BOARD GENDER DIVERSITY AND FINANCIAL PERFOMANCE OF COMMERCIAL BANKS IN KENYA

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ABSTRACT

The relationship between board gender diversity and the financial performance of firms has continued to elicit debate. Proponents of board gender diversity have averred that a diverse board leads to better financial performance of firms while those who are against it have argued there is no relationship at all or there exists a negative relationship between the two. It is with the above in mind that the study set out to establish the kind of relationship that exist between the gender diversity of the board and the financial discharge of Kenyan commercial banks. The study was based on the commercial banks licensed in Kenya due to the paucity of data that covers this field. The study relied on the published financial reports of the licensed banks to analyse the data. The study used descriptive statistics in the study. The study used the statistical package for social science (SPSS) to carry out the analysis. The study established a negative existing connection among the board gender diversity and the financial performance of commercial banks. It was recommended that further studies should be done in the field covering a large data set and using different industries in order to get conclusive results in the relationship between the two.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Shareholders have delegated the roles of monitoring and control to the board of directors in order to facilitate proper functioning and the running of the day to day activities. The operation of company activities is done by top management who in turn report to the board of directors for directions. Due to recent developments globally and the 2007-2008 financial crisis the composition of the board of directors in banks has been put under special scrutiny.

De Andreas and Vallelado (2008) argue that due to the complexity of the banking industry boards in the industry have an even increased role due to the information asymmetry that exists in that industry. Pathan and Faff (2013) argue a well governed bank will facilitate and promote functioning of other industries and promote a more effective apportionment of capitals in the economy.

Corporate scandals such as Enron, WorldCom, Parmalat, and Tyco led to increased scrutiny of the compositon and the role that the board of directors plays. Campbell and Minguez (2008) averred that the directors monitoring role should be steadfastly observed and pointed out on the importance of gender diversity in boards while discharging their mandate. There has been increased public interest, debate and academic research due to the supposed benefits of boardroom diversity (Dang, and Nguyen, 2013).

There has been enactment of laws in nations such as Spain, France, Italy and Norway on the requirement of existence of women in boards of listed firms (Schwizer, Soana and Cucinelli, 2013). This legislations were made in order to have better corporate governance system that will be derived from having more women directors (Schwizer, *et al*, 2012). Despite the laws being

passed most firms still have a minor fraction of women directors who are considered as tokens (Torchia, Calabrò, and Huse, 2011).

Researchers have begun investigating the effect of gender diversity in boardrooms, they have focused on managerial qualification, personalities, education, learning styles, age, expertise and values (Coffey and Wang, 2015). This research will focus on Boardroom gender diversity and financial performance of commercial banks in Kenya.

1.1.1 Board Gender Diversity

Researchers have argued that lack of gender diversity in the board results to a manila mindset in addressing corporate issues (Burgess and Tharenou, 2012). This leads to group think on issues as well as subpar achievement in the organization. Homogeneous boards have greatly contributed to corporate failures and poor governance (Brown *et al*, 2012).   Researchers have shown that a well varied board leads to an increased ethical and moral viewpoint in discussions that will lead to decision making. Arfken (2014) argues that diversity limits the risk of a myopic decision making process which may lead to unethical decisions being made when the board is made up of similar demographics.

Many researchers have found out that the likelihood of myopic decision making is not only limited because of diversity and the likelihood of positive occurrences such as better problem solving, better ideas, improved strategic planning and additional accountability is increased (Arfken, 2014). There is better decision making when a board is well diversified as a more complete picture of issues at hand are typically discussed (Adams and Flynn, 2015). Adams and Ferreira's (2009) observed that diverse boards are more likely to hold executives responsible for poor stock value

performance and board compensation is more likely aligned with shareholder interests (Equity based).

Adams and Ferreira (2010) assert that Boards that are gender diverse have increased corporate oversight and boardroom involvement. They also argue that boards with higher female presence have a higher level of attendance at its meetings. They argue that attendance is a crucial factor in boardrooms since it is the primary method in which boards operate and conduct business. They noted that women were less likely to miss boardroom meetings and that having more women on boardrooms led to better attendance by even its male directors.

Research has consistently shown that increased attendance results in better performance (Adams and Ferreira, 2010), with women directors' active participation in boards there will be increased effectiveness due to better boardroom discussion. Bear *et al,* (2015) argue that increased membership of women directors enhanced corporate reputation. Bear *et al,* (2010) also contended that companies with higher female representation were more likely to be named among the top 100 firms in their countries.

1.1.2 Financial Performance

Financial performance has over the years remained perceived only through the prism of profits. This has however changed in the current age; financial performance at this age has different meanings depending on the users view on financial information. Managers are interested in profits because their targets are mostly tied to profits achieved. Shareholders are interested in wealth maximization through increased market capitalization and dividend payments. Commercial stakeholders are more interested in the solvency of the firm while creditors are interested in the capacity of the institutions to repay the loans on time. The firm employees desire a stable job

accompanied by high level of material benefits, while the government is interested in an efficient company that pays its taxes and other statutory fees (Valentin, 2015).

Financial indicators are used by companies' management to measure, report and improve their performance. Financial and non-financial ratios are used in order to get a multi-dimensional perspective on companies' performance. This analysis is vital for all participants particularly the stockholders. The Anglo-Saxon corporate governance principles emphasizes on shareholder value maximization and it offers a conceptual and operational framework for assessing commercial performance.

Branch and Gale (2015) contend that the market value of a corporation which is also shareholders wealth is based on several factors among them the risks a company faces, the economic growth potential for the future earnings, and its profitability. While this are main issues swaying the market price of a corporation Biel and Lawrence (2016) argue that monetary pointers based on accounting data are sufficient to arrive at the value of shareholders wealth.

The market position of a firm greatly determines its financial performance. The financial performance also defined as profitability in some quarters can be disintegrated into net turnover and the net profit margin. Riew *et al*, (2015) contends that both net asset turnover and the net profit margin significantly affect profitability of a firm at any one time. A high turnover indicates better use of a firms assets thus it's a measure of efficiency of the firm. A higher profit margin the firm has a greater market power therefore it can derive more from every dollar invested (Kimotho, 2015)

According to Fruhan (2015) risk and growth also greatly determines the performance of an institution. This is because the market value is conditioned on the firm's results which is sensitive to the level of the risk exposure. Expected future profits which are also defines as future earnings potential also greatly influence a firm's market value in the stock market since investors discount the future earnings potential of a firm to its present value.

There is however little to propose that board gender diversity has a cross sectional relationship with performance. There is significant literature on the subject and no concrete relationship has yet been found. Daly *et al,* (2015) showed that board structure has almost no consequence on firm performance, and that there was no relationship between the structure of leadership and firm performance. They argued that stockholder involvement is key to ensuring good corporate governance without it there won't be transparency and accountability.

1.1.3 Board Gender Diversity and Financial Performance

Investigation on the direct result of gender diversity in the board on the financial performance of a firm is inconclusive. There are studies that point towards a positive association between gender diversity in the board and financial performance. Carleys *et al,* (2013) found that performance improved in non-financial firms when there is gender diversity in the board. Garli *et al,* (2015) established similarly positive connection among the board gender diversity and financial performance of European banks, this is one if the few studies that focused on the financial industry.

Catalyst (2011) found that firms with more female representation on the board outperformed those with few women representation in relation to return on capital invested, and. return on sales. Credit Suisse (2012) and (2014) released reports that showed that firms with at least a female representative at the board had a higher share price than those without a female representative on

the board. There are however studies that found that the effect of female representative on the board is null or negative (Adams and Ferreira, 2009).

In countries such as Norway which have regulation that require at least a 40 percent female representation at the board, there was a decrease in profitability after the quota was implemented by the firms affected by the quota (Matsa and Miller, 2013). Smith (2013) argued in his paper that during the economic crisis Norway was one of the most economically sound nations and it experienced economic growth during the same period. More research is however needed to establish if board gender diversity contributed to the above outcome.

Ekadah and Mokaya (2015) in their study that was conducted in Kenya found that board gender diversity had no consequence on the financial performance of banks. Despite the conflicting results from the studies empirical evidence shows that small banks with female leadership as the Chief Executive Officer and board chair position were more likely to wither during the financial crisis (Palvia *et al*, 2013). One argument to back it up is that gender diverse boards are more probable to be effective in risk management and decision making in times of crisis (Dhir, 2015)

The typecast that women are more hazardous than men was viewed as disadvantageous because the aversion to risk was perceived as preventing a firm from success. In the aftermath of the financial crisis great emphasis has been placed on understanding and controlling risk to safeguard existence of the business in the long term. This has led to women being viewed more favorably because of their risk aversion attitude (Hutchinson *et al*, 2014). Schubert argues that the associations between board gender diversity and reduced bank risk taking is empirically supported he argues in his paper that a higher illustration of women in boards is associated with less volatility in return on average assets.

Maries *et al*, (2011) argued that an advanced representation of women at the board level moderates extreme risk taking which leads to an improvement of the performance of an establishment as determined by the ROA. Hutchinson *et al,* (2015) found in their paper that excessive risk taking and inadequate bank governance were to blame for the financial crisis. Overall recent research suggests that having a higher female representation on boards was beneficial to firms during the financial crisis.

1.1.4 Commercial Banks in Kenya

Kenya has been mentioned and recognized among one of the most robust nations in banking and finance innovation. The banking industry in Kenya dwarfs other East and Central African countries, it also has the highest penetration rates in the region. The country had 46 commercial banks as at June 2015. Compared to its peers it has the highest number of banks measured against its population. Nigeria with a population of over 180 million people has only 22 banks while South Africa has 19 banks compared to its population of 55 million people.

The bank which is a public institution is established under the CBK ACT 231 of the Constitution of Kenya. The Central Bank of Kenya is the industry regulator. The Bank is the sole watchdog of the Banking industry in Kenya it also sets the monetary policy in the country in order to achieve price stability. The bank acts as a banker, adviser and fiscal agent for the government of Kenya. The banks also provides oversight of payment, clearing and settlement systems in the country (CBK, 2011).

The Kenya Bankers Association is the industry lobby for the Kenyan banking industry. Among its functions is to promote economic growth and industry development by engaging the regulator and the government. The association also lobby's and champions industry innovation and development

by coordinating its members and partnering with other stakeholders. Its current membership stands at 46 commercial banks. The association has been at the forefront at opposing the capping of interest rate which they view as a blunt tool to enforce regulation by the government.

The Kenyan banking industry is heavily concentrated at least 10 banks control 70% of the market with seven of them being local banks. According to a CBK report (2011) six banks control 52.4% of the entire industry. The Kenyan market has been described as oligopolistic by many given the tight control that few banks have on the entire market. This has led to cartel like behaviour that has brought it under the sharp focus of regulators and policy makers. The effect of the oligopolistic behaviours has been cited as the cause of prohibitive credit in the Kenyan Market.

1.2 Research Problem

The issue of women representation on boards of companies has increasingly become an issue of debate in recent years due to the spotlight on boards after recent corporate failures. While there are those who argue that more women on boards contribute to better corporate governance practices which in turn leads to improved financial performance there are those who argue there is no significant relationship between the two. The debate has spilled from the boardrooms to academic halls where scholars have offered mixed opinions on the same issue. The debate is still open on the contribution of gender diverse boards to the financial performance of companies.

Management theories such as diversity management give theoretical explanations on inclusion of more women on boards. The theory posits that more diverse boards lead to improved performance. Both the agency theory and the resource dependence theory posit a positive association between board diversity and a firm's financial performance. Jensen and Meckling, (1976) argued that in agency theory aver that diversity in boards is one measure of their independence. Muth and

Donaldson, (2013) argue that independent boards are more effective at their management function of monitoring and control and this may lead to a positive outcome on the financial performance.

An investigation conducted on the implications of both gender diversity on the financial achievements of firms by Erhardt *et al*, (2013) found that gender diverse boards are more likely to post improved financial performance than boards that are not gender diverse. In their study they sampled 50 listed firms in the Singapore Securities Exchange. In another study in Ghana Okiweni (2013) found no noteworthy relationship between a gender diverse board and the financial performance of listed companies. The above studies provided contrasting results even though they were done in the same period on listed firms in different countries.

According to Calors (2010) Studies conducted to scrutinize the result of board gender diversity on the financial performance of firms have provided inconsistent and mixed evidence. There are different views that suggest board gender diversity may negatively affect financial performance (Rose, 2017). There needs to be clarity on the impacts of board gender diversity on the financial achievement of an organization.

To clarify the role and the impact of board gender diversity on financial performance, the field would benefit from additional empirical studies such as this one. Although studies were conducted in countries such as the US, UK, Spain and Norway, among other countries (Adams and Ferreira, 2009), the researcher could not find any published study conducted using Kenyan banks. In addition, some of the studies were not specific regarding percentage of women on the board, there was no control for industry and there were inconsistencies regarding measures of company performance employed.

With the presence of overwhelming evidence with regard to the qualities women bring to the board it is still not clear how gender diverse boards affect company's financial performance (Mwangi, 2015). The conflicting results of evidence suggest that research results may be country specific. There is growing interest in Kenya with regard to the subject as companies seek to maximize shareholders wealth.

Due to the lack of conclusive findings and evidence with regard to gender diverse boards on company performance the researcher sought to establish the effect of gender diverse board on a firm's financial performance by comparing firms whose boards are gender diverse with those that are not. The researcher then sought to establish which group had a superior performance.

1.3 Research Objective

The objective was to study the relationship between board gender diversity and financial performance of financial institutions in Kenya.

1.4 Value of the Study

The government through its legislative organs will find it useful as they seek to craft laws that will guide companies in their board operations and on matters regarding board composition. The Capital Markets Authority which is the regulating body for listed firms will also find it extremely useful as they make policy decisions and the advisory role they offer listed firms on matters of compliance.

Investors who are key stakeholders in companies will find the study to be of great significance as they seek to appoint board members who are going to enable them maximize their wealth. The study will also be useful to academic practitioners and researchers as they seek to build on the

body of knowledge in this field and conduct further research that will delve deeply on the subject and provide additional solutions to it.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The literature relevant in this study was extensively examined in this chapter. It adopted the conceptual framework and incorporated works of previous scholars on the subject.

2.2 Theoretical Review

The theories reviewed were relevant to the study. The theories and the relevant literature are critically explored and analyzed and put in the contextual aspect of the study.

2.2.1 Agency Theory

It is premised on the impression that there is departure of ownership from managing in a contemporary corporation, that the agents act on behalf of the principal in running the organization and that there are agency costs incurred while resolving conflict between the agents and the principles. This theory is premised on the idea that there are a large number of shareholders who are also owners who allow agents who are independent of them to direct, control and appropriate capital for their future gains (Berle and Means, 1932).

Different scholars have argued that the top administration of a firm becomes more powerful when the directors at the board are persons who discern little of the business and the firm's stock are widely held (Mulili and Wong, 2011). Proponents of this theory argue that company's top leadership should be substantial owners of the company in order to promote goal congruence (Mallin, 2014). It has been argued that the challenges faced by corporations arise because the top leadership are not willing to shoulder the accountability for their choices unless they have significant shareholding in the stock of the company.

Jensen and Meckling (1976) averred governance at the board provides a mechanism where directors of the board monitor the corporation and help reduce or minimize conflicts brought by the principal agent relationship. This scenario the owners are the principals, the managers are the agents, and the directors at the board act as monitoring device (Mallin, 2014). The monitoring mechanism is necessitated by the observance that agents who are managers may take actions that may not maximize shareholder wealth. This is further exacerbated by their firm specific expertise and knowledge which the principals don't have hence the need to have the board to act as a monitoring mechanism (Jensen and Meckling, 1976)

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Donaldson and Davis argued that unless proper governance structures are set up and implemented to safeguard shareholders' interests the managers who are the agents will not maximize the returns of the shareholders which is their core duty. This they argue is the purpose of business governance which is to eliminate or minimize potential for agents to act dissimilar to the welfare of the principals of the firm and their interest which is maximization of returns. Proper governance structure will include a well diverse board which brings in different experts with different backgrounds to widen the pool of knowledge a gender diverse board is part of this.

2.2.2 Stakeholder's Theory

Donaldson and Preston (1995) argue that corporations touch the wellbeing of different stakeholders who are clusters or persons that cooperate with the company and will influence or will be affected by the company as it seeks to achieve its objective. They argue that the corporation is just but a social entity with many stakeholders. Donaldson and Davis argue that this interaction and role of shared incumbency by stakeholders in the firm help in maximizing shareholder returns. They argue that stakeholder theory is superior to the agency theory.

Jensen (2011), has criticized this theory for assuming a solitary valued objective. His argument suggests that organization's performance is not and ought not to be measured only by improvements to its stakeholders. (Jensen, 2011). This is because stakeholder's theory posits that for a firm to improve its financial performance it must take the interests of all stakeholders into account. (Yusoff and Alhaji, 2012). Scholars have roundly criticized this assertion, in their argument and the above assertion is impractical.

This theory argues that the stakeholders include associations of trade, groups of people, related companies, potential workers, government, political parties and the general public. In extreme cases prospective clients and competitors can be viewed as stakeholders in order to promote efficiency in the marketplace place. The theory has gained additional prominence since scholars realized the actions of firms influence outside surroundings therefore necessitating responsibility to its broader audience and not just to its shareholders (Yusoff and Alhaji, 2012)

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2.2.3 Stewardship Theory

A sharp departure and a complete contrast of the agency theory is the stewardship theory. It proposes a dissimilar model of administration where directors are considered as noble overseers who will act in the greatest interests of the proprietors of the firm (Davis and Donaldson, 1991). Stewardship philosophy is founded on social thinking which emphasizes on executive's behavior. The behaviour of the agent is collectivists, has a greater usefulness than personal selfish behaviour, pro- organizational and the behaviour of the steward won't be different from organization's interest since they will seek to maintain the goals of the business as stewards (Davis, Schoorman and Donaldson, 1997).

This theory emphasizes on the arrangement set up that help empower and facilitate rather than control and monitor (Davis, Schooman and Donaldson, 1997). The philosophy advances a more relaxed view of the departure of the part between the chairperson and the chief executive officer and supports the selection of a single individual intended for the role of the CEO (Clarke, 2014). Therefore for a better financial performance the board should ensure the right structures are in place that will empower the managers and facilitate the work as they seek to achieve the objectives of the firm (Clarke, 2014).

Sanders (2014) argues steward's utilities are maximized when the shareholders wealth is maximized. This is because the success of the organization will satisfy most of the steward's requirement and they will have a clear mission. Tensions between different interests groups and beneficiaries are balanced by the stewards. Advocates of this philosophy contend that stewardship theory satisfies the requirement of all interested parties resulting to a performance equilibrium.

In this theory there is an assumption of strong relationship between agents who are the managers and the firm. The agents strive to promote and protect the firm's performance. When the performance is successfully improved by a steward most stakeholders groups in an organization are satisfied. The fate of an organization is determined by a single person when that individual and the organization. (Davis, Schooman and Donaldson, 1997)

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2.2.4 Resource Dependency Theory

It is founded on the premise that the environment is the source of resources which are scarce and the firm are dependent on these finite resources for operation. Uncertainty is created when there is a lack of control of this resources by the firms operating in that environment. This situation is deemed as undesirable and leads to instability (Lutherman, 2015). Pfeffer and Salancik, (1978) argue that organisations must look for sustainable methods to exploit these resources which are scarce and are being pursued by other corporations in order to ensure their existence. They argue that the survival of any organization is based on its ability to acquire and maintain resources.

Pfeffer (1972) argues that the directors of the board are important players who play the role of understanding and help mitigating the critical element of uncertainty in the environment. Transaction costs are reduced by environmental linkages which are associated with environmental interdependency. Scholars argue that this theory posits that corporate boards should reflect the environment (Pfeffer, 1972.). Scholars argue that under this theory corporate directors will be people who help maximize provision of important resources.

Directors will bring different resources and linkages to the board. The composition of the board will reflect matching of the dependencies an organisation requires and the acquisition of resources by members of its board (Hillman, Cannella and Paetzold, 2015). From the above arguments it advocates that the managers should be people with diverse skills and resources in order to enable the firm achieve its performance.

2.3 Determinants of Financial Performance of Banks

2.3.1 Board Diversity

Allen *et al*, (2017), argued that when a board is more diversified there is better performance than for boards that are less diversified. Fan (2012) measured the diversity of boards in Singapore in terms of gender, ethnicity, race and profession and noted that there was a positive relationship between more diversified boards and the financial performance of companies.

Cognitive diversity of variables such as age, race, color, knowledge and education was studied by Erhardt, Werbel and Shrader (2013), it was noted that there was a positive correlation between number of women in the board and the company's financial performance. Their finding was contradicted by Daunfeldt and Rudhhlolm (2016) who established that there was a negative association between board gender diversity and the Return on Total Asset.

2.3.2 General Macroeconomic Conditions

The general market conditions existing at a time affect the company's commercial performance (Arthur, 2015). In their study Harold *et al,* (2017) found that in periods of subdued general macroeconomic conditions firm performance declined considerably. They also found out that in periods of favorable macroeconomic conditions company's financial performance was reported to be favorable. Their study was carried out in the USA, Germany, Spain and South Africa where they looked at the economic cycles at different times and the company's financial performance at those times.

Kolade (2012) in his study of Nigerian firms noted deteriorating financial performance in periods of economic meltdown while the converse happened during periods of economic boom. Clair (2014) argued that the financial performance of banks is predisposed by the business cycle in the

country. She argued that during boom time households commits a significant proportion of their income to service debts hence the rise of income in banks during such periods.

2.3.3 Company size and Leverage

Leverage beyond a certain limit negative result on the financial performance of a company due to the high interest costs associated with high leverage levels (Malenya and Muturi, 2013). Still in their research they identified company age and company size which effects on the performance of businesses. This was because of the economies of scale enjoyed by large firms as opposed to small firms.

Chuthamas *et al,* (2015) in their paper argued that leverage significantly affects company performance as cheap credit acts as a cheap source of capital while expensive credit hinders firm growth and better financial performance as the firm will be bogged down by heavy interest cost. In their study that covered both small sized firms and big firms in Thailand they found out that small firms reported lower RoA and RoE due to the high cost of credit while large firms reported superior RoA and RoE due to cheap credit.

Ongore and Kusa (2013) argued that a banks size has an effect on its financial performance. They argued that large banks attracted cheap source of funding and competitively advanced it to borrowers at high margins while small banks were forced to pay expensively for their deposits because of the perception that funders have of them as being risky therefore requiring a high return for the risk undertaken.

2.4 Empirical Review

The relationship between the diversity of board members and the financial performance of listed companies was examined by Darmadi (2010) in the Indonesian Stock Exchange. Gender, age and

nationality were used as the proxies in the test of diversity. 169 firms were used in the sample of listed firms at the Indonesian Stock Exchange as at 31st December 2007 and (OLS) revealed both marketplace performance and accounting performance using (Tobin Q) and Return on Assets (RoA) had significant negative association with gender while population diversity was found to have no effect.

A study carried out in the USA did not find any substantial association between boardroom of corporations nonetheless between the fraction of young people in boardrooms and the financial performance of corporations. It was found that when young people are in the boardroom there is a important improvement in financial performance. Women and foreign nationals were found to have no effect on both accounting performance and market performance (Carter *et al*, 2010).

Research on the association between female's presence in boards and the business financial performance was conducted in Australia by Wang and Cliff (2013). It was conducted among 243 firms in the year 2003. The results of the study showed that the percentage of women executives did not have any significant influence on the financial performance of a company. In another study in the same country by Vaulry *et al,* 2010 found no association between proportion of women and the financial performance in companies.

Aduda *et al,* (2013) in their investigation of women representation in the boardroom and firm financial performance found a positive correlation firm financial performance and boardroom composition, RoA and Tobin Q ratios were used to measure accounting and market performance respectively. In another study it was found that gender sensitive boards as a portfolio significantly outperformed the market leading to a conclusion that these firms are good bets for the shareholders (Von and Parnell, 2015). Von Bergen and Parnell (2015) concluded that promoting gender

diversity was a viable strategy that can be used in order to enhance market performance of listed companies.

Marimuthu (2015) investigated the significance of gender diversity on boards and financial performance. He used secondary data from listed firms in the Main Board of Bursa Malaysia from 2000 to 2005 a six year period. He sampled the top 100 companies based on market capitalization. Financial performance was measured by Return on Asset (RoA) while gender diversity was measured by percentage of women directors. The researcher used regression and correlation analysis to measure the relationship in the study.

Mwangi (2013) in his study on the importance of gender diverse boards in manufacturing and allied firms listed in the NSE found that there existed no significant relationship between the two. Mwangi used data from industry regulators and published results of the companies in the NSE. The study covered the years between 2006 and 2016. He covered twenty listed firms in the above category.

Kimathi (2015) in the investigation of the relationship between board diversity and the financial performance of private companies. The results of the study showed the existence of a positive relationship between the two. In the results there was significant improved financial performance when firms increased the presence of women in the boardrooms. He argued this brought about diversity and improved decision making at the board level.

The outcomes of the study displayed that gender diversity was positively correlated to the financial performance of the firm. The research findings illustrate consistency with Agency theory by Jensen and Meckling 1976 that showed ethnic and any other form of diversity are important and can act as an effective tool in helping a company achieve its objectives. Marimuthu (2015) argued that if

the tool (gender diversity) was applied effectively it would help company's achieve greater financial performance.

A study carried out in Ghana by Okeche (2015) on the effect of a gender diverse board on the financial performance of private companies found out that gender diversity has little significance to the financial performance of private firms. Okeche sampled one hundred and fifty firms. The study covered the period between 2005 and 2015. The results of the study found the existence of a negative relationship between diverse boards and the financial performance of private firms.

In the study the firms sampled had been in existence for periods of over ten years this criteria was chosen in order to ensure only firms that are stable make it to the sample it was also used to weed out firms that do not survive past the five year cycle. The firms were then scrutinized to ensure that only firms that had audited financial statements made it to the collected sample. This was done to promote verifiability and accuracy.

Oleche (2016) in a similar study that covered private firms in Ghana in which he concentrated on firms that had been in existence for periods of over fifteen years and have consistently been audited found that there existed a positive relationship between gender diverse boards and the financial performance of companies. The results of the study were at variance with previous studies carried out in Ghana on the same issue.

In his study Ujunwa (2012) investigated the effect of corporate board formation on the financial performance of institutions that are listed in the Nigerian Securities Exchange. Board expertise, board size, Population, board ethnicity, Chief Executive Officer Duality, and board gender. A panel data of 122 listed firms was used for the years between 1991 and 2008. He used the random

effect and fixed effect general least squares (GLS) to test the hypotheses formulated for the study while controlling the firm size and age.

The results of Ujunwa's study showed that CEO duality, Board size, and gender diversity were negatively linked to the financial performance of companies. Whereas nationality, ethnicity and education of the board i.e. number of board members with postgraduate qualification were found to positively impact company's financial performance. This study has been used as a base study on the subject of boardroom gender diversity and the financial performance of firms in Nigeria (Ukuko, 2013)

A similar study by the same boardroom features for 180 small businesses exposed that CEO duality positively affected the financial performance of firms. The findings of this studies provide conflicting results and contrasting signal between the alignment of agency and stakeholder theory. Agugu (2012) did a similar study of Nigeria listed firms and used the above characteristics of board composition and arrived to similar findings with Ukuko.

The association among board gender diversity market and book measures on company financial performance was investigated by Cheong and Sinnakkannu (2014). They sourced data from company's' annual reports and Bloomberg database. They used 634 firms listed in the Bursa Malaysia main market and categorized the firms according to their level of boardroom gender diversity. The categories were ranked as either High, Moderate or Low. The firm's financial performance was measured using Tobin Q, Return on Assets and Return Equity and the annual net income of the firm. By use of the Ordinary Least Square (OLS) regression analysis they found out that firms which recorded a higher annual net income had a high level of board gender diversity while those that recorded the lowest annual net income had lower gender diversity.

The highest mean Return on Assets was also recorded by the firms with the highest board gender diversity followed by those that were moderate and lastly those that had low gender representation on their board. These findings are in concurrence with agency theory. Agency theory posits that more diverse boards are in a better position to increase their shareholders wealth due to the strategic advantage they have in their resources (a diverse board).

In a related study Ambaka (2016) carried out an investigation on the effect of gender diversity of the members of the board and the institution's financial performance. Ambaka focused on companied in the manufacturing sector in Kenya. In his study he sampled companies located at the industrial area in Nairobi. The results of the study showed that companies with advanced percentage of women performed slightly better than those that had a lower representation. He however pointed out that the results of the study were not generic to all industries and further research will have to be undertaken to create the relationship between the two variables in other industries.

A study done in Kenya by Letting, Aosa and Machuki (2012) sought to establish the relationship board diversity and company's performance. The variables that were used to test board diversity were gender diversity, nationality, and academic background and more particularly the influence of women on the board on the firm's financial performance. Semi structured questionnaire were used in the study. The questionnaires targeted company secretaries or the board chairpersons of all the listed firms in the Nairobi Securities Exchange.

The researchers achieved an 85% response rate. The data on financial performance was obtained from the company's annual reports, and NSE publications. Descriptive statistics was used to

outline board membership of the firms. The years of study were between 2006 and 2009. The study found significant positive relationship between gender diversity, nationality & academic background with the financial performance of firms.

A study by Ouma (2015) done on Kenyan listed firms for the years 2000-2010 investigated the association among board gender diversity and the financial performance of firms found significant positive association between boardroom gender diversity and the financial performance of firms. ROE and Return on Asset were used as the measures for accounting returns while Tobin Q was used as a measure of market return. The answers of the study are consistent with the findings of the study by Letting, Aosa and Machuki.

In a study done by Ombogo (2013) on the relationship between board gender diversity and the financial performance of companies he found out that firms that were gender diverse with a higher share of females represented at the board performed better than firms that had a lower representation of women. Ombogo in his study considered a representation of below twenty percent to be a low threshold, a representation of between twenty one percent and forty five percent to be moderate and representation of above forty five percent to be high.

In a related study Ambaka (2016) carried out an investigation on the effect of gender diversity of the members of the board and the institution's financial performance. Ambaka focused on companied in the manufacturing sector in Kenya. In his study he sampled companies located at the industrial area in Nairobi. The results of the study showed that companies with advanced percentage of women performed slightly better than those that had a lower representation. He however pointed out that the results of the study were not generic to all industries and further research will have to be undertaken to create the relationship between the two variables in other industries.
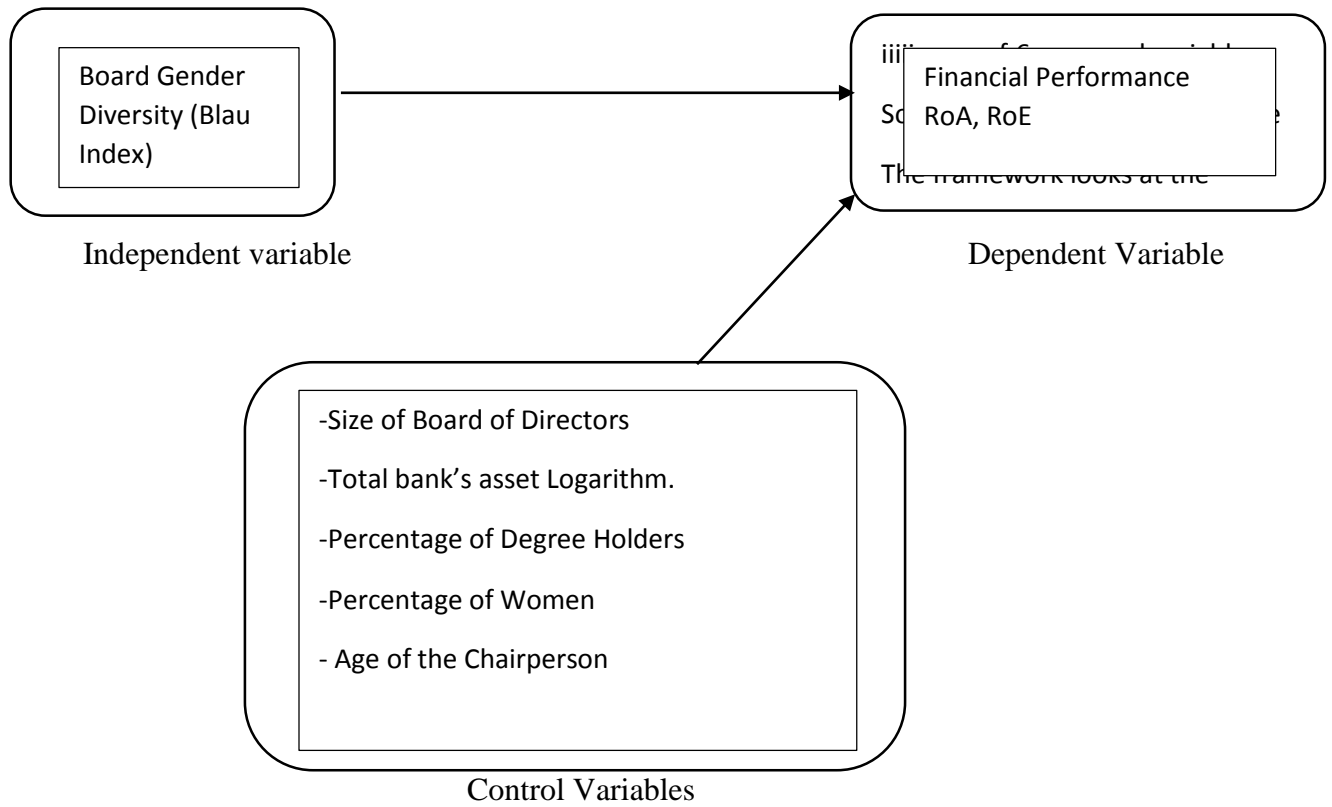
In order to address the above shortcoming Angwesi (2017) carried out a research but incorporated more than one industry. Angwesi took a sample of twenty firms from different industries. The industries sampled were Manufacturing, Retail, Energy and the Hospitality industry. The researcher pointed out that due to the limit of funds he was unable to sample a larger population size in the study. The outcomes of the study pointed out of the inexistence of any connections between the gender diversity and the firm's financial performance.

2.5 Conceptual Framework

In figure 1 the conceptual framework board gender diversity is the independent variable, it is measured in relation of percentage of women in the board. The control variables are size of board of directors, total bank's asset logarithm and ownership of the firm. The dependent variable is the financial performance of the firm measured in terms of ROA and ROE as accounting measures.

The hypothesis of this research study was that board gender diversity has a positive correlation with the financial performance of a firm with the assumption that a gender diverse board will help make far better decision than a less gender diverse board. This is on the premise that a gender diverse board will make informed decisions making the firm gain a competitive edge in the industry it operates in. The material found from the audited and published financial reports of the company's in the study was used by the researcher to calculate the RoA and RoE.

Figure 1: Conceptual Framework

Board Gender Diversity (Blau Index)

Independent variable

Financial Performance RoA, RoE

Dependent Variable

-Size of Board of Directors

-Total bank's asset Logarithm.

-Percentage of Degree Holders

-Percentage of Women

- Age of the Chairperson

Control Variables

Source: Author

2.6 Summary of Literature Review

The theories reviewed in this chapter were Agency, Stakeholder, Stewardship and the Resource dependency theory. The theories are explored in great detail in order to understand the principles espoused and the arguments that support them. In agency theory managers are entrusted with the duty of maximizing shareholders (principals) wealth, there are agency costs involved since they are viewed to be self-seeking and have conflict of interest with the principals (Davis *et al*, 2015). To address the conflict of interest and the opportunity of self-seeking behaviour a board of directors is put in place in order to screen and control the agents.

Stewardship theory contrasts with agency theory and posits that managers with dual roles will act in the concern of the investors. Stakeholder theory posits that the greatest worth is created when the interest of all stakeholders are taken into account. The stakeholders include employees, suppliers, shareholders, local authorities, governments and other interest groups.

Empirical review of studies has been done covering countries both in Europe Asia, USA and Africa. The studies offers conflicting conclusions on the relationship between boardroom gender diversity and the financial performance of companies. The aim of the study was to fill the gap that to date exist in the board gender diversity and financial performance literature in Kenya. Few studies that have been conducted have concentrated on the manufacturing and service industry firms with no similar studies being done on the commercial banks in Kenya this study aimed to address these gaps.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The design and the methodology of the study is set out in this chapter. The sources of data used, their method of collection and how the analysis was carried out is detailed in this section.

3.2 Research Design

This research paper adopted a descriptive research design, Cooper and Schindler (2013) in their paper argued that this design relates and measures the cause and effect relationship among variables under study. This approach was suitable since the study objective was to establish the existing association amongst the board gender diversity and the financial performance of firms. Secondary data was collected for the study, the data was collected from the banks websites, The Nairobi Securities Exchange website and investment banks reports.

3.3 Population of the Study

Commercial banks approved by the regulator formed the population of the study. The study was restricted to banks licensed by the end of 31st December 2016. The study used the census approach and sampled the entire population in the study since it was scalable and feasible. A population has been defined as a set of objects or individuals with common observable characteristics (Mugenda and Mugenda, 2013). The commercial banks licensed by the industry regulator formed the population of the study, this banks are shown in appendix I

3.4 Data Collection Method

There are various ways in which data can be collected, the tool and instrument to be used depends on the characteristics of the subject the topic of research, the research problem, the objectives, and the expected results (Ngechu, 2014). This is because of the specific nature of the tools and

instruments that collect the data. The data collected covered the period from January 2006 to December 2015, this covered a ten year period.

3.5 Data Analysis Techniques

Collected records was validated, coded and checked for any errors and omissions. Later the data was run through the statistical Package for Social Science (SPSS). The objective was met by computing the regression analysis of the variables.

The regression model to test the relationship between the gender diversity and bank's performance is as follows:

$$\text{ROA} = \beta_{o+} + \beta_1 \text{BlauIndex} + \beta_2 \text{AS} + \beta_2 \text{BS} + \beta_3 \text{TA}_3 + \beta_4 \text{PDH}_4 + \beta_5 \text{PW} \dots\dots\dots\dots\dots\text{model 1}$$

$$\text{ROE} = \beta_{o+} + \beta_1 \text{BlauIndex} + \beta_2 \text{AS} + \beta_2 \text{BS} + \beta_3 \text{TA}_3 + \beta_4 \text{PDH}_4 + \beta_5 \text{PW} \dots\dots\dots\dots\dots\text{model 2}$$

Where:

ROA, ROE are the dependent variables

3.5.1 Independent variable

BlauIndex: Board gender diversity

The Blauindex is used to calculate board gender diversity its formula is denoted as . $1 - \sum p_i^2$

3.5.2 Control Variables

AS: Age of the Chairperson

BS: size of board of directors

TA: total bank's asset, logarithm

PDH: Percentage of Degree Holders

PW: Percentage of Women

3.6. Test of Significance

The test of significance measure the probability that the association amongst the variables stated in the regression model above exist and if it does exist, how strong is the relationship.

As a degree of the strength of the relationship amongst the variables, an alpha ($\dot{\alpha}$) value =

0.05 was chosen. Also, (P)-value is the likelihood of gaining the observed sample results, or "more extreme" results, when the null hypothesis is actually true. The P-value will be set at

0.01 i.e. $P \leq 0.01$

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This section presents the research findings on the study on the relationship between board gender diversity and financial performance of commercial banks in Kenya. Analysis of secondary data commenced by undertaking a descriptive analysis of the study variables aimed at obtaining the general profile of the data. In addition, appropriate regression diagnostic checks were undertaken on the data so as to determine its suitability for further statistical analysis. Further, an estimation of the panel regression models specified in section 3.5 was undertaken and interpretation of the results performed using the inferential statistics.

4.2 Response Rate

Out of 42 commercial banks, data was collected on a sample of 39 commercial banks for the period ranging from 2006 to 2015, accounting for a response rate of 92.86%. According to Mugenda and Mugenda (2013) over 50% response rate is satisfactory for examination while over 70% is regarded as excellent. The response rate was thus regarded as excellent and was considered appropriate for the study.

4.3 Descriptive Statistics

This section aims at observing and describing the general characteristics of the data in regard to its distribution. Specific aspects observed included the measures of central tendency i.e. mean; variability i.e. standard deviation, minimum and maximum; and symmetry i.e. skewness and kurtosis. Table 4.1 presents the descriptive statistics for all the variables used in the study.

Table 4. 1: Panel Data Summary

Variables	Obs	Mean	Std. dev.	Min	Max	Skewness	Kurtosis
ROE	390	10.718	44.370	-24.140	82.060	1.725	3.013
ROA	390	2.354	5.389	0.004	56.928	1.847	3.012
logTA	389	14.050	1.794	8.423	18.935	1.256	3.131
BlauIndex	390	0.195	0.130	0.002	0.602	1.429	3.014
PWoman	390	0.113	0.161	0.002	0.958	1.431	3.111
BS	390	0.329	0.176	0.007	0.771	1.347	3.219
PDH	390	0.205	0.143	-0.032	0.884	1.244	3.171

The average company profitability as measured by ROA and ROE reveals an average of 2.354% with a standard deviation of 5.389 and 10.718% with a standard deviation of 44.37 respectively. This suggests a fairly low performance for most commercial banks during the period under study. High variability was also observed in the returns with ROA having a minimum of -0.04% and a maximum of 56.928% while ROE had a minimum of -24.14% and a maximum of 82.06%; suggesting presence of both highly efficient and highly inefficient commercial banks in the sector. This was also confirmed by the presence of relatively high skewness of -0.847 and -1.725 for ROA and ROE respectively. According to the pecking order theory, efficient firms operate at optimal capacity to utilize invested funds appropriately translating to high rates of return and subsequently high retention rate, hence less dependence on debt financing; the reverse being true for inefficient firms.

The results showed that the Blau index of gender in the banking segment had a mean annual diversity index of 19.5% but with a relatively high standard deviation of 13.0% as corroborated by an extreme minimum annual diversity index of 2% and a maximum of 60.2%. The results had a mean of 11.3% but with a relatively high standard deviation of 16.1% as corroborated by an extreme minimum of 2% and a maximum of 95.8%.

4.4 Panel Diagnostic Tests

4.4.1 Normality Tests

This research was based on the assumption that data for all variables followed an approximately linear distribution for each of the companies. It was therefore necessary to carry out appropriate tests to validate this assumption. The Shapiro-Wilk test ($p > 0.05$) was done for all the variables and the results, as presented in Table 4.2, showed that the same were approximately normally distributed for each variable. The Shapiro-Wilk test is widely accepted for its accuracy since it factors in the effects of outliers, skewness and kurtosis in determining normality (Razali & Wah, 2011; Shapiro & Wilk, 1965).

Table 4. 2: Panel Normality Tests

Variable	Obs	w	v	z	Prob>z
PDH	390	0.93248	18.171	6.892	7.17
BS	390	0.97919	5.600	4.095	0.975
AS	390	0.92909	19.083	7.008	0.665
BlauIndex	390	0.93417	17.716	6.832	0.652
ROE	390	0.19751	215.974	12.775	0.509
ROA	390	0.38558	165.357	12.140	0.339
logTA	389	0.96995	8.069	4.962	0.841

4.4.2 Autocorrelation Test

Since multiple linear regressions would be used to determine the association between variables, it was also necessary to check whether the assumption of normality of residuals i.e. lack of significant autocorrelation was met. The researcher checked for this assumption using the Durbin-Watson statistic (Durbin & Watson, 1971). As a rule of thumb, a Durbin-Watson statistic of 2 and thereabouts shows that there is no autocorrelation problem. A value greater than 3 signals negative autocorrelation and a value less than 1 signals presence of positive correlation; scenarios which negatively affect the validity of other statistics such as the p-values. As presented in Tables 4.3, the Durbin-Watson statistic for all the regressions close to 2 hence indication that the residuals were approximately normally distributed.

Table 4. 3: Autocorrelation Test

Model	Durbin Watson
ROA	2.167
ROE	2.271

4.4.3 Correlation Analysis

Correlation analysis was performed to determine existence and strength of relationship between the dependent and independent variables used in the study. Correlation between two variables is measured using the correlation coefficient, denoted as 'r', and ranges from -1 to +1, where -1 indicates a strong negative correlation, +1 indicates a strong positive correlation and zero (0) indicates lack of correlation (Kothari, 2011).

Considering that the research was modeled to control for the effects of board gender diversity and financial performance, partial correlation was done to measure the correlation between

independent and dependent variables instead of the full Pearson product moment correlation. Table 4.4 presents the partial correlation results.

Table 4. 4: Partial correlation between independent and dependent variables

	logTA	BlauIndex	Pwoman	BS	PDH	ROE	ROA
logTA	1.0000						
BlauIndex	0.4635	1.0000					
Pwoman	-0.4479	-0.6447	1.0000				
BS	-0.3897	-0.7408	0.1406	1.0000			
PDH	0.5551	0.7166	-0.7128	-0.6901	1.000		
ROE	-0.3266	-0.2862	0.2555	0.2152	-0.2944	1.000	
ROA	0.0508	0.0971	0.2032	-0.4771	0.2657	-0.0676	1.000

The partial correlation results indicated a strong positive relationship between percentage of women in the board, measured by PW, and board size as measured by logTA at the 95% level of confidence. This strong relationship points out that a large proportion of the banks in Kenya comprises of women in their board composition.

On the other hand, board gender diversity measured by BlauIndex has a moderate positive and significant relationship with financial performance measured by ROA at the 95% confidence level and an inverse weak relationship with financial performance measured by ROE.

4.4.3 Breusch-Pagan / Cook-Weisberg Test for Heteroskedasticity

Table 4. 5: Breusch-Pagan / Cook-Weisberg test for heteroskedasticity statistics

Response variable	Model	Chi square	Prob > chi2

ROA	1	777.43	0.000
ROE	2	1025.62	0.000

4.4.4 Panel Unit Root Test

As shown in Table 4.6, the null hypotheses that all panels contain unit roots for all variables were rejected at 5% significance level since the p values were less than 5%. This therefore implies that all the variables were stationary (no unit roots) and hence robust regression results even without lags (at level).

Table 4. 6: Panel Unit Root Test Statistics

Variable			Statistic	p-value
ROA	Inverse chi-squared(78)	p	379.9483	0.000
	Inverse normal	Z	-8.2566	0.000
	Inverse logit t(199)	L*	-14.7346	0.000
	Modified inv. chi-squared	Pm	24.1752	0.000
ROE	Inverse chi-squared(78)	p	236.8008	0.000
	Inverse normal	Z	-5.3564	0.000
	Inverse logit t(199)	L*	-7.8624	0.000
	Modified inv. chi-squared	Pm	12.7142	0.000
logTA	Inverse chi-squared(78)	p	218.7769	0.000
	Inverse normal	Z	-5.4996	0.000
	Inverse logit t(194)	L*	-7.4140	0.000
	Modified inv. chi-squared	Pm	11.2712	0.000
BlauIndex	Inverse chi-squared(78)	p	218.7325	0.000
	Inverse normal	Z	-4.3419	0.000
	Inverse logit t(194)	L*	-6.8998	0.000
	Modified inv. chi-squared	Pm	11.2676	0.000
Pwoman	Inverse chi-squared(78)	p	491.8540	0.000
	Inverse normal	Z	-7.5474	0.000
	Inverse logit t(199)	L*	-18.3966	0.000
	Modified inv. chi-squared	Pm	33.1348	0.000
BS	Inverse chi-squared(78)	p	670.5895	0.000

	Inverse normal	Z	-12.6287	0.000
	Inverse logit t(199)	L*	-26.9350	0.000
	Modified inv. chi-squared	Pm	47.4451	0.000
pdh	Inverse chi-squared(78)	p	284.2985	0.000
	Inverse normal	Z	-6.5381	0.000
	Inverse logit t(194)	L*	-10.2833	0.000
	Modified inv. chi-squared	Pm	16.5171	0.000

4.4.5 The Hausman Test for Model Effects Estimation

Table 4. 7: Hausman Test for Model Effects Estimation

ROA Model	(b) Fixed	(B) Random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
PDH	9.807792	20.84338	-11.03559	3.645438
BS	-22.49385	-11.46212	-11.03174	3.486313
AS	1.957581	14.99736	-13.03978	4.105495
BlauIndex	-17.50508	-9.117882	-8.387199	4.006177
logTA	-.5282411	-.298473	-.2297681	.1402732

chi2(5) = (b-B)'[(V_b-V_B)^(-1)](b-B)

$$= \quad 19.02$$

Prob>chi2 = 0.0019

ROE model	(b) Fixed	(B) Random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
PDH	-95.860	-100.834	4.974	44.597
BS	-89.570	-80.612	-8.958	42.809
AS	-97.450	-72.735	-24.715	49.387

BlauIndex	-136.737	-124.062	-12.674	48.672
logTA	-11.577	-5.454	-6.123	1.552

chi2(5) = (b-B)'[(V_b-V_B)^(-1)](b-B)

$$= \quad 17.70$$

Prob>chi2 = 0.0034

H0: Random effects model is appropriate;

Significance level: 5%

Table 4.7 displays the Hausman specification test results for panel regression models1 and 2. The test results show that the chi-square statistics for panel model 1 and 2 were statistically significant at 5% level as supported by the p-values of 0.0019 and 0.0034 respectively. The study therefore did not disapprove the null hypothesis that the fixed effects estimation was appropriate for both equation 1 and 2 at 0.05 significance level. Effectively, the study estimated the panel equations for fixed effects.

4.5 Panel Regression Analysis

4.5.1 Regression Results of Board Gender Diversity Versus ROA- Fixed Effect Model

As shown in Table 4.8, the coefficient of determination (R-square) describes how financial performance of commercial banks in Kenya varied with variation in PDH, BS, AS, BlauIndex and logTA. From table 4.8, the value of overall R^2 is 0.3743. This implies that, there was a variation of 37.43% of financial performance (ROA) of commercial bank with PDH, BS, AS, BlauIndex and logTA at a confidence level of 95%. This means that 37.43% of commercial banks ROA are attributable to PDH, BS, AS, BlauIndex and logTA in the commercial banks. Further, the p-value of 0.000 which was less than 0.05 indicated that the model was statistically significant in explaining the impact of the independent variables on financial discharge (ROA) of financial

establishments in Kenya. It is therefore concluded that BlauIndex had significant combined effects on ROA.

From the data in Table 4.8, the established regression equation was

ROA = 18.03343 -17.50508 BlauIndex - 0.5282411 logTA + 1.957581AS -22.49385BS + 9.807792PDH

From the above regression model, it was found that financial performance of commercial bank would be at 18.03343 holding PDH, BS, AS, BlauIndex and logTA constant at zero. A 1% increase in BlauIndex would lead to a decrease in ROA of commercial bank by 17.50508%. The p value was 0.147 which is greater than 5% level of significance. This indicates that BlauIndex had an insignificant negative relationship with financial performance (ROA).

Table 4. 8: Regression Results of Board Gender Diversity Versus ROA- Fixed Effect Model

	ROA	Coefficient	Std. Error	t	P>|z|
Model 1	PDH	9.80779	11.4424	0.86	0.392
	BS	-22.494	11.2936	-1.99	0.047
	AS	1.95758	11.7628	0.17	0.868
	BlauIndex	-17.505	12.0338	-1.45	0.147
	logTA	-0.5282	0.20948	-2.52	0.012
	_cons	18.0334	12.069	1.49	0.136
Statistics					
F(5,345)	38.74				
Prob > F	0				
R-sq Overall	0.3743				
rho	0.17569				

4.5.2 Regression Results of Board Gender Diversity Versus ROE- Fixed Effect Model

As shown in Table 4.9, the coefficient of determination (R-square) describes how financial performance of commercial banks in Kenya varied with variation in PDH, BS, AS, BlauIndex and logTA. From table 4.9, the value of overall R^2 is 0.3523. This implies that, there was a variation of 35.23% of financial performance (ROE) of commercial bank with PDH, BS, AS, BlauIndex and logTA at a confidence level of 95%. This means that 35.23% of commercial banks ROE are attributable to PDH, BS, AS, BlauIndex and logTA in the commercial banks. Further, the p-value of 0.000 which was less than 0.05 indicated that the model was statistically significant in explaining the impact of the independent variables on financial execution (ROE) of financial institutions in Kenya. It is therefore concluded that BlauIndex had significant combined effects on ROE.

From the data in Table 4.9, the established regression equation was

ROE = 275.905 -136.7365BlauIndex - 11.57688logTA - 97.4499AS - 89.56963BS -95.86024P

From the above regression model, it was found that financial performance of commercial bank (ROE) would be at 275.905 holding PDH, BS, AS, BlauIndex and logTA constant at zero. A 1% increase in BlauIndex would lead to a decrease in ROE of commercial bank by 136.7365%. The p value was 0.260 which is greater than 5% level of significance. This indicates that BlauIndex had an insignificant negative relationship with financial performance (ROE).

Table 4. 9: Regression Results of Board Gender Diversity Versus ROE- Fixed Effect Model

	ROE	Coefficient	Std. Error	t	P>|z|
Model 2	PDH	-95.86024	115.1241	-0.83	0.406
	BS	-89.56963	113.6269	-0.79	0.431
	AS	-97.4499	118.3481	-0.82	0.411
	BlauIndex	-136.7365	121.0742	-1.13	0.260
	logTA	-11.57688	2.107646	-5.49	0.000
	_cons	275.905	121.4288	2.27	0.024
Statistics					
F(5,345)	12.61				
Prob > F	0.000				
R-sq Overall	0.3743				
rho	0.15398317				

4.7 Discussion of Research Findings

While past studies on the relationship between board gender diversity and the financial performance of institutions produce inconclusive results this study shows the existence of a negative insignificant relationship between the two. While some past studies showed that there exist a positive relationship others indicated that there also exist a negative relationship.

The reason for the mixed results can be attributed to different factors such as use of different methodology, use of small samples, a short observation period and different industries and the use of different control variables. The above factors can be attributed to the production of different results which have led to raging debate on the issue

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter contains the research findings of the study, the data was analyzed and presented in the chapter four.

5.2 Summary of Findings

The study found that the regression equation for the period 2006 to 2015 to establish the connection between board gender diversity and financial fulfilment of commercial banks in Kenya were:

$$Y = 18.03343 \ -17.50508 BlauIndex \ -0 \ .5282411 logTA + 9.807792 \ PDH + -22.49385 \ BS + 1.957581 \ AS$$

$$Y = 275.905 - 136.7365 BlauIndex - 11.5768811 logTA - 95.86024 PDH + -89.56963 BS - 97.4499 AS$$

From the above regression model for the ten years, the study established that there exist a negative relationship between board gender diversity and financial performance of Kenyan banks in Kenya. The results in all the regressions models indicated a significantly negatively relationship between board gender diversity and financial performance with Blauindex coefficients of -17.50508 (0.000) and -136.7365 (0.000 for both ROA and ROE regression models respectively. This strongly suggested that holding all other factors constant, a 1% increase in board gender diversity (BlauIndex) led to an approximately -17.50508 % decrease in return on assets ratio (ROA) and an approximately 136.7365% decrease in return on equity ratio (ROE).

The study found the intercept to vary though with the highest value being 275.905 and the lowest being 18.03343, this mean that financial performance of commercial banks would range between 18.03343 and 275.905 holding Blauindex, logTA, PDH, BS and AS to a constant zero.

5.3 Conclusion

The findings of the study show that there is no notable correlation between board gender diversity and the financial performance of commercial banks. This is supported by the evidence of a statistically insignificant relationship between the two. While diversity might be good for corporate governance purposes it does not have an effect on the bottom-line of the company.

This show that while majority of the boards of commercial banks in Kenya might be male dominated the absence of women did not in any way affect the financial performance of financial establishments in Kenya. This finding negate the arguments that have been propelled about the importance of board gender diversity and the financial performance of entities.

The financial performance of commercial banks in dependent on other factors other than board gender composition. While a lot has been said and advanced about the importance of gender diversity in leadership positions the results of the study do not point to its significance in the financial performance of commercial banks in Kenya.

5.4 Recommendations

The findings of the study point to an insignificant relationship between board gender diversity and the financial performance of entities. Companies should base their appointment on boards on other factors such as educational competence, skills competence and experience rather than gender since the findings indicate the existence of a negative insignificant relationship between the two.

Companies should further ensure that all appointments to the board have undergone integrity checks in order to promote ethical behaviour in boards. The background checks carried out on

employees wishing to be recruited in the firm should be further extended to the board members in order to promote consistency and fair treatment across the board.

When appointing board members shareholders should seek to ensure the new board members add value to the firm by bringing industry experience and linkages that will be useful to the company. This experience can be leveraged when the company needs assistance from regulators financiers and trade. This linkages will be useful for the banks as they seek to improve the financial performance.

5.6 Suggestions for Further Research

The present study only focussed only on commercial banks in Kenya it will be important that any future study should cater for a well-diversified population. This should include all industries in order to get a bigger picture of the relationship between the two. It is also important that any future study should incorporate more control variables in order to get more accurate results.

It is also imperative that future studies should be well funded in order to attract the right talent pool in order to produce better quality work. Any future research should incorporate the latest statistical tools in order to increase the accuracy of the research results. This will promote confidence in the output of the results achieved.

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