Corporate Governance and Risk Management: A Case of Nepalese Commercial Banks

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Abstract

The study examines the impact of corporate governance and risk management in the context of Nepalese commercial banks. Non-performing loan and capital adequacy ratio are the dependent variables. The selected independent variables are board size, board diversity, audit committee, firm size, proportion of independent directors and board meeting. The study is based on secondary data of 12 commercial banks with 120 observations for the study period from 2013/14 to 2022/23. The data were collected from Bank Supervision Report published by Nepal Rastra Bank (NRB), Ministry of Finance (MoF) and annual reports of the selected commercial banks. The correlation coefficients and regression models are estimated to test the significance and importance of corporate governance and risk management in the context of Nepalese commercial banks.

The study showed that board size has a negative relationship with non-performing loan. It means that increase in board size leads to decrease in non-performing loan. Similarly, board diversity has a negative relationship with non-performing loan. It means that increase in board diversity, leads to decrease in non-performing loan. Further, proportion of independent directors have a negative relationship with non-performing loan. It means that increase in proportion of independent directors leads to decrease in non-performing loan. Moreover, board meeting have a negative relationship with non-performing loan. It means that increase in board meeting leads to decrease in non-performing loan. Similarly, the results show that audit committee has a negative relationship with non-performing loan and capital adequacy ratio indicating that increase in audit committee leads to decrease in non-performing loan and capital adequacy ratio. Further, board size have a positive relationship with capital adequacy ratio. It means that increase in board size leads to increase in capital adequacy ratio. However, board diversity have a positive relationship with capital adequacy ratio. It means that increase in board diversity leads to increase in capital adequacy ratio. In addition, firm size have a positive relationship with capital adequacy ratio. It means that increase in firm size leads to increase in capital adequacy ratio.

Keywords: non-performing loan, capital adequacy ratio, board size, board diversity, audit committee, firm size, proportion of independent directors, board meeting

1. Introduction

Good corporate governance and risk management are critical in this era of globalization, particularly within the public sector (Kuo and Lee, 2024). Government involvement in economic and social activities places a significant responsibility on preventing corruption and the abuse of authority. Despite ongoing efforts to enhance transparency and accountability in the public sector, corruption and abuse of authority persist as serious challenges (Teichmann

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et al., 2023). Rashid *et al.* (2024) provided strong evidence that several individual characteristics of corporate governance and the composite index are significantly related to the operational risk, the liquidity risk and the Z-score (a proxy for solvency risk). The results also revealed that institutional quality significantly and substantially contributes in reducing the level of risks. Finally, the estimation results indicated that the effects of corporate governance on risk management are significantly different at Islamic financial institutions and conventional financial institutions. Azzahra *et al.* (2024) showed that structured risk evaluation and effective information communication can significantly reduce the risk of corruption. Practices such as strict internal controls and integrated information technology were found to improve transparency and accountability.

Corporate governance refers to the procedures that guarantee corporations receiving capital will see a return on their investment in the company. Management, capital providers, and other stakeholders influence the processes by which capital and resources are divided, earnings are dispersed, and performance is tracked by establishing the firm's policies, incentives, and objectives (Shleifer and Vishny, 1997). Kyere and Ausloos (2021) clarified that females have an important impact on the corporate governance of banks and are not demoted by men-dominated board culture. In a corporate governance system that operates for the benefit of all shareholders, management pursues maximization of firm value. Baek *et al.* (2004) confirmed that corporate governance has a significant influence on firm-level performance in crises and further suggested that the negative impact is greater on firms in which controlling shareholders have stronger incentives and means to expropriate resources. Ayorinde *et al.* (2012) stated that the corporate governance is about building credibility, ensuring transparency and accountability as well as maintaining an effective channel of information disclosure that will foster good corporate performance. Corporate governance therefore refers to the processes and structures by which the business and affairs of institutions are directed and managed in order to improve long term shareholders' value by enhancing corporate performance and accountability while taking into account the interest of other stakeholders.

Tsorhe *et al*. (2011) revealed that board strength does not have significant impact on capital risk, credit risk nor liquidity risk. The study reported that there is no statistical difference between the strengths of bank boards in Ghana and that board strength does not have significant impact on capital risk, credit size, pro-risk nor liquidity risk. Besides meeting the environmental and local community needs the aim of corporate governance is to govern the firms by complying with the legal and regulatory requirements. Corporate governance is concerned with the proper implementation of policies and procedures by a company to satisfy its related parties including shareholders, employees, customers, suppliers, regulatory authorities and the community at large (Kaur, 2014). Pandey (2006) asserted that corporate governance implies that the company would manage its affairs with diligence, transparency, responsibility and accountability and would maximize shareholders wealth. Hence, it is required to design systems, process, procedures, and structures and take decisions to augment its finance performance and shareholders' value in the long run. Corporate governance aims at reducing conflicts of interest, short-sightedness of writing costless perfect contracts and monitoring of controlling interest of the firm, the absence of which firm value is decreased (Denis and McConnell, 2003). Pearl-Kumah *et al.* (2014) examined the degree to which banks in Ghana use risk management practices and corporate governance in dealing with different

types of risk. The result of the study indicated that board of directors, senior staffs and not all staff are actively involved in risk management and the most important types of risk facing the sampled banks are credit risk, operating risk, solvency risk, interest rate risk, and liquidity risk. The study also found that the sampled banks are efficient in managing risk. Rachdi and Ben Ameur (2011) investigated the relationship between board characteristics; performance (Board meeting and Return on Equity) and bank risk taking (Z-score) in Tunisian banks. The study concluded that a small bank board is associated with more performance and with more bank risk-taking, the presence of independent directors within the board of directors affects negatively the performance, but has no significant effect on the risk-taking, a lower CEO ownership is associated with lower performance.

Aebi *et al.* (2012) argued that banks have to significantly improve the quality and profile of their corporate governance and risk management function in order to be well prepared to face a financial crisis. Tarraf and Majeske (2008) investigated the relationship among corporate governance, risk taking and financial performance at bank holding companies (BHCs) during the financial crisis of 2008. The study found that there is no significant relationship between corporate governance and risk-taking level. Stulz (2014) concluded that the success of risk management in performing its functions depends on the corporate environment and its ability to shape that environment. However, while better risk management should lead to better risk taking, there is no reason for a bank with good risk management to have low risk. Corporate governance aims at reducing conflicts of interest, short-sightedness of writing costless perfect contracts and monitoring of controlling interest of the firm, the absence of which firm value is decreased (Denis and McConnell, 2003).

According to Fraser *et al.* (1995), bank management is risk management. Banks accept risks in order to earn profits. Bank must balance the various alternative strategies in times of their risk or return characteristics with the goal of maximizing shareholders wealth. In doing so, banks must recognize that there are different types and that the impact of a particular investment strategy on shareholders depends on the impact of the total risk on the organization. Sinkey (1992) observed risk management as the heart of bank financial management. Adeusi *et al.* (2013) investigated the relationship between corporate governance and both of risk management and bank performance. The study provided evidence of negative relationship between corporate governance and risk management. Christopher and Yung (2009) concluded that banks with larger size of board of directors and with a lower level of related-party loans tend to perform well. The extent of related-party loans is a key consideration for effective corporate governance practices. Brian and Anna (2014) concluded that there is statistically significant relationship between capital adequacy ratio and corporate governance. Total assets, non-performing loan, board meeting are not statistically significant relationship between corporate governance. There is also statistically significant relationship between CAR, PTC and board size. Cheung (2010) concluded that the quality of corporate governance appears very significant in explaining future company returns and risk. The study found good corporate governance is associated with both higher stock returns and with lower unsystematic risk and vice versa. Quaresma (2014) analyzed the relation between the quality of corporate governance practices and the financial performance of international listed banks. This study concluded that there is a significant relation between best corporate governance practices and financial performance of studied banks.

In the context of Nepal, Bhojraj and Sengupta (2003) observed that a firms' risk, institutional ownership enjoys lower bond yields and higher bond rating due to monitoring power of the institutional owners. Corporate governance reforms are of great significance for developing countries like Nepal, to gain a sustained effort to attract foreign direct investment and foreign portfolio management and to mobilize greater saving through capital market (Maskay, 2004). Acharya (2018) concluded that corporate governance does affect the financial performance of commercial banks in Nepal. Pradhan (2014) revealed that there is positive impact of board size on return on assets and returns on equity which indicated that larger the number of board of directors, higher will return on assets and return on equity. Kunwar *et al.* (2014) concluded that there is a negative impact of the audit committee on the bank performance. However, public shareholder has positive impact on return on assets which means larger the number of public shareholders, higher will be return on assets. Poudel and Hovey (2012) showed that bigger board and audit committee size and lower Frequency of board meeting and lower proportion of institutional ownership lead to better efficiency in the commercial banks. Singh *et al.* (2018) specified that elements of corporate governance such as the presence of independent director, firm size have a positive effect on the performance of firms.

The above discussion shows that empirical evidences vary greatly across the studies on the impact of corporate governance and risk management of commercial banks. Though there are above mentioned empirical evidences in the context of other countries and in Nepal, no such findings using more recent data exist in the context of Nepal. Therefore, in order to support one view or the other, this study has been conducted.

The main purpose of the study is to analyze the impact of corporate governance and risk management of Nepalese commercial banks. Specifically, it examines the relationship of board size, board diversity, audit committee, firm size, proportion of independent directors and board meeting with non-performing loan and capital adequacy ratio of Nepalese commercial banks.

The remainder of this study is organized as follows. Section two describes the sample, data and methodology. Section three presents the empirical results and the final section draws the conclusion.

2. Methodological aspects

The study is based on the secondary data which were collected from 12 Nepalese commercial banks for the period from 2013/14 to 2022/23, leading to a total of 120 observations. The study employed convenience sampling method. The main sources of data collected from Bank Supervision Report published by Nepal Rastra Bank (NRB) and annual reports of the selected commercial banks. This study is based on descriptive as well as causal comparative research designs. Table 1 shows the list of commercial banks selected for the study along with the study period and number of observations.

Table 1

List of commercial banks selected for the study along with study period and number of observations

S.N.	Name of Commercial Banks	Study time Period	Observations
1	Agricultural Development Bank Limited	2013/14-2022/23	10
2	Everest Bank Limited	2013/14-2022/23	10
3	Himalayan Bank Limited	2013/14-2022/23	10
4	Machhapuchchhre Bank Limited	2013/14-2022/23	10
5	Nepal Bank Limited	2013/14-2022/23	10
6	Nepal SBI Bank Limited	2013/14-2022/23	10
7	NMB Bank Limited	2013/14-2022/23	10
8	Prime Commercial Bank Limited	2013/14-2022/23	10
9	Citizens International Bank Limited	2013/14-2022/23	10
10	Sanima Bank Limited	2013/14-2022/23	10
11	Siddhartha Bank Limited	2013/14-2022/23	10
12	Standard Chartered Bank Nepal Limited	2013/14-2022/23	10
Total number of observation			**120**

Source: Annual Reports

Thus, the study is based on 120 observations.

The model

The model used in this study assumes that risk management depends upon bank specific factors. The dependent variables selected for the study are non-performing loan and capital adequacy ratio. Similarly, the selected independent variables are board size, board diversity, audit committee, firm size, proportion of independent directors and board meeting. Therefore, the model takes the following form:

Risk management = f (BSZ, BM, BD, AC, FS, ID)

More specifically, the given model has been segmented into the following models:

$$NPL_{it} = \beta_0 + \beta_1 BSZ + \beta_2 BM + \beta_3 BD + \beta_4 AC + \beta_5 FS + \beta_6 ID + e_{it}$$

$$CAR_{it} = \beta_0 + \beta_1 BSZ + \beta_2 BM + \beta_3 BD + \beta_4 AC + \beta_5 FS + \beta_6 ID + e_{it}$$

Whereas,

NPL = Non-performing loan defined as the ratio of non-performing loans to total loan, in percentage.

CAR = Capital adequacy ratio measured by tier I and tire II capital divided by total risk weighted assets, in percentage.

BSZ = Board size as measured by the total number of directors in boards, in numbers.

BM = Board meeting as measured by the number of board meetings held in a year, in numbers.

BD = Board diversity as measured by the total number of female director in board, in numbers.

AC = Audit committee as measured by the total number of member in audit committee, in numbers.

FS = Firm size as measured by the log value total assets, rupees in billions.

ID = Independent director as measured by the number of independent director in boards in numbers.

The following section describes the independent variables used in this study along with hypothesis formulation.

Board size

Board size is one of the corporate governance variables most used in the corporate governance literature. Board size refers to the total number of directors on the board. Agency theory stated that a smaller board size is more effective for good governance and may increase firm performance (Jensen, 1993). In contrast, resource dependence theory suggested that larger board size will positively contribute to firm performance (Dalton *et al.,* 1999). Pfeffer (1972) noted that board size is positively linked to the performance of large firms. This is because large firms have a greater need of more board members who may bring different experience and expertise especially when the board is well diversified. Based on it, the study develops the following hypothesis:

H_1: There is positive relationship between board size and risk management.

Board diversity

Gender diversity in management and on boards has become a subject of empirical studies, and it is also an important indicator for good governance. Board diversity can also promote more effective global relationships and increase board independence because people of different gender, ethnicity or cultural backgrounds might ask questions that would not come from directors with more traditional backgrounds (Arfken *et al.,* 2004). Further, Brennan and McCafferty (1997) concluded that female directors can increase firm value for two reasons: women are not part of the old-boys network, which allows them to be more independent; and they have better understanding of consumer behavior, their needs and the opportunities to meet those needs. Adams and Ferreira (2009) found a negative relationship between the proportion of female directors and Tobin's Q. Similarly, Ahern and Dittmar (2012) found that there is a negative association between female directors and firm performance. Based on it, the study develops the following hypothesis:

H_2: There is negative relationship between board diversity and risk management.

Audit committee

The role of audit committee in bank is to improve the quality of financial reporting, transparency and accountability that ultimately leads to improved financial performance of banks. Klein (2002) argued that larger the audit committee size, better will be the financial performance of the bank. Coleman-Kyereboah (2007) revealed a positive relationship between audit committee size and a firm's performance. Al-Matari *et al.* (2014) revealed a positive relationship between audit committee size and firm performance. Based on it, the study develops the following hypothesis:

H_3: There is positive relationship between audit committee and risk management.

Firm size

Shih *et al.* (2000) revealed a clear evidence of diminishing relationship between the size of a firm and loss magnitude. Yegon *et al.* (2014) revealed a positive association between firm size and risk management. Burson (2007) revealed that firm size has a positive significant relationship with the return on assets (firm performance). Majumdar (1997) found that firm size has a positive impact on the performance. Ekwe and Duru (2012) argued that there is a strong positive relationship between firm size and financial performance. Based on it, the study develops the following hypothesis:

H_4: There is positive relationship with firm size and risk management.

Independent directors

Ezzamel and Waston (1993) revealed that independent directors are appointment to accommodate investor performance of western style corporate governance. Hence, balanced composition of dependent and independent directors leads to better financial performance in banks. Millstein and MacAvoy (1998) showed that those companies with independent directors operated better and gained more significant returns than those without independent directors. Lu *et al.* (2009) found that independent director from any background have a positive influence on firm performance. Based on it, this study develops the following hypothesis:

H_5: There is positive relationship between of independent directors and risk management.

Board meetings

Board meeting shows how efficiently the banks are using their assets to generate the income. It further indicated the efficiency of the management in generating net income from all the resources (Khrawish, 2011). Board meeting is determined as net income divided by total assets. Wen (2010) stated that a higher board meeting indicates company's efficiency. Todorovic (2013) revealed that the number of board meetings has a negative impact on the financial performance. Conger *et al.* (1998) argued that board time is an important resource for improving effectiveness of board. This implies that when board of directors meet frequently they are likely to reduce or manage bank risk. Based on it, this study develops the following hypothesis.

H_6: There is positive relationship with board meetings and risk management.

3. Results and Discussion

Descriptive statistics

Table 2 presents the descriptive statistics of the selected dependent and independent variables during the period 2013/14 to 2022/23.

Table 2

Descriptive statistics

This table shows the descriptive statistics of dependent and independent variables of 12 Nepalese commercial banks for the study period of 2013/14 to 2022/23. Dependent variables are NPL (Non-performing loan defined as the ratio of non-performing loans to total loan, in percentage) and CAR (Capital adequacy ratio measured by tier I and tire II capital divided by total risk weighted assets, in percentage). The independent variables are BSZ (Board size as measured by the total number of directors in boards, in numbers), BM (Board meeting as measured by the number of board meetings

held in a year, in numbers), BD (Board diversity as measured by the total number of female directors in board, in numbers), AC (Audit committee as measured by the total number of member in audit committee, in numbers), FS (Firm size as measured by the log value total assets, Rs. in billions) and ID (Independent director as measured by the number of independent directors in boards, in numbers).

Variables	Minimum	Maximum	Mean	Std. Deviation
NPL	-1.45	13.83	1.56	1.46
CAR	7.98	28.98	15.19	3.08
BSZ	5.00	10.00	6.82	1.39
BM	0.00	3.71	2.71	0.50
ID	0.00	21.00	9.06	7.55
BD	1.00	42.00	3.85	7.84
AC	2.00	5.00	2.12	1.86
FS	20180	207802	89335.89	39858.55

Source: SPSS output

Correlation analysis

Having indicated the descriptive statistics, Pearson's correlation coefficients are computed and the results are presented in Table 3.

Table 3

Pearson's correlation coefficients matrix

This table shows the bivariate Pearson's correlation coefficient dependent and independent variables of 12 Nepalese commercial banks for the study period from 2013/14 to 2022/23. Dependent variables are NPL (Non-performing loan defined as the ratio of non-performing loans to total loan, in percentage) and CAR (Capital adequacy ratio measured by tier I and tire II capital divided by total risk weighted assets, in percentage). The independent variables are BSZ (Board size as measured by the total number of directors in boards, in numbers), BM (Board meeting as measured by the number of board meetings held in a year, in numbers), BD (Board diversity as measured by the total number of female directors in board, in numbers), AC (Audit committee as measured by the total number of member in audit committee, in numbers), FS (Firm size as measured by the log value total assets, Rs. in billions) and ID (Independent director as measured by the number of independent directors in boards, in numbers).

Variables	NPL	CAR	BSZ	BM	ID	BD	AC	FS
NPL	1							
CAR	-0.757**	1						
BSZ	-0.183	0.109	1					
BM	-0.187**	0.236*	0.022	1				
ID	-0.346**	0.299**	-0.087	0.213*	1			
BD	0.000	0.236*	-0.146	0.099	0.210*	1		
AC	-0.162	0.090	-0.199	0.285*	0.233*	0.217*	1	
FS	-0.048	0.021	-0.267*	0.219*	0.200*	-0.087	0.196	1

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

Table 3 reveals that board size has a negative relationship with non-performing loan. It means that increase in board size leads to decrease in non-performing loan. Similarly, board meeting has a negative relationship with non-performing loan. It shows that increase in board meeting leads to decrease in non-performing loan. In addition, proportion of independent directors has a negative relationship with non-performing loan indicating that increase in proportion of independent directors leads to decrease in non-performing loan. However, board diversity has a positive relationship with non-performing loan. It indicates that increase in board diversity leads to increase in non-performing loan. The results show that audit committee has a negative relationship with non-performing loan indicating that increase in audit committee leads to decrease in non-performing loan. Firm size has a negative relationship with non-performing loan. It indicates that increase in firm size leads to decrease in non-performing loan.

Similarly, board size has a positive relationship with capital adequacy ratio. It means that increase in board size leads to increase in capital adequacy ratio. Similarly, board meeting has a positive relationship with capital adequacy ratio. It shows that increase in board meeting leads to increase in capital adequacy ratio. In addition, proportion of independent directors has a positive relationship with capital adequacy ratio indicating that increase in proportion of independent directors leads to increase in capital adequacy ratio. However, board diversity has a positive relationship with capital adequacy ratio. It indicates that increase in board diversity leads to increase in capital adequacy ratio. The results show that audit committee has a positive relationship with capital adequacy ratio indicating that increase in audit committee leads to increase in capital adequacy ratio. Firm size has a positive relationship with capital adequacy ratio. It indicates that increase in firm size leads to increase in capital adequacy ratio.

Regression analysis

Having indicated the Pearson's correlation coefficients, the regression analysis has been computed and results are presented in the Table 4. More specifically, it shows the regression results of board size, firm size, proportion of independent directors, board meeting, audit committee and board diversity on non-performing loans of Nepalese commercial banks.

Table 4

Estimated regression results of board size, firm size, board diversity, board meeting, audit committee and proportion of independent directors on non-performing loans

This result is based on panel data of 12 commercial banks with 120 observations for the period of 2013/14 to 2022/23 by using linear regression model**.** The model is $NPL_{it} = \beta_0 + \beta_1 BSZ + \beta_2 BM + \beta_3 BD + \beta_4 AC + \beta_5 FS + \beta_6 ID + e_{it}$ where the dependent variable is NPL (Non-performing loan defined as the ratio of non-performing loans to total loan, in percentage). The independent variables are BSZ (Board size as measured by the total number of directors in boards, in numbers), BM (Board meeting as measured by the number of board meetings held in a year, in numbers), BD (Board diversity as measured by the total number of female directors in board, in numbers), AC (Audit committee as measured by the total number of member in audit committee, in numbers), FS (Firm size as measured by the log value total assets, Rs. in billions) and ID (Independent director as measured by the number of independent directors in boards, in numbers).

Model	Intercept	Regression coefficients of						Adj. R_bar^2	SEE	F-value
		BSZ	ID	BD	AC	FS	BM			
1	2.642 (3.511)**	-0.170 (1.597)						0.018	1.848	2.862
2	2.276 (4.489)**		-0.489 (1.712)					0.019	1.404	2.971
3	2.164 (8.531)**			-0.067 (3.652)**				0.111	1.575	13.241
4	1.458 (9.857)**				0.0000 (0.001)			0.010	1.766	0.000
5	1.696 (7.874)**					-0.117 (1.521)		0.013	1.949	2.322
6	3.028 (0.872)						-0.139 (0.423)	0.008	1.566	0.149
7	3.772 (4.588)**	-0.186 (1.892)	-0.270 (0.984)	-0.66 (3.539)**				0.135	1.356	6.137
8	3.847 (4.599)**	-0.188 (1.905)	-0.279 (1.008)	-0.67 (3.563)**	-0.10 (0.547)			0.128	1.361	4.644
9	4.016 (4.701)**	-0.206 (2.052)*	-0.227 (0.776)	-0.064 (3.349)**	-0.012 (0.650)	-0.76 (0.982)		0.128	1.362	3.906
10	3.342 (0.858)	-0.202 (1.964)	-0.226 (0.781)	-0.064 (0.332)	-0.012 (0.661)	-0.077 (0.985)	0.058 (0.018)	0.119	1.569	3.287

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 levels respectively.

iii. Non-performing loan is the dependent variable.

Table 4 shows that the beta coefficients for board size are negative with non-performing loans. It indicates that board size has a negative impact on non-performing loans. This finding is consistent with the findings of Jensen (1993). Furthermore, the beta coefficients for proportion of independent directors are negative with non-performing loans. It indicates that proportion of independent directors has a negative impact on non-performing loans. This finding is consistent with the findings of Millstein and MacAvoy (1998). Moreover, the beta coefficients of board diversity are negative with non-performing loans. It indicates that board diversity have a negative impact on non-performing loans. This finding is consistent with the findings of Brennan and Tarraf and Majeske (2008). In addition, the beta coefficients of audit committee are positive with non-performing loans. It indicates that audit committee have a positive impact on non-performing loans. This finding is consistent with the findings of Al-Matari *et al.* (2014). Similarly, the beta coefficients for firm size are negative with non-performing loans. It indicates that firm size has a negative impact on non-performing loans. This finding is similar to the findings of Ekwe and Duru (2012). Likewise, the beta coefficients for board meeting are negative with non-performing loans. It indicates board meeting has a negative impact on non-performing loans. This finding is similar to the findings of Todorovic (2013).

Table 5 presents the regression results of board size, firm size, board diversity, board meeting, audit committee and proportion of independent directors on capital adequacy ratio of Nepalese commercial banks.

Table 5

Estimated regression results of board size, firm size, board diversity, board meeting, audit

committee and proportion of independent directors on capital adequacy ratio

This result is based on panel data of 12 commercial banks with 120 observations for the period of 2013/14 to 2022/23 by using linear regression model**.** The model is $CAR_{it} = \beta_0 + \beta_1 BSZ + \beta_2 BM + \beta_3 BD + \beta_4 AC + \beta_5 FS + \beta_6 ID + e_{it}$ where the dependent variables is CAR (Capital adequacy ratio measured by tier I and tire II capital divided by total risk weighted assets, in percentage). The independent variables are BSZ (Board size as measured by the total number of directors in boards, in numbers), BM (Board meeting as measured by the number of board meetings held in a year, in numbers), BD (Board diversity as measured by the total number of female directors in board, in numbers), AC (Audit committee as measured by the total number of member in audit committee, in numbers), FS (Firm size as measured by the log value total assets, Rs. in billions) and ID (Independent director as measured by the number of independent directors in boards, in numbers).

Model	Intercept	Regression coefficients of						Adj. R_bar^2	SEE	F-value
		BSZ	ID	BD	AC	FS	BM			
1	12.537 (7.474)**	0.243 (1.089)						0.002	3.186	1.593
2	11.738 (10.084)**		1.434 (2.404)*					0.046	3.016	5.782
3	13.086 (26.045)**			0.122 (3.105)**				0.080	2.982	9.934
4	15.424 (39.216)**				-0.059 (1.506)			0.013	3.099	3.267
5	14.884 (27.672)**					0.147 (0.895)		0.002	3.032	0.802
6	13.586 (1.472)						0.142 (0.205)	0.010	3.153	0.042
7	9.454 (4.789)**	0.280 (1.327)	1.066 (1.816)	0.111 (0.272)				0.110	2.014	5.059
8	8.770 (4.904)**	0.371 (1.286)	1.031 (1.745)	0.107 (2.668)**	-0.041 (1.088)			0.111	2.912	4.997
9	8.794 (4.802)**	0.208 (1.245)	1.040 (1.707)	0.107 (2.628)**	-0.041 (1.083)	-0.011 (0.065)		0.102	2.957	3.244
10	8.794 (4.802)**	0.352 (1.340)	1.080 (1.738)	0.109 (2.642)**	-0.040 (1.035)	-0.008 (0.045)	-0.261 (0.370)	0.083	2.941	2.731

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 levels respectively.

iii. Capital adequacy ratio is the dependent variable.

Table 5 shows that the beta coefficients for board size are positive with capital adequacy ratio. It indicates that board size has a positive impact on capital adequacy ratio. This finding is consistent with the findings of Jensen (1993). Furthermore, the beta coefficients for proportion of independent directors are positive with capital adequacy ratio. It indicates that proportion of independent directors has a positive impact on capital adequacy ratio. This finding is consistent with the findings of Pearl-Kumah *et al.* (2014). Moreover, the beta coefficients of board diversity are positive with capital adequacy ratio. It indicates that board diversity have a positive impact on capital adequacy ratio. This finding is consistent with the findings of Brennan and McCafferty (1997). In addition, the beta coefficients of audit committee are positive with capital adequacy ratio. It indicates that audit committee have a positive impact on capital adequacy ratio. This finding is consistent with the findings of Al-Matari *et al.* (2014). Similarly, the beta coefficients for firm size are positive with capital adequacy ratio. It indicates that firm size has a positive impact on capital adequacy ratio.

This finding is similar to the findings of Singh *et al.* (2018). Likewise, the beta coefficients for board meeting are positive with capital adequacy ratio. It indicates board meeting has a positive impact on non-performing loans. This finding is similar to the findings of Todorovic (2013).

4. Summary and conclusion

Good corporate governance builds the platform for a smooth, faster, easier and reliable financial system, clarifying responsibilities, fostering transparency and fairness to encourage greater individual accountability. Although various corporate governance mechanisms have evolved in developed countries, their applicability in a low-income country such as Nepal may not be efficacious due to differences in political, cultural, social and economic factors. Hence this thesis addresses the requirement for an evidence-based study that evaluates the best fit corporate governance mechanisms applicable for the Nepalese banking sector.

This study attempts to analyze the impact of corporate governance practices on risk management of Nepalese commercial banks. The study is based on secondary data of 12 commercial banks with 120 observations for the study period from 2013/14 to 2022/23.

The major conclusion of this study is that board size, board diversity, firm size, proportion of independent directors and board meeting have negative relationship with non-performing loan. It means that higher the board size, board diversity, firm size, proportion of independent directors and board meeting, lower will be the non-performing loan. Similarly, audit committee have positive relationship with non-performing loan. It means that higher the audit committee, higher will be the non-performing loan. The result also shows that board size, board diversity, audit committee, firm size, proportion of independent directors and board meeting have positive relationship with capital adequacy ratio. It means that higher the board size, board diversity, audit committee, firm size, proportion of independent directors and board meeting, higher will be the capital adequacy ratio. Further the study also concluded that the most dominant factor that determines the risk management is board diversity in the context of Nepalese commercial banks.

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