Corporate Governance and Performance of Commercial Banks in Nepal

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ABSTRACT

The purpose of this study was to examine the effect of corporate governance on performance of commercial banks in. It also examined the corporate governance practices of commercial banks. The study followed quantitative approach and descriptive research design. Multiple regression analysis was used to explore the causal relationship between corporate governance and financial performance of commercial banks. The study revealed a positive relationship of number of board meeting and foreign ownership and bank performance which shows higher the board meeting, foreign investment higher would be the bank performance. However, there was negative relationship of board size and capital adequacy ratio with bank performance indicating higher the board size, capital adequacy ratio would lead lower bank performance. Practices of corporate governance system of financial sector in Nepal is still infant stage however joint venture banks practices are more harmonizing rather than government banks and other banks.

Keywords: *Corporate governance, Bank performance, corporate governance practices*

Introduction

Corporate governance encompasses monitoring and market processes, establishing the relationships between the owners of a bank and its management board and other stakeholders and the targets towards which the company is marching (Mohan et al.,2015). It includes the relationship among the many players involved and the goals for which the corporation is governed. The principal players are the shareholders, management and the board of directors.

On the other hand, corporate governance is described as the set of processes, customs, policies, laws and institutions affecting the way of corporation are directed, administered or controlled. It is argued that good corporate governance leads to increase in firm value (Fanta et al., 2015). Though concrete evidence does not substantiate the relationship between good corporate governance and creation of value for an organization, there is strong evidence in the past to affirm the destruction of good values by bad corporate governance. Hence, weak corporate governance is a red signal which has to be carefully monitored by all stakeholders of corporate as well as the government regulatory bodies.

In case of the Nepal, the reforms in corporate bank governance are highly important to achieve persistent efforts to attract worthy foreign investments directly with management of different portfolio and to achieve the goal of saving through market capitals (Gupta & Wei, 2018). For the developing countries like Nepal, it has been receiving a lot of attention for literature and has become an emerging topic for academician in the policy studies. In addition, improving corporate governance can serve a number of important public policy objectives for such a developing economy (Words et al., 2019). . The utilization of the resources, effective decision making, transparency, responsiveness, rule of law are the major areas where Nepali organizations do believe and work.

Statement of the Problem

According to agency theory, the principals of the company hire the agents to perform work. The principals delegate the work of running the business to the directors or managers, who are agents of shareholders. Agents or managers may not always act in the best interest of shareholders when the control of a company is separate from its ownership (Bonazzi & Islam, 2007).

The employees take ownership of their jobs and work at them diligently. But stewardship theory in its current state is not well suited to capture moral behavior in organizations, and it certainly cannot explain the benevolent character that is oftentimes attributed to family firms (Waldkirch & Nordqvist, 2016).The provision of resources enhances organizational functioning, firm's performance and its survival. The directors bring resources to the firm, such as information, skills, access to key constituents such as suppliers, buyers, public policy makers, social groups as well as legitimacy. The resource-dependence view of corporate governance stems from the fundamental logic that various elements of corporate governance can act as critical resources for a firm (Udayasankar, 2008).Stakeholder theory gives a broader overview about corporate governance than agency theory; hence it creates better look for company performance from corporate governance.

It is on the basis of these conflicting theories and empirical evidence that this study has tried to contribute to the debate by investigating the influence of corporate governance on the performance of commercial banks in Nepal. The lack of studies of the effect of corporate governance on bank performance also justified this study's relevance. In order to do so, the effects of board size, board meetings, foreign ownership and capital adequacy ratio have been considered. Although there is mixed evidence in the literature across the world with regard to the effect of corporate governance on bank performance the prior empirical studies were focused on developed and developing countries. Regarding impact of corporate governance on bank performance as well as its practices there is lacking in-depth studies in developing countries like Nepal. Thus, this study attempts to analyze effect of corporate governance on financial performance and explore its predominant practices in Nepalese commercial banks. This study seeks the answer

and issues of following questions: Does board size affect bank performance in Nepal? Does the number of board meeting have significant impact on bank financial performance? What kind of relationship exists between foreign ownership and the financial performance of banks? What is the relationship between capital adequacy ratio and bank performance? What are the corporate governance practices in Nepalese commercial banks?

Review of Literature

Macey (1996) found that in recent years, legal scholars have frequently criticized America's traditional system of corporate governance, routinely depicting it as having sharply constrained the development of multidimensional governance relationships. As stated by Kryvko and Reichling (2012), the corporate governance influence on key performance figures of publicly traded European banks in the period from 2005 to 2009. The United States and the United Kingdom have a governance system characterized by a strong legal protection of investors and a lack of large investors, except when ownership is concentrated temporarily during the takeover process. However, little attention has been given to corporate governance of banking sector especially in developing economies (Lipunga, 2014).Corporate governance focuses on three meters as board size, number of meeting and audit committee size and firm financial performance has also three indicators return on equity, return on asset and earning per share (Haider et al., 2015). Through an extensive review of literature, they found three major issues. Firstly, despite the deals of good corporate governance have been adopted by developing countries since the 1980s, there is little research in the area. Secondly, there are myriad challenges or areas in need of reforms. Thirdly, corporate governance practices used in developed countries are not directly applicable in developing countries. Therefore, it intimated the need for more research and development of corporate governance model appropriate to the conditions in developing countries.

Banking performance is measured through Efficiency (Non-performing Loans/ Total Loans), Return on Assets (ROA) and Return on Equity (ROE). Several problems may be occurred if the banks cannot fulfil their duties as to applying corporate governance practices efficiently. In addition, the expanded multifaceted nature of financial institute requires thinking about the particular drivers of banking performance regarding income and efficiencies. Previous studies used return on asset (ROA), return on equity (ROE) and earnings per share (EPS) as the measures of firm's performance. ROA indicates the actual performance of a firm, ROE is another predictor for performance measure and appropriate both in short-term and long-term benefits for most shareholders. It demonstrates a financial saver about how much benefit can be formed by the firm, utilizing the cash contributed from its investors, EPS sanction the partners to realize overall increase earned on per share basis which decides benefit (Morshed et al., 2020). Therefore, in this study, the investigation utilizes ROA, ROE and EPS to determine performance of banks.

The impact of corporate governance on firm performance has received enormous attention in economic and finance literature in recent years. This attention has been motivated by financial scandals that rocked the U.S. economy in early and late 2000 and the Asian financial crisis of late 90s. Despite a number of studies having been undertaken on the subject matter, there is still much debate on the relationship between corporate governance and firm performance and more soon the relationship between corporate governance and performance of commercial banks (Gupta & Wei, 2018). A smaller board, having proven itself to be suboptimal, is enlarged. Such behavior would lead to a negative correlation between board size and profitability, but not because of value-enhancing characteristics of small boards. Adequate corporate governance practices lead to avoiding agency costs. These costs entail constant monitoring and control of the agents by the principals until the agents send signals that they have gained the trust of the principals (Vargas-Hernández & Teodoro Cruz, 2018). In wave of the recent corporate scandals, corporate governance practices have received tremendous attention from all interest group inside and outside from corporations (Personal & Archive, 2013). Several studies investigated the relationship between corporate governance and a vast array of performance indicators. In developing countries such as Malaysia, a good governance of the banks is crucial for the survival of its economy (Adnan et al., 2011).

An agency relationship has arisen between two (or more) parties when one, designated as the agent, acts for, on behalf of, or as rep- presentative for the other, designated the principal, in a particular domain of decision problems (Ross, 1973). If the CEO and the chairman of the board is the same person, there would be no other individual to monitor his or her actions and CEO will be very powerful and may maximize his or her own interests at the expense of the shareholders. Thus, a separate leadership structure is recommended in order to monitor the CEO objectively and effectively (Adnan et al., 2011).Since the relationship between the stockholders and manager of a corporation fit the definition of a pure agency relationship it should be no surprise to discover that the issues associated with the "separation of ownership and control" in the modern diffuse ownership corporation are intimately associated with the general problem of agency. The principal can limit divergences from his interest by establishing appropriate incentives for the agent and by incurring monitoring costs designed to limit the aberrant activities, of the agent (Company et al., 1976).The agency costs mainly occur between the principal and principal (PP) and between principal and agent (PA). The cost associated due to the PP relationship is relatively more recent but there are many research studies to be found on the PA aspects of agency costs.

Stewardship assumes a convergence in the goals between principal and agent, since the collective behavior and orientation of the agent will generally benefit principals such as company owners. The stewardship perspective suggests that

stewards (managers) are satisfied and motivated when organizational success is attained even at the expense of the stewards' personal goals (Fanta et al., 2015). The function of corporate governance is to encourage the efficient use of resources and equally to require accountability for the stewardship of those resources (Udayasankar, 2008). The theory further argues that there must be only one person as CEO and chairman, and the power to formulate strategy should be in the hands of a single person. The focus of this theory is on structure and facilities that empower managers rather than monitoring and control. The executive manager, under this theory, far from being an opportunistic shirker, essentially wants to do a good job, to be a good steward of the corporate assets.

Stakeholder theory is an extension of agency theory whose main aim is to protect shareholders' wealth and interest, while stakeholder theory tries to protect the interest of its different stakeholders. Thus, this theory states that the organization should be managed for the benefit of all the parties who have a direct or indirect stake in the company. Dao and Tran (2017) argues that corporation must simultaneously satisfy the owners, the employees, and their unions, suppliers and customers in order to be successful. Besides, managers in different functional disciplines ought to be more responsive to the external environment by carrying forward the notion of "internal stakeholders" as the conduits to external groups. Mwanzia and Corresponding (2011) argued that stakeholders can be instrumental to corporate success and have moral and legal rights. When stakeholders get what they want from a firm, they return to the firm for more. Therefore, corporate leaders have to consider the claims of stakeholders when making decisions and conduct business responsibly towards the stakeholders.

The resource-dependence view of corporate governance stems from the fundamental logic that various elements of corporate governance can act as critical resources for a firm (Udayasankar, 2008). Resource dependence, therefore, would suggest that BODs become increasingly important as a means by which financially distressed firms ensure long-term viability (Gales, 1994). Resource dependence logic therefore suggests that a board's provision of resources is directly related to firm performance. Resources help reduce the dependency between the organization and external contingencies, diminish uncertainty for the firm, lower transaction costs and ultimately aid in the survival of the firm (Callaghan, 2016).

In Nepalese context, most of the corporate governance practices are expected to evolve under the regulatory requirements of the Nepal Rastra Bank (NRB) rather than other laws and rules. The first unified directives were formulated in 2010 and after that every year they have been revised to meet the changing regulatory requirements. This has eased the supervision process for the NRB. In the same way, unified directives have also incorporated various international guidelines from BASEL II and BASEL III, with some customization. It has also promulgated stress-testing guidelines for class A commercial bank to gauge the strengths of the banking

sector against possible shocks. Similarly, it has also incorporated Internal Capital Adequacy Assessment Process (ICAAP) guidelines to identify the unique risk of each bank and set the capital requirements accounting to this risk.

Salim (2016) investigated the relationship between corporate governance and the efficiency of Australian banks between 1999 and 2013, using two-stage double-bootstrap data envelopment analysis. The study found the evidence of improvements in overall industry efficiency due to the impact of good corporate governance.

Ozili and Uadiale (2017) argued whether ownership concentration influences bank profitability in a developing country context. Also found that banks with high ownership concentration have higher return on assets, higher net interest margin and higher recurring earning power while banks with dispersed ownership have lower return on assets but have higher return on equity. And, higher cost efficiency improves the return on assets of widely-held banks and the return on equity of banks with moderate ownership.

Gupta and Wei (2018) conducted a research based on the data obtained from eighteen commercial banks in Nepal dated: 2010/2011to 2015/2016, leading to a total of 108 observations. Some of the result has positive correlation with the ratio of non-performance loan which shows that diversified the board, director of board, audit committee higher will be the ratio of nonperforming loan and vice versa, while the result has negative impact on the presence of foreign ownership which are otherwise explain the presence of foreign ownership would reduce the bank proficiency. Furthermore, the presence of domestic ownership has increased the efficiency of the corporate banking sectors.

Words (2019) studied to establish an assessment of national policy effectiveness on corporate governance, specifically in the banking sector. And concluded that an emerging economy, improving the level of corporate governance can serve a number of important public policy objectives such as reducing market vulnerability to financial crises, controlling transaction costs and cost of capital, and resulting with investor confidence and capital market development situation.

Morshed (2020) investigated the influence of corporate governance in banking performance. Board size, structure of internal audit committee and capital adequacy ratio were being taken as independent variables to measure the effects of corporate governance whereas return on asset, return on equity and earnings per share were being taken as dimensions for measuring bank performance.

Agency theory posits that a large board can be less efficient than a small board due to a rise in agency conflicts because of inefficient communication and cooperation costs. The smaller boards seem to be more conducive to board member participation and thus would result in a positive impact on the monitoring function and the strategic decision-making capability of the board, and

independence from the management (Adnan et al., 2011). There is a negative relationship between board size and firm's performance.

$H_{1:}$ There is a negative relationship between board size and bank performance in Nepal.

The board meeting is important resource in improving the effectiveness of the board. It helps directors to be informed and keep abreast with the development with the organization. Board members have insufficient time to fulfil their duties and board meetings enhance the board's effectiveness. A higher frequency of board meetings could result in directors carrying out their duties in line with shareholders' expectations and interests and to monitor management more efficiently. However, there is a contrary view and claims that board meetings might not necessarily be useful because of the shortage in time for outside directors to exchange meaningful ideas among themselves, the board or the management (Salim, 2016).

$H_{2:}$ There is a positive relationship between board meetings and performance of banks in Nepal.

Capital Adequacy Ratio (CAR) expressed as proportion of financial capital to the risk-weighted assets (Personal & Archive, 2013). The CAR has the greater impact on Bank performance. So, it can be concluded that all banks should maintain their capital adequacy ratio which attract clients and reduce the chances of becoming insolvent as well as increase the performance of the bank.

$H_{3:}$ There is a positive relationship between capital adequacy ratio and bank performance in Nepal.

The presence of foreigner in board of governor in banks increases directly foreign investment in the non-financial sector. Besides the foreign ownership it also increases human assets through the existence of foreign managers which convey good skills and technology. The international experience also leads to progress the local competencies through training and knowledge transfer. While previous researchers found a negative effect of foreign ownership on NPL on a cross countries analysis. They focused that foreign banks increase loan quality in a country and may lead to expand domestic banks credit quality. Finally it is found that foreign organized banks are more preformat than domestic ones bank for a panel of developing countries (Gupta & Wei, 2018).

H4: There is a positive relationship between foreign ownership and bank performance in Nepal.

Methods and Materials

Research Design

The study adopts descriptive as well as causal comparative research design to investigate the relationship of corporate governance and bank performance. Age of banks, and total number of branches has considered as control variables on this study. Similarly, this study also analyzes corporate governance practices in the context of Nepalese commercial banks. The relationship between corporate governance and bank performance has analyzed utilizing multiple linear regressions. The commonly used multiple regression analysis is used in panel data analysis. This study is an empirical and employing various historical secondary data relating the impact of corporate governance on the performance of commercial banks in Nepal as well as deep study of annual reports of banks, bank supervision report, NRB directives, BASEL report and OECD principles to analyze recent corporate governance practices by banks.

Population and Sample

The study is based on the secondary data of commercial banks which are listed in Nepal Stock Exchange. As of mid-July 2020, there were a total of 27 commercial banks. The commercial banks comprise the largest share of assets in the banking industry. Although there were 27 listed commercial banks in Nepal Stock Exchange till date of 15 July 2020, this study covers only 22 banks because some commercial banks in Nepal have merged, or are in the phase of merging. These all commercial banks are population of this study. So, this study is concerned with only 22 commercial banks during the study period of 2010 to 2020. The study adopts purposive sampling method to select those banks which have traded in the NEPSE since 2010 for consistency of the data. Total 220 observations have used to analyze relationship between corporate governance and bank performance in Nepal. Apart from this, the study is also based on frequent review of corporate governance related documents of commercial banks, Nepal Rastra Bank and BASEL committee to analyze corporate governance practices in the context of commercial banks in Nepal. To identify the practices of corporate governance, this study is focused on in - depth study of annual reports disclosed by joint venture, government and private domestic commercial banks from 2010/11 to 2019/20 in Nepal.

Nature and Sources of Data

This study is basically based on secondary data provided by Nepalese commercial banks, Nepal Rastra Bank, BASEL committee and Organization for Economic Cooperation and Development (OECD) as well as Bank and Financial Institution Act. The data from "Annual Reports to Shareholders" by concerned banks, from various newspapers and magazines are also collected as per research need. In this empirical study, various historical data are used from 22 Nepalese commercial banks. The unified directives of NRB and bank supervision report are reviewed in this study. The yearly reports of these banks is investigated by

downloading from the official sites of the respective banks. The reason for choosing the yearly reports is that the yearly report is the most widely recognized document normally created by organizations in Nepal.

Method of Analysis

To examine the impact of corporate governance on bank performance, different statistical analysis methods are used. Statistical and econometric models have been used to analyze the secondary data using EXCEL, GRETL etc. based on previous study. Secondary data is analyzed through multiple regression models. Similarly, the review based study is also used to analyze corporate governance practices of commercial banks in the context of Nepal. By reviewing the annual reports, unified directives, bank supervision report of NRB, Bank and Financial Institution Act (BFIA) and OECD principal, the additional part of analyzing corporate governance practices of commercial banks in Nepal is analyzed. The basic model of analysis is depicted as equation in below.

$$P_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 NBM_{it} + \beta_3 FW_{it} + \beta_4 CAR_{it} + \varepsilon_{it} \qquad \text{(Eq. 1)}$$

First, the dependent variable, bank performance (P_{it}): Return on assets, Return on equity and Earning per share is regressed against the independent variables: board size(BS_{it}) , number of board meetings (NBM_{it}), foreign ownership (FW_{it}) , capital adequacy ratio(CAR_{it}). This provides a crude test of the relationship between corporate governance and bank performance with the regression equation.

Second, the dependent variable is regressed against the independent variables and the control variables with the following regression equation:

$$P_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 NBM_{it} + \beta_3 FW_{it} + \beta_4 CAR_{it} + \beta_5 Age_{it} + \beta_6 NB_{it} + +\varepsilon_{it} \qquad \text{(Eq.2)}$$

Where, i indicate bank observations which take 1 to 22, t indicates time (10) which takes the values of 2010 to 2020, bank performance which is denoted by (P_{it}), β_0 denotes the intercept of the straight line, β denotes the slope of the regression line and ε is the error term.

Table: Definition of variables

Variable Type	Variables	Definition/Description
Dependent	Return on Assets (ROA)	Net income/ Total assets
	Return on Equity (ROE)	Net income/ Total equity
	Earnings Per Share (EPS)	Total earnings/ Total no. of shares outstanding
	Board size (BS)	Total number of members in the board
Independent	Number of board meetings (NBM)	Numbers of board meetings held in a year
	Foreign ownership (FW)	Proportion of shares held by foreign shareholders i.e. more than 10 percent foreign ownership
	Capital Adequacy Ratio (CAR)	A measure of the amount of a bank's capital expressed as a percentage of its risk weighted credit exposure
Control	Age of banks (Age)	Age of bank
	Total no. of branches (NB)	Total number of branches

Results

Analysis of Secondary Data

This section first describes descriptive statistics, correlation analysis and regression analysis which have been presented in tabular form with reports and the concluding remarks. The hypotheses presented in Chapter Two are tested by using sequences of data analysis techniques discussed in the following sections.

Descriptive Statistics

Descriptive statistics help to describe, show or summarize the data in a meaningful way making them more useful for analysis. Descriptive statistics are very important because they enable the presentation of the data in a more meaningful way, which allows for simple interpretation of the data. They summarize the mean, median, variance, standard deviation, histograms and pie charts of the data as suggested by (Bernard & Bernard, 2013).

Table: Descriptive statistics

Variable	N	Mean	Std. Deviation	Minimum	Maximum
ROA	220	0.02	0.007	0.0003	0.082
ROE	220	0.20	0.12	0.0009	0.7657
EPS	220	28.02	18.87	0.09	95.14
BS	217	7.06	1.38	3	11
NBM	81	27.02	15.12	7	67
CAR	219	0.14	0.04	0.03	0.42
FW	60	9.08	0.38	8.35	9.70
Age	220	19.04	12.44	1	54
NB	215	77.74	64.68	9	326

Table 4.1 presents the mean, and standard deviation including minimum and maximum values of each variable. From the descriptive statistics above, it can be seen that the minimum board size is between three (minimum) and eleven (maximum) members during 2003 with the mean value of 7.06. Analyzing 217 observations, the table indicates that Nepalese commercial banks have formed board size including around 7 members within the range 3 to 11. There is a huge difference in the ages of the banks i.e., the minimum being 1 and maximum 54 years. This is because the bank of government sector was established before the establishment of other commercial banks of private sector in Nepal.

Frequent number of board meeting reflects the better performance of banks which is observed representing 27.02 average number of board meetings in this study. The variation of number of board meeting is 15.12 where some commercial banks held minimum 7 and some commercial banks held maximum 67 times of board meetings. The mean statistics of the foreign ownership as measured by log of assets is Rs. 9.08 million ranged from Rs 8.35 to Rs 9.70 million. The table 4.1 presents the average capital adequacy ratio is 14 times which ranges from 3 to 42 times. There are huge differences in number of branches. The minimum number of branches of 9 is Century bank during 2010 and the maximum number or branches of 326 is NIC ASIA during 2020 with average of 77.4 which is mainly due to the development and expansion of several private commercial banks in Nepal.

Correlation and multi- collinearity diagnostic

Table 4.2 shows Pearson's correlation coefficients which indicate that there exist both positive as well as negative relationship between dependent and independent variables. The highest degree of correlation is shown between the bank age and foreign ownership, suggesting that the old private banks have more foreign ownership. Similarly, the least correlation is shown between board size and return on assets of banks which are positively correlated. The return on equity as the financial performance of banks is positively correlated with board size but earning per share is negatively correlated with board size. The number of board meeting as independent variable is negatively correlated with return on equity and earning per share as dependent variable of corporate governance. On the other hand, return on assets is positively correlated with number of board meeting where significant relation is also illustrated between number of board meeting and board size of banks.

Table: Pearson's correlation of dependent and independent variables

	ROA	ROE	EPS	BS	NBM	CAR	FW	Age	NB
ROA	1								
ROE	0.02	1							
EPS	0.026	.736**	1						
BS	0.003	0.045	-0.007	1					
NBM	0.132	-0.081	-0.001	.340**	1				
CAR	-0.048	-.158*	-0.011	-0.006	.237*	1			
FW	0.007	-.498**	-0.197	-.580**	0.178	.475**	1		
Age	0.055	.435**	.437**	-0.052	.373**	-0.054	.788**	1	
NB	-0.004	.139*	0.125	0.007	.771**	0.051	.341**	.558**	1

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

*Correlation is significant at the 0.05 level (2-tailed)

Note: Data related to banks such as board size, number of board meeting, capital adequacy ratio, foreign ownership bank age and number of branches are collected from annual reports of the banks.

There is significant negative correlation of capital adequacy ratio with return on equity. On the contrary, there is significant positive correlation between capital adequacy ratio and number of board meeting. Foreign ownership is positively correlated with return on assets which depicts the increase of foreign ownership enhances return on assets of commercial banks. In spite of positive correlation of foreign ownership with return on assets, negative correlation with return on equity and earning per share is demonstrated in table 4.2. The control variable age of bank is significantly and positively correlated with return on assets, return on equity and earning per share elaborating that older banks get high performance due to their long experience. And number of branches however there is positive relation with all variables except return on assets. The return on assets is negatively correlated with the number of branches indicating expansion of branches decrease the return on assets. There is significant positive correlation between expansion of branches and increase of return on equity.

Multicollinearity

Multicollinearity is the violation of the assumption that no independent variable is a perfect linear function of one or more other independent variables. A VIF of 10 or more indicates the existence of multicollinearity among the independent variables, and it needs to be addressed (Nguyen et al., 2014). However, while compiling the VIF, the data in Table 4.3, it is found that all the variables are less than 7.214. Overall, the matrix indicates that multicollinearity is not an issue. The variance inflation factor (VIF) values of all predictors are less than 10, indicating that there is no problem of multicollinearity in the model.

Variance Inflation Factor

Variables	VIF
BS	2.622
NBM	1.377
CAR	1.522
FW	7.214
Age	3.938
NB	2.122

Note: The table reports the VIF coefficients for explanatory variables

Test for Heteroscedasticity

The existence of heteroscedasticity is a major concern in regression analysis. A representation of the residuals against the explanatory variables may reveal heteroscedasticity, it is therefore necessary to perform a test for heteroscedasticity. Table 4.4 shows the presence of homoscedasticity in the data for all independent variables except foreign ownership since p-value of board size, number of board meeting and capital adequacy ratio are greater than 0.05. But p-value of foreign ownership is less than 0.05.

Table: Breusch- Pagan test of heteroscedasticity

Variable	p-value	Homoscedasticity/Heteroscedasticity
BS	0.1746	Homoscedasticity
NBM	0.8570	Homoscedasticity
CAR	0.9791	Homoscedasticity
FW	0.0331	Heteroscedasticity

Selection of Statistical Techniques

While reviewing various literature on corporate governance, it is unclear which are the appropriate universal statistical techniques to be used when there are dichotomous/categorical and interval/continuous variables in the study. However, in most of the literature, the multiple regression equations have been used. So, following the trend, the multiple regression techniques have been used for this study.

Multiple linear regression analysis

Multiple linear regression is used to predict the relationship between one dependent variable and a set of independent variables. The most widely used method to analyze the effect of corporate governance is OLS regression which estimates the unknown parameters in multiple linear regression (Stock & Watson, 2010). The regression of corporate governance without control variables and with control variables on bank performance has been analyzed by defining bank performance in terms of return on assets, return on equity and earning per share.

The produced the results of model-1 regressing corporate governance variables on return on assets as indicated in Table 4.5.

Table: Regression Analysis; Corporate governance on Return On Assets (ROA)

$ROA = \beta_0 + \beta_1 BS_{it} + \beta_2 NBM_{it} + \beta_3 FW_{it} + \beta_4 CAR_{it} + \varepsilon_{it}$

Model 1	Unstandardized Coefficients	Standardized Coefficients		t	Sig.	R^2	F	Sig.
	B	Std. Error	Beta					
(Constant)	0.008	0.044		0.190	0.851			
BS	-0.002	0.001	-0.321	-1.413	0.169			
NBM	0.000	0.000	-0.254	-1.384	0.177	0.285	2.796	0.045
CAR	-0.077	0.039	-0.350	-1.985	0.057			
FW	0.002	0.001	0.498	2.377	0.029			

The regression analysis of corporate governance on return on assets without using control variables consisting model 1 is presented in table 4.5. All four predictors are able to explain around 28.5 percent of the total variation on bank performance. The fitted model is significant and there is significant positive relationship between foreign ownership and return on assets. The unstandardized B weight of foreign ownership is 0.002 which means increase of one rupee's foreign ownership brings an increase of 0.2 percent in the return on assets. The negative coefficient depicts that there is negative relation between board size and return on assets. Capital adequacy ratio and return on assets also represents the negative relation. The increase of number of board members in board committee leads the decrease of return on assets. Similarly, higher capital adequacy ratio reflects the decline of return on assets. On the other hand, it is found that there is no relation between number of board meeting and return on assets. The unstandardized beta coefficient of number of board meeting is close to zero in relation with return on assets representing insignificant relation.

Table: Regression Analysis; Corporate governance on Return On Equity (ROE)

$ROE = \beta_0 + \beta_1 BS_{it} + \beta_2 NBM_{it} + \beta_3 FW_{it} + \beta_4 CAR_{it} + \varepsilon_{it}$

Model 2	Unstandardized Coefficients	Standardized Coefficients		t	Sig.	R^2	F	Sig.
	B	Std. Error	Beta					
(Constant)	-0.121	0.504		-0.240	0.812			
BS	0.002	0.015	0.028	0.130	0.898			
NBM	-0.005	0.002	-0.459	-2.676	0.012	0.373	4.170	0.009
CAR	-1.649	0.448	-0.608	-3.681	0.001			
FW	0.069	0.049	0.308	1.412	0.169			

This fitted model represents the 0.009 p-value which is significant in table 4.6. Dependent variables are explained by 37.3 percent of independent variables. Unstandardized regression weights of number of board meeting and capital

adequacy ratio are significant and negative with return of equity. Increase number of board meetings decreases return on equity similarly higher capital adequacy ratio leads lower return on equity. The increment of a number of board meeting declines the 0.5 percent return on equity. One percent rise of capital adequacy ratio diminishes 16.49 percent return on equity. Foreign ownership has positive relation with return on equity that means attracting more foreign investment raises return on equity of commercial banks in Nepal. A part from, this study has interesting result that means board size and return on equity presents positive relation without controlling effect. The table 4.6 demonstrates insignificant relation of board size and foreign ownership with return on equity except number of board meeting and capital adequacy ratio.

Table: Regression Analysis; Corporate governance on Earning Per Share (EPS)

$EPS = \beta_0 + \beta_1 BS_{it} + \beta_2 NBM_{it} + \beta_3 FW_{it} + \beta_4 CAR_{it} + \varepsilon_{it}$

Model 3	Unstandardized Coefficients	Standardized Coefficients		t	Sig.	R^2	F	Sig.
	B	Std. Error	Beta					
(Constant)	10.468	13.336		0.759	0.454			
BS	-7.950	4.041	-0.375	-1.967	0.059			
NBM	-0.824	0.461	-0.274	-1.788	0.085	0.499	6.975	0.001
CAR	-0.5536	1.579	-0.699	-4.733	0.000			
FW	9.520	12.873	0.144	0.740	0.466			

Table 4.7 presents the significance fitted model where earning per share as dependent variable is explained by 49.9 percent of independent variables. The capital adequacy ratio represents significant negative relation with earning per share except board size, number of board meeting and foreign ownership. Increase of one percent capital adequacy ratio decreases 55.36 percent of earning per share of commercial banks. There is insignificant negative relation between board size and earning per share. Number of board meeting indicates insignificant negative relation with earning per share. Similarly, result of table depicts insignificant positive relation between foreign ownership and earning per share of Nepalese commercial banks without controlling effect of age of banks and number of branches.

Major Findings on corporate governance practices

The annual reports of commercial banks are not uniform while disclosing the facts relating to information about the corporate governance that is board composition, board meetings, board allowances, audit committee meetings and allowances, CEOs compensation and allowances etc.

In terms of disclosure of corporate governance mechanism as stated in OECD principles, it has found that all most banks have not disclosed full information about corporate governance out of 27 commercial banks in Nepal.

A bank or financial institution shall have a board of directors comprising of at least five directors and not exceeding seven directors which is clearly stated in Bank and Financial Institution (BFIA) but the corporate governance practices regarding board size shows that 44 % commercial banks have crossed the limit of 5 to 7 directors in board committee.

As regard the board meetings of board of directors contained in annual financial statement by commercial banks this study has found that only 15% banks have contained the number of board meeting in their financial statement during this study period.

The new capital adequacy framework requires the banks to maintain minimum capital requirements. As per the framework, commercial banks need to maintain at least 6 percent Tier I capital and 11 percent total capital (Tier I & Tier II) which is maintained by all commercial banks.

The findings of the study depict that there is a huge gap of CEOs salary and allowances as well as board's compensation of government, joint venture and domestic private commercial banks.

In respect of board's responsibilities, board structure, shareholder's rights, transparency and disclosures, the study has revealed that joint venture commercial banks are ahead rather than government commercial banks and domestic private commercial banks.

Discussion

This study has examined the impact of corporate governance variables i.e. board size, number of board meeting, capital adequacy ratio and foreign ownership in the performance of banking industry in Nepal. The study has contributed to the existing literature from different perspective. This thesis has bridged the gaps in the research of relationship between corporate governance mechanism and bank performance in Nepal. This research found that large board size negatively impacts the performance of commercial banks in Nepal. The board size is negative and insignificant, meaning large membered board size is responsible for lower return on assets, return on equity and earning per share. This is consistent with the findings of previous study which suggest negative relationship between board size and Performance.

Our findings suggest a statistically significant and positive relation between the frequency of corporate board meetings and return on equity as corporate performance, implying that board meeting more frequently tend to generate higher financial performance. However, return on assets and earning per share are not statistically significant with board meeting suggesting that the board meeting be important resource in improving the effectiveness of the board. Capital adequacy ratio has significant negative relationship with return on equity and earning per

share which means higher capital adequacy ratio negatively affects the bank's efficiency. The findings from the regression imply that capital adequacy ratio has the greater impact on bank performance. So, it can be concluded that all banks should maintain their capital adequacy ratio which will attract clients and reduce the chances of becoming insolvent as well as will increase the performance of the bank.

The findings of this study shows that firm performance has positive relationship with foreign ownership. Return on assets of commercial banks in Nepal has significantly and positively related with the foreign ownership. Although, relation of return on equity and earning per share is insignificant with the foreign ownership. These advantages provide them the capabilities and strong incentives to monitor the banks they invested in.

In respect of corporate governance practices of commercial banks in Nepal boards responsibilities, Board Structure, Shareholders Rights, Transparency, and Disclosures, Audit Committee and Miscellaneous Governance issues, the study has revealed that Joint Venture Commercial Banks are ahead of Government Commercial Banks and Domestic Private Commercial Banks. The remuneration of CEO is clearly disclosed by government banks which is positive aspect from the OECD principles' view point regarding disclosure and transparency rather than joint venture banks and domestic private banks. The annual reports of Commercial Banks are not uniform while disclosing the facts relating to information about the Corporate Governance that is Board Composition, Board meetings, Board allowances, Audit Committee meetings and allowances, CEOs compensation and allowances etc.

Conclusion

The corporate governance is highly linked with the performance of the commercial banks. The study reflects the significant effect of corporate governance on bank financial performance in Nepal. The findings from the regression imply that capital adequacy ratio has the greater impact on bank performance. So, it can be concluded that all banks should maintain their capital adequacy ratio which will attract clients and reduce the chances of becoming insolvent as well as will increase the performance of the bank. Performance of commercial banks in Nepal has significantly and positively related with the foreign ownership due to technical capabilities, financial resources and superior managerial capital. Additionally, practices of corporate governance system of financial sector in Nepal is still infant stage however joint venture banks practices are more harmonizing rather than government banks and other banks. The corporate governance mechanism contained in annual financial reports as directed by NRB is not sufficient to disclose transparency and responsibility. The annual reports of commercial banks are not uniform while disclosing the facts relating to information about the corporate governance. The utilization of the resources, effective decision making,

transparency, responsiveness, rule of law are the major areas where Nepali organizations do believe and work. The change is needed, so all the frame of mind should be changed first for good corporate governance system in Nepal. Many commercial banks in Nepal have merged, or are in the phase of merging with, class A, class B and class C financial institutions. These changes may provide interesting opportunities to analyze how governance pre- and post-restructuring impacts upon returns of the banks involved. Additionally, the case study approach to explore the corporate governance issues would enable the capture of shifting ideas, paradigms, social norms and modes of thinking.

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