

Board of Directors, Audit Committee Characteristics and Performance of Nepalese Commercial Banks

Ishwari Rana, Garima Paudel, Jyoti Chauhan, Jyoti Panta and
Sumit Pradhan*

Abstract

The study examines the effect of board of directors and audit committee characteristics on the performance of Nepalese commercial banks. The dependent variables selected for the study are return on assets and earnings per share. The selected independent variables are board size, gender diversity, independent directors, audit committee size, total assets and number of board meetings. The study is based on secondary data of 11 commercial banks with 110 observations for the study period from 2013/14 to 2022/23. The data were collected from Banking and Financial Statistics published by Nepal Rastra Bank, publications and websites of Nepal Rastra Bank (NRB) and annual reports of the selected commercial banks. The correlation coefficients and regression models are estimated to test the significance and importance of board of directors and audit committee characteristics on the performance of Nepalese commercial banks.

The study showed that board size has a positive effect on return on assets and earnings per share. It means that higher the number of directors on the board, higher would be the return on assets and earnings per share. Similarly, gender diversity has a negative effect on return on assets and earnings per share. It means that increase in proportion female directors on board leads to decrease in return on assets and earnings per share. The results of the study also shows that audit committee has a positive effect on return on assets and earnings per share. It implies that larger the size of audit committee, higher would be the return on assets and earnings per share. Likewise, number of board meetings has a negative effect on return on assets and earnings per share which indicates that increase in the number of board meetings leads to decrease in return on assets and earnings per share. However, independent director has a negative effect on return on assets and earnings per share. It indicates that increase in number of independent directors on the board leads to decrease in return on assets and earnings per share. Similarly, total assets have a negative effect on return on assets and earnings per share. It implies that increase in total assets of the bank leads to decrease in return on assets and earnings per share.

Keywords: board size, gender diversity, independent directors, audit committee size, total assets, return on assets, earnings per share

1. Introduction

Corporate governance mechanisms adopted by banks play a crucial role in improving organizational performance and contributing to various aspects of

* Mr. Rana, Ms. Paudel, Ms. Chauhan and Ms. Panta are Freelance Researchers, Kathmandu, Nepal and Mr. Pradhan is the Head, Research Department, Uniglobe College (Pokhara University Affiliate), Kathmandu, Nepal.

their operations, including market share expansion and enhancing understanding of business roles and obligations. Effective governance mechanisms promote transparency and accountability within banks. By ensuring clear reporting lines, disclosure requirements, and oversight mechanisms, banks can enhance transparency in their operations and financial reporting. This transparency builds trust with investors, customers, and regulators, contributing to market share growth and improved organizational performance (Nyarko et al., 2017). Effective governance structures establish processes for managing identified risks. This may involve implementing controls, developing mitigation strategies, transferring risks through insurance or other means, or accepting certain risks based on informed decision-making. Risk management practices should be integrated into the organization's overall strategy and operations to ensure that risks are addressed proactively. By integrating risk identification, assessment, and management into their governance structures, organizations can enhance their ability to anticipate and respond to challenges effectively, thereby safeguarding their long-term sustainability and success. Effective corporate governance structures are essential for identifying, assessing, and managing risks within an organization (Gebba, 2015).

The audit committee plays a pivotal role in ensuring good governance within an organization. Its responsibility extends to overseeing the integrity of financial reporting, ensuring compliance with regulatory requirements, and assessing the effectiveness of internal controls. By providing an independent review of financial statements and reporting processes, the audit committee helps maintain transparency and credibility, which are essential for building trust among stakeholders such as investors, regulators, and the public. Additionally, the committee often serves as a bridge between management, internal auditors, and external auditors, facilitating communication and collaboration to address any issues or concerns that may arise. Overall, the audit committee's oversight contributes significantly to promoting accountability and sound governance practices within an organization (Zraiq and Fadzil, 2018). It is essential to have members with the right expertise and experience relevant to the organization's industry, financial matters, and regulatory environment. A diverse skill set within the committee can enhance its effectiveness in overseeing various aspects of governance. the size of an audit committee is crucial for its effectiveness in providing governance oversight. Maintaining a balance between independence and collaboration is vital. Having too many members may dilute the independence of the committee, while having too few may limit its ability to provide objective oversight. Omotoye et al. (2021) discovered the association between various

audit committee and board attributes and the market performance of listed deposit money banks in Nigeria. The study showed a positive but insignificant influence of board shareholding on market performance. The results imply that weakness in governance structures might lead to lower market performance. Al-Ahdal and Hashim (2022) revealed that there is lack of evidence to show that audit committee characteristics improve the performance of top Indian non-financial listed firms. However, external audit quality was found to have a significant positive impact on the financial performance of firms as measured by Tobin's Q, while firm size and leverage were found to have a significant impact on the financial performance of firms as measured by return on assets and return on equity.

Fariha et al. (2021) analyzed the effect of board characteristics and audit committee attributes on the firm performance of publicly listed commercial banks of Bangladesh. The results showed that board independence positively influences stock returns but negatively affects ROA and Tobin's Q. Similarly, board diversity has a negative impact on ROA and ROE. Family duality boosts ROA but hampers stock returns, while audit committee size and chairman independence impact Tobin's Q negatively. Manini and Abdillahi (2015) examined the impact of corporate governance mechanisms on banks' profitability based on the annual reports on 42 banks in Kenya in 2014. Using multiple regression analysis, the results showed that audit committee size, board gender diversity, and bank capital did not significantly impact profitability, while board size negatively influenced financial performance, and bank size had a positive association with financial performance. Al-Matari et al. (2014) examined the association between the board of director's characteristics, audit committee characteristics and the executive committee characteristics and the performance of the Oman companies. The data comprised of 162 non-financial companies because financial and non-financial companies employ different methods and they have different structures. The results showed that there is a positive correlation of board size, board meetings, audit committee independence, and executive committee independence with the performance of the Oman companies. However, board independence and legal counsel have a negative relationship with the performance of the Oman companies. Moreover, CEO tenure, CEO compensation, and audit committee size have an insignificant impact on the performance of the Oman companies.

Abbadi et al. (2016) investigated the effect of corporate governance quality on earnings management in Jordan. Using a panel data set of all industrial and service firms listed on Amman Stock Exchange (ASE) during the period 2009-2013, the study revealed that earnings management is affected

negatively by corporate governance quality. In particular; the results showed that earnings management is affected negatively by overall categories of governance index represented by board of director, board meeting, Audit and nomination and compensation committee. Furthermore, the results suggested that corporate governance quality has increased over time. Thus, its ability to constrain earnings management has also increased. Aanu et al. (2014) analyzed the effectiveness of audit committee and firm financial performance in Nigeria. The major findings were positive significant relationship between the independence and financial expertise of the audit committee and ROA, ROE, and ROCE. However, the results showed that size and meetings of the audit committee have no significant relationship with all performance variables. Shungu et al. (2014) investigated the impact of corporate governance on the performance of commercial banks in Zimbabwe. The findings showed a positive correlation between board composition, diversity, and commercial bank performance, but a negative correlation between board size, committees, and bank performance. Rahman et al. (2019) explored the impact of audit characteristics on firm performance of the listed manufacturing firms of Dhaka Stock Exchange (DSE) during the period of 2013 to 2017. Using the pooled OLS method, the findings showed that there is a significant negative relationship between audit committee meeting and firm performance.

Okoye et al. (2020) explored the nexus between governance practices and bank profitability in Nigeria. The estimation technique of the Generalized Method of Moments was employed. The study underscores the critical link between governance and financial performance, suggesting optimal board size to mitigate conflicts and advocating for directors of banking institutions to maintain substantial equity stakes to reinforce profitable governance practices. Similarly, Fanta (2013) examined the corporate governance mechanisms and their impact on performance of commercial banks in the absence of organized stock exchange. The study assessed the relationship between selected internal and external corporate governance mechanisms, and bank performance as measured by ROE and ROA. The study found that larger board size and the presence of an audit committee have a negative impact on bank performance, while bank size has a positive effect. Capital adequacy ratio positively influenced performance, but challenges like absence of stock exchanges, government intervention, and weak corporate governance standards adversely affected bank performance in Ethiopia. Adeabah et al. (2018) analyzed the efficiency of banks under board gender diversity and determinants of bank efficiency. Using descriptive statistics, correlation matrix, and panel regression model, the results showed that board independence and

powerful CEOs have negative effects on bank efficiency. Islam and Islam (2022) assessed the relationship between board independence, directors' ownership, and organizational profitability of listed nonfinancial enterprises on the Dhaka Stock Exchange between 2015 and 2019. Using generalized method of moments (GMM), the study reveals that board independence has a negative and significant effect on profitability. Grove et al (2011) revealed that corporate governance factors significantly impact financial performance, with CEO duality and leverage showing negative effects, while executive incentive pay has mixed impacts on loan quality. Board size and average director age exhibit a concave relationship with financial performance, while evidence regarding other governance measures is weak.

In the context of Nepal, Saphi *et al.* (2023) found that board management and structure disclosure, accounting and auditing disclosure, remuneration of directors' disclosure, ownership disclosure, and risk management disclosure all have positive impact on earnings per share (EPS). Moreover, Karki *et al.* (2023) revealed that female directors on the board, family ownership, and leverage have negative impact on return on assets and basic earning power ratio. Additionally, female executives in the management team, board size, board independence, firm size, and net interest margin have positive impact on return on assets and basic earning power ratio. Dongol (2021) investigated the impact of corporate governance on financial performance of Nepalese commercial banks. The results gained through regression analysis depicted that larger board and audit committee size and lower frequency of board meeting, proportion of institutional ownership led to better efficiency in commercial banks. Likewise, Bhattra (2017) found that the board size has a negative impact on financial performance of commercial banks in Nepal whereas audit committee size and portion of independent directors have positive impact on financial performance of commercial banks in Nepal.

The above discussion shows that empirical evidences vary greatly across the studies on the effect of board of directors and audit committee characteristics on the performance. Though there are above-mentioned empirical evidence 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 major objective of the study is to examine the effect of board of directors and audit committee characteristics on the performance in Nepalese commercial banks. Specifically, it examines the relationship of board size, gender diversity, independent directors, audit committee size, total assets and

number of board meetings on return on assets and earnings per share in the context 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 11 Nepalese commercial banks from 2013/14 to 2022/23, leading to a total of 110 observations. The study employed convenience sampling method. The main sources of data collected from the 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 the banks | Study period | Observations |
|-------------------------------------|---------------------------------------|-------------------|--------------|
| 1 | Agricultural Development Bank Limited | 2013/14 - 2022/23 | 10 |
| 2 | Everest Bank Limited | 2013/14 - 2022/23 | 10 |
| 3 | NIC Asia Bank Limited | 2013/14 - 2022/23 | 10 |
| 4 | Machhapuchchhre Bank Limited | 2013/14 - 2022/23 | 10 |
| 5 | Himalayan Bank Limited | 2013/14 - 2022/23 | 10 |
| 6 | Nepal Bank Limited | 2013/14 - 2022/23 | 10 |
| 7 | Nepal SBI Bank limited | 2013/14 - 2022/23 | 10 |
| 8 | Prime Commercial Bank Limited | 2013/14 - 2022/23 | 10 |
| 9 | Standard Chartered Bank Nepal Limited | 2013/14 - 2022/23 | 10 |
| 10 | Siddhartha Bank Limited | 2013/14 - 2022/23 | 10 |
| 11 | Sanima Bank Limited | 2013/14 - 2022/23 | 10 |
| Total number of observations | | | 110 |

Thus, the study is based on 110 observations.

The model

The model used in this study assumes that bank performance depends upon board of directors and audit committee characteristics. The dependent variables selected for the study are return on assets and earnings per share.

Similarly, the selected independent variables are board size, gender diversity, independent directors, audit committee size, total assets and number of board meetings. Therefore, the models take the following forms:

$$ROA = \beta_0 + \beta_1 BS_{it} + \beta_2 GD_{it} + \beta_3 ID_{it} + \beta_4 ACS_{it} + \beta_5 TA_{it} + \beta_6 NBM_{it} + e_{it}$$

$$EPS = \beta_0 + \beta_1 BS_{it} + \beta_2 GD_{it} + \beta_3 ID_{it} + \beta_4 ACS_{it} + \beta_5 TA_{it} + \beta_6 NBM_{it} + e_{it}$$

Where,

ROA = Return on assets as measured by the ratio of net income to total assets, in percentage.

EPS = Earnings per share as measured by the ratio of net income to total outstanding shares, in Rs.

BS= Board size as measured by the number of board members, in numbers

GD= Gender diversity as measured by the number of females in the board as a director, in numbers.

ID= Independent directors as measured by the number of directors in the board as an external, in numbers.

ACS= Audit committee size as measured by the number of audit committee members, in numbers.

TA= Total assets as measured by the total assets of the banks, Rs in billion.

NBM= Number of board meetings conducted during a year, in number.

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

Board size

Kanakriyah (2021) examined effect of the board of directors' (BOD) characteristics on the corporate performance of the Jordanian industrial and service companies listed on the Amman Stock Exchange (ASE) during the period 2015–2019. The study showed a positive effect of managerial ownership, CEO duality, board independence, gender diversity; nationality diversity, board meetings, board size, corporate size on performance, while the corporate age and the education level (BOD members) have a negative effect on performance. Al-Matari et al. (2014) investigated the relationship between 8 internal corporate governance mechanisms and firm performance (ROA) of the Muscat Security Market (MSM) listed companies during 2011 and 2012. The study comprised of non-financial firms. The study found a

positive relationship of board size, board meeting, CEO tenure, board change and legal counsel with ROA. The greater number of board members, the more relations to the external environment exist to gather critical resources and information for decision making on corporate policies that will improve efficiency (Goodstein et al., 1994). Based on it, this study develops the following hypothesis:

H₁: There is a positive relationship between board size and bank profitability.

Gender diversity

Pathan and Faff (2013) examined the effect of board structure (board size, composition and gender diversity) on the bank performance. The results showed that bank performance in banks is negatively affected by larger board size and decreased board independence, but positively influenced by gender diversity. Imade (2019) examined the nexus between board gender diversity, non-executive director's composition and corporate performance (return on asset) of listed firms on the Nigerian Stock Exchange. Using Ordinary Least Square (OLS) estimation technique, the analysis revealed that board gender diversity has substantial positive effect on corporate performance (return on asset) of listed firms on the Nigerian Stock Exchange. Terjesen et al. (2016) empirically analyzed whether gender diversity enhances boards of directors' independence and efficiency. Using data from 3,876 public firms in 47 countries and controlling for a wide set of corporate governance mechanisms, the study found that firms with more female directors have higher firm performance by market (Tobin's Q) and accounting (return on assets) measures. Based on it, this study develops the following hypothesis:

H₂: There is a positive relationship between gender diversity and bank profitability.

Independent directors

External directors offer a more effective level of objectivity when assessing the firm's situation. Valenti et al. (2011) investigated the effects of prior firm performance on board composition and governance structure of 90 companies listed on National Association of Securities Dealers Automated Quotations. The study revealed a negative relationship between independent directors and bank profitability. According to Fariha et al. (2021), board independence has a negative and significant relationship with bank profitability measured by ROA and Tobin's Q. Olatunji and Stephen (2011) examined the effect of the proportion of non-executive directors on the profitability of the listed banks in Nigeria. The study discovered that a negative but significant relationship

exists between return on equity and non- executive directors. Based on it, this study develops the following hypothesis:

H₃: There is a negative relationship between independent directors and bank profitability.

Audit committee size

Al-Ahdal and Hashim (2022) analyzed the influence of audit committee characteristics and external audit quality on the performance of non-financial public limited companies listed on the National Stock Exchange 100. Audit committee characteristics didn't improve performance for top Indian non-financial firms, but higher external audit quality positively impacted financial performance, alongside significant effects from firm size and leverage on return metrics. Badolato et al. (2014) opined that having a member of an audit committee that possesses a financial expertise would likely reduce earnings management for firms where the corporate governance mechanisms are weak. Similarly, Zalata et al. (2018) found that firms with higher quality of earning are more associated with audit committee members who have financial expertise. Buallay and Al-Ajmi (2012) examined the role of audit committee attributes in corporate sustainability reporting from banks in the Gulf Cooperation Council. The results showed that audit committee financial expertise has a significant impact on returns on equity and return on asset. The study further revealed a positive relationship between audit committee financial expertise and firm financial performance. Based on it, this study develops the following hypothesis:

H₄: There is a positive relationship between audit committee size and bank profitability.

Total assets

Abreu and Mendes (2002) evaluated the determinants of bank's interest margins and profitability for some European countries. The study found that well capitalized banks face lower expected bankruptcy costs and this benefit interprets into better profitability. Burki and Niazi (2010) analyzed the impact of financial reforms on the efficiency of state, private and foreign banks of Pakistan by using data of 40 banks for the period 1991-2000. They found a positive impact of banks size, interest income to earning assets and loans to deposit ratio on estimated efficiency scores. According to Gul et al. (2011), the larger banks are better placed than smaller banks in harnessing economies of scale in transactions to the plain effect that they will tend to enjoy a higher level of profits. The result is consistent with the findings of Molyneux and

Thornton (1992); Bikker and Hu (2002). Based on it, this study develops the following hypothesis:

H₅: There is a positive relationship between total assets and bank profitability.

Number of board meetings

The relationship between the number of board meetings and bank profitability can vary based on several factors, including the effectiveness of board oversight, the quality of decision-making during meetings, and the overall governance structure of the bank. A higher number of meetings is an indication of more opportunities to consider various board decisions and reach the ultimate decision (Khan and Javid, 2011). More frequent meetings can provide opportunities for the board to closely monitor the bank's operations, identify potential problems early, and take corrective actions to improve profitability. Arora and Sharma (2016) revealed that frequent board meetings and members' attendance of the meetings led to enhanced board performance. Mishra and Mishra (2009) examined the implications of board meeting on the performance of the firm through strategic advice concerning opportunities for investment. Therefore, the frequency of board meetings may be stated as an element that could lead to enhanced firm performance. Based on it, this study develops the following hypothesis:

H₆: There is a positive relationship between number of board meetings and bank profitability.

3. Results and discussion

Descriptive statistics

Table 2 presents the descriptive statistics of 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 11 Nepalese commercial banks for the study period of 2013/14 to 2022/23. The dependent variables are ROA (Return on assets as measured by the ratio of net income to total assets, in percentage) and EPS (Earnings per share as measured by the ratio of net income to total outstanding shares, in Rs). The independent variables are BS (Board size as measured by the number of board members, in numbers), GD (Gender diversity as measured by the number of females in the board as a director, in numbers), ACS (Audit committee size as measured by the number of audit committee members, in numbers), ID (Independent directors as measured by the number of directors in the board as an external, in numbers), TA (Total assets as measured by the total assets of the banks, Rs in billion) and NBM (Number of board

meetings conducted during a year, in number).

| Variables | Minimum | Maximum | Mean | Std. Deviation |
|-----------|---------|---------|--------|----------------|
| ROA | 0.47 | 3.12 | 1.57 | 0.52 |
| EPS | 5.30 | 86.04 | 28.46 | 13.54 |
| BS | 5.00 | 10.00 | 7.08 | 1.21 |
| ID | 0.00 | 2.00 | 0.53 | 0.51 |
| GD | 0.00 | 2.00 | 0.58 | 0.59 |
| NBM | 11.00 | 73.00 | 33.96 | 19.65 |
| TA | 0.084 | 364.08 | 124.55 | 8.36 |
| ACS | 1.00 | 9.00 | 3.48 | 1.30 |

Source: SPSS Software

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 coefficients of dependent and independent variables of 11 Nepalese commercial banks for the study period from 2013/14 to 2022/23. The dependent variables are ROA (Return on assets as measured by the ratio of net income to total assets, in percentage) and EPS (Earnings per share as measured by the ratio of net income to total outstanding shares, in Rs). The independent variables are BS (Board size as measured by the number of board members, in numbers), GD (Gender diversity as measured by the number of females in the board as a director, in numbers), ACS (Audit committee size as measured by the number of audit committee members, in numbers), ID (Independent directors as measured by the number of directors in the board as an external, in numbers), TA (Total assets as measured by the total assets of the banks, Rs in billion) and NBM (Number of board meetings conducted during a year, in number).

| Variables | ROA | EPS | BS | ID | GD | NBM | TA | ACS |
|-----------|----------|---------|----------|---------|---------|---------|--------|-----|
| ROA | 1 | | | | | | | |
| EPS | 0.664** | 1 | | | | | | |
| BS | 0.026 | 0.212* | 1 | | | | | |
| ID | -0.011 | -0.157 | -0.289** | 1 | | | | |
| GD | -0.065 | -0.098 | -0.244* | 0.465** | 1 | | | |
| NBM | -0.077 | -0.030 | 0.479** | 0.008 | 0.071 | 1 | | |
| TA | -0.358** | -0.239* | -0.194* | 0.550** | 0.437** | 0.369** | 1 | |
| ACS | 0.309** | 0.192* | -0.130 | 0.089 | 0.332** | -0.056 | -0.100 | 1 |

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

Table 3 shows that board size has a positive correlation with return on assets. It means that higher the number of directors on the board, higher would be

the return on assets. Similarly, gender diversity has a negative correlation with return on assets. It means that increase in proportion female directors on board leads to decrease in return on assets. The results of the study also shows that audit committee has a positive correlation with return on assets. It implies that larger the size of audit committee, higher would be the return on assets. Likewise, number of board meetings has a negative correlation with return on assets which indicates that increase in the number of board meetings leads to decrease in return on assets. However, independent director has a negative correlation with return on assets. It indicates that increase in number of independent directors on the board leads to decrease in return on assets. Similarly, total assets have a negative correlation with return on assets. It implies that increase in total assets of the bank leads to decrease in return on assets.

On the other hand, board size has a positive correlation with earnings per share. It means that higher the number of directors on the board, higher would be the earnings per share. Similarly, gender diversity has a negative correlation with earnings per share. It means that increase in proportion female directors on board leads to decrease in earnings per share. The results of the study also shows that audit committee has a positive correlation with earnings per share. It implies that larger the size of audit committee, higher would be the earnings per share. Likewise, number of board meetings has a negative correlation with earnings per share which indicates that increase in the number of board meetings leads to decrease in earnings per share. However, independent director has a negative correlation with earnings per share. It indicates that increase in number of independent directors on the board leads to decrease in earnings per share. Similarly, total assets have a negative correlation with earnings per share. It implies that increase in total assets of the bank leads to decrease in earnings per share.

Regression analysis

Having indicated the Pearson's correlation coefficients, the regression analysis has been carried out and results are presented in Table 4. More specifically, it shows the regression results of board size, gender diversity, independent directors, audit committee size, total assets and number of board meetings on return on assets in the context of Nepalese commercial banks.

Table 4

Estimated regression results of board size, gender diversity, independent directors, audit committee size, total assets and number of board meetings on return on assets

The results are based on panel data of 11 commercial banks with 110 observations for the period of 2013/14-2022/23 by using the linear regression model and the model is $ROA = \beta_0 +$

$\beta_1 BS_{it} + \beta_2 GD_{it} + \beta_3 ID_{it} + \beta_4 ACS_{it} + \beta_5 TA_{it} + \beta_6 NBM_{it} + e_{it}$ where, the dependent variable is ROA (Return on assets as measured by the ratio of net income to total assets, in percentage). The independent variables are BS (Board size as measured by the number of board members, in numbers), GD (Gender diversity as measured by the number of females in the board as a director, in numbers), ACS (Audit committee size as measured by the number of audit committee members, in numbers), ID (Independent directors as measured by the number of directors in the board as an external, in numbers), TA (Total assets as measured by the total assets of the banks, Rs in billion) and NBM (Number of board meetings conducted during a year, in number).

| Model | Intercept | Regression coefficients of | | | | | | Adj. R_bar ² | SEE | F-value |
|-------|--------------------|----------------------------|-------------------|-------------------|-------------------|---------------------|------------------|----------------------------|-------|---------|
| | | BS | ID | GD | NBM | TA | ACS | | | |
| 1 | 0.701 (4.675)** | 0.007 (4.078)** | | | | | | 0.130 | 0.137 | 16.627 |
| 2 | 0.161 (1.784) | | -0.008 (0.777) | | | | | 0.004 | 0.147 | 0.603 |
| 3 | 0.236 (1.955) | | | -0.081 (1.201) | | | | 0.009 | 0.233 | 1.442 |
| 4 | 0.105 (3.869)** | | | | -0.010 (0.561) | | | 0.007 | 0.576 | 0.314 |
| 5 | -0.121 (-2.807) | | | | | -0.016 (1.186) | | 0.099 | 0.132 | 6.991 |
| 6 | 0.098 (3.163)* | | | | | | 0.01 (0.211) | 0.009 | 0.148 | 0.045 |
| 7 | 0.741 (4.432)** | 0.007 (4.016)** | -0.005 (0.555) | | | | | 0.125 | 0.138 | 8.412 |
| 8 | 0.939 (4.180)** | 0.007 (3.793)** | -0.012 (1.114) | -0.009 (1.311) | | | | 0.131 | 0.137 | 6.220 |
| 9 | 0.961 (4.164)** | 0.007 (3.632)** | -0.014 (1.196) | -0.009 (1.360) | -0.001 (0.450) | | | 0.124 | 0.138 | 4.679 |
| 10 | 0.443 (1.692) | 0.004 (1.885) | -0.012 (1.078) | -0.005 (0.716) | -0.001 (0.871) | -0.012 (1.586) | | 0.217 | 0.130 | 6.760 |
| 11 | 2.583 (1.742) | 0.014 (1.192) | -0.123 (0.664) | -0.033 (0.226) | -0.002 (0.423) | -0.075 (1.488)** | 0.175 (3.435) | 0.251 | 0.501 | 3.965 |

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. Return on assets is the dependent variable.

Table 4 shows that the beta coefficients for board size are positive with return on assets. It indicates that board size has a positive impact on return on assets. This finding is similar to the findings of Kanakriyah (2021). Similarly, the beta coefficients for gender diversity are negative with return on assets. It indicates that gender diversity has a negative impact on return on assets. This finding is similar to the findings of Pathan and Faff (2013). Likewise, the beta coefficients for audit committee size are positive with return on assets. It indicates that audit committee size has a positive impact on return on assets. This finding is consistent with the findings of Al-Ahdal and Hashim (2022). In addition, the beta coefficients for total assets are negative with return on assets. It indicates that total assets have a negative impact on return on assets. This finding contradicts with the findings of Bikker and Hu (2002). Further, the beta coefficients for number of board meetings are negative with return on assets. It indicates that number of board meetings has a negative impact on

return on assets. This finding is similar to the findings of Mishra and Mishra (2009). Moreover, the beta coefficients for independent directors are negative with return on assets. It indicates that independent directors have a negative impact on return on assets. This finding is similar to the findings of Olatunji and Stephen (2011).

Table 5 shows the regression results of board size, gender diversity, independent directors, audit committee size, total assets and number of board meetings on earnings per share in the context of Nepalese commercial banks.

Table 5

Estimated regression results of board size, gender diversity, independent directors, audit committee size, total assets and number of board meetings on earnings per share

The results are based on panel data of 11 commercial banks with 110 observations for the period of 2013/14-2022/23 by using the linear regression model and the model is $EPS = \beta_0 + \beta_1 BS_{it} + \beta_2 GD_{it} + \beta_3 ID_{it} + \beta_4 ACS_{it} + \beta_5 TA_{it} + \beta_6 NBM_{it} + e_{it}$ where, the dependent variable is EPS (Earnings per share as measured by the ratio of net income to total outstanding shares, in Rs). The independent variables are BS (Board size as measured by the number of board members, in numbers), GD (Gender diversity as measured by the number of females in the board as a director, in numbers), ACS (Audit committee size as measured by the number of audit committee members, in numbers), ID (Independent directors as measured by the number of directors in the board as an external, in numbers), TA (Total assets as measured by the total assets of the banks, Rs in billion) and NBM (Number of board meetings conducted during a year, in number).

| Model | Intercept | Regression coefficients of | | | | | | Adj. R ² | SEE | F-value |
|-------|---------------------|----------------------------|-------------------|-------------------|-------------------|-------------------|------------------|---------------------|--------|---------|
| | | BS | ID | GD | NBM | TA | ACS | | | |
| 1 | 114.202 (1.606) | 1.255 (1.510) | | | | | | 0.012 | 65.300 | 2.279 |
| 2 | 60.520 (1.513) | | -6.074 (1.348) | | | | | 0.008 | 65.450 | 1.817 |
| 3 | -65.322 (-1.220) | | | -3.873 (1.366) | | | | 0.008 | 65.430 | 1.865 |
| 4 | 10.651 (0.882) | | | | -0.083 (0.331) | | | 0.009 | 0.741 | 0.109 |
| 5 | 15.795 (0.736) | | | | | -0.622 (0.416) | | 0.008 | 0.678 | 0.173 |
| 6 | 14.517 (1.057) | | | | | | 1.496 (0.597) | 0.006 | 0.552 | 0.356 |
| 7 | 157.539 (1.997)* | 1.184 (1.425) | -5.636 (1.254) | | | | | 0.018 | 65.126 | 1.933 |
| 8 | 82.106 (0.773) | 1.315 (1.566) | -3.060 (0.599) | -3.417 (1.060) | | | | 0.019 | 0.179 | 1.665 |
| 9 | 90.972 (0.834) | 1.255 (1.464) | -3.764 (0.691) | -3.223 (0.984) | -0.182 (0.382) | | | 0.010 | 65.364 | 1.274 |
| 10 | 161.242 (1.231)* | 4.038 (1.741) | -4.038 (0.740) | -2.594 (0.776) | -1.654 (0.272) | -1.654 (0.972) | | 0.010 | 0.311 | 1.208 |
| 11 | 50.165 (1.454) | 4.150 (2.521) | -2.419 (0.562) | -0.318 (0.092) | -0.131 (1.357) | -2.255 (1.924) | 2.535 (2.139) | 0.267 | 11.662 | 4.211 |

Notes:

- Figures in parenthesis are t-values.
- The asterisk signs (**) and (*) indicate that the results are significant at one percent and five percent level respectively.
- Earnings per share is the dependent variable.

Table 5 shows that the beta coefficients for board size are positive with earnings per share. It indicates that board size has a positive impact on earnings per share. This finding is similar to the findings of Al-Matari et al. (2014). Similarly, the beta coefficients for gender diversity are negative with earnings per share. It indicates that gender diversity has a negative impact on earnings per share. This finding is similar to the findings of Terjesen et al. (2016). Likewise, the beta coefficients for audit committee size are positive with earnings per share. It indicates that audit committee size has a positive impact on earnings per share. This finding is consistent with the findings of Badolato et al. (2014). In addition, the beta coefficients for total assets are negative with earnings per share. It indicates that total assets have a negative impact on earnings per share. This finding contradicts with the findings of Molyneux and Thornton (1992). Further, the beta coefficients for number of board meetings are negative with earnings per share. It indicates that number of board meetings has a negative impact on earnings per share. This finding is similar to the findings of Arora and Sharma (2016). Moreover, the beta coefficients for independent directors are negative with earnings per share. It indicates that independent directors have a negative impact on earnings per share. This finding is similar to the findings of Fariha et al. (2021).

4. Summary and conclusion

Corporate governance mechanisms are essential for banks as they ensure that the institution is managed efficiently and ethically, ultimately enhancing organizational performance. A diverse and independent board brings varied perspectives and reduces the risk of groupthink. Independent directors can provide unbiased oversight and hold management accountable. Strong compliance programs ensure that the bank adheres to regulatory requirements and internal policies, minimizing legal risks and maintaining the bank's reputation.

This study attempts to analyse the effect of board of directors and audit committee characteristics on the performance in Nepalese commercial banks. The study is based on secondary data of 11 commercial banks with 110 observations for the period from 2013/14 to 2022/23.

The major conclusion of this study is that gender diversity, independent directors, total assets and number of board meetings have negative effect on return on assets and earnings per share in the context of Nepalese commercial banks. Moreover, board size and audit committee size have positive effect on

return on assets and earnings per share in the context of Nepalese commercial banks. Similarly, the study also concluded that the greater number of board members, the more relations to the external environment exist to gather critical resources and information for decision making on corporate policies that will improve efficiency.

References

- Aanu, O. S., I. F. Odianonsen, and O. I. Foyeke, 2014. Effectiveness of audit committee and firm financial performance in Nigeria: An empirical analysis. *Journal of Accounting and Auditing* 1(1), 2-11.
- Abbadi, S. S., Hijazi, Q. F., and Al-Rahahleh, A. S. (2016). Corporate governance quality and earnings management: Evidence from Jordan. *Australasian Accounting, Business and Finance Journal*, 10(2), 54-75.
- Abreu, M., and V. Mendes, 2002. Commercial bank interest margins and profitability. *European Journal of Finance* 2(1), 36-48.
- Adeabah, D., A. Gyeke-Dako, and C. Andoh, 2019. Board gender diversity, corporate governance and bank efficiency in Ghana: a two-stage data envelope analysis (DEA) approach. *Corporate Governance: The International Journal of Business in Society* 19(2), 299-320.
- Al-Ahdal, W. M., and H. A. Hashim, 2022. Impact of audit committee characteristics and external audit quality on firm performance: Evidence from India. *Corporate Governance: The International Journal of Business in Society* 22(2), 424-445.
- Al-Matari, E. M., A. K. Al-Swidi and F. H. BtFadzil, 2014. The effect on the relationship between board of directors' characteristics on firm performance in Oman: Empirical study. *Middle-East Journal of Scientific Research* 21(3), 556-574.
- Al-Matari, E. M., A. K. Al-Swidi, and F. H. Fadzil, 2014. The effect of board of directors' characteristics, audit committee characteristics and executive committee characteristics on firm performance in Oman: An empirical study. *Asian Social Science* 10(11), 149-171.
- Arora, A., and C. Sharma, 2016. Corporate governance and firm performance in developing countries: evidence from India. *Corporate governance* 16(2), 420-436.
- Badolato, P. G., D. C. Donelson, and M. Ege, 2014. Audit committee financial expertise and earnings management: The role of status. *Journal of Accounting*

and Economics 58(3), 208-230.

- Bhattra, H., 2017. Effect of corporate governance on financial performance of bank in Nepal. *Zenith International Journal of Multidisciplinary Research* 7(3), 97-110.
- Bikker, J. A., and H. Hu, 2002. Cyclical Patterns in Profits, Provisioning and Lending of Banks and Procyclicality of the New Basle Capital Requirements. *BNL Quarterly Review* 221(5), 143-175.
- Buallay, A., and J. Al-Ajmi, 2020. The role of audit committee attributes in corporate sustainability reporting: Evidence from banks in the Gulf Cooperation Council. *Journal of Applied Accounting Research* 21(2), 249-264.
- Burki, A. A., and G. S. K. Niazi, 2010. Impact of financial reforms on efficiency of state-owned, private and foreign banks in Pakistan. *Applied Economics* 42(24), 3147-3160.
- Dongol, P., 2021. Corporate governance framework and financial performance of Nepalese banking sector. *Corporate Governance* 6(5), 77-87.
- Fanta, A., 2013. Corporate governance and impact on bank performance. *Journal of Finance and Accounting* 1(1), 19-26.
- Fariha, R., M. Hossain, and R. Ghosh, 2021. Board characteristics, audit committee attributes and firm performance: empirical evidence from emerging economy. *The Asian Journal of Accounting Research* 7(1), 84-96.
- Gebba, T. R., 2015. Corporate governance mechanisms adopted by UAE national commercial banks. *Journal of Applied Finance and Banking* 5(5), 23-61.
- Goodstein, J., K. Gautam, and W. Boeker, 1994. The effects of board size and diversity on strategic change. *Strategic Management Journal* 15(3), 241-250.
- Grove, H., L. Patelli, L. M. Victoravich, and T. Xu, 2011. Corporate governance and performance in the wake of the financial crisis: Evidence from US commercial banks. *Corporate Governance: An International Review* 19(5), 418-436.
- Gul, S., F. Irshad, and K. Zaman, 2011. Factors Affecting Bank Profitability in Pakistan. *Romanian Economic Journal* 14(39), 61-87.
- Imade, O. G., 2019. Board gender diversity, non-executive directors' composition and corporate performance: evidence from listed firms in Nigeria. *African Journal of Business Management* 13(9), 283-290.

- Islam, M. T., and M. A. Islam, 2022. Dynamic association between board independence and firm profitability: The moderating role of director ownership. *Journal of Management and Economic Studies* 4(3), 389-399.
- Kanakriyah, R., 2021. The impact of board of directors' characteristics on firm performance: a case study in Jordan. *The Journal of Asian Finance, Economics and Business*, 8(3), 341-350.
- Karki, A., A. Nepali, A. Pandit, A. K. Mahato, and A. Joshi, 2023. Female presence in corporate governance, firm performance, and the moderating role of family ownership: A case of Nepalese commercial banks. *Nepalese Journal of Finance* 10(1), 15-35.
- Khan, M., and A. Javid, 2011. Determinants of board effectiveness: Logit model ferheen kayani. *Interdisciplinary Journal of Contemporary Research in Business* 3(2), 1970-1981.
- Manini, M. M., and U. A. Abdillahi, 2015. Corporate governance mechanisms and financial performance of commercial banks in Kenya. *IOSR Journal of Business and Management* 17(3), 25-40.
- Mishra, D., and A. Mishra, 2009. Effective communication, collaboration, and coordination in extreme Programming: Human-centric perspective in a small organization. *Human Factors and Ergonomics in Manufacturing and Service Industries* 19(5), 438-456.
- Molyneux, P., and J. Thornton, 1992. Determinants of European bank profitability: A note. *Journal of banking and Finance* 16(6), 1173-1178.
- Nyarko, F. K., K. Yusheng, and N. Zhu, 2017. Corporate governance and performance of firms: Empirical evidence from the banking sector of Ghana. *Journal of Economics and International Business Management* 5(1), 14-29.
- Okoye, L. U., F. Olokoyo, J. Okoh, F. Ezeji, and R. Uzohue, 2020. Effect of corporate governance on the financial performance of commercial banks in Nigeria. *Banks and Bank Systems*, 15(3), 55-69.
- Omotoye, O., K. Adeyemo, T. Omotoye, F. Okeme, and A. Leigh, 2021. Audit committee attributes, board attributes and market performance of listed deposit money banks in Nigeria. *Banks and Bank Systems* 16(1), 168-181.
- Pathan, S., and R. Faff, 2013. Does board structure in banks really affect their performance? *Journal of Banking and Finance* 37(5), 1573-1589.
- Rahman, M., M. R. Meah, and N. U. Chaudhory, 2019. The impact of audit

characteristics on firm performance: An empirical study from an emerging economy. *The Journal of Asian Finance, Economics and Business* 6(1), 59-69.

- Saphi, L. K., L. Bhandari, J. Tharu, K. Chaudhary, and K. K. Jha, 2023. Impact of corporate governance disclosure on firm performance of Nepalese commercial banks: The risk-taking as mediating variable. *Nepalese Journal of Finance* 10(1), 132-150.
- Shungu, P., H. Ngirande, and G. Ndlovu, 2014. Impact of corporate governance on the performance of commercial banks in Zimbabwe. *Mediterranean Journal of Social Sciences* 5(15), 93-105.
- Terjesen, S., E. B. Couto, and P. M. Francisco, 2016. Does the presence of independent and female directors' impact firm performance? A multi-country study of board diversity. *Journal of Management and Governance* 20(1), 447-483.
- Valenti, M., R. Luce, and C. Mayfield, 2011. The effects of firm performance on corporate governance. *Management Research Review* 34(3), 266-283.
- Zalata, A. M., V. Taurigana, and I. Tingbani, 2018. Audit committee financial expertise, gender, and earnings management: does gender of the financial expert matter? *International Review of Financial Analysis* 55(1), 170-183.
- Zraiq, M., and F. Fadzil, 2018. The impact of audit committee characteristics on firm performance: Evidence from Jordan. *Scholar Journal of Applied Science and Research* 1(1), 39-42.