CORPORATE GOVERNANCE AND PERFORMANCE IN COMMERCIAL BANKS IN NEPAL

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Abstract

This journal examines the Corporate Governance and performance of Nepalese Commercial Banks. This research covers a total of 27 commercial banks in Nepal from 2010 to 2014. The study focuses on 5 aspects of Corporate Governance namely, Board Size, Board Diligence, Board independence, Ownership Structure and Internal Control as well as three control variables also. Banking performance is measured through Efficiency (Non-performing Loans/ Total Loans), Return on Assets (ROA) and Return on Equity (ROE). The Multiple regression analysis is used to study which Corporate Governance and Control variables affect the banking performances in terms of Efficiency, ROA and ROE. The regression results indicate that Board Diligence and Ownership Structure are significant variables affecting Efficiency. The factors affecting ROA are Board Size, Board Independence, Bank Size, Internal Controls and CAR, while ROE is affected by Bank Size, CAR and Bank Age.

Keywords: Corporate Governance, Banking performance, Efficiency, Return on Assets (ROA), Return on Equity (ROE), Commercial Banks in Nepal.

Introduction

The Asian financial crisis of 1997/98 as well as the global financial crisis of 2007/08 highlighted the need for Corporate Governance in banking sector even more. The lack of Corporate Governance in Banks can make the market to lose confidence in its ability and leads to economic crisis (Garcia-Marco & Robles- Fernandez, 2008). On the other hand, good governance has lots of advantages like strong property rights, minimum transaction cost and capital market development (Claessens & Fan, 2002). For a developing country like Nepal, Corporate Governance reforms are more significant as it helps to attract
more foreign direct investment and mobilizes greater savings through capital markets (Maskey, 2004). The Corporate Governance scenario gathered momentum only after 2002 when the central bank of Nepal, Nepal Rastra bank (NRB) issued Corporate Governance directives. Till today, the regulatory requirements of Nepal Rastra Bank (NRB) solely act as the Corporate Governance benchmark. The Bank run of Nepal Bangladesh Bank (NB Bank) in November of 2006 (Upreti, 2008) and the Vibor Bikas Bank (VBB) crisis in 2011 (Sapkota, 2011), in which the Central Bank (NRB) had to rescue VBB, are the two remarkable banking crisis in Nepal. Vibor Bikas Bank’s crisis can be compared to Lehman Brothers (Sapkota, 2011). Similarly, the bankruptcy of Nepal Development Bank in 2009 was also one of the dark phases of Nepalese banking sector (Sapkota, 2009). However, all three cases were linked to the failures in the implementation of Corporate Governance. In 2005 the central bank of Nepal, Nepal Rastra Bank issued directives to strengthen Corporate Governance, but it however reported several lapses in several banks. Hence, this research paper aims to find out the discrepancies and offer recommendations to it. The objectives of this research include: (1) To study the effect of Corporate Governance factors (Board Size, Board Diligence, Board Independence, Ownership Structure and Internal Control) on the performance variables Efficiency, Return on Assets (ROA) and Return on Equity (ROE) of Nepalese Commercial Banks; (2) To study the effect of control factors (Bank Age and Bank Size) on the performance variables Efficiency, Return on Assets (ROA) and Return on Equity (ROE) of Nepalese Commercial Banks.

**Literature review**

Previous studies on Corporate Governance put forward many dimensions and behaviour of companies with different affecting variables. Though Martin and Cullen (2006) argued that none of the theoretical perspective can fully summarize the complicities of an organization, Corporate Governance mechanisms like Board Characteristics, Audit Committee characteristics, Ownership Structures, are considered the measure for Corporate Governance variables (Poudel & Hovey, 2013). This section summarizes the studies that have been done in terms of Corporate Governance as well as Corporate Governance variables like Board size, Board Diligence, Board Independence, Internal controls and Ownership Structure, Control variables like Bank Age and Bank Size, and their impact on Efficiency, Return on Assets and Return on Equity.

For a developing country like Nepal, Corporate Governance plays a significant role to attract Foreign Direct Investment and Foreign Portfolio Management and to mobilize capital market saving (Sapkota, 2008). Similarly Basel committee (2006) advises that to implement the Corporate Governance principles, a bank should be proportionate with the group to which it belongs in terms of structure, risk profile, size, complexity and economic significance.
Corporate governance variables

Board size

Based on the Codes of Corporate Governance in Nepal, the board of directors consists of five to nine members. Some studies have suggested smaller boards are better for improving firm performance (Lipton & Lorsch, 1992; Barnhart & Rosenstein, 1998) while other studies provide positive relationship between Board Size and firm performance (Zahra & Pearce, 1989; Mak & Li, 2001). However, Ghabayen (2012) in his research about board characteristic and firm performance in Saudi Arabia found no any relationship between Board Size and a firm’s performance. Poudel and Hovey (2013) found Board Size to be statistically significant to performance in the research about Efficiency of Nepalese Commercial Banks from 2005-2011. Tai (2015) found significance of Board Size in ROA, but the contribution of Board Size on Efficiency and ROE is insignificant in the study of Gulf Banks.

Board independence

The Nepal Rastra Bank, the central Bank of Nepal emphasizes on having at least 1 independent director on the board. Some researchers like Baysinger and Butler (1985) and Ezzamel and Watson (1993) found outside directors are positively related with a firm’s performance whereas Wen et al. (2002) and Brick and Chidambaran (2008) observed the negative result between outside directors and a firm’s performance.

However, Poudel and Hovey (2013) found no significant effect of Board Size on Nepalese Commercial Banks. On the contrary, El-Chaarani (2014) found Board Independence to be extremely significant on the performance variables like ROA and ROE in the study about Lebanese banks.

Board diligence

Based on code of Corporate Governance in Nepal, board has to sit at least twelve times per year. When boards hold regular meetings, they are more likely to remain informed and knowledgeable about relevant performance of the company leading them to take or influence and direct the appropriate action to address the issue (Abbott et al., 2003). Likewise, Hermanson et al. (2002) put forward the number of board meetings as a factor related to Board Diligence, referring Board Diligence to be the proxy of the frequency of board meetings. Poudel and Hovey (2013) in the context of Nepalese Banks, found Board Diligence to be statistically significant.

Ownership structure

Relevant literature on Corporate Governance provides much attention to the issue of shareholder identity (Shleifer & Vishny, 1997). It is accepted that foreign ownership plays crucial role in a firm’s performance, particularly in developing and transitional economies (Görg & Greenaway, 2004). Clarke et al. (1999) have argued that foreign banks are more profitable than domestic once in developing countries and less profitable in industrial countries in their research about foreign entry in banking sector in Argentina. Poudel and Hovey (2013) found Institutional Ownership to be significant in Nepalese Banks but failed to find significance in foreigner ownership.
Internal control

The significant components of control (Internal) are the procedures relating to control and environment, and accounting system (Harvey & Brown, 1998). Jansen (1998) pointed out that historically internal controls, has focused conforming employees’ actions to the desires of management. Internal controls are there to protect a financial institution from loss or misuse of its assets (khan, 1994). Poudel and Hovey (2013) found audit committee size to be statistically significant. Ramiz and Inayat (2012) also found audit committee size to be negatively significant on performance variables, ROA and ROE in Pakistani Banks.

Control variables

Bank size

There are several literatures about the size of bank and the performance. Some researchers indicate that a medium sized bank is more efficient than large and small banks (Berger et al., 2005; Noulas et al., 1990; Mester, 1992; Clark, 1996). Drake and Hall (2003) found strong relationship between bank size and technical efficiency and scale efficiency. Similarly, El-Chaarani (2014) found Bank Size to be statistically significant in the study about corporate governance and performance in Lebanese Banks

Bank age

DeYoung and Hasan (1998) found that bank performances are positively affected by bank age. DeYoung et al. (1999) asserted that the bank begins its operations as a financial intermediary firm entering the market and competition on a certain scale. The age of a bank positively affects the bank performance due to age having a positive correlation with experience (i.e. learning curve) which finally leads to higher performance (DeYoung & Hasan, 1998; DeYoung et al., 1999). However, El-Chaarani (2014) found no significance between the age of bank and performance in the study about Lebanese banks from 2006-2010.

Capital adequacy ratio

Previous studies on bank performance show that Capital Adequacy Ratio (CAR) also affects the performance of the banks (DeYoung & Hasan, 1998). A Capital Adequacy Ratio is set by the regulators to meet minimum capital requirements so bank’s management will manage their assets properly and will have an increase in performance (Unite & Sullivan 2003; Naceur & Kandil 2009). The operational functions and security functions can be increased by the compliance with a Capital Adequacy Ratio (Siamat 2004). The performance of the bank can be improved by an adequate level of Capital Adequacy Ratio accompanied by effective and efficient bank management and lending activities (Utama & Musa 2011).

Methodology

A quantitative method of data analysis which involves a descriptive analysis and multiple regression analysis is employed to analyse the normal distribution and the deviation of regression variables. Multiple regressions are conducted to achieve the purpose of the study: corporate governance and performance in Commercial Banks in Nepal.
Population and sample of the study

In this study the population consists of the commercial banks of Nepal with are total 30 in numbers as per their listing on Nepal Stock Exchange (NEPSE) index. As the population of Class A bank is 30, but 3 banks are excluded, hence the sample size will is 27 banks. Nepal Rastra Bank is excluded from the research due to unavailability of data, Civil Bank Ltd and Century Commercial Bank Ltd are excluded as they were established in 2011, whereas the data has been collected from 2010-2014.

Regression models

The performance of the bank is measured by Efficiency, ROA and ROE. Hence, the plan that is used for the research is the secondary data from annual reports, financial statement, the website of the respective banks as well as the website of Central bank and yearly report of Nepal Rastra Bank (central bank). The performance of Banks from their annual reports is the elements of population of research and the data from 2010-2014 is taken as 7 banks were established in between 2008/2009 fiscal year. Hence for 1 bank the data for 5 years is used and for 27 banks the number sums up to 135 observations.

three measures of regression models are used to find the Bank performance.

1) Efficiency= $\beta_0 + \beta_1 BS + \beta_2 BD + \beta_3 BI + \beta_4 OS + \beta_5 IC + \beta_6 BKs + \beta_7 BA + \epsilon$
2) ROA= $\beta_0 + \beta_1 BS + \beta_2 BD + \beta_3 BI + \beta_4 OS + \beta_5 IC + \beta_6 CAR + \beta_7 BKs + \beta_8 BA + \epsilon$
3) ROE= $\beta_0 + \beta_1 BS + \beta_2 BD + \beta_3 BI + \beta_4 OS + \beta_5 IC + \beta_6 CAR + \beta_7 BKs + \beta_8 BA + \epsilon$

Where,

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Variables</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS</td>
<td>Board Size</td>
<td>the number of directors on the board</td>
</tr>
<tr>
<td>BD</td>
<td>Board Diligence</td>
<td>the number of board meeting held during the year</td>
</tr>
<tr>
<td>BI</td>
<td>Board Independence</td>
<td>the percentage of independent director to board size at the end of each year</td>
</tr>
<tr>
<td>OS</td>
<td>Ownership Structure</td>
<td>percentage of ownership owned by institutional owners and large shareholders</td>
</tr>
<tr>
<td>IC</td>
<td>Internal Controls</td>
<td>the number of member in audit committee at end of each year</td>
</tr>
<tr>
<td>BKs</td>
<td>Bank Size</td>
<td>natural logarithm of total assets.</td>
</tr>
<tr>
<td>BA</td>
<td>Bank Age</td>
<td>age of bank since its establishment.</td>
</tr>
<tr>
<td>CAR</td>
<td>Capital Adequacy Ratio</td>
<td>Percentage of capital reserved for liquidity</td>
</tr>
<tr>
<td>EFF</td>
<td>Efficiency</td>
<td>ratio of non-performing loan to total loan at the end of each year</td>
</tr>
<tr>
<td>ROA</td>
<td>Return on Assets</td>
<td>Net income divided by total assets</td>
</tr>
<tr>
<td>ROE</td>
<td>Return on Equity</td>
<td>Net income divided by common equity</td>
</tr>
</tbody>
</table>
Empirical findings

Descriptive statistics were calculated for Corporate Governance variables and Control variables against firm performance variables of Efficiency, ROA and ROE in this study. Descriptive statistics describe the characteristics of Board Structure, Ownership Structure, Bank Size and Age among Commercial Banks in Nepal and the variables used to measure the performance of these Commercial Banks. Similarly the descriptive statistics also describe the measurement variables of different size and different age with the performance (Table 2).

Table 2 Descriptive statistics of corporate governance and control variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFF (%)</td>
<td>135</td>
<td>.000</td>
<td>24.200</td>
<td>2.314</td>
<td>3.306</td>
</tr>
<tr>
<td>BS (No.)</td>
<td>135</td>
<td>4</td>
<td>10</td>
<td>7.50</td>
<td>1.251</td>
</tr>
<tr>
<td>BD (No. of Times)</td>
<td>135</td>
<td>12</td>
<td>67</td>
<td>15.21</td>
<td>8.670</td>
</tr>
<tr>
<td>BI (%)</td>
<td>135</td>
<td>10.00</td>
<td>25.00</td>
<td>13.764</td>
<td>2.644</td>
</tr>
<tr>
<td>OS (%)</td>
<td>135</td>
<td>.12</td>
<td>100.00</td>
<td>50.273</td>
<td>26.611</td>
</tr>
<tr>
<td>IC (No.)</td>
<td>135</td>
<td>2</td>
<td>5</td>
<td>3.68</td>
<td>.769</td>
</tr>
<tr>
<td>BKS (ln)</td>
<td>134</td>
<td>21.570</td>
<td>25.206</td>
<td>24.047</td>
<td>.649</td>
</tr>
<tr>
<td>BA(Years)</td>
<td>27</td>
<td>5</td>
<td>77</td>
<td>17.78</td>
<td>15.240</td>
</tr>
<tr>
<td>ROA (%)</td>
<td>135</td>
<td>-4.96</td>
<td>8.15</td>
<td>1.492</td>
<td>1.285</td>
</tr>
<tr>
<td>ROE (%)</td>
<td>135</td>
<td>-278.73</td>
<td>65.56</td>
<td>14.420</td>
<td>27.858</td>
</tr>
<tr>
<td>CAR (%)</td>
<td>135</td>
<td>-11.13</td>
<td>70.00</td>
<td>13.228</td>
<td>7.416</td>
</tr>
</tbody>
</table>

Before running a regression, a correlation test is done among the explanatory variables to identify the multicollinearity problem (Table 3). The correlation coefficient examines the relation between the financial variables. According to Tabachnick and Fidell (2007), the correlation exceeding ±0.9 is supposed to have multicollinearity problem. The table 3 shows there is multicollinearity problem between two independent variables Board Size and Board Independence with the correlation coefficient of -.973. Hence, two separate regression for each model is conducted one excluding Board Size and another, excluding Board Diligence.
Table 3 Correlation

<table>
<thead>
<tr>
<th></th>
<th>EFF</th>
<th>BS</th>
<th>BD</th>
<th>BI</th>
<th>OS</th>
<th>IC</th>
<th>BKS</th>
<th>BA</th>
<th>ROA</th>
<th>ROE</th>
<th>CAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFF</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS</td>
<td>-.108</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BD</td>
<td>.245**</td>
<td>.116</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BI</td>
<td>.096</td>
<td>-.973**</td>
<td>-.083</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OS</td>
<td>-.191*</td>
<td>-.040</td>
<td>.000</td>
<td>.065</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC</td>
<td>-.052</td>
<td>.134</td>
<td>.189*</td>
<td>-.147</td>
<td>.128</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BKS</td>
<td>.071</td>
<td>-.171*</td>
<td>.213*</td>
<td>.195*</td>
<td>.087</td>
<td>.298**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank age</td>
<td>.193</td>
<td>-.503**</td>
<td>-.183</td>
<td>.524**</td>
<td>-.610**</td>
<td>-.369</td>
<td>-.089</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>-.346**</td>
<td>-.158</td>
<td>.201*</td>
<td>.204*</td>
<td>.172*</td>
<td>.208*</td>
<td>.143</td>
<td>-.283</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROE</td>
<td>-.468**</td>
<td>-.081</td>
<td>.031</td>
<td>.105</td>
<td>.130</td>
<td>.068</td>
<td>.222**</td>
<td>.734**</td>
<td>.628**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CAR</td>
<td>-.184*</td>
<td>.247**</td>
<td>.091</td>
<td>-.286**</td>
<td>.095</td>
<td>.013</td>
<td>-.534**</td>
<td>-.675**</td>
<td>.169</td>
<td>-.036</td>
<td>1</td>
</tr>
</tbody>
</table>

The regression of Corporate Governance and Control variables on Dependent variable Efficiency, ROA and ROE is done in Table 4 as follows:

Table 4 shows the multiple regressions of all the 3 models with 135 observations for each model. The Durbin-Watson statistics range between 1.515-1.956, which shows the absence of significant autocorrelation. The F-statistics explains the most possible combination of predictor variables that could contribute to the dependent variables Efficiency, ROA and ROE.

Table 4 Regression

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Model 1 Efficiency</th>
<th></th>
<th>Model 2 ROA</th>
<th></th>
<th>Model 3 ROE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BS</td>
<td>-.358</td>
<td>-.241***</td>
<td>-.353</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BD</td>
<td>.102***</td>
<td>.020</td>
<td>-.128</td>
<td>-.126</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BI</td>
<td>.146</td>
<td>.145***</td>
<td>.379</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OS</td>
<td>-.024**</td>
<td>.005</td>
<td>.113</td>
<td>.091</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IC</td>
<td>-.302</td>
<td>.237</td>
<td>-.265</td>
<td>-.133</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BKS</td>
<td>.146</td>
<td>.362*</td>
<td>13.869***</td>
<td>13.711***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BA</td>
<td>-.005</td>
<td>-.003</td>
<td>.744*</td>
<td>.722*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAR</td>
<td>-.004</td>
<td>.051***</td>
<td>.693</td>
<td>.705*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R square</td>
<td>.122</td>
<td>.188</td>
<td>.214</td>
<td>.100</td>
<td>.100</td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>1.720</td>
<td>1.575</td>
<td>1.515</td>
<td>1.897</td>
<td>1.901</td>
<td></td>
</tr>
<tr>
<td>F Statistics</td>
<td>2.954</td>
<td>4.200</td>
<td>4.947</td>
<td>2.005</td>
<td>2.204</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>135</td>
<td>135</td>
<td>135</td>
<td>135</td>
<td>135</td>
<td></td>
</tr>
</tbody>
</table>

Note: *** Significant at 0.01 level **- Significant at 0.05 level *- Significant at 0.1 level.

The regression of Efficiency and Corporate Governance is shown on Model 1 in table 4. Efficiency is measured by the ratio of Non-Performing loan, the lower the NPL the higher the efficiency of banks. We can see negative coefficients between Efficiency and Board Size, Ownership Structure, Internal Control and Bank Age. The independent variable Ownership Structure has significant negative relationship with Efficiency which implies that higher number of institutional ownership has significant
effect on bank’s efficiency. Similarly, Board Diligence has significant positive relation with Efficiency which implies less numbers of board meetings has better effect on Efficiency.

The given table 4 (Model 2) gives the result of the regression of dependent variable ROA with Corporate Governance and control variables. The Corporate Governance variables like Board Size, Board Independence, Internal Controls, Bank Size and Capital Adequacy Ratio have significant effect on ROA. The negative relationship between Board Size shows that decreasing the board size will yield better ROA. Similarly, increasing the size of total assets also significantly increases the ROA. Capital Adequacy Ratio is found to be significant in case of ROA, maintaining the adequate level of capital can give higher Return on Assets (ROA).

The table 4 (Model 3) shows the result of the regression between dependent variable ROE and independent variables. Here we can see the minimal significance between ROE and Corporate Governance variables. However, ROE is significantly affected by control variables Bank Size and Bank Age. The positive relationship shows that increasing the total assets will improve ROE ratio in Nepalese commercial banks. Similarly, the newly established banks are found to be low in ROE. The independent variables like Board Size, Board Diligence, Ownership Structure and Internal Control have minimal significance with ROE.

Conclusion and discussion

Conclusion

The study found that Board Diligence and Ownership Structure have significant effect on Efficiency of Commercial Banks in Nepal. Board Diligence has positive relation with Non-performing Loan to Total Loan ratio, decreasing the frequency of board meetings will have positive impact on Efficiency of banks. Similarly Ownership Structure has negative relation with Non-performing Loan to Total Loan ratio, increasing the percentage of institutional and foreign ownership will have positive effect on Efficiency of Commercial Banks in Nepal.

ROA is another dependent variable which is significantly affected by Board Size, Board Independence, Bank Size, Internal Controls and Capital Adequacy Ratio. Board Size has negative impact on ROA, proposing smaller board size is good for ROA. Similarly, Board Independence has positive contribution to ROA. Increasing the percentage of outside directors can increase the ROA. Bigger banks are found to be more efficient in terms of ROA. The Audit Committee should also be bigger for better ROA, which is shown by significant positive contribution by Internal Controls. Similarly Capital Adequacy Ratio has positive impact hence increasing the CAR will have positive impact on ROA.

The analysis of ROE shows that ROE is positively affected by control variables Bank Age, CAR and Bank Size. The older banks are found to be better performing on giving returns to its shareholders. Similarly the large sized banks are more efficient on giving higher Return on Equity. The adequate level of Capital Adequacy Ratio is also necessary for better Return on Equity.
Discussions

Board size
This research found that large Board Size positively impacts the performance of commercial banks in Nepal. In case of Efficiency, the Board Size is negative, meaning large membered Board Size is responsible for lower Non performing loans (NPL). This is consistent with the findings of Zhara and Pearce (1989) and Mak and Li (2001) which suggest positive relationship between Board Size and Performance. However ROE has negative but insignificant relation with Board Size, which is in line with Ghabayen (2012) where no relationship with Board Size and performance is established. ROA has a very significant negative relation with Board Size. The result of this study does not support the findings of Haniffa and Hudaib (2006) that proposed a statistically significant relationship and positive relationship with Board Size and ROA. Mangla (2012) also found significant relation between Board Size and ROA and ROE in the research about banks in Pakistan. However Willesson (2014) failed to find any significant relation between ROA and Board Size in the study about Corporate Governance in European Banks. Similarly, Ajanthan et al. (2013) also failed to find significant relation between Board Size and ROA and ROE in the study about Corporate Governance and banking performance in Sri Lanka.

Board diligence
The study found significant positive relation between the ratio of NPL (Efficiency) and Board Diligence, meaning higher number of board meeting will have negative impact of performance. This is consistent with the research of Vaefas (1999) and Poudel and Hovey (2013) that concluded negative relation between Board Diligence and performance. Similarly, both ROA and ROE have no significant relationship with Board Diligence, which is consistent with Velnampy (2013), Klien (1998), Tai (2015), Brick and Chidambaran (2008), Bhagat and Black (2000), which failed to find any significant relationship between board monitoring and accounting returns.

Board independence
The result of this study showed not any significant effect of Board independence and performance measures of Efficiency and ROE, and a significant positive effect on ROA. This supports Klien (2002) that independent directors are not effective. Similarly, the result also supports Bhagat and Black (2002) and Kajola (2008) that failed to find relationship between performance and Independent Director. The significant positive relation between Board independence and ROA is consistent with Zhara and Pearce (1989) and Choe and Lee (2003) which emphasized higher proportion of independent directors for better performance. Tai (2015) in the study about Gulf Banks found the contribution of Board independence and ROA and ROE not statistically significant.

Ownership structure
The study found Significant negative relation between Non- performing loan and Ownership structure, which means Institutional Ownership has positive relation with efficiency. This is consistent with the findings of Poudel and Hovey (2013) and Han and Suk (1998) that emphasized that higher institutional ownership is positively
related to performance as the top management is monitored more actively. However other 2 Accounting measures (ROE and ROA) have no significant relationship with Ownership Structure. Mangla (2012) in the research about banks in Pakistan also failed to find significant relation between Ownership Concentration on both ROA and ROE.

Internal control
This study is able to find significant positive contribution of internal controls on ROA, other than those other Models of bank performance do not have significant contribution. This finding is consistent with Klien (2002) and Poudel and Hovey (2013) which found significant positive relationship. The findings of this study disagree with Rouf (2011) in Bangladesh and Ghabayen (2012) in Saudi Arabia, which found no significant effect of audit committee size on performance.

Bank size
The study found significant relationship with Bank Size and Bank performance in Nepal. The relationship with ROA and ROE is found to be statistically significant. Utma and Musa (2011) found the Bank Size to be positively significant on both ROA and ROE in the study about Corporate Governance and performance in Indonesia. Love and Rachinsky (2007) also found Bank Size to be positively significant with ROE in Russia and positively significant with both ROA and ROE in Ukraine. This relationship is also emphasized by Drake and Hall (2003) and Miller and Noulas (1996). Similarly, Hasan and Marton (2003) also found Bank Size positively related with efficiency in Banks in Hungary. Sathye (2001) also found a positive relation between performance and size in Australian Banks.

Bank age
The control variable Bank Age has been found to have positive significant effect on ROE. Other dependent variables Efficiency and ROA do not have significant impact on Bank Age. El-Chaarani (2014) in the research about Lebanese banks found Bank Age to be without any significance on ROA and ROE.

Capital adequacy ratio
This study used capital adequacy ratio for accounting performance only, hence only ROA and ROE was used to find the contribution of Capital Adequacy Ratio in Nepalese Commercial Banks. The study found CAR statistically significant positive relationship with ROA and positive relationship with ROE. The significant relationship between ROA and CAR is recognized by Praptiningish (2009) in the study about Corporate Governance and Bank Performance in Indonesia, Philippines, Malaysia and Thailand. Similarly the positive but insignificant relation is consistent with Aebi et al. (2012) in the research about corporate governance and bank performance in financial crisis. Fanta et al. (2013) also found significant positive impact of CAR on ROA.

Implication of the study
In terms of Efficiency, there should be lower number of board meetings as high frequency of Board meetings negatively affects the efficiency while the banks with higher institutional ownership perform better. To increase the ROA, the Board Size should be smaller, Independent director percentage in the
board should be high and the total assets should be greater in proportion to other banks. Similarly, the leverage should be below 20% and there should be more than 10% of capital reserved for CAR. ROE is mostly affected by the control factors, Bank Size and Bank Age. The results indicate that bigger and older banks are more efficient in terms of ROE. They are able to mobilize funds better than new and smaller banks.

**Research recommendation**

**For banks**

The study recommends that the Board Size in Nepalese Commercial banks should not be large. The percent of independent directors (Board Independence) should also be high, as all banks have only 1 independent director, therefore the bigger Board Size make the percentage of independent director low. The bigger sized banks (Bank Size) are performing better, so it is necessary to maintain sufficient capital to attain better performance. The research also found that the older banks (Bank Age) are more efficient than the new banks. Hence, the new banks should follow the strategy of old banks to be more successful.

**For policy makers and regulators**

The result obtained from this research has several recommendations for policy makers and Regulators. The Central Bank of Nepal, Nepal Rastra Bank (NRB) is the sole body to implement the corporate governance as well as other banking policies and regulating them. The findings stress the importance of central bank in monitoring and guiding the commercial banks for better performance. The results, shows the Board Size was exceeded to 10 persons in 1 bank, hence effective monitoring is necessary. Regarding Board Diligence, most of the banks are having board meetings 12 times a year, just to maintain the central bank guideline, but there is no maximum limit and board meetings have been held 67 times also. There should be a policy for maximum number of board meetings also as higher numbers of board meeting are negatively contributes to the performance of commercial banks. The results also show the some of the banks are not maintaining the Capital Adequacy Ratio of 10% as proposed by Basel Committee, hence effective regulations are also necessary.

**Limitations**

The sample of this study has excluded three banks. Rastriya Banijya Bank is excluded because of unavailability of data. Similarly, Civil Bank and Century Commercial Bank are excluded as they were established on 2011, whereas the data is collected from 2010 to 2014. Hence, the outcome of this study misses the data of these 3 banks. The study considers the data of 5 years from 2010 to 2014. For better understanding of the situation, multiple numbers of years has to be considered, as 5 years is a short time. The data used in this study are collected from the annual reports and financial statement of commercial banks, annual reports of the central bank and the respective banks websites. The data in the reports are subjected to manipulation, the assets may be undervalued, the different methods of depreciation used by banks may produce alterations, different ways of treatment of certain expenditure.
and revenue items. The study explored only 7 Corporate Governance and Control factors, however in general there are a lot of factors like GDP growth rate, inflation, foreign exchange rate, market interest rates (Poudel and Hovey, 2013) that affect the performance of banks.

The researcher believes that these limitations do not compromise on the validity or conclusions drawn based on the results.

**Further research**

For future research, it is suggested that the use of larger data set, including the cross-sections and time series data, in order to get more accurate and reliable data analysis. The sample size should be increased along with the number of years considered for data collection, similarly, instead of yearly data, quarterly data set can be used in order to be able to assess the effectiveness and implication of policies related to the corporate Governance and Control mechanisms. Future research should also consider adding more Corporate Governance and Control factors like the number of board members attending the board meeting, number of audit committee meeting, the qualification of board members, the average tenure of the board members, market returns as well as macroeconomic factors than the existing 7 in this study. The ownership structure can also be divided into domestic institutional ownership and foreign institutional ownership to test the Corporate Governance and performance in further studies.

**References**


