EFFECTS OF BOARD DIVERSITY ON FINANCIAL PERFORMANCE OF COMPANIES QUOTED ON THE NAIROBI SECURITIES EXCHANGE

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A RESEARCH PROJECT PRESENTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTERS OF SCIENCE IN FINANCE, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI

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DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

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D63/7416/2017

This research project has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

I dedicate this project to God almighty for the gift of life and good health during study period and my entire family of Mrs. Lopusie Nakerukon Lobuin and Mr. Nakerukon Lobuin Loukokito for your prayers all through research and academic period. To my daughter Delanie Achuman and my other children and I expect them to surpass this level and be great achievers as they will be inspired by this hard work And Finally to My Supervisor whose guidance and instructions has proved valuable throughout the research period.

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LIST OF ABBREVIATIONS

ANOVA   Analysis of Variance

CMA   Capital Markets Authority

FP   Financial Performance

NSE   Nairobi Security Exchange

ROA   Return on Assets

SPSS   Statistical Package for Social Sciences

VIF   Variance Inflation Factors

ABSTRACT

This research set to determine how board diversity influences financial performance of firms listed at the NSE. All 62 organizations listed at the NSE formed population of this work. Data was obtained from 57 firms giving a response rate of 91.9% that was considered adequate for this study. Independent variable in this research was board diversity operationalized as gender diversity, age diversity and citizenship diversity. Control variables were age of a firm represented by the number of years the firm has been in existence, board size represented by the number of board members and firm size given by natural logarithm of total assets in an year. The response variable was financial performance given by return on assets. A five-year period, January 2014 and December 2018, was studied through gathering of secondary data. Descriptive research design method was employed while multiple linear regressions model was applied in analysis of the association between the variables. The data was analyzed by use of SPSS version 22. An R-Square value of 0.078 was produced from the study results which meant that 7.8% of financial performance of organizations at the Nairobi Securities Exchange can be explained by the six predictor variables as 92.2 of disparity of financial performance was related to variables that were not part of this study. Findings of ANOVA highlight how F was important at the 5% level, showing p=0.001. Henceforth, this case showed that the model was appropriate in explaining the correlations between the predictor variables and the response variable. In addition, it was revealed that gender diversity, citizenship diversity and age of a firm had a significant effect on financial performance while age diversity, board size and firm size produced positive but insignificant findings for this research work. This research recommends that strategies should be set to enhance gender diversity and citizenship diversity since these two significantly influence financial performance among firms at the NSE.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Langevoot (2016) defined board diversity as having so many people with varying demographic features, education level, competence, expertise and experience for board homogeneity. Different strategies, cultures, and companies called for board diversity since it predicted numerous gains such as proper utilisation of available knowledge, workable choice in enhancing investor associations and company reputations by giving the organisation a picture of responsibility, Raheja (2015). Martino in 1999 provided a united states board report prepared from motor, IBM, Lucent, Nortel, Texaco, Sarah Lee, and DuPont mentioned board diversity as important ingredient for business to excel. The study specifies turnout rates for labour market dynamics and profitability gains of different groups as principal uplifter for diversity more so, reports outlines that firms that have succeeded in diversification, have included females and minorities in their employees and board of directors. As Measures of compliance with regulatory framework a number of nations are paying more attention to boards diversity. Example, publicly quoted companies in Canada expects member's constitution to be occupied in ethical process to institute, depending on the exposures and chance(Environment) affecting the organisation. Which ability, capability and individual features should put into point of view in choosing current individuals of the directorate. These happens to usher more values and the company.

This study sought to assess influence which board diversity can have on Financial Performance (FP) of companies quoted in Nairobi securities exchange. This research focussed on gender, citizenship and lifetime difference. Theories that predicts a

considerable influence which board diversity can have on FP are resource dependence theory, human capital and group diversity hypothesis. Pfeiffer and salancik (1978) came up with resource dependency theory which argues age difference has likelihood of increasing group production, due to the fact that members of various ages will, to some scope have unlike scenes, expertise, experience and communal platform. Becker (1964) through human capital theories assert that if members of the board are of various sexes, it is much probable their platforms will be dissimilar from others, thus making firms aggregate communal resources so big. Ox in 1993 stated the class diversity theory which puts forward that a nationally diversified board is well placed to successfully address the different demands affecting worldwide investors. Implying that a citizen varyin board will open to increased monetary achievement.

In Singapore, customs in boards is that they should include members with important expertise such as finance and accounting, business exposure, management, strategic planning, industry skills, customer-based know how and involvement in such related works before. On the other hand, Australian companies anticipated to surround itself with directors endowed with appropriate knowledge to promote their success in carrying out their duties. In resolved premise which the sarbenes-oxley reforms didn't acknowledge or institute significance of board's diversity plays role in magnifying firms operations, Ramirez (2003)suggests on ways and modalities states like Israel have achieved a head of united states of America in that Israel commencing 1994,Their requirement remained members of corporate boards are chosen considering gender disparity,likeliness,Norwegian government on the their part decided that not less than 45% of board members s placement in companies   be occupied by female citizens on or before the year 2005. Many nations are developing

policies and conducting research on how to accelerate board diversity in their company's board.

1.1.1 Board Diversity

Board diversity is extent upon which board is generally made up of scope of scenes and desires, encompassing individuals from non-identical customary categories, minorities, gender, age and social economic status, experience, connections, values and disability. Members of the directorate is defined as grouping of persons involved in the expansion and choosing ideas for the excellence of a corporation, Murphy&Mclntyre (2007). Initial concerns were placed on independence of boards, size, tenure, board diversity is seen to be much acceptable in bid of getting quality decision making, Higgs (2003). Diverse board increases output, specifically FP and decisions manufacturing process as well as bringing more ideas that add value to the table thus improving firm performance, Luis (2008). Research has a proof that firms with diversity in its board results in actual gains for both corporations and its owners. A study authorised by California public employee's retirees scheme discovered, corporations with mixed boards produced better than those with non-diversity in its directorships. Many firms globally have exemplified that diversity of its members of the boards guides to more company performance, carter 2003, Europe has inaugurated compulsory allocation for women directors, Grady (1999). Governments of Developed nations including United states of America, Australia among others have established equal opportunities commission for its companies.

Proposal on good governance reforms as well progressively mentions the noteworthiness of diversifying board of directors, Ferreira&Adams(2009). Diversification is considered necessary for better decision making in the

boards,Higgs(2003). A diversified board boosts results, especially FP and decision making process as well as add value by introducing new ideas and different perspectives to the discussion which in turn boosts company performance, Luis (2008). In addition, most researchers stipulate, diversity in board meetings results to factual benefit in favour of corporations and the owners. California public employee's retirement scheme(CalPERS) in its report discovered, companies with diverse boards perform better than those boards without. Study of boards diverse strategy, realising competitive benefit and share owner value stated corporations which has no ethnic minorities together with female directors on their boards eventually may be at disadvantage thus having lower share value (Luis,2008).

Various companies around the globe are exemplifying that diversity on boards ensures higher firm performance,carter(2003). Countries in Europe have initiated compulsory quotas for women directors(Grady,1999). Most Government of developed nations like Australia and United states of America have set up equal opportunities commission. Proposal on good governance and reforms have too progressively mentioned significance of diversifying boards of directors,Adams&Ferreira(2009). Moreover, Norway and Swedish governments have imposed sex quotas on composition of boards Medlands(2004);Randoy(2005). Research by Diana Grady,1999 points out that boards needs diverse perspectives to challenge the thinking management. As part of results in a survey conducted to examine corporate governance in Nigeria banks believed that their boards are diversified (with a score of 5.9 on a point 7 scale) in terms of having a mix scale of persons with different characteristics, academic level, occupational and financial knowledge. In Kenya, most of corporate boards are dominated by male due to the fact most appointments are

based on previous linkage and familiarity, where current directors would bring their friends on boards before their tenure expire,Business daily(2010).

1.1.2 Financial Performance

Company's FP is interpreted in various forms. Majorly, symbolising usefulness that flow in to the firm's shareholders,Anderson,&Rashid(2008). Pursuing capability of a company is accidental to its viability to achieve considerable gains from the stocks and other assets it owns. Good profitability increases an entity's ability to aid its growth, enhance other than refilling the gains from stock measure and keep industrialising market place. Company's performance largely depends on contrasting measures of profitability like return on equity, assets, past performance and industry's standards.

Financial performance measures ways a company uses its net resources from its main activities to raise finances as well as value for all interested parties. FP is a measure of company's general wellbeing over a particular period of time. Various estimates of financial doings are used in assessing firm's FP. Estimates comprise; accounting based -ratios extracted from statement of financial position and income statements like return on Assets(ROA), return on equity(ROE), return on capital employed(ROCE), and Tobin Q's considered to be mixing trading with accounting values and measuring of profit efficiency like managerial which is computed using a profit function sadegian (2012).

Assets returns gives the percentage of net profit relative to firm's resources in general. It especially shows an amount of after -tax profit a firm raise for every shilling worth of assets it owns. Equity returns is expressed as percentage of net income in relation to stockholder's equity or dividends on capital invested into the

business. Returns on equity is quantified as ratio observed by investors and stock analysts. Usually big Return on Equity ratio is considered an enabler to buy firm's shares. Moreover, this is a measure of return generated by bondholders, shareholders and other providers of capital. Tobin Q is a ratio of market value of the assets owned by the firm on the book value of assets. This research applied Tobin Q's, return on assets measures these performances because these two measures are all surrounding as they measure worth provided by utilising resources of a company. Besides, measures mentioned herein being tested in, most research such as Tauseef, Lohan and Khan, (2015), Badu&victor (2016), Trujillo-ponce (2017), and weill (2018).

1.1.3 Board Diversity and Financial Performance

Board is regarded a connection of important assets which a firm need from outside environments to have exemplary performance. Designation of strangers to membership assists in dependency theorist expanding disagreement by mentioning that members of directorate with varying expertise, cultural background,and gender.Will behave as strategic resource to the company therefore resulting in excellent FP Johnson (1996).It argued further that diversity promotes functionality of the board, with emphasis on its capability to participate in complex problem solving, planned decision manufacturing, management and monitoring.millikisen & forbes(1999).

In Theory, many disagreements exist in support of board diversity and FP for instance, carter(2003), identified five constructive disagreements concerning board diversity in principle representative structure. They established that a more balanced board is well placed to make decision based on the assessment of more options than homogeneous board. Diverse board seems to possess more knowledge of the market

pricing which increases transformation, creativity and financial increase. Diversity of boards improves image of the company; impressive picture has positive influence on customer's manner.

1.1.4 Nairobi Securities Exchange

This is securities trading market based in Nairobi, the capital city of Kenya. It is best known as fastest growing economies in Africa. This securities exchange market was established in 1954.It has sixty years in securities listing of both equity and debt stocks. It has global class business facilities suitable for domestic and foreign investors willing to gain exposures in Kenya and Africa economic progression. Nairobi Securities Exchange demutualised and got self- listed in 2014.It's board of management comprise of best stock market experts, whose concentration is on transformation, diversification and operational success in that area. Nairobi securities exchange functions within frameworks of capital markets Authority of Kenya and Company's Act cap 486 Laws of Kenya.

Nairobi security exchange plays a crucial role in mobilising resources and giving means through which most of listed companies can raise capital. They provide means with which to be privatised, Nairobi securities exchange has provided platform upon which ownership of companies trading is widely and fairly distributed among members of public.Otieno(2010). Since 1995, Nairobi securities exchange has promoted capital inflow when the government passed a policy allowing foreign individuals and corporate to invest in locally quoted firms,jebet(2001). Firms in stock exchange market has various mechanisms in which boards are able to instruct, monitor, supervise operations and behaviour of corporates and their management in a way which guarantees proper layers of accountability, power, stewardship, leadership,

direction and control diverse governing structures. We ask if a relationship exist between board diversity and FP of quoted companies. Nairobi security exchange comprises of 62 listed firms divided into eight groups (8) depending on each company area of specialisation. Performance of every corporation is monitored through NSE 20 share index and NSE all share index 2019.Therefore, this study examines whether FP of quoted companies is affected by board diversity.

1.2 Research Problem

The research seeks to show the usefulness deduced from board diversity with regard to FP of listed companies in Kenya. There is a gap in publications regarding the correlation between boards diversity and FP of listed companies. However, in year 2008 Brown and Baraka (2008), pin pointed boards diversity in Kenyan securities exchange increased companies social reporting. Most shareholder invest in companies which they expect good pay out of their investments and therefore they would not want to risk loss of their capital. Consequently, it has brewed a broad variety of processes and approaches shielding devastating effects of difficulty being minimised if not eradicated.

Most of quoted companies in securities exchange market provide various services which are key in economic growth and development. This range from financial, insurance, services provision, goods production. Despite this trend towards sensitive to different aspect of diversity, on company's boards, their influence on productivity is not clear with number of studies showing mixed results on the contribution of various important elements on board diversity to firm performance.

A research conducted by Ujunwa (2012) to investigate the impact of company board diversity on the FP of a Nigerian quoted firm, results reflected that gender diversity

was dismissively connected with company's performance, while board citizenry and board ethnicity were positive in foreseeing same firms quoted performance. Manifestation of women board enhances company's performance if they bring on board additional perception on board decision making. Contrary, women board members may have dismissive effects if the decision to nominate them was because of society pressure to achieve equality among sexes Kenneth&Dittmer (2009). Mismanagement of quoted companies is bad practice in Kenya which has resulted to many firms being put under receivership.

Locally, Muriithi (2008), on studying connection between the structure of boards and the performance of firms quoted on Nairobi securities exchange(NSE), found manifestation of outside Directors is constructively linked with output of a company. In the following study by Ongore (2011) inspected the interconnections among owners, board and management features and company doings amongst a sample of 62 companies quoted at Nairobi securities exchange(NSE). Their outcome reflected a significant constructive connection between managerial discretion and performance. None of these studies focussed on corporate governance on FP on corporate governance mechanisms of board composition in Kenya. Arising from these differences, does the board composition have any effect on FP of firm's quoted at Nairobi securities exchange?

1.3 Research Objective

The purpose of this research was to determine correlation between board diversity and financial performance of companies quoted in Nairobi securities exchange

1.4 Value of the Study

Discoveries will help blueprint developers especially National Treasury in preparing proper procedural mechanisms to lead governance of quoted companies in this country, including; composition, size of key governance within councils' frameworks. The results will help authorities and capital markets Authority in establishing standard blueprint upon which corporate governance within quoted capital will be placed. Kenyan companies will benefit as well as they will know on how to effectively deal with board diversity matters within their control.

The research will too form an important asset for scholars and other persons interested in investigating future performance within the listed companies in Kenya. Moreover, governance intellectuals and analysts propose that diversity is largely a key determinant which is important when fronting discipline and providing new leadership at the time a company is doing poorly. It is indeed achievable that diversity becomes important in a definite company's events, including a resolution to have new senior management. This study will be helpful in knowing effects of board diversity, performance and chief executive officer turn over and in adding value on the available information concerning the subject matter.

The research will also be of great help to board of directors and management when valuing significance of applying board diversity to tenets, increasing firm's general performance. These discoveries will lead leadership of all quoted companies and those not quoted in ascertaining the suitability of different diversity features and how they connect to the FP of their particular organisations. This would provide support in plotting the structure which has ability of optimizing financial results for them including finance and administration.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter entails and analyses works of various authors concerning relationship between board diversity and company's FP. Applicable hypothesis; potential costs and benefits, board gender, age and ethnic diversity relationship, empirical literature as well as FP indicators among firm's listed/quoted in Nairobi securities exchange.

2.2 Theoretical Review

A number of theories has been developed to explain impacts of board diversity on FP of quoted companies here in Kenya. Whereas some of these theories are placed on reasoning of uncomplicated impartiality, especially those in support of, others focus on the effectiveness and efficacy of patchwork attributes in the board. Welsbach & Hermalin (1998): Ferreira & Adams (2007) whenever in economics, theoretical analysis of corporate boards usually conceptualises from the procedure in which board members reach a consensus.

2.2.1 Human Capital and Social Dependency Theory

Human capital is derived from articles prepared by Becker 1964 it entails individual education, skills, experience that can bring more benefits to the company. It can either be for a particular company or fit them overall singh (2007).Accordingly, diversity is observed to affect board performance due to diverse and unique human capital,carter(2010). The influence on firm's financial productivity can either be constructive or destructive and its adequacy for an individual human stock would be relying on firm's inner and outside situations. Social stock is generated at that

moment when persons or companies relate, singh (2007). For instance, it is a fact that information and knowledge is communicated in networks of interactions which facilitate influential relationship. All profitable deeds are enabled, influenced and informed by networks of social relations Lynall (2003). extensive networks and with many areas being not linked usually provides better access to more diverse information's.

Demographic likeness within board of directors can show inter-company connection, Lynall (2003). But when directors show demographical distinctness from others, there is high likelihood that their connections will differ from each other. Thus making a firm capital high, singh (2007). Therefore, Boards social capital becomes critical to boards operations murphy&McIntyre (2007). Human capital influences expertise, which in turn affects board performance and social capital, has effects on board linkage therefore affecting board performance Murphy and McIntyre (2007). According to carter (2010), these demographic dissimilarities lower social cohesion among classes. Social barriers have been found to reduce the occurrence that minority view point influences group choices and majority status individuals are found to have disproportionate amount of influence on decisions. More diversity on boards creates more diverse opinions and critical thinking which result in more time consuming and less effective decision procedure which results in conflicts and more employees leaving their jobs in the company which could have effect of increased diversity.

According to Becker (1964) and includes education, skills, experience that adds value to an organization in that new expertise is brought on to the company's board of management to enhance better decision making for explicit FP thus making this theory relevant to the study which concentrates mainly on effects of diversity on

company's performance. Human capital and social dependency theory is regarded by this study as main theory simply due effects/influence of education, skills, experience and social networks of board members on company's decisions.

2.2.2 Resource Reliance Hypothesis

This hypothesis was created by Pfeiffer and salancik in 1978 to enable them evaluate impacts of board diversity on FP of various companies. According to this hypothesis, board of directors is usually considered an instrument of managing outside reliance. Decreasing surroundings unpredictability and transaction costs linked with environmental interreliance by connecting the company with outside surrounding. Lynall(2003).

The theory has been found to give companies more suitable theoretical framework of researching diversity on board of directors and company FP.Carter(2010). In resource dependency hypothesis, a board is considered providers of at least four main advantages which includes; resources provision like information and expertise, creating channels of communication with ingredients considered useful to the company. Providing commitment and aid from key crucial companies, groups existing within outside surrounding and formation of the company legitimacy in the outside environment. Lynall (2003). This ensure the research is provided with a suitable hypothetical framework to research diversity on boards and company performance,carter(2010). Moreover, this hypothesis has not provided mechanics and process that ensures that a more diverse age board is put in place to perform better than diverse board.

The relationship of this hypothesis is that, members of boards bring various resources connections to the board and ways in which boards are constituted requires

adjustments to meet particular needs of the company, hence study. this adjustment should be done over time as needs changes. Boards are important sources for counsel, inner voice and they improve reputation and acceptability of the company Lynall(2003). Interlocks amongst directors have also been found to be a key factor in dissemination of information across company's other than securing preferential access to significant sources.

2.3 Determinants of Financial Performance

Financial performance of quoted companies at Nairobi securities exchange is one of the aspect for which this research is carried out. A number of determinants of FP has been developed to carry it out and they are as under:

2.3.1 Board Diversity

Understanding of diversity can be done using models like biasness and impartiality, all of it by way of plans like endorsing in that approach trying to choose from underrepresented people besides using figures based approach in which figures is considered a crucial instrument by Ely&Thomas (1996).

2.3.2 Board Gender Diversity

In recent times a firm strategy, governments concern and academic study has given its attention to gender diversity in members of boards and top positions in companies, for a period of not less than ten years now with admirable balanced outcome. It was perceived an association and pictorial presentation matter, sex diversity has been progressively considered a value driver in organisational plans and company management, therefore making an issue to think about in current research being carried out. Marinova, (2010)found out that impressive performance influence among members of directorate gender diversity suggest, increased number of female

directors a company has at the top corresponds with improved company profitability and performance.

2.3.3 Board Age Diversity

Influence of age variance on well-being of the company was observed by Wegge (2008), By analysing all the earlier research on age and sex diversity, discovered similar balance output. Researcher sampled 4000 employees of public entities and carried out discoveries on them. It was found that Age heterogeneity increased the capability of employees to solve tasks known to be of extreme difficulty. But in case of people assigned to perform easy jobs, however age heterogeneity enhances company-reported wellbeing difficulties-which in turn shows that groups of varying ages need to be used specifically for creativity and problems solving Daggson (2011).

2.4 Empirical Review

Previous years study has been linking Board diversity with FP of companies quoted in Kenya's securities exchange market. This has attracted attention of scholars around the globe. Academicians endowed in social psychology and social science, happen to be considered among the first to carry out statistical research of the boards constituents. This far, there is no clear theoretical position

A research conducted in 2000 by Milton and west phal found out that minority directors have more influence on board decision in case of having earlier exposure in a minority position while holding similar positions. Other than having social connection to majority directors by means of common membership in similar positions elsewhere. Moreover, Bednar and westphal(2001) explained the need for demographic uniformity within members of the boards with respect to sex,

operational settings, academics and industry exposures enhances their likelihood of expressing their concerns in board meetings.

Strahan & krosner (2001), assess the possibility that conflicts of interests arising is linked with presence of directors who are knowledge in financial management such as bankers .Moreover,Guner (2008), argue with evidence that firms with financially experienced directors prefer debt capital at the expense of investments chances and participate oftenly in net worth reduction M&A's undertakings for sole purpose of benefiting lenders rather than firms they serve as directors,Ferreira(2010).Knyazeva(2009) on their study on members of boards features as regarding nominations, experience in other companies and industry, their shareholding, found substantial variations in board heterogeneity that is explained by industry ,corporate level determinants.

Ferreira,(2010)argues in a number of instance, that confirmation gives reinforcement for the capital dependency opinion. He further asserts, west phal (1995) has provided a number original research on the topic of discussion, with the help of information obtained by means of surveying directors in big and established United States firms. They argue that chief executive officers derive satisfaction in working with demographically a like director. Therefore, chief executive officers interested in interfering with nomination process, will concentrate on hiring directors with demographic similarity like theirs. In addition, chief executive officers obtain confirmation that their satisfaction is key when chief executive officers and directors happen to be demographically same,Ferreira(2010).

Farrell and Hersch,(2005)in their study used Poisson regressions together with moment research to find out effects of including women directors to United states

boards, Found no evidence which affected return on assets or shareholders market returns.Shrader(1997) discovered no important connection in ratio of female members on board of directors ,profitability,assets returns, return on equity for sampled of United States firms .When Ferreira,(2010)and Pfeffers,(1972) notes a thinking considering board instrumental in handling firms outside environment embodying more study on diversity of boards. He argues that in 2001, knoebers's' and Agrawal investigation on nominating directors known to political class is encouraged by this thinking. It was found that companies taking part in industries that are solely reliant on government are run by directors whose appointment was based on political allegiance.

Smith(2006) findings were more complicated, with the results showing a non-attractive connection between gender variance on the company gross profit to sales across a sample of Denmark companies although there was no numerically important relationship between board gender diversity and other indicators of accountability measuring FP. On the contrary,Rose(2007)researched on various samples of Denmark companies and reacher concluded that, there was no important relationship between Tobin Q's and board gender diversity.

Significant numbers of diversity studies have been conducted in the united states mostly on gender diversity, with results predominantly positive. Popular in economic studies, Ferreira & Adams (2009) for instance discovered Tobin Q constructively linked to a number of females within TMT Inc. This was arrived at by using a sample of 638 fortune of 1000 companies back in 1997. Rose and Dezso (2008) discovered similar results extracted from panel data of the period (1992-2006) affecting various fortune 1000 firms.

In Campbell(2008) and minguez-vera decided to estimate connection involving gender diversity and FP of Spanish companies. The result was board gender diversity has a considerable amount of influence on the worthiness of firm when measured by using Tobin Q's.

Goldman(2009) in study whose findings backed theories that nomination of directors with political network has effect on owner's worthiness established, a collection of companies with republican directors, outperforms those of democratic companies immediately following united states 2000 presidential elections, Ferreira(2010).

Mboya (2010) decided to examine connection involving board gender diversity and FP amongst commercial banks incorporated and concluded, board gender diversity does not affect banks performance.

In Aosa(2012) carried out assessment of relationship of FP and board diversity amongst firms in Nairobi securities exchange. Information collected on boards age, features and FP. Targeted companies were 40 listed and they employed use of structured questionnaire. Ordinary Least Squares was used and research did show an insignificant positive connection amongst FP and board age diversity. Discoveries gave an indication of statically an unimportant impact of the boards age diversity on FP. Therefore, these discoveries have not agreed with the resource theory touching corporate governance and similar empirical studies.

2.5 Critique of the Study

Empirical studies determining influence of board diversification on FP, is not conclusive, which case outcome concerning previous research is seen to be solely reliant mostly on procedures employed together with components of the research. All theories in the research examined showed various outcomes different depending on

periods applied, varying economic environment, diversity in nations formed the research and it is worth considering a number of measures were helpful in examining diversity and FP. This research being undertaken used information falling within period between (2012-2018) to adopt most current inventions since most firms had recently accepted board diversity.

Although may corporations globally welcomed board diversity an important ingredient for improving governance and companies performance, many studies indicate positive effects Rodrigues(2014),negative effect Damard(2010) , impartial effect Ekhada and Mboya (2012) of boards diversity on company FP raised a number of questions with respect to value of diversified board .Moreover, majority of the studies tend to measure board diversity using underlying determinants like sex,citizenship,age but do not have a measure of diversity which incorporate many features of diversity. This research gave one measure of diversity combining different aspects of diversity.

2.6 Conceptual Framework

In Accordance with Rangarajan and shields(2013) conceptual framework is considered an analytical tool having differences in context beneficial in differentiating, well arranged ideas in better but more simple methodology. This frame work gives a mode of appreciating mechanisms in which board diversity influences performance of our Kenyan's quoted companies. Conceptual framework which was used in this study is shown below.

Figure 2.1: The Conceptual Model

Predictor variable   **Response variable**

```
┌─────────────────────────┐
│ Board diversity         │
│   • Gender              │ ──────┐
│   • Age                 │        \
│   • Citizenship         │         \
└─────────────────────────┘          \
                                       \    ┌──────────────────────────┐
                                        ──> │ Financial performance    │
┌─────────────────────────┐             /  │                          │
│ Board size              │            /   │   • Effective      Tax   │
│   • Number    of        │           /    │     Rate                 │
│     directors           │          /     └──────────────────────────┘
│ Firm size               │         /
│   • Total assets        │ ───────┘
│ Firm age                │
│   • Number    of        │
│     years      in       │
│     existence           │
└─────────────────────────┘
```
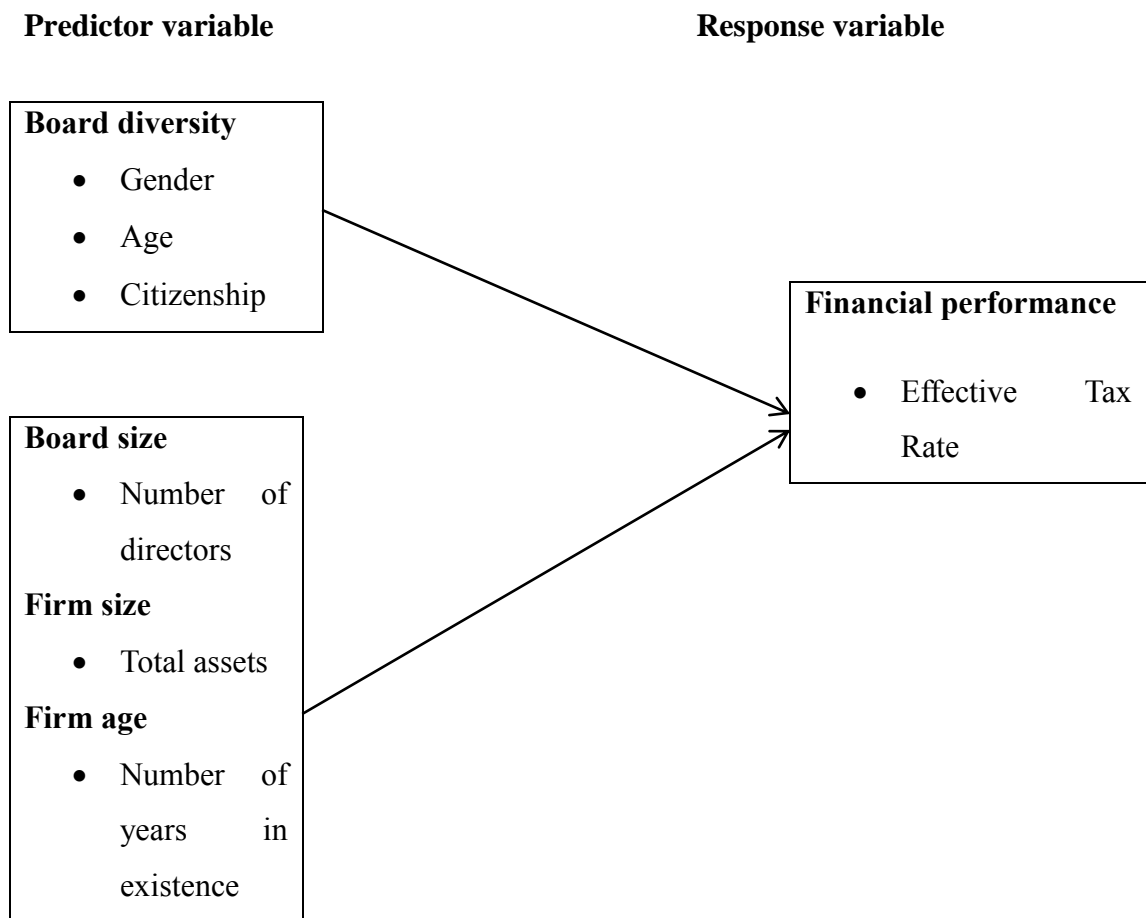
Control Variables

Source: Researcher (2019)

All these measurements of board diversity such as; age, citizenship and gender was perceived to be independent variables. Conversely, control variables in the study included board size, firm size and company age. The researcher included them in the study, since they had shown to be key in influencing FP. Book value of asset owned by company measured its size, Board size was measured using the number of directors in the board and company age was measured using the period for which it was incorporated in addition to time of carrying out its operations. Return on Asset measured FP and it was a dependent variable.

2.7 Summary of the Literature Review

Board constitution considered individual director's ability to perform various activities, Johnson, Daily and Dalton (1999), this has been comprehensively reviewed through analysis board's demographic features by Rindova (1999). Size of the board, its composition has been considered an important governance process. Components for companies since it explains every director's association whether it is an external or internal board member Stapledon & Lawrence(1999),Tricker(2009) and Boone(2007). Directors are considered helpful in firm performance. Earlier on company realignments procedures enhanced women member's involvement incorporating governance activities with main objective of increasing gender diversity in board's.

Institutional shareholders, investors, and interest groups have been at fore front coercing firms to appoint directors with acceptable nationality, ethnic and gender backgrounds, desirable age and expertise to their boards Vander &Walt (2006). It has been perceived that wider diversity would lead to reduced internal-perception choices -selection procedures with a better future oriented ability Fredrickson& westphal(2001); Bathula(2008).On the same point, in 1994 Bilimoria thought out that women in executive positions come with well-informed and new opinions relating with environment, market and ethical matters that can influence company's decision-making. In addition, he outlined that boards with at least one women director deliver a better positive effects through strategic decisions. Therefore, board of directors' diversity, irrespective of view point whether from one or combined attributes be it directly or indirectly could define company FP.

Empirical evidence on board diversity and FP is not conclusive and equivocal with other earlier years 'studies giving information which is not reconciling. Hypothesis linking firm FP and board diversity reported contradicting and confusing results. Besides, so many analysis and studies concentrate on gender diversity, But a few on age and citizenship diversity. Earlier on studies concluded that there is no association between Ekadah&Mboya (2012) and Haslam (2010). Therefore, Any relationship between Firm FP and board diversity is considered not conclusive and more Empirical studies can be conducted.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter stipulates various processes and procedures that will be followed keenly to complete research procedure to be undertaken. This includes study data and collection methods to be used to collect the data and the data analysis methods to be utilized beside providence of population that was in the study and obtaining observations and conclusions.

3.2 Research Design

A research design is described as the method that is procedurally used by the researcher and that which enables the researcher to answer questions accurately, validly, objectively, and economically (Khan, 2008). The study employed a descriptive cross-sectional design to investigate how board diversity affects FP of firms. The researcher sought to find out the state of affairs, as they exist. The appropriateness of this design lies in the fact that the researcher is accustomed to the phenomenon that is being investigated but seeks to know more with respect to the nature of associations between the study variables. In addition, a descriptive research aims at providing a valid and accurate representation of the study variables and this helps in responding to the research question (Cooper & Schindler, 2008).

3.3 Population

This research targeted all the sixty-two firms operational and carrying out their business in Kenya. Their numbers was based on report provided by Nairobi securities exchange. The study was therefore conducted on a census of sixty-two companies and there was no sampling done (see appendix I).

3.4 Data Collection

The study relied on secondary data. The source of secondary data was the published annual financial reports of the firms listed at the NSE between January 2014 and December 2018 and captured in a data collection sheet. The reports were obtained from the CMA and individual firms annual reports. The end result was annual information on the predictor and the response variables for the 62 firms quoted at the NSE.

3.5 Diagnostic Tests

The study undertook several diagnostics test to assess the applicability of the research structure. The study first assessed for normality, which through the Kolmogorov-Smirnov and Shapiro-Wilk tests of the residuals where in both tests, a non-important result (a p factor of greater than 5%) was deemed an indication for normality. The study was also assessed for Multicollinearity.In using the tolerance and the Variance Inflation Factors (VIF) where a tolerance figure of greater than 0.2 or a VIF or more than 10 was an indication of the presence of Multicollinearity. Additionally, the study assessed for serial correlation (autocorrelation) using the Durbin Watson test where a value of between 1.5 and 2.5 indicated that there exists no auto-correlation.

3.6 Data Analysis

The SPSS software version 23 was used in the analysis of the data. The researcher quantitatively presented the findings using graphs and tables. Descriptive statistics were employed to give a summary and an explanation of the variables of the study as observed among the firms. The results were presented using frequencies, percentages, measures of central tendencies and dispersion displayed in tables. Inferential statistics included Pearson correlation, multiple regressions, ANOVA and coefficient of

determination.

3.6.1 Analytical Model

The regression model below was used:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \varepsilon.$$

Where: Y = Financial performance as measured by return on assets

α = y intercept of the regression equation

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ = are the slope of the regression

X_1 = Gender diversity as given by the ratio of number of women in the board to total board members on an annual basis.

X_2 = Age diversity measured as measured as the average age differences using coefficient of variation

X_3 = Citizenship diversity as measured by number of nationalities in the board as a percentage of total board members in an year

X_4 = Board size as measured by number of board members on an annual basis.

X_5 = Firm size as measured by natural logarithm of total assets on an annual basis

X_6 = Age of a firm as measured by the number of years the firm has been in existence

ε = error term

3.6.2 Tests of Significance

The researcher carried out parametric tests to establish the statistical significance of both the overall model and individual parameters. The F-test was used to determine how significant the model is in the study and this was obtained from Analysis of

Variance (ANOVA) while a t-test was used to establish statistical significance of individual variables.

CHAPTER FOUR: DATA ANALYSIS, RESULTS AND FINDINGS

4.1 Introduction

This chapter aims to present analysis of collected data from the organizations' yearly reports to establish how board diversity impacted FP. Using descriptive statistics, correlation and regression analyses, findings were illustrated on tables as illustrated in the subsequent sections.

4.2 Response Rate

The 62 listed firms at the NSE were the target population for the current research. Data obtained from 57 firms meant that the response rate was at 91.9% which was considered adequate. The researcher successfully acquired secondary data on board diversity, board size, firm age, firm size and FP of the firms.

4.3 Descriptive Analysis

Measures of central tendency and dispersion statistics were used. Central tendency measured the extent to which the data on each variable were concentrated at a central point while dispersion measured the degree to which the data were spread out from the convergent point. The central tendency was measured by the mean while dispersion was measured by the standard deviation. The analysis was extracted from SPSS software for 5 years (2014 - 2018) for all the 57 firms in this study. The table below shows Minimum, Maximum, mean and standard deviation.

Table 4.1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	282	-1.0	.4	.010	.1497
Gender diversity	282	.0000	.5000	.225177	.1377403
Age diversity	282	1.9	9.4	6.778	1.6477
Citizenship diversity	282	.1	.8	.265	.1514
Board size	282	4.0	24.0	9.684	3.3772
Firm size	282	11.7	20.4	16.766	2.0515
Firm age	282	7	150	64.92	30.049
Valid N (listwise)	282				

Source: Research Findings (2019)

4.4 Diagnostic Tests

Linear regression assumes insignificant Multicollinearity.In between pairs of variables. The data on board diversity, board size, age of a firm and firm size were tested for significant Multicollinearity. Variance inflation factors (VIFs) were used in this diagnosis. Table 4.2 shows the VIF test results.

According to Cooper and Schindler (2008) VIF values above 10.0 demonstrate significant Multicollinearity between pairs of variables. Table 4.2 shows that the variance inflation factors shows that there was no significant Multicollinearity in the variants since none of them was above 10.0.

Table 4.2: Multicollinearity Test for Tolerance and VIF

Variable	Collinearity Statistics	
	Tolerance	VIF
Gender diversity	0.352	2.841
Age diversity	0.360	2.778
Citizenship diversity	0.646	2.513
Age of a firm	0.398	2.513
Board size	0.388	2.577
Firm size	0.376	2.659

Source: Research Findings (2019)

Linear regression assumes that data was normally distributed. Two tests were used. The secondary data was not normal was the null hypothesis for the test. The researcher would reject it if the p-value recorded was greater than 0.05. Shown in table 4.3 are the results of the test.

Table 4.3: Normality Test

Financial performance	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Gender diversity	.178	282	.300	.881	282	.723
Age diversity	.173	282	.300	.918	282	.822
Citizenship diversity	.173	282	.300	.918	282	.822
Age of a firm	.175	282	.300	.874	282	.812
Board size	.174	282	.300	.913	282	.789
Firm size	.176	282	.300	.892	282	.784
a. Lilliefors Significance Correction						

Source: Research Findings (2019)

Both Shapiro-Wilk and Kolmogorov-Smirnova tests revealed that the research data was normally distributed by recording o-values more than 0.05 and hence rejecting the alternative hypothesis. The data was consequently considered fit to be used in conducting parametric tests like Pearson's correlation, regression analysis and ANOVA.

Autocorrelation exists where variable measures are influenced by its historical values which makes modeling complex. Autocorrelation is equally referred to as first order serial correlation. In this work, the Durbin Watson test was used to test autocorrelation. A durbin-watson statistic of 2.225 was within the acceptable range between 1.5 and 2.5 implied that the variable residuals were not serially related.

Table 4.4: Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.280[a]	.078	.058	.1453	2.225

a. Predictors: (Constant), Firm age, Gender diversity, Age diversity, Citizenship diversity, Gender diversity, Firm size
b. Dependent Variable: ROA

Source: Research Findings (2019)

4.5 Correlation Analysis

Correlation analysis measures the existing relations between the variants. It undertakes a Pearson correlation that measures the linear relationship of variants. Correlation of 1 showed a perfect positive correlation while of 0 or value close to zero shows no relationship or weak relationship respectively. -1 value, shows a negative perfect relationship and values close to it have strong negative relationship. The table 4.5 showed value of Pearson correlations for the variants.

As per the table, our interest is on how predictor variables relates to the response variant. The correlation of gender diversity against FP ratio is 0.154 implying that gender diversity exhibits a positive relation with FP. The association is statistically significant. Age diversity had a positive correlation with FP. It showed that the more diverse the board was in terms of age, the more the FP. The association is however not significant. Citizenship diversity exhibited positive and significant association with FP as shown by .168 and a p value less than 0.05.

Age of a firm showed a positive and significant association with FP among listed firms as evidenced by a positive correlation coefficient and a p value less than 0.05. Firm size and board size exhibited a positive relation with FP but the association was not significant.

Table 4.5: Correlation Analysis

		ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
ROA	Pearson Correlation	1						
	Sig. (2-tailed)							
Gender diversity	Pearson Correlation	.154**	1					
	Sig. (2-tailed)	.010						
Age diversity	Pearson Correlation	.005	.124*	1				
	Sig. (2-tailed)	.939	.038					
Citizenship diversity	Pearson Correlation	.168**	.002	.055	1			
	Sig. (2-tailed)	.005	.976	.357				
Board size	Pearson Correlation	.059	.082	.273**	.196**	1		
	Sig. (2-tailed)	.327	.169	.000	.001			
Firm size	Pearson Correlation	.055	.163**	.511**	.009	.530**	1	
	Sig. (2-tailed)	.353	.006	.000	.886	.000		
Firm age	Pearson Correlation	.143*	.098	.131*	.189**	.179**	.184**	1
	Sig. (2-tailed)	.016	.100	.027	.001	.003	.002	

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
c. Listwise N=282

Source: Research Findings (2019)

4.6 Regression Analysis

So as to show how board diversity related to the FP of firms listed at the NSE, the below model was employed.

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \varepsilon$$

A regression analysis was undertaken that had findings as stipulated below.

Table 4.6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.280[a]	.078	.058	.1453	2.225

a. Predictors: (Constant), Firm age, Gender diversity, Age diversity, Citizenship diversity, Board size, Firm size
b. Dependent Variable: ROA

Source: Research Findings (2019)

In the model summary table, coefficient of determination that is denoted by R squared is given by 0.078. It shows the strength in which the model is able to forecast the dependent variable. The value indicates that 7.8% of the variations can be described in the model. The other 92.2% can only be described by other factors that are not present in the current study.

Table 4.7: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	.494	6	.082	3.896	.001[b]
1	Residual	5.807	275	.021		
	Total	6.300	281			

a. Dependent Variable: ROA
b. Predictors: (Constant), Firm age, Gender diversity, Age diversity, Citizenship diversity, Board size, Firm size

Source: Research Findings (2019)

This model is established by matching the p value with the alpha value. The model is said to be insignificant when the value of P is higher than that of the alpha while the

vice versa is true. The regression analysis is undertaken at 95 degrees of freedom which means the alpha value is 0.05. According to the table, p is shown as 0.001 that shows that it is less than the alpha value. We therefore conclude that the relationship between the predictor variables and FP of firms listed is significant.

To determine whether or not to reject the alternative hypothesis we compare the F statistic and the calculated value of F as shown in the table 4.7, if the calculated value is higher than existing, it will be rejected. According to the topic under study, the null hypothesis states that there is no effect of the selected independent variables on FP of firms listed at the NSE. Calculated F value is 3.896 while the F statistic at an alpha of 0.05 and 6, and 281 degrees of freedom is 3.12. The value is greater which means we reject the null hypothesis. We therefore conclude that there is a substantial effect of selected variables on the FP of listed firms.

Table 4.8: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.158	.115		-1.382	.168
	Gender diversity	.171	.064	.157	2.671	.008
	Age diversity	.002	.006	.017	.250	.803
	Citizenship diversity	.161	.060	.163	2.680	.008
	Board size	.004	.003	.099	1.406	.161
	Firm size	.004	.006	.059	.751	.453
	Firm age	.001	.000	.123	2.042	.042
a. Dependent Variable: ROA						

Source: Research Findings (2019)

The coefficients $\beta 0$ $\beta 1$ $\beta 2$ and $\beta 3$ are given by; -0.158, 0.171, 0.161 and 0.001 respectively. The model therefore becomes

$Y = -0.158 + 0.171X_1 + 0.161X_2 + 0.001X_3$

Where,

Y = Financial performance

X_1= Gender diversity

X_2= Citizenship diversity

X_3= Age of a firm

This model may therefore shows effect of any of independent variants on the FP, when a variable is increased by 1 unit and all other variables are kept constant.

4.7 Discussion of Research Findings

The study undertook a linear regression model on data collected in determining how FP of organizations listed at the NSE is influenced by board diversity. Diagnostic test were first conducted on the data in order to determine presence of collinearity or presence of residuals in autocorrelations. Collinearity test undertaken showed that all variables had VIF values of less than 10 and therefore there was no collinearity among the variables. The Durbin Watson value was 2.225, less than 2.5 and therefore there were no residuals or autocorrelations that would imply error in the model.

There was 91.9% response rate which was enough for obtaining conclusions from findings of data. Pearson correlation indicated that gender diversity exhibits a positive relation with FP. The association is also statistically significant. Age diversity had a positive correlation with FP. It showed that the more diverse the board was in terms of age, the more the FP. The association is however not significant. Citizenship diversity exhibited positive and significant association with FP as shown by .168 and a p value less than 0.05. Age of a firm showed a positive and significant association with FP among listed firms as evidenced by a positive correlation coefficient and a p value less than 0.05. Firm size and board size exhibited a positive

relation with FP but the association was not significant.

Regression analysis undertaken discovered that the model would predict 7.8% of variations in FP of the firms. The other 92.2% however would be as a result of factors not in this model. The analysis showed that p value was less than the alpha value and therefore the relationship was significant. The calculated value of F was higher than F statistic leading to a rejection of the null hypothesis to be rejected. In conclusion the findings of the study were that there is a significant effect of the selected independent variables on FP of firms listed at the NSE.

The findings of the study concur with a significant number of diversity studies that have been conducted in the United States mostly on gender diversity, with results predominantly positive. Popular in economic studies, Ferreira & Adams (2009) for instance discovered Tobin Q constructively linked to a number of females within TMT Inc. This was arrived at by using a sample of 638 fortune of 1000 companies back in 1997. Rose and Dezso (2008) discovered similar results extracted from panel data of the period (1992-2006) affecting various fortune 1000 firms.

The findings are also in agreement with Aosa (2012) who carried out assessment of relationship of FP and board diversity amongst firms in Nairobi securities exchange. Information collected on board age, features and FP. Targeted companies were 40 listed and they employed use of structured questionnaire. Ordinary Least Squares was used and research did show an insignificant positive connection amongst FP and board age diversity. Discoveries gave an indication of statically an unimportant impact of the board age diversity on FP.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Chapter five presents results from previous chapter, its conclusions, limitations encountered during study. It also recommends policies that policy makers can use to improve the expectations of firms at the NSE in regards to achievement of superior FP. Additionally, the chapter gives recommendations for future study.

5.2 Summary

The objective of this study was to establish the influence of board diversity on FP among firms listed at the NSE. Board diversity was operationalized in terms of gender diversity, age diversity and citizenship diversity while FP was measured using ROA. The control variables were board size, firm size and age of a firm. From the results of regression, gender diversity and citizenship diversity had positive and statistically significant influence on FP while age diversity had positive but not significant influence on FP.

Other predictor variants in the model were age of a firm, board size and firm size that were the control variables. Age of a firm had a substantial effect on FP implying that older firms are likely to perform better compared to young firms. Board size was also found to have a positive influence on FP but the influence was not statistically significant. Firm size was found to have a positive but not statistically significant influence on FP of firms listed at the NSE.

The study showed that the p value was below the alpha value of 0.05 at 0.001 implying that the overall model was statistically significant. The F statistic was also

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less than the calculated value of F at 3.896 as the critical F value was at 3.12. The results were applied to determine the significance of the relationship between the variables and whether or not to reject or accept the null hypothesis.

5.3 Conclusion

From the study, it can be concluded that two of the three measures of board diversity selected for this study have a significant positive influence on FP of listed firms. The study found that gender diversity has a positive effect on FP and therefore this study concludes that boards that are more diversified in terms of gender are likely to report higher returns compared to less diversified boards. The study found that citizenship diversity has a positive effect on FP and therefore this study concludes that more diversified boards in terms of citizenship will on average perform better than less diversified boards.

Regression model had a coefficient of determination (R Squared) of 7.8%, which means that the model could explain up to 7.8% of the variations of FP among listed firms. Other variations in FP represented by 92.2% are elaborated by outside factors. The model was substantial and we can therefore conclude that this model is fairly good in predicting FP of listed firms.

Age of a firm had a significant positive influence on FP which shows that the more profitable a firm is, the more likely it is to report high FP and vice versa. Firm size had a positive correlation with FP showing that firms with more assets will on average report high FP but this relationship was not statistically significant. Board size exhibited positive but not statistically significant influence on FP of firms.

This study is in agreement with Aosa (2012) who carried out assessment of relationship of FP and board diversity amongst firms in Nairobi securities exchange. Information collected on board age, features and FP. Targeted companies were 40 listed and they employed use of structured questionnaire. Ordinary Least Squares was used and research did show an insignificant positive connection amongst FP and board age diversity. Discoveries gave an indication of statically an unimportant impact of the board age diversity on FP.

5.4 Recommendations

The study revealed that FP is positively influenced by gender diversity implying that more diversified boards in terms of gender perform better on average than less diversified boards. This study recommends the need for policy makers and practitioners in the listed firms to prioritize having a more gender sensitive board that takes into account the significant positive influence of having more women in the board.

The study further revealed that citizenship diversity has a positive and statistically significant positive influence on FP of listed firms. This study recommends the need to have board members from different countries of origin as their contribution has been found to be key in improving FP. This can be explained by their ability to bring in diverse experiences that are key in enhancing FP.

The findings of the study also showed that age of a firm has a positive and significant influence on FP implying that older firms are likely to report higher performance than old firms. Young firms should work towards being in operation in the foreseeable future as this is likely to enhance their performance. This can be explained by economies of scale enjoyed by old firms as a result of their accumulated assets.

5.5 Limitations of the Study

The period selected in this study was 5 years that is from 2014-2018. There is no proof that similar results will remain the same in future. More time would prove more reliable since it will include cases of major economic changes like recessions and booms.

The most significant limitation for this study was the quality of the data. It cannot be concluded with accuracy from this study that the findings are a true representation of the situation at hand. An assumption has been made that the data used in the study is accurate. Additionally, a lot of inconsistency in the measurement of the data was experienced due to the prevailing conditions. The study utilized secondary data contrast to primary information. It took into account some factors affecting listed firms performance and not all factors because of the limit imposed by data availability.

To complete the analysis of the data, multiple linear regression model was used. Because of the limitations involved when using the model like erroneous and misleading results resulting from a change in variable value, it would be impossible for the researcher to generalize the findings with accuracy. In case of an addition of data to the functional regression model, the model may not perform as per the previous.

5.6 Suggestions for Future Research

Present study focused on board diversity and FP among listed firms by relying on secondary data. A similar study that is based on primary data collected with tools such as detailed interviews and questionnaires conducted on all 62 firms would be more appropriate in complimenting this research.

This study did not exhaust all the predictor variants affecting FP of listed firms and therefore gives a recommendation that future studies be based on other variables such as management efficiency, growth opportunities, industry practices, political stability or any other macro-economic variable. Policy makers should be able to implement an appropriate tool to control FP of these firms.

The study utilized data from recent five years since it was readily available. Subsequent studies may use a longer range of years like 10 years or 20 years which can be useful in complementing or disapproving the results. Other limitations are that it focused only on listed firms. It is recommended that further studies focus equally on other firms in Kenya. Lastly, due to the limitations of the regression models, further studies should adopt a different model in explaining the relationship between the variables for example use Vector Error Correction Model (VECM).

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APPENDICES

Appendix I: Firms Listed at the NSE

	COMPANY	SECTOR	YEAR OF LISTING
1	Deacons (East Africa)	Consumer Services	2016
2	Nairobi Business Ventures	Consumer Services	2016
3	Stanlib Fahari I-REIT	Financials	2015
4	Atlas African Industries	Industrials	2014
5	Flame Tree Group Holdings	Basic Materials	2014
6	Kurwitu Ventures	Financials	2014
7	Nairobi Securities Exchange	Financials	2014
8	Home Afrika	Financials	2013
9	I&M Holdings	Financials	2013
10	CIC Insurance Group	Financials	2012
11	Umeme	Utilities	2012
12	Britam (Kenya)	Financials	2011
13	TransCentury	Industrials	2011
14	Co-operative Bank of Kenya	Financials	2008
15	Safaricom	Telecommunications	2008
16	Kenya Re-Insurance Corporation	Financials	2007
17	Liberty Kenya Holdings	Financials	2007
18	Equity Group Holdings	Financials	2006
19	Eveready East Africa	Consumer Goods	2006
20	KenGen Company	Utilities	2006
21	WPP Scangroup	Consumer Services	2006
22	Mumias Sugar Co	Consumer Goods	2001
23	ARM Cement	Industrials	1997
24	TPS Eastern Africa	Consumer Services	1997
25	Kenya Airways	Consumer Services	1996
26	National Bank of Kenya	Financials	1994
27	Sameer Africa	Consumer Goods	1994

28	Longhorn Publishers	Consumer Services	1993
29	Crown Paints Kenya	Basic Materials	1992
30	HF Group	Financials	1992
31	Uchumi Supermarkets	Consumer Services	1992
32	KCB Group	Financials	1989
33	Standard Chartered Bank Kenya	Financials	1988
34	Total Kenya	Oil & Gas	1988
35	Barclays Bank of Kenya	Financials	1986
36	Jubilee Holdings	Financials	1984
37	Express Kenya	Consumer Services	1978
38	Olympia Capital Holdings	Industrials	1974
39	East African Cables	Industrials	1973
40	Nation Media Group	Consumer Services	1973
41	Carbacid Investments	Basic Materials	1972
42	Diamond Trust Bank Kenya	Financials	1972
43	Eaagads	Consumer Goods	1972
44	East African Breweries	Consumer Goods	1972
45	East African Portland Cement	Industrials	1972
46	Kapchorua Tea Kenya	Consumer Goods	1972
47	Kenya Power & Lighting	Utilities	1972
48	Williamson Tea Kenya	Consumer Goods	1972
49	NIC Group	Financials	1971
50	Unga Group	Consumer Goods	1971
51	Bamburi Cement	Industrials	1970
52	Stanbic Holdings	Financials	1970
53	B O C Kenya	Basic Materials	1969
54	BAT Kenya	Consumer Goods	1969
55	Centum Investment	Financials	1967
56	Limuru Tea	Consumer Goods	1967
57	Sasini	Consumer Goods	1965
58	Sanlam Kenya	Financials	1963
59	KenolKobil	Oil & Gas	1959
60	Kenya Orchards	Consumer Goods	1959
61	Standard Group	Consumer Services	1954
62	Kakuzi	Consumer Goods	1951

Source: Nairobi Securities Exchange (2019)

Appendix II: Research Data

COMPANY	Year	ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
Athi river mining	2018	(0.1350)	0.1818	8.110	0.636	11	17.660	46
	2017	(0.1534)	0.1818	8.124	0.636	11	17.570	45
	2016	(0.0548)	0.1538	8.286	0.538	13	17.748	44
	2015	0.1487	0.1667	8.301	0.500	12	17.766	43
	2014	0.4048	0.1667	8.469	0.333	12	15.121	42
Bamburi	2018	0.0276	0.4167	8.808	0.417	12	17.735	68
	2017	0.1370	0.4167	8.813	0.417	12	17.670	67
	2016	0.0869	0.4545	8.818	0.455	11	17.524	66
	2015	0.1008	0.2500	9.363	0.500	12	17.554	65
	2014	0.0731	0.2500	9.341	0.500	12	17.529	64
Car & General	2018	0.0266	0.000	7.873	0.286	7	16.135	83
	2017	0.0129	0.000	7.885	0.429	7	16.042	82
	2016	0.0224	0.000	8.035	0.429	7	16.088	81
	2015	0.0237	0.000	8.049	0.429	7	16.011	80
	2014	0.0435	0.000	8.063	0.429	7	15.914	79
Carbacid	2018	0.0866	0.000	7.308	0.400	5	15.031	58
	2017	0.1002	0.000	7.289	0.400	5	15.012	57
	2016	0.1219	0.000	7.386	0.400	5	14.941	56
	2015	0.1325	0.000	7.375	0.400	5	14.904	55
	2014	0.1722	0.000	7.484	0.400	5	14.745	54

COMPANY	Year	ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
Crown Berger	2018	0.0319	0.000	7.129	0.167	6	15.516	61
	2017	0.0391	0.000	7.098	0.167	6	15.586	60
	2016	0.0461	0.000	7.178	0.167	6	15.437	59
	2015	0.0132	0.000	7.156	0.167	6	15.328	58
	2014	0.0060	0.000	7.133	0.143	7	15.164	57
East Africa Cables	2018	(0.0401)	0.1429	7.343	0.286	7	15.703	53
	2017	(0.0963)	0.1667	7.337	0.333	6	15.767	52
	2016	(0.0786)	0.1429	7.330	0.286	7	15.837	51
	2015	0.0220	0.1250	7.323	0.250	8	15.942	50
	2014	0.0385	0.1250	7.316	0.250	8	15.881	49
E.A Portland	2018	0.2052	0.1250	7.309	0.125	8	17.454	80
	2017	(0.0386)	0.1667	7.301	0.167	6	17.124	79
	2016	0.1486	0.1667	7.541	0.167	6	17.142	78
	2015	0.3103	0.1667	7.546	0.167	6	16.956	77
	2014	(0.0245)	0.1667	7.552	0.167	6	16.570	76
Eveready	2018	(0.1947)	0.1111	7.996	0.111	9	13.260	52
	2017	0.3531	0.1111	8.123	0.111	9	13.558	51
	2016	(0.1809)	0.1111	8.447	0.111	9	13.895	50
	2015	0.3070	0.1111	7.913	0.111	9	14.229	49
	2014	(0.1909)	0.1111	7.928	0.111	9	13.743	48
Kakuzi	2018	0.0816	0.0000	7.628	0.250	8	15.597	113
	2017		0.0000					112

COMPANY	Year	ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
		0.1033		7.634	0.250	8	15.564	
	2016	0.1122	0.0000	7.802	0.250	8	15.438	111
	2015	0.1536	0.0000	7.815	0.250	8	14.922	110
	2014	0.0400	0.0000	7.840	0.250	8	15.166	109
Kengen	2018	0.0192	0.3333	7.075	0.067	15	19.754	65
	2017	0.0225	0.3333	7.035	0.067	15	19.747	64
	2016	0.0176	0.3125	6.994	0.063	16	19.720	63
	2015	0.1920	0.3125	6.953	0.063	16	19.652	62
	2014	0.0163	0.2941	6.910	0.059	17	19.338	61
Kenolkobil	2017	0.1023	0.2000	7.989	0.400	5	16.998	59
	2016	0.0997	0.1667	8.006	0.333	6	17.002	58
	2015	0.1160	0.1667	8.023	0.333	6	16.671	57
	2014	0.0456	0.1667	8.041	0.333	6	16.990	56
KPLC	2018	0.0057	0.3333	8.864	0.083	12	19.635	97
	2017	0.0159	0.2500	8.857	0.083	12	19.618	96
	2016	0.0249	0.3333	8.849	0.083	12	19.484	95
	2015	0.0270	0.3333	8.841	0.083	12	19.434	94
	2014	0.0317	0.3333	8.833	0.083	12	19.213	93
KQ	2018	(0.0553)	0.2308	7.233	0.154	13	18.733	42
	2017	(0.0626)	0.2727	7.222	0.182	11	18.810	41
	2016	(0.1908)	0.2308	7.211	0.154	13	18.863	40
	2015	(0.1878)	0.2308	7.199	0.154	13	19.020	39

COMPANY	Year	ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
	2014	(0.0200)	0.2308	7.187	0.154	13	18.817	38
Safaricom	2018	0.3302	0.2000	7.678	0.800	10	18.936	26
	2017	0.2996	0.3000	7.693	0.800	10	18.901	25
	2016	0.2394	0.3333	7.707	0.667	9	18.886	24
	2015	0.2031	0.3333	7.722	0.667	9	18.871	23
	2014	0.1710	0.3333	7.737	0.667	9	18.718	22
Sameer	2018	(0.2673)	0.3750	9.401	0.125	8	14.766	55
	2017	0.0271	0.3750	9.348	0.125	8	14.904	54
	2016	(0.1229)	0.3750	9.293	0.125	8	15.007	53
	2015	(0.0012)	0.3750	9.275	0.125	8	15.138	52
	2014	(0.0235)	0.5000	9.414	0.167	6	15.165	51
Sasini	2018	0.0233	0.1111	8.025	0.111	9	16.377	67
	2017	0.0237	0.1250	8.341	0.250	8	16.395	66
	2016	0.0459	0.1250	7.862	0.125	8	16.638	65
	2015	0.0608	0.1250	8.043	0.250	8	16.591	64
	2014	0.3843	0.1250	8.044	0.250	8	16.519	63
Standard Group	2018	0.0559	0.1111	7.830	0.222	9	15.358	117
	2017	(0.0473)	0.1111	8.146	0.222	9	15.311	116
	2016	0.0451	0.1250	8.160	0.250	8	15.298	115
	2015	(0.0665)	0.1250	8.331	0.250	8	15.287	114
	2014	0.0538	0.1250	8.339	0.250	8	15.227	113
Total Kenya	2018							64

COMPANY	Year	ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
		0.0589	0.2222	8.038	0.444	9	17.486	
	2017	0.0720	0.2222	8.056	0.333	9	17.453	63
	2016	0.0617	0.3333	7.927	0.556	9	17.404	62
	2015	0.0472	0.3333	7.947	0.556	9	17.348	61
	2014	0.0438	0.2222	8.115	0.444	9	17.298	60
TransCentury	2018	(0.1780)	0.1250	8.446	0.125	8	16.629	22
	2017	(0.2086)	0.1250	8.454	0.125	8	16.746	21
	2016	(0.0454)	0.1250	8.463	0.125	8	16.755	20
	2015	(0.1327)	0.1667	8.471	0.167	6	16.755	19
	2014	(0.0909)	0.1250	8.478	0.125	8	16.898	18
Uchumi	2017	(0.8552)	0.4444	9.006	0.111	9	15.280	43
	2016	(0.7197)	0.4444	8.976	0.111	9	15.425	42
	2015	(0.6129)	0.4444	8.946	0.111	9	15.674	41
	2014	0.0529	0.4444	8.914	0.111	9	15.745	40
Unga Group	2018	0.0789	0.3750	7.253	0.250	8	16.111	111
	2017	(0.0007)	0.3750	7.254	0.250	8	16.062	110
	2016	0.0609	0.3750	7.254	0.250	8	15.938	109
	2015	0.0717	0.3750	7.254	0.250	8	15.976	108
	2014	0.0591	0.3750	7.254	0.250	8	15.898	107
Nation Media	2018	0.0944	0.0556	7.134	0.333	18	16.231	60
	2017	0.1193	0.1111	7.242	0.389	18	16.242	59
	2016	0.1343	0.1111	7.241	0.389	18	16.315	58

COMPANY	Year	ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
	2015	0.1631	0.1765	7.240	0.471	17	16.357	57
	2014	0.2018	0.1765	7.238	0.471	17	16.296	56
BOC Kenya	2018	0.0151	0.4000	8.861	0.200	10	14.577	79
	2017	0.0104	0.4000	8.320	0.200	10	14.617	78
	2016	0.0346	0.3000	8.328	0.400	10	14.615	77
	2015	0.0295	0.3000	8.336	0.400	10	14.657	76
	2014	(0.1022)	0.3000	8.345	0.400	10	14.649	75
EABL	2018	0.0897	0.4615	8.195	0.231	13	18.082	97
	2017	0.1159	0.5455	8.211	0.273	11	18.015	96
	2016	0.1642	0.5455	8.226	0.273	11	17.939	95
	2015	0.1190	0.5000	8.242	0.250	12	18.019	94
	2014	0.1119	0.5000	8.258	0.250	12	17.957	93
Eaagads Ltd	2018	0.0351	0.2500	7.831	0.333	12	13.759	73
	2017	0.0376	0.2500	7.855	0.333	12	13.735	72
	2016	0.0485	0.2500	8.022	0.333	12	13.543	71
	2015	0.0752	0.2500	8.046	0.333	12	12.971	70
	2014	0.0682	0.2500	8.071	0.333	12	13.008	69
Williamson Tea	2018	(0.0136)	0.000	7.068	0.286	7	15.907	150
	2017	(0.0313)	0.000	7.142	0.286	7	15.939	149
	2016	0.0541	0.000	7.117	0.286	7	16.005	148
	2015	(0.0266)	0.000	7.143	0.286	7	15.962	147
	2014		0.000					146

COMPANY	Year	ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
		0.0866		7.135	0.286	7	15.961	
Kapchorua Tea	2018	0.0669	0.000	7.052	0.286	7	14.727	150
	2017	(0.0255)	0.000	7.023	0.286	7	14.524	149
	2016	0.1093	0.000	7.044	0.286	7	14.578	148
	2015	(0.0115)	0.000	7.031	0.286	7	14.500	147
	2014	0.0653	0.000	7.007	0.286	7	14.473	146
Limuru Tea	2018	0.0174	0.2857	7.397	0.286	7	12.500	124
	2017	0.0162	0.2857	7.412	0.286	7	12.476	123
	2016	(0.0771)	0.5000	7.427	0.500	4	12.550	122
	2015	0.0103	0.5000	7.707	0.500	4	12.656	121
	2014	0.0109	0.5000	7.733	0.500	4	12.733	120
Express	2018	(0.2247)	0.2500	6.897	0.500	4	12.679	101
	2017	(0.2507)	0.2500	6.842	0.500	4	12.794	100
	2016	(0.2550)	0.2000	6.894	0.400	5	12.847	99
	2015	(0.1358)	0.2000	6.854	0.400	5	12.999	98
	2014	(0.0484)	0.2000	6.812	0.400	5	13.077	97
TPS	2018	0.0102	0.0909	7.235	0.364	11	16.683	49
	2017	0.0068	0.0833	7.374	0.333	12	16.677	48
	2016	0.0076	0.0909	7.394	0.364	11	16.648	47
	2015	(0.0177)	0.0909	7.163	0.364	11	16.577	46
	2014	0.0172	0.0769	7.045	0.308	13	16.584	45
Scan Group	2018	0.0357	0.0000	7.534	0.222	9	16.484	53

COMPANY	Year	ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
	2017	0.0372	0.0000	7.560	0.250	8	16.437	52
	2016	0.0305	0.0000	7.586	0.250	8	16.417	51
	2015	0.0221	0.0000	7.612	0.250	8	16.339	50
	2014	0.0438	0.0000	7.639	0.286	7	16.402	49
Jubilee	2018	0.0316	0.1818	7.276	0.455	11	18.553	82
	2017	0.0427	0.2000	7.277	0.500	10	18.469	81
	2016	0.0406	0.2000	7.277	0.500	10	18.322	80
	2015	0.0379	0.1818	7.276	0.455	11	18.227	79
	2014	0.0417	0.1818	7.275	0.455	11	18.126	78
Pan Africa	2018	(0.0680)	0.2500	7.875	0.500	8	17.186	101
	2017	0.0018	0.2857	7.980	0.571	7	17.210	100
	2016	0.0025	0.2857	8.012	0.571	7	17.163	99
	2015	0.0010	0.2500	8.044	0.500	8	17.115	98
	2014	0.0354	0.2500	8.077	0.500	8	17.018	97
Kenya Re	2018	0.0397	0.2727	6.738	0.091	11	17.608	48
	2017	0.0413	0.2727	6.603	0.091	11	17.570	47
	2016	0.0732	0.2727	6.460	0.091	11	17.466	46
	2015	0.0643	0.2727	6.308	0.091	11	17.398	45
	2014	0.1062	0.2727	6.146	0.091	11	17.287	44
Liberty	2018	0.0150	0.1667	6.471	0.500	6	17.415	55
	2017	0.0182	0.1667	6.656	0.500	6	17.430	54
	2016							53

COMPANY	Year	ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
		0.0180	0.3333	6.892	0.500	6	17.369	
	2015	0.0213	0.3333	6.455	0.333	6	17.357	52
	2014	0.1002	0.4000	6.414	0.400	5	16.255	51
Britam	2018	(0.0213)	0.2727	6.371	0.273	11	18.457	54
	2017	0.0053	0.3333	6.325	0.333	9	18.411	53
	2016	0.0297	0.1250	6.277	0.375	8	18.242	52
	2015	(0.0130)	0.1111	6.226	0.333	9	18.167	51
	2014	0.0345	0.1111	6.172	0.333	9	18.098	50
CIC	2018	0.0231	0.2308	6.218	0.077	13	17.311	51
	2017	0.0116	0.2500	6.183	0.083	12	17.233	50
	2016	(0.0015)	0.3333	6.146	0.083	12	17.105	49
	2015	0.0314	0.3333	6.107	0.083	12	17.031	48
	2014	0.0475	0.3333	6.065	0.083	12	16.981	47
Olympia	2018	(0.0021)	0.2500	6.702	0.250	4	14.315	51
	2017	0.0237	0.2000	6.736	0.200	5	14.309	50
	2016	0.0097	0.1667	6.770	0.167	6	14.239	49
	2015	(0.0193)	0.1667	6.805	0.167	6	14.242	48
	2014	0.0286	0.1667	6.840	0.167	6	14.271	47
Centum	2018	0.0290	0.2000	6.508	0.100	10	18.383	52
	2017	0.0940	0.1818	6.525	0.091	11	18.297	51
	2016	0.1274	0.2222	6.541	0.111	9	18.173	50
	2015	0.1098	0.2000	6.558	0.100	10	18.097	49

COMPANY	Year	ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
	2014	0.0423	0.2000	6.575	0.100	10	18.095	48
Home Africa	2018	(0.0769)	0.3750	7.382	0.250	8	15.320	11
	2017	(0.0405)	0.3750	7.391	0.250	8	15.315	10
	2016	(0.0429)	0.3750	7.400	0.250	8	15.184	9
	2015	(0.1010)	0.2143	7.408	0.143	14	15.167	8
	2014	0.0024	0.3333	7.415	0.222	9	15.129	7
Kurwitu	2018	(0.0390)	0.1429	7.895	0.143	7	11.837	13
	2017	0.0771	0.1429	7.797	0.143	7	11.853	12
	2016	0.1126	0.1429	7.859	0.143	7	11.765	11
	2015	0.1398	0.1429	7.689	0.143	7	11.731	10
NSE	2018	0.0845	0.2727	6.513	0.273	11	14.612	65
	2017	0.1038	0.2727	6.552	0.273	11	14.561	64
	2016	0.0912	0.2727	6.592	0.273	11	14.516	63
	2015	0.1593	0.2727	6.632	0.273	11	14.467	62
	2014	0.1899	0.2500	6.674	0.375	8	14.337	61
BAT	2018	0.2227	0.4000	6.471	0.300	10	16.724	117
	2017	0.1878	0.4000	6.510	0.300	10	16.695	116
	2016	0.2622	0.3000	6.550	0.300	10	16.733	115
	2015	0.2664	0.3000	6.590	0.300	10	16.743	114
	2014	0.2331	0.3000	6.631	0.300	10	16.720	113
MUMIAS	2018	(0.9623)	0.4000	7.340	0.100	10	16.571	48
	2017							47

COMPANY	Year	ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
		(0.2824)	0.2857	7.337	0.071	14	16.997	
	2016	0.0555	0.2857	7.332	0.071	14	17.104	46
	2015	(0.2273)	0.3333	7.325	0.083	12	16.833	45
	2014	(0.1149)	0.3636	7.315	0.091	11	16.975	44
Longhorn Publishers Limited	2018	0.0718	0.2727	8.115	0.091	11	14.694	54
	2017	0.0638	0.3333	7.777	0.111	9	14.435	53
	2016	0.0540	0.3333	7.397	0.111	9	14.440	52
	2015	0.0915	0.2500	6.967	0.125	8	13.443	51
	2014	0.1266	0.2500	6.476	0.125	8	13.531	50
Deacons (East Africa) PLC	2018	(0.4839)	0.5000	4.831	0.333	6	14.450	46
	2017	(0.5426)	0.5000	4.962	0.333	6	14.256	45
	2016	(0.1218)	0.5000	5.295	0.333	6	14.640	44
	2015	0.0405	0.5000	5.352	0.333	6	14.726	43
	2014	0.0502	0.5000	4.940	0.333	6	14.489	42
Barclays Bank	2018	0.0228	0.4545	4.959	0.091	11	19.600	65
	2017	0.0255	0.4545	4.978	0.091	11	19.420	64
	2016	0.0285	0.4444	5.296	0.111	9	19.375	63
	2015	0.0349	0.4545	5.054	0.091	11	19.300	62
	2014	0.0371	0.4545	4.970	0.091	11	19.235	61
Co-operative bank of Kenya	2018	0.0308	0.1250	4.288	0.083	24	19.841	53
	2017	0.0295	0.1250	4.280	0.083	24	19.774	52
	2016							51

COMPANY	Year	ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
		0.0360	0.1250	4.270	0.083	24	19.679	
	2015	0.0342	0.1250	4.258	0.083	24	19.652	50
	2014	0.0281	0.1250	4.556	0.083	24	19.469	49
Diamond Trust Bank	2018	0.0187	0.1538	4.432	0.308	13	19.750	73
	2017	0.0191	0.1667	4.476	0.333	12	19.711	72
	2016	0.0236	0.1667	4.869	0.333	12	19.609	71
	2015	0.0243	0.1667	4.838	0.333	12	19.420	70
	2014	0.0270	0.1667	4.801	0.333	12	19.170	69
Equity Bank	2018	0.0346	0.2222	4.667	0.222	9	20.167	34
	2017	0.0361	0.2222	4.673	0.222	9	20.078	33
	2016	0.0350	0.3077	4.676	0.154	13	19.976	32
	2015	0.0405	0.3077	4.676	0.154	13	19.875	31
	2014	0.0498	0.3077	4.672	0.154	13	19.658	30
Housing finance Company ltd	2018	(0.0099)	0.4545	4.120	0.091	11	17.919	53
	2017	0.0019	0.3333	3.986	0.111	9	18.028	52
	2016	0.0126	0.3333	3.826	0.111	9	18.091	51
	2015	0.0167	0.3000	3.632	0.200	10	18.087	50
	2014	0.0160	0.3000	3.396	0.200	10	17.926	49
I&M Bank	2018	0.0295	0.2222	3.383	0.333	9	19.480	44
	2017	0.0303	0.2222	3.441	0.333	9	19.297	43
	2016	0.0369	0.2500	3.502	0.375	8	19.165	42
	2015							41

COMPANY	Year	ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
		0.0373	0.2500	3.632	0.375	8	19.072	
	2014	0.0325	0.2500	3.685	0.375	8	18.989	40
KCB Bank	2018	0.0336	0.3000	3.884	0.200	10	20.387	32
	2017	0.0305	0.3000	3.778	0.200	10	20.287	31
	2016	0.0331	0.2500	3.442	0.167	12	20.204	30
	2015	0.0352	0.2500	3.518	0.167	12	20.140	29
	2014	0.0344	0.2500	3.599	0.167	12	20.011	28
National Bank of Kenya	2018	(0.0007)	0.1818	3.825	0.091	11	18.559	50
	2017	0.0071	0.1818	3.789	0.091	11	18.515	49
	2016	0.0006	0.1818	3.733	0.091	11	18.535	48
	2015	(0.0092)	0.1818	3.647	0.091	11	18.647	47
	2014	0.0071	0.1818	3.522	0.091	11	18.628	46
NIC Plc bank	2018	0.0203	0.1875	3.159	0.188	16	19.155	59
	2017	0.0201	0.1875	3.269	0.188	16	19.144	58
	2016	0.0256	0.2308	3.393	0.231	13	18.948	57
	2015	0.0271	0.2308	3.531	0.231	13	18.926	56
	2014	0.0282	0.2308	3.688	0.231	13	18.798	55
Stanbic Bank Kenya Ltd	2018	0.0214	0.4000	3.671	0.400	10	19.487	60
	2017	0.0173	0.4000	3.462	0.400	10	19.332	59
	2016	0.0206	0.4000	3.101	0.400	10	19.185	58
	2015	0.0235	0.4000	2.765	0.400	10	19.155	57
	2014	0.0314	0.4000	1.961	0.400	10	19.014	56

COMPANY	Year	ROA	Gender diversity	Age diversity	Citizenship diversity	Board size	Firm size	Firm age
Standard Chartered Bank	2018	0.0284	0.3333	3.704	0.417	12	19.469	107
	2017	0.0242	0.3333	3.333	0.417	12	19.471	106
	2016	0.0361	0.3333	2.963	0.417	12	19.339	105
	2015	0.0271	0.3333	2.037	0.417	12	19.271	104
	2014	0.0469	0.3333	1.852	0.556	9	19.220	103