CORPORATE GOVERNANCE ISSUES IN THE PUBLIC SECTOR: BOARD PERSPECTIVE AND PECULIARITIES

ABSTRACT

Goal: The objective of the paper is to extend the discussions on corporate governance to the public sector and examine good governance from a Ghanaian institutional context.

Design / Methodology / Approach: Literature is based on relevant theoretical concepts and seven explanatory variables of corporate governance. Primary data was abstained through structured questionnaires administered to public servants from the Ministries, Departments and Agencies – MDA’s in Accra. Ordinary Least Square multiple regression was employed to analyze a total valid sample of 568. The findings represent the opinions of board of directors, internal auditors, senior management and employees.

Results: The empirical result shows that audit committees, leadership, board effectiveness, accountability and directors’ qualification are strong determinants of good governance in public organizations. However, board size has no impact on good governance when board independence is negative. There is evidence that international corporate governance principles are reasonably visible without any significant deviations.

Limitation of the investigation: The study is empirically limited with the absence of key variables such as corruption, ethnicity and tribal politics in public organizations in Ghana. These are major factors associated with institutional governance in developing countries.

Practical implications: The study observed a negative relationship between board independence and good governance attributed to lack of board diversity. The study implies that gender balanced boards composed of higher ratio of female directors could enhance decision-making and guarantee board effectiveness.

Originality / Value: The study emphasizes that public and private organizations share almost similar governance indicators, considering the model estimation. There is evidence that corporate governance is gaining popularity in the public sector, a discussion that is often limited to the private sector. The study contributes to the limited existing findings on the subject from a Ghanaian institutional context. Finally, the results validate many empirical opinions about the negative relationship between good governance and board size from different institutional environments.

Keywords: Good Corporate Governance; Accountability; Compliance; Independence.
1. INTRODUCTION

Agency theory, stakeholder theory, stewardship and institutional theory are notable concepts relied on to propose relevant ideas of organisational governance. These concepts address organisational leadership, efficiency and performance challenges peculiar to various countries. Irrespective of the structure of the public sector managerial controls and corporate governance discussions around the world tend to focus on the board. In some cases the arguments support traditional institutional governance standards, which are formed around legal structures and constitutional provisions peculiar to each country (Love, 2010). Similar discussions are centred around institutional variables such as organisational culture, gender pay gap and gender inequality which are being considered as new indicators of institutional governance in a modern society (Organisation for Economic Co-operation and Development, 2004; Brammer et al., 2007). This study intends to advance the discussion from a developing economy’s viewpoint by using influential factors that define the nature and characteristics of a board from a Ghanaian institutional context. The public sector of Ghana include the police, military, fire, prisons and all security services. The ministries consist of the health, education, transport, finance and economics, agriculture, defence and local government among others (Killick, 2010). These public services are collectively supervised by respective boards formed under the authority of the judiciary, executive and the legislative arms of government (Joyce, 2015). The mandate and responsibility given the board by definition prescribes the core functions of governance in the public sector. That include providing leadership and control to support the institutions in charge of providing basic social services in the economy. The concept of corporate governance traditionally originates from corporate business, meaning managing people and controlling resources of the entity to deliver on the expectations of stakeholders. It also ensures a good balance between the interest of the organisation and its stakeholders (Amore and Bennedsen, 2016). The UN defines the public sector as general governmental and public corporations (Weiss and Thakur, 2010).

The paper is structured as follows; Section one outlines the literature on public sector governance and the principles of governance from the board perspective. Section two presents the research design and framework, variable measurement and empirical results, using robustness and a diagnostic test. Section three presents discussion and emerging issues. The paper draws conclusions on the theoretical relevance of the study, its limitation and makes proposals for future studies.

2. LITERATURE REVIEW

2.1 Public Sector Governance

The heritage of governance is attributed to board leadership and the technical roadmap designed to maintain compliance within applicable legal frameworks. This is supported by acceptable organizational cultures and the philosophy linked to the system of central governance structures (Danescu et al., 2015). Public sector governance is defined as the arrangement of resources and systems to meet the collective interest of stakeholders reflecting the achievements of public organizations. Several authorities in governance defined the term as the fulfilment of a purpose, delivering essential services to citizens through efficient consultations and partnerships among institutions based on constitutionally acceptable standards and provisions (Chartered Institute of Public Finance and Accountancy, 2004).

From the corporate perspective the processes involve accounting, reporting on long-term financial and strategic decisions and controlling the organizational behavior from the top, in alignment with the interest of all stakeholders (Clarke et al., 2018). Committee of Sponsoring Organizations of the Treadway Commission (2018), defines governance in its framework as a deliberate effort by the board of directors of an entity who design policies and procedures to guarantee the achievement of the long term strategic objectives. Additionally, the vision of the board is guided by risk identification, commitment to ethics and efficient resource allocation (Committee of Sponsoring Organizations of the Treadway Commission, 2015). In the Ghanaian public institutional context, public sector governance means a collective commitment by various stakeholders and corporations delivering essential services and accounting for resources on a yearly basis through independent evaluation in accordance with legislative instruments guiding public administration.

Public organizations are classified under the Local Government Act (462) of 1993, as defined in the constitution. The sector is decentralized into ten regions and administratively the governance structure is also divided according to Ministries, Departments and Agencies – MDA’s which are accountable to the Public Accounts Committee of Parliament and supervised by the Auditor General, who is the chief custodian of accountable governance (Boadu, 2016). Inconsistencies in financial reporting in the public sector raise major concerns of accountable governance across major sectors providing essential services such as quality healthcare, education, employment, economic growth and the general standard of living. Board of Directors play a vital
role in the governance structure of the public sector, hence empirical researchers are focusing on various aspects of the board which contributes to sound governance and strategic leadership (Organisation for Economic Co-operation and Development, 2004).

2.1 Board Size

The most dominant cases of corporate scandals include Enron, Lehman Brothers, and WorldCom. This represents classical example of corporate misdeeds which drew the attention of policy makers to revisit the role of the board in ensuring transparent corporate behavior based on quality decisions to restore ethical standards (Clarke et al., 2018). Larger boards of up to fifty may pose challenges in the likelihood event that board decisions are influenced by the executive directors’ which could compromise the board independence. From this viewpoint, the following hypothesis is developed: Hypothesis (H1): Board composition, on the bases of numbers, talent and skill, enhances the quality of decision and good governance.

Agency theory prescribes that the higher the degree of directors’ independence the better the decision-making. Identifying the optimal number of directors suitable for developing the strategic philosophy in line with the vision and interest of all stakeholders is a matter of concern (Russell and Lamme, 2016). Lack of consensus among empirical researchers over the ideal board size which could influence quality decision has left the topic open for extensive empirical discussions. Rodríguez Fernández (2015), examined the ratio of executive and non-directors and found no consensus as to whether board composition is of relevance. Hotchkiss (2016), was emphatic that a board size of eight or fewer is ideal and efficient.

2.2 Leadership

The prospects of an organization largely depend on critical decisions to address major objectives. This responsibility is performed by persons who are collectively chosen to visualize and influence the performance from the corporate level (Caperchione et al., 2017). By implication, the board is responsible for drawing the strategic roadmap for a given strategic period, based on the knowledge, skill and expertise brought by its members (Riaz and Kirkbride, 2017; Grillo-Espinoza et al., 2018). It is mandatory to create a conducive internal environment, demonstrate commitment and operate with an organisational culture that is acceptable and understood by the entire organisation. This influences the behavior of members to contribute overwhelmingly without necessarily resorting to undue influence. The study presumes that the leadership qualities of the board influences good governance, hence the following hypothesis is developed to measure the impact: Hypothesis (H2): Leadership qualities based on a balance of knowledge, experience, power and personal intuition enhances good governance.

The leadership qualities of the board of directors also influences the quality of financial reporting objectives, strategic objectives, operational and compliance objectives based on high ethical values (Committee of Sponsoring Organizations of the Treadway Commission, 2018). In most cases remuneration disclosures of the board may be enhanced through a self-regulatory and state regulatory reforms, with the support of legal and societal principles to deal with governance issues in the context of Africa (Letza, 2017).

2.3 Accountability

Accountability is an essential requirement of all public entities, usually enforced by the board, who represents the interest of all stakeholders in the public sector. This duty ensures that public funds are applied according to financial provisions and properly accounted for while they provide value for money (Lartey et al., 2019). Accountability requirements involve setting financial reporting and compliance standards as a priority and ensuring that the entire organization abides by it and considers it the right thing to do (Wang and Sarkis, 2017; de Lourdes Marques et al., 2018).

Governance and accountability relate in many ways, as evident in the work of Black et al. (2018) that adopting and aligning with internationally recognised accounting standards of best practice is the way forward. Also, board of directors are responsible for estimating financial risk by establishing a risk model that will neutralize possible threats, using strong internal control systems as a support mechanism and a shared responsibility between members of the organisation. The study relies on the above viewpoints to examine the role of the board in enhancing accountable governance by assuming the following hypothesis: Hypothesis (3): The Directors ability to demonstrate wide skepticism on financial standards enhances good governance.

2.4 Board Effectiveness

This discussion is centred on performance and the ability to achieve the desired results relative to expectations of stakeholders (Thompson et al., 2015). Board effectiveness is defined as achieving the desired result with a given
resource and within a specified period of time. Board effectiveness requires technical knowledge, resources, processes and system supports. Based on industry experience, directors with a relatively higher age average are deemed qualified due to their vast technical know-how (Committee of Sponsoring Organizations of the Treadway Commission, 2018). The study presumes that if the board is composed of members with the requisite experience and technical knowledge it could be more aligned with the principles of good governance and that will influence delivery on the expectations of stakeholders. Based on the above assumptions the following hypothesis is developed: Hypothesis (4): Board effectiveness enhances the alignment with good governance principles.

Hothkiss (2016), opines that directors above the age of 60 to 70 are aggressive and autocratic, in which cases decision-making becomes one sided and difficult. Board effectiveness also relates to diversity and gender balance issues that will encourage constructive criticisms as well as tolerance of culture, political and religious views.

2.5 Board Independence

Section 404 of the Sarbanes Oxley Act 2002 is mostly referred to on issues of financial compliance, internal control structures and the methods of reporting reliable financial information as attested by auditors (Christensen et al., 2010). The definition of board independence is often taken in context, as most of the factors vary depending on country and organisational setting (Archer, 2016). The role of non-executive directors has often been associated with good governance and performance as clearly stated in the UK corporate governance code (Spier, 2017; Nordberg, 2017). From the corridors of the EU corporate governance and transparency reforms are a priority for all member states in accordance with the European Corporate Law reforms and several other Directives (European Economic and Social Committee and the Committee of the Regions, 2012). The European Commission is currently reinforcing the role of non-executive directors on matters of financial transparency and disclosure of related financial matters such as remunerations. However, individual EU countries have also initiated good governance reforms and that of Germany is documented by, Noack and Zetzsche (2005) in Italy Wieland (2009); France Enriques and Volpin (2007), whereas Enriques and Gatti (2006), captured the overview of corporate government reforms across the EU.

The study examines the degree of board independence in a Ghanaian institutional context, in order to ascertain whether the governance practices conform to the evidence gathered from the EU and other parts of the world. To do this, board independence is hypothesised as follows: Hypothesis (H5): A higher ratio of independent directors enhances the balance of power in decision making.

In France, for example, the new reforms prohibit a board of directors from accessing vital business documents of a company (Wieland, 2009). Whereas in Poland the executive directors are obliged to inform the board on a regular basis about the effectiveness of governance mechanisms (Szczepankiewicz, 2012). The audit committee is mandated to tighten and enforce the requirements of the board independence.

2.6 Board Member Qualification

The performance of the board depends on key elements such as competence and the technical knowledge required to oversee and discharge quality supervisory work. In the views of Dong et al. (2017) the board requires the services of qualified persons with vast knowledge about how things work in accordance with the strategy to sustain the entity long enough to meet its strategic objectives. In other words a good mix of knowledge, integrity, experience and technical knowhow can build an effective board that will enhance good governance. Armstrong et al. (2015), argued that qualified members are determined when the appointment committee follows a rigorous but transparent procedure in winning suitable candidates with outstanding industry specific and personal skills to contribute to change and value. Amore and Bennedsen (2016), claimed that the criteria are limited to persons with expert knowledge in public sector finance, procurement laws and public administration, since much of the challenges facing the public sector is noncompliance. The above viewpoints led to the adoption of the following hypothesis: Hypothesis (H6): The requisite qualification of the board of directors enhances good governance

2.7 Audit Committee

This consists of independent, non-executive directors, tasked to enhance compliance with financial reporting and enforce all available standards both at the corporate level and across the entity. The role of the audit committee is strongly connected to internal control and risk management. Filatotchev et al. (2018), observed that the audit committees contribute immensely to detective and preventive controls, given that the committee is independent of management and autonomous to validate large volumes of accounting and financial information.
Marques et al. (2018), suggest that without a robust internal audit the traditional method of accounting and reporting alone, could hinder the work of the audit committee and make it impossible to keep pace with management on issues of the review to test compliance. Matei and Drumasu (2015), further posit that corporate decisions are based on several factors that include how the senior directors relate with the audit committees within the board structure to champion efficiency. Based on the above supporting literature, the study further hypothesizes that: 

**Hypothesis (H7): An independent Audit committee enhances quality board oversight responsibilities.**

3. METHODOLOGY AND RESEARCH DESIGN

The study sampled public agencies under the Local Government Act 1993 (462) of Ghana and sent 650 structured questionnaires measured at 5 points on the Likert scale; (5 strongly agree to 1 strongly disagree), to fit seven explanatory variables and one dependent variable. Respondents included management, board members, staff and employees working in various Ministries, Departments and Agencies (MDAs). The purpose was to gather primary evidence of good governance and how the principle influences board performance and the efficiency of public organizations in a Ghanaian institutional context (Wintoki et al., 2012). Secondary information was sourced from the Auditor General’s report and particular attention paid to the comments on public sector governance and accountability between 2014 and 2018. A total of 16 public agencies were selected arbitrarily and subsequently stratified to maintain a fair balance of public organizations. A multiple regression technique was applied to measure the degree of relationships, coefficients weights and associations between constructs.

3.1.1 Research Framework, Significance and Problem Statement

Over the years the Organization for Economic Co-operation and Development –OECD, has been engaging governments to initiate policies of good governance centered on integrity, accountable governance and transparency in the public sector (Organisation for Economic Co-operation and Development, 2004). Although the competitive drivers between the private and public sector are different, both sectors share almost similar principles of governance, also referred to as the board characteristics (Kong et al., 2018). In addition, the constitution mandates public organizations to emphasize the government’s commitment to integrity and ethical practices as key components of good governance which shapes the corporate behavior. However, corporate governance has become popular in corporate business than the public sector in many developing countries. Matei and Drumasu (2015), emphasized that institutional governance depends on peculiar critical success factors based on countries, regions, laws, sectors and industries. Therefore the criteria for selecting variables for this study is largely dependent on the jurisdiction, sector, expertise and personal judgment of the researcher in the Ghanaian institutional context and from an African perspective, where corporate governance issues in the public sector are not popularly discussed, due to complex legal and constitutional frameworks and legislative instruments that form the basis of establishing those public organizations. Nonetheless the research variables support the standards prescribed under the constitutional provisions on public administration in Ghana and major international standards (Lartey et al., 2019). The research framework (see Figure 1), shows the variables selected to explain and address weak financial management, inefficiencies and financial irregularities in the public sector as captured in the Auditor-General’s report.

![Figure 1. The Conceptual Framework](source: Authors’ elaboration)
The variables have been well tested and documented but not extensively studied in emerging and developing economies like Ghana.

The unequal dissemination of knowledge on this subject amounts to knowledge disparity between public and private organizations. The variables and hypothesis also motivated by the work of the Committee of Sponsoring Organizations (COSO), on internal controls which embodies many aspects of corporate governance, termed as control environment, also referred to as “tone at the top”. The control environment represents all elements of good governance and characteristics of a board (Committee of Sponsoring Organizations of the Treadway Commission, 1992).

3.1.2 Respondents Profiles

Final responses gathered resulted in 89.3% totally agreed and 10.7% disagreed. Further breakdown of the demographic factors indicate that, out of the 568 valid responses. 100% of respondents were public servants made up of 40% senior management staff and the board of directors who have worked between 23-28 years and above at various ministries including any previous employment in the public sector. The rest fall within 1-5, 6-11, 12-16 and 17-22 years.

The respondents constitute a fair representation of each department; 60% of respondents were unit and sectional heads, supervisors and employees from IT, internal audit, finance procurement/logistics, transport, administration and other specialized units. The respondents’ educational level included 30.5% members of the Institute of Chartered Accountants Ghana, along with those in the process of becoming certified. 27.2% were PhD holders, while 23.6% were master degree holders and 18.7% bachelor degree holders. Additionally 38.4% of the respondents were female while 61.6% were male. 5% of respondents are supporting staff on national service programs and internships which last between 1-2 years.

3.1.3 Variable measurement

The variables adopted in Table 1 were tested previously as governance indicators by various scholars. Leadership (LED), represents the views of Friedman and Miles (2006), and Amore and Bennedsen (2016). It explains the stock of expert knowledge, diversity and the ability of the board to develop a strategic path for the organisation and it is measured using categorical questions about the leadership qualities of the directors. Accountability (ACT) is adopted from Clarke et al. (2018), based on agency theory and it is also measured based on categorical questions explaining the board’s commitment to accounting standards, ethical financial practices and reporting objectives. From the perspective of institutional theory Dedu and Chitan (2013) proposed board size (BSZ) as a measure of the relationship between board composition directors contribution to quality decision-making.

In Table 1 the Board effectiveness (EFF) was adopted from Singh and Vinnicombe (2004), on the basis of examining how the board of directors discharge their oversight duties including assessing a wide-enterprise of

<table>
<thead>
<tr>
<th>Labels</th>
<th>Variables</th>
<th>Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent variable:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GOG</td>
<td>Good Governance</td>
<td>Board responsibility to produce strategic guidance and effective oversight mandate</td>
</tr>
<tr>
<td>Independent variables:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LED</td>
<td>Leadership</td>
<td>Board possessing a fair balance of knowledge and qualities to execute strategic decisions</td>
</tr>
<tr>
<td>ACT</td>
<td>Accountability</td>
<td>Implementation of accounting standards</td>
</tr>
<tr>
<td>BSZ</td>
<td>Board Size</td>
<td>Size of board - members coded ‘0’ if the board members are between five and sixteen, and coded ‘1’ if otherwise</td>
</tr>
<tr>
<td>EFF</td>
<td>Board Effectiveness</td>
<td>Desirable results to stakeholders based on tacit and explicit knowledge and expertise gained over a period</td>
</tr>
<tr>
<td>IND</td>
<td>Board Independence</td>
<td>More than 50% of non-executive directors present on the board coded ‘1’, and ‘2’ if otherwise</td>
</tr>
<tr>
<td>BMQ</td>
<td>Board Member Qualification</td>
<td>Special skills required of board members to fit into the scope of their responsibilities</td>
</tr>
<tr>
<td>ADC</td>
<td>Audit Committee</td>
<td>More than 50% independent outside directors on audit committee coded ‘1’, and ‘2’ if otherwise</td>
</tr>
</tbody>
</table>

Source: Authors’ elaboration
risks that increasingly hinders institutional governance in the public sector. This variable also measures the boards’ ability to pass good judgment of management, observing all judgement traps and avoidable errors while evaluating its own performance.

From the stakeholders’ perspective board independence (IND) was adopted, which explains management’s relationship with the board and how that affects critical decisions in line with expectations of stakeholders, objectivity, ethics and transparency (Aguilera et al., 2006). This variable explains the possibility of conflict of interests and disclosure of material weaknesses. The general method of measuring board independence is by comparing the ratio of the executive and outside directors (Tricker and Tricker, 2009). Board member qualification (BMQ) relates to their requisite knowledge and know-how, based on the educational background of directors. In most cases a board of directors holding professional qualifications such as Certified Chartered Accountant, Management Accountant, postgraduate, bachelor or doctoral degrees belong to this category (Ayuso and Argandoña, 2009) but how the board members’ qualifications impact on good governance and decision-making is a matter of empirical research. An audit committee (ADC) is composed of a group non-executive members who engage external auditors on matters of compliance, internal controls and risks and can influence good governance according to Amore and Bennedsen (2016). They influence decisions in the interest of stakeholders and ensure sound judgement and oversight responsibilities. In order words they limit the tendency of corruption and corporate scandals. This represents the public governance framework developed by OECD in the past 15 years of promoting good governance in first world and developing countries.

3.1.4 The Regression Model

The components of the regression model are given as: X’s are the independent variables (IV’s) and Y represents the dependent variable (governance GOG). The β’s are the unknown coefficients, βj (j=1, 2,...,7), to be estimated using the categorical variables, data and additional information gathered between 2015 and 2018 accounting year. The j is the subscript observation (row) number of each variable. Each β represents unknown population parameters while e represents the errors or residuals of j.

\[ Y_j = \beta_0 + \beta_1 X + \epsilon_j \]  

(1)

1. Y = symbolizes the explained variable (Good governance - GOG)

2. \( \beta_0 \) = symbolizes the intercept of the explained variable.

3. \( \beta_j \) = symbolizes the slope and the coefficients of the variables (\( \beta_1, \ldots, \beta_7 \))

4. \( X_1 \) = Independent variables (Effectiveness, Leadership, Accountability, Independence, Audit Committee, Board Member Qualification & Board Size)

5. \( \epsilon_j \) = represents error, observation row and time.

3.2 Empirical Results

3.2.1 Descriptive Results

Board characteristics are essential elements of organizational performance and it forms the core source of strategy for every organization, both public and private. How each of these board characteristics influences the entity is a matter of quality judgment. In Table 2 the mean represents average values for each construct in the model, while the standard deviation denotes the general distribution of the data relating to the average values and how close the data is to the mean during the period of study.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOG</td>
<td>1.000</td>
<td>5.000</td>
<td>4.144</td>
<td>1.257</td>
</tr>
<tr>
<td>LED</td>
<td>1.000</td>
<td>5.000</td>
<td>3.935</td>
<td>1.230</td>
</tr>
<tr>
<td>ACT</td>
<td>1.000</td>
<td>5.000</td>
<td>4.092</td>
<td>1.109</td>
</tr>
<tr>
<td>BSZ</td>
<td>5.000</td>
<td>16.000</td>
<td>9.108</td>
<td>2.046</td>
</tr>
<tr>
<td>EFF</td>
<td>1.000</td>
<td>5.000</td>
<td>3.572</td>
<td>1.389</td>
</tr>
<tr>
<td>IND</td>
<td>1.000</td>
<td>2.000</td>
<td>1.209</td>
<td>0.407</td>
</tr>
<tr>
<td>BMQ</td>
<td>1.000</td>
<td>5.000</td>
<td>3.800</td>
<td>1.371</td>
</tr>
<tr>
<td>ADC</td>
<td>1.000</td>
<td>2.000</td>
<td>1.093</td>
<td>0.291</td>
</tr>
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</table>

Source: Authors’ calculations
Table 2 reports the summary of the descriptive statistics of the variables, which also represent the average indicators of the variables or the expected values in the observation. The mean value of governance (GOG) is 4.144. This means on average, 4.14% of policies and programs are likely to focus on good corporate governance, given a standard deviation of 1.257. The mean value appears to be lower, compared to a recent survey where 12.89% of corporate policies focuses on risk and good governance in the banking sector of Ghana (PricewaterhouseCoopers, 2018). This is associated with a standard deviation of 1.257 for governance (GOG). According to Fornell and Larcker (1981)’s rule a lower standard deviation means the data points are spread widely around the mean, while a higher standard deviation means the data points are closer to the mean within the range of values. The descriptive statistics also shows that approximately 3.94% and 4.09% of management policies focuses on the board leadership and accountability issues. Whereas the average board size of these public organizations is 9.108 with a slightly higher standard deviation than the rest of the variables. It is important to note that board effectiveness and member qualification form important part of management policies considering their average values of 3.57% and 3.80%. Interestingly, board independence and the audit committees are the least priority factors on average. However, that will be confirmed in subsequent analysis.

3.2.2 Correlation results

Table 3 illustrates the correlation coefficients between -1 and +1. It measures the direction and strength of the relationships between governance and the independent variables. The dependent variable, governance correlates perfectly with itself likewise in all the constructs. Table 3 presents the correlation results showing the relationship between the explanatory variables and Governance (GOG). It shows that between the study variables there is a strong relationship between Leadership and Governance (GOG) at the rate of 80.3%. This result is a confirmation of hypothesis (2), which states that: Leadership qualities based on a balance of knowledge, experience, power and personal intuition enhances good governance is true, and that means the null hypothesis can be rejected. This result supports earlier reports in Table 2, where Leadership policies form a top priority according to the mean values. Accountability also has a positive relationship with Governance (GOG) at a percentage of 88.4%.

There is a strong indication that the board is being guided by all applicable accounting and financial standards, and this will increase the reliability of financial reporting. It therefore suggests that hypothesis (H3) is true and under the circumstance, we may reject the null hypothesis. According to Hypothesis (4), Board effectiveness enhances the alignment with good governance principles. This relationship is confirmed by 0.642 (over 64.2% which is optimistic) correlation coefficient. With regards to board size, earlier report in Table 2 indicated that the average board size is 9.108. However, Table 3 shows a negative relationship with Governance (GOG) and board size, implying that the boards of these selected public organizations might be too large. The study may rejects the alternate hypothesis (H1) which states that; Board composition on the bases of numbers, talent and skill enhances the quality of decision and good governance and rather maintain the null hypothesis which suggests there is no relationship between board size and Governance (GOG). The negative relationship is a confirmation that larger boards are ineffective and may not be suitable for the public sector, it might be effective for the private sector. The coefficients, implies that public organizations are operating within acceptable governance regulations and currently upholding ethical practices, despite a weak correlation coefficients by the audit committees and the board independence. It raise serious concerns about lack of diversity and the ratio of non-executive director serving on the board and its sub-committees such as the audit committees which will guarantee the board independence against undue influence by management. It could be inferred that the model is a good fit as the variables passed the multicollinearity test without extremely high correlation values. Based on the evidence the null hypothesis stating that public boards are not influenced by governance policies considering their average values of 3.57% and 3.80%.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>GOG</th>
<th>LED</th>
<th>ACT</th>
<th>BSZ</th>
<th>EFF</th>
<th>IND</th>
<th>BMQ</th>
<th>ADC</th>
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<tr>
<td>GOG</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LED</td>
<td>.803**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACT</td>
<td>.884**</td>
<td>.868**</td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>BSZ</td>
<td>-.372**</td>
<td>-.303**</td>
<td>-.322**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EFF</td>
<td>.642**</td>
<td>.642**</td>
<td>.754**</td>
<td>.144**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IND</td>
<td>.135**</td>
<td>.092*</td>
<td>.115*</td>
<td>.055</td>
<td>.059</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMQ</td>
<td>.637**</td>
<td>.641**</td>
<td>.770**</td>
<td>.144**</td>
<td>.949**</td>
<td>.067</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ADC</td>
<td>.096*</td>
<td>.062</td>
<td>.047</td>
<td>.062</td>
<td>.044</td>
<td>.018</td>
<td>.031</td>
<td>1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed). Source: Authors’ calculations.
variables may be rejected and proceed with a more robust statistical analysis for further inferential judgment.

3.2.3 Regression coefficients

Table 4 illustrates the regression coefficients and the impact of the independent variables on governance. With minimal error in the regression model the data produced an Adjusted R-Square of 0.938 representing total variance caused by the independent variables on governance and the model fitness. Based on the p-values the null hypotheses associated with Leadership, Accountability, Effectiveness, Qualification and Audit Committees can be rejected at 0.000 significance. The table also confirms that Board size and Independence have no significant impact on Governance, therefore hypotheses (H1) and (H5) can be rejected for the null hypotheses based on their insignificance values of 0.865 and 0.810 respectively. Board Independence and Size have also produced a negative and insignificance coefficient estimates of -0.007 and 0.0007 to justify the rejection of the hypotheses.

This confirms earlier reports in Tables 1 and 2, where the result of weak board independence caused the audit committee to have an almost moderate to weak relationship with governance. However leadership, accountability, effectiveness, qualification and the audit committee are more likely to enhance good governance as per the model’s prediction. The theoretical implication is that decision-making based on these positive coefficients β= (.249, .085, .151, .218 and .179) will enhance governance reforms. It is important to note that none of these principles of governance functions in isolation of the others, therefore in order to achieve the real effect they must be applied interdependently. For example, if the leadership qualities of board is very significant, it allocates power to the audit committee to perform its functions of tightening independent requirements and enforcing accountability at the top level. Additionally, when qualified individuals are appointed to board, based on merit and competence, it will have a big impact on the board effectiveness, since the board is composed of individuals who know what works based on their technical abilities and expertise. The model predicts a 95% confidence interval, hence the significance of the coefficient weights depends on the p values. From Table 4 each construct had strong significance values, with minimum model errors, similar to Tricker and Tricker (2015), who examined the same indicators and suggested leadership qualities are a strong determinant of governance since it aligns the organisation to acceptable legal and regulatory frameworks.

From the viewpoint of directors’ independence it could be inferred that public boards may not be entirely constituted based on merit, competence or expertise. Directors’ political affiliation and bad management philosophy have contributed to weak independence. It also means the board is unable to take certain decisions that may be detrimental to management, hence they stand to compromise their integrity against the collective interest of stakeholders, whiles the size of the board seem to be too large and so it contributes nothing to the quality of governance. Those were the views of Hotchkiss (2016) who advocates smaller boards. The demerits are over bloated boards with many dormant members violates the principles good governance. That is in sharp contrast with Darmadi (2013) who has been studying board effectiveness and often considers board size a critical determinant of corporate governance. However, according to Cucari et al. (2018), size could be significant for listed companies where corporate governance codes are mandatory. This study presents new evidence suggesting that, for private and public entities, size may not matter.

3.3.4 Robustness and diagnostic test

<table>
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<tr>
<th>Factors</th>
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<th>Sig.</th>
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<tr>
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<td>8.410</td>
<td>.0291</td>
<td>.000</td>
</tr>
<tr>
<td>ACT</td>
<td>.085</td>
<td>2.829</td>
<td>.0301</td>
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<td>.0262</td>
<td>.865</td>
</tr>
<tr>
<td>EFF</td>
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<td>4.010</td>
<td>.0443</td>
<td>.000</td>
</tr>
<tr>
<td>IND</td>
<td>-.007</td>
<td>-.241</td>
<td>.0227</td>
<td>.810</td>
</tr>
<tr>
<td>BMQ</td>
<td>.218</td>
<td>8.352</td>
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</tr>
<tr>
<td>ADC</td>
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<tr>
<td>Adjusted R Square</td>
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<tr>
<td>p-value</td>
<td></td>
<td></td>
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</table>

Table 4. Impact on governance

a. Dependent Variable: GOG. Source: Authors’ calculations
Table 5 illustrates the robust standard errors of the coefficients SE (β), and it shows the sampling variation if the data is re-sampled and re-estimated β (Hoechle, 2007). In order to handle any suspected heteroskedasticity and possible autocorrelation all estimates and parameters remained constant in Table 4 except that the standard errors were adjusted into robust standard errors.

After confirming that the data is stationary and having ensured that each explanatory variable is exogenous it was anticipated that the variables could auto-correlate. Leadership, accountability, effectiveness, the audit committee are all significant except independence and board size, having p values greater than p=0.05. In Table 5 the robustness test was meant to confirm the explanatory power of the seven factors and validate the reports in Table 4. Here it could be mentioned that the model suitability is positive, considering the Root mean square error (RMSE) value 0.430. It stands for the standard deviation of the unexplained variations by the model (Jöreskog, 1993). The value of the RMSE explains the accuracy of prediction and model efficiency. In earlier studies an acceptable criteria for a Root MSE was fixed at less or equal to 1 (Jöreskog, 1993). The value provides a reasonable assurance in addition to the significant R-squared value 0.939 and overall p-value= 0.000 of the model. The regression model estimated positive coefficients, however board independence remained insignificant, having little or no impact on governance. The test also confirms that indeed the composition of the board based on members qualification, leadership, accountability, effectiveness and the support of independent non-executive directors on the board are relevant principles to enhance good governance in public organisations. The outcome of the adjusted regression shows a rather significant increase in the standard errors, indicating that, the model has larger standard errors compared to the unadjusted standard errors. The R-square values imply that there is consistency and model fitness without violating the constant variation rule, which could lead to wrongful rejection of the null hypothesis. Subsequent observations are that the coefficients are practically the same (see Tables 4 and 5). Looking at the t-test of the adjusted regression the higher values suggest that the model satisfactorily explains governance, while the variables predicted higher statistical significance making it unlikely to commit a type one error (Hoechle, 2007). The impact of the robustness and diagnostic test did not cause any significant effect on the regression coefficients, nor adjusted R –square values, but the standards errors, t-values and the p values.

### 4. DISCUSSION AND EMERGING ISSUES

The qualities of a board cast a good image on organisation in terms of reputation and expertise, which translates into achievements. Board composed of outstanding and high-quality individuals in respective fields affects the board ability to perform their functions effectively. Board characteristics relate to matters of leadership and delivering results to meet complex expectations, through strategic thinking and accountable governance. This is done by persons from diverse backgrounds determined to make a change, develop talents and create value. These group of experts are charged with responsibilities such as, developing organizational values and philosophy also referred to as the “tone” to drive the vision, guided by ethical practices and all acceptable standards applicable to its core business (Filatotchev et al., 2018). They are required to demonstrate commitment and lead by example, monitor the corporate behaviour and ensure proper reporting of both financial and non-financial events to stakeholders whose interests they represent. These are the fundamental requirements of a well-established board that can deliver quality governance and impact positively on performance. There is emphasis on good governance principles in public organizations,
in alignments with management principles traditionally associated with the private sector, such as internal culture (Ludolf et al., 2017). The findings in this study contribute a new evidence of the determinants of good corporate governance in the public sector using prominent governance principles that apply to both the public and private sector in a developing country perspective. Arora and Sharma (2016), performed empirical of Indian top 100 firms, and found a negative relationship between board size and good governance. In other words this study is a confirmation of the inverse relationship found in previous studies among some Australian top 100 listed companies (Christensen et al., 2010; Calleja, 1999). There is a similar trend in the US according to Aguilera et al. (2006); UK, Brammer et al. (2007); Japan, Bonn et al. (2004); China Wang and Sarkis (2017) and among Swedish top 100 companies and the rest of EU Bajra and Čadež (2018). The case of the top 100 Italian firms was documented by Cucari et al. (2018), a further validation of previously observed negative relationships. It could be inferred that in both private and public sector boards, the size or number of directors may not necessarily affect decision-making like other determinants, considering the insignificant coefficients values reported by board size. In Ghana the law mandates a minimum of 3 and maximum of 12 directors while private companies are allowed between 2 and 15. The number of board members varies across different countries. In many jurisdictions, the maximum number of directors is unlimited, while others prescribe a specific size for various reasons. In India it is between 2 - 15, in China 3 - 13, Spain 3 - 12, and Philippines. 5 - 15, Russia 5 – 10 and France 3 - 18. In Japan, Italy, Singapore, South Korea, South Africa, Ireland, Sweden, USA, UK, Argentina, Belgium, Brazil, Canada, Australia, Austria, Denmark, Finland, and Egypt, the minimum number of board of directors is 1 and 3, but the maximum number is unlimited as captured in Rodríguez Fernández (2015); Aguilera and Cuervo-Cazurra (2004); Stuart (2008); Wibbeke and McArthur (2013). Several researchers are discovering the benefits of working in smaller groups.

Current research is discovering the benefits of the board working in smaller groups. Hotchkiss (2016) opined that boards with a smaller number of directors performs better than larger boards while Blenko et al. (2010) also inferred that quality decision making can only be reached by a maximum of 7 members in a group and that therefore any extra numbers contribute to 10% ineffectiveness. Following this argument, larger boards could mean a good representation of stakeholders in a social, political and governance structure, but may be inefficient. This study has produced evidence that a larger board with a maximum of 16 and average 9.108, as shown in Table 1, is too large, ineffective and that it constitute the old norm. In exceptional cases larger boards may be preferred to keep pace with increasing government responsibilities with the support of various sub-committees.

5 CONCLUSIONS

The paper investigated good governance practices from a Ghanian institutional context and estimated the impact of corporate governance principles using the public sector of Ghana as the unit of analysis. The findings suggest that, out of the seven explanatory variables tested, board leadership, accountability, effectiveness, board members’ qualifications and the audit committee of which the majority are non-executive directors constitute strong determinants of good governance. Moving forward, the theoretical implication provide evidence that corporate governance which is traditionally popular in the private sector, is also effective and gaining acceptance in the public sector in a developing country like Ghana. Comparing the result to similar findings in other parts of the world, it could be concluded that policy makers in the public sector of Ghana are reasonably complying with corporate governance standards. Interestingly, board size is negatively associated with corporate governance irrespective of the sector. This report coincides with other results related to public and private firms in Australian, China and the US (Clarke et al., 2018; Liu et al., 2018; Black et al., 2018). The study also concludes that aligning the board to good governance principles is a difficult task without the support of an independent audit committee consisting of a majority non-executive directors. Their duty includes tightening accountability and ethical standards to ensure that the board remains independent of management. The study concludes that public boards lack independence and diversity in gender balance. The study is not without a limitation in scope. The introduction of specific variables to measure board diversity and gender equality in corporate governance could enhance the empirical significance. However, the outcome is an indication that good corporate governance in the public sector would enhance ethical compliance and minimize cases of opportunistic behavior among those in charge of governance in public organisations.

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