IMPACT OF BOARD STRUCTURE ON THE PERFORMANCE OF RURAL AND COMMUNITY BANKS IN THE EMERGING ECONOMY CONTEXT

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1. INTRODUCTION

Governance may be defined to include the structures and processes that allow an organization to make decisions, to be accountable and to control and ensure the proper behaviour in the organization for its growth and development. The United Nations Economic and Social Commission for Asia and the Pacific have defined governance as the process of decision making and the course by which decisions are either implemented or not implemented. Thus ‘good governance’ is the process that has fulfilled or is in accordance and harmony with some features deemed appropriate or standard, acknowledged, recognized and accepted by the international bodies and organizations (Mahmod, 2013).

The paper sought to examine the extent to which board structure impacts on the performance of rural and community banks (RCBs) in emerging economies, using the Brong Ahafo Region in Ghana as a case study. A panel data comprising the financial reports from 2010 to 2016 of eleven (11) RCBs were used for the study. The fixed effect modelling was used to examine the extent to which board structure impacts on the performance of the RCBs. Our results show that previous year’s returns on assets and equity as well as the board size and female composition had positive and significant relationships with returns on assets and equity respectively while board diversity had a significant and negative impact on return on equity. The implication for this study is that there is the need to control board size, while board diversification that considers female representations as part of its composition would go a long way to enhancing a firm’s performance. It is recommended that further studies be carried out to determine corporate board structure and its impact on management compensation in the rural and community banks in emerging economies.

Keywords: Board Structure, Return on Assets, Return on Equity, Corporate Governance, Ghana

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According to Buchs and Mathisen (2005), promoting corporate fairness, accountability and transparency is what constitutes corporate governance. Therefore, factors including lack of transparency, accountability and poor ethical conduct are responsible for poor corporate performance, especially in the financial sector. Good Governance is a very important tool for survival and an indicator of how predictable the system for doing business in any nation is. According to Matama (2008), the importance of governance in developing countries is to strengthen the foundation of society and chip into the global economy.

Good corporate governance includes putting in place the structures, processes and mechanisms that will ensure that the firm is directed and managed in
a way that enhances the long term shareholder value through the accountability of managers for ensuring the growth of the firm.

A stable board structure is fundamental to building the estimation of the firm in all the types of financial organizations. The financial stability and business values may differ because of the divergent arrangement of corporate governance in the growing and firmly-established organizations. An unrivalled board structure enhances the organization's decision-making and conceivably profit maximization abilities with an adequate level of corporate accountability (Thomsen & Conyon, 2012).

In the interim, do our financial sector boards have personnel with the essential requisite skills and experiences? Are they responsive to their roles? Do they pursue self-interest goals at the expense of stakeholder goals? Why would some governing boards and chief executives woefully derail and fail in the execution of their duties? Are there disagreements within boards and between boards and management resulting in squabbles? Are there concentrations of powers from a combination of positions in one single individual? Why would some stifle effective planning and decision making by stakeholders? It is therefore indispensable to explore answers to these and many other demands in the quest of examining the role of boards in enhancing excellence in service delivery and overall performance in the financial sector.

This study seeks to extensively contribute to the literature on corporate board structure and corporate governance in an emerging and developing country context by examining the effects of board structure on the financial performance of rural and community banks (RCBs) in Ghana, using the Brong Ahafo region as a case study to provide more empirical evidence at the local level. There is a huge gap between the study of corporate governance structure on Commercial Banks and RCBs in Ghana and this study seeks to bridge that gap. The choice of the Brong Ahafo is not a matter of convenience but it is the fact that the region is among the four regions with a high number of community and rural banks in Ghana. The general aim of this study is to: examine the extent to which board size and composition impact on the financial performance of RCBs, determine if board committees impact on the financial performance of RCBs, examine the effect of board independence on the financial performance of RCBs and, to investigate how board diversity significantly affects financial performance of RCBs.

The study will guide Policy-Makers to formulate good corporate governance policies to maximize shareholders' wealth. In light of the results of this study, corporate governance parties could formulate a model of corporate governance values that amplify and ensure the maximization of stakeholders' value. Corporate leaders can separate their business and send trustworthy signs to pull in investors by adopting good practices and corporate governance policies. In addition, corporate organization management can use the results of the study to minimize investment risk and increase shareholder confidence in business performance. Financial marketers can reduce the cost of capital, improve the market value and reputation of their companies, and raise the necessary funds for operation and expansion by improving corporate governance practices. Section one of the paper deals with the introduction while section two deals with the theoretical literature and review of previous studies. The third section of the paper deals with the methods for analysing our data while the last section deals with the discussion of our results and conclusion.

2. THEORETICAL LITERATURE

2.1. Theories of corporate governance

In this area, a portion of the theories of governance, including organization theory and institutional theory as a hypothetical reason for this investigation, are discussed to see how they identify with corporate governance.

2.1.1. The agency theory

Supporters of this theory determine an agreement which meets the shareholders and managers as a principal-agent relationship. Per this agreement, directors have one main objective which is to serve and fulfill the interests of the owners. Therefore, anything contrary may result in contractual relations in an agency problem (Ngoungo, 2012). Accordingly, the agency problem emerges if the welfare of the agent depends on another principal. Agency problem emerges when stewardship sets conflicting goals of the owners.

An agent is a man following up for the benefit of the directors and the manager is the individual influencing the activity. Corporate executive seeking after their interests to the detriment of the interests of investors can lead to problems. The executives have data and can utilize organization assets to accomplish their own particular objectives and decrease profits of the proprietors (Pelayo-Macieł et al., 2012). At a point in time when officials’ stakes are low, there is a more likelihood that the pioneers themselves will suggest declining estimation of the works. Thus, pioneers tend to conceal data from investors and settle on choices to seek after their interests. Along these lines, supporters of agency theory trust that stewardship is not generally prone to act and act to the greatest advantage of the proprietors (Al Mamun et al., 2013). Scientists concentrate on stewardship that is self-benefit (Shin-Ping & Hui-Ju, 2011). By this theory, therefore, directors are to work to provide good returns to their stakeholders. We, therefore, expect the structure and composition of the board to impact positively on the returns to equity and assets respectively.

2.1.2. Stakeholder theory

This concept has gained popularity among academics, business leaders, the media and researchers at large. Stakeholders are all individuals and groups who are affected or may affect the achievement of firm targets (Al Mamun et al., 2013). Stakeholders may include shareholders, suppliers, customers, employees, lenders, governments, local charities and various stakeholders. Proponents of this theory argue that strong managers require participants to design and implement appropriate measures to identify the type of relationship that
must exist between managers and stakeholders in achieving their overall goals. According to (Mangunyi, 2011), the value for any business is created by the parties that unite, coordinate, cooperate and to improve the situation of each other.

Several researchers have explained the stakeholder theory though explained differently from the agency theory, they turn to theory, the same concept. The most comprehensive and balanced explanation considers stakeholders that are critical to the success and survival of the company and therefore separating owners from the day to day running of the organization is vital (Al Mamun et al., 2013). Board independence is therefore vital in every organization. This explanation is corporation oriented and is considered part of a larger social system. Business leaders directly or indirectly affect the survival of the company (Al Mamun et al., 2013). The stakeholder theory is a combination of philosophical ideas of law, ethics and economics. The implication of this theory is that board independence has a greater influence on the survival of every company and therefore we expect board independence to impact positively on returns to equity and assets.

2.1.3. Stewardship theory

This theory originated from psychology and sociology while the agency theory originated from economics (Al Mamun et al., 2013). The stewardship theory school of thought accept that objectives are high by large amounts of obligation and performance, and self-inspiration and business security through aggregate activity. Under the stewardship theory, management is benevolent for the advantage of the organization and the ownership (Pelayo-Maciel et al., 2012).

Moreover, a proponent of the stewardship theory assumes that the nature of handling the duty impacts business performance and market value; thus creating more benefits or losses to steward and director (Al Mamun et al., 2013). According to this definition, management is defined as an administrator working for the principal. From another perspective, management theory is defined as action or conduct that specifies the long-term interests of the company and the owners and not interests of individuals. Management plays its role as services align their benefit and interest, as well as achieving firm targets. Consequently, management is to protect the principles and make profits for themselves, while with the agency theory, business leaders work for their own interest (Al Mamun et al., 2013). Just like the agency theory, stewardship theory means that board structure and composition must lead to increasing returns on equity an assets of the stakeholders.

2.1.4. Institutional theory

Advocates of institutional theory deal with the uncertainties of the firm transaction between the economic agents (Al Mamun et al., 2013). The important part of foundations in an economy is to lessen expenses and transaction cost by evacuating the uncertainty and building the foundation of a decent structure that encourages cooperation between organizations. This gives organizations approach opportunities for the dynamic part in an institutional. The institutional condition is characterized as an arrangement of legitimate, social, monetary and political understandings that make the establishment for the creation of products, services and trade base (Yi et al., 2012). This condition as an outer factor is vital for organizations on the transition economies (Yi et al., 2012).

According to this theory, the place where transactions occur is not only at the companies' premises; but there are also social and cultural systems that impact on transactions (Yi et al., 2012). Consequently, the company can survive without legitimacy. The perspective of institutional theory best in an environment where there are high levels of effective laws. Therefore, corporate governance is considered an institutional arrangement that investors are provided with adequate returns on their investments. According to (Yi et al., 2012), the main feature of the institutional theory is openness in business practices and human behaviour. The formation of the social culture of the company is an important factor in institutional theory (Yi et al., 2012). The about theory means that the composition and structure of the board that make up the institution and their relationship with the outside world in terms of business practices and human behaviour must benefit owners in terms of increase in returns to assets and equity.

2.1.5. Resource dependency theory

Ovidiu-Niculae, Lucian and Christian (2012) developed the theory of resource dependency, and postulated that businesses rely on each other to obtain the necessary resources; and therefore links are created between them. Many companies create and maintain social relationships for the continuation of its mandate. This mandate may be performed by a person who is a member of the boards of both companies. The unique combination of the quality of skill, extensive experience and knowledge of the board and senior management would have a positive impact on policy decisions, leading to better organizational performance (Ovidiu-Niculae et al., 2012). According to this theory, there are reasons and incentives for a company to build relationships with external parties, as these help to reduce environmental uncertainties. Companies consider the benefits of connection and participation in an open dialogue, taking into account the direct costs and benefits of their decisions, due to their commitment to dialogue. In addition, companies having good relationships with key players can create values for businesses and reduce their risks. Therefore, companies with strong relationships with their stakeholders face less uncertainty (Rehbein et al., 2013). By this we expect board diversity to impact positively on returns to assets and equity.

2.2. Corporate governance mechanism

Corporate governance has turned into a vital issue in both developed and developing nations after the occurrence of the global financial crisis. The solutions to effective corporate governance systems that protect the shareholders rights and their wealth were developed (Kumar & Singh, 2012). These
systems were intended to lessen the wasteful aspects that come from unfavourable choice and dangers (Vintila & Gherghina, 2012).

There are two kinds of systems components: internal audit mechanism and external monitoring mechanism. All business activities are observed and controlled by internal components, while the external mechanism incorporates control over the business by external stakeholders (Vintila & Gherghina, 2012). Corporate governance makes use of internal control instruments (N'goungo, 2012). However, both could be utilized to adjust the interests of stakeholders and managers (Vintila & Gherghina, 2012). In this area, parts of corporate governance components that are autonomous factors are analysed to see how they impact on the firm's performance. The corporate governance systems of this study are the board size, board independence, board committees, ownership structure, and executive compensation.

The board of directors is a specialty unit in charge of characterizing techniques and arrangements and observing the activities of the organization (Maztoul, 2014; Pandya, 2011). The board of directors is thought to be a team of members with fiduciary responsibility in the stewardship and heading of the activities of the organization for the basic role of ensuring the interests of shareholders and other stakeholders. The board is allotted three basic capacities: agency theory responsibilities, resource dependence responsibilities, and legal responsibilities (Brédart, 2014; Pandya, 2011).

With regard to the agency theory responsibilities, the board is in charge of ensuring the interests of the stakeholders in securing the choices taken for the advantage of the organization, as opposed to the individual interests of the executives, with the goal that the board turns into the overseer of the interest of the owners. As a major aspect of the resource dependence responsibilities, the board is in charge of procuring assets for the organization as far as its associations with different organizations. The legal responsibilities are a guardian obligation; so the board satisfies a specific prerequisite to speak to the lawful privileges of all interested stakeholders. These obligations incorporate enlisting general supervisor and assessing business performance (Stanwick & Stanwick, 2010).

According to Joseph, Ocasio and McDonnell (2014), most corporate organisations' controllers have concentrated on the issue of board autonomy to decrease the impact of the board's executive general. These controllers have required a base division of the board individuals to be free. The motivation behind these standards is that if executives are autonomous from stewardship, they are likely to ensure and guard the interests of investors and different stakeholders (Gábor & Ahmed, 2012). The independence secures the interests of investors and gives control and observing capacities keeping in mind the end goal to adjust the interests of administrators and the interests of stakeholders. Thus, to decrease the cost of the agency, the board must incorporate a larger part of free managers, as they assume the part of key arrangements and the best board observing capacity (Bouchareb et al., 2014; Kumar & Singh, 2012). Autonomy of executives is more viable and particular to control the card than agencies and managers inside because they can moderate the concentrated energy of the CEO, which eliminates the abuse of organization assets and enhance their performance and market esteem.

Ownership structure is unique amongst the most essential factors in corporate governance instruments, which shape the governance arrangement of any nation, since this factor distinguishes the idea of the agency problem. Ownership structure is critical to guaranteeing trained managers, business goals and shareholders wealth. As indicated by agency theory, the better match between responsibility for and corporate control minimizes conflicts of interest, which expands the performance of the organization (Mangunyi, 2011). The level of convergence of an organization's ownership recognizes how power and specialists are separated amongst directors and investors.

According to Darmadi (2011), the cultural diversity and nationality of the management team and board of directors can escalate interpersonal conflicts (Cox, 2007) and multicultural stocks of communication. On the other hand, Oxlheim and Randoy (2003) suggest that the presence of foreign nationals in the board structure is expected to bring competitive advantage for the firm. According to them, it breeds the existence of the global network, more commitment and obligation to the needs of stakeholders, and streamlining of managerial entrenchment and that, with the increasing trends in globalization of business, foreign investors have the opportunity to buy more shares in the company.

2.3. Corporate governance in emerging economies

According to Mulili and Wong (2011), corporate governance in emerging economies is weak, and this is attributed to the lack of professional management strategies, human resources and investor confidence, as well as weak legal and judicial systems. In most developing nations, there are no standards and controls for business stewardship, legitimate and administrative frameworks to ensure the rights and commitments of investors and punishments for violators. According to (Donaldson, 2012; Mande et al., 2014) however, the issue lies in the absence of checking and usage of these frameworks, laws, principles and controls and the selection of a suitable process for keeping the viable implementation of corporate governance. In this manner, the legitimate and administrative frameworks ought to incorporate the selection of guidelines and directions, as well as the foundation of a system for actualizing these principles and controls, and a decent level of consistency with standards and control directions. According to Okpara and Kabongo (2010), there is a lawful structure in developing nations for successful corporate governance, however, consistency and requirement is insufficient or frail. Practitioners have demonstrated that law authorization might be more essential than the law on the part of developing nations (Trivun & Mrgeud, 2012).
2.4. Review of previous studies

Bishnu et al. (2014) examined how board structure impacts on firm performance in Vietnam and observed that the board size and board independence were positively and significantly associated with the firm performance. Similarly, Zubaidah et al. (2014) examined the association between board structure and corporate performance and observed that the composition and size of the board had a positive impact on firm performance. Using a sample of nine banks in Nigeria in the years 2006 to 2010, Onakoya et al. (2014) used a sample of nine banks in Nigeria to examine the impact of board structure on banks’ performance and observed that the structure and size of the board positively influence banks assets, while business governance indicator had a negative impact on bank assets. On duality, size and composition of boards on corporate governance disclosure in Pakistan, Zaheer (2013) found out that, there were least chances for the dominance of the company’s management if the board size is large and that whereas larger board size had positive effects on the level of corporate governance disclosure, CEO duality and board composition were not found to have any significant impact on level of disclosure. The study of Laksmana (2008) supports this orientation that a larger board size brings a diversity of expertise in handling financial and managerial terms in the boardroom. Goodstein et al. (2004) earlier found that the inspiration of the board members’ strategic decision making was adversely hampered by larger board size which eventually produced a negative relationship between disclosure and board size.

The conclusion of a negative relationship between board size and firm’s performance from the majority of US empirical studies have led Hermalin and Weisbach (2003) to conclude that this relation is one of the prominent empirical regularities in the literature. Other studies in the US have found very similar results (Coles et al., 2008) with only two meta-analyses of Adams and Mehran (2005) and Dalton et al. (1999) reporting a positive effect of board size on performance (Guest, 2009). Vo and Nguyen (2014) observed that whereas board size had a significant and inverse relationship with firm performance, female composition had a significant and a positive effect on a firm’s performance. Baloyi and Ngwakwe (2017) on the other hand did not find any significant relationship between CEO’s gender and firm’s performance. This finding is not different from Alm and Winberg (2016) who also found no significant relationship between gender on board and firm’s performance. All the above studies established that the size of the board has a positive impact on firm performance, with a number of proxies used to measure complexities shown to positively influence board size, including financial leverage (Guest, 2008; and Linck et al. 2008) and industrial diversification (Coles et al., 2008). Al-Manaseer et al. (2012) and Pathan et al. (2007) observed a significant and an inverse relationship between board structure and firm performance but a significant and a positive relationship between bank performance and non-executive directors. Zeitun (2017) and Tian (2007) conclusion lends support to other findings that “Ownership structure and concentration are considered as important factors that affect a firm’s health”, as they found that ownership structure had significant effects on return on assets (ROE) in Jordan. Kapopoulos and Lazareto (2006) found that higher firm profitability requires a less diffused ownership. With regard to board committees and diversity, Byoun et al. (2016) observed that firms with gender diversified-board prefer to pay a dividend to stakeholders more than those firms with non-diversified boards. This observation is the same as the findings of Al-Rahahleh (2017). Fauzi and Locke (2012) observed that forming more committees among board members impact positively on firm performance while board diversity impacted negatively on firm performance. This observation is similar to Mohammed et al. (2016) who observed that having various committees among board members impact positively on firm’s performance. A few pieces of research have been conducted to determine the relationship between board composition and firm performance of the banking industry in several OECD countries (Adams & Mehran, 2008; Andres & Valleano, 2008) and found no negative relation between board size and firm performance.

In Ghana, Kyereboah-Coleman and Biekpe (2006), found a significant and positive relationship between board size and firm performance but a significant and negative relationship between bank performance and non-executive directors, so was Bino and Tomar (2012) in Jordan. The corporate governance structure in Ghana has emphasized upon board size. It is, however, unclear to what extent findings from researchers with respect to board size and performance will be applicable for the rural banking sector in Ghana. Another important factor missing with regard to board composition in the researches the authors have come across is the extent to which gender influences board structure and hence performance and this study bridges this gap. Though few studies have been done on Ghana with regard to board structure and bank’s performance none has been done with regard to the board structure of RCBs and how it impacts on these rural banks’ performance. It must be emphasized that the composition of boards of these RCBs may suffer some restrictions as members must be picked from their areas of operation and such could have an adverse impact on their performance.

3. RESEARCH METHODOLOGY

3.1. Data

The collections of financial information including the returns on asset (ROA) and equity (ROE) were from financial statements of the RCBs in the Brong Ahafo Region of Ghana. These data enabled the researcher to analyse the relationship between board structure and financial performance. We wish to state that some of the RCBs were unwilling to provide information with regard to their financial statement and other information needed for the study. A total of eleven (11) RCBs provided such information. Notwithstanding, this number is representative enough and hence conclusions drawn from this research are valid.
3.2. Model specification

Our model for estimating the impact of board structure on the performance of rural and community banks shall be of the form:

\[
\ln \text{ROA}_t = \alpha_0 + \beta_1 \ln \text{SIZE}_{it} + \beta_2 \text{BCOMP}_{it} + \beta_3 \text{BDIVE}_{it} + \beta_4 \text{BIND}_{it} + \beta_5 \text{BCOMT}_{it} + \epsilon_{it}
\]

\[
\ln \text{ROE}_t = \alpha_0 + \beta_1 \ln \text{SIZE}_{it} + \beta_2 \text{BCOMP}_{it} + \beta_3 \text{BDIVE}_{it} + \beta_4 \text{BIND}_{it} + \beta_5 \text{BCOMT}_{it} + \epsilon_{it}
\]

Where:
- ROA and ROE represent financial performance variables;
- SIZE is the board size;
- BCOMP is board composition;
- BDIVE is board diversity;
- BIND is board independence;
- BCOMT is board committees.

The parameters indicated by \( \beta \) are the coefficient of determinants and \( \epsilon_{it} \) is the residuals for the regression analysis. We lag the explanatory variables with the assumption of transitions that it takes at least one year for the explanatory variables to impact on the outcome variables (Masaki & van de Walle, 2014), while we include a lagged term of one year of our outcome variables as independent variables.

The study sought to test the following null hypotheses:

\[\text{H1: Board size and composition have no significant effect on the financial performance of RCBs.}\]

This hypothesis is derived from the stewardship, institutional as well as the agency theories.

\[\text{H2: Board committee has no significant effect on the financial performance of RCBs.}\]

This is also derived from the resource dependency theory that highlights on board diversity to impact on returns to stakeholders.

\[\text{H3: Board independence has no significant effect on the financial performance of RCBs.}\]

This hypothesis is derived from stakeholder theory which stresses the need for board independence from owners in order to be properly accountable and work to the mutual benefit of the board and owners.

\[\text{H4: Board diversity has no significant effect on the financial performance of RCBs.}\]

This hypothesis is also derived from the resource dependency theory that emphasizes on the unique combination of quality skills, extensive experience and knowledge of the board and senior management while making decisions that impact positively the organizational performance.

3.3. Variables and their a priori signs

We expect previous year’s return on assets and return on equity to have a positive impact on return on assets and return on equity respectively and hence we expect positive coefficients for the one year lag of ROA and ROE (\( \text{ROA}_{t-1} \) and \( \text{ROE}_{t-1} \)).

We expect board size as a variable to impact positively on both ROA and ROE and therefore, a positive coefficient for board size. However, there is a limit to which the board size should be increased as beyond that limit we expect diminishing returns to set in therefore have a negative impact on performance (ROA and ROE). We, therefore, expect a negative coefficient of the square of board size (Board size \(^2\)).

4. DISCUSSION OF RESULTS

4.1. Descriptive statistics

Table 1 presents the descriptive analysis of the variables used for the study.

The table showed that on the average RCBs in Brong Ahafo Region enjoy positive profits as indicated by the mean values of ROA and ROE of 2.63 and 20.74 respectively. Nonetheless, a more critical look uncovers that the fluctuation in Return on Equity (ROE) is generally higher than that of the Return on Asset as indicated by their respective standard deviation proposing that the mean ROE probably been pulled upwards by extreme value.

Table 1 further showed the mean board size of Rural Banks in Brong Ahafo is 7.196, suggesting that the banks have reasonably large board size and are able to fulfil their financial obligations. An average board size of 7 demonstrates that the board measure is thought to be lined up with governance structures and more committees as compared to other regions. The average board of directors of 7 individuals can be reasonable, as increasing the number affect the ability of the board to become independent.

Table 1 also showed a mean male composition of 6.57. This is a clear indication that approximately 6 more members of board composition are males compared to female composition in board structure. The male to female composition is lower than that of the Nigerian banks as reported by Onakoya et al. (2014). The average board committee of 2.93 for Ghanaian RCBs has more committees as shown in Table 1. This shows that board committees can guarantee the greatest advantage of stakeholders, including investors for RCBs in Brong Ahafo Region of Ghana. In terms of board diversity, the table showed that the Ghanaian Rural Banks have weak board diversity (approximately 57.10% weak). This is an indication that the Ghanaian RCBs board is not diversified. The most vital component for a successful board is to have a greater part of board diversification.

With respect to board independence, the mean rate of 62.5% for Ghanaian RCBs was reported indicating strong independence of the board. This supposes that over half of the composition of directors were independently selected.
Therefore, there is no possibility of the problem of multicollinearity present in the regression analysis.

4.2. Test for correlation

Table 2 illustrates the correlation matrix for the study variables. Generally, the correlation coefficients between independent variables are low, indicating that the variables are not highly correlated with each other and therefore the problems associated with multicollinearity do not affect our regression analysis.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Mode of measurement</th>
<th>Mean</th>
<th>Std. dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>Return on asset</td>
<td>Ratio of net profit divided by total assets</td>
<td>2.63428</td>
<td>1.579</td>
<td>0.19</td>
<td>6.87</td>
</tr>
<tr>
<td>ROE</td>
<td>Return on equity</td>
<td>Ratio of net profit divided by total shareholders’ equity</td>
<td>20.74</td>
<td>8.8308</td>
<td>2.98</td>
<td>43.66</td>
</tr>
<tr>
<td>Board size</td>
<td>Size of the board</td>
<td>Total number of board directors in the company</td>
<td>7.1964</td>
<td>1.1023</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Male comp</td>
<td>Male composition</td>
<td>Proportion of male directors on the board</td>
<td>6.5714</td>
<td>1.4504</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Female comp</td>
<td>Female composition</td>
<td>Proportion of female directors on the board</td>
<td>.625</td>
<td>.75226</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Board committee</td>
<td>Number of committees on the board</td>
<td></td>
<td>2.9285</td>
<td>.89151</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diversity</th>
<th>Board diversity</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Very strong</td>
<td>4</td>
<td></td>
<td>Very strong</td>
<td>10.71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>3</td>
<td></td>
<td>Strong</td>
<td>12.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weak</td>
<td>2</td>
<td></td>
<td>Weak</td>
<td>44.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very weak</td>
<td>1</td>
<td></td>
<td>Very weak</td>
<td>12.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independence</th>
<th>Proportion of independent directors on the board who do not have any material interest in the firm profit</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Very strong</td>
<td>5</td>
<td>Proportion of independent directors on the board who do not have any material interest in the firm profit</td>
<td>Very strong</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>4</td>
<td>Proportion of independent directors on the board who do not have any material interest in the firm profit</td>
<td>Strong</td>
<td>62.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weak</td>
<td>2</td>
<td>Proportion of independent directors on the board who do not have any material interest in the firm profit</td>
<td>Weak</td>
<td>23.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very weak</td>
<td>1</td>
<td>Proportion of independent directors on the board who do not have any material interest in the firm profit</td>
<td>Very weak</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s Construct, 2018

4.3. The impact of board structure on the performance of RCBs

Table 3 is the presentation of our results of the variance inflation factor (VIF). The VIF results show a mean of 2.2 which is less than 5. In light of this, we conclude that the variables are not highly correlated with at least one of the other predictors in the model. Therefore, there is no possibility of the problem of multicollinearity present in the regression analysis.

Table 3. Variance inflation factor (VIF)

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female composition</td>
<td>2.37</td>
<td>0.422632</td>
</tr>
<tr>
<td>Board independence</td>
<td>2.27</td>
<td>0.440591</td>
</tr>
<tr>
<td>Board committee</td>
<td>2.52</td>
<td>0.457232</td>
</tr>
<tr>
<td>Board diversity</td>
<td>2.51</td>
<td>0.464041</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>2.42</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s Construct, 2018

Table 1. Descriptive analysis of variables

In furtherance to this check for robustness is our variance inflation factor (VIF) as a confirmation of no problem of multicollinearity.

Table 4 represents the Ordinary Least Squares (OLS) and the Fixed Effects (FE) results of board structure on the financial performance of the RCBs. For the purpose of this study, the fixed effect was used because the data collected was a panel data with fixed effects characteristics of Rural Banks.

Our results show that previous year’s ROE and ROA have a positive and significant relationship with their current. We also observed that board size was positive and significant in all the two fixed effects regressions (ROE and ROA) as indicated in columns 3 and 5. The results imply that board size affects the firm performance of the sampled RCBs (though there is a limit to which the board size can be increased as indicated by insignificant board size square). Thus, the hypothesis that board size has an effect on firm performance is supported, while our results are consistent to the stewardship, institutional and resource dependency theories. The
results also confirm the empirical findings of (Adam & Mehran, 2005; Dalton et al., 1999; Guest, 2009; Zubaidah et al., 2014) who observed a positive and significant relationship between board size and firm performance. We also observed female composition was positive and significant in determining RCBs financial performance (ROE and ROA). Thus, the hypothesis that female composition has a positive effect on firm performance is accepted. Our result is also consistent with the resource dependency and stewardship theories. The findings support the assertion that in spite of the cultural impediments female board members perform effectively to improve firm performance. In general, a greater representation of female in the board does not only increases the size of the Human Capital Group from which directors can be drawn but also provides additional skills and perspectives that may not be available for all male board (Zubaidah et al., 2014). This finding also supports that of Vo and Nguyen (2014) that the presence of female membership for the board of directors has a positive and significant effect on corporate financial performance.

Regarding board diversity, it was observed that board diversity did not have any significant on return on assets (ROA), however, we observed that board diversity had a negative and significant effect on return on equity (ROE). The implication is that an increase in board diversity results in a decrease in profitability. The study, therefore, supports Fauzi and Locke’s (2012) findings that board diversity has a negative relationship with the performance of New Zealand’s listed banks.

<table>
<thead>
<tr>
<th>Variables</th>
<th>OLS ROE</th>
<th>FE ROE</th>
<th>OLS ROA</th>
<th>FE ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>(ROE),i</td>
<td>0.604***</td>
<td>0.422**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(board size),i</td>
<td>2.013</td>
<td>(1.721)</td>
<td>0.117</td>
<td>(0.139)</td>
</tr>
<tr>
<td>(female comp),i</td>
<td>-0.165</td>
<td>-0.688**</td>
<td>-0.159</td>
<td>0.549**</td>
</tr>
<tr>
<td>(board diversity),i</td>
<td>1.066</td>
<td>-0.583**</td>
<td>0.122</td>
<td>-0.455</td>
</tr>
<tr>
<td>(board committee),i</td>
<td>-1.606</td>
<td>-0.834**</td>
<td>-0.270**</td>
<td>-0.0595</td>
</tr>
<tr>
<td>(board size),i</td>
<td>-0.644**</td>
<td>-5.186</td>
<td>-0.788*</td>
<td>-0.365*</td>
</tr>
<tr>
<td>(ROA),i</td>
<td></td>
<td></td>
<td>0.563***</td>
<td>0.454**</td>
</tr>
<tr>
<td>(board independence),i</td>
<td></td>
<td></td>
<td>0.388**</td>
<td>0.244</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.136</td>
<td>-0.890</td>
<td>-0.300</td>
<td>-3.030</td>
</tr>
<tr>
<td>Observations</td>
<td>77</td>
<td>77</td>
<td>77</td>
<td>77</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.746</td>
<td>0.528</td>
<td>0.788</td>
<td>0.611</td>
</tr>
<tr>
<td>Number of code</td>
<td>11</td>
<td>11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Standard errors in parentheses - *** p<0.01, ** p<0.05, * p<0.1

5. CONCLUSION

Corporate governance in Ghana has assumed an important part in ensuring that stakeholders and owners of firms accrue satisfactory returns on their investments and re-establishing trust amongst investors. This trademark demonstrates the important factor of corporate governance in Ghana that there should be the presence and the practice of good corporate governance as a way of maximizing shareholders' wealth. As indicated by Jensen (2000), an ideal control framework could be accomplished in so far as there is an adjustment of intensity between the contracting parties.

The Ghanaian market has endeavoured to enhance the adequacy of its governance component over the years. It has been acknowledged that organizations with better governance have a higher market value. The board as a key interior governance instrument can assume an essential part in guaranteeing superior practices of corporate governance. The paper was set to investigate the board structure and performance using a sample of eleven (11) Rural Banks in Ghana.

The study showed that the Ghanaian Rural Banks were characterized by higher board size which had a significant effect on financial performance. The results also showed that female composition on the board had a greater and significant influence on firm's performance lending support that gender consideration with regard to women representation at the higher management levels impacts positively on firm's performance. The findings of the study have greater implications in the sense that gender representation and composition of relatively large board size that will deal with an individual member having greater power because of the smallness of board size are inevitable. The study endorsed the regulations that require Ghanaian Rural Banks to choose a fair distribution of gender as representatives of boards while an ideal board size with independent directors to constitute the board. It is recommended that further studies are carried out to examine the impact of corporate board structure on management compensation in the RCBs in Ghana.
REFERENCES


