

CORPORATE GOVERNANCE, GENDER DIVERSITY, AUDIT COMMITTEE CHARACTERISTICS AND AUDIT FEES IN GHANA

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ABSTRACT

Purpose: *This study examined the effect of board characteristics, audit committee characteristics and gender diversity on audit fees of listed firms in Ghana.*

Design/methodology/approach: *The study adopted a quantitative approach relying on secondary data extracted from annual report of listed companies in Ghana. The sample includes 21 listed firms excluding commercial banks and insurance companies. Data was collected on the selected companies over a 10-year period from 2010 to 2019. The study used descriptive analysis, correlation analysis and panel regression analysis to analyze the data collected.*

Findings: *The results of the study show that listed firms in Ghana have good corporate governance structures in terms of board size, board independence, board chairperson independence, etc. The study also shows that female representation on board and other top-level positions among listed firms is low. The results of the regression analysis show that board size, board chairperson independence, management shareholding and female representation on the board were significant determinants of audit fees in Ghana. Among these variables board size and independent board chairperson had positive relationship while management shareholding and female representation on the board had negative relationship with audit fees.*

Originality/Value: *The research extends the literature on determinants of audit fees that have focused largely on firm characteristics and regulatory changes to include gender diversity and audit committee characteristics on audit fees in a developing economy (Ghana).*

Practical implications: *The study is important to practitioners it highlights the importance of audit fees determinants. It will help companies to know which governance structures that influence audit fee pricing. The implication of the study is that listed firms may increase female representation on their boards and also increase directors' shareholding to reduce audit fees.*

Research limitations: *The study is limited to a geographical area (Ghana). the authors propose that future studies will widely consider other African countries to improve the scanty literature in the area.*

Keywords: Corporate Governance, Gender Diversity, Audit Committee, Audit Fees, Ghana.

INTRODUCTION

External auditors are considered as one of the most important pieces of the corporate governance puzzle as they help to protect and guarantee the rights and interests of shareholders/investors (Bozec & Dia, 2017; Choi & Yoon, 2014; Desender et al., 2010). The work of the external audit comes at a cost to the firm which is usually determined by the board of

directors (Amran et al., 2014; Hay et al., 2008; Hassan et al., 2014; Gul et al., 2011; Ghafran & O'Sullivan, 2017). The principles of good corporate governance by the Organization for Economic Co-operation and Development (OECD) argues that the board should act on an informed basis, in good faith with due diligence and care and in the best interest of all stakeholders especially shareholders and investors (Jizi & Hehme, 2018). This fiduciary duty is legislated in some countries such as US, Canada, France, Germany, etc. while in Ghana there is no such statutes on corporate governance. A study by Karim et al. (2002) argues that where corporate governance statutes exist, the board is likely to take steps to protect its reputational capital by avoiding legal liability through the demand for more audit services. In this regard, more independent boards may demand a wider scope of audit as compared to executive and less independent boards (Zaman et al., 2011; Desender, 2010). This means that there is some link between board characteristics and external audit and hence audit fees. According to Xiang & Qin (2015) the presence of audit committees and their effectiveness and gender diversity on the board influence audit fees. Most corporate governance mechanisms have made strong case for diversity of which gender is an important component. The diversity of the board also has theoretical justification in the agency theory (Kearney et al., 2009)

The audit function and audit fees are a reflection of the effort put in by the auditor during an audit engagement and the audit risk exposure (Musah et al., 2018; Karim et al., 2016). The extent to which corporate governance practices and gender diversity may influence audit fees remain debatable and have not been examined in the Ghanaian context. Audit fees represent the remuneration auditors receive for providing their legally mandated assurance role as required by the companies Act 2019, Act 992 in Ghana. The amount charged as audit fees is dependent on several variables which include both internal firm characteristics and external market conditions (Carson et al., 2012; Musah et al., 2018; Wu, 2012). The amount charged as audit fees is also very important information hence the requirement that such information be disclosed in the financial statement of companies (Kikhia, 2015; Hentati & Jilani, 2013). Since the seminal work on determinants of audit fees by Simunic (1980) where a model was proposed to determine audit fees, several studies have examined the subject matter in different context using different variables as determinants. Majority of these studies have relied on firm specific variables as key determinants of audit fees (Coffie & Bedi, 2019; Musah, 2017; Joshi & Al-Bastaki, 2000; Hay et al., 2008) and the reputation of the auditor, auditor experience and competition in the market (Hentati & Jilani, 2013; Ask & Holm, 2013; Castro et al., 2015). In recent times, some studies have also examined the effect of regulatory change such as IFRS adoption and other legal changes on audit fees (Musah et al. 2018; Klibi & Klibi, 2016; Camaran & Perotti, 2014; Nulla, 2013; Daske et al., 2008; Loyeung et al., 2016; Choi & Yoon, 2014; Kim et al., 2012; Madawaki, 2012; Jung et al., 2016).

According to Wu (2012) among the key determinants of audit fees in literature corporate governance and its variants has received less attention and represent a relatively new area of research as far as determinants of audit fees is concerned. The aftermath of the several corporate scandals such as Enron and WorldCom has resulted in more interest in internal corporate governance in both research and public policy and discourse (Wu, 2012; Ghafran & O'Sullivan, 2017). Auditors' role in this regard has also been very critical in the discussion which has implications for audit fees. Several studies have since examined how corporate governance mechanism influence audit fees (Wu, 2012; Hassan et al., 2014; Zaman et al., 2011; Farooq et al., 2018). Despite these studies and several other studies on the subject matter (Farooq et al., 2018) argues that how corporate governance mechanisms influence audit fees still remains

debatable as previous studies have provided conflicting results. Moreover, majority of these studies have been skewed to developed and western countries and recently some from emerging economies with little known about the subject matter in Africa and most importantly Ghana. Diversity on boards especially gender diversity is also one area that have received limited attention in terms of how that affects audit fees (Abdul Malik & Che-Ahmad, 2016; Xiang et al., 2015). The study addresses these discrepancies in literature by examining how corporate governance mechanism and gender diversity as well as audit committee characteristics influence audit fees in Ghana. The study makes significant contributions to literature, policy and practice in Ghana and other developing countries in Africa. First, the study contributes to the limited literature on determinants of audit fees in Ghana by extending previous studies that focused mostly on firm characteristics and regulatory change in financial reporting as sole determinants of audit fees in Ghana to include corporate governance structures, gender diversity and audit committee characteristics on audit fees. In this regards the study focuses on corporate governance variables, audit committee characteristics and gender diversity and how they influence audit fees in Ghana. The study also introduces variables such as managerial shareholding which have received little attention in audit fees literature globally.

The results of the study will help regulators and corporate executive know the appropriate corporate governance mechanism to put in place to improve monitoring thereby reducing audit fees through reduction in audit risk. The study will also serve as reference work for advanced studies in the area with a view to expanding literature on determinants of audit fees.

LITERATURE REVIEW

Corporate Governance and Audit Fees

Corporate governance is a set of mechanism put in place by an organization to control management from engaging in activities that are detrimental to the organization (Hassan et al., 2014; Gul et al., 2011; Wu, 2012). Corporate governance is also expected to enhance transparency and accountability and improve the quality of financial reporting thereby contributing towards reducing audit risk. The question as to whether corporate governance structure affect audit fees remains debatable in literature with results from other countries providing mixed results (McNulty & Nordberg, 2016; Ghafran & O'Sullivan, 2017; Jiraporn et al., 2018; Barroso et al., 2018; Jizi & Nehme, 2018). The mixed results are attributed to the differences in corporate governance practices and environment within which the companies operate (Desender et al., 2010). The conflicting results can be grouped into two major categories; namely demand based view and risk-based view. The argument of the demand-based view is that good corporate governance agents will demand high quality audit to ensure validity and reliability of the financial statement and hence higher external audit fees (Farooq et al., 2018). On the other hand, the risk-based perspective argues that good corporate governance structures reduce audit risk which reduces external auditors' effort which will result in lower audit fees (Farooq et al., 2018). The quality of a company's board is determined largely by the corporate governance structures and their role in monitoring and reducing opportunistic behaviour of management (Hay et al., 2008). This responsibility also includes ensuring the quality of financial reporting and information disclosed in the financial statement (Farooq et al., 2018). Which of these perspectives apply to firms in Ghana remains unanswered as studies have not examined the subject matter in the Ghanaian context. The remaining sections examine literature on how some corporate governance structures affect audit fees and development of hypothesis.

Board Size and Audit Fees

Corporate governance studies have always seen board size as an important structure in enhancing the quality of corporate monitoring and financial reporting quality (Lin & Hwang, 2010; Carcello et al., 2002). Studies have shown that board size is associated with its ability to monitor and control the behaviour of management (Lipton & Lorsch, 1992; Farooq et al., 2018). Previous studies have produced conflicting results on the impact of board size on corporate governance effectiveness (Usman et al., 2018; Lipton & Lorsch, 1992; Jensen, 1993). Farooq et al. (2018) in their study found that the effect of corporate governance which includes board size is positively associated with audit fees. On board size as potential determinants of audit fees, majority of previous studies have reported a positive association between board size and audit fees (Jizi & Nehme, 2018; Bozec & Dia, 2017; Karim et al., 2016). In line with the findings of previous studies, the study hypothesizes that;

H₁: There is a positive relationship between board size and audit fees.

Board Independence/Non-Executive Directors and Audit Fees

The inclusion of independent non-executive directors is to help enhance the board ability and capacity of monitoring the opportunistic behaviour of management (Farooq et al. 2018; Wu, 2012; Hassan et al. 2014). This is to help safeguard the interest of shareholders and other key stakeholders. Non-executive directors are believed to have more opportunity to monitor management because they are not under any hierarchical authority and do not face any challenge of retaliation (Jiraporn et al., 2018; Jizi & Nehme, 2018; Hay et al., 2008). Some studies have reported a negative association between the percentage of outside directors and the incidence of fraudulent financial reporting (Beasley, 1996; Dechow et al., 1996). Literature has established that the presence of non-executive directors on the board enhances the board monitoring capacity and reduces opportunistic behaviours. However, the question that remains unanswered is whether this will result in an increase or decrease in audit fees. One school of thought argues that since the inclusion of non-executive directors on the board is a control mechanism for controlling fraudulent financial reporting, they will demand high quality audit which will increase the cost of audit (Hassan et al., 2014). The other school of thought rather see higher monitoring by non-executive directors as reducing audit risk and improving the quality of financial reporting environment which should translate into lower audit fees. In line with this first argument, previous studies have established a positive relationship between non-executive directors and audit fees (Bozec & Dia, 2017; Jizi & Nehme, 2018; Farooq et al., 2018). This study agrees with the assertion that non-executive directors will demand high quality audit which will increase the cost of audits hence high audit fees. In line with the above argument, the study hypothesizes that;

H₂: There is a positive and significant association between proportion of non-executive directors on the board and audit fees.

Management Holding and Audit Fees

Management holding is one of the new corporate governance variables introduced in recent studies as it has the potential to reduce management opportunistic behaviours.

Management shareholding is measured as the percentage of shares held by board members (Farooq et al. 2018). Management shareholding can be one of the most effective mechanisms to reduce agency conflicts (Bopkin & Arko, 2009). Management shareholding reduces agency conflicts and helps to align the interest of shareholders and management (Farooq et al. 2018). A study by Tsui et al. (2001) equity shareholding by board members reduces the possibility of management issuing misleading information to shareholders. In line with the risk-based approach, it is expected that there should be a negative association between directors' shareholding and audit fees because it is expected that the alignment of shareholders and management interest is supposed to reduce audit risk and reduce audit fees (Farooq et al., 2018). Furthermore, O'Sullivan (2000) found a negative association between directors' shareholding and audit fees. In line with the theoretical arguments espoused above and the empirical findings, the study hypothesizes that;

H₃: There is a negative association between director's shareholding and audit fees.

Chairperson Independence and Audit Fees

According to Farooq et al. (2018) previous studies on corporate governance and audit fees have always ignored board chairperson independence until recently that some few studies have made a strong case for its inclusion. Also, the Code of good corporate governance in developed countries like the UK recommends the independence of the board chairman. The independence of board chairperson is measured as the selection of board chairman from among non-executive directors. As indicated earlier, few studies have included this variable in their studies. For instance, Habbash et al. (2010) examined the impact of board chair independence on earnings management in their study and found no significant effect between the two variables. Usman et al. (2018) examined the role of board effectiveness on CEO compensation and included chairman independence as one of the variables for board effectiveness. Their study reported a negative relationship between board chairman independence and CEO compensation. Farooq et al. (2018) in their study on the corporate governance and audit fees included board chairman independence as one of the variables of corporate governance and board effectiveness. This means that independent board chairperson will also demand high quality audit which will result in an increase in audit fees. In line with the above argument, the study hypothesizes that;

H₄: There is a positive association between board chairperson independence and audit fees.

Audit Committee and Audit fees

Audit committee of the board of directors is one of the most important corporate governance committees which have been highly researched in literature in developed countries. The presence of audit committee improves the independence of the internal audit function of the organization which allows them to carry out their mandate effectively (Ho & Kang, 2013). The requirement for audit committee is compulsory for all listed firms in Ghana. Some studies have also examined the impact of audit committee on audit fees (Bedard et al. 2004; Zhang et al. 2007; Xiang et al. 2015; Jizi & Nehme, 2018). Most of these studies have examined critical characteristics of audit committee such as size, expertise and gender diversity and audit fee in various contexts. This study seeks to examine these variables in the Ghanaian context.

Audit Committee Size and Audit Fees

Farooq et al. (2018) in their study argue that the code of good corporate governance requires that audit committees have the right size to enable them carry their mandate effectively. According to Chan et al. (2013) the need for the right size of audit committee is to improve the status of the committee. Large audit committee help to improve the internal audit function thereby helping the work of the external auditor (Farooq et al., 2018). In line with this argument, it is anticipated that a larger audit committee will enhance the quality of financial reporting thereby reducing the efforts of external auditors (Hannifa et al. 2006). Based on the arguments above, the study hypothesizes that;

H₅: There is a negative association between audit committee size and audit fees.

Audit Committee Independence

The independence of audit committee is measured by the proportion of non-executive directors on the audit committee. Increasing the proportion of non-executive directors on audit committees enhances the quality of financial reporting oversight which should reduce the probability of misstatement (Farooq et al. 2018). The presence of non-executive directors on audit committees also enhances the quality of internal control systems which reduces inherent and control risk. Hannifa et al. (2006) argue that more independent directors on the audit committee improve the quality of financial reporting and lower audit fees. Found a positive association between non-executive directors on audit committees and audit fees. In line with earlier argument, the study hypothesizes that;

H₆: There is a negative association between non-executive directors on audit committees and audit fees.

Gender Diversity of Audit Committee and Audit Fees

Research has established the importance of gender diversity on audit committees and its impact on corporate governance effectiveness (Huse & Grethe-Solberg, 2006; Miller & del Carmen Triana, 2009; Nielson & Huse, 2010, Xiang et al. 2015). Some studies argue that women presence on committees makes the committee more diligent in their work (Thiruvadi, 2012) and hence reduce audit fees. Xiang et al. (2015) in their study argue that the presence of women on audit committees is associated with demand for higher quality audit which can lead to higher audit fees. Xiang et al. (2015) in their study reported a negative association between women representation on audit committees and audit fees. It can be argued that women representation on audit committee will ensure more diligence and improve internal audit function and internal control systems and hence reduce audit risk and audit fees. In line with the above argument, the study hypothesizes that;

H₇: There is a negative association between women representation on audit committee and audit fees.

Gender Diversity and Audit Fees

Studies have established that female director have significant impact on board inputs and organizational or committees' outcomes (Usman et al. 2018). Many corporate governance reforms around the world stress on the need to have gender diversity on the board to enhance board effectiveness (Srinidhi et al. 2011; Nielsen & Huse, 2010). The agency theory also

underscores the importance of board room diversity which gender is one of such important diversities. It is expected that gender diversity will play an important role in firms' audit fees determination either from the risk base perspective or from demand for high quality audit perspective.

Proportion on Women on the Board and Audit Fees

A lot of studies have underscored the importance of gender diversity on boards in its influence on effective corporate governance (Srinidhi et al. 2011). It appears there is a general consensus that female representation on the board improves the quality of governance as they increase the intensity of monitoring and are more independent (Usman et al., 2018). A study by (Gul et al., 2011; Srinidhi et al., 2011) showed that gender balanced boards and audit committees improves the quality of financial reporting. This can only be achieved through high demand for quality audit by engaging specialist auditors which should result in higher audit fees. Gul et al. (2008) in their study on the influence of gender diversity on audit fees found that board with more females demand more quality audit which increases the cost of audit in line with the agency theory. On the basis of the arguments above, the study hypothesizes that;

H₈: There is a positive association between female representation on boards and audit fees.

CEO Gender and Audit Fees

Prior studies have shown that women are more conservative and less risk takers compared to their male counterparts (Huang et al., 2014). This means that with a female in charge as the CEO, they are more likely to be rule complainers and avoid losses. To achieve this, it can be anticipated that females as CEOs will require higher quality audit than males. The demand for higher quality audit increases the work and audit effort which will result in higher audit fees.

On the other hand, it can be argued that because females are more cautious and rule complainers, they might reduce the inherent risk in an audit through improving the integrity of the financial reporting process. The auditor may view a firm with a female CEO as having less inherent risk of financial misstatements and, therefore, be willing to reduce the scope of the audit leading to lower audit fees. This suggests that firms with female CEOs are associated with lower audit fees. The direction of the association between CEO gender and audit fees is, therefore, an empirical question. On the basis of the above arguments, the study hypothesizes that;

H₉: There is a negative association between female CEOs and audit fees

METHODOLOGY

The sample frame includes all listed firms that annual reports are readily available as at the end of 2019 financial year. The sample period will range from the year 2010 to 2019. The total number of firms sampled for the study is 21 firms over a 10-year period. The sample

however exclude banks and insurance companies as these institutions are heavily regulated especially with regards to their corporate governance structure.

To achieve the objectives of the study, the following estimated panel regression model was adopted for the study.

$$\begin{aligned} AUDFee_{it} = & \beta_0 + \beta_1 BDSize_{it} + \beta_2 BDIND_{it} + \beta_3 MGTSHG_{it} \\ & + \beta_4 BDCHAIRIND_{it} + \beta_5 AUDCSize_{it} + \beta_6 AUDCInd_{it} \\ & + \beta_7 GDAUDC_{it} + \beta_8 FRBD_{it} + \beta_9 GDCEO_{it} + \beta_{10} BIG4_{it} \\ & + \beta_{11} SIZE_{it} + \varepsilon_{it} \end{aligned}$$

Where; Table 1 below presents a summary of the descriptive statistics.

Variable	Definition	Measurement
BDSize	Board Size	Number of directors on the Board
BDIND	Board independence	Proportion of non-executive directors on the board
MGTSHG	Management shareholding	Percentage of shares held by management
BDCHAIRIND	Board chairperson Independence	Dummy, 1 if board chairman is non-executive director, 0 otherwise
AUDCSize	Audit committee size	Number of directors on audit committee
AUDCInd	Audit committee independence	Proportion of non-executive directors on audit committee
GDAUDC	Gender diversity of audit committee	Proportion of women on audit committee
FRBD	Female representation on the board	Proportion of women on the board
GDCEO	Gender of the CEO	Dummy, 1 if CEO is female, 0 otherwise
BIG4	Big four Audit firm	Dummy, 1 if firm I audited by big 4 audit firm, 0 otherwise
SIZE	Firm size	Natural logarithm of total Assets

ANALYSIS AND DISCUSSION OF FINDINGS

Descriptive Analysis

The study used one dependent variable (audit fees) and 11 independents variable out of which two (Big4 and Size) were used as control variable. The independent variable examines various corporate governance structures, audit committee structures as well as gender diversity of listed firms in Ghana. Table 2 below presents a summary of the descriptive statistics.

Variable	Mean	Std. Deviation	Min.	Max
AUDFee	10.71	1.0353	7.6	15.94
BDSize	7.72	2.0352	3	13
BDInd	0.76	0.1495	0.33	0.92

MGTSHG	0.1194	0.1877	0	0.61
BDCHAIR IND	0.89	0.3198	0	1
AUDCSize	3.55	0.8254	2	6
AUDCInd	0.839	0.1771	0.33	1
GDAUDC	0.1403	0.2389	0	1
FRBD	0.1721	0.0743	0	1
GDCEO	0.03	0.171	0	1
BIG4	0.665	0.4731	0	1
SIZE	17.47	2.16	10.2	21.53

The first variable in table 2 is the natural logarithm of audit fees which is the main variable of interest. The actual audit fees data shows that the minimum audit fee charged over the 10-year period was GHC4,500 while the maximum was GHC300,000. The second variable is board size and the result shows that the average board size of listed firms in Ghana is 7.7 while the company with the smallest board members had 3 members. Also, the company with the largest board size have 13 board members. The next variable is board independence measured as the ratio of non-executive directors on the board. The descriptive statistics shows that the average proportion of non-executive directors on the board is 76% of the total board members. The result is similar to finding from developed countries and shows that listed firms in Ghana understand the value that non-executive director brings onto the board in terms of their ability to monitor management and ensure that the right control mechanism and risk measures have been implemented by management. The company with the least ratio of non-executive director had 33% of its board members being non-executive. The company with the highest proportion of non-executive directors had over 90% of its members as non-executive directors.

The next variable (MGTSHG) measured the proportion of shares held by directors of the company. The results show that the average directors shareholding over the study period is 12% and the company with the least directors' shareholding had 0% while the one with the highest director's shareholding had 61% of its shares held by board members.

The next variable examined the independence of the chairperson of the board of directors and the results from table 2 above show that 89% of the companies sampled over the study period had a non-executive director as board chairperson while the other had executive board chairperson.

The next variable measured audit committee size (AUDCsize) and the result shows that average audit committee size of listed firms in Ghana was 3.55 while the company with the largest audit committee size had 6 members and the lowest was 2 members.

The study further examined the independence of the audit committee (AUDCInd) using the proportion of non-executive directors on the committee. The result in table 2 show that on average 84% of audit committee members of listed firms in Ghana are non-executive directors.

The results further show that some companies have all their audit committee members as non-executive directors which is a sign of strong corporate governance mechanism that will help guarantee the independence of the internal audit unit to carry out their mandate of ensuring effective and efficient internal control systems

The study also examined gender diversity on the audit committees as studies have shown that women on board and board committees are more effective in terms of monitoring and ensuring that the right thing is done which will have effect on audit fees. The results rather showed low female representation on the audit committees as only 14% of the audit committee members of listed firms in Ghana are women. These committees are still male dominated despite the global call for women inclusion in key decision making.

The study further examined female representation on the board (FRBD) of the company itself as part of gender diversity. The results consistent with the first one showed low level of women representation on corporate board of listed firm in Ghana. The results revealed that the average women representation on the board of listed firm in Ghana is 17% which is far lower than anticipated.

Finally, on the main independent variables, the study also examined the proportion of Chief Executive Officers of listed firms in Ghana who are women (DGCEO). The result shows that on average only 3% of CEOs of listed firms in Ghana are women. Overall, the study shows that female representation at the higher corporate level is still very low despite recent campaigns on gender equity and gender parity.

Correlation Analysis

The correlation analysis was used to establish the relationship between the dependent variable (AUDFee) and the independent variable used in the study. The correlation analysis also helped in determining the extent of multicollinearity in the variable before running the regression model. The results of the correlation analysis are presented in table 3 below.

	AUDFee	BDSIZE	BDInd	MGC SHG	BDCInd	AUDCSize	AUDCInd	GDAUDC	FRBD	GDCEO	BIG4	SIZE
AUDFee	1											
BDSIZE	0.3509	1										
BDInd	0.1531	0.4259	1									
MGC SHG	-0.5146	-0.4244	-0.084	1								
BDCInd	0.3316	0.2822	0.2064	-0.2521	1							
AUDCSize	0.1386	0.3964	0.3248	-0.2454	0.0863	1						
AUDCInd	0.2749	0.299	0.4366	-0.2095	0.2917	0.0754	1					
GDAUDC	-0.0452	0.161	-0.501	-0.0303	0.015	-0.1859	0.0765	1				
FRBD	-0.2037	0.007	-0.387	-0.0732	-0.1943	-0.152	-0.0893	0.7382	1			
GDCEO	-0.1366	-0.0479	-0.091	0.1535	0.0634	-0.0808	-0.1427	0.0091	0.0603	1		
BIG4	0.4214	0.1574	0.0378	-0.4377	0.1094	0.2382	0.0435	-0.0389	-0.205	-0.1857	1	
SIZE	0.6673	0.6566	0.2984	-0.6077	0.3747	0.2539	0.4035	0.2467	-0.145	-0.1691	0.346	1

The results of the correlation analysis for the corporate governance variables shows some significant relationship with audit fees among listed firms in Ghana. The first variable board size showed a positive correlation between board size and audit fees. The results suggest that larger board size does not necessarily reduce internal control risk which must be compensated with high quality audit which comes at higher audit fees. The second corporate governance variable (board independence) showed a weak positive association between proportion of non-executive director and audit fees. The results also suggest that high proportion of non-executive directors could mean these non-executive directors are demanding higher audit quality which result in higher audit fees. The next corporate governance variable (management shareholding) showed a strong negative relationship with audit fees. The results show that directors who are shareholders have more access to corporate information that increases the quality of their monitoring thereby reducing audit risk and subsequently audit fees. The next corporate governance variable is board chairperson independence which the correlation analysis showed a positive association with audit fees. The results can be interpreted to mean that non-executive directors demand higher audit quality which increase the price for the audit. On the other hand, it could mean that the independent board chairperson does not have the needed information to carry out effective monitoring which have to be compensated with high quality audit hence high audit fees.

On the audit committee characteristics, audit committee size showed a positive association with audit fees even though the relationship appears weak. The result suggest that more audit committee members do not reduce audit risk and hence increase audit fees. It could also mean more members means the demand for high quality audit is high which will result in higher audit fees as well. Still on the audit committee variables, the correlation results also showed that there is a positive relationship between audit committee independence and audit fees. The results suggest that independent audit committee members demand for high audit quality which results in higher audit fees. On the last audit committee variable, the results showed a weak negative association between female representation on audit committee and audit fees. The results suggest female inclusion in audit committee enhance the quality of the committee work and improve internal control systems which reduce audit risk and audit fees.

On the gender diversity variables, the correlation results showed a negative relationship between female representation on the board of listed firms and audit fees. The results confirm the assertion that women are more detailed and thorough and as such their inclusion on the board enhance the board monitoring capacity which reduce risk and hence lower audit fees. The result suggests women inclusion on the board help to reduce risk associated with financial reporting environment and hence less audit risk and reduce audit fees. Also, the correlation results also showed a negative relationship between female CEO and audit fees. Female CEO improves the quality of the company's reporting system and hence reduce audit risk and audit fees.

On the control variables, the correlation analysis showed a positive association between big4 audit firms and audit fees. The result shows that big4 audit firms charge higher audit fees as compared to local audit firms. Finally, the correlation analysis also showed a strong positive association between firm size and audit fees. The result show that bigger firms increase the volume of work to be carried out by auditors and hence higher audit fees are charged.

Regression Analysis

To achieve the objective of the study which examines the effect of corporate governance, audit committee characteristics and gender diversity on audit fees. The study adopted a panel regression to achieve the objective. The Hausmann test showed that the fixed effect was appropriate as it provided more consistent results. The study also used the robust generalized least square regression to take care of the problems like autocorrelation and heteroscedasticity. The regression analysis showed an Adjusted R-Squared of 45% which shows that the independent variables can explain 45% of the variations in the dependent variable. Even though the 45% is below the rule of thumb of 50% and more, the 45% is significant compared to results from other similar studies. For instance, Farooq et al. (2018) had Adjusted R-Squared of 36% and 13% in their study. Moreover, the probability of the F-statistics is significant at 1% significance level suggesting that the model is well fit. The results of the regression analysis are presented in table 4 below.

Variable	Coefficie	Std. Devia	T-Value
BDSize	0.0618*	0.0361	1.71
BDInd	-0.6851	0.557	-1.19
MGTSHG	-1.5999***	0.3822	-4.05
BDCHAIR IND	0.4018**	0.1943	2.11
AUDCSize	-0.0183	0.0761	-0.24

AUDCInd	0.2898	0.4015	0.72
GDAUDC	0.2479	0.3995	0.62
FRBD	-1.1128**	0.4688	-2.37
GDCEO	-0.2281	0.3326	-0.69
BIG4	0.397***	0.1385	2.87
SIZE	8.09***	1.66	4.88
CONST	10.145***	0.4549	22.2
F(11, 188)	15.79		
Prob>F	0.000		
Adjusted R Squared	0.4498		

Note *** represents significance at 1% significance level; ** at 5% and * at 10%

Objective 1: Board Characteristics and Audit Fees

The results of the panel regression analysis in Table 4 show that there is a positive relationship between board size and audit fees in Ghana. The relationship was also statistically significant at 10% significance level suggesting that indeed board size is a significant determinant of audit fees. The result of the study is consistent with the expectation of the first hypothesis which predicted a positive association between board size and audit fees. The result suggest that larger board size does not necessarily improve the quality of financial reporting but perhaps increase the demand for high quality audit which increases audit fees. The result is consistent with findings from previous studies on the same variables (Jizi & Nehme, 2018; Bozec & Dia, 2017; Karim et al., 2016; Adams et al., 2010). The result shows that board size increases the demand for high quality audit which increase the cost of audit for companies.

The second corporate governance variable (board independence) showed a negative association between the proportion of non-executive directors on the board and audit fees. However, the relationship was statistically insignificant suggesting that board independence is not a significant determinant of audit fees in Ghana. The negative association between board independence and audit fees shows that non-executive directors improve the quality of board monitoring and financial reporting quality which reduce audit efforts and hence audit fees. The result is inconsistent with the expectations of the second hypothesis which predicted a positive and significant relationship between board independence and audit fees. The result is also inconsistent with the findings of most previous studies which found a positive association between board independence and audit fees (Aldamen et al., 2018; Bozec & Dia, 2017; Jizi & Nehme, 2018; Farooq et al., 2018).

The next corporate governance variable (management shareholding) showed a negative association with audit fees. The relationship was also statistically significant at 1% significance level and as such management shareholding is a significant determinant of audit fees in Ghana. The result suggests that management shareholding reduces agency conflict and opportunistic behavior of management thereby enhancing the quality of financial reporting which translates into lower audit fees. The result is consistent with the expectations of the third hypothesis which predicted a negative and significant association between management shareholding and audit fees. The result is also consistent with the findings of Farooq et al. (2018); O'Sullivan (2000) who all reported a negative and significant association between management shareholding and audit fees.

The last corporate governance variable focused on the effect of board chairperson independence on audit fees in Ghana. The results of the regression analysis revealed a positive relationship between the independence of the board chairperson and audit fees. The result is

statistically significant at 5% significance level indicating that independent board chairperson is a significant determinant of audit fees in Ghana. The result is consistent with the expectations of the fourth hypothesis which predicts a positive and significant association between board chairperson independence and audit fees. The result also suggests that independent board chairperson increase the demand for high quality audit which result in increased audit fees. The result is inconsistent with the findings of Farooq et al. (2018) who reported a positive but statistically insignificant association between board chairperson independence and audit fees.

Objective 2: Gender Diversity and Audit Fees

The first variable under gender diversity examined the effect of female representation on the board of directors and audit fees in Ghana. The regression results showed that there is a negative association between female representation on the board and audit fees. The result was also statistically significant at 5% significance level indicating that female representation on the board is a significant determinant of audit fees in Ghana. The result suggests that more female representation on the board increase board monitoring capacity and improves the quality of financial reports which reduces audit risk and hence lower audit fees. The result is contrary to the prediction of the 8th hypothesis of the study which expected a positive and significant association between female representation on the board and audit fees.

The second gender diversity variable is the gender of the CEO and how that affect audit fees. The regression analysis shows a negative association between female CEO and audit fees. However, the relationship was not statistically significant suggesting that female CEOs are not a significant determinant of audit fees in Ghana. The result is contrary to the expectations of the 9th hypothesis which predicted a significant association between female CEOs and audit fees.

The last gender diversity variable which is also audit committee variable examined the influence of female representation on audit committees and audit fees. The result of the regression analysis showed a positive but statistically insignificant relationship between female representation on audit committee and audit fees. The relationship was however not statistically significant suggesting that female representation on audit committee is not a significant determinant of audit fees. The result is contrary to the expectations of the 7th hypothesis of the study which predicted a negative and significant association between gender diversity of audit committee and audit fees in Ghana. The result is inconsistent with the findings of Xiang et al. (2015) who in their study reported a negative association between women representation on audit committees and audit fees.

Objective 3: Audit Committee Characteristics and Audit Fees

Audit committee of the board of directors is one of the most important corporate governance committees which have been highly researched in literature in developed countries. The requirement for audit committee is compulsory for all listed firms in Ghana. Some studies have also examined the impact of audit committee on audit fees (Bedard et al. 2004; Zhang et al. 2007; Xiang et al. 2015; Jizi & Nehme, 2018; Abbott et al., 2004). Most of these studies have examined critical characteristics of audit committee such as size, expertise and gender diversity and audit fee in various contexts. The result of the regression analysis shows that there is a positive association between audit committee size and audit fees. However, the relationship is

not statistically significant which indicates that audit committee size is not a significant determinant of audit fees in Ghana. The result is contrary to the expectations of the 5th hypothesis of the study which predicted a negative and significant association between audit committee size and audit fees. The result suggests that large audit committee size does not reduce audit risk which should result in lower audit fees. The result is also inconsistent with the findings of Farooq et al. (2018); Abdulmalik and Ahmad (2016). Who reported a positive and significant association between audit committee size and audit fees.

Finally, the last audit committee characteristics examined the influence of audit committee independence on audit fees. The result of the study showed that there was a positive association between audit committee independence and audit fees. However, the result was statistically insignificant indicating that the independence of audit committee is not a determinant of audit fees in Ghana. The result is inconsistent with the expectations of the 6th hypothesis of the study which also predicted a negative association between audit committee independence and audit fees. The result is also inconsistent with the findings of Farooq et al. (2018) who reported a positive and significant association between audit committee independence and audit fees. The result seems to suggest that independent audit committee members will rather demand high quality audit which will increase audit fees. Overall, all the audit committee characteristics in the study were not significant determinants of audit fees in Ghana.

CONCLUSION

The results of the study suggest that corporate governance mechanism play an important role in audit pricing in Ghana. The results show that good corporate governance mechanism does not only improve monitoring of management and reduce opportunistic behaviors of management and improve financial reporting quality, it can also affect audit fees. The major findings suggest that larger board size increases audit fees in Ghana. Also, independence of the board is not a significant determinant of audit fees. However, proportion of directors' shareholding reduces audit fees. The results also show audit committee characteristics are not significant determinants of audit fees in Ghana. On gender diversity, female representation at the top-level management generally reduces audit fees. More specifically, female representation on the board of director reduces audit fees significantly in Ghana. On the basis of the findings of the study, the study recommends that;

First, companies that seek to reduce audit fees should increase director's shareholding as it will not only reduce management opportunistic behaviors and improve the quality of financial reporting, but it will also reduce audit fees. Second, the listed firms in Ghana should increase female representation on the board as that will improve the quality of board monitoring, reduce agency conflicts and reduce audit fees significantly. Third, the study recommends that similar studies can be undertaken on Banks and Insurance companies in Ghana to see if similar results will be found as this study excluded the financial sector. The study can also be replicated in other African countries as there are limited studies on the variables used in terms of determinants of audit fees in Africa.

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