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Board Gender Diversity and Firm Performance:

- An Evidence of Listed Commercial Banks in Ghana-

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Abstract

This study will examine the effect of gender diversity on firm performance of listed companies in Ghana. The sample will consist of 15 listed companies under the Security and Exchange Commission of Ghana who were registered under the Company Code Act 1969, 179 of Ghana. The study will cover the period 2011-2018 which will yield a panel data of 105 firms. The objective of the study is to examine the percentage of women on the boards of selected companies in Ghana, examine the financial performance of selected companies in Ghana and analyse the effect of women on boards on the financial performance of selected companies in Ghana. The dependent variable will be Return on Asset (ROA) which will be used to measure financial performance of the selected companies. The independent variables will include board gender diversity which will be measured using the Blau index, Percentage of women on board and dummy variables. The control variables will include firm size and firm age. The measurement will be done using the pooled Ordinary Least Square (OLS). The STATA software will be used to run the regression after which the analysis, conclusion and recommendation will be followed.

A major policy recommendation will be on the need for companies to include women on their boards since previous studies revealed that women contribute significantly towards the performance of companies.

Keyword: Gender Diversity, Firm Performance
Student Number: 2020-23555

Table of Contents

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ROA	Return on Assets
ILO	International Labor Organization
AfDB	African Development Bank
OLS	Ordinary Least Square
GLS	Generalized Least Square
CLRM	Linear Regression Model
GSEC	Ghana Security and Exchange Commission
MoGCSP	Ministry of Gender, Children and Social Protection
IoD-G	Institute of Directors-Ghana
CEO	Chief Executive Officer
GIPC	Ghana Investment Promotion Center
EBIT/TA	Earnings Before Interest and Tax Over Total Assets
GPM	Gross Profit Margin
NPM	Net Profit Margin
FEM	Fixed Effects Model
REM	Random Effects Model
PWD	Proportion of Women on Boards
SD	Standard Deviation
GCB	Ghana Commercial Bank
ADB	Agricultural Development Bank
SG-SSB	Société Générale-Social Security Bank
SCB	Standard Chartered Bank
FB	Fidelity Bank
ZB	Zenith Bank
CB	Cal Bank
EB	Ecobank
PB	Prudential Bank

CHAPTER ONE
INTRODUCTION

1.0 Background of the study

The board of directors within modern organizations forms an important corporate governance mechanism which guarantees a judicious use of resources and proper running of organizations so as to guarantee the maximization of the wealth of shareholders. The consistent records of global corporate scandals such as Enron and Worldcom is an indication of the need for organizations to comply and implement the mechanism of corporate governance (Board gender diversity, board independence, CEO duality, board size) which will ensure that stakeholders to organizations attain maximum satisfaction especially the rational shareholders for their investment into organizations as a means of taking risk for future benefit (Shleifer and Vishny, 1997).

Major roles within organizations are carried-out by the board of directors including monitoring role, strategic formulation of mission and vision, provision of links to external resources and avenues which will enable adherence and implementation of corporate governance best practices and reports such as Cadbury Committee report in the UK (1992) and Sarbanes-Oxley Act (Hendry and Kiel, 2004; Reguera-Alvarado et al., 2015). Among the important variables of corporate governance which have caught the

attention of World leaders, professionals and researchers especially within modern organizations to support the need for standardization and harmonization, is the board gender diversity.

Board gender diversity remains a topical issue of discussion and it is broadly categorized into board demographic diversity (service task of the board) and board structural diversity (control task of the board) (Ben-Amar, Francoeur, Hafsi, & Labelle, 2013). The interest of the student researcher is to consider the effect that gender diversity has on the financial performance of companies listed in Ghana, because board gender diversity is a variable considered to be sensitive and broader than the other demographic variables (Krishnan and Park, 2005).

Gender diversity is regarded by several researchers as being the different talents and capabilities of both men and women, how women are considered for their potentials within the boards of organizations and how best men and women work with each other within organizations to enhance performance which will enable an attainment of the ultimate objective of maximizing the wealth of shareholder (Dutta and Bose, 2006; Herring 2009). There are various interest groups who are much interested in knowing the contribution of women potential on the board of corporations and how that can reflect in the financial performance of such corporations. Women are seen as contributing to boards effective functions within modern organizations

including monitoring and supervisory roles and they are trustworthy and compassionate in dealing with corporate affairs relating to customers and employees. This has made gender diversity an interesting area of consideration by professionals and policy makers who even seek gender equality in the boardroom making gender diversity a sensitive variable especially with the population census that reveals a higher percentage of women as well as other conclusion from researches revealing how the potential of women contribute to the growth and development of organizations and economies at large (Erhardt, Werbel and Shrader, 2003).

Admittedly, women contributions towards the growth and development of societies cannot be overemphasized. Women remain phenomenon not only in the up-bringing of potentials in children, but also when participating on corporate institutions. This has resulted into several researches to know women potentials. Whilst some researchers concluded on women engagement into corporate boards contributing to financial performances after using accounting and marketing performance measuring variables including Tobin's Q, Return on Assets on an independent variables such as the Blau index 1977 and dummy variable, (Carter, Simkins& Simpson, 2003; Francoeur, Labelle &Desgagne, 2008), other research conclusions revealed the opposite and this makes gender diversity an interesting area of study (Niederle and Vesterlund, 2007). There were conclusions revealing some weakness in women including women portraying risk-averse trait,

women avoiding overconfidence, and in management when women become emotional, careful with some even withdrawing from competition for promotions or choosing to desist from positions which they may consider to be of stressful nature (Barber and Odean, 2001; Matsa and Miller, 2011).

Women participation on board is concluded as enabling an introduction of fresh mindsets to issues that are complex within organizations, they are known of possessing unique understanding of consumer behavior which makes their involvement in corporate boards to be encouraged despite the few negative characteristics as identified in other studies (Campbell & Vera, 2008; Bathula 2008; Brennan and McCafferty, 1997). The trustworthiness of women, their collaborative nature, their ability to introduce fresh information and to bring different solutions to challenges that can help in improving board dynamics have made it more acceptable for women participation on boards of organizations (Dang et al, 2012 Croson and Buchan, 1999; Lincoln and Adedoyin, 2012).

One would have thought that with the numerous contributions of women as revealed through research conclusions, there will be a massive engagement of women on the board of organizations. However, women participation on board is not encouraging within organizations. This has been disclosed in the report presented by the Catalyst which concluded on only 14.7% women representation on board after considering 500 companies in 2005 in the

United State of America. The 2013 and 2012 World Development Report relating to gender and jobs availability to women also revealed that in the 1980s and 1990s, the active participation of women globally has seen an improvement when it comes to the contribution of women expertise in labour markets even though there are persistent problem of unemployment especially within the emerging nations (ILO, 2007).

Gender diversity has recently been admitted and implemented in many nations including Belgium, France, Norway and Italy. It has become a national issue within some of these nations whereby organizations are restricted to formulate board functions with regulated gender consideration. In Norway, there is 40% reservation of board seats for women which was also in Spain since 2015. It has become necessary for other nations including Ghana to also consider women involvement on board functions to fill the numerous gaps women potentials.

1.1 Problem statement

Most organization are seen to be underperforming as a result of neglecting the potential of women on their boards which reflects in their financial performances. African Development Bank (AfDB) report revealed in the year 2015 that, women are only assigned to 14% board participation after considering the board function from the annual report of 307 organizations

in Africa. It has been clarified into details within the report covering some African nations which are improving in terms of women participation on board including Kenya, Ghana and South Africa with 19.8%, 17.7% and 17.4% respectively. Egypt, Morocco and Tunisia are also seen with some level of recognition of women potentials on board showing 8.2%, 7.9% and 5.9% respectively. This has revealed only about 12.7% on an average the percentage allocated to women on board in among organizations from the African countries identified. However, men occupy almost 87.3 of board participation despite the potential of women as aforementioned.

The past years have seen little efforts in utilizing women potential to ensure an enhanced performance within organizations. Carter, Simskins and Simpson, (2003) concluded on the participation of women in organizations affecting financial performance positively which is in consistency with the other research findings. Erhardt, Werbel and Shrader (2003) revealed from the study clearly that gender diversity is positively linked to the performance of organizations after using Return on Asset (ROA) to measure performance. McKinsey & Company, (2007) concluded that the performance of companies is guaranteed through an effective role on their boards just as it was found by (Wang and Clift, 2009). Unfortunately, most emerging nations like Ghana are faced with the problem of insignificant participation of women on the boards of corporations which in turn reflect on their performances.

Most of the studies on gender diversity were conducted in developed nations with Ghana, Kenya, India, and Malaysia among some emerging nations where there were studies on gender to unravel the women potentials on boards of organizations which is required of notice by policy makers to enhance organization's performance (Barako& Brown 2008; Marimuthu & Kolandaisamy 2009).

The Ghanaian culture was for the past years criticized as recognizing only the potential of women in playing leadership roles which places men in superiority in terms of decision making without an absolute recognition of the potential of women. In Ghana, Amidu and Abor (2006) is considered to have touched on the key issue of gender diversity within organizations. The conclusion from their study revealed that the potential of women is slightly utilized despite the numerous capabilities of women in terms of playing complementing roles that will lead to the performance of firms.

The key critique of (Amidu and Abor, 2006) study was its inability to show empirical test for inferential analysis and to know whether their findings were statistically significant. This study seeks to bridge this gap by employing ordinary least square (OLS) and generalized least square (GLS) pooled regression model to measure the effect of gender diversity on firm performance. The author could not show enough test to show the correlation and other relevant analysis between the variables to enable better

understanding. It's been over a decade since the publication of (Amidu and Abor, 2006) study on gender, there were limited study on gender diversity as a mechanism of corporate governance within organizations in Ghana. Ghana has become the preferred destination for investors in the Sub-Saharan Africa and it is therefore relevant to reflect on (Amidu and Abor, 2006) findings and to make known the new observations for policy formulation in order to deepen investor's confidence.

1.2 Objectives of the study

The main objective is to examine how gender diversity can affect the financial performance of organizations in Ghana.

The study will address the following specific objectives;

i. Examine the percentage of women on the boards of selected companies in Ghana.
ii. Examine the financial performance of selected companies in Ghana.
iii. Analyse the effect of women on boards on the financial performance of selected companies in Ghana.

1.3 Research questions

i. To what extent do we say, there are a greater percentage of women on the board of companies in Ghana?

ii. To what extent do women board directors affect the financial performance of companies in Ghana?

iii. What is the analysis to show the extent to which the presence of women on boards affects performance of companies in Ghana?

1.4 Justification of the study

The current study seeks to examine the effect of women presence on boards of organizations in Ghana. The conclusion from the study will serves us a reference point for corporate bodies in Ghana and other decision makers regarding the contributions of women on boards of corporations. At this time when nations are formulating policies with an efficient regulatory framework which will ensure that women occupy some percentage on board of corporations, the Ghanaian government will as well rely on the current study to establish policies relating to gender diversity.

The study will also add up to the existing literature on board gender diversity and it will remain reliable when it comes to studies on board gender diversity in Ghana as a means of improving previous studies such as Amidu and Abor (2006) and this will also assist the selected firms in considering women's participation on their boards.

1.5 Research Methodology

Research methodology refers to the general approach to design process of a study. Methodology provides theoretical foundation to the collection of data and its analysis (Hickman, 2010). The study will adopt a descriptive research design and quantitative research approach. The quantitative approach will be used to gather data for the study. Data will be retrieved from the annual report of selected commercial banks which have been registered under the Security and Exchange Commission in Ghana covering the period 2010 – 2018 as a result of untimely availability of certified and audited annual reports from some of these companies in Ghana. The STATA software will be depended upon for the generation of result after which further analysis and conclusions will be drawn to help make suggestions and recommendations.

1.6 Scope and delimitations of the study

Board gender diversity remains a topical issue which has caught the attention of governments, professional and researchers. There is the need for a broader study on gender diversity especially among the emerging nations. This comes as a result of the desire of most governments among the emerging nations to grow the private sector and to ensure an efficient education system. The research of this nature would have to use data from

other Africa nations. However, the student researcher is limited to use only data available in Ghana from the annual reports of the listed companies of Ghana whose annual reports are mandatory to be published for stakeholder's consumption. Financial and other duration to complete the study will further serve as a limitation to the student researcher to complete the current study and to draw reliable conclusions. It is evidenced that major practical studies on gender diversity have been conducted using data drawn from developed countries (Carter et al., 2010), but there has been an absence or little of evidence from developing markets. The sample of this research will be drawn from listed organizations in Ghana, but the results may not generalize all selected firms in the country.

1.7 Organization of the study

The entire study will be grouped into five segments. The first chapter will give introduction will be followed with the identification of problems as well as the objectives and other related questions to be answered in the study through to how it will be organized. It will be followed with the chapter two which will review literature including the theoretical and contextual literature as well as a conceptual framework. The chapter there will display the methodology whereas the fourth chapter will present an analysis and discussions on data as well as research findings. It will be

ended with the fifth chapter which will summarize the related findings, draw conclusions and give recommendation and some areas that will need further research.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviews literature relating to board gender diversity and firm performance and it further outlines the conceptual, theoretical and empirical framework. The various theories are also reviewed as well as the contextual framework in this chapter.

2.1 Board of Directors

The Board of directors are involved in the formulation of vision and mission statements of a company. The board of directors also perform the monitoring roles and strategies roles of companies (Hendry and Kiel, 2004; Reguera-Alvaradoet al., 2015). The board of directors have therefore become very influential within modern companies and contribute towards the achievement of objectives of companies.

Considering the structure of ownership of modern companies whereby ownership is given to shareholders through the holding of shares, the board of directors represents the shareholders who become the owners of companies and they function to seek the interest of the owners. The board of directors does this by ensuring that management keeps to their objectives and policies which are to benefit the shareholders through the maximization

of their wealth rather than for management to enrich their wealth through the utilization of the resources available to them (Australian Human Resources Institute, 2011).

On that note, the board of directors keeps that trust and confident of the owners and also ensure that any conflict of interest, agency problem and information asymmetry is resolved to enhance the operations of Companies.

2.2 Board Gender diversity

Board gender diversity has become a topical issue which has caught the attention of policy makers, researchers and other professionals. It is a topic which has gain attention within the domain of national policies globally.

Generally, board gender diversity considers the potential of women and men and how men and women can together contribute their knowledge and skills towards the growth of a particular company (Dutta and Bose, 2006). It reveals the potential of women as contributing towards the growth of companies when they are involved on boards. Women are considered as having unique functions which enable them to contribute towards the best usage of resources available to companies, building relationship with other external factors and enabling the products of companies to be patronized by its target customers.

This led to the argument on the need to ensure board diversity on the board of companies by considering board structure diversity and board specific diversity which at the end will enable the potential of women to be contributed on the board of companies which will result into the growth of the beneficial companies. This is acknowledged and encouraged to be practiced not only by companies, but also in governance of nations and in policy making.

The European Union requires that women are given 40% representation on board. This is not different from Norwegian government which also requires for 40% of women potential on board. It is also seen in some African countries including Ghana where the Ministry of Gender, Children and Social Protection (MoGCSP) in 2009 implemented policies which can enable women potentials to be realized at all sectors. In Kenya also, the 2010 constitution creates room for one-third gender rule in the composition of boards.

2.2.1 Board Gender Diversity and Its Importance

Gender diversity considers the inclusion of diverse skills and capabilities of women and men as board members (Foldy& Scully, 2003). This cannot be overemphasized for its unique contributions towards the growth of companies. As a result, Board gender diversity cannot be compromised as

far as the need for a collaborative effort and sharing of ideas towards an enhanced operation are concerned. It remains relevant through the usage of women potential without wastage. Through gender diversity on board, transparency and efficient board functions are attained through active participation of women on board and their ability to introduce some unique functions which will enable certainty and growth to companies (Carter, Simskins and Simpson, 2003

Admittedly, women are considered as playing active complementary roles which enable an up-bringing of active labour force within every nation. Women contributions towards the better future of the youth remains encouraging and for that matter, their potential can enable an efficient usage of human resource which will result into an enhanced operation and the maximization of wealth of shareholders. The conclusion from the study conducted by Erhardt, Werbel and Shrader (2003) revealed that, whenever there is board gender diversity, it results into financial performance of companies.

2.3 Women membership on corporate boards

The past years according to literature, has seen an improvement in the participation of women on boards despite its slow nature (Pathan and Faff, 2013). There is evidence of a gradual admission of women potentials within

corporate boards which has been supported through the regulatory requirements within some nations including Norway (Randøyet al., 2009; Rose, 2007). There have been several schools of thoughts which seek to consider the need for women membership on boards. Even though the ethical school of thought could not provide enough evidence as to the reasons why women should not be involved on boards, the economic school of thought has rather outlined the potential of women and the fact that their membership on corporate board is the best way to enable an effective and efficient operations of the functions of boards which will result into the attainment of stated objectives of companies (Campbell and Minguez-Vera, 2007). Research conclusion from Fondas & Sassalos, (2000), revealed how the contributions of women expertise would enhance the independence of the board and reflects the quality of governance and also draws the attention of boards to the core functions which will enable the potential of board members to be realized through the provision of different opinion and brainstorming of practical corporate ideas that can make the board more collaborative. (Ruigrok et al., 2007).

2.4 Corporate Governance in Ghana

The desire of every nation is to create environment which will enable growth. Among some of the common policies of every nation is to

contribute towards the private sector growth which is mostly referred to as the engine of growth in every nation. This enables every nation to provide a regulatory framework which will enable an accepting code of best practices to be implemented by companies.

Among the most common practices which have caught the attention of many, is corporate governance. This corporate governance has gained relevance within corporate literature especially after the collapse of some international companies including Enron and WorldCom. After the active deliberation and participation of World leaders and involvement of professionals and researchers, corporate governance has recently gained dominance and there is a call for every nation to formulate policies which will enable the importance of corporate governance to be realized.

In Ghana, the Companies Code, 1963 (Act, 179) and the Security and Exchange Commission Act 2000 (Act 590) support the need for corporate governance implementation and best practices as provided by Cadbury committee and other reports on best practices. The Acts make provision for governance of all companies incorporated in Ghana (Appiah, Awunyo-Vitor, and Awuah-Nyarko, 2017). This has enabled most companies to admit and appreciate the need for corporate governance compliance in their operations as discovered by the Institute of Directors-Ghana (IoD-Ghana) in 2001.

2.5 Board Gender diversity as a mechanism of corporate Governa nce

The relevance of corporate governance requires that its mechanisms are considered and given attention within modern corporations. Among the mechanism of corporate governance are the board gender diversity, board independence, CEO duality and board size (Adekoya, 2012 P.40. These mechanisms are considered relevant and have attracted several researchers to undertake studies which will enable their needs to be realized for practices within modern organizations.

The board gender diversity which is the mechanism of corporate governance of which the student researcher is considering has gained worldwide recognition. It is considered sensitive among the other mechanism of corporate governance as a result of its focus on the participation of both men and women on board.

It is a mechanism which is most often considered not only within companies, but has become a topical issue which other concern groups advocate to be given attention in governance of nations.

This is evidenced in Ghana when the late President of Ghana (John Evans Attah Mills) first appointed woman as the speaker of parliament and also with many women representing as members of parliament. Board gender diversity has also enabled companies to realize some gains through the

collaborative effort and unique sharing of skills of men and women within organizations.

2.6 Performance of Companies in Ghana

Performance guarantees the continuation of operations of companies and it serves as evidence of an efficient utilization of resources available to companies. Most often, management efficiency and effectiveness are also measured through their capability to perform using the resources of companies that they manage.

This performance could be measured using financial performance variables including return on Asset, Gross profit margin etc. It can also be measured through the usage of market performance variables. In Ghana, the companies code, 1963 (Act 179) establishes and regulates companies operating in Ghana. The regulation of the companies enables them to enhance their performance. Both the listed and the unlisted companies are required to efficiently utilize the resources available to them to ensure that they perform to meet their objectives.

The nation Ghana as one of the developing nations which seeks the growth of the private sector, currently has about thirty-seven (37) listed under the companies Act and also sixty-seven (67) unlisted companies according to (GIPC 2017 publication). These companies are required to intensify their

operations in order to enable growth. According to Amidu & Abor, (2006), there is a requirement of efficiency and uttermost utilization of resources through best practices in order for such companies to enhance their performances.

2.7 Gender Diversity on Boards and Firm Performance

As indicated earlier, gender diversity considers the usage of the potential of women and men and how that can enable the performance of companies. Gender diversity is concluded by Dutta and Bose, (2006) as contributing towards the attainment of the objectives of companies. It enables the women to utilize their skills and potential to intensify communication and build relationship as may be required for a particular company to gain advantage over competitors.

Gender diversity contributes towards performance as measured using accounting-based and also measured through market-based calculations of both listed and unlisted companies (Marimuthu, Arokiasamy& Ismail 2009). Gender diversity is measured on firm performance using market-bases and accounting-bases such as Tobin's Q and Return on Assets (ROA) on an independent variable such as; the Blau, 1977, dummy variable, percentage of female directors and concluded on a positive correlation (Thomsen et al. 2009).

The numerous benefits derive through gender diversity has led to the enhancement of the participation of women on boards.

The publication by International Labour Organization (ILO) 2009) revealed an encouragement in the participation of women on boards within the global market during 1970 and 1980s. The report clarified that the inclusion of women in 2008 was 50.4% as compared with 48.3% in 1998 within the European Union. It also shows improvement of 52.6% in 2008 as compared with 44.2% in 1998 covering Latin America and Caribbean (ILLO 2009). According to the current report of World Bank enterprise survey, the percentage of firms with women involvement on boards in Ghana is 31.6%, whiles in Sub-Sahara Africa is 31.2. It was clarified through their conclusion that the Percentage of firms with a majority female ownership in Ghana is 14.7%, whiles it is 12.9% in Sub Sahara. Percentage of full-time female workers in Ghana is 24.7%, whiles it is 27.8% in Sub-Sahara Africa. Percentage of full-time non-production female workers is 18.6%, whiles it is 18.8% in Sub-Sahara Africa.

2.8 Theoretical Background of the Study

The need for gender diversity gains its backing from the theoretical perspectives as many modern theories supports the participation of women

and men on the boards of companies. Among the many theories include Agency theory, resource dependency theory and stewardship theory.

2.8.1 Agency theory

Agency theory remains one of the recognized theories which makes provision on the need for companies to ensure an efficient operation by building a stronger relationship among the parties to companies. This enables agency problems to be settled as well as resolving issues of information asymmetry.

When it comes to gender diversity, the agency theory supports the need for combining the potential of both men and women. The Agency theory supports the need for board diversity which will enhance the monitoring role of the board and (Carter et al, 2010). It further suggests that when there is diversity on board, it will result into performance (Fama and Jensen, 1983).

2.8.2 Stewardship theory

This is also a theory which considers the stewardship roles of managers within corporate institutions and for that matter, guides the everyday activities of corporations (Donaldson & Davis 1991). The stewards are required to conduct their operations to comply with the best interests of the principals (Donaldson & Davis 1991).

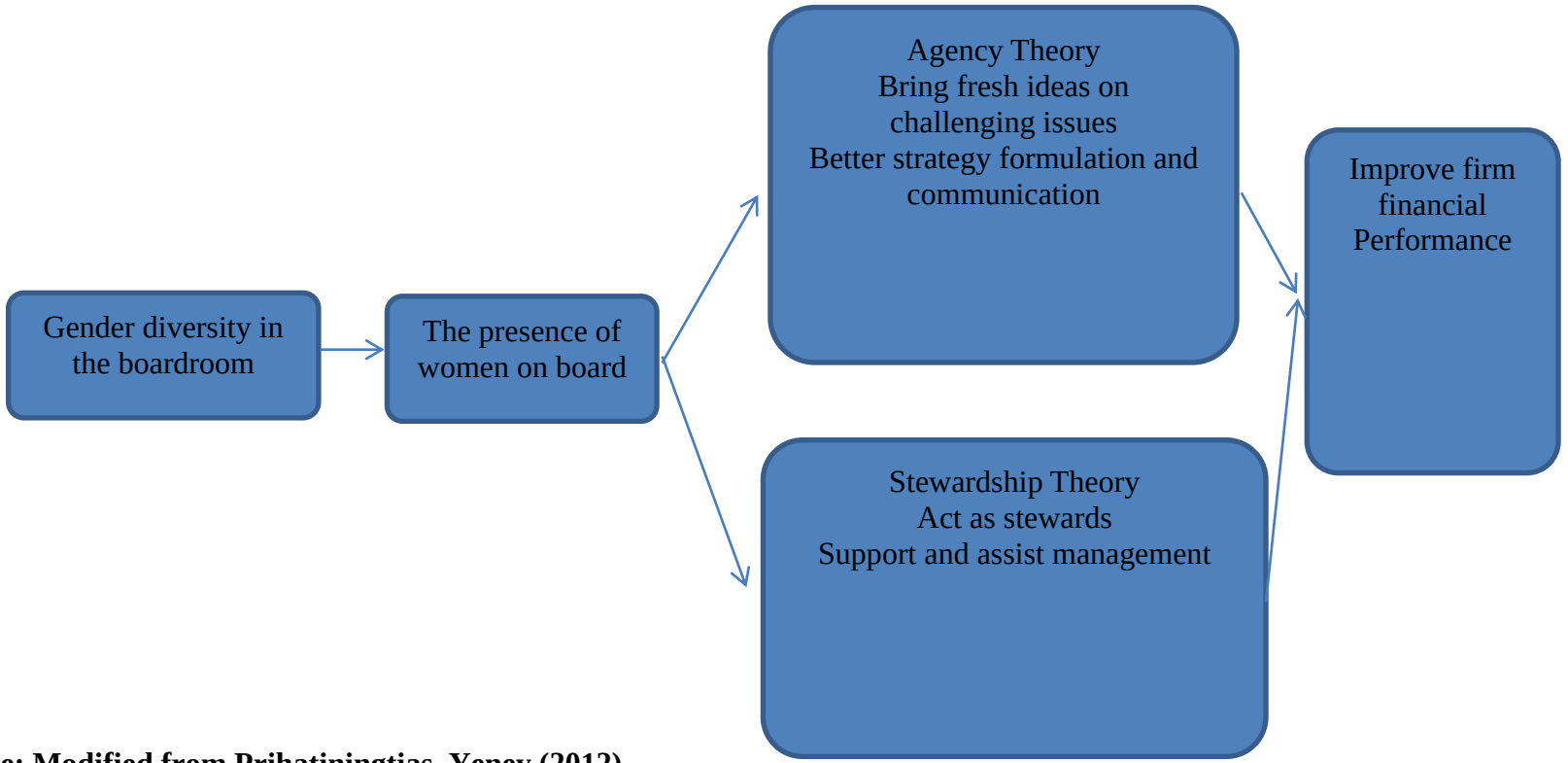
The Stewardship theory therefore considers the stewards as effectively utilizing the potential of both men and women as that will result into a higher profitability and sales growth, leading to the fulfilments of principal's wealth maximization (Davis, Schoorman& Donaldson 1997). The stewardship theory makes an indication on a drawback of an efficient managerial level as they turn to inculcate non-financial desires and self-interest including the need to achieve and recognise services and conditions Muth and Donaldson (1998).

2.8.3. Resource dependency theory

This theory is regarded as enabling the boards to concentrate on playing their responsibilities in such a manner as it will result into an enhanced performance within companies (Abdullah & Valentine, 2009).

The theory gives reverence to the functions of board of directors and for that matter, boards are considered as being the most valuable resource within companies and as a result, their skills and expertise result into an enhanced performance (Ayuso & Argandona, 2007). Resource dependence theory made a consideration into the resources made available to companies. The theory proposes a model that pays attention to the best mechanism which companies can rely upon to enable the attainment of their objectives (Wang, 2009

Conceptual framework on board gender diversity and firm performance



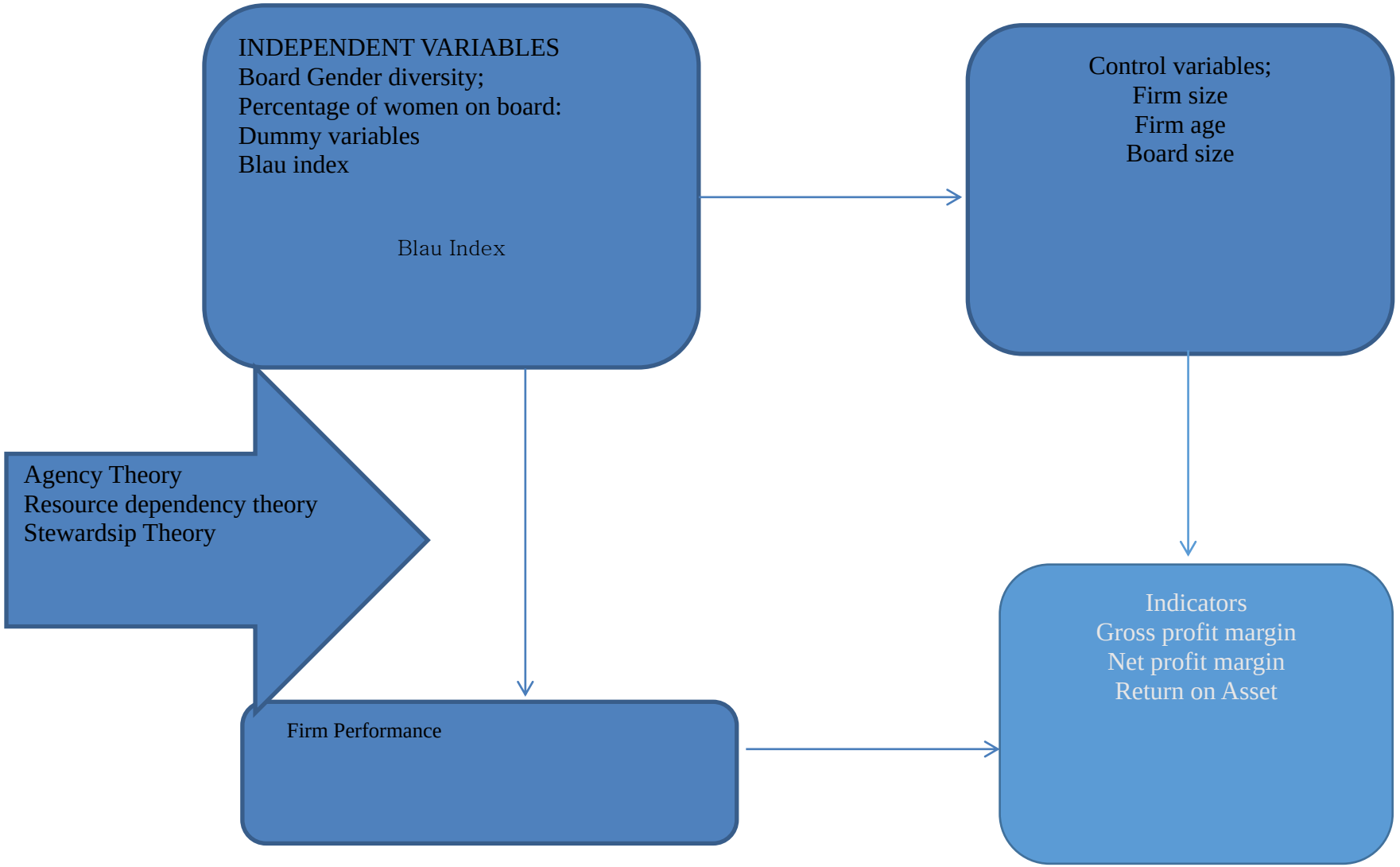
Source: Modified from Prihatiningtias, Yeney (2012)

2.9 Conceptual framework on gender diversity on firm performance measurement

The framework provided above represents the relevance of companies admitting and implementing board gender diversity within their boards.

It follows with the framework below which further makes provision concerning the variables to be considered by the student researcher in meeting the objectives of the current study. The control variables (board size, firm size and firm age) are chosen for this current research following literature by (Campbell and Minguez-Vera, 2007). Board size captures the entire board of directors in the annual report. Firm age determines the number of active years of operation by the firm. Firm size controls variable in analysis of financial performance (Fama and French (1992).

Source: Modified from Osei, Beatrice (2015)



2.10 Hypothesis

The study examines board gender diversity as a variable of corporate governance on firm performance in Ghana. It is built on the perception that; boardroom diversity has a major impact over the company's operations and reflects in the financial performance of companies especially those that adhere to corporate governance practices.

Provided below are the hypothesis which support the study:

H1: There is a high percentage of female participants on the boards of large quoted and unquoted firms in Ghana.

H2. Women participation on boards has a significant positive effect on financial performance of large quoted and unquoted firms.

The significance level of 5% is accepted for the above hypothesis.

2.11 Contextual framework of women membership on corporate boards

The need for gender diversity has enabled various interest groups to come out with thorough studies out of which conclusions were drawn. These have been captured in the contextual literature to be relied upon to enable further decision and conclusion on the subject. The review of contextual framework revealed conclusions from various interest groups. Deloitte Global Center,

(2016) publication revealed a data on women participation on boards of 15% of all board seats globally are taken up by women.

In the US, Catalyst, (2003) revealed that women held 13.6% of Fortune 500 board seats. It has also been clarified that women directors in in countries including Australia (8.7%), Canada (10.6%), Japan (0.4%) and (8%).

This is not different in Africa as there is an encouragement of active women participation on boards. In Africa, women participation grew to 12.7%. Kenya and South Africa have a record of higher women participation of 19.8% and 17.4% whereas Egypt and Tunisia record the lowest of 8.2% and 7.9% respectively after considering data from the top 307 listed companies based upon 12 African countries (Geraldine J. Fraser-Moleketi, Simon Mizrahi Director, 2015),

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter contains the methods to be used by the researcher to meet the objectives of the study. It contains the research design, the study population, the source of data to be used by the research, the instrument to be used in analyzing data, how data will be interpreted as well as the models to be used by the researcher.

3.1 Research design

According to Shiyatov et al. (2001), research design is referred to as all the matters that will surround particular research including how to select participants, how make data available as well as other activities that compact a research process. Briffa et al, (2001), concluded on research design in two categories. This includes conclusive research which can either be descriptive and casual research (Briffa et al, 2001) and exploratory research design. According to Kasim et al, (2010), the exploratory research design is the means to collect data, gather information in either an informal, unstructured or highly flexible.

The study will use a panel data set. This will capture the time period and cross section and further allow for the researcher to have control over

variables that may not be measured or observed. The data for the study will cover eight-year period starting from the year 2010 to 2018. According to Wooldridge (2006), a panel data may be balanced or unbalanced depending upon the availability of the data set. A balanced panel data is the one that has data to cover the time period and the cross section. Unbalanced panel data may however not have all of its data available (Wooldridge 2006). As a result of the difficulties most often encountered in getting the audited annual reports of the target population, the researcher anticipates the use of an unbalanced panel data to cover the period 2010-2018.

The Hausman test will be conducted to conclude on the appropriate technique to be used in the study including Random and fixed effect model, Generalized Least Square (GLS) and the pooled OLS regression. The fixed-effects controls for all time-invariant changes amongst the entities, so that any expected figure from the fixed-effects models cannot be partial because of absent of time-invariant characteristic like gender. The pooled OLS however does not solely consider the cross-section and time series, but rather combine the selected entities and run the regression covering it.

3.2 Population of the Study

Murthy and Bhojanna (2010) defines population as being the whole collection of case that meet a designed set of criteria or the group that a

researcher intended to generalize research findings. The general objective of the study is centered on gender diversity and firm performance with the attention on Commercial banks that are operating in Ghana. The population of the study is made up of the commercial banks that have been incorporated under the Companies Act, 1963 (Act 179).

The choice of the commercial banks is as a result of the relevance of the financial sector to the economy of Ghana. Despite the numerous b enefits associated with the banking sector of Ghana, the sector has for the past years performed poorly. This has led to the collapse of many banks with others been consolidated. On the 14th August, 2017, the licenses of some banks that were operating in Ghana were revoked including Capital and UT bank. On the 1st of August, 2018 other banks including the Unibank, Sovereign bank, Beige bank and Royal bank were consolidated. This has made the public to lose confidence in the banking sector. Meanwhile, the ba nking sector is of central importance for the growth of the country. The banking acts, Security and Exchange Commission Act and Company Acts in Ghana recognised the need for compliance to corporate governance practices.

One of the main aspects of corporate governance mechanisms at the banking sector has to do with the issue of board gender diversity. The banking sector remains one of the sectors which have employed many women in their services. Women potentials is required for a sustainable operation at the

banking sector. This necessitated the choice of the commercial banks in the banking sector among companies that are operating in other sectors.

Attention will be paid mostly to those that have been recognized under the Ghana Club 100 Companies as published by the Ghana Investment Promotion Center (GIPC) in 2017. These companies are recognized for their immerse contributions especially in the private sector growth in the country through their corporate social responsibilities and provision of employment facilities to the many unemployed class in the country Ghana. Data will be derived from the annual reports of ten (10) of these companies covering the year 2010 to 2018. The choice of the period is as a result of unavailability of timely available audited annual reports from some of these companies. The period was also when the nation Ghana had her first woman as the speaker of Parliament with majority of women also representing as Members of Parliament and also forming parts of corporate boards. The period was recognized for global financial crises, but the nation Ghana was one of the nation's having a stable economic activity.

3.3 Data Set and Sample Determination

Kothari, (2004) concluded on the two data sources as being primary and secondary data sources. The earlier makes use of new data which may be derived from interview guide, unpublished documents and fieldwork

(Kothari, 2004). The latter, according to Mesly, (2015) consists of data which exist prior to a study. The current study will use data which will be derived from secondary sources. The study will as well adopt a quantitative research strategy and will follow positivist approach. This is accepted for use in previous studies relating to the topic (Lewis-Beck, Bryman & Liao 2004).

3.4 Measurement and definition of variables

The study will make use of different variables including dependent, control and independent variables. These variables will be used based upon their relevance in the study.

Return on Asset is used as the main dependent variable. Return on Assets (ROA) is used as an accounting base to measure financial performance. ROA was measured as the ratio of Earnings before Interest and Taxes over Total Assets (EBIT/TA). The profitability ratios are generally used to show the capacity of an organization to generate accounting-based earnings and returns to shareholders (Shrader et al., 1997). Return on Asset as one of the profitability ratios is important in assessing the financial performance of companies and in ensuring the judicious use of economic resources of the companies. It enables the efficiency of management to be assessed. This is because, according to the agency theory, management are likely to misuse profits and when this happens, there will be less returns for the shareholders

and other stakeholders (Ujunwaetal, 2012).

The Return on Assets (ROA) for instance is recommended for use in the previous studies as a result of its indication of the competence of a firm's executives in effectively utilizing the resources available to them (Ujunwaetal, 2012; Javedetal, 2013). The use of ROA in the current study will be relevant in assessing the efficiency of management in utilizing the resources available to them in the selected companies. Generally, when there is a lower ROA, it indicates that the executives from the various companies are not using their competencies in to maximize the wealth of the shareholders and other stakeholders. In the previous studies, ROA was used in measuring the performance of companies in knowing how gender diversity can affect financial performance of firms (Hillman & Cannella Jr. 2007; Adams & Ferreira 2009; Dobbin & Jung 2011).

3.4.1 Independent variables

The independent variables of the study will include board gender diversity. This will measure the percentage of women on the board. The study will measure board gender diversity by depending upon dummy variables which will take a value of one (1) when in a year when a woman participates on the board. Board Gender Diversity will also consider number of women as compare with the total members on board. The (Blau, 1977) was also used

in the previous studies to calculate board gender diversity and this is also considered for use in the current study. It is commonly used in determining diversity variables by using the formula below (Harrison & Sin 2006):

$$1 - \sum_{i=1}^{n} Pi^2$$

where P is the proportion of group members in the it category and n is the total number of board members.

3.4.2 Dependent variables

The main dependent variable which will be used in the current study is the Return on Asset (RoA). Gross Profit Margin (GPM), Net Profit Margin (NPM) may as well be used in the measurement of firm performance. The Return on Assets (ROA) is an accounting base which is mostly used in the measurement of financial performance of firm. The use of this variable and other variables remains relevant for use in the current study to meet the stated objectives. The variables will unravel any inefficiency in the use of resources by executives and will also help to assess the extent at which the economic resources are effectively and efficiently utilized as a result of the usage of GPM which measures the total gross profit over sales.

ROA measures earnings of a company before its interest and taxes over Total Assets (EBIT/TA) whereas the gross profit was measured as gross

profit to sales and the net profit as Net profit before interest and tax divided by sales.

Despite the advantages and the disadvantages as may be associated with these performance measuring ratios, but they remain relevant in assessing the financial performance of companies and in ensuring the judicious use of returns. This is because, according to the agency theory, directors are likely to misuse profits and when this happens, there will be less returns for the owners (Ujunwaetal, 2012).

3.4.3 Control Variables

The control variables as used in previous studies that relate to the subject for consideration include Firm size, board size and firm age (Campbell and Vera (2008). It could be more appropriate to consider firms with the same size in terms of available economic resources as well as human resources, however, which is not the case in the current study. Issues relating to over trading and over capitalization are issues of concern towards the growing concern of corporations. In the current study, firm size is considered as one of the relevant control measures and is measured by the natural logarithm of total assets. Board size of the corporation is also considered as a control variable in this current study. The same way board members contribute to the success of the firm, the same way they also add to the cost. Members of the boards are considered in financial wise in terms of allowances and other

refreshments. Their participation would enhance firm performance not necessarily because of their number but at a point when they admit their roles and they work toward its attainment in a more effective and efficient manner. That is not to say that, higher board membership is a waste to corporations, but to consider what board members are to do in order to be recognized as effective in a way of contributing their expertise to the highest per degree.

Firm age is another control variable. Even though, this research considers the period 2010 to2018, however, some of the banks under consideration were incorporated several years ago. Age could be an influence; however, it is not a guarantee to the success of the firm. The only way an older firm could perform better, is when the laid down principles are followed whiles they win competition and to attain a goodwill status.

3.5 Data Analysis

According to Klevmarken, 1989 and Hsiao, (2003), panel data allows for measurement of variables across entities but changes over time. It is used for this current study as a result of its numerous advantages such as enabling the acquisition of more data points, accounting for individual heterogeneity and supporting inclusive of variables at different levels of analysis**.** Furthermore, the use of panel data is known to mitigate multicollinearity encounted in the use of time series and to provide more informative data,

more variability, and efficiency in generating and analyzing data (Klevmarken, 1989 and Hsiao, 2003).

3.5.1 Panel data model

The basic model of panel data could be appropriately defined depending upon whether; there is serial correlation and heteroscedasticity in the estimated model in question and the behavior of the error term. Panel data model is in the form below;

$Yit = \alpha + xit\beta + \varepsilon it$ …….. (1)

Where α is constant, *i* represents the firm and *t* is the time dimension. β represents explanatory variable and Ɛ is the error term.

Panel data can be analyzed using techniques such as fixed effects, random effects; pooled OLS and several others such as Generalize Least Square (GLS). Hausman test helps in drawing conclusion on the model to us.

3.5.2 The Pooled Regression Model

Pool regression model considers all the observation and run the regression model by overlooking the cross-section and time series. The main difficulty with the pooled regression is that it does not distinguish between the different entities. This is one of the variables that specifies constant coefficients, which is the common assumption about cross-section analysis is of the form:

$Yit = \alpha + xit\beta + \varepsilon it$ …….. (2)

Where α is constant, *i* represents the firm and *t* is the time dimension. β represents explanatory variable and Ɛ is the error term.

3.5.3 Fixed effects model

$Yit = \beta 1i + \beta 2X2it + \beta 3X3it + \mu it$…… (3)

Where; Y = dependent variable X=explanatory variable *i* = cross section unit *t* = the time period.

Although, in Fixed Effect Model (FEM), intercept may differ across individual firms, each individual intercept does not vary over time; i.e., it is time invariant.

3.5.4 Random effects model (REM)

$Yit = \beta 1i + \beta 2X2it + \beta 3X3it + \mu it$

Where; Y =dependent variable X=explanatory variable *i* = cross section unit *t* = the time period.

Although, in Fixed Effect Model (FEM), intercept may differ across individual firms, each individual intercept does not vary over time; i.e., it is time invariant.

3.5.5 Model Estimation

Following the empirical studies by Bøhren and Strøm (2010); the researcher posits the modified version of the econometric models as the one below:

Firm Performance (ROA) it = α + β1BLAU/DUMMYit + β2FIRMSIZEit + β3BOARDSIZEit + β4AGEit + εit

Where:

ROA = firm financial performance (accounting-based: ROA)

α = Constant, i = entity, t = time,

β = Regression coefficient

ε = Within-entity error.

CHAPTER FOUR
DISCUSSION AND ANALYSIS

4.1. 1ntroduction

This section presents the results from the regression estimation of eighty-one (81) firms observed from 2010-2018. This section also presents the results of descriptive statistics, the demographic characteristics of the firms, the empirical results of the relationship between women on the board and financial performance of selected banks in Ghana.

4.2. Percentage of women on the board

The table 1 below presents the results of percentage of women on the board of selected financial institutions in Ghana. From the table, Standard Chartered Bank was identified as the bank with the highest proportion of women on the board (PWB) of directors with a mean score of 0.378 percent within the period 2010 to 2018. This figure was closely followed by Prudential Bank which had a mean value of 0.333. The results imply that the percentage of women on the board was 33%.

Fidelity bank mean proportion of women on the board (PWB) stood at 18.3%. This was followed by HFC, ADB, Zennith Bank, Ecobank and Cal Bank which had moderate mean PWB of 0.17, 0.157, 0.130, 0.103 and 0.0926 respectively.

Barclays Bank had mean PWB standing at 0.00%, implying that there was no woman on the board of directors.

Table 1: Percentage of women on the board

Bank	2010	2011	2012	2013	2014	2015	2016	2017	2018	MEAN
Calbank	0.1667	0.1667	0.1250	0.1250	0.1250	0.1250	0.000	0.000	0.000	0.0926
Ecobank	0.2500	0.2500	0.000	0.000	0.000	0.000	0.143	0.143	0.143	0.103
HFC	0.1111	0.1111	0.2000	0.2000	0.111	0.111	0.077	0.308	0.308	0.17
SCB	0.308	0.308	0.308	0.308	0.308	0.467	0.467	0.467	0.467	0.378
BB	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ADB	0.000	0.000	0.125	0.125	0.125	0.125	0.333	0.333	0.250	0.157
Zennith	0.1667	0.1667	0.1667	0.125	0.125	0.125	0.100	0.100	0.100	0.130
PB	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333	0.333
Fidelity	0.286	0.286	0.286	0.167	0.167	0.143	0.143	0.083	0.083	0.183

4.3. Financial Performance of selected firms

The table 2 below presents the results of the financial performance of selected financial institutions in Ghana. From the table, Ecobank and Cal bank were identified as the most profitable banks with a mean score of 0.336 each within the period 2010 to 2018. This figure was closely followed by Barclay Bank which had a mean value of 0.116. The results imply that Cal Bank had a return of 11.6% on its total assets.

This was followed by Fidelity bank with mean return on asset of 0.023. HFC, Zennith, and Standard Chartered Bank followed with moderate mean of profitability of 0.021, 0.020 and 0.017 respectively.

Agricultural Development bank and Prudential Bank had the least return on asset with mean return on asset of 0.015 and 0.013 respectively.

Table 2: Financial Performance of selected firms

Bank	2010	2011	2012	2013	2014	2015	2016	2017	2018	MEAN
BB	0.108	0.093	0.078	0.075	0.118	0.062	0.084	0.063	0.359	0.116
Zennith	0.014	0.013	0.013	0.017	0.016	0.080	0.020	0.002	0.018	0.020
HFC	0.012	0.024	0.015	0.033	0.025	0.023	0.021	0.019	0.021	0.021
SCB	0.019	0.020	0.020	0.021	0.021	0.015	0.015	0.015	0.010	0.017
Fideli	0.024	0.017	0.021	0.022	0.027	0.023	0.024	0.025	0.027	0.023
Prudentia	0.023	0.009	0.009	0.009	0.013	0.007	0.016	0.016	0.016	0.013
Ecobank	2.954	0.000	0.012	0.002	0.017	0.018	0.010	0.013	0.001	0.336
CalBank	0.04	0.04	0.023	0.025	0.011	0.013	0.011	0.010	0.008	0.336
ADB	0.017	0.018	0.019	0.007	0.007	0.008	0.010	0.027	0.020	0.015

4.4. Descriptive statistics

Table 3 shows the descriptive statistics of the variables for the study. The mean Return on Assets (ROA) is .0647372. The Return on Assets (ROA) has a minimum of 6.00E-06 and a maximum of 2.954348. There is a standard deviation (SD) of 0.3280371 which shows a moderate variation from the mean value.

The proportion of women on the board has a mean value of 0.1694659. It has a minimum value of 0 and a maximum of 0.46667. There is a standard deviation (SD) of .1335105 which shows a moderate variation from the mean value.

The mean blau/dummy is 0.1749. The blau/dummy has a minimum of 0 and a maximum of 1.333. There is a SD of 0.2102.

The mean firm size is 13.43879. The firm size has a minimum of 8.1953 and a maximum of 19.3835. There is a SD of 3.00934 which shows a moderate variation from the mean value.

The mean board size is 2.248805. The board size has a minimum of 1.0986 and a maximum of 2.8904. There is a SD of 0.3757719 which shows a moderate variation from the mean value.

The mean firm age is 3.367. Firm Age has a minimum of 2.4849 and a maximum of 4.804. There is a SD of .6670022 which shows a moderate variation from the mean value.

Table 3: Descriptive Statistics

Variable	Obs	Mean	Std. Deviation	Min	Max
Roa	81	.0647372	.3280371	6.00e-06	2.954348
PWD	81	.1694659	.1335105	0	.46667
Blau/dummy	81	.1749012	.2102047	0	1.333
Firm size	81	13.43879	3.00934	8.1953	19.3835
Board size	81	2.248805	.3757719	1.0986	2.8904
Firm Age	81	3.367061	.6670022	2.4849	4.804

4.5. Multicollinearity Test

This section presents the probable degree of Multicollinearity among the variable. The correlation among the variables may affect the efficacy of the estimated coefficients. Table 4 shows the results of the correlation among variables using Pearson correlation matrix.

Proportion of women on the board is positively correlated with blau/dummy, board size and firm age with coefficient 0.2780, 0.5598 and 0.3753.

Proportion of women on the board is negatively correlated with firm size with coefficient -0.1958.

Blau/dummy is positively correlated with firm size and Age with correlation coefficient of 0.1044 and 0.2938. Board size is positively correlated with Age with correlation coefficient of 0.2184.

ROA has a negative correlation with blau/dummy, firm size, board size and age with correlation co-efficient of -0.0336, -0.2263, -0.1473 and -0.0563 respectively.

Blau/dummy is negatively correlated with board size with correlation coefficient of -0.2253.

Firm size is negatively correlation with board size and age with correlation co-efficient of -0.2716 and -0.1456 respectively.

Table 4: Correlation Matrix

Variable	ROA	PWB	Blau/Dummy	Firm Size	Board size	Age
ROA	1.0000					
PWB	-0.0326	1.0000				
Blau/Dummy	-0.0336	0.2780	1.0000			
Firm Size	-0.2263	-0.1958	0.1044	1.0000		
Board size	-0.1473	0.5598	-0.2253	-0.2716	1.0000	
Firm Age	-0.0563	0.3753	0.2938	-0.1456	0.2184	1.0000

4.6. Diagnostic Tests Result

This section provides test for the linear regression model (CLRM) assumptions including autocorrelation, normality, multicollinearity and heteroscedasticity as in accordance Brooks (2008).

4.6.1 Normality test

In applying the model, the distribution takes the form of a symmetric of data with the aim of enhancing research quality. The distribution takes the form of a symmetric bell- shaped curve. The standard normal distribution is 1 with a mean of less than 1 and a standard deviation of less than 1. Since the number of observations is large, it is considered normal distribution. The normality test is presented in table 5 below. From table 5, ROA has skewness and kurtosis value of 0.000 and 0.000 respectively and it is significant at 0.00, implying it is normally distributed. PWB ratio has skewness and kurtosis value of 0.1050 and 5.54 respectively and it is significant at 0.00, implying it is normally distributed. Blau/dummy ratio has skewness and kurtosis value of 0.000 and 0.000 respectively and it is significant at 0.00, implying it is normally distributed. Firm size has skewness and kurtosis value of 0.0527 and 0.0000 respectively. Board size ratio has skewness and kurtosis value of 0.4784 and 0.1677 respectively and it is insignificant at 0.29, implying it is not normally distributed. Firm age has skewness and kurtosis value of 0.0051 and 0.5727 respectively and it is significant at 0.02, implying it is normally distributed.

Table 5: Skewness/ Kurtosis test for Normality

Variable	Obs	Pr (Skewness)	Pr (Kurtosis)	Adj chi2 (2)	Prob> chi2
ROA	81	0.0000	0.0000	.	0.0000
PWB	81	0.1050	0.0769	5.54	0.0625
Blau/dummy	81	0.0000	0.0000	71.28	0.0000
FS	81	0.0527	0.0000	17.40	0.0002
Board size	81	0.4784	0.1677	2.49	0.2885
Firm age	81	0.0051	0.5727	7.38	0.0250

4.6.2 Heteroscedasticity Test

In the event of existence of heteroskedasticity disturbs the unbiasedness of OLS property and consistency of the parameter's estimations are questioned (Bedru and Seid, 2005). The results generated from the OLS estimation given the presence of heteroskedasticity makes the outcomes unreliable and false. The study employs Breusch-Pagan/ Cook-Weisberg Test for Heteroskedasticity and the null hypothesis is that the error variances are all equal against the alternative hypothesis increase (decrease) as the predicted values of the dependent variable increase. Following the result in table 6 below it shows there is presence of Heteroskedasticity in the case of variable; the test rejects the null hypothesis of no heteroskedacity at 1 percent level of significance in each case.

Table 6: Breusch-Pagan/ Cook-Weisberg Test for Heteroskedasticity

chi2 (1) = 243.29
Prob > chi2 = 0.0000

Source: Computed from selected financial institutions in Ghana

4.6.3 Multicollinearity Test

Multicollinearity Test shows the linear relationship between some of the independent variables. According to Gujarati (2004), multicollinearity is perfect, when the regression coefficients of the independent variables are undetermined and their standard errors are immeasurable. Multicollinearity makes significant variables by increasing p- values (Ahmad and Bashir, 2013). Independent variables are highly related to one another. Correlation matrix was used to test Multicollinearity, the values of the correlation coefficient ranged between -1 and +1. The correlation coefficient indicates either a positive or negative perfect relationship between the variables. 0 correlation coefficient means there is no linear relationship. There is no Multicollinearity problem between some variables but from the table there is multicollinearity between PWB, Board size, Blau/dummy, Firm age and Firm Size since their VIF coefficients are less than 10.

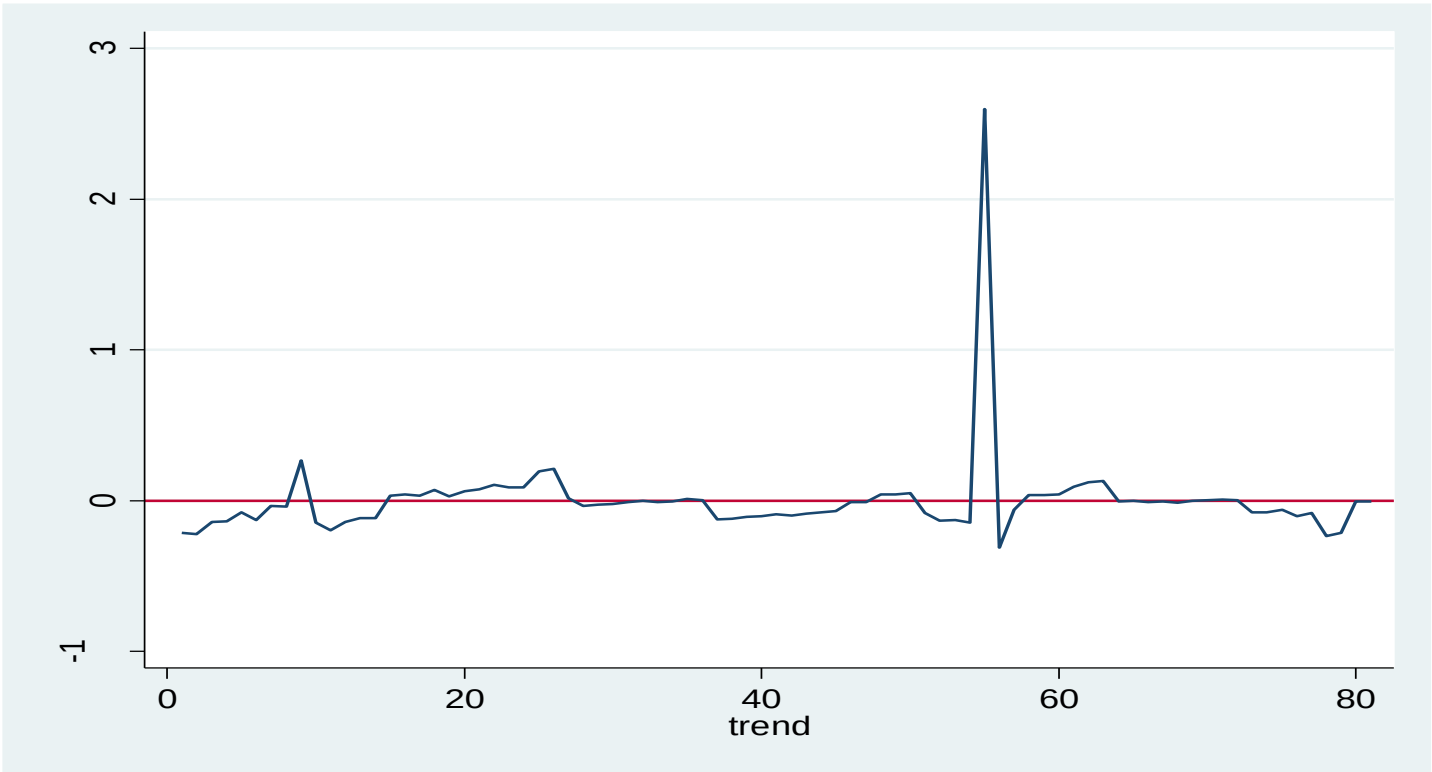
Table 7: VIF

Variable	VIF	1/VIF
PWB	2.00	0.499081
Board size	1.95	0.512848
Blau/dummy	1.52	0.655970
Firm age	1.27	0.784965
Firm Size	1.12	0.895024
Mean VIF	1.57	

4.6.4. Autocorrelation

Autocorrelation plot shows the value of the autocorrelation function on the vertical. From the Figure 1 below, the value of the autocorrelation ranges from -0.2 to 0.2 which shows the no presence of autocorrelation. The horizontal axis shows the size of the lag between the elements of the time series. From table 8 below, the coefficient -.0862336 shows negative and no strong autocorrelation between variables.

Figure 1: Autocorrelation Matrix



Source: Computed from selected financial institutions

Table 8: Autocorrelation Table

Source	**SS**	**Df**	**MS**
Model	.057005114	1	.057005114
Residual	7.56208741	78	.096949839
Total	7.61909253	79	.096444209

F (1, 78) = 0.59

Prob > F = 0.4455

R-Squared = 0.0075

Adj R-Squared = -0.0052

Root MSE = .31137

Uhat	**Coef.**	**Std. Err.**	**T**	**P > |t|**	**95% conf.**	**Interval**
Uhat L1	-.0862336	.1124588	-0.77	0.446	-.3101218	.1376546
_cons	.0026926	.034812	0.08	0.939	-.0666127	.0719979

Source: Computed from selected financial institutions

4.7 Model Specification

4.7.1 Hausman Specification Test

The model was used to examine the effect of women on the board and financial performance of selected banks in Ghana. The researcher conducted Hausman Specification Test to conclude on the appropriate model. Fixed effect is not correlated with the independent variable whereas the random effect correlates with the variables. According to Gujarati (2004) random effect is more appropriate when null hypothesis is rejected whereas fixed effect is more appropriate when null hypothesis is not rejected. Random effects are consistent with both null hypothesis and alternative hypothesis. The decision rule, for Hausman Specification test is accepting the null hypothesis when the P- value is insignificant. The results in table 9 show the null hypothesis is accepted hence the data follows fixed effect model.

Table 9: Hausman Test for Fixed or Random Effects

	(b) Fe	(B) re	(b-B) Difference	Sqrt (diag (V_b-V_B)) S.E.
PWB	.3076848	.3076848	0	0
Blau/dummy	-.152773	-.152773	0	0
Firm size	-.0307291	-.0307291	0	0
Board size	-.2691376	-.2691376	0	0
Firm age	-.017346	-.017346	0	0

b = consistent under Ho and Ha; obtained from regress

B = inconsistent under Ha, efficient under Ho; obtained from regress

chi2(4)
= (b-B)'[(V_b-V_B)^(-1)](b-B) = 0.00

Prob > chi2 =

.

Source: Computed from selected financial institutions

4.8. The Effect of Women on the Board and Financial Performance

Table 10: The relationship between women on the board and financial performance

ROA	COEF	STD. ERR	Z	P>|Z|	95% CONF	INTERVAL
PWB	.3076848	.3789698	0.81	0.417	-.4350824	1.050452
BLAU/DUM	-.152773	.2099525	-0.73	0.467	-.5642723	.2587263
FIRM SIZE	-.0307291	.012555	-2.45	0.014	-.0553364	-.0061217
BOARD SIZE	-.2691376	.1328271	-2.03	0.043	-.5294739	-.0088012
FIRM AGE	-.017346	.0604857	-0.29	0.774	-.1358958	.1012039
_cons	1.11592	.3887873	2.87	0.004	.3539109	1.877929

The result from the table 10 indicates a positive and insignificant relationship between proportion of women on the board and ROA (Return on Assets), implying no relationship between proportion of women on the board and ROA (Return on Assets).

The table shows a negative and insignificant relationship between blau/dummy and ROA (Return on Assets), implying no relationship between blau/dummy and ROA (Return on Assets).

Firm size also has negative and statistically significant relationship with profitability measured by ROA, implying that there is inverse relationship between firm size and profitability measured by ROA.

Board size has negative and statistically significant relationship with profitability measured by ROA, implying that the lower the Board size, the more profitable firms become. Firm age variable has positive and statistically insignificant relationship with profitability measured by ROA, implying that the there is no relationship between firm age and profitability measured by ROA.

4.9. Proportion of women on the board and firm financial perfor mance

The investigation of many prior studies concludes that women are less represented in the executive division of corporate boards (Singh et al., 2008).

According to their findings, some companies now have women in their top team, totalling 33% of senior executive roles.

The result reveals a mixed result depending on the dependent variable being used at a time. Firms size demonstrate a negative and significant impact on performance measured by ROA at less than 5% significance level. The age of the firm is statistically insignificant to profitability measured by ROA at more than 5% level.

The study highlights negative and significant relationship between board size and firm performance using both ROA.

CHAPTER FIVE
CONCLUSION AND RECOMMENDATION

5.1. Introduction

This chapter presents the conclusion and makes appropriate recommendation to the study. The study also provides the recommendation for future research in this area.

5.2: Summary of Findings

5.2.1: Percentage of women on the board

The study showed that standard chartered bank was the bank with the highest proportion of women on the board of directors. This figure was closely followed by prudential bank; Fidelity bank. The study showed HFC, ADB, Zennith Bank, Ecobank and Cal Bank had moderate mean proportion of women on the board respectively. Barclays bank had no women on the board. These findings were supported by majority of the respondents.

5.2.2: Financial Performance of selected firms

The study showed Ecobank and Cal bank were the most profitable banks. This figure was closely followed by Barclay Bank. This was followed by Fidelity bank. HFC, Zennith, and Standard Chartered Bank followed with

moderate mean of profitability. Agricultural Development bank and Prudential Bank had the least return on asset.

5.2.3: The Effect of Women on the Board and Financial Performa nce

Firm size had a negative and statistically significant relationship with profitability measured by ROA, implying that there is inverse relationship between firm size and profitability measured by ROA.

Board size has negative and statistically significant relationship with profitability measured by ROA, implying that the lower the Board size, the more profitable firms become. Firm age variable has positive and statistically insignificant relationship with profitability measured by ROA, implying that the there is no relationship between firm age and profitability measured by ROA.

5.3. Conclusion

The study showed that standard chartered bank was the bank with the highest proportion of women on the board of directors. This figure was closely followed by prudential bank; Fidelity bank; HFC; ADB; Zennith Bank; Ecobank; and Cal Bank. Barclays bank had no women on the board. The study showed Ecobank and Cal bank were the most profitable banks.

They were closely followed by Barclay Bank; Fidelity bank; HFC; Zennith; and Standard Chartered Bank. Agricultural Development bank and Prudential Bank had the least return on asset.

Firm size had a negative and statistically significant relationship with profitability measured by ROA, implying that there is inverse relationship between firm size and profitability measured by ROA. Board size has negative and statistically significant relationship with profitability measured by ROA, implying that the lower the Board size, the more profitable firms become. Firm age variable has positive and statistically insignificant relationship with profitability measured by ROA, implying that the there is no relationship between firm age and profitability measured by ROA.

5.4. Recommendations for the study

Based on the findings of the study the following recommendations have been made.

1. More women should not be included on the board

Firms should not include more women on their boards. The study showed no significant relationship between women on the board and profitability. Since the proportion of women on the selected firms had no impact on

performance (ROA), the recommends that firms should not include more women on their boards.

2. Women should undergo relevant seminars and training

Since the study showed no significant relationship between women on the board and profitability, it is recommended that women should undergo relevant seminars and training to enhance their performance.

3. Women should acquire more skills

Women should be encouraged to acquire more skills needed for them to contribute effectively to decision making and thereby leading to increased profitability. Since the executive directors on the board are more likely to have experience hands being appointed as board members, the study recommends that women who have specialized skills should be appointed to the board to contribute to increased profitability.

4. Disclosure of corporate governance issues

The government should make it a requirement for all firms to disclose corporate governance issues in their annual report. This will whip the citizens' interest on the corporate governance issues.

5.5 Areas for further studies

Further research is required using data from the sixteen regions in Ghana to give a true representation of Ghana. The study recommends that future research regarding investor behaviour in response to the appointment of female board members should be done.

Again, there should be further studies that will explore the contributions of women on boards among all companies listed on the stock exchange because there is a possibility that shareholders behaviour may change in relation to the gender bias and profitability.

Abstract

이사회의 성 다양성과 회사의 성과

이 연구는 가나 상장 기업의 확고한 성과에 성 다양성이 미치는 영향을 조사합니다. 이 샘플은 가나의 1969 년 179 회사 코드 법에 따라 등록 된 가나의 보안 및 교환위원회에 따라 15 개의 상장 회사로 구성됩니다. 이 연구는 105개 기업의 패널 데이터를 산출하는 2011-2018 년 기간을 다룰 것입니다. 이 연구의 목적은 가나에 있는 선택된 기업의 이사회에 있는 여성의 비율을 검토하고, 가나에 있는 선택된 기업의 재무 성과를 검토하고, 가나에 있는 선택된 기업의 재무 성과에 대한 여성의 영향을 분석하는 것입니다. 종속 변수는 선택한 회사의 재무 성과를 측정하는 데 사용되는 자산 수익(ROA)입니다. 독립적인 변수에는 블라우 지수, 기내 여성의 비율 및 더미 변수를 사용하여 측정할 보드 성별 다양성이 포함됩니다. 제어 변수에는 확고한 크기와 확고한 연령이 포함됩니다. 측정은 일반 최소 해결 사각형(OLS)을 사용하여 수행됩니다. STATA 소프트웨어는 회귀를 실행하는 데 사용되며, 그 후에는 분석, 결론 및 권장 사항을 따릅니다.

주요 정책 권고는 기업이 이사회에 여성을 포함시켜야 할 필요성에 있을 것이며, 이전 연구에 따르면 여성이 기업의 성과에 크게 기여한다는 사실이 나타났습니다.

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