Corporate Governance and Capital Structure Dynamics: A Case of Nepalese Commercial Banks

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Abstract

The study examines the effect of corporate governance on capital structure dynamics of Nepalese commercial banks. Total debt to equity ratio and total debt to asset ratio are selected as the dependent variables. The selected independent variables are board size, independent director, board meeting, female director, audit committee and institutional ownership. The study is based on secondary data of 10 commercial banks with 100 observations for the period from 2012/13 to 2021/22. 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 corporate governance on the capital structure dynamics of Nepalese commercial banks.

The study showed that institutional ownership has a positive impact on total debt to equity ratio and total debt to asset ratio. It shows that increase in institutional ownership leads to increase in total debt to equity ratio and total debt to asset ratio. Similarly, female director has a negative impact on total debt to equity ratio and total debt to asset ratio. It implies that increase in female board directors in the board leads to decrease in total debt to equity ratio and total debt to asset ratio. Moreover, board meetings have positive impact on total debt to equity ratio and total debt to asset ratio. It shows that increase in number of board meetings leads to decrease in total debt to equity ratio and total debt to asset ratio. Similarly, board size has a negative impact on total debt to equity ratio and total debt to asset ratio. It means increase in board size leads to decrease in total debt to equity ratio and total debt to asset ratio. Likewise, audit committee has a positive impact on total debt to equity ratio and total debt to asset ratio. It means that increase in audit committee size leads to increase in total debt to equity ratio and total debt to asset ratio. Furthermore, independent director has a positive impact on total debt to equity ratio and total debt to asset ratio. It means that increase in independent directors leads to increase in total debt to equity ratio and total debt to asset ratio.

Keywords: board size, independent director, audit committee, institutional ownership, female director, and board meetings, total debt to equity ratio, total debt to assets ratio

1. Introduction

Corporate governance one of the main issues have been raised recently in the corporate world. The corporate governance is a structure which

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monitors and controls the behavior of corporate executives in different areas such as financial one which can be applied by the board of directors (large owners), and institutional investors. Corporate governance issue can have an effect on the various aspects of firm's management including the performance management, earnings management and capital structure. Morin and Jarrell (2001) argued that corporate governance mechanism is a framework that controls and safeguards the interest of the relevant players in the market which include managers, employees, customers, shareholders, executive management, suppliers, and the board of directors. Effective financial management decisions in the field of horizontal and vertical structure of capital, insurance of short-term and long-term capital, maintaining liquidity and solvency are viewed as a key function in the creation of competitive advantages (Mulili and Wong, 2011). In this way, capital structure decision is also the vital one since the profitability of an enterprise is directly affected by such decision. The successful selection and use of capital is one of the key elements of the firms' financial strategy. The management of capital structure, which reflects the financial leverage of companies and the way by which the capital of company is applied by the managers, is one of the important issues, since the inclusion of debt in the capital structure may affect the performance and the market value of the firm. Optimal capital structure and sound corporate governance and an optimal are very important for each firm to improve the firm's market value. The corporate governance system allocates the proper distribution of corporate responsibilities to principles that regulate the traits of management and decisions in a firm. Therefore, corporate governance variables, such as board size, board composition, managerial ownership, and duality, might have a direct influence on setting the leverage structure in a firm. The separation of ownership and control in a firm may result in managers' overexerting a lacking workforce, indulging in prerequisites, choosing inputs and outputs that suit their own preferences or otherwise failing to maximize the firm's value. Fair and free corporate governance practices may have a significant influence on a strategic decision such as external financing or capital structure decision. In the absence of the strong role of corporate governance, agency problems (conflicts of interest within the firm) arise between shareholders and managers. This leads to a weak legal and regulatory system, inconsistent accounting, and auditing standards and poor management practices (Uddin et al., 2019).

Achchuthan et al. (2013) examined the relationship between board size and leverage structure from the 28 manufacturing companies of the Colombo Stock Exchange. The result revealed that there is no relationship between

board size and a leverage ratio. The study also postulated that if the board size is bigger, they can provide more pressure to the managers to keep the limited leverage. Similarly, Uwuigbe (2014) examined the relationship between corporate governance attributes and capital structure decision in the listed firms in Nigeria Stock Exchange. The study revealed that there is an inverse connection between board composition and capital structure. According to Mokarami et al. (2012), given the different and inconsistent corporate governance structures in different countries which results from varying social, economic and legal conditions within them, the links between corporate governance and financing decision making are different in financial markets of developed and developing countries. Berger et al. (1997) examined the relationship between managerial entrenchment and firms' capital structures. Results indicate that entrenched CEOs make efforts to remain away from debt and gearing ratios remain lower in the absence of demand from owners. Sotu (2003) studied the relationship between capital structure and corporate governance in Malaysia before and after 1997 crisis by using representation costs approach. The study concluded that a diffuse ownership corporation leads to a weakened corporate governance system and a higher financial leverage of the firm. The study considers the ownership centralization as a factor to reduce interest conflicts between directors and owners. A higher quality of corporate governance system leads to lower representation costs of internal financing. Thus, increasing the quality of governance system, external financing is decreased. As a result, there is a negative relationship between corporate governance system's quality and the firm's financial leverage. Antoniou et al. (2008) also investigated how firms operating in capital market-oriented economies (the U.K. and the U.S.) and bank-oriented economies (France, Germany, and Japan) determine their capital structure. The study found that capital structure of a firm is heavily influenced by the corporate governance practices and exposure to capital markets.

Yaseen and Al-Amarneh (2015) examined the relationship between corporate governance and the use of debt financing. The study shown that funds and institutional holdings has a negative and significant impact on leverage, suggesting that financial leverage degree decreased with the increased monitoring power of funds and institutional stockholdings. On the other hand, the holdings of large owners have a positive and significant relationship with leverage. Uddin et al. (2019) examined the regulation of corporate governance on leverage structure decision-making in Bangladesh from 2003 to 2017. The study used appropriate panel methods are employed to control the problems of serial correlation, heteroskedasticity, and the cross-

sectional nature of manufacturing companies. The study found that corporate governance attributes such as board size, managerial ownership, and duality are the dominant factors for leverage decision-making. The results also indicates that control variables such as firm size and profitability have an influential role on leverage decision-making in Bangladesh. Abor (2007) examined the relationship between corporate governance and capital structure decision of Ghanaian listed firm with the help of multiple regression analysis. The result found that the board size is positively related to capital structure decision because larger board size is inspired to adopt high debt policy. Diversified board size combines the diversity in the knowledge that contributes to the positive role in capital structure decision. Hart (1995) revealed that board size is negatively associated with capital structure decision.

Chen and Chen (2012) argued that managerial ownership makes the force of work and professionalism in management that enhances the shareholders' interest and reduce the agency problem. Adegbile (2015) investigated the effect of corporate governance on the leverage structure of Nigerian food and beverages industry for the period of 2003–2012. The study revealed that managerial ownership has an inverse relationship with the leverage ratio. Joher et al. (2006) also provided evidence of an inverse association between managerial ownership and leverage structure decision-making with the help of data from 100 Malaysian composite index companies. By employing a two-stage least square method and a data set between 1998 and 2003, Nyonna (2012) estimated the significant but negative correlation between managerial ownership and capital structure. The study explained that both managerial ownership and capital structure are substituted with each other, and that could reduce the agency cost. Bokpin and Arko (2009) used regression analysis towards a panel data set of Ghanaian firms from the period 2002–2007 to find out the relationship between ownership and capital structure. The results established a positive significant correlation between board independence and leverage ratio. The study explained that if the board members are independent, they can choose the efficient leverage structure for the company. Abor (2007) reported the evidence that CEO duality is positively related to capital structure decision. The study stated that when the CEO is also a member of the board play a vital role to take an efficient decision. At that time, the CEO thinks that he/she is not only an employee of the company but also a partner of it. The level of sincerity would become higher and efficient. Uwuigbe (2014) also indicated the positive relationship between CEO duality and leverage ratio. Moreover, Velnampy and Niresh (2012) examined the relationship between profitability and leverage of Sri

Lankan Bank over the period of 2002–2009. The results evidence that there is an adverse relationship between profitability and capital structure because most of their assets are covered by the debt. Furthermore, Erickson and Wang (2005) found that board independence included on board does not have any positive relationship on capital structure decision. The study further argued that firms which poorly operate their performance requirements to increase the independent directors in subsequent periods.

In the context of Nepal, Ojha *et al*. (2016) revealed that board composition, leverage, institutional ownership and public ownership have positive impact on the bank performance in Nepal. However, board size, firm size and audit committee size have negative impact on the bank performance. Sharma *et al*. (2014) examined the role of corporate governance on bank performance of Nepalese banks. The study revealed that CEO duality, firm size, board size, debt equity ratio and firm age have positive relation with return on assets. Poudel and Hovey (2012) revealed that positive relationship of audit committee size with bank efficiency. The study also stated that survival and stability of financial sectors depends on the quality of its governance system. Effective corporate governance in banking industry helps to foster financial stability, strengthen risk management and ultimately contribute to a strong financial system.

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

The main purpose of the study is to analyze the effect of corporate governance on capital structure dynamics of Nepalese commercial banks. Specifically, it examines the relationship of board size, independent director, board meeting, female director, audit committee and institutional ownership with capital structure dynamics 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 sections draws the conclusion.

2. Methodological aspects

The study is based on the secondary data which were gathered from 10

Nepalese commercial banks for the study period from 2012/13 to 2021/22, leading to a total of 100 observations. The study has employed purposive sampling method. The main sources of data include Banking and Financial Statistics published by Nepal Rastra Bank, reports published by Ministry of Finance and the annual report of respective 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	Citizens Bank International Limited	2012-13-2021/22	10
2	Agricultural Development Bank Limited	2012-13-2021/22	10
3	Everest Bank Limited	2012-13-2021/22	10
4	Siddartha Bank Limited	2012-13-2021/22	10
5	NIC Asia Bank Limited	2012-13-2021/22	10
6	Nepal SBI Bank Limited	2012-13-2021/22	10
7	Prime Commercial Bank Limited	2012-13-2021/22	10
8	Sanima Bank Limited	2012-13-2021/22	10
9	NMB Bank Limited	2012-13-2021/22	10
10	Machhapuchchhre Bank Limited	2012-13-2021/22	10
Total number of observations			**100**

Thus, the study is based on 100 observations.

The model

The model used in the study assume that capital structure dynamics depends upon the corporate governance of Nepalese commercial banks. The dependent variables selected for the study are total debt to equity ratio and total debt to asset ratio. Similarly, the selected independent variables are board size, independent director, board meeting, female director, audit committee and institutional ownership. Therefore, the model takes the following forms:

$$DTE = \beta_0 + \beta_1 BS + \beta_2 ID + \beta_3 FD + \beta_4 AC + \beta_5 BM + \beta_6 IO + e_{it}$$

$$DTA = \beta_0 + \beta_1 BS + \beta_2 ID + \beta_3 FD + \beta_4 AC + \beta_5 BM + \beta_6 IO + e_{it}$$

Where,

DTE= Total debt to equity ratio as measured by the ratio of total debt to total equity, in percentage.

DTA= Total debt to asset ratio as measured by the ratio of total debt to total assets, in percentage.

BS= Board size as measured by the number of directors on the board, in numbers.

ID= Independent director as measured by the number of independent directors on the board, in numbers.

FD = Female director as measured by the number of female directors in the board, in numbers.

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

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

IO= Institutional ownership as measured by the proportion of ownership held by institutions, in percentage.

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

Board size

Ganiyu and Abiodun (2012) in Nigeria found a positive association, suggesting that larger boards tend to facilitate effective monitoring through diverse directorial bodies, thereby encouraging higher debt levels to enhance firm value. However, they also noted that larger boards might lead to conflicts hampering consensus in decision-making, potentially weakening corporate governance and increasing leverage. Heng et al. (2012), in Malaysia, found an inverse relationship between total board members and the debt-to-asset ratio. Thakolwiroj and Sithipolvanichgul (2021) also observed a negative correlation between total board members and the debt-to-asset ratio in the context of Thai listed companies. The result also indicates that managerial

pressures on lower debt levels could be adopted to improve firm performance. Based on it, this study develops the following hypothesis:

H_1: There is a negative relationship between board size and debt ratio.

Independent director

When the number of external directors increases, the firm tends to have a lower level of debt which means there is a negative correlation between the presence of external directors on the board and debt. It implies that managers tend to be monitored by independent directors, which encourages the managers to pursue a low level of debt to achieve better performance throughout minimizing firm riskiness (Wen et al., 2002). Li et al. (2008) assessed the ownership, independent directors, agency costs and financial distress in Chinese listed companies. The study found negative relationship between independent directors, agency costs and debt ratio. Byrd and Mizruchi (2005) found that there is a higher proportion of independent directors tend to have lower debt ratios. This is because independent directors are more likely to monitor management and discourage them from taking on excessive debt. Independent directors are also more likely to push for conservative financial policies that reduce the risk of bankruptcy. Based on it, the study develops following hypothesis:

H_2: There is a negative relationship between independent director and debt ratio.

Audit committee

Dinu and Nedelcu (2015) found that a stronger audit committee is associated with a higher debt ratio. More effective audit committees are more likely to support management's use of debt as a financing strategy. This is because debt can be a tax-efficient way to finance a company, and it can also signal to investors that management is confident in the company's future prospects (Kristanti and Mulya, 2021). A stronger audit committee is more likely to be associated with better corporate governance practices, which can lead to increased access to capital. A stronger audit committee may be more likely to implement policies that make it easier for the firm to raise equity financing (Kallamu and Saat, 2015). Based on it, the study develops following hypothesis:

H_3: There is a positive relationship between audit committee and debt ratio.

Board meetings

Bin-Sariman et al. (2016) assessed board of directors' quality and firms' debt financing and the moderating effect of insider ownership in Omani firms. The results showed that number of board of directors' meetings have positive effect on the leverage ratio. Thakolwiroj and Sithipolvanichgul (2021) found a positive association between board meetings and debt to equity ratio in the context of Thai listed companies. Moreover, Amrah et al. (2015) examined the moderating effect of family control on the relationship between board of directors' effectiveness and cost of debt in Oman. The results showed a positive relationship between board of directors' effectiveness, meetings and debt ratio in Oman. Based on it, the study develops following hypothesis:

H_4: There is a positive relationship between board meetings and debt ratio.

Female director

According to Usman et al. (2019), there is a positive relationship between female directors and leverage ratio. Rossi et al. (2018) found a positive relationship between female directors and debt ratio have suggested that female directors may be more willing to take on risk, which could lead to higher debt levels. Additionally, female directors may be more likely to support growth opportunities that require additional funding. Pasaribu (2017) stated that firms with higher debt ratios are more likely to appoint female directors simply because they are more likely to be scrutinized by investors and regulators.Based on it, the study develops following hypothesis:

H_5: There is a positive relationship between female director and debt ratio.

Institutional ownership

Elyasiani et al. (2010) revealed that there is a positive relationship between institutional ownership and debt ratio. This means that firms with a higher proportion of their shares owned by institutional investors tend to have higher debt ratios than firms with a lower proportion of institutional ownership. Moreover, Al-Najjar (2010) showed a positive association between institutional ownership and debt ratios. Further, Sukmawardini and Ardiansari (2018) revealed that institutional investors are often more willing to take on risk than individual investors. This is because institutional investors are typically more sophisticated and have a longer investment horizon than individual investors. As a result, they may be more willing to invest in firms

with higher debt levels, as these firms may offer the potential for higher returns. Based on it, the study develops following hypothesis:

H_6: There is a positive relationship between institutional ownership and debt ratio.

3. Results and discussion

Descriptive statistics

Table 2 presents the descriptive statistics of selected dependent and independent variables during the period 2012/13 to 2021/22.

Table 2

Descriptive statistics

This table shows the descriptive statistics of dependent and independent variables of 10 Nepalese commercial banks for the study period from 2012/13 to 2021/22. The dependent variables are DTE (Total debt to equity ratio as measured by the ratio of total debt to total equity, in percentage) and DTA (Total debt to asset ratio as measured by the ratio of total debt to total assets, in percentage). The independent variables are BS (Board size as measured by the number of directors on the board, in numbers), ID (Independent director as measured by the number of independent directors on the board, in numbers), FD (Female director as measured by the number of female directors in the board, in numbers), AC (Audit committee size as measured by the number of audit members, in numbers), BM (Board meetings as measured by the number of board level meetings held in a year, in numbers) and IO (Institutional ownership as measured by the proportion of ownership held be institutions, in percentage).

Variables	Minimum	Maximum	Mean	Std. Deviation
BS	5.00	11.00	7.32	1.27
ID	0.00	4.00	0.71	0.64
BM	0.00	60.00	20.57	12.31
AC	1.00	6.00	3.14	1.02
FD	0.00	2.00	0.57	0.55
IO	0.00	51.00	11.81	15.54
DTE	0.00	153.20	20.61	25.65
DTA	0.00	18.04	2.45	3.40

Source: SPSS output

Correlation analysis

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

Table 3

Pearson's correlation coefficients matrix

This table shows the bivariate Pearson's correlation coefficients of dependent and independent variables of 10 Nepalese commercial banks for the study period of 2012/13 to 2021/22. The dependent variables are DTE (Total debt to equity ratio as measured by the ratio of total debt to total equity, in percentage) and DTA (Total debt to asset ratio as measured by the ratio of total debt to total assets, in percentage). The independent variables are BS (Board size as measured by the number of directors on the board, in numbers), ID (Independent director as measured by the number of independent directors on the board, in numbers), FD (Female director as measured by the number of female directors in the board, in numbers), AC (Audit committee size as measured by the number of audit members, in numbers), BM (Board meetings as measured by the number of board level meetings held in a year, in numbers) and IO (Institutional ownership as measured by the proportion of ownership held be institutions, in percentage).

Variables	BS	ID	BM	AC	FD	IO	DTE	DTA
BS	1							
ID	-0.256*	1						
BM	-0.339**	0.127	1					
AC	0.027	-0.061	0.098	1				
FD	0.039	0.214*	0.011	0.107	1			
IO	-0.143	0.088	0.092	0.203*	-0.292**	1		
DTE	-0.153	0.102	0.132	0.080	-0.111	0.221*	1	
DTA	-0.163	0.027	0.395**	0.080	-0.165	0.078	0.681**	1

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

Table 3 shows that institutional ownership is positively correlated to total debt to equity ratio. It shows that increase in institutional ownership leads to increase in total debt to equity ratio. Similarly, female director is negatively correlated to total debt to equity ratio. It implies that increase in female board directors in the board leads to decrease in total debt to equity ratio. Moreover, there is a positive relationship between board meetings and total debt to equity ratio. It shows that increase in number of board meetings leads to decrease in total debt to equity ratio. Similarly, board size is negatively correlated to total debt to equity ratio. It means increase in board size leads to decrease in total debt to equity ratio. Likewise, there is a positive relationship between audit committee and total debt to equity ratio. It means that increase in audit committee size leads to increase in total debt to equity ratio. Furthermore, there is a positive relationship between independent director and total debt to equity ratio. It means that increase in independent directors leads to increase in total debt to equity ratio.

On the other hand, institutional ownership is positively correlated to total debt to asset ratio. It shows that increase in institutional ownership leads to increase in total debt to asset ratio. Similarly, female director is negatively correlated to total debt to asset ratio. It implies that increase in female board directors in the board leads to decrease in total debt to asset ratio. Moreover, there is a positive relationship between board meetings and total debt to asset ratio. It shows that increase in number of board meetings leads to decrease in total debt to asset ratio. Similarly, board size is negatively correlated to total debt to asset ratio. It means increase in board size leads to decrease in total debt to asset ratio. Likewise, there is a positive relationship between audit committee and total debt to asset ratio. It means that increase in audit committee size leads to increase in total debt to asset ratio. Furthermore, there is a positive relationship between independent director and total debt to asset ratio. It means that increase in independent directors leads to increase in total debt to asset ratio.

Regression analysis

Having indicated the Pearson's correlation coefficients, the regression analysis has been carried out and the results are presented in Table 4 and Table 5. More specifically, Table 4 shows the regression results of board size, independent director, board meeting, female director, audit committee and institutional ownership on total debt to equity ratio of Nepalese commercial banks.

Table 4

Estimated regression results of board size, independent director, board meeting, female director, audit committee and institutional ownership on total debt to equity ratio

The results are based on panel data of 10 commercial banks with 100 observations for the period 2012/13 to 2021/22by using linear regression model. The model is $DTE = \beta_0 + \beta_1 BS + \beta_2 ID + \beta_3 FD + \beta_4 AC + \beta_5 BM + \beta_6 IO + e_{it}$ where the dependent variable is DTE (Total debt to equity ratio as measured by the ratio of total debt to total equity, in percentage). The independent variables are BS (Board size as measured by the number of directors on the board, in numbers), ID (Independent director as measured by the number of independent directors on the board, in numbers), FD (Female director as measured by the number of female directors in the board, in numbers), AC (Audit committee size as measured by the number of audit members, in numbers), BM (Board meetings as measured by the number of board level meetings held in a year, in numbers) and IO (Institutional ownership as measured by the proportion of ownership held be institutions, in percentage).

Model	Intercept	Regression coefficients of						Adj. R_bar^2	SEE	F-value
		BS	ID	BM	AC	FD	IO			
1	43.040 (2.891)	-3.064 (1.529)						0.013	25.49	2.337
2	17.71 (4.611)		4.090 (1.016)					0.001	25.654	1.032
3	14.972 (2.997)			0.274 (1.315)				0.007	25.56	1.729
4	14.304 (1.719)				2.010 (0.797)			0.004	25.706	0.636
5	23.543 (6.393)					-5.137 (1.107)		0.002	25.629	1.226
6	16.303 (5.152)						0.365 (2.244)*	0.039	25.151	5.037
7	38.587 (2.349)	-2.717 (1.307)	2.703 (0.651)					0.007	25.562	1.374
8	30.742 (1.615)	-2.142 (0.975)	2.550 (0.613)	0.182 (0.819)				0.004	25.6055	1.136
9	25.374 (1.253)	-2.228 (1.010)	2.751 (0.659)	0.161 (0.719)	1.999 (0.788)			0.001	25.657	1.004
10	24.709 (1.225)	-1.946 (0.883)	4.140 (0.967)	0.162 (0.725)	2.417 (0.950)	-6.500 (1.356)		0.009	25.544	1.178
11	21.996 (1.092)	-1.658 (0.753	3.175 (0.736)	0.155 (0.697)	1.422 (0.542)	-3.945 (0.776)	0.262 (1.447)	0.020	25.396	1.342

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. Total debt to equity ratio is the dependent variable.

Table 4 shows that the beta coefficients for board size are negative with total debt to equity ratio. It indicates that board size has a negative impact on total debt to equity ratio. This finding is similar to the findings of Elamer and Benyazid (2018). Similarly, the beta coefficients for audit committee are positive with total debt to equity ratio. It indicates that audit committee has a positive impact on total debt to equity ratio. This finding is consistent with the findings of Kallamu and Saat (2015). Likewise, the beta coefficients for independent director are positive with total debt to equity ratio. It indicates that independent director has a positive impact on total debt to equity ratio. This finding is similar to the findings of Burke (2000). Similarly, the beta coefficients for institutional ownership are positive with total debt to equity ratio. It indicates that the institutional ownership has a positive impact on total debt to equity ratio. This finding is consistent with the findings of Tanna et al. (2011). However, the beta coefficients for board meetings are positive with total debt to equity ratio. It indicates that board meetings have a positive impact on total debt to equity ratio. This finding is similar to the findings of Chen (2020).

Table 5 shows the regression results of board size, independent director,

board meeting, female director, audit committee and institutional ownership on total debt to asset ratio of Nepalese commercial banks.

Table 5

Estimated regression results of board size, independent director, board meeting, female director, audit committee and institutional ownership on total debt to asset ratio

The results are based on panel data of 10 commercial banks with 100 observations for the period 2012/13 to 2021/22by using linear regression model. The model is DTA = β_0 + β_1 BS + β_2 ID + β_3 FD + β_4 AC + β_5 BM + β_6 IO + e_{it} where the dependent variable is DTA (Total debt to asset ratio as measured by the ratio of total debt to total assets, in percentage). The independent variables are BS (Board size as measured by the number of directors on the board, in numbers), ID (Independent director as measured by the number of independent directors on the board, in numbers), FD (Female director as measured by the number of female directors in the board, in numbers), AC (Audit committee size as measured by the number of audit members, in numbers), BM (Board meetings as measured by the number of board level meetings held in a year, in numbers) and IO (Institutional ownership as measured by the proportion of ownership held be institutions, in percentage).

Model	Intercept	Regression coefficients of						Adj. R_bar^2	SEE	F-value
		BS	ID	BM	AC	FD	IO			
1	5.630	-0.434						0.017	3.375	2.676
	(2.856)	(1.636)								
2	2.352		0.142					0.009	3.419	0.070
	(4.594)		(0.265)							
3	0.204			0.109				0.148	3.142	18.171
	(0.333)			(4.263)**						
4	1.623				0.264			0.004	3.410	0.625
	(1.470)				(0.791)					
5	3.030					-1.013		0.017	3.374	2.750
	(6.250)					(1.658)				
6	2.250						0.017	0.004	3.410	0.605
	(5.243)						(0.778)			
7	5.770	-0.445	0.085					0.007	3.392	1.337
	(2.648)	(1.613)	(0.154)							
8	1.175	-0.108	0.174	0.107				0.132	3.179	6.021
	(0.498)	(0.398)	(0.339)	(3.874)**						
9	0.805	-0.114	0.161	0.105	0.138			0.125	3.184	4.526
	(0.320)	(0.417)	(0.310)	(3.779)**	(0.437)					
10	0.693	-0.067	0.073	0.105	0.208	-1.092		0.146	3.144	4.398
	(0.279)	(0.249)	(0.138)	(3.830)**	(0.664)	(1.850)				
11	0.765	-0.074	0.098	0.105	0.235	-1.160	0.007	0.138	3.159	3.645
	(0.305)	(0.272)	(0.184)	(3.818)**	(0.719)	(1.834)	(0.310)			

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. Total debt to asset ratio is the dependent variable.

Table 5 shows that the beta coefficients for board size are negative with total debt to asset ratio. It indicates that board size has a negative impact

on total debt to asset ratio. This finding is similar to the findings of Elamer and Benyazid (2018). Similarly, the beta coefficients for audit committee are positive with total debt to asset ratio. It indicates that audit committee has a positive impact on total debt to asset ratio. This finding is consistent with the findings of Kallamu and Saat (2015). Likewise, the beta coefficients for independent director are positive with total debt to asset ratio. It indicates that independent director has a positive impact on total debt to asset ratio. This finding is similar to the findings of Burke (2000). Similarly, the beta coefficients for institutional ownership are positive with total debt to asset ratio. It indicates that the institutional ownership has a positive impact on total debt to asset ratio. This finding is consistent with the findings of Tanna et al. (2011). However, the beta coefficients for board meetings are positive with total debt to asset ratio. It indicates that board meetings have a positive impact on total debt to asset ratio. This finding is similar to the findings of Chen (2020).

4. Summary and conclusion

Corporate governance remains a critical topic in corporate finance research, because it has an enormous influence on a firm's health and capital structure and determines the owners' role in guiding managerial decisions. Corporate governance holds immense importance within the banking sector, guaranteeing stability, transparency, and accountability for commercial banks. In Nepal, the banking industry serves as a pivotal driver for economic growth by facilitating financial transactions and fostering investment. As the sector has progressed, robust corporate governance frameworks have increasingly become essential. The guiding tenets of corporate governance in Nepalese commercial banks revolve around principles of transparency, accountability, and effective management.

This study attempts to the effect of corporate governance on capital structure dynamics of Nepalese commercial banks. The study is based on secondary data of 10 Nepalese commercial banks with 100 observations for the study period from 2012/13 to 2021/22.

The study showed that independent director, audit committee, institutional ownership, and board meetings have positive effect on total debt to equity ratio and total debt to asset ratio in the context of Nepalese commercial banks. However, board size and female directors have negative effect on total debt to equity ratio and total debt to asset ratio. The study

showed that corporate governance quality has a significant influence on capital structure dynamics of Nepalese commercial banks. Likewise, the study concluded that institutional ownership is the most influencing factor that explains the changes in total debt to equity ratio. Likewise, the study also concluded that the most dominant factor that determines the total debt to asset ratio in the context of Nepalese commercial banks is board meetings.

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