Impact of Ownership Structure and Corporate Governance on Performance of Nepalese Commercial Banks

Bishal G.C., Bikash Thapa Magar, Brij Bihari Shah, Dikshya Pant and Dr. R. S. Pradhan*

Abstract

The study examines the effect of ownership structure and corporate governance on performance of Nepalese commercial banks. The dependent variables selected for the study are return on assets and return on equity. The selected independent variables are board size, gender diversity, audit committee size, institutional ownership, foreign ownership and government ownership. The study is based on secondary data of 12 commercial banks with 108 observations for the study period from 2014/15 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 ownership structure and corporate governance on performance of Nepalese commercial banks.

The study showed that board size has a positive effect on return on assets and return on equity. It means that larger the board size, higher would be the return on assets and return on equity. Similarly, gender diversity has a positive effect on return on assets. It means that increase in proportion female directors on board leads to increase in return on assets. The results of the study also shows that audit committee has a positive effect on return on assets and return on equity. It implies that larger the size of audit committee, higher would be the return on assets and return on equity. However, foreign ownership has a positive effect on return on assets and return on equity. It implies that higher proportion of foreign ownership leads to increase in return on assets and return on equity. Similarly, government ownership has a positive effect on return on assets and return on equity. It implies that higher proportion of government ownership leads to increase in return on assets and return on equity.

Keywords: board size, gender diversity, audit committee size, institutional ownership, foreign ownership, government ownership, return on assets, return on equity

1. Introduction

The increasing interconnectedness of global markets and the expansion of multinational corporations have heightened the importance of consistent and effective corporate governance standards across borders. The recognition of corporate governance as a global issue reflects the importance of fostering trust, stability, and sustainable growth in the corporate sector (Hale, 2008).

* Mr. GC, Mr. Magar, Mr. Shah and Ms. Pant are Freelance Researchers, Kathmandu, Nepal and Dr. Pradhan is the Professor and Academic Director, Uniglobe College (Pokhara University Affiliate), Kathmandu, Nepal.

Effective governance mechanisms promote transparency and accountability within banks by establishing clear roles and responsibilities, fostering a culture of integrity and compliance, and enhancing stakeholder confidence in the bank's operations and performance. This transparency and accountability are essential for maintaining trust and credibility in the banking sector and contributing to financial stability and sustainable growth. Corporate governance aims at promoting competition, while allowing customers the option of making a choice. This concerns deregulation as reform measures that guarantees lower rates, provide customer choice and offer reliable services so that no one is literally left in the dark. However, corporate governance arrangement and institutions vary from place to place, though the focus is always to promote corporate fairness, transparency and accountability (Kashyap and Iveroth, 2021).

Mbu-Ogar et al. (2017) asserted that corporate governance is about promoting corporate fairness, transparency and accountability. Corporate governance frameworks establish processes for identifying, assessing, and managing risks that may impact the company's performance. By implementing robust risk management practices, boards and management teams can mitigate potential threats, seize opportunities, and safeguard the organization's financial stability and reputation. Good governance promotes accountability and transparency in decision-making processes and operations. Clear reporting lines, disclosure requirements, and ethical standards foster trust among stakeholders, including investors, customers, employees, and regulators. Transparent communication about performance, financial results, and governance practices enhances credibility and ensures that stakeholders can hold the company accountable for its actions. El Khoury (2018) examined the impact of corporate governance on the profitability of six Lebanese listed banks between 2008-2012. The study found that bank's performance is positively related to board independence and number of board meeting and negatively related to separate leadership and audit committee members. A non-linear relationship exists between performance and board size, suggesting the presence of an optimal size for board members. Vicente-Ramos et al. (2020) determined the impact of the variables of good corporate governance on profitability by equity of the banks of 13 banks in Peru listed on the Lima Stock Exchange. The result showed that there is a significant direct relationship between the general meeting of shareholders and return on equity, which indicates that, the greater the integration of the General Meeting of shareholders in banking companies, the greater the profitability of equity for shareholders. The results also showed that, the greater the transparency of information, the greater the profitability of equity for shareholders.

According to Larkan and Tayan (2011), corporate governance is the collection of control mechanisms that an organization adopts to prevent or dissuade potentially self-interest managers from engaging in activities detrimental to the welfare of shareholders and other stakeholders. At a minimum, the monitoring system consists of a board of directors to oversee management and an external auditor to express an opinion on the reliability of financial statements. In most cases, however, governance systems are influenced by a much broader group of constituents, including owners of the firm, creditors, labor unions, customers, suppliers, investment analysts, the media, and regulators. For the economy as a whole, effective corporate governance systems present a very effective solution to issues of financial crime thereby promoting the achievement of an investor-friendly environment, a necessary requirement for the inflow of foreign capital. Also, since efficiency of corporate governance structures are directly linked to corporate profit performance, corporate governance has immense potential to drive capital formation through tax revenue (Okoye et al., 2016). Isik and Ince (2016) investigated the impact of board size and board composition on performance for a sample of 30 commercial banks from 2008 to 2012 in Turkey. Controlling for bank size, credit risk, liquidity risk, net interest margin and non-interest income, the results of panel fixed effects regression suggested that board size has a significantly positive effect on bank's financial performance.

Purba and Africa (2019) examined the effect of capital structure, institutional ownership, managerial ownership, and profitability on company value listed in the Indonesia Stock Exchange (IDX) for the period 2014-2017. The results indicated that the debt-to-equity ratio and institutional ownership have positive but insignificant effect on company value. Companies with large institutional ownership indicate their ability to monitor management. The greater the institutional ownership, the more efficient the utilization of company assets and it is expected to be able to act as a deterrent to the waste carried out by management. Institutional ownership can oversee all company activities by utilizing information held by institutions so that the company has good performance. It can be concluded that the higher the institutional ownership, higher the company value. This is in accordance with the agency theory that describes relationships that occur between the shareholders or institutional ownership (principals) and management (agents) in corporate decision making that can affect the value of the company. Arifin and Yaqin (2020) examined the effect of Islamic social reporting (ISR), leverage and institutional ownership on firm value and profitability. The study also assessed whether there is an effect of institutional ownership on firm value of Sharia commercial banks in Indonesia. The results showed that Islamic social reporting and institutional ownership have a positive effect on both profitability and firm value.

Westman (2011) found that institutional ownership has a positive and significant effect on firm value. High institutional ownership can provide companies with access to additional capital and resources, which can be used for investments in growth opportunities, research and development, or expansion into new markets. This access to capital can contribute to the firm's value creation potential. A significant presence of institutional investors in a company's shareholder base can signal confidence in the company's management and strategy. This confidence can enhance the company's credibility in the eyes of other investors and stakeholders, leading to increased stability and potentially higher valuations. Institutional ownership can increase firm value, by utilizing information, and can resolve agency conflicts because by increasing institutional ownership, all corporate activities will be supervised by the institution. However, Li and Ji (2021) found that institutional ownership has a negative and significant relationship with firm value. High institutional ownership might lead to increased pressure for short-term performance, potentially sacrificing long-term value creation for the sake of meeting quarterly targets or satisfying investors' demands. Additionally, large institutional investors might have different priorities or agendas that could conflict with maximizing firm value.

Aburime (2008) sought to identify significant industry-level determinants of bank profitability in the country. Using a panel data set comprising 1153 observations of 138 banks over the 1980-2007 period and industry-level indices over the same period, the regression results indicated that competition level in the Nigerian banking industry and the degree of foreign ownership of the industry have negative relationships with the profitability of banks operating in Nigeria. Le (2020) investigated the impact of multimarket contacts on bank profitability in the Vietnamese banking system from 2006 to 2015 using the system GMM. The study revealed that on average the most profitable banks are less geographically diversified, more technically efficient, and have lower credit risk. Regarding the role of bank ownership, more profitable banks are state-owned commercial banks, listed banks, and non-merged banks. Foreign-owned banks on average seem less profitable than domestic counterparts.

In the context of Nepal, Sethi et al. (2024) analyzed the impact of corporate governance on credit and liquidity risks of Nepalese commercial banks. The study showed that board size, board meetings, independent directors and bank size have negative impact on non-performing loans. Likewise, audit committee and gender diversity have positive impact on non-performing loan. The study also showed that board size, and gender diversity have positive impact on the liquidity risk of the banks. However, number of board meetings, audit committee, independent directors and bank size have negative impact on liquidity risk of Nepalese commercial banks. Nepali (2022) examined the linkages of corporate governance with the performance and risk-taking of Nepalese banks. The study revealed that a greater number of board meetings and audit committee meetings leads to better performance and lower risk.

The above discussion shows that empirical evidences vary greatly across the studies on the effect of ownership structure and corporate governance on performance of banks. 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 ownership structure and corporate governance on performance of Nepalese commercial banks. Specifically, it examines the relationship of board size, gender diversity, audit committee size, institutional ownership, foreign ownership and government ownership on return on assets and return on equity 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 12 Nepalese commercial banks from 2014/15 to 2022/23, leading to a total of 108 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	Nepal Bank Limited	2014/15 - 2022/23	9
2	NMB Bank Limited	2014/15 - 2022/23	9
3	Himalayan Bank Limited	2014/15 - 2022/23	9
4	Everest Bank Limited	2014/15 - 2022/23	9
5	Machhapuchchhre Bank Limited	2014/15 - 2022/23	9
6	Sanima Bank Limited	2014/15 - 2022/23	9
7	Siddhartha Bank Limited	2014/15 - 2022/23	9
8	Prime Commercial Bank Limited	2014/15 - 2022/23	9
9	Citizens Bank International Limited	2014/15 - 2022/23	9
10	Rastriya Banijya Bank Limited	2014/15 - 2022/23	9
11	Standard Chartered Bank Nepal Limited	2014/15 - 2022/23	9
12	Nepal SBI Bank Limited	2014/15 - 2022/23	9
Total number of observations			**108**

Thus, the study is based on 108 observations.

The model

The model used in this study assumes that bank performance depends upon ownership structure and corporate governance. The dependent variables selected for the study are return on assets and return on equity. Similarly, the selected independent variables are board size, gender diversity, audit committee size, institutional ownership, foreign ownership and government ownership. Therefore, the models take the following forms:

$$ROA = \beta_0 + \beta_1 BS_{it} + \beta_2 GD_{it} + \beta_3 IO_{it} + \beta_4 ACS_{it} + \beta_5 FO_{it} + \beta_6 GO_{it} + e_{it}$$

$$ROE = \beta_0 + \beta_1 BS_{it} + \beta_2 GD_{it} + \beta_3 IO_{it} + \beta_4 ACS_{it} + \beta_5 FO_{it} + \beta_6 GO_{it} + e_{it}$$

Where,

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

ROE = Return on equity as measured by the ratio of net income to total shareholders’ equity, in percentage.

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.

IO = Institutional ownership as measured by the percentage of shares owned by the different institution, in percentage.

FO= Foreign ownership is a dummy variable which is measured as '0' if there is no foreign ownership and '1' as if there is foreign ownership.

GO= Government ownership is a dummy variable which is measured as '0' if there is no government ownership and '1' as if there is government ownership.

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

Board size

Liang et al. (2013) investigated the effects of board characteristics such as size, composition and functioning of the board of directors on financial performance of banks and asset quality, using a sample of 50 Chinese commercial banks over the period 2003-2010. The findings suggested that board size has a significant and negative effect on bank performance measured by ROA and ROE. Using a sample of 58 large European banks over the period 2002-2004, Staikouras et al. (2007) uncover a negative relation between the size of board of directors and profitability. Agoraki (2010) analysed the relationship between board structure, in terms of board size and composition, and bank performance in terms of both cost and profit efficiency of large European banks operating during the period 2002-2008. The study documented a negative correlation between board size and cost and profit efficiency. Based on it, this study develops the following hypothesis:

H_1: There is a negative relationship between board size and bank profitability.

Gender diversity

According to Ali et al. (2021), a company with at least one female director on the board helps in presenting a more positive picture means that there is improvement in monitoring process, enhanced creativity and diversified ideas. Haniffa and Hudaib (2006) revealed that females on top positions in management bends toward taking more risks which leads to better financial performance. The presence and proportion of female director positively influences the financial performance but the board size has neutral effect. However, supervisory and lawmaking efforts should be made in order to achieve reasonable gender stability on board (Oba and Fodio, 2013). Based on it, this study develops the following hypothesis:

H_2: There is a positive relationship between gender diversity and bank profitability.

Institutional ownership

Yuwono and Aurelia (2021) examined the effect of profitability, leverage, institutional ownership, managerial ownership, and dividend policy on firm value controlled by firm size of 170 manufacturing companies listed on the Indonesian Stock Exchange from 2014 to 2018. The results of the study indicate that profitability, institutional ownership, managerial ownership and dividend policy are significantly positive with firm value, leverage is negatively related to firm value. As a control variable, firm size has a significant positive effect on firm value. A company increases institutional ownership, which is expected to put pressure on the company to continue to implement better corporate governance as desired by institutional investors. Therefore, with good company performance, the company can increase its company value (Purba and Africa, 2019). Institutional investors who own the majority of shares in the company have an obligation to build the company's reputation for minority shares. When institutional investors are unable to monitor properly, companies are unable to demonstrate an increase in their assessment. That way the institution that is a shareholder can detect errors that occurred at the time of the incident (Setiyawati et al., 2018). Based on it, this study develops the following hypothesis:

H_3: There is a positive relationship between institutional ownership and bank profitability.

Audit committee size

Anasweh (2021) examined the relationship between audit committee characteristics and bank's financial, operational and market performance of banks listed on the Gulf Cooperation Council Stock Exchange during the period from 2015 to 2019. The study showed that the size of audit committee and the AC member's independency in Islamic banks has positive significant impact on ROA and ROE. Salehi et al. (2018) evaluated the relationship between the characteristics of the audit committee and the board and profitability among the companies listed on the Tehran Stock Exchange (TSE) in Iran. The results showed that there is a positive and significant relationship between audit committee financial expertise and profitability. Hasan et al. (2019) investigated the relationship between corporate governance (CG) elements, namely board characteristics (board size, independence, expertise) and audit committee characteristics (audit committee size, independence, expertise) with profitability, present by two proxy ROA and ROE. The empirical result of the study showed that board size, board expertise and audit committee size have significant positive relationship with both proxy of profitability i.e., ROA and ROE. Based on it, this study develops the following hypothesis:

H_4: There is a positive relationship between audit committee size and bank profitability.

Foreign ownership

Ambarwati (2021) examined whether foreign institutional ownership, foreign directors and foreign commissioners have an effect on profitability of banking companies listed on the Indonesia Stock Exchange in 2014-2018. The results of this study showed that foreign institutional ownership has an effect on profitability. Acquisitions by foreign parties are considered to be able to improve the performance of local banks. Foreign-owned banks are associated with increased profits. Pawlowska (2016) examined the impact of banking-sector structure and macroeconomic changes on bank profitability in the Polish banking sector over the past fifteen years (i.e., prior to and during the global financial crisis of 2008). The study found that increased foreign ownership and intermediation have a positive effect on bank profitability. Chen and Liao (2011) empirically investigated the joint home- and host-country effects of banking market structure, macroeconomic condition, governance, and changes in bank supervision on foreign bank margins. The study found that foreign banks are more profitable than domestic banks when they operate in a host country whose banking sector is less competitive and when the parent bank in the home country is highly profitable. Moreover, when foreign banks operate in a host country with lower growth rates of GDP, higher interest and inflation rates, and more stringent regulatory compliance with Basel risk weights, their margins increase. Specifically, changes in bank supervision of a parent bank's ownership restrictiveness in the home country significantly increases foreign bank margins, while supervisory changes in regulatory compliance with Basel risk weights in the host country enhances foreign bank margins. Based on it, this study develops the following hypothesis:

H_5: There is a positive relationship between foreign ownership and bank profitability.

Government ownership

Rosalina and Nugraha (2019) examined the effects of ownership structure on the profitability of banks in Indonesia. The results showed that private domestic and foreign ownership have statistically significant positive effects on bank profitability, while government ownership has a statistically significant negative effect on bank profitability. Anvarova and Isakov (2022) investigated their influence on the profitability of 32 commercial banks of Uzbekistan. The regression results showed that government ownership and operating costs have negative and statistically significant relationship with the profitability of commercial banks in Uzbekistan. Fernandez et al. (2006) found that a large proportion of government ownership is associated with less developed financial performance. State-owned banks are less likely to take risks because politicians control banks, have incentives to maintain bank solvency, and use the opportunity to use state-owned banks as a policy tool. Based on it, this study develops the following hypothesis:

H_6: There is a positive relationship between government ownership and bank profitability.

3. Results and discussion

Descriptive statistics

Table 2 presents the descriptive statistics of selected dependent and independent variables during the period 2014/15 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 from 2014/15 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 ROE (Return on equity as measured by the ratio of net income to total shareholders' equity, 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), IO (Institutional ownership as measured by the percentage of shares owned by the different institution, in percentage), FO (Foreign ownership is a dummy variable which is measured as '0' if there is no foreign ownership and '1' as if there is foreign ownership) and GO (Government ownership is a dummy variable which is measured as '0' if there is no government ownership and '1' as if there is government ownership).

Variables	Minimum	Maximum	Mean	Std. Deviation
ROA	0.47	3.22	1.56	0.48
ROE	3.78	69.56	15.14	6.95
BS	5.00	11.00	7.10	1.31
GD	0.00	2.00	0.58	0.58
ACS	2.00	8.00	3.29	0.94
IO	0.00	65.00	11.03	17.28
FO	0.00	6.00	0.52	0.90
GO	0.00	1.00	0.16	0.37

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 12 Nepalese commercial banks for the study period of 2014/15 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 ROE (Return on equity as measured by the ratio of net income to total shareholders' equity, 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), IO (Institutional ownership as measured by the percentage of shares owned by the different institution, in percentage), FO (Foreign ownership is a dummy variable which is measured as '0' if there is no foreign ownership and '1' as if there is foreign ownership) and GO (Government ownership is a dummy variable which is measured as '0' if there is no government ownership and '1' as if there is government ownership).

Variables	ROA	ROE	BS	GD	ACS	IO	FO	GO
ROA	1							
ROE	0.601**	1						
BS	0.034	0.189	1					
GD	0.210	-0.290**	-0.031	1				
ACS	0.174	0.014	0.126	-0.086	1			
IO	-0.026*	0.043	0.068	0.072	-0.078	1		
FO	0.179	0.074	0.035	-0.039	0.221*	-0.036	1	
GO	0.091	0.102	0.151	0.447**	-0.101	0.231*	-0.107	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 positive correlation with return on assets. It means that increase in proportion female directors on board leads to increase 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, institutional ownership has a negative correlation with return on assets which indicates that higher proportion of institutional ownership leads to decrease in return on assets. However, foreign ownership has a positive correlation with return on assets. It implies that higher proportion of foreign ownership leads to increase in return on assets. Similarly, government ownership has a positive correlation with return on assets. It implies that higher proportion of government ownership leads to increase in return on assets.

On the other hand, board size has a positive correlation with return on equity. It means that higher the number of directors on the board, higher would be the return on equity. Similarly, gender diversity has a negative correlation with return on equity. It means that increase in proportion female directors on board leads to decrease in return on equity. The results of the study also shows that audit committee has a positive correlation with return on equity. It implies that larger the size of audit committee, higher would be the return on equity. Likewise, institutional ownership has a positive correlation with return on equity which indicates that higher proportion of institutional ownership leads to increase in return on equity. However, foreign ownership has a positive correlation with return on equity. It implies that higher proportion of foreign ownership leads to increase in return on equity. Similarly, government ownership has a positive correlation with return on equity. It implies that higher proportion of government ownership leads to increase in return on equity.

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, audit committee size, institutional ownership, foreign ownership and government ownership on return on assets of Nepalese commercial banks.

Table 4

Estimated regression results of board size, gender diversity, audit committee size, institutional ownership, foreign ownership and government ownership on return on assets

The results are based on panel data of 12 commercial banks with 108 observations for the period of 2014/15-2022/23 by using the linear regression model and the model is ROA = $\beta_0 + \beta_1 BS_{it} + \beta_2 GD_{it} + \beta_3 IO_{it} + \beta_4 ACS_{it} + \beta_5 FO_{it} + \beta_6 GO_{it} + e_{it}$ 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), IO (Institutional ownership as measured by the percentage of shares owned by the different institution, in percentage), FO (Foreign ownership is a dummy variable which is measured as '0' if there is no foreign ownership and '1' as if there is foreign ownership) and GO (Government ownership is a dummy variable which is measured as '0' if there is no government ownership and '1' as if there is government ownership).

Model	Intercept	Regression coefficients of						Adj. R_bar^2	SEE	F-value
		BS	GD	ACS	IO	FO	GO			
1	1.146 (1.823)	0.004 (0.081)						0.009	1.229	0.006
2	1.308 (8.179)		0.162 (1.916)					0.024	1.214	3.670
3	1.485 (0.622)			0.04 (0.163)				0.009	1.229	0.027
4	0.654 (2.677)				-0.025 (2.053)			0.029	1.206	4.214
5	5.382 (2.358)					0.493 (1.88)		0.023	1.210	3.535
6	2.153 (3.105)						0.245 (1.546)	0.013	1.216	2.389
7	1.389 (2.169)	0.006 (0.13)	0.162 (1.91)					0.015	1.220	1.827
8	1.586 (0.664)	0.005 (0.111)	0.162 (1.897)	0.021 (0.086)				0.006	1.226	1.209
9	0.274 (0.114)	0.017 (0.385)	0.178 (2.121)	0.082 (0.328)	-0.002 (2.242)			0.043	1.203	2.198
10	2.731 (1.083)	0.021 (0.48)	0.184 (2.251)	0.627 (1.974)	-0.031 (2.539)	0.890 (2.659)		0.096	1.169	3.278
11	1.505 (3.672)	0.024 (0.568)	0.290 (3.086)	0.091 (1.665)	-0.004 (1.250)	0.166 (2.259)	0.174 (1.300)	0.098	0.461	2.651

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 asset 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 Agoraki (2010). Similarly, the beta coefficients for gender diversity are positive with return on assets. It indicates that gender diversity has a positive impact on return on assets. This finding is similar to the findings of Haniffa and Hudaib (2006). 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 contradicts with the findings of Anasweh (2021). In addition, the beta coefficients for institutional ownership are negative with return on assets. It indicates that institutional ownership has a negative impact on return on assets. This finding is consistent with the findings of Yuwono and Aurelia (2021). Further, the beta coefficients for foreign ownership are positive with return on assets. It indicates that foreign ownership has a positive impact on return on assets. This finding is similar to the findings of Pawlowska (2016). Moreover, the beta coefficients for government ownership are positive with return on assets. It indicates that government ownership has a positive impact on return on assets. This finding is similar to the findings of Fernandez et al. (2006).

Table 5 shows the regression results of board size, gender diversity, audit committee size, institutional ownership, foreign ownership and government ownership on return on equity of Nepalese commercial banks.

Table 5

Estimated regression results of board size, gender diversity, audit committee size, institutional ownership, foreign ownership and government ownership on return on equity

The results are based on panel data of 12 commercial banks with 108 observations for the period of 2014/15-2022/23 by using the linear regression model and the model is ROE = $\beta_0 + \beta_1 BS_{it} + \beta_2 GD_{it} + \beta_3 IO_{it} + \beta_4 ACS_{it} + \beta_5 FO_{it} + \beta_6 GO_{it} + e_{it}$ where, the dependent variable is ROE (Return on equity as measured by the ratio of net income to total shareholders' equity, 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), IO (Institutional ownership as measured by the percentage of shares owned by the different institution, in percentage), FO (Foreign ownership is a dummy variable which is measured as '0' if there is no foreign ownership and '1' as if there is foreign ownership) and GO (Government ownership is a dummy variable which is measured as '0' if there is no government ownership and '1' as if there is government ownership).

Model	Intercept	Regression coefficients of						Adj. R_bar^2	SEE	F-value
		BS	GD	ACS	IO	FO	GO			
1	0.755 (14.521)	0.008 (2.034)						0.028	0.101	4.137
2	0.684 (52.786)		-0.025 (3.616)					0.101	0.098	13.073
3	0.592 (2.946)			0.006 (0.293)				0.008	0.103	0.086
4	0.641 (30.93)2				0.001 (0.555)			0.006	0.103	0.308
5	0.343 (1.778)					0.036 (1.605)		0.014	0.102	2.574
6	0.89 (16.38)						0.055 (4.455)	0.147	0.095	19.851
7	0.795 (15.698)	0.008 (2.263)	-0.025 (3.773)					0.134	0.096	9.348
8	0.637 (3.391)	0.009 (2.383)	-0.025 (3.799)	0.017 (0.871)				0.132	0.096	6.470
9	0.579 (2.993)	0.009 (2.522)	-0.026 (3.891)	0.022 (1.089)	0.001 (1.207)			0.136	0.095	5.233
10	0.446 (2.167)	0.009 (2.506)	-0.026 (3.866)	-0.007 (0.272)	0.001 (1.008)	0.048 (1.763)		0.153	0.096	4.893
11	0.69 (3.167)	0.504 (2.037)	-0.279 (2.054)	0.889 (1.123)	0.021 (0.475)	0.472 (0.443)	0.956 (0.492)	0.081	6.684	2.340

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 equity is the dependent variable.

Table 5 shows that the beta coefficients for board size are positive with return on equity. It indicates that board size has a positive impact on return on equity. This finding is similar to the findings of Staikouras et al. (2007). Similarly, the beta coefficients for gender diversity are negative with return on equity. It indicates that gender diversity has a negative impact on return on equity. This finding is similar to the findings of Oba and Fodio (2013). Likewise, the beta coefficients for audit committee size are positive with return on equity. It indicates that audit committee size has a positive impact on return on equity. This finding contradicts with the findings of Salehi et al. (2018). In addition, the beta coefficients for institutional ownership are positive with return on equity. It indicates that institutional ownership has a positive impact on return on equity. This finding is consistent with the findings of Purba and Africa (2019). Further, the beta coefficients for foreign ownership are positive with return on equity. It indicates that foreign ownership has a positive impact on return on equity. This finding is similar to the findings of Chen and Liao (2011). Moreover, the beta coefficients for government ownership are positive with return on equity. It indicates that government ownership has a positive impact on return on equity. This finding is similar to the findings of Anvarova and Isakov (2022).

4. Summary and conclusion

Effective governance mechanisms are integral to the success and stability of banks. By promoting transparency and accountability, banks can build and maintain trust with their stakeholders, which is essential for their credibility and long-term success in the banking sector. By implementing robust governance frameworks, banks can better manage risks and make informed strategic decisions, contributing to the overall stability of the financial system. Good governance practices help banks to be resilient in the face of economic challenges, thus supporting long-term sustainable growth. Moreover, these practices ensure that banks are better positioned to comply with regulatory requirements and adapt to changes in the regulatory landscape.

This study attempts to analyse the effect of ownership structure and corporate governance on performance of Nepalese commercial banks. The study is based on secondary data of 12 commercial banks with 108 observations for the period from 2014/15 to 2022/23.

The major conclusion of this study is that board size, audit committee size, institutional ownership, foreign ownership and government ownership have positive effect on return on equity of Nepalese commercial banks. However, gender diversity has a negative effect on return on equity. Moreover, board size, audit committee size, gender diversity, foreign ownership and government ownership have positive effect on return on equity of Nepalese commercial banks. However, institutional ownership has a negative effect on return on equity. Similarly, the study also concluded that increased diversity can lead to initial integration challenges or conflicts within teams, which might temporarily affect productivity and performance in the context of Nepalese commercial banks.

References

Aburime, T., 2008. Determinants of bank profitability: Industry-level evidence from Nigeria. *International Journal of Nigerian Studies and Development* 14(1), 21-34.

Agoraki, M. E. K., M. D. Delis, and P. K. Staikouras, 2010. The effect of board size and composition on bank efficiency. *International Journal of Banking, Accounting and Finance* 2(4), 357-386.

Ali, F., M. Wang, K. Jebran, and S. T. Ali, 2021. Board diversity and firm efficiency: evidence from China. *Corporate Governance: The International Journal of Business in Society* 21(4), 587-607.

Ambarwati, Y. B., 2021. The effect of foreign institutional ownership, foreign directors and foreign commissioners on profitability. *The Indonesian Accounting Review* 11(2), 115-126.

Anasweh, M., 2021. The relationship between audit committee characteristics and banks performance. *Turkish Journal of Computer and Mathematics Education* 12(6), 2962-2983.

Anvarova, M., and O. Isakov, 2022. Impact of government ownership on banks' profitability: Empirical evidence from commercial banks in Uzbekistan. *Journal of Economics and Financial Analysis* 6(1), 37-53.

Arifin, S., and A. Yaqin, 2020. The effect of Islamic social reporting (ISR), leverage and institutional ownership on firm value and profitability. *Jurnal Akuntansi Dan Audit Syariah* 1(1), 62-76.

Chen, S. H., and C. C. Liao, 201). Are foreign banks more profitable than domestic banks? Home-and host-country effects of banking market structure, governance, and supervision. *Journal of Banking and Finance* 35(4), 819-839.

El Khoury, R., 2018. Corporate governance does affect bank profitability: Evidence from Lebanon. *International Journal of Business and Management Science 8*(1), 83-91.

Fernandez, A. I., A. R. Fonseca, and F. González, 2006. *International Finance and Monetary Policy* (Nova Science, New York).

Hale, T. N., 2008. Transparency, accountability, and global governance. *Global Governance: A Review of Multilateralism and International Organizations* 14(1), 73-94.

Haniffa, R., and M. Hudaib, 2006. Corporate governance structure and performance of Malaysian listed companies. *Journal of Business Finance and Accounting* 33(7-8), 1034-1062.

Hasan, M. T., M. S. Molla, and F. Khan, 2019. Effect of board and audit committee characteristics on profitability: Evidence from pharmaceutical and chemical industries in Bangladesh. *Finance and Economics Review* 1(1), 64-76.

Isik, O., and A. R. Ince, 2016. Board size, board composition and performance: An investigation on Turkish banks. *International Business Research* 9(2), 74-84.

Kashyap, S., and E. Iveroth, 2021. Transparency and accountability influence of regulation on risk control: the case of a Swedish bank. *Journal of Management and Governance* 25(2), 475-508.

Larkan, D, and B. Tayan, 2011. *Corporate Governance Matters: A Closer Look at Organizational Choices and Their Consequences* (FT Press, New Jersey).

Le, T. D., 2020. Multimarket contacts and bank profitability: Do diversification and bank ownership matter? *Cogent Economics and Finance* 8(1), 184-199.

Li, T., and Y. Ji, 2021. Institutional ownership and insider trading profitability: Evidence from an emerging market. *Pacific-Basin Finance Journal* 70(1), 101-116.

Liang, Q., P. Xu, and P. Jiraporn, 2013. Board characteristics and Chinese bank performance. *Journal of Banking and Finance* 37(8), 2953-2968.

Mbu-Ogar, G. B., S. A. Effiong, and J. O. Abang, 2017. Corporate governance and organizational performance: evidence from the Nigerian manufacturing industry. *IOSR Journal of Business and Management* 19(6), 46-51.

Nepali, S. R., 2022. Does Corporate governance matter for bank performance and risk-taking? Insights from the Nepalese Banking Industry. *Finance and Economics Review* 4(2), 47-60.

Oba, V. C., and M. I. Fodio, 2013. Boards' gender mix as a predictor of financial performance in Nigeria: an empirical study. *International Journal of Economics and Finance* 5(2), 170-178.

Okoye, L. U., G. O. Evbuomwan, U. Achugamonu, and I. Araghan, 2016. Impact of corporate governance on the profitability of the Nigerian banking sector. *Science and Technology 7*(1), 281-292.

Pawlowska, M., 2016. The impact of market structure and the business cycle on bank profitability: the role of foreign ownership. The case of Poland. *National Bank of Poland Working Paper No.* 229.

Purba, J. T., and L. A. Africa, 2019. The effect of capital structure, institutional ownership, managerial ownership, and profitability on company value in manufacturing companies. *The Indonesian Accounting Review* 9(1), 27-38.

Rosalina, D. A., and N. Nugraha, 2019. The effects of ownership structure on bank profitability. *Advances in Economics, Business and Management Research* 5(1), 42-46.

Salehi, M., M. Tahervafaei, and H. Tarighi, 2018. The effect of characteristics of audit committee and board on corporate profitability in Iran. *Journal of Economic and Administrative Sciences* 34(1), 71-88.

Sethi, P., P. Chand, R. J. Yadav, and S. Bhandari, 2024. Impact of corporate governance on credit and liquidity risks of Nepalese commercial banks. *Nepalese Journal of Economics* 8(3), 38-55.

Setiyawati, L., S. Wahyudi, and W. Mawardi, 2018. the influence of dividend policy, debt policy, independent commissioner, and institutional ownership on the firm value with growth opportunities as moderator variables. *Jurnal Bisnis Strategi* 26(2), 146-162.

Staikouras, P. K., C. K. Staikouras, and M. E. K. Agoraki, 2007. The effect of board size and composition on European bank performance. *European Journal of Law and Economics* 23(1), 1-27.

Vicente-Ramos, W., K. Reymundo, L. Pari, N. Rudas, and P. Rodriguez, 2020. The effect of good corporate governance on banking profitability. *Management Science Letters* 10(9), 2045-2052.

Westman, H., 2011. The impact of management and board ownership on profitability in banks with different strategies. *Journal of Banking and Finance* 35(12), 3300-3318.

Yuwono, W., and D. Aurelia, 2021. The effect of profitability, leverage, institutional ownership, managerial ownership, and dividend policy on firm value. *Journal of Global Business and Management Review* 3(1), 15-29.