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Effects of Board Diversity on the Earning Quality of Non-Financial Firms Listed on the Ghana Stock Exchange

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ABSTRACT

To maximize wealth, corporate finance must carefully balance cash flows and the cost of capital for a corporation, which results in corporate governance. Corporate governance guarantees openness, responsibility, equity, the organization's long-term financial health, investor credibility, and the optimization of investor wealth. The study aimed to determine how board diversity affected the profitability of non-financial listed companies on the Ghana Stock Exchange with a specific focus on the effects of gender diversity, age diversity, and nationality diversity on earnings quality. The study used a descriptive design and a quantitative research methodology. The data were examined and reviewed using SPSS version 23, STATA 14, and Excel. The study used secondary data that was collected for a period of 11 years (2011-2021) from the financial accounts of the five (5) non-financial institutions that were listed on the GSE. From the perspective of non-financial listed firms on the Ghana Stock Exchange, the study found that gender diversity and nationality diversity significantly influence earnings quality but age diversity does not have a significant impact on the earnings quality of non-financial listed companies on the Ghana Stock Exchange. The study also recommended that management of publicly traded companies consciously adopt more diverse boards, especially in terms of gender diversity because it is associated with an increase in earnings quality.

INTRODUCTION

According to Eka (2018), the goal of corporate finance is to maximize wealth, which necessitates a careful balance between Cash flows and the cost of capital for a company. Earnings that have not yet been paid in cash are categorized as normal accruals and abnormal accruals; higher abnormal accruals are associated with lower-quality earnings. Profitability influences whether a business can get bank financing, attract investors to fund its operations, and grow. According to Lazonick (2014), firms cannot continue to exist if they are not turning a profit. To maintain the standard of earnings and win the stakeholders' trust and confidence, operational and non-operational income should be balanced. Quality of Earning, which measures the company's actual growth as a result of operational activity, is the ratio of net functioning income to net income (Abbadı *et al.*, 2016). Organizations place more emphasis on the quality of their earnings because if their operational revenue is strong enough, they can also sustain over the long term; non-operational income is only a plus. Most businesses define their earning evaluation criteria in terms of repeatable, controllable, and bankable (Hashim *et al.*, 2019).

To meet predetermined goals and maximize profits while also attracting investors, it is crucial for managers and expert analysts to maintain quality in the earnings. Strong corporate governance improves the firm's standards and long-term performance. Corporate governance ensures transparency, accountability, fairness, the long-term financial viability of the organization, investor confidence,

and the maximization of shareholder wealth. The performance of a corporation is significantly impacted by the board's culture and in commercial governance, the board of directors is important. The board's structure and membership have an impact on performance and the quality of reported outcomes. Chapple and Humphrey (2014), the term "board diversity" is vague so numerous empirical studies have been done, focusing on various aspects of board diversity (gender, age, board independence, and nationality). Busirin *et al.* (2015) indicated that an advanced number of independent directors on a board will reduce the tendency of earnings manipulation. One of the demographic characteristics that may affect important decisions made by CEOs is CEO origin, such as accounting judgments that may affect earnings quality (Shen *et al.*, 2021).

The corporate governance law, which was developed by Ghana's Securities & Exchange Commission, increased the impact of corporate governance on businesses. However, to overcome this agency conflict and satisfy the interests of shareholders, managers should look for solutions that are commensurate with increasing shareholder wealth by raising the firm's earning quality. This conflicting information tie-up has a negative impact on the financial statements. Although there are no specific guidelines for corporate governance to follow, these tools are typically divided into internal and external methods. Despite the lack of consensus, numerous studies have identified a strong correlation between corporate governance and earnings management for constructing and maintaining

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the earning quality of organizations. To prevent investors from making regrettable decisions as has frequently happened around the world when accounting fraud has been used financial statements should exactly reveal all facts needed by users to make well-versed decisions on a company's worth, the value of its shares, and the precise future cash flows. By monitoring how firms are run while keeping in mind that managers' interests differ from those of owners, the Board of Directors protects the interests of investors.

To smooth out earnings, managers use the art of earning management to convert and manipulate the outcomes. This leads to the development of the idea of corporate governance, which aims to improve quality by curtailing irregular and non-accounting business operations. Boards make sure that the interests of owners and managers are associated. In the context of Ghana, Adeabah *et al.* (2018) studied the effectiveness of Ghanaian banks, corporate governance, and board gender diversity. In the context of Ghanaian listed firms, Kukah *et al.* (2016) concentrated on corporate governance practices and accounting information quality. The focus of Boadi and Osarfo's (2019) study was on Diversity and Return: The Effects of Board Members' Education Diversity on Performance. Some research has been conducted to determine how board diversity and earnings management affect each other but this study was set out to fill a knowledge gap caused by the fact that previous research on the subject has not been conclusive, particularly in the case of developing countries like Ghana with Gross Domestic Product, firm size, firm sector and inflation as control variables from the viewpoint of listed non-financial firms on the Stock Exchange. The prime goal of this study was to investigate the connection between board diversity on the earnings quality of non-financial companies quoted on the Ghana Stock Exchange by narrowing board diversity to; gender diversity, age diversity, and nationality.

LITERATURE REVIEW

Conceptual Review

Earning Quality (EQ) Concept

There is no established definition of earnings quality (EQ) or method for determining it in literature (Abdelghany, 2005; Schipper & Vincent, 2003). Managers, accountants, auditors, and policymakers are all concerned with EQ since capital markets depend on accurate and reliable financial information. Regarding this, Teets (2002) claimed that "higher quality earnings provide more information about the features of a firm's financial performance that are relevant to a specific decision made by a specific decision-maker". With this description, "quality" depends on a particular decision context and is determined subjectively (Dechow, Ge, & Schrand, 2010).

To extract information from earnings patterns that are significant to value, investors, for instance, employ EQ "as a conditioning variable" (Francis, LaFond, Olsson, & Schipper, 2003). Even when reported earnings and the associated revelation comply with Generally Accepted

Accounting Principles, false reporting is referred to in the financial press as an "earnings quality" issue. The press may not agree with standard setters, policymakers, and auditors on this matter because, in their opinion, earnings are of extraordinary quality if they adhere to the spirit and regulations outlined in GAAPs and IFRSs. Conversely, when earnings are readily convertible into cash flows, creditors are more inclined to consider those earnings as being of good quality. Otherwise, when compensation reflects managers' actual performance and is mostly unaffected by circumstances outside of management control, compensation committees are likely to consider profits as being of high quality. These instances demonstrate how the concept of EQ is driven by the decision-objective makers and the function that earnings play in the resolution model.

EQ study was reviewed in depth and detail by Dechow and Schrand (2010), who also offered other insightful observations that when earnings give decision-makers additional details about a company's financial performance, they are seen as being of higher quality. According to the authors' analysis of EQ from the perspective of financial analysis, earnings are of high quality if they "precisely annuitize the inherent value of the firm." They distinguish this value quality by reporting an earnings number that is normalized, productive, or representative and equates to long-term earnings. They said that earnings have three qualities that make them of excellent quality: they provide a helpful summary for estimating business worth; they accurately reflect actual performance; and they predict future success. EQ is the term used to describe the capacity of reported profits to properly represent the underlying earnings of the company as well as their efficacy in projecting future earnings. The relationship between the most basic indicators of a company's performance, namely cash flows, and earnings, can be used to gauge emotional intelligence (EQ). EQ is related to the process by which a company converts its cash flows into reported earnings.

Board Diversity Concept

Board diversity is one of the most significant governance challenges in recent years (Barako & Brown, 2008). However as the workforce became more diverse in respect of gender, race, and age, the need for a more diverse board became more essential (Darmadi, 2011). An organization benefits from having a diverse board of directors because it increases corporate leadership effectiveness, fosters market understanding, legitimizes businesses, forges international linkages, and improves corporate administration (Van der Walt & Ingley, 2003 and Erhardt *et al.*, 2003). According to the agency idea, the more varied a board is, the more independent it will be, which will result in better management oversight (Carter *et al.*, 2007). Diversity is described as the state of including or consisting of various elements, of diversity (Cabrera-Suárez *et al.*, 2017). A collection of diverse individuals in terms of their cultures, races, backgrounds, etc. is referred

to as a group that has undergone diversification (Ararat *et al.*, 2010).

Board diversity hence refers to the diversity of the board. When discussing board diversity, people usually consider gender diversity; however, true diversity also includes things like cultures, races, educational levels, ethnicity, nationality, and more. Numerous international organizations have made efforts to diversify their boards of directors and administration and Ghana is not an exception since Ghana is a nation with several different ethnic groups.

The resource dependence theory, on the other hand, contends that board variety will boost the funds given by members, including expertise, knowledge, legitimacy, and access to important stakeholders (such as vendors, customers, federal policy decision-makers, and social groupings) (Hillman *et al.*, 2000). As a result, the board of directors diversity in relation to age, gender, and race would be able to offer the management special knowledge for improved decision-making (Ayuso & Argandoa, 2007). These may affect a company's earning potential. While gender diversity, as per Perryman *et al.* (2016), aids in enhancing the stock charge in information by encouraging the collection of private data in small businesses and increasing public disclosure in large corporations.

Gender Diversity

Gender variety is the term used to describe situations in which a person's gender identity, role, or manifestation differs from the expectations placed on members of a particular sex in society. This expression is being used to refer to people more frequently. Gender identities are said to exhibit gender diversity when they display a range of expressions outside of the binary framework. Many gender-diverse people find the concept of binary gender, which forces you to decide whether to manifest yourself as male or female, to be limiting. Some people would want to have the freedom to alter their gender or not identify at all. Others merely want the ability to publicly disagree with or reject more prevalent gender stereotypes. Gender diversity has been incorporated into the larger idea of board diversity (Carter *et al.*, 2003). Carter *et al.*, (2003), allude to the fact that there are female directors on the board of directors of the corporation. Women directors provide a variety of viewpoints, experiences, and working methods to the board which improves decision-making and the board's debate.

Age Diversity

The acceptance of people of different ages in a professional context is referred to as age diversity. Businesses can take action to combat ageism at work and address the aging population. Age can be viewed as a board asset and is part of human capital, per Sonnenfeld (2002) and Darmadi (2011), because it can replicate experience and risk-taking. However, in the business world of today, youthful directors are constantly

involved, while the majority of board members are older (Benjamin *et al.*, 2018). Young directors could provide the organization with fresh insights and ideas. There is a claim that youthful directors are more imaginative and have a greater capacity to process fresh ideas (Van Ness *et al.*, 2010). Additionally, they have a better relationship with strategic change and are more eager to take part in the control process (Darmadi, 2011). The board's effectiveness and decision-making may be improved as a result.

Nationality Diversity

Several governance principles promote the appointment of members of various nationalities to the board of directors to reflect the national variety of its stakeholders, employees, and consumers (Fidasoski *et al.*, 2014). Additionally, it is believed that adding foreign directors to the board can enhance the quality of the decision-making process (Van den *et al.*, 2005). According to resource dependence theory, foreign directors can offer a variety of viewpoints, have distinct cultures and behaviors, as well as varied life experiences, all of which may be able to advance decision-making and the business's plans (Ruigrok *et al.*, 2007; Ayuso & Argandona, 2007). It was suggested that hiring foreign directors would help the team make better decisions since they would provide a variety of viewpoints and opinions about the country or region's culture, language, life experiences, religion, and social customs (Ruigrok *et al.*, 2007). According to Ayuso and Argandona (2007), the knowledge of foreign directors enhances corporate strategy decisions, for instance, by supporting CSR reporting techniques, while also increasing board capital (which eventually may lead to improved financial performance).

Theoretical Review

Identifying current theories, their connections, the depth of their research, and the creation of new testable hypotheses are all aided by a theoretical literature review. Many corporate governance ideas incorporate stewardship theory and agency theory.

Agency Theory

In 1952, Jensen and Meckling created the agency hypothesis. According to Jensen and Meckling (1976), an agency relationship is defined as the parameters of an agreement whereby the principal appoints a distinct agent to carry out tasks like exercising decision-making authority on his behalf. Regarding the agency theory, the degree of firm complexity and the possibility of agency benefits have an impact on managers' capacity to alter data and manipulate earnings, both of which may be crucial. A large company with complex organizational structures and agency issues is deemed to be more varied than an industry or a nation (Padilla, 2000).

According to Jensen and Murphy (1990), managers are also urged to call for diversification to increase their pay, as well as for status and authority that help preserve

their post within the company by managing particular investments to reduce the risks associated with both their personal investments and the organization's investments. One of the motivations for managers to limit costs is agency cost. Per agency theory, controlling earnings is prioritized in the management of figures so that they can profit from the contracting procedure, according to actual data. Numerous studies have documented the existence of information asymmetry between investors and directors, which is a prerequisite for effective earnings management (Yu, 2008). As a result of the shareholders receiving less information, the internal management may have used its point to manage and influence the reported earnings (Amihud *et al*, 2006).

Given that boards of directors represent shareholders while managing the operations of the company, agency theory is extremely pertinent to the current research on the link between board diversity and earnings management. Agency issues may arise if the directors act in their self-interest, for as by falsifying financial records to present a positive performance picture, particularly if their compensation is contingent on the success of the company.

Stewardship Theory

According to Barbuto & Wheeler, the stakeholder theory merged the fields of sociology and organizational studies (2006). According to the stakeholder theory, the institution's goals might be affected or impacted by a group of people. The systems of connections that administrators must manage include those with employees, traders, and business partners. Additionally, it is asserted in this theory that the set of systems is more significant than the relationship between the employer and employees as described in the agency theory. The incentive mechanisms in share options provide the managers with a way to justify their exceptional overpaying. Keasle *et al* (1997). Since executive compensation has grown significantly quicker than the average wage and there is a poor correlation between managerial performance and pay, executive power is being misused. This is especially related to the issue of overpay (Conyon *et al*, 1995; Brennan *et al*, 2008). The development of independent remuneration committees, as is the case in large businesses, is ineffectual, and the humility of the managers is the only important factor that can limit executive pay (Owen, N., 2018)

The analysis of how board diversity affects the management of profitability in publicly traded manufacturing organizations can be done using the stakeholder theory. The study outlines the many parties that aside from owners whose control might affect a firm's survival, have a stake in the administration of manufacturing enterprises. The proponents of this model argue that the most effective control mechanisms are the main lines of modifications in corporate governance, such as non-executive directors, shareholder participation in important decision-making, and complete disclosure of company affairs (Kay and Silberston, 1995).

Empirical Review

Gender Diversity and Earnings Quality

The study by Ain *et al* (2021) uses a sizable sample spanning the years 2003–2017 to evaluate the connotation between gender diversity on the board and dividend payouts in China. Our findings offer solid and convincing proof that gender diversity on the board is favorably linked to dividend payments made in cash. The empirical results back the idea that gender diversity on the board improves corporate governance, which in turn encourages dividend payments. They demonstrate that the benefit of gender diversity on the board is greatest when there is a critical mass of engagement (three or more female directors), as opposed to just nominal engagement. Female independent directors have a considerable impact on dividend payouts, but female executive directors do not. We also add to the body of knowledge on the relationship between dividend payments and public control by providing data demonstrating that gender diversity has a bigger impact on dividend payouts for state-owned businesses than for non-state-owned enterprises.

Our results are trustworthy and solid after the endogeneity issues are taken into account. Using data analysis of 152 businesses quoted on the Tehran Stock Exchange between 2011 and 2016, Kazemi and Abdi's (2019) study intended to evaluate the effects of gender diversity (at least one female delegate on the board of directors and in the audit committee) on profit quality. The archive-based method was used to collect the data, and regression analysis with the imbalanced panel data method was used to evaluate the hypotheses.

The findings showed that having women on audit committees had a big impact on the quality of earnings. Also, the results showed that gender variety on the board of directors does not significantly affect the quality of the company's earnings. When women are well-represented among senior business executives, financial reporting and managerial control are of higher quality. The audit committee and board of directors are consequently more impartial, which raises the standard of earnings. The results show that having female directors with significant financial experience improves earnings quality more than doing without them. Additionally, our findings show that the only female directors who can minimize earnings management are those who have relevant financial expertise and fewer outside directorships. The study found no indication that female directors without the necessary financial skills may mitigate profit management, irrespective of their external directorships or duration.

The study by Dimitrova (2017) examines the impact of social connections between CEOs and board members as well as the gender of these CEOs on the standard of earnings as determined by earnings administration. The scrutiny of financial reporting has intensified in recent years as a result of several accounting scandals, which have also brought to light the value of sound corporate governance. The board should be independent and diverse to lessen agency conflicts. Although previous research

has not shown definitive results, social bonds may reduce independence. According to Dimitrova (2017), connected CEOs and profit quality should be negatively correlated. In a professional setting, gender diversity is a subject that is frequently explored. Women are generally thought to be more ethical at work, which implies that they take part in less earnings administration and hence produce higher-quality earnings. The hypothesis is tested using a sample of 99 UK-listed companies with 198 observations spanning two years (2015 and 2016).

Age Diversity and Earnings Quality

Hoang *et al.* (2017), in a survey of Vietnamese public companies, the study looked at how board diversity affected the quality of the earnings. A wide range of structural and demographic aspects of a board of directors are covered by the two dimensions of board diversity measures used in this study, which include a diversity-of-boards index (dissimilarities among company boards, i.e., board structure) and a diversity-in-boards index (dissimilarities among directors within a board, i.e., demographic features of board members). Four accounting-based factors accruals quality, earnings consistency, earnings predictability, and accruals smoothness combine to provide the overall indication of profits quality. They find a non-linear, U-shaped link between the two variables, but a strong, significant linear association between the diversity of boards and earnings quality.

Almomania *et al.* (2020), study looks at how board diversity and profits quality relate to a sample of Amman Stock Exchange-quoted companies (ASE). There were 68 firms in the sample from 2010 to 2019, totaling 680 firm-year observations. The yearly reports of companies registered on the ASE were used to gather secondary data. The discretionary accruals (DA) model developed by Kothari in 2005 was used to gauge the quality of earnings. Board gender, board experience, board age, and board religion were used to measure board diversity.

Board age, experience, and gender all have a big impact on earnings quality, but board religion does not. This shows that a key explanation for the quality of earnings is provided by corporate governance. This study shows how a diverse board can improve the earnings quality of companies quoted on the ASE. Additionally, this research reveals that the board of directors has a crucial role in promoting corporate governance. A more diversified board of directors should be encouraged and should also ensure that listed companies' corporate governance is effective.

Nationality Diversity and Earnings Quality

Hashim *et al.* (2019), the study aimed to investigate the connection between board diversity and the quality of earnings in the companies listed on Bursa Malaysia Main Market. Malaysia has a multi-ethnic population with many distinct beliefs, which may have a good impact on the standard of earnings. In order to improve the firms' profits quality, the study also looks at whether internal audit functions are carried out internally or externally. It is

discovered that ethnic and national diversity significantly affects the sampled companies' earning quality. Age and gender diversity, however, do not seem to have a major consequence on the quality of wages. The quality of the companies' earnings will be able to rise with the inclusion of more representatives of various races on the board.

By examining listed corporations in Pakistan, Khan and Abdul Subhan (2019) look into how board diversity and high-quality auditing affect financial performance. The diversity of the board is examined in terms of gender and nationality. Even though many firms desire a diverse board composition, it is unclear how this will affect business performance. This study showed an intriguing correlation between board diversity and firm financial performance. Higher audit expenses lead to more efficient audit services when compared to organizations with lower audit prices. Sector representation and the largest market capitalization are taken into consideration while choosing the PSE-100 index. A panel data collection with a time range of 2008 to 2017 is gathered. In its methodology, the study used panel data and quantitative econometric methodologies to close the research gap in the body of existing governance literature.

According to research, nationality diversity is inversely correlated with corporate financial performance, primarily as a result of communication hurdles and varying cross-cultural perspectives. Due to extended audit hours and skilled audit employees conducting a more thorough inquiry, which costs more in audit fees, high audit cost implies a good quality audit. Kouaib and Almulhim (2019), examined the question of whether an audit index controls the association between boardroom diversity in terms of gender and foreign directors and earnings-management practices in the European environment. A moderation model was tested using information from a sample of 429 European companies featured on the Stoxx Europe 600 Index between 1998 and 2017.

Evidence shows that non-European directors are linked with earnings-management activities, while accruals-based and real earnings-management activities are inversely associated with board gender diversity. The relationship between board diversity and earnings management is further dramatically moderated by the audit index. This study is distinctive in that it offers European proof of the controlling role of audit quality in the relationship between board member demographics and business performance. Haruna *et al.* (2018), investigated how board characteristics affect the profitability of Nigerian conglomerate enterprises. The secondary source of data gathering was the audited accounts of Nigerian conglomerate corporations, the gathered data was examined using two steps of regression. The outcome showed that the board characteristics proxies significantly influence the earnings quality of Nigerian conglomerate enterprises. This proves that board qualities are important in restricting managers' unethical behavior in Nigerian conglomerate enterprises and enhancing the quality of earnings.

Conceptual Framework

A conceptual framework incorporates one or more formal theories, additional concepts, and actual evidence from the literature, either entirely or in portion (Horn and Brem, 2013). It is used to show how these ideas are related to one another and how they relate to the research issue.

As shown in Figure 1, gender diversity, age diversity, and

nationality diversity are used as the independent variables which are components of board diversity, the dependent variable is earnings quality. Ali *et al.* (2015) asserted that the firm size and its sector of operation influence the earnings quality of an organization. Therefore the study used firm size, firm sector, inflation, and Gross Domestic Product as control variables.

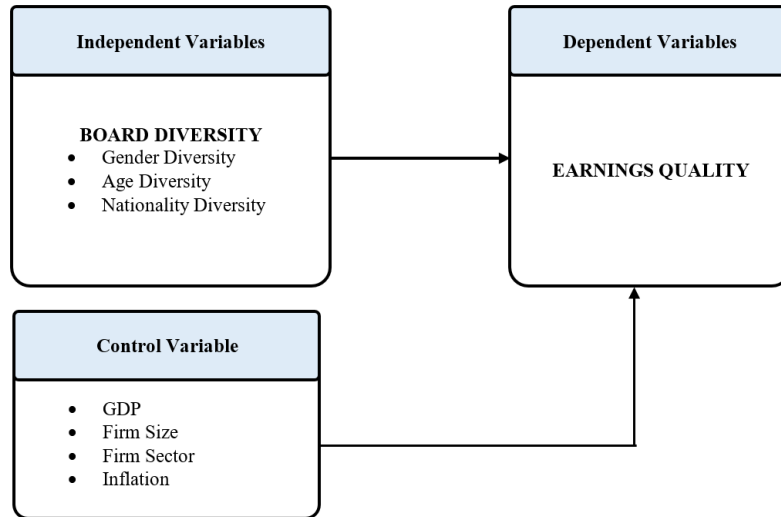


Figure 1: Conceptual Framework

Source: Author's Construction (2022)

METHODOLOGY

The approach used in this investigation is demonstrated in this section. The study used a descriptive design in its methodology. Descriptive design studies are concerned with the description of characteristics of individuals or groups (Lenz *et al.*, 2016). Descriptive research helps researchers to accurately evaluate the background of a research problem before doing a more in-depth examination by clearly and specifically identifying the independent and dependent variables being studied.

As of December 31, 2020, there were 25 non-financial firms registered on the Ghana Stock Exchange. From 2011 to 2021, five (5) non-financial firms registered on the Ghana Stock Exchange were specifically chosen using the purposive sample method with eleven-year period of information span. The sampled firms are Guinness Ghana Breweries PLC, Fan Milk Limited, GOIL PLC, Golden Star Resources Ltd, and Unilever Ghana PLC. Firms that were not listed between 2011 and 2021, firms without financial statements for the study period,

Table 1: Measurement of Variables

S/N	Description	Measurement	Source	Prediction
Dependent Variable				
1	Earnings Quality	Dividing total earnings or total net income by the total number of outstanding shares.	Dechow <i>et al.</i> (2010)	
Independent Variables				
2	Gender Diversity	The ratio of female directors to the total number of directors	Owen (2018)	+
3	Age Diversity	The percentage of young to the total number of directors of the company	Owen (2018)	-
4	Nationality	Foreign directors to the total number of directors on the board	Owen (2018)	+
Control Variables				
5	GDP	The sum of what is purchased in the economy	GSS (2020)	+
6	Firm Size	Log of total Assets of the firm	Owen (2018)	+
7	Firm Sector	Firm sector operating	Darmadi (2011)	+
8	Inflation	The rate of change of those prices	GSS (2020)	+

Source: Author's Construction

and firms with published audited accounts that did not show the corporate governance system by disclosing board diversity information were not included in the study sample, hence this methodology was appropriate. Information for the study was based on secondary data, particularly the financial statements of the five (5) selected registered non-financial companies on the GSE from 2011 to 2021. Additionally, academic journals, scholarly papers, pertinent textbooks, and web search engines were utilized. Dependent variables, independent variables, and control variables were appropriately measured. The elements which include gender diversity, age diversity, nationality diversity, earnings quality, firm size, firm sector, inflation, and Gross Domestic Product were considered as the variables in the study.

Excel and STATA 14 are employed to evaluate the data that was gathered. Regression analysis is used in the research to determine the relationship between the variables being examined. The research used linear regression data analysis methods to analyze the collected data, both descriptive and correlation. In the data analysis, cross-sectional and time series data were integrated. Descriptive statistics are used to quantify the main performance variables using Mean, Maximum, Minimum, and Standard Deviations. As part of the validity and reliability assessments, the study also performed diagnostic tests: multicollinearity and heteroscedastic.

Model Specifications

The paper adopted a regression model to institute the connection between the variables in the study as recommended by Hair, *et al.* (2006). The model

specification was presented as:

$$EQ = \beta_0 + \beta_1 \text{ Size} + \beta_2 \text{ FS} + \beta_3 \text{ INF} + \beta_4 \text{ GDP} + \beta_5 \text{ GD} + \epsilon \dots \text{Model 1}$$

$$EQ = \beta_0 + \beta_1 \text{ Size} + \beta_2 \text{ FS} + \beta_3 \text{ INF} + \beta_4 \text{ GDP} + \beta_6 \text{ AG} + \epsilon \dots \text{Model 2}$$

$$EQ = \beta_0 + \beta_1 \text{ Size} + \beta_2 \text{ FS} + \beta_3 \text{ INF} + \beta_4 \text{ GDP} + \beta_7 \text{ NA} + \epsilon \dots \text{Model}$$

EQ = Earnings Quality

Size = Firm size

FS = Firm Sector

INF = Inflation

GDP = Gross Domestic Product

GD = Gender Diversity

AG = Age Diversity

NA = Nationality

α = The intercept

β = Coefficient of independence variables

ϵ = Error term within a confidence interval of 5%

RESULTS AND DISCUSSIONS

Descriptive Statistics

Table 2 shows the descriptive statistics of the variables used in the study. The variables include earnings quality (EQ), gender diversity (GD), age diversity (AD), nationality diversity (NA), firm size (Size), firm sector (SEC), inflation (IFL), and Gross Domestic Product (GDP).

As shown in Table 2, in the case of Earnings Quality (EQ), the maximum amount recorded within the year is 0.930, and the minimum value is -0.750. The mean for the period is 0.20 also recording a standard deviation of 0.30. This means on average there is an increase of 0.20 in the earnings quality from 2011 to 2021.

Table 2: Summary of Descriptive Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Earnings Quality	55	0.20	0.30	-0.750	0.930
Gender Diversity	55	0.23	0.12	0.090	0.500
Age Diversity	55	0.23	0.23	0.039	0.900
Nationality	55	0.46	0.26	0.000	0.780
Firm Size	55	9.02	3.42	3.494	18.000
Firm Sector	55	1.40	0.49	1.000	2.000
Inflation	55	11.71	3.45	7.140	17.450
GDP	55	5.97	3.66	0.510	14.050

Ghana Stock Exchange (2021)

It was also revealed that the mean value for gender diversity was 0.23 with a standard deviation of 0.12, the smallest rate recorded was 0.090 and the maximum value of 0.500 was recorded. This result implies that there is less gender diversity on the boards of the firms sampled. This indicates that men and women are not engaged at a balanced rate.

The maximum rate for age diversity was 0.900 and a minimum of 0.039. The standard deviation rate was 0.23 and the mean of 0.23. This result implies that age diversity is crucial for a welcoming environment which is

challenged since a low mean value was recorded.

In respect of the board member nationality, the mean value of 0.46 and standard deviation of 0.26 are recorded. The minimum value recorded was 0.000 and a maximum value of 0.780 was also recorded. With a minimum value of 0.000, this means some of the board does not include foreign members, and also with a standard deviation of 0.26, most of the board have foreigners as board members. With respect to the firm size, it was established that the average size is 9.02 and a standard deviation of 3.42, the maximum size recorded was 18.000 and the minimum

value is 3.494. Recording a mean of 9.02 implies that on average over the period of eleven years from 2011 to 2021, the firm increased by 9.02 in size. The firms were categorized as manufacturing or non-manufacturing which was labeled as a firm sector, the average rate recorded was 1.40 with a standard deviation of 0.49, a least value of 1.000, and a supreme value of 2.000. This implies both manufacturing and non-manufacturing are involved in the study. With respect to inflation the mean value of 11.71 and the standard deviation of 3.45. The minimum value recorded was 7.140 and the maximum value of 17.450. This implies the highest inflation recorded within the period of the study was 17.450 and the lowest was 7.140 and on average, the rate of increase in the rate was 11.71. With respect to Gross Domestic Product, the minimum rate for the period was 0.510 and the maximum 14.05, with a mean of 5.97 and a standard deviation of 3.66. This implies the highest GDP rate recorded within the period of the study was 14.05 and the lowest was 0.510 and on average, the rate of increase in the rate was 5.97.

Augmented Dickey-Fuller (ADF) Test

The first difference is that all five series appear stationary, and correlograms confirm this by showing that ACFs tend to zero rather quickly. After taking the first difference, the study uses the unit root test with Augmented Dickey-Fuller to determine whether the series is now stationary or not, and the results are shown in Table 3.

According to Cheung and Lai (1995), when the P-value is greater than 0.05, the null hypothesis (H0) is not excluded, the data has a unit root, and it is non-stationary; when the P-value is less than 0.05, the null hypothesis (H0) is excluded, the figures do not have a unit root, and it is stationary; and when the P-value is less than 0.05, the figures does not have a unit root, and it is stationary.

The results of the Augmented Dickey-Fuller test in Table 3 indicated that there is a unit root based on the P-values of all five series, as the P-values are insignificant. The calculated ADF test-statistic values of the five sequences are less than the critical values at the 1%, 5%, and 10% levels of importance, with dissimilar lag lengths (based

Table 3: Augmented Dickey-Fuller (ADF) Test

Results		EQ	GD	AD	NA	Size	SEC	IFL	GDP
Test Critical Values	1% level	-2.559	-3.750	-3.750	-3.750	-3.000	-3.000	-3.000	-3.000
	5% level	-3.750	-3.000	-3.000	-3.000	-2.400	-2.400	-2.400	-2.400
	10% level	-3.000	-2.630	-2.630	-2.630	-2.104	-2.104	-2.104	-2.104
T-Statistic		-2.559	-2.345	-4.563	-1.219	-1.876	-3.650	-1.105	-0.975
Lag Length		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Prob		0.102	0.158	0.522	0.665	0.126	0.418	0.474	0.532

Note: Earnings Quality (EQ), Gender Diversity (GD), Age Diversity (AD), Nationality Diversity (NA), Firm Size (Size), Firm Sector (SEC), Inflation (IFL), and Gross Domestic Product (GDP).

Source: Author's Estimation.

on Schwarz Information Criterion). As a result, we reject the null hypothesis that all three sequences have a unit root. According to the Augmented Dickey-Fuller results, we concluded that all five series are stationary.

Test of Heteroscedasticity

There are several methods of detecting Heteroscedasticity in regression models. However, the present study resorted to using the Breusch-Pagan Godfrey Heteroscedasticity Test due to its robustness and wide acceptance.

If the probability of the F-statistics of the test show significance that implies that there is a presence of Heteroscedasticity. As shown in Table 4, the models showed significance which suggests that Heteroscedasticity was not a problem in the study.

Table 4: Breusch-Pagan / Cook-Weisberg test for Heteroscedasticity

Ho	Constant Variance
Variables	Fitted Values Of EQ
chi2 (1)	0.09
Prob > chi2	0.762

Source: Author's Estimation.

Correlation Matrix

Table 5 displays the correlation matrix. In a correlation study, the correlation value should not exceed 0.8 for that variable. Values greater than 0.8 indicate a multicollinearity problem. As shown in Table 5 none of the variables recorded a multicollinearity problem since all the correction values

Table 5: Correlation Matrix

	IFL	GDP	Size	GD	AD	NA	SEC	EQ
IFL	1							
GDP	-.472**	1						
	0.000							
Size	0.054	-0.126	1					
	0.696	0.358						

GD	-0.203	0.026	-.434**	1				
	0.136	0.849	0.001					
AD	-0.057	-0.053	0.094	.331*	1			
	0.677	0.702	0.494	0.014				
NA	-0.012	-0.003	-0.134	.326*	0.022	1		
	0.930	0.985	0.330	0.015	0.876			
SEC	0.000	0.000	.587**	-.516**	-.413**	-.495**	1	
	1.000	1.000	0.000	0.000	0.002	0.000		
EQ	0.079	-0.176	-.467**	.390**	-0.030	-0.016	-.288*	1
	0.566	0.199	0.000	0.003	0.826	0.909	0.033	

Note: Earnings Quality (EQ), Gender Diversity (GD), Age Diversity (AD), Nationality Diversity (NA), Firm Size (Size), Firm Sector (SEC), Inflation (IFL), and Gross Domestic Product (GDP).

Source: Author's Estimation.

are below 0.8. The results showed a mean of 0.82 and a standard deviation of 0.12. The minimum and greatest values that were noted were 0.560 and 0.940, respectively. As a result, the majority of the board members are not now working for the company or its auditor, and neither does their employer do a lot of business with the organization. It was revealed that EQ correlates with Size ($p=0.000$, $r=-0.467$), and SEC ($p=0.033$, $r=-0.288$). SEC is also found to correlate with Size ($p=0.000$, $r=0.587$), GD ($p=0.000$, $r=-0.516$), AD ($p=0.002$, $r=-0.413$) and NA ($p=0.000$, $r=-0.495$). Also, NA is found to correlate with GD ($p=0.015$, $r=0.326$).

Multiple Regression Analysis

A model that establishes the relationship between the control, independent, and dependent variables is multiple regression analysis. This analysis's goal is to predict how the sampled secondary data will turn out. The goal of this analysis is to develop models of the relationship between the collected explanatory and secondary data.

Gender Diversity and Earnings Quality

The first regression was to analyze the relationship flanked

by gender diversity and earnings quality as indicated in model 1 of this study. The result is presented in Table 4.5. The investigation starts with a review of the model summary. This model describes the regression line's capacity to fully explain the difference in the dependent variable. The R square is the second piece of information discovered by the researcher. The value of R square is 0.2903, which equals 29.03 percent. This means that the independent variable which is Gender Diversity and the control variables (firm size, firm sector, inflation, and GDP) explain 29.03 percent of the total variance.

Table 6 also summarizes the study model's overall fit. The number of observations (55) simply refers to the number of observations used in the regression. F (5, 49) represents the F-statistics of the model-based ANOVA test. The F-statistic analyzes whether there is a statistically momentous difference between the ratios explainable to inexplicable mean-variance.

Simply, the models and residual degrees of liberty are represented by the numbers 5 and 49, correspondingly. To find out how effectively the indicators (as a whole) predict the dependent variable, Stata does a hypothesis test. According to the null hypothesis, the mean-variance

Table 6: Gender Diversity and Earnings Quality

Source	SS	df	MS		Number of obs	55
					F(5, 49)	4.01
Model	1.40	5	.28018		Prob > F	0.004
Residual	3.42	49	.0699		R-squared	0.2903
					Adj R-squared	0.2179
Total	4.83	54	.089363405		Root MSE	0.26437
Earnings Quality	Coef.	Std. Err.	t	P> t 	[95% Conf.	Interval]
Firm size	-0.034	0.1637	-2.05	0.045	-0.07	0.00
Firm sector	-0.009	.09107	-0.10	0.922	-0.19	0.17
Inflation	-0.001	.011817	-0.06	0.954	-0.02	0.02
GDP	-0.019	.01137	-1.65	0.106	-0.04	0.00
Gender Diversity	-0.034	.03278	-1.04	0.302	-0.10	0.03
_cons	0.734	.2175	3.37	0.001	0.30	1.17

Source: Author's Estimation.

that can be understood easily is related to the average variance that cannot be explained. The mean summation of the squares of the model is approximately four times larger than that of the residual.

The possibility of attaining the predicted F-statistics or greater is indicated by the Prob > F. (the p-value). The transitional that the MS of the model is considerably bigger than the residual must be accepted if the study's p-value is less than 0.05 for a standard alpha level of 0.05. As an outcome, our model's predictors precisely predicted the aim of the variable.

In the case of the control variables Firm Size, Firm Sector, Inflation, and Gross Domestic Product recorded p-values of 0.00, 0.17, 0.02, and 0.00 respectively. This

implies that three control variables (Firm Size, Inflation, and Gross Domestic Product) influence the dependent variable which is Earnings Quality when the independent variable is Gender Diversity.

Also, the independent variable Gender Diversity recorded a p-value of 0.03. The study results imply that Gender Diversity has a significant influence on Earnings Quality among the listed firms.

Age Diversity and Earnings Quality

The regression analysis for the relationship between the control variable, age diversity as an independent variable, and earnings quality is examined and the results are presented in Table 7.

Table 7: Age Diversity and Earnings Quality

Source	SS	df	MS		Number of obs	55
					F(5, 49)	3.71
Model	1.33	5	.2650		Prob > F	0.006
Residual	3.50	49	.0714		R-squared	0.275
					Adj R-squared	0.201
Total	4.83	54	.0893		Root MSE	0.267
Earnings Quality	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
Firm size	-0.044	.0149	-2.96	0.005	-0.074	
Firm sector	0.008	.1122	0.07	0.944	-0.218	0.233
Inflation	-0.001	.0120	-0.06	0.955	-0.025	0.023
GDP	-0.020	.0114	-1.74	0.088	-0.043	0.003
Age Diversity	0.012	.1946	0.06	0.95	-0.379	0.403
_cons	0.707	.2378	2.98	0.005	0.230	1.185

Source: Author's Estimation.

In the case of model 2, age diversity is used as the independent variable while earnings quality was used as a dependent variable with control variables of firm size, firm sector, inflation, and GDP. As shown in Table 7, an r-square of 0.275 was recorded this means the age diversity with the control variables explains 27.50% of the dependent variable.

The possibility of attaining the predicted F-statistics or greater is indicated by the Prob > F. (the p-value). If the inquiry provides results that support the alternative hypothesis that the model's MS is significantly greater than the lingering effects of the null hypothesis, it is shown by a p-value less than 0.05 for a standard alpha level of 0.05, as illustrated in Table 7. As a result, the predictors in our model successfully forecast the desired variable. With respect to model 2, the control variables which include firm size, firm sector, inflation, and gross domestic product recorded p-values of 0.005, 0.944, 0.955, and 0.088 respectively. This implies of one the control variables which is firm size influences the dependent variable which is Earnings Quality as the independent variable. Also, the independent variable Age Diversity recorded a p-value of 0.06. The study outcomes imply

that Age Diversity has little or unimportant influence on earnings quality among the listed firms.

Nationality and Earnings Quality

This section presents the multiple regression analysis for model 4, where Nationality is used as the independent variable. The analysis includes the dependent variable and the control variables and the result is presented in Table 9. As shown in Table 9, the Prob > F value recorded was 0.005 which implies that the model significantly predicts accurately the target variable. Since the p-value is below 0.05. Model 4 is found to explain the dependent variable by 28.40% since the R-squared value recorded was 0.284. Among the control firm size was the only control variable found to significantly influence earning quality since a p-value of 0.004 was recorded. In the case of the other control variables, firm sector, inflation, and GDP the p-values chronicled were 0.712, 0.939, and 0.088 respectively which are above the theoretical level of 0.05. The dependent variable which is Nationality recorded a p-value of 0.022 which means that Nationality has a significant impact on the earning quality of a firm. This means that Nationality has an influence on earning quality.

Table 8: Nationality and Earnings Quality

Source	SS	df	MS		Number of obs	55
					F(5, 49)	3.88
Model	1.368	5	.27365		Prob > F	0.005
Residual	3.457	49	.0705		R-squared	0.284
					Adj R-squared	0.210
Total	4.826	54	.0893		Root MSE	0.266
Earnings Quality	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
Firm size	-0.041	.0135	-3.05	0.004	-0.0687	-0.014
Firm sector	-0.039	.1061	-0.37	0.712	-0.2527	0.174
Inflation	-0.001	.0118	-0.08	0.939	-0.0248	0.023
GDP	-0.020	.0113	-1.74	0.088	-0.0425	0.003
Nationality	-0.447	.1887	-2.37	0.022	-0.8270	-0.067
_cons	0.812	.2511	3.23	0.002	0.3070	1.316

Source: Author's Estimation.

RESULTS AND DISCUSSION

The primary objective of the research was to investigate the connection between board diversity and the profitability of non-financial companies registered on the Ghana Stock Exchange. According to Francis *et al.* (2003), investors use EQ as a conditional variable to source high valuation knowledge from earnings trends. Earnings are regarded as being of greater quality when they provide decision-makers with additional information about a firm's financial results (Dechow *et al.*, 2010).

The study's goal was to determine how gender diversity among non-financial registered firms on the Ghana Stock Exchange affects earnings quality. Gender diversity was found to have a p-value of 0.022, which is less than the p-value of 0.05. This suggests that the profitability quality of non-financial registered firms on the Ghana Stock Exchange is significantly impacted by gender diversity. Similar to this, Ain *et al.* (2021), study shows that gender diversity on the board has the biggest influence when there are three or more female directors, as opposed to just one or two.

Kazemi and Abdi's (2019) findings also show that the quality of earnings is significantly affected by the presence of women on audit committees. Instead, the findings indicated that the quality of the company's earnings is not significantly impacted by gender diversity on the board of directors. When women are well-represented among senior business executives, financial reporting and managerial control are of higher quality.

Also, Zalata *et al.* (2022), findings indicated that only feminine directors with relevant financial perspectives and fewer outside directorships can reduce earnings management; as a result, overcommitting seasoned female directors with more exterior directorships would decrease their monitoring ability. Regardless of their outside directorships or tenure, the study did not identify any evidence indicating that female directors without appropriate financial expertise can mitigate profit management.

The study's second goal was to investigate the impact of age diversity on the profitability of non-financial registered firms on the Ghana Stock Exchange. According to Sonnenfeld (2002) and Darmadi (2011), Age can be viewed as a broad asset and is part of human capital because it can reflect experience and risk-taking. In the business world of today, youthful directors are constantly involved, while the majority of board members are older (Gilpatrick, 2000).

Age diversity has a p-value of 0.500, which implies that it has no apparent impact on the earnings quality of non-financial companies listed on the Ghana Stock Exchange, according to the study's findings. This result shows that the quality of profits of non-financial companies listed on the Ghana Stock Exchange is unaffected by the age diversity of the board of directors.

However, Hoang *et al.* (2017) study contradicts this study's findings, showing a non-linear, U-shaped link between age diversity in boards and earnings quality instead of a strong and positive linear relationship between age diversity of boards and earnings quality. The same is true of Almomania *et al.* (2020), who discovered that while board religion has no momentous influence on earnings quality, board gender, board experience, and board age do. This shows that a key explanation for the quality of earnings is provided by corporate governance.

Examining the impact of nationality on earnings quality among non-financial listed firms on the Ghana Stock Exchange was the study's third goal. According to Fidanoski *et al.* (2014), there are several governance principles that promote the appointment of members of various nations to the board of directors to reflect the nationality variety of its stakeholders, consumers, and employees.

The findings of the study indicate that nationality has an impact on the standard of earnings. This finding suggests that nationality diversity has a major impact on earnings quality. The study's findings supported the claim made by Van den *et al.* (2005) that the addition of foreign directors can enhance the standard of the board's

deliberations. Additionally, the research by Hashim *et al.* (2019) demonstrates that ethnic and national diversity is found to significantly affect the earning quality of the selected companies. Age and gender diversity, however, do not appear to have a major effect on the quality of wages. The findings of Khan and Abdul Subhan (2019) presented an intriguing picture of board diversity and company financial performance. Due to varying cross-cultural views and communication hurdles, nationality diversity is inversely correlated with corporate financial performance (Khan and Abdul Subhan, 2019). Evidence from Kouaib and Almulhim (2019) shows that non-European directors are positively linked with earnings-management activities, whereas accruals-based and real earnings-management activities are inversely associated with board gender diversity. Results from Makhlof *et al.* (2018) demonstrate that accounting conservatism is highly positively connected with gender diversity, education level, and nationality diversity. The data, however, do not demonstrate any appreciable impact of directors' age on accounting prudence.

CONCLUSIONS

This research's key goal was to examine the connection between board diversity and the earnings quality of non-financial companies quoted on the Ghana Stock Exchange. The study revealed that the board diversity variables, including gender and nationality diversity, affected the company's earning quality. While it was discovered that age diversity had little or no impact on earnings quality. Overall, it was discovered that board diversity significantly and favorably impacts the earnings quality of the businesses registered on the Ghana Stock Exchange. The study concluded that businesses with a more diversified board seem to be more likely to have earnings that are of higher quality.

The study advises management of publicly traded companies to actively adopt more diverse boards, particularly in terms of gender diversity because it is linked to an increase in earnings management. Companies' Shareholders should be aware of the advantages of having a gender-diverse board, particularly in thwarting management's manipulation of the books of accounts to portray a particular image. To reduce the number of enterprises that fail in large numbers, the study also wants to advise policymakers to keep implementing the laws pertaining to gender diversity. The financial markets should ensure that diversification standards are carefully adhered to, to prevent accounting fraud and businesses' widespread failure due to long-term losses concealed by accounting fraud meant to show successful performance. The research recommends that another research be undertaken that includes both secondary and prime data since some elements of board diversity cannot be adequately studied via the use of secondary data. Another study should be carried out on non-financial companies as well as other companies that are not non-financial companies to encourage cross-industry comparison since

the present investigation was only carried out in Ghana's publicly traded non-financial companies.

REFERENCES

- Abbadì, S. S., Hijazi, Q. F. and Al-Rahahleh, A. S., (2016). Corporate governance quality and earnings management: Evidence from Jordan. *Australasian Accounting, Business and Finance Journal*, 10(2), 54-75.
- Adeabah, D., Gyeke-Dako, A., & Andoh, C. (2019). Board gender diversity, corporate governance and bank efficiency in Ghana: a two stage data envelope analysis (DEA) approach. *Corporate Governance: The International Journal of Business in Society*, 19(2), 299-320.
- Ahmed, M. G., Ganesan, Y., Hashim, F. And Sadaa, A. M., (2021). The effect of chairman tenure on governance and earnings management: A case study in Iraq. *The Journal of Asian Finance, Economics and Business*, 8(3), 1205-1215.
- Ain, Q. U., Yuan, X., Javaid, H. M., Zhao, J. and Xiang, L., 2021. Board gender diversity and dividend policy in Chinese listed firms. *Sage Open*, 11(1), 2158244021997807.
- Ali, M. F., Joyes, G., & Ellison, L. (2015). Proposing the third generation of an aligned activity system as a theoretical framework in blended learning research. *Jurnal Teknologi*, 75(3), 61-66.
- Almomania, D. T., Ayedhb, D. A. and Almoanic, P. M., (2020). The Effects of the Family Ownership Structure on the Relationship between Board of Directors and Earnings Quality: Evidence Manufacturing Firms in Amman Stock Exchange. *governance*, 29(7), 13005-13015.
- Alves, S., (2014). The effect of board independence on the earnings quality: evidence from Portuguese listed companies. *Australasian Accounting, Business and Finance Journal*, 8(3), 23-44.
- Alves, S., (2021). CEO duality, earnings quality, and board independence. *Journal of Financial Reporting and Accounting*.
- Amihud, Y., Mendelson, H., & Pedersen, L. H. (2006). Liquidity and asset prices. *Foundations and Trends® in Finance*, 1(4), 269-364.
- Ararat, M., Aksu, M. H., & Tansel Cetin, A. (2010). The impact of board diversity on boards' monitoring intensity and firm performance: evidence from the Istanbul Stock Exchange. Available at SSRN 1572283.
- Ayuso, S. Argandona (2007), Responsible corporate governance: towards a stakeholder board of directors (Vol. 701). Working Paper.
- Barako, D. G., & Brown, A. M. (2008). Corporate social reporting and board representation: evidence from the Kenyan banking sector. *Journal of management & governance*, 12, 309-324.
- Barbuto Jr, J. E., & Wheeler, D. W. (2006). Scale development and construct clarification of servant leadership. *Group & organization management*, 31(3), 300-326.
- Benjamin, O. M., & Tenai, J. (2018). Effect of age diversity

- on dividend policy in Kenya. *International Journal of Advances in Management, Economics and Entrepreneurship*, 5(8), 1-6.
- Boadi, I., & Osarfo, D. (2019). Diversity and return: the impact of diversity of board members' education on performance. *Corporate Governance: The International Journal of Business in Society*, 19(4), 824-842.
- Brennan, N. M., & Solomon, J. (2008). Corporate governance, accountability and mechanisms of accountability: an overview. *Accounting, Auditing & Accountability Journal*, 21(7), 885-906.
- Busirin, M. F., Azmi, N. A. and Zakaria, N. B., (2015). How effective is board independence in the monitoring of earnings manipulation? *Procedia Economics and Finance*, 31, 462-469.
- Cabrera-Suárez, M. K., & Martín-Santana, J. D. (2015). Board composition and performance in Spanish non-listed family firms: The influence of type of directors and CEO duality. *BRQ Business Research Quarterly*, 18(4), 213-229.
- Carter, D., D'Souza, F. P., Simkins, B. J., & Simpson, W. G. (2007). The diversity of corporate board committees and firm financial performance. Available at SSRN 972763.
- Chapple, L. and Humphrey, J. E., 2014. Does board gender diversity have a financial impact? Evidence using stock portfolio performance. *Journal of business ethics*, 122(4), 709-723.
- Cheung, Y. W., & Lai, K. S. (1995). Lag order and critical values of the augmented Dickey–Fuller test. *Journal of Business & Economic Statistics*, 13(3), 277-280.
- Conyon, M. J., & Peck, S. I. (1998). Board size and corporate performance: evidence from European countries. *The European journal of finance*, 4(3), 291-304.
- Darmadi, S. (2011). Board diversity and firm performance: *The Indonesian evidence. Corporate ownership and control Journal*, 8.
- De Cuyper, N., Notelaers, G. and De Witte, H., 2009. Job insecurity and employability in fixed-term contractors, agency workers, and permanent workers: associations with job satisfaction and affective organizational commitment. *Journal of occupational health psychology*, 14(2), 193.
- Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of accounting and economics*, 50(2-3), 344-401.
- Dimitrova, D., 2017. The impact of social ties and gender diversity on earnings quality.
- Eka, H., 2018. Corporate finance and firm value in the Indonesian manufacturing companies. *Business Studies*, 11(2), 113-127.
- ElMoatasem Abdelghany, K. (2005). Measuring the quality of earnings. *Managerial Auditing Journal*, 20(9), 1001-1015.
- Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of director diversity and firm financial performance. *Corporate governance: An international review*, 11(2), 102-111.
- Fidanoski, F., Simeonovski, K., & Mateska, V. (2014). The impact of board diversity on corporate performance: New evidence from Southeast Europe. *In Corporate governance in the US and global settings*, 17, 81-123. Emerald Group Publishing Limited.
- Francis, J., LaFond, R., Olsson, P., & Schipper, K. (2003). Earnings quality and the pricing effects of earnings patterns. Available at SSRN 414142.
- Hair, E., Halle, T., Terry-Humen, E., Lavelle, B., & Calkins, J. (2006). Children's school readiness in the ECLS-K: Predictions to academic, health, and social outcomes in first grade. *Early Childhood Research Quarterly*, 21(4), 431-454.
- Haruna, D., Kwambo, L. M. and Hassan, S. U., (2018). Board characteristics and earnings quality of listed conglomerate firms in Nigeria. *Scholedge International Journal of Business Policy & Governance*, 5(3), 14-37.
- Hashim, F., Ahmed, E. R. and Huey, Y. M., (2019). Board diversity and earning quality: Examining the role of internal audit as a moderator. *Australasian Accounting, Business and Finance Journal*, 13(4), 73-91.
- Hashim, H.A. and Devi, S., (2008). Board characteristics, ownership structure, and earnings quality: Malaysian evidence. In *Corporate governance in less developed and emerging economies*. Emerald Group Publishing Limited.
- Hillman, A. J., Cannella, A. A., & Paetzold, R. L. (2000). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management studies*, 37(2), 235-256.
- Hoang, T.C., Abeysekera, I. and Ma, S., (2017). The effect of board diversity on earnings quality: An empirical study of listed firms in Vietnam. *Australian Accounting Review*, 27(2), 146-163.
- Hohenfels, D., (2016). Auditor tenure and perceived earnings quality. *International Journal of Auditing*, 20(3), 224-238.
- Horn, C. and Brem, A., (2013). Strategic directions on innovation management—a conceptual framework. *Management research review*.
- Ianniello, G., (2015). The effects of board and auditor independence on earnings quality: evidence from Italy. *Journal of management & Governance*, 19(1), 229-253.
- Jensen, M. C., & Meckling, W. H. (1979). Rights and production functions: An application to labor-managed firms and codetermination. *Journal of business*, 469-506.
- Jensen, M. C., & Murphy, K. J. (1990). CEO incentives: It's not how much you pay, but how.
- Kazemi Olum, M. and Abdi, M., (2019). Impacts of gender diversity in the board of directors and audit committee on earnings quality. *Journal of Knowledge Accounting*, 10(1), 137-168.
- Keasler, T. R., Goff, D. C., & Perfect, S. B. (1997). Event Risk Bond Covenants and Shareholder Wealth:

- Evidence from Convertible Bonds. *Journal of Financial And Strategic Decisions*, 10(3), 37-41.
- Khan, A. W. and Abdul Subhan, Q., 2019. Impact of board diversity and audit on firm performance. *Cogent Business & Management*, 6(1), 1611719.
- Kouaib, A. and Almulhim, A., 2019. Earnings manipulations and board's diversity: The moderating role of audit. *The Journal of High Technology Management Research*, 30(2), 100356.
- Kukah, M. A., Amidu, M., & Abor, J. Y. (2016). Corporate governance mechanisms and accounting information quality of listed firms in Ghana. *African Journal of Accounting, Auditing and Finance*, 5(1), 38-58.
- Lazonick, W., 2014. Profits without prosperity. *Harvard Business Review*, 92(9), 46-55.
- Lenz, A. S., Henesy, R. and Callender, K., (2016). Effectiveness of seeking safety for co-occurring posttraumatic stress disorder and substance use. *Journal of Counseling & Development*, 94(1), 51-61.
- Lyimo, G. D., (2014). Assessing the measures of quality of earnings: Evidence from India. *European Journal of Accounting Auditing and Finance Research*, 2(6), 17-28.
- Makhlouf, M. H., Al-Sufy, F. J. and Almubaideen, H., (2018). Board diversity and accounting conservatism: Evidence from Jordan. *International Business Research*, 11(7), 130-141.
- Marra, A. and Mazzola, P., (2014). Don't judge a book by its cover: The influence of independent directors' busyness and tenure on earnings quality. Available at SSRN 2374002.
- Owen, N. (2018). Effect of board diversity on earnings management in listed manufacturing and allied companies in Kenya (Doctoral dissertation, University of Nairobi).
- Perryman, A. A., Fernando, G. D., & Tripathy, A. (2016). Do gender differences persist? An examination of gender diversity on firm performance, risk, and executive compensation. *Journal of Business Research*, 69(2), 579-586.
- Ruigrok, W., Peck, S., & Tacheva, S. (2007). Nationality and gender diversity on Swiss corporate boards. *Corporate governance: an international review*, 15(4), 546-557.
- Schipper, K., & Vincent, L. (2003). Earnings quality. *Accounting horizons*, 17, 97-110.
- Shen, H., Xiong, H., Zheng, S., and Hou, F., (2021). Chief executive officer (CEO)'s rural origin and internal control quality. *Economic Modelling*, 95, 441-452.
- Sonnenfeld, J. A. (2002). What makes great boards great. *Harvard business review*, 80(9), 106-113.
- Teets, W. R. (2002). Quality of earnings: An introduction to the issues in accounting education special issue. *Issues in Accounting Education*, 17(4), 335-360.
- Van den Berghe, L. A. A., & Baelden, T. (2005). The complex relation between director independence and board effectiveness. *Corporate Governance: The international journal of business in society*, 5(5), 58-83.
- Van der Walt, N., & Ingley, C. (2003). Board dynamics and the influence of professional background, gender and ethnic diversity of directors. *Corporate governance: An international review*, 11(3), 218-234.
- Van Ness, R. K., Miesing, P., & Kang, J. (2010). Board of director composition and financial performance in a Sarbanes-Oxley world. *Academy of Business and Economics Journal*, 10(5), 56-74.
- Yu, F. F. (2008). Analyst coverage and earnings management. *Journal of financial economics*, 88(2), 245-271.
- Zalata, A. M., Ntim, C. G., Alsohagy, M. H. and Malagila, J., (2022). Gender diversity and earnings management: the case of female directors with financial background. *Review of Quantitative Finance and Accounting*, 58(1), 101-136.