3.64	1.26	37.39
	2016	4.5	0	421	8.53	6.45	1.62	58.56
	2017	3.8	0	470	6.55	2.96	1.65	71.46
	2018	5	937.54	474.3	6.16	1.52	1.78	82.78
	2019	6.4	472.8	799.8	6.71	1.65	1.8	94.60
	2020	3.5	222.4	587.5	7.69	1.57	1.17	116.29
NMBL	2013	3.97	300	136	9.81	2.08	1.43	25.13
	2014	4.09	21	174	9.74	3.66	1.36	30.21
	2015	1.66	17	212	11.54	3.67	1.21	41.34
	2016	2.47	54	488	9.87	5.09	1.49	74.61
	2017	2.9	0	623	7.1	3.24	1.74	86.86
	2018	8.38	1520.66	712.53	5.82	1.97	1.65	112.39
	2019	9.16	577.09	990.8	6.8	1.43	1.79	135.50
	2020	4.08	446.4	722	7.6	2.24	0.7	179.50
PRABHU	2013	-	-	114.1	10.6	1.9	-3.43	23.440
	2014	-	-	128.9	10.6	3.7	-1.44	37.21
	2015	-	-	387.6	14.5	3.02	2.19	46.51
	2016	-	-	488.6	8.1	3.8	1.64	69.80
	2017	-	-	812.1	8.9	2.9	1.76	92.60
	2018	4.5	34.6	383.5	7.9	1.2	0.86	112.60

	2019	6.33	74.7	328.6	8.62	1.7	1.29	137.90
	2020	4.8	54.7	567.6	9.9	1.5	0.71	167.50
MBNL	2013	2.05	210	76	6.1	0	1.02	17.41
	2014	2.81	15	131	6.5	3.82	1.49	20.57
	2015	2.67	14	151	7.03	3.35	1.4	24.71
	2016	3.06	28	24	8.54	4.39	1.92	39.87
	2017	3.32	0	335	6.78	3.53	1.74	45.64
	2018	4.2	704.56	525.64	5.5	1.24	1.61	82.06
	2019	5.52	1220.7	693.3	6.2	1.64	1.68	97.80
	2020	6.5	400.7	658.5	7.6	1.47	1.64	155.50
CBL	2013	3.38	115	52	7.94	1.46	0.66	18.23
	2014	5.7	40	101	7.29	3.14	0.94	25.43
	2015	2.15	10	99	8.25	2.53	0.76	30.42
	2016	1.19	7	142	8.79	2.17	0.93	35.43
	2017	4.39	0	76	5.22	2.03	0.88	41.74
	2018	2.65	294	265.35	4.27	1.22	1.21	51.93
	2019	4.16	525.8	363.3	5.2	1.25	1.13	62.50
	2020	6.06	33.6	324	6.53	1.09	0.72	76.90
SANIMA	2013	4.05	11	132	8.07	2.38	1.39	21.98
	2014	2.47	18	188	9.37	5.49	1.46	29.38
	2015	3.79	27	261	10.75	4.13	1.55	40.30
	2016	2.11	36	421	9.45	6.2	1.78	55.97
	2017	3.71	0	559	6.73	3.2	1.86	70.00
	2018	4.32	1120.18	717.83	7.51	2.18	1.85	91.82
	2019	6.05	884.14	962.1	8.1	2.2	2.07	109.06
	2020	4.12	316.9	753.5	8.85	2.4	1.41	126.10