Corporate Governance and Pay-For-Performance: The Impact on Earnings Management in Nepalese Commercial Banks

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Abstract

This study examines the impact of corporate governance and pay for performance on earnings management in Nepalese commercial banks. Efficiency ratio and basic earning power are selected as the dependent variables. The selected independent variables are board size, tenure of CEO, age of CEO, size of firm, board meetings, compensation, independent directors and foreign ownership. The study is based on secondary data of 17 commercial banks with 102 observations for the study period from 2017/18 to 2022/23. The data were collected from Banking and Financial statistics published by Nepal Rastra bank and the annual reports of the selected commercial banks. The correlation coefficients and regression models are estimated to test the significance and importance of corporate governance and pay for performance on earnings management in Nepalese commercial banks.

The study showed that board size has a negative impact on efficiency ratio and basic earning power. It indicates that increase in board size leads to decrease in efficiency ratio and basic earning power. Similarly, tenure of CEO has a negative impact on efficiency ratio and basic earning power. It indicates that increase in tenure of CEO leads to decrease in efficiency ratio and basic earning power. Likewise, age of CEO has a positive impact on efficiency ratio and basic earning power. It indicates that higher age of the CEO in the organization leads to increase in efficiency ratio and basic earning power. Further, size of firm has a positive impact on efficiency ratio and basic earning power. It indicates that larger the size of firm, higher would be the efficiency ratio and basic earning power. In addition, board meetings has a positive impact on efficiency ratio and basic earning power. It indicates that higher the number of board meetings, higher would be the efficiency ratio and basic earning power. Moreover, compensation has a positive impact on efficiency ratio and basic earning power. It indicates that better the compensation facilities, higher would be the efficiency ratio and basic earning power. Likewise, independent directors has a positive impact on efficiency ratio and basic earning power. It indicates that increase in independent directors in the board leads to increase in efficiency ratio and basic earning power. Further, foreign ownership has a positive impact on efficiency ratio and basic earning power. It indicates that higher the proportion of foreign ownership, higher would be efficiency ratio and basic earning power.

Keywords: board size, tenure of CEO, age of CEO, bank size, board meetings, compensation, independent director, foreign ownership, efficiency ratio, basic earning power

1. Introduction

In today's economy, earnings management is a common term used by managers in accounting activities and managers' involvement in earning

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management intentionally to get targets like to increase shareholders' wealth, or to get personal benefits (Asogwa et al., 2019). Gill et al. (2013) defined that earnings management is the practice of managerial actions reflected in the company's financial statements. Earnings management is divided into accrued items surplus management and real earnings management activities. Accrued-based earnings management is achieved through the adoption of different accounting methods, while real activities earnings management to be achieved by manipulating the enterprises real activities. According to Shuang et al. (2016), earning management generate effects on the firm performance. Earnings management is practiced for two purposes: to hide the "true" financial performance of a company in order to mislead users of the financial reports and to convey private information to the investors for signaling purposes (Makhaiel and Sherer, 2017). Financial regulation, practice of good governance, strong audit mechanism and ethical practice in financial reporting help to reduce the practice of earnings management (Leventis et al., 2010). Earnings management is also considered as a major challenge for effective implementation of corporate governance mechanism. The practice of prudent corporate governance could mitigate the practice of Earnings management in listed companies (Wei, 2007).

In the financial business world of today, for any banking institution to flourish, effective marketing of financial activities is important. A system for how such banking institutions are directed and controlled is required. Such a system is integrated into the "corporate governance" of an institution (Price, 2018). Corporate governance is concerned with the resolution of collective action issues, problems, and challenges among dispersed investors and the reconciliation of conflicts of interest between various corporate stakeholders (Mertzanis et al., 2019). There may be some conflicts of interest among stakeholders in the majority of banking companies. It is very important for corporations to try so hard to execute planned and organized issues and resolve conflicts of interest as, in modern times, the focus of an organization's marketing efforts has shifted from satisfying customer needs to value creation for stakeholders (Benna et al., 2016). Corporate governance is concerned with the leadership decisions set by the corporation's management, which involves the company's board of directors in order to maximize the value of the shareholders' wealth, and normally corporate governance is conducted by the company's board of directors (Gherghina, 2021). The key responsibilities of the board of directors of a company include setting the company's strategic aims, providing the leadership to put them into effect, supervising the management of the business, and reporting to shareholders on their

stewardship. However, the main role of the board of directors is oversight and planning (Price, 2018). Corporate governance is therefore about what the board of directors of a particular company does and how it sets the values of the company, and it is to be distinguished from the day-to-day operational management of the company by full-time executives. Therefore, the ultimate purpose and goal of the good governance of the company is to add to and increase its value and to make sure that those who contribute directly or indirectly to its generation and growth can participate in the increase in value, respectively (Castrillón and Alfonso, 2021). Handriani *et al.* (2019) asserted that effective corporate governance helps to solve the principal-agent problem that has undermined the success of many entities. Isaac (2022) observed that some listed companies on the Nairobi Stock Exchange had poor leadership performance despite adopting numerous corporate governance practices.

Karimzadeh (2012) revealed that public banks are more efficient than peers of private banks. Similarly, Salim et al. (2016) examined the relationship between corporate governance and bank efficiency for the period 1999-2013 in Australia. The study found that size of the board and the numbers of committee meetings have positive and significant impact on efficiency. The study also revealed that the overall efficiency of the banking industry is improved after the introduction of good corporate governance in Australia. Likewise, Zeineb and Mensi (2018) investigated the effect of corporate governance on bank efficiency and risk of Gulf Cooperation Council Islamic banks. The study found that size of the board, duality role of chief executive officers and ownership structure have positive impact on efficiency. Further, Mollah and Zaman (2015) found that board efficiency of Islamic banks increase with the presence of Shariah board. In addition, Silva et al. (2016) examined the efficiency of Chinese local banks using of DEA and SFA methods. The study found a consistent trend in global efficiency score. The study found that rank correlation is relatively small and diverged about individual performance diagnoses. Likewise, Quaresma (2014) analyzed the relationship between the quality of corporate governance practices and the financial performance of internationally listed banks. The study concluded that there is a significant relationship between the best corporate governance practices and the financial performance of the banks. Similarly, Fanta et al. (2013) concluded that the board size is associated negatively with bank performance. Likewise, Oluwafemi et al. (2013) examined the relationship between corporate governance and performance in Nigeria's banking sector. The study concluded that improved performance of the banking sector is not dependent on increasing the number of executive directors and board

composition. In addition, the need for increase in board size and decrease in board composition is measured by the ratio of outside directors to the total number of directors in order to increase the bank performance.

Coleman and Biekpe (2006) examined the relationship between board size, board composition, CEO duality and firm performance: Experience from Ghana. The study found that boards with small number of directors is associated with better performance of Micro Finance Institutions. Similarly, Mak and Kusnadi (2005) indicated that when the board of director consist of five directors then the firm valuation will be in high level, and interestingly, this number of directors on the board is considered small in such countries. Likewise, Sanda et al. (2003) indicated that the performance is associated significantly and positively with small number of directors in boards. Further, Stepanova et al. (2012) concluded board size has a negative impact on bank performance. In addition, Darwis (2012) stated that earnings management has no impact on firm performance. Similarly, Gill et al. (2013) found a negative influence between earnings management and firm performance. Likewise, Davidson et al. (2005) revealed that Australian listed firms with a majority of non-executive directors on the board and the audit committee can restrain earnings management, while the choice of auditor and the formation of an internal audit function do not affect the level of discretionary accruals. Saenz Gonzalez and Garcaa-Meca (2014) concluded that a smaller board size seems to associate with the failure of the organization. Similarly, Aslam et al. (2023) stated that size of the board should not exceed more than eight or nine directors; the exceeding number of board members decreases the effectiveness because of coordinating flaws. Likewise, Ab Razak and Palahuddin (2014) found that the role of an individual having duality is positively related to discretionary accrual. It is claimed that an efficient system of ownership restrains the behavior of earning management (Alzoubi, 2019). The independence of the audit committee has a significant impact on the monitoring of earnings management (Alzoubi, 2019). Further, Sapto and Christian (2019) revealed that earnings management measures can reduce the value of the company. In addition, Thai et al. (2021) revealed that earnings management and surplus free cash flow have positive association with the banking sector of Vietnam.

In the context of Nepal, Rijal *et al.* (2016) revealed that board size and audit committee have positive impact on earnings, whereas CEO duality has an insignificant impact on earnings. Similarly, Paudel and Hovey (2013) investigated the impact of corporate governance on efficiency of Nepalese commercial banks. The results showed that the foreign and institutional ownership have different influence on banks. The study also found that foreign

ownership has no any significant relation with bank efficiency. Further, Devkota *et al.* (2022) examined the impact of corporate governance and ownership structure on the performance of Nepalese commercial banks. The results showed that leverage ratio has a negative impact on performance of banks. The study also showed that board independence, government ownership, firm size, board size and firm age have positive impact on performance of banks. In addition, Amatya *et al.* (2014) stated that better corporate governance leads to better financial performance. Corporate governance variables such as board size, board diligence, board independence, ownership structure and internal controls and control variables such as bank age, bank size, leverage, market return and capital adequacy ratio significantly affect the banking performance (Lamichhane, 2018).

The above discussion shows that empirical evidences vary greatly across the studies on the impact of corporate governance and pay for performance on earnings management in 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 major objective of the study is to examine the impact of corporate governance and pay for performance on earnings management in Nepalese commercial banks. Specifically, it examines the relationship of board size, tenure of CEO, age of CEO, size of firm, board meetings, compensation, independent directors and foreign ownership with earnings management 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 secondary data which were gathered from 17 Nepalese commercial banks for the period from 2017/18 to 2022/23, leading to a total of 102 observations. The study has used purposive sampling method to select the banks. The main sources of data include Banking and Financial Statistics published by Nepal Rastra Bank and annual report of respective banks. Table 1 shows the list of commercial banks 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

| S. N. | Name of the banks | Study period | Observations |
|-------|---------------------------------------|-----------------|--------------|
| 1 | Global IME Bank Limited | 2017/18-2022/23 | 6 |
| 2 | Himalayan Bank Limited | 2017/18-2022/23 | 6 |
| 3 | Kumari Bank Limited | 2017/18-2022/23 | 6 |
| 4 | Citizens Bank International Limited | 2017/18-2022/23 | 6 |
| 5 | Machhapuchchhre Bank Limited | 2017/18-2022/23 | 6 |
| 6 | Rastriya Banijay Bank Limited | 2017/18-2022/23 | 6 |
| 7 | Sanima Bank Limited | 2017/18-2022/23 | 6 |
| 8 | Nepal Bank Limited | 2017/18-2022/23 | 6 |
| 9 | Nepal Investment Bank | 2017/18-2022/23 | 6 |
| 10 | Siddhartha Bank Limited | 2017/18-2022/23 | 6 |
| 11 | Nepal SBI Bank Limited | 2017/18-2022/23 | 6 |
| 12 | NIC Asia Bank Limited | 2017/18-2022/23 | 6 |
| 13 | Everest Bank Limited | 2017/18-2022/23 | 6 |
| 14 | Standard Chartered Bank Nepal Limited | 2017/18-2022/23 | 6 |
| 15 | Prabhu Bank Limited | 2017/18-2022/23 | 6 |
| 16 | NMB Bank Limited | 2017/18-2022/23 | 6 |
| 17 | Sunrise Bank Limited | 2017/18-2022/23 | 6 |
| | 102 | | |

number of observations

Thus, the study is based on 102 observations.

The model

The model used in this study assumes that earnings management depend upon corporate governance and pay for performance. The dependent variables selected for the study are earning ratio and basic earning power. Similarly, the selected independent variables are board size, tenure of CEO, age of CEO, size of firm, board meetings, compensation, independent directors and foreign ownership. Therefore, the model takes the following form:

$$\begin{split} & \text{ER} = \beta_0 + \beta_1 \text{BS} + \beta_2 \text{TC} + \beta_3 \text{AC} + \beta_4 \text{TA} + \beta_5 \text{BM} + \beta_6 \text{CC} + \beta_7 \text{ID} + \beta_8 \text{FO} + e_{it} \\ & \text{BEP} = \beta_0 + \beta_1 \text{BS} + \beta_2 \text{TC} + \beta_3 \text{AC} + \beta_4 \text{TA} + \beta_5 \text{BM} + \beta_6 \text{CC} + \beta_7 \text{ID} + \beta_8 \text{FO} + e_{it} \\ & \text{Where,} \end{split}$$

ER = Efficiency ratio as measured by the ratio of current liabilities and current assets by total assets, in percentage.

BEP = Basic earning power as measured by the ratio of EBIT to total asset, in percentage.

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

TC = Tenure of CEO is measured by the experience of the CEO, in years.

AC = Age of CEO, in years.

TA = Size of firm is measured by total assets, in Rupees.

BM = Board meeting is measured by the number of meeting conducted in a year, in number.

CC = Compensation as measured by the incentive provided, in Rupees.

ID = Independent directors is a dummy variable which is measured as '0' if there is no independent director and '1' as if there is independent director, in number.

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, in percentage.

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

Board size

With more members, communication and agreement amongst directors become more complex, potentially weakening their oversight function and allowing management to engage in earnings manipulation. Arora (2012) examined the impact of board directors' size on the performance of 150 pharmaceutical companies for the period from 2001 to 2010. The study found that board directors' size has a positive impact on firms' performance. Similarly, Guest (2009) found that board size has a strong negative impact on profitability, Tobin's Q and share returns. In a large board, individual directors might feel less accountable for monitoring, leading to information overload and a dilution of responsibility, making it easier for management to manipulate earnings without detection. Likewise, Topak (2011) stated that there is no relation between board size and the firm performance. Further, Anderson *et al.* (2004) argued that board directors' size plays a vital role in improving firms' performance as it enables the companies to control and oversee managers. Based on it, this study develops the following hypothesis:

 H_{I} : There is a positive relationship between board size and earning management.

Firm size

Large firms tend to have complex business operations and accounting practices, providing more opportunities for managers to manipulate accruals, revenue recognition, or other accounting treatments to influence reported earnings. Fisseha (2015) analyzed the profitability of commercial banks on the basis of bank size, capital adequacy, liquidity risk, credit risk, management efficiency, labor efficiency, inflation rate and real GDP rate. The study showed a positive impact of bank size, capital adequacy and liquidity risk on the profitability of commercial banks. Similarly, Bikker and Hu (2002) stated a positive impact of bank size on the profitability. Likewise, Irawati and Maksum (2017) stated that firm size has a positive and significant impact on return on assets. Further, Goddard *et al.* (2004) found that size is positively related to profitability. Based on it, this study develops the following hypothesis:

H_2 : There is a positive relationship between firm size and earning management. Board meeting

Increased interactions between management and board members might raise the risk of collusion or implicit pressure to adjust accounting practices to meet short-term earnings targets. Board meetings are very fundamental for directors as they utilize the attendance as a way which enables them to control properly (Yameen *et al.*, 2019). Similarly, Mohamed *et al.* (2016) found that board meetings are positively correlated to return on equity. Similarly, Laksmana (2008) argued that board meetings allow the directors to share more information and viewpoints, improving the decision-making process and ensure legitimacy of all stakeholder expectations in a dynamic business environment. Based on it, this study develops the following hypothesis:

H_{3} : There is a positive relationship between board meeting and earning management.

Compensation

Kim and Gu (2005) concluded that a compensation system based on managerial performance would be a better solution to deteriorating performance of corporate organization because perfect monitoring may be impossible or too expensive. Similarly, Shahzad and Bhatti (2008) concluded that organizations having proper and updated compensation plans as per industry trends are more profitable as compared to rest of the organizations, which do not update pay plans according to the current trends. Likewise, Oyerogba *et al.* (2016) revealed a significant positive relationship exists between the directors' cash incentives, bonus issue of share and earnings per share. The study also revealed that the relationship between non cash incentive and earnings per share is an insignificant. Based on it, this study develops the following hypothesis:

 H_{4} : There is a positive relationship between compensation and earning management.

Tenure of CEO

Putra (2021) showed that female CEO, longer tenure CEO, CEO with higher education levels, and foreign CEO increase firms' profitability without engaging in earnings management. On the other hand, there is no effect of CEO age and founding-family status on pre-earnings management profitability. Similarly, Bouaziz et al. (2020) indicated that there is a positive and significant relationship between CEO duality, CEO nationality and the quality of financial communication. Likewise, Johan and Sari (2020) showed that CEO age has a significant and positive impact on the profitability of banks. Based on it, this study develops the following hypothesis:

 H_s : There is a positive relationship between tenure of the CEO and earning management.

Foreign ownership

Abdallah and Ismail (2017) assessed the relationship between foreign ownership with firm performance in the Gulf Cooperation Council (GCC) countries. The study found that the involvement of foreign investors in the ownership structure of a firm improves the performance of the firm. Similarly, Musallam (2015) argued that foreign ownership performs an effective monitoring function of the firm management. Likewise, Jalila and Devi (2012) reported that there is a positive relationship between the level of dividends and the level of foreign ownership of shares. Further, Orazalin and Mahmood (2019) found that the presence of large foreign ownership does not bring positive impact on the banks' performance. Based on it, this study develops the following hypothesis:

H_{6} : There is a positive relationship between foreign ownership and earning management.

Independent directors

Bryan and Mason (2020) revealed a negative relationship between the proportion of independent directors with relatively low reputation incentives and accruals quality. Likewise, James (2021) revealed that longtenured independent directors are better monitors and advisors. The study also concluded that long-tenured directors benefit firms and their investors by enhancing firm transparency and reducing information risk. Similarly, Rajkovic (2020) showed that the presence of a lead independent director on the corporate board is positively associated with investment efficiency. The study also concluded that lead director board role is also positively associated with future firm performance. Further, Man and Wong (2013) revealed that the board still needs to be effective in enforcement and the number of independent director is a good proxy for measuring the effectiveness of board performance and internal corporate governance. In addition, Adams and Ferreria (2009) showed that there is a positive relationship between independent directors and corporate governance. Based on it, this study develops the following hypothesis:

 H_{γ} : There is a positive relationship between independent directors and earning management.

Age of CEO

Belenzon *et al.* (2019) revealed the positive correlations between CEO salary, CEO bonus, CEO total compensation and CEO age. Similarly, Cheema (2020) concluded that CEO tenure indirectly influences performance through direct impact on the association between CEO age and performance. Similarly, Dang *et al.* (2017) found that target CEO age leads to a lower probability of obtaining desired equity ownership levels compared to unmatched ownership achievements, controlling for target corporate governance structures. Based on it, this study develops the following hypothesis:

 H_{s} : There is a positive relationship between age of CEO and earning management.

3. Results and discussion

Descriptive statistics

Table 2 presents the descriptive statistics of selected dependent and independent variables during the period 2017/18-2022/23.

Table 2

Descriptive statistics

This table shows the descriptive statistics of dependent and independent variables of 17 Nepalese commercial banks for the study period from 2017/18 to 2022/23. The dependent variables are ER (Efficiency ratio as measured by the ratio of current liabilities and current assets by total assets, in percentage) and BEP (Basic earning power is measured by EBIT/ Total asset, in percentage). The independent variables are BS (Board size as measured by the number of board members, in numbers), TC (Tenure of CEO is measured by the experience of the CEO, in years), AC (Age of CEO is measured in years), TA (Size of firm is measured in the total assets, in Rupees), BM (Board meeting is measured by the number of meeting conducted in a year, in number), CC (Compensation as measured by the incentive provided, in Rupees), ID (Independent director is a dummy variable which is measured as '0' if there is no independent director and '1' as if there is independent director, in number), and 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, in percentage).

| Variables | Minimum | Maximum | Mean | S.D. |
|-----------|---------|---------|-------|--------|
| ER | 0.12 | 33.05 | 2.93 | 7.12 |
| BEP | 0.01 | 2.87 | 0.26 | 0.66 |
| BS | 5.00 | 9.00 | 6.58 | 1.01 |
| ТС | 3.00 | 20.00 | 11.80 | 3.22 |
| AC | 31.00 | 56.00 | 43.80 | 5.77 |
| TA | 9.33 | 181.00 | 95.17 | 121.39 |
| BM | 12.00 | 32.00 | 16.23 | 3.87 |
| ID | 0.00 | 1.00 | 0.64 | 0.35 |
| FO | 0.00 | 1.00 | 0.40 | 0.51 |

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 17 Nepalese banks for the study period 2017/18-2022/23. The dependent variables are ER (Efficiency ratio as measured by the ratio of current liabilities and current assets by total assets, in percentage) and BEP (Basic earning power is measured by EBIT/ Total asset, in percentage). The independent variables are BS (Board size as measured by the number of board members, in numbers), TC (Tenure of CEO is measured by the experience of the CEO, in years), AC (Age of CEO is measured in years), TA (Size of firm is measured in the total assets, in number), CC (Compensation as measured by the incentive provided, in Rupees), ID (Independent director is a dummy variable which is measured as '0' if there is no independent director and '1' as if there is independent director, in number), and FO (Foreign ownership is a dummy variable which is measured as '0' if there is no foreign ownership and '1' as if other is foreign ownership, in percentage).

| ariables | ER | BEP | BS | тс | AC | TA | BM | CC | ID |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| ER | 1 | | | | | | | | |
| BEP | 0.986 | 1 | | | | | | | |
| BS | -0.070 | -0.055 | 1 | | | | | | |
| тс | -0.253 | -0.265 | 0.315 | 1 | | | | | |
| AC | 0.032 | 0.017 | -0.041 | 0.411 | 1 | | | | |
| ТА | 0.191 | 0.189 | 0.121 | 0.045 | 0.095 | 1 | | | |
| BM | 0.295 | 0.280 | 0.057 | -0.235 | 0.025 | 0.133 | 1 | | |
| CC | 0.084 | -0.094 | 0.104 | 0.093 | 0.226 | 0.020 | 0.039 | 1 | |
| ID | 0.122 | 0.122 | 0.028 | -0.012 | -0.341 | 0.371 | 0.076 | 0.091 | 1 |
| FO | 0.083 | 0.055 | 0.121 | 0.173 | -0.224 | -0.013 | -0.264 | -0.235 | 0.344 |

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

Table 3 shows that board size is negatively correlated to efficiency ratio. It means that increase in board size leads to decrease in efficiency ratio. Similarly, there is a negative relationship between tenure of CEO and efficiency ratio. It means that increase in tenure of CEO leads to decrease in efficiency ratio. In contrast, age of CEO has a positive relationship with efficiency ratio. It shows that increase in age of CEO leads to increase in efficiency ratio. Furthermore, there is a positive relationship between size of firm and efficiency ratio. It indicates that increase in size of firm leads to increase in efficiency ratio. In addition, board meetings has a positive relationship with efficiency ratio. It indicates that board meetings leads to increase in efficiency ratio. Moreover, compensation has a positive relationship with efficiency ratio. It indicates that compensation leads to increase in efficiency ratio. Further, independent directors has a positive relationship with efficiency ratio. It indicates that independent directors leads to increase in efficiency ratio. Likewise, foreign ownership has a positive relationship with efficiency ratio. It indicates that foreign ownership leads to increase in efficiency ratio.

Similarly, the result also shows that board size is negatively correlated to basic earning power. It means that increase in board size leads to decrease in basic earning power. Similarly, there is a negative relationship between tenure of CEO and basic earning power. It means that increase in tenure of CEO leads to decrease in basic earning power. In contrast, age of CEO has a positive relationship with basic earning power. It shows that increase in age of CEO leads to increase in basic earning power. Furthermore, there is a positive relationship between size of firm and basic earning power. It indicates that increase in size of firm leads to increase in basic earning power. In addition, board meetings has a positive relationship with basic earning power. It indicates that board meetings leads to increase in basic earning power. However, compensation has a positive relationship with basic earning power. It indicates that compensation leads to increase in basic earning power. Further, independent directors has a positive relationship with basic earning power. It indicates that independent directors leads to increase in basic earning power. Likewise, foreign ownership has a positive relationship with basic earning power. It indicates that foreign ownership leads to increase in basic earning power.

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, tenure of CEO, age of CEO, size of firm, board meetings, compensation, independent directors and foreign ownership with efficiency ratio of Nepalese commercial banks. Table 4

Estimated regression results of are board size, tenure of CEO, age of CEO, size of firm, board meetings, compensation, independent directors and foreign ownership on efficiency ratio

The results are based on panel data of 17 Nepalese commercial banks with 102 observations for period 2017/18-2022/23 by using linear regression model. The model is $ER = \beta_0 + \beta_1$ $BS + \beta_2TC + \beta_3AC + \beta_4TA + \beta_5BM + \beta_6CC + \beta_7ID + \beta_8FO + e_{ii}$ where dependent variable is ER (Efficiency ratio). The independent variables are BS (Board size as measured by the number of board members, in numbers), TC (Tenure of CEO is measured by the experience of the CEO, in years), AC (Age of CEO is measured in years.), TA (Size of firm is measured in the total assets), BM (Board meetings, in numbers) CC (Compensation as measured by the incentive provided, in rupees), ID (Independent director as measured by the number of independent directors on the board, in numbers), and 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).

| Model | Intercent | | | Re | gression c | oefficient | s of | | | Adj. | SEE | F-value |
|-------|--------------------|-------------------|-------------------|------------------|---------------|------------------|-------------------|------------------|------------------|--------------------|-------|---------|
| | Intercept | BS | TC | AC | TA | BM | CC | ID | FO | R_bar ² | SEE | |
| 1 | 6.197 (-1.324) | -0.497 (0.707) | | | | | | | | 0.005 | 7.125 | 0.5 |
| 2 | 9.536 (3.651) | | -0.56 (2.623) | | | | | | | 0.055 | 6.919 | 6.88 |
| 3 | 1.144 (0.21) | | | 0.041 (0.33) | | | | | | 0.065 | 0.64 | 3.355 |
| 4 | 1.102 (0.946) | | | | 0.012 (1.95) | | | | | 0.091 | 0.312 | 3.541 |
| 5 | -5.893 (-2.001) | | | | | 0.543 (3.092) | | | | 0.078 | 6.834 | 9.561 |
| 6 | 3.075 (4.227) | | | | | | 1.97 (0.849) | | | 0.003 | 7.128 | 0.72 |
| 7 | 0.556 (0.271) | | | | | | | 2.685 (1.23) | | 0.005 | 7.009 | 1.514 |
| 8 | 2.367 (2.441) | | | | | | | | 1.185 (0.838) | -0.003 | 7.128 | 0.702 |
| 9 | 9.137 (1.94) | 0.074 (0.102) | -0.567 (2.509) | | | | | | | 0.046 | 6.95 | 3.411 |
| 10 | 0.322 (0.405) | 0.307 (0.42) | -0.748 (2.984 | 0.215 1.614) | | | | | | 0.061 | 6.898 | 3.179 |
| 11 | 0.761 (0.107) | 0.118 (0.162) | -0.728 (2.943) | 0.187 (1.413) | 0.012 (1.974) | | | | | 0.088 | 6.798 | 3.429 |
| 12 | -3.755 (0.516) | -0.129 (0.178) | -0.559 (2.185) | 0.142 (1.081) | 0.011 (1.742) | 0.39 (2.135) | | | | 0.12 | 6.677 | 3.4756 |
| 13 | -5.53 (0.742) | -0.033 (0.045) | -0.569 (2.228) | 0.174 (1.722) | 0.001 (1.722) | 0.393 (2.154) | -2.43 (1.075) | | | 0.128 | 6.645 | 3.127 |
| 14 | -11.882 (1.345) | 0.121 (0.165) | -0.648 (2.480) | 0.274 (1.783) | 0.007 (0.951) | 0.367 (2.001 | -3.118 (1.350) | 3.364 (1.327) | | 0.128 | 6.645 | 3.127 |
| 15 | -12.014 (1.383) | -0.081 (0.112) | -0.716 (2.759) | 0.287 (1.895) | 0.009 (1.278) | 0.468 (2.509) | -1.646 (0.690) | 1.239 (0.458) | 3.214 (2.033) | 0.157 | 6.536 | 3.344 |

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. Efficiency ratio is the dependent variable.

Table 4 shows that the beta coefficients for board size are negative with efficiency ratio. It indicates that board size has a negative impact on efficiency ratio. This finding is similar to the findings of Guest (2009). Similarly, the beta coefficients for tenure of CEO are negative with efficiency ratio. It indicates that tenure of CEO has a negative impact on efficiency ratio. This finding is consistent with the findings of Putra (2021). Similarly, the beta coefficients for age of CEO ratio are positive with efficiency ratio. It indicates that age of CEO has a positive impact on efficiency ratio. This finding is similar to the findings of Belenzon et al. (2019). Likewise, the beta coefficients for size of firm are positive with efficiency ratio. It indicates that size of firm has a positive impact on efficiency ratio. This finding is inconsistent with the findings of Irawati and Maksum (2017). Further, the beta coefficients for board meetings are positive with efficiency ratio. It indicates that board meetings has a positively impact on efficiency ratio. This finding is similar to the findings of Mohamed et al. (2016). Moreover, the beta coefficients for compensation are positive with efficiency ratio. It indicates that compensation has a positive impact on efficiency ratio. This finding is consistent with the findings of Oyerogba et al. (2016). In addition, the beta coefficients for independent directors are positive with efficiency ratio. It indicates that independent directors has a positive impact on efficiency ratio. This finding is similar to the findings of Rajkovic (2020).

Table 5 shows the estimated regression results of board size, tenure of CEO, age of CEO, size of firm, board meetings, compensation, independent directors and foreign ownership with the basic earning power of Nepalese commercial banks.

Table 5

Estimated regression results of board size, tenure of CEO, age of CEO, size of firm, board meetings, compensation, independent directors and foreign ownership on basic earning power

The results are based on panel data of 17 Nepalese commercial banks with 102 observations for period 2017/18-2022/23 by using linear regression model. The model is $BEP = \beta_0 + \beta_1$ $BS + \beta_2 TC + \beta_3 AC + \beta_4 TA + \beta_5 BM + \beta_6 CC + \beta_7 ID + \beta_8 FO + e_{ii}$ where dependent variable is BEP (Basic earning power is measured by EBIT/Total asset). The independent variables are BS (Board size as measured by the number of board members, in numbers), TC (Tenure of CEO is measured by the experience of the CEO, in years), AC (Age of CEO is measured in years.), TA (Size of firm is measured in the total assets), BM (Board meetings, in numbers) CC (Compensation as measured by the incentive provided, in rupees), ID (Independent director as measured by the number of independent directors on the board, in numbers), and 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).

| Model | T | | | Re | gression c | oefficient | s of | | | Adj. | CEE | F-value |
|-------|-------------------|-------------------|-------------------|---------------|------------------|------------------|-------------------|-----------------|------------------|--------------------|--------|---------|
| | Intercept | BS | TC | AC | ТА | BM | CC | ID | FO | R_bar ² | SEE | |
| 1 | 0.503 (1.152) | -0.036 (0.553) | | | | | | | | 0.007 | 0.6648 | 0.306 |
| 2 | 0.908 (3.747) | | -0.055 (2.754) | | | | | | | 0.061 | 0.642 | 7.582 |
| 3 | 0.177 (0.349) | | | 0.002 (0.173) | | | | | | 0.01 | 0.666 | 0.037 |
| 4 | 0.096 (0.884) | | | | 0.001 (1.933) | | | | | 0.026 | 0.654 | 3.736 |
| 5 | -0.516 (1.882) | | | | | 0.048 (2.925) | | | | 0.070 | 0.639 | 8.556 |
| 6 | 0.28 (4.135) | | | | | | -2.06 (0.951) | | | 0.001 | 0.663 | 0.905 |
| 7 | 0.042 (0.221) | | | | | | | 0.252 (1.23) | | 0.005 | 0.661 | 1.534 |
| 8 | 0.23 (2.538) | | | | | | | | 0.073 (0.556) | 0.007 | 0.665 | 0.309 |
| 9 | 0.796 (1.822) | 0.021 (0.309) | -0.057 (2.699) | | | | | | | 0.053 | 0.6449 | 3.804 |
| 10 | 0.018 (0.027) | 0.041 (0.609) | -0.073 (3.116) | 0.019 (1.534) | | | | | | 0.065 | 0.64 | 3.355 |
| 11 | 0.058 (0.089) | 0.024 (0.354) | -0.071 (3.077) | 0.016 (1.334) | 0.001 (1.952) | | | | | 0.091 | 0.312 | 3.541 |
| 12 | -0.32 (0.472) | 0.003 (0.048) | -0.056 (2.368) | 0.013 (1.03) | 0.001 (1.737) | 0.033 (1.919) | | | | 0.116 | 0.623 | 3.647 |
| 13 | -0.5 (0.720) | 0.013 (0.192) | -0.058 (2.417) | 0.016 (1.267) | 1.267 (1.717) | 0.033 (1.941) | -2.462 (1.169) | | | 0.119 | 0.621 | 3.279 |
| 14 | -0.5 (0.720) | 0.013 (0.192) | -0.058 (2.417) | 0.016 (1.267) | 1.267 (1.717) | 0.033 (1.941) | -2.462 (1.169) | | | 0.119 | 0.621 | 3.279 |
| 15 | -1.109 (1.357) | 0.013 (0.199) | -0.07 (2.863) | 0.026 (1.842) | 0.001 (1.179 | 0.038 (2.152) | -2.065 (0.921) | 0.166 (0.655 | 0.229 (1.537) | 0.139 | 0.615 | 3.041 |

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. Basic earning power is the dependent variable.

Table 5 shows that the beta coefficients for board size are negative with basic earning power. It indicates that board size has a negative impact on basic earning power. This finding is similar to the findings of Guest (2009). The beta coefficients for tenure of CEO are negative with basic earning power. It indicates that tenure of CEO has a negative impact on basic earning power. This finding is consistent with the findings of Putra (2021). Similarly, the beta coefficients for age of CEO ratio are positive with basic earning power. It indicates that age of CEO has a positive impact on basic earning power. This finding is similar to the findings of Belenzon et al. (2019). Likewise, the beta coefficients for size of firm are positive with basic earning power. It indicates that size of firm has a positive impact on basic earning power. This finding is inconsistent with the findings of Irawati and Maksum (2017). Further, the beta coefficients for board meetings are positive with basic earning power. It indicates that board meetings has a positively impact on basic earning power. This finding is consistent with the Mohamed et al. (2016). Moreover, the beta coefficients for compensation are negative with basic earning power. It indicates that compensation has a negative impact on basic earning power. This finding is contradictory with the findings of Oyerogba *et al.* (2016). In addition, the beta coefficients for independent directors are positive with basic earning power. It indicates that independent directors has a positively impact on basic earning power. This finding is similar to the findings of Rajkovic (2020). Furthermore, the beta coefficients for foreign ownership are positive with basic earning power. It indicates that foreign ownership has a positively impact on basic earning power. This finding is consistent with the findings of Jalila and Devi (2012).

4. Summary and conclusion

Earnings management is a common term used by managers in accounting activities and managers' involvement in earning management intentionally to get targets like to increase shareholders' wealth, or to get personal benefits. Earnings management is the practice of managerial actions reflected in the company's financial statements to either give the impression of periodic or annual smooth earnings, this is to show high profits in a certain year. Earnings management is divided into accrued items surplus management and real earnings management activities. Accrued-based earnings management is achieved through the adoption of different accounting methods, while real activities earnings management to be achieved by manipulating the enterprises real activities. No matter what kind of earnings management was used, it will generate effects on the firm performance.

This study attempts to analyse the corporate governance and pay for performance and its impact on earnings management in Nepalese commercial banks. The study is based on the secondary data of 17 banks with 102 observations for the period from 2017/18 to 2022/23.

The study showed that board size and tenure of CEO have negative impact on efficiency ratio and basic earning power. Similarly, age of CEO, size of firm, board meetings, compensation, independent directors and foreign ownership have positive impact on efficiency ratio and basic earning power. Likewise, the study concluded that good governance creates an environment where managers are less likely to manipulate earnings to meet pay for performance targets, thereby preserving transparency and long-term value creation. Further, the study also concluded that board meetings followed by tenure of CEO is the most influencing factor that explains the changes in the earnings management of Nepalese commercial banks.

References

- Ab Razak, N. H., and S. H. Palahuddin, 2014. Corporate governance and earning management: Evidence from 200 Malaysian listed firms from the period of 2007 to 2011. *Corporate Board: Role, Duties and Composition* 10(1), 6-17.
- Abdallah, A. A. N., and A. K. Ismail, 2017. Corporate governance practices, ownership structure, and corporate performance in the GCC countries. *Journal of International Financial Markets, Institutions and Money* 46(1), 98-115.
- Adams, R. B., and D. Ferreira, 2009. Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics* 94(2), 291-309.
- Alzoubi, E. S. S., 2019. Audit committee, internal audit function and earnings management: Evidence from Jordan. *Meditari Accountancy Research* 12(1), 1-15.
- Amatya, S., T. B. Bhandari, S. Aryal, and S. Shrestha, 2014. Effect of board size, board composition, and ownership structure on bank performance: A case of Nepal. *Nepalese Journal of Corporate Governance* 1(1), 71-86.
- Aslam, E., A. Ur Rehman, and A. Iqbal, 2023. The mediating role of intellectual capital in corporate governance and financial efficiency of Islamic banks. *Corporate Governance: The International Journal of Business in Society* 3(1), 56-63.
- Belenzon, S., A. Shamshur, and R. Zarutskie, 2019. CEO's age and the performance of closely held firms. *Strategic Management Journal* 40(6), 917-944.
- Benn, S., R. Abratt, and B. O'Leary, 2016. Defining and identifying stakeholders: Views from management and stakeholders. *South African journal of business management*, 47(2), 1-11.
- Bouaziz, D., B. Salhi, and A. Jarboui, 2020. CEO characteristics and earnings management: empirical evidence from France. *Journal of Financial Reporting and Accounting* 18(1), 77-110.
- Bryan, D. B., and T. W. Mason, 2020. Independent director reputation incentives, accruals quality and audit fees. *Journal of Business Finance and Accounting* 47(7-8), 982-1011.
- Castrillon, G., and M. Alfonso, 2021. The concept of corporate governance.

Revista Científica Visión de Futuro 25(2), 178 – 194.

- Cheema, S., 2020. Does CEO age matters? A case of an emerging economy. *A Case of an Emerging Economy* 2(7), 1-25.
- Coleman, A., and N. Biekpe, 2006. The relationship between board size, board composition, CEO duality and firm performance: Experience from Ghana. *Corporate Ownership and Control* 4(2), 114-122.
- Dang, M., D. Henry, and V. A. D. Hoang, 2017. Target CEO age, ownership decisions, and takeover outcomes. *Research in International Business* and Finance 42(1), 769-783.
- Darwis, Y., and I. W. Kellaway, 2001. Nebulisation of rehydrated freezedried beclomethasone dipropionate liposomes. *International Journal of Pharmaceutics* 215(1-2), 113-121.
- Davidson, R., J. Goodwin-Stewart, and P. Kent, 2005. Internal governance structures and earnings management. Accounting and Finance 45(2), 241–267.
- Devkota, A., A. Thapa, A. Thapa, A. kunwar, and A. Karn, 2022. Impact of corporate governance and ownership structure on the performance of Nepalese commercial banks. *Nepalese Journal of Finance* 9(1), 92-104.
- Fanta, A., K. Kemal, and Y. Waka, 2013. Corporate governance and impact on bank performance. *Journal of Finance and Accounting* 1(1), 19-26.
- Fanta, A., K. Kemal, and Y. Waka, 2013. Corporate governance and impact on bank performance. *Journal of Finance and Accounting* 1(1), 19-26.
- Gherghina, Ş. C., 2021. Corporate finance. Journal of Risk and Financial Management 14(2), 44-55.
- Gill, A., N. Biger, H. S. Mand, and N. Mathur, 2013. Earnings management, firm performance, and the value of Indian manufacturing firms. *International Research Journal of Finance and Economics* 116(1), 121-131.
- Guest, P. M., 2009. The impact of board size on firm performance: Evidence from the UK. *The European Journal of Finance* 15(4), 385-404.
- Handriani, E., and R. Robiyanto, 2019. Institutional ownership, independent board, the board size, and firm performance: Evidence from Indonesia. *Contaduría administración* 64(3), 0186-1042.
- Isaac, R. M., 2022. Contribution of Corporate Governance on Performance of Listed Companies in Kenya. *European Journal of Business and*

Management Research 7(1), 104-112.

- Jalila, S., and J. Devi, 2012. Ownership structure effect on the extent of segment disclosure: Evidence from Malaysia. *Procedia Economics and Finance* 2(1), 247-256.
- James, H. L., T. Ngo, and H. Wang, 2021. Independent director tenure and corporate transparency. *The North American Journal of Economics and Finance* 57(1), 101-113.
- Johan, S., and W. R. Sari, (2020). The influence of CEO characteristic on banking performance. *Advances in Economics, Business and Management Research* 151(1), 27-30.
- Karimzadeh, M., 2012. Efficiency analysis by using data envelopment analysis model: evidence from Indian banks. *International Journal of Latest Trends Finance, Economics and Science* 2 (3), 228-237.
- Kin W., and S. Gu, 2005.Disentangling the relationship between ownership concentration and firm performance in emerging markets: A Meta-Analysis. *International Research Journal of Finance and Economics*, 50(3), 8-16.
- Lamichhane, P., 2018. Corporate governance and financial performance in Nepal. *NCC Journal* 3(1), 108-120.
- Leventis, S., P. Dimitropoulos, and A. Anandarajan, 2010. Loan loss provisions, earnings management and capital management under IFRS: The case of EU commercial banks. *Journal of Financial Services Research* 40(6), 103-122.
- Mak, Y. T., and Y. Kusnadi, 2005. Size really matters: Further evidence on the negative relationship between board size and firm value. *Pacific-Basin Finance Journal* 13(3), 301-318.
- Makhaiel, N., and M. Sherer, 2017. In the name of others: an investigation of the earnings management motives in Egypt. *Journal of Accounting in Emerging Economics* 7 (1), 61-89.
- Mollah, S., and M. Zaman, 2015. Shri'ah supervision, corporate governance and performance: conventional vs. Islamic banks. *Journal of Banking and Finance* 58(3), 418-435.
- Muhamad, S. F., M. K. Kamarudin, R. Usop, M. S. Arslan, and N. A. Aziz, 2019. Board characteristics and financial performance of Islamic banks. *Journal of Management and Operation Research* 1(2), 1-7.
- Musallam, S. R., 2015. Relationships between ownership structures and

corporate performance: Evidence from Malaysia. *Mediterranean Journal of Social Sciences* 6(3), 70-76.

- Mzenzi, S., N. Mori, and A. Kurt, 2019. An exploratory study on corporate governance practices of the selected oil and gas companies in Tanzania. *In Business Management Review* 22(1), 150 -167.
- Oluwafemi, A., A. Israel, and A. Olugbenga, 2013. Corporate governance and firm financial performance: Do ownership and board size matter? *Academic Journal of Interdisciplinary Studies* 2(3), 5-9.
- Orazalin, N., and M. Mahmood, 2019. The financial crisis as a wake-up call: Corporate governance and bank performance in an emerging economy. *Corporate Governance: The International Journal of Business in Society* 19(1), 80-101.
- Oyerogba, E. O., G. K. Riro, and F. S. Memba, 2016. The perceived relationship between executive compensation package and profitability of listed companies in Nigeria. *European Journal of Business, Economics and Accountancy* 4(3), 2056-6018.
- Poudel, R. P., and A. M. Hovey, 2013. Corporate governance and efficiency in Nepalese commercial banks. *International Review of Business Research Papers* 9(4), 53-64.
- Price, N. J., 2018. The role of the board of directors in corporate governance. *Diligent Insights* 3(4),7-12.
- Putra, A. A., 2021. The effect of CEO characteristics on pre-earnings management profitability. *Jurnal Akuntansi dan Keuangan Indonesia* 18(2), 1-9.
- Quaresma, A., R. Pereira, and Á. Dias, 2014. Corporate governance practices in listed banks-impact on risk management and resulting financial performance. *Journal of Business and Economics* 5 (8), 12-50.
- Quaresma, A., R. Pereira, and Á. Dias, 2014. Corporate governance practices in listed banks-impact on risk management and resulting financial performance. *Journal of Business and Economics*, 5 (8), 12-50.
- Rijal, P., P. Bajracharya, P. Gurung, P. Joshi, and P. Shakya, 2016. Earnings management and corporate governance: The role of the board and audit committee in Nepalese commercial banks. *Nepalese Journal of Management*, 3(1), 56-68.
- Saenz Gonzalez, J., and E. Garcaa-Meca, 2014. Does corporate governance influence earnings management in Latin American markets? *Journal of*

Business Ethics 12(1), 419-440.

- Salim, R., A. Arjomandi, and J. Seufert, 2016. Does corporate governance affect Australian banks' performance? *Journal of International Financial Markets, Institutions and Money* 43(5), 113-125.
- Sanda, A., A. Mukaila, and T. Garba, 2003. Corporate governance mechanisms and firm financial performance in Nigeria. *Final Report Presented to the Biannual Research Workshop of the AERC, Nairobi, Kenya* 1(1), 24-29.
- Sapto, U. E., and F. M. D. Christian, 2019. Financial ratio analysis of banking liquidity level: A case study at SOE Persero banks in Indonesia. *Russian Journal of Agricultural and Socio-Economic Sciences* 85(1), 45-52.
- Shahzad, I., and K. Bhatti, 2008. Antecedents of compensation and relationship among compensation, motivation, and organizational profitability. *The Business Review, Cambridge*, 10(2), 236-247.
- Silva, T.C., B.M. Tabak, D.O. Cajueiro, and V.B. Dias, 2016. A comparison of DEA and SFA using micro and macro level perspectives: Efficiency of Chinese local banks. *Physica A: Statistical Mechanics and its Application* 496(3), 216-223.
- Stepanova, A., O. Ivantsova, S. Stepanov, A. V. Vernikov, and V. A. Bokov, 2012. Role of corporate governance in banking sector: Evidence from all over the world. *Electronic Journal of Corporate Finance* 4(24), 80-86.
- Thai, V. H., M. H. Nguyen, C. T. Nguyen, and T. L. P. Pham, 2021. The influence of earning management and surplus free cash flow on the banking sector performance. *Polish Journal of Management Studies* 23(1), 403-417.
- Topak, M. S. 2011. The effect of board size on firm performance: Evidence from Turkey. *Middle Eastern Finance and Economics* 14(1), 1450-2889.
- Wei, G., 2007. Ownership structure, corporate governance and company performance in China. *Asia Pacific Business Review* 13 (4), 519-545.
- Zeineb, G.B., and S. Mensi, 2018. Corporate governance, risk and efficiency: Evidence from GCC Islamic banks. *Managerial Finance*, 44 (5), 551-569.