

**BOARD GENDER DIVERSITY AND FINANCIAL PERFORMANCE OF INSURANCE  
COMPANIES IN KENYA**

**(A CASE OF LISTED INSURANCE COMPANIES IN KENYA)**

**BY**

**MUMUT OLE SIALO**

**D63/83831/2016**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE  
IN FINANCE, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI**

**DECEMBER, 2022**

## DECLARATION

This research project is my original work and has not been submitted for examination in any other university.

Mumut Ole Sialo



D63/83831/2016

Sign .....

Date: ..07/12/22

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

DR. Winnie Nyamute

Sign.....

Date: ..December 4, 2022...

## TABLE OF CONTENTS

DECLARATION .....	i
TABLE OF CONTENTS.....	ii
LIST OF FIGURES .....	vi
LIST OF FIGURES .....	vii
ABBREVIATIONS/ACROMNYS.....	viii
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.1.1 Board Diversity.....	2
1.1.2 Financial Performance .....	3
1.1.3 Board Diversity and Financial Performance .....	4
1.1.4 Insurance Industry in Kenya.....	4
1.2 Research Problem.....	5
1.3 Objective of the Study.....	6
1.4 Value of the Research .....	6
CHAPTER TWO: LITERATURE REVIEW .....	8
2.1 Introduction .....	8
2.2 Theoretical Review .....	8
2.2.1 Resource Dependence Theory .....	8

2.2.2 Social Capital and Human Capital Theories.....	9
2.2.3 Information and Decision Making Theory .....	10
2.3 Determinants of Financial Performance of Insurance Companies.....	11
2.3.1 Enterprise Risk Management.....	11
2.3.2 Firm Size.....	12
2.3.3 Leverage .....	13
2.3.4 Sales Growth.....	14
2.3.5 Age of the company.....	14
2.4 Empirical Studies .....	15
2.5 Conceptual Framework .....	18
2.6 Literature Review Summary. ....	20
<b>CHAPTER THREE: RESEARCH METHODOLOGY .....</b>	<b>21</b>
3.1 Introduction .....	21
3.2 Research Design.....	21
3.3 Population.....	21
3.4 Data Collection.....	21
3.5 Data Analysis .....	21
3.5.1 Analytical Model .....	22
3.5.2 Diagnostic Tests .....	22

3.5.2.1 Multicollinearity .....	23
3.5.2.2 Autocorrelation .....	23
3.5.2.3 Heteroskedasticity .....	23
3.5.2.4 Test for Fixed or Random Effects .....	24
<b>CHAPTER FOUR: RESEARCH RESULTS AND ANALYSIS .....</b>	<b>25</b>
4.1 Introduction .....	25
4.2 Descriptive Results.....	25
4.3 Correlation Analysis.....	26
4.4 Diagnostic Tests .....	27
4.4.1 Test for Normality .....	27
4.4.2 Test for Multi-collinearity .....	28
4.4.3 Autocorrelation Test.....	28
4.4.4 Heteroskedasticity Test.....	29
4.5.5 Hausman Test .....	29
4.6 Panel Regression Evaluation.....	30
<b>CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS.....</b>	<b>32</b>
5.1 Introduction .....	32
5.2 Summary of Major Research Results.....	32
<b>5.3 Conclusions .....</b>	<b>33</b>

5.4 Recommendations of the Study .....	34
<b>5.5 Areas for Further Research .....</b>	<b>35</b>
REFERENCES .....	36
APPENDIX 1: LISTED INSURANCE COMPANIES .....	38

## LIST OF FIGURES

<b>Figure 1: Conceptual Framework</b> .....	18
---	----

## LIST OF FIGURES

Table 4.1: Descriptive Results .....	25
Table 4.2: Correlation Results .....	26
Table 4.3: Normality Test .....	27
Table 4.4: Multi-collinearity Findings .....	28
Table 4.5: Test of Autocorrelation .....	28
Table 4.6: Heteroskedasticity Test .....	29
Table 4.7: Hausman Test .....	29
Table 4.8: Regression Results .....	30

## **ABBREVIATIONS/ACROMNYS**

**ROA**- Return on Assets

**BCOMP**- Board Composition

**MIN BOARD** -Foreign Director

**FEM BOARD** -Gender Diversity

## ABSTRACT

The study's goal was to ascertain whether board diversity and financial success among Kenyan insurance underwriters are related. Specifically, the study sought to analyze the relationship existing between board diversity, firm size, leverage, firm age, sales growth and the financial performance of insurance firms in Kenya. In order to establish the association, a correlation study design was best suited for this research. The study's target population comprised of six listed insurance firm in Kenya. The study employed secondary sources of financial data and it extracted audited data used to measure financial performance including total asset and net earnings of individual insurance companies over a ten-year period. This researcher also obtained data on the age, gender, and ethnic makeup of the corporate boards of firms under inquiry. The median, mean, standard deviation, and other descriptive statistics, as well as inferential statistics like as multiple regression, and correlation were used to assess board features. The study adopted various diagnostic tests to make sure that the assumptions of the linear regression model have not been violated. These were: Multicollinearity, autocorrelation and heteroskedasticity. Regression results showed that board diversity had a positive and insignificant effect on financial performance ( $\beta = 0.478$ ,  $p = 0.103$ ). Regression results showed that firm size had a favorable and significant impact on financial performance ( $\beta = 11.981$ ,  $p = 0.000$ ). In addition, results showed that the relationship between leverage and financial performance had a negative and substantial with a coefficient of ( $\beta = -0.007$ ,  $p = 0.001$ ). Regression results showed that firm age had a positive and insignificant impact on financial performance ( $\beta = 0.006$ ,  $p = 0.888$ ). Regression results showed that the relationship between sales growth and financial performance was favorable and substantial ( $\beta = 0.702$ ,  $p = 0.000$ ). The study recommends that management on insurance firms listed in NSE to focus on leverage, firm size, sales growth since they were found to have a significant effect on the financial performance. The firm size is crucial in a company due to their market power larger firms are able to charge higher prices and hence earn higher profits. Additionally, higher profits could also be result of economies of scale and stronger negotiating power that provides larger firms more favorable financing conditions. The insurance firms managers should also aim to maintain low leverage levels in their firms. This is because high level of debt has an adverse influence on financial growth.



## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background of the Study**

Is the Board of Directors' makeup a factor in how well a company performs? The corporate governance discussion has centered on this issue. Directors often have the following duties: counseling CEOs (Chief Executive Officers ) and executive managers, developing strategies, evaluating management performance, directing the hiring and firing of senior executives, and advancing the interests of shareholders (Taljaard et al., 2015). Further, there is a lot of literature pointing out that the board's primary goal is to foster organizational success by conducting business in a way that satisfies shareholders' aspirations (Denis & McConnell, 2003). Different board structures often have different effects on key organizational decisions.

The resource dependency theory introduced by Pfeffer and Salancik in 1978, Becker's human capital theory (1964) and the information and decision making theory introduced by Carter in 2010 will serve as the study's main pillars. According to the resource dependence hypothesis, board membership should be altered to meet the unique requirements of the company since directors bring a variety of resources and networks to the board. As company needs change over time, the board's composition should be modified accordingly (Hillman et al., 2009). Human capital, according to as study by Murphy and McIntyre's (2007) influences board competence, which in turn influences board performance.

A number of company failures can be attributed to incompetent boards. In some situations, management actions can raise serious questions about the integrity, skill, and efficacy of corporate boards. Given the vital role insurance companies play in the ecosystem and economy, it is necessary for a research on the effect of board diversity on the financial performance.

Diversity of boards has been looked through various facets with most researchers focusing on gender, age and nationality. In countries which have significant population from different races have led researchers in those countries to focus on race as among the indicators of board diversity. In countries that are still behind on gender equality researchers have sought to establish whether gender diverse boards have an impact on the performance of companies.

The import of boards on the performance and longevity of firms cannot be ignore as over the years firms have either prospered or failed based on the leadership of boards, Regulators have over the years south to have well balanced boards in order to provide checks to management and bring diversified ideas and knowledge.

### **1.1.1 Board Diversity**

The board diversity refers to the diversity reflected on a firm's board of directors. Coffey and Wang (1998) characterize the diversity of the board as an individual contrast of the board. Van der Walt and Ingley (2003) found that the assortment of board diversity arrangements ranged from women, ethnic and racial minorities on the board. Heterogeneity was characterized (Wang and Cliff, 2009) Board diversity comprises mixing individuals from various ethnic backgrounds, cultures, educational backgrounds, genders, skills, and viewpoints, which can result in a great variety of significant challenges. (Society for Corporate Governance in Nigeria, 2014).

Higgs (2003) explains that while past practice emphasized board independence, tenure and size, board diversity is now considered vital for enhanced decision making. A diverse board adds value by bringing fresh views and new ideas which may enhance business performance. Luis (2008) explains that it also improves results, notably financial performance due to improved decision-making processes.

Numerous studies show that having boardroom diversity has substantial benefits for businesses and shareholders. Indeed, a study commissioned by the California Public Employees' Retirement System (CalPERS) discovered that businesses with diverse boards outperform those without. Companies without women and ethnic may experience declining competitiveness and have often have an underperforming share value (Luis, 2008).

Diversity of boards promotes diverse opinions as no single group would likely have the same view on issues due to different socialization and culture. Studies have shown that companies with the most diverse boards are more likely to post better financial performance and withstand financial crisis due to improved corporate governance that is brought about by well balance board. In the 2007/2008 financial crisis companies that had well diversified boards withstood

shocks and survived out the storm due to better structures and policies perceived to be brought about by diversified boards (Wanjiku, 2018)

### **1.1.2 Financial Performance**

According to Ndungu and Ngugi (2015), a measure of financial performance is an assessment of a company's profitability in relation to its asset base. Khawaja and Musleh (2014) described it as a company's ability to maintain growth and revenue. Further, a sector can endure economic downturns if it can regularly show profitable results over an extended period. In all sectors, profit is considered as a vital statistic for financial performance measurement. (Aura et al, 2013).

The majority of companies in the insurance industry gauge profitability by taking into account leverage, company size, and liquidity. Financial performance, in a broader sense, guarantees that the company's aims and objectives are successfully attained. Profitability, which is the consequence of carefully managed income and balance statements, is what determines a company's overall financial health.

Ang et al. (2000) opine that the usefulness of a measure of performance may be influenced by the objective of a firm that will determine the choice of performance measure and the development of the stock and capital market. For instance, market performance metrics cannot provide satisfactory result if the stock market is not well-developed and busy. They further assert that three distinct areas of firm outcomes are what determine organizational performance: company financial performance as assessed by ROA, ROI and profit, shareholder return and product market performance, as measured by the total returns to shareholders and enhanced residual wealth.

ROA has been a financial metric of choice due to perceived usefulness specially in curbing window dressing of financial results by managers of companies. Traditional matrices are susceptible to manipulation especially because management decisions can influence the net profit of companies by disposing the company's assets in order to report a larger than expected profit. This will normally lead to one off income that cannot be recurred thus posting misleading information about the company performance.

### **1.1.3 Board Diversity and Financial Performance**

There are several theoretical justifications for having a diverse board of directors. In a principle agent framework, Carter et al. (2003), for instance, established five persuasive arguments in favor of board diversity. In comparison to a board with a more homogenous makeup, they contend that a board that is more diverse is better able to make choices based on the consideration of more options. It is believed that a diverse board has a better grasp of the firm's market, which fosters innovation and creativity.

Board diversity may enhance the company's reputation if company image positively impacts customers' behavior. The business case for having a company board that is diverse is that it increases a company's profitability and adds shareholders value. This argument suggests that a diverse board is composed of individuals who are perfect substitutes with similar abilities rather than their unique attributes that collectively add value.

Studies have shown that companies will benefit from well diversified boards due to diversity of ideas, knowledge strategy and risk profile of diversified boards. Professionals of different backgrounds will have different risk appetites due to their training, socialization and environments therefore having a mix of well diversified boards will lead to a balanced approach to issues.

### **1.1.4 Insurance Industry in Kenya**

Kenya's insurance sector is governed using various laws including the Insurance Act (CAP. 487) and the Insurance Regulatory Authority playing the regulatory role. As a statutory government agency The Insurance Regulatory Authority –IRA- was established following the ratification of the Insurance Act of 2006, (CAP. 487) and was meant to supervise, regulate, and grow the insurance industry.

In Kenya, insurance providers are governed by the Association of Kenya Insurers (AKI, 2016). This umbrella organization unites the present 46 insurance companies. Any insurance company that has been properly registered to conduct business in Kenya as outlined by the Insurance Act is eligible to join the association (AKI, 2016).

Kenya's insurance sector is a leader in the COMESA area and the East Africa Community. There are over 10,000 workers in the sector. It is thought that the industry can expand significantly if the government invests in it rather than just acting as a regulator. The East African Community's single market protocol generates a sizable market brimming with prospects.

Ndung'u (2012) asserts that the insurance along with the reinsurance sector in Africa will continue to expand across nations with freedom of movement and the chance to fully capitalize on cross-border expansion. Therefore, the sector should promptly get ready for this possibility. Insurance firms must also abide by rules set forth by the oversight body - IRA- which issued corporate governance standards in 2011.

The insurance sector in Kenya is a major employer with thousands of individuals depending on it either directly or indirectly. Among the people that depend on the industry are insurance agents, sales people, actuaries, assessors among many others. Among those who depend on the industry indirectly are motor vehicles mechanics who work with the insurance sector to repair accident vehicles.

## **1.2 Research Problem**

While several studies have indicated that board diversity plays an essential role in the financial success of the majority of organizations, others have revealed contrary findings. Ujunwa (2012) explored the effects that emanate from diversity in company boards and how it impacted financial performance for certain listed firms in Nigerian, the findings revealed a negative correlation between gender diversity and financial performance, whereas a positive correlation was found between board ethnicity and board nationality and company financial performance.

Any business must perform financially, but the insurance industry is particularly sensitive to this. Nothing is worse for insurance clients than learning that their insurance provider might not be financially stable enough to make payments in the event of a significant number of claims. Insurance businesses offer not only essential but also distinctive financial services that are vital to the proliferation and refinement of every economy. Their specialized financial services mainly

entails underwriting for entities' inherent risks in a given economy. Insurance firms also mobilize significantly large capitals through premiums particularly for investments with a long term outlook (Sacky, 2012).

The link between the diversity of the board and the financial success of insurance companies in Kenya is not well covered in the literature. The majority of research have concentrated on the banking industry; however, Barako and Brown (2008) found that board diversity within the Kenya's banking sector had considerably enhanced how corporate social reporting was done. A few authors have conducted studies on the interrelation between diversity in company boards and company performance in Kenya (Ekadah&Mboya, 2012); their research used data obtained between 1998 and 2009 focusing on woman and discovered they had extremely low representation in corporate boards. However, this study was narrow in scope as it ignored other characteristics of diversity including ethnicity and age and solely concentrated on gender diversity.

Because of the recent failure of certain insurance firms, more research is needed to determine whether board diversity has any effect on the financial accomplishment of the insurance sector in Kenya. This research therefore sought to tackle the following question: Is there any correlation between company board diversity and financial performance in the Kenyan insurance underwriters?

### **1.3 Objective of the Study**

The study's goal was to ascertain whether board diversity and financial success among Kenyan insurance underwriters are related.

### **1.4 Value of the Research**

This study's findings will serve as a foundation for relevant decision- and policy-makers in the insurance sector to re-evaluate and change their board membership structure to attain the fundamentals of company management for enhanced financial performance, sustainability, and longevity of the sector's unique roles in providing a sense of calm in the face of enormous economic uncertainties. Future research may build on these conclusions as an empirical data

source for the association between board diversity and financial performance in Kenya's insurance sector.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

The chapter mainly focused on reviewing relevant literature on the possible correlation between corporate board diversity and company financial performance. Other aspects reviewed include pertinent ideas, prospective costs and advantages, the relationship between ethnic diversity and age, empirical text, along with financial performance metrics in the insurance sector.

### **2.2 Theoretical Review**

The theoretical frameworks employed to explain the impacts are as diverse as the studied topic itself. Various theories are put forth in favor of or against practices associated with board diversity. While some, particularly those in favor of them, are founded on the principle of straightforward fairness, others place more emphasis on the efficacy and efficiency of a patchwork of board features. In economics, theoretical examinations of corporate boards typically abstract from the negotiation process among board members (Adams & Ferreira 2007; Hermalin & Weisbach 1998). Directors are frequently viewed as heterogeneous due to their position as company outsiders or insiders (e.g., Raheja 2005). Here, several theories are examined.

#### **2.2.1 Resource Dependence Theory**

The resource dependence concept, which Pfeffer and Salancik first introduced in 1978, views a corporation as operating like an open system that is dependent on external environmental circumstances (Hillman et al., 2009). By connecting the firm with its external environment, the board of directors is viewed under this theory as an instrument "to manage external reliance, reduce external uncertainties, minimize transaction costs that are commonly associated or linked to environmental interdependency" (Lynall et al., 2003, p.417). The resource interdependence concept gives us a more suitable theoretical framework to inquire about the interconnection between firm performance and diversity among corporate board members (Carter et al., 2010).

The resource dependency theory postulates that a board offers the company four main advantages, including: the provision of essential resources like expertise and information; the

establishment of effective communication channels with key constituents; ensuring commitmentsupport from significant organizations or groups from the external operating environment; and creating legitimacy for the firm within the external environment.

This theory's key tenet is that members of the board offer a variety of connections and resources, hence the board's makeup should be tailored to the particular requirements of the company. Hillman et al. (2009) explain that board composition should change with changing company needs. Compared to larger and more established companies, small businesses and businesses in the early stages of their lifecycle may also secure certain benefits from the increased resources the board offers.

### **2.2.2 Social Capital and Human Capital Theories**

The concept of human capital is based on Becker's 1964 book "Human Capital," which discusses how an individual's education, experience, and abilities can be utilized to benefit a company. It may be both general and firm-specific (Singh, 2007). Theoretically, diversity will influence board performance due to a diversified and distinctive personnel resources (Carter et al., 2010). However, the expected impact on financial success can be both positive and negative, and the value of a person's human capital may vary depending on the external and internal conditions of an organization. Interactions between people or organizations build social capital (Singh, 2007).

As an illustration, consider the knowledge and information shared via social networks that support practical action. The network that arises fromsocial ties informs, facilitates and controls economic activity (Lynall et al., 2003). In a network of relationships, social actors are typically linked to one another in a crisscrossing manner with varied degrees of strength (Singh, 2007). Better access to increased and different types of information will be possible with a vast network with numerous disconnected places.

Directors' demographic similarity will represent the network of other organizations (Lynall et al., 2003). According to Singh (2007), in scenarios where directors are demographically distinct from one another, there is more likelihood that their social networks or alliances will differ from one another which will increase the company's total social capital. The resulting social capital

becomes crucial to how the board operates (Murphy & McIntyre, 2007). Further, human capital has a major influence on board expertise, which also effects board performance while social capital determines affects board performance depending on board members' networks. Board effectiveness influences company performance (Murphy & McIntyre, 2007).

Carter et al. (2010) demographic disparities are observed to reduce the social cohesion of groups. Social obstacles make it less likely for minority opinions to have an impact on group decisions, while people who belong to the majority status are shown to have an unequal or disproportionate influence. More diverseboards have more diverse perspectives and critical thinking, creating a situation where the decision-making process to take longer and be less efficient. Increased diversity might also lead to more disagreements and a higher staff turnover rate.

Carter also explains that board demographics and psychological processes can possibly have a substantial impact on a board's efficacy, and these processes typically have a variety of complicated, conflicting impacts on processes that determine board performance. Running counter to the above-mentioned negative impacts, the speed and breadth of the senior management strategic action capability are positively correlated with board performance.

Additionally, research indicates that minority groups are likely to promote alternative thinking during decision-making and foster greater creativity and innovation. According to Carter et. al both beneficial and adverse effects of board diversity on company performance are possible.

### **2.2.3 Information and Decision Making Theory**

This theory is also relevant. Teams made up of "similar minds" and lacking in demographic variety typically perform worse than more varied teams. Studies have also shown that the degree of diversity in experience enhances a group performance. This is a scenario where the facts are ambiguous and unclear (Carter, 2010). However, excessive variety can lead to conflict and a breakdown in communication, which has a negative impact on performance. All aspects of diversity may influence group performance positively or negatively depending on the context, as Carter et al. (2010) concluded.

When minority groups advance in their fields, they are met with expectations that are likely to make it challenging for them to reach their full potential. Members of a group who receive just token representation are subject to pressures that could harm their performance. According to stereotype threat research, when a minority group's status is primed, its members are likely to perform worse because they believe they are being evaluated as a group as opposed to being upraised as individuals.

Members of the majority group may stigmatize minorities and undervalue their contributions. Thus, according to psychological studies, board diversity may have either beneficial or bad consequences on a company's success. Because they represent a larger range of viewpoints, boards comprised as women may be better able to address issues, but diversity can also impede problem solutions by fostering disagreement. According to Kanter (1977), if diversity is affecting corporate performance through altering board capacity, we should observe effects starting on corporate profitability then move to stock returns.

### **2.3 Determinants of Financial Performance of Insurance Companies**

Both external and internal factors can affect how profitable an insurer is. The insurer's unique traits are what contribute to the internal factors, whilst macroeconomic variables and industry features are what contribute to the external elements.

#### **2.3.1 Enterprise Risk Management**

According to a widespread belief, companies in the financial services sector have a more likelihood of applying ERM, and as a result of this implementation, they can improve market efficiency and corporate governance since managerial risk-taking is more closely monitored (Hoyt & Liebenberg 2011). Despite this finding showing a correlation existing between ERM and business value, other researchers discovered a favorable relationship within the financial services sector, therefore the study on this relationship is inconclusive.

According to McShane et al. (2012)- who discovered a similar result- there exists a positive and substantial association between ERM and company value in companies with low or inadequate ERM ratings. No considerable evidence of such in companies with strong or ERM

ratings was found in the same study. This suggests that further research is needed to determine the specific correlation between ERM and business value.

According to Gordon et al. (2009), ERM has a beneficial influence on firm value, but the degree of the effect depends on a firm's internal factors, including firm complexity and size. In a more conclusive study comprising 125 listed insurance companies in the U.S. Hoyt et al. discovered that the accruing ERM premium on company value was almost 17% of company value. It has also been suggested that a corporation's level of underwriting risk may affect the firm's value. The financial performance of an insurer depends on sound underwriting practices, and the underwriting risk is influenced by the insurers' risk appetite.

### **2.3.2 Firm Size**

Larger insurance companies have more market power and, as a result, more underwriting capacity, which enables them to engage in riskier, more lucrative activities that would ordinarily be handled in reinsurance markets. They can also increase their claims and catastrophe equalization reserves as a safety measure against sudden bursts of claims. Liebenberg and Sommer (2008) point out that big companies have a larger ability for diversification as a result of their ability to allocate resources differently among their different business lines and to weather the turbulence caused by the insurance industry, which differs for each line.

Therefore as McShane and Cox (2009) suggest, it is unsurprising that larger insurance companies generally achieve higher returns on equity (ROE). In addition, larger insurance companies have lower risk of bankruptcy because they enjoy economies of scale and scope and therefore are relatively more efficient than small firms. Net premium, - premium earned by underwriters firm after deducting ceded reinsurance, can be used to calculate size. (Ahmed, Ahmed & Ahmed, 2010). Following earlier studies such that of Hoyt and Liebenberg (2012), this study will measure the size of the insurance firms by taking the natural logarithm of book value of equity as a proxy for firm size.

Larger insurance companies also benefit from brand visibility attributed to their size thus signaling stability to customers and confidence in the market thus helping them retain and get new market share with ease that will not be possible for smaller insurance firms. Larger insurance firms are also able to undercut smaller insurance firms on premiums thus giving them undue competitive advantage. Operational efficiency is another key advantage of larger insurance firms that cannot be achieved by their smaller rivals.

### **2.3.3 Leverage**

Leverage is a term used to describe the degree to which a corporation uses debt to finance its assets; it is a crucial factor in determining a company's worth (Pagch&Warr 2011). Because it can limit the amount of free cash flow managers can invest on unproductive projects that serve their own interests over those of the shareholders, debt is often used by businesses to finance their operations (Jensen 1986). Additionally, using debt has financial advantages because interest payments are deductible expenses, which lowers a company's tax burden (MacKie-Mason 2000). Consequently, financial leverage can raise the value of a company.

Tahir and Razali (2011) point out when companies reach high levels of leverage, lenders often demand the development of ERM and appropriate structures of corporate governance to reduce risk on investments. This is because when a company's debt level significantly exceeds its assets, lenders will become especially anxious. In such circumstances, using too much debt may raise the likelihood of financial trouble, which will push the company into bankruptcy.

Excessive leverage has a negative effect on the company due to unsustainable interest rates that the company pays to its creditors. Leverage up to a certain point has been found to be good to a company beyond a certain point it starts having a negative impact on the company. Higher interest rates will be required by the company creditors to compensate for the increased risk the company faces due to high debt levels. This will in turn lead to cash flow problems which affect the working capital of firms.

### **2.3.4 Sales Growth**

According to earlier studies dating back to Myers (1977) the worth of a company is positively impacted by an insurance company's sales growth. Given that the rapid and unsustainable expansion of financial institutions before the 2008 financial crisis is widely regarded as a cultural issue that risk management systems failed to tackle, the influence or impact of ERMs compared to that of sales volumes on company value is interesting. However, it is assumed that sales growth might have a positive link with business success as highlighted by various past studies including that of King and Santo (2008) and Maury (2006).

Increased sales will lead to increased revenue of the company leading to higher profits if the costs are contained. Studies have shown that the costs of firms increase with increase of revenue though at a certain level they tend to remain constant and flat. With increased sales companies are likely to post better performance irrespective of whether the costs of the company are increasing in tandem with the revenues or not.

### **2.3.5 Age of the company**

According to Shiu (2004), older businesses perform better because they have more experience, have benefited from learning, and are less vulnerable to the risks associated with being new. Older businesses also profit from reputation impacts, which boosts their ability to make a bigger margin on sales. Further, an inverse correlation between profitability and age can be anticipated in this situation because older firms are more likely to exhibit inaction and the bureaucratic traits that come with aging. In this situation, firms may have developed routines might be removed from the realities of prevailing market conditions (Demirgüç- Kunt&Maksimovic, 2009).

Older firms are also likely to benefit from learning curve effect by gaining competitive advantage due to the knowledge gained from being in the market for a longer period compared to younger firms. Studies have shown that the comparative advantage that are domiciled in older firms are difficult to replicate in younger firms.

## 2.4 Empirical Studies

Chen et al. (2015) looked into how gender diversity on corporate boards affects innovation and business performance in the United Kingdom. Cardiff-based retail businesses were the main focus of the analysis. The researchers established, based on existing secondary data, that companies with more gender diversity in top management outperformed those with less diversity in terms of innovation. The quantity of new items added to the supply chain was used to gauge innovation performance. This suggested that female board members might have strengthened management oversight, boosting the pressure on managers to engage in innovation initiatives. The study, which used ROA to measure financial performance, did not discover any connection between gender diversity on boards and financial performance. While this experimentation was undertaken on retail businesses in the UK, this exploration focused on Kenyan banks. The U.K analysis also solely took into account gender diversity, but this study also looked at other board diversity factors.

According to Low et al. (2015), gender diversity in company top management has beneficial impacts on company success. The study sample was drawn from Asian companies, specifically those in Malaysia, Singapore, Hong, and South Korea, were used in this study. The study compared the company performance of firms in four countries using ROE as the performance indicator. In the study, panel data from 2011 to 2014 were used. The study found a link between increased business performance and a higher percentage of female board members. The study's conclusion was that adding more women to the board is anticipated to boost company performance. However, the study found that in nations where women make up a large portion of the workforce, this beneficial effect was reduced. Due to the significant disparities between Kenya and Asia, it is not possible to generalize its findings to the situation in Kenya.

According to the Ness et al. (2010) study, the board members' average age had no discernible effect on financial success. This was in spite of the claim that younger members are more open to change, are more willing to take risks and have more advanced technical expertise. Additionally, younger members of the board are thought to be more creative and effective at overseeing governance, which is anticipated to increase financial performance. Conversely, it is also asserted that older board members have an impact on a company's performance through

their expertise, better independence, and long-standing networks, which result in better corporate performance. Rather than utilizing the more reliable ROA that was used in the present analysis, the study used ROE as the performance metric.

Dagsson and Larsson (2011) examined OMX listed firms on the Stockholm exchange starting from 2005 to 2009 in order to investigate the connection between diversity in executive management and firm success. A third of the firms were chosen for the inquiry. The study evaluated the relationship between age diversity among board members (measured by the standard deviation- SD- of ages) and market and financial performance (measured by Tobin's Q and ROA respectively). According to the study's findings, age diversity had a substantial impact on organizational performance as assessed by ROA but not Tobin's Q. The study's findings also showed that effects were only perceptible when the company was a small-cap having a market cap under EUR 150 million. The results of this research may not be generalizable to Kenya because it was carried out in a developed market.

Gaur et al. (2015) examined the link between corporate governance practices and firm performance. The agency theory, resource dependency theory, stewardship theory and stakeholder theory were all employed in this study. A number of listed companies on the New Zealand Stock Exchange were the subject of this investigation. Data for the study were gathered from 2004 to 2007. The generalized least square estimation methodology and random effects were used. The results of the study showed that having experienced directors results in better business performance. This study did not include non-listed corporations and only focused on publicly traded companies. This study involved both listed and non-listed banks.

In a study done in Kenya among the licensed commercial banks on the relationship between board diversity and financial performance (Wanjiru, 2017) it was found that not all variables of board diversity had an impact on financial performance. Gender diversity was found to be significant to financial performance while age diversity was found not to be significant as a factor of financial performance. In the study asset logarithm was used as the control variable. In the study it was also found that education diversity had a strong influence on financial performance of commercial banks as boards that had the most diverse educational background performed better than those whose members had less diverse educational background.

In a different study carried out by (Mwangi, 2018) on the effect of board diversity on the financial performance of listed manufacturing firms in Kenya it was found that gender diverse boards posted better performance compared to those that were not gender diverse. Another factor that strongly impacted the financial performance of listed manufacturing firms was race diversity as firms that have diversified race posted better performance compared to firms that had one race only. The authors argued this could be attributed to different cultures hence different attitudes and approaches towards work, management risk and failure. In the study it was recommended that boards of listed manufacturing firms should be more gender diverse and also be more race diversified.

Ngũgĩ (2018) in his study of listed banks in Kenya found that gender diversified boards' posted better financial performance compared to those that were less gender diversified. The study was carried over a ten-year period from 2009 to 2017. In the study the results showed that boards that had more diversified boards in terms of education background had better performance compared to those that were less diversified in terms of educational background. The performance of the banks was measured using the Return on Asset metric. The study used bank size as the control variable. The study recommended that banks implement gender diversity not as a sign of tokenism but as an important component of driving performance and deriving value from the organizations.

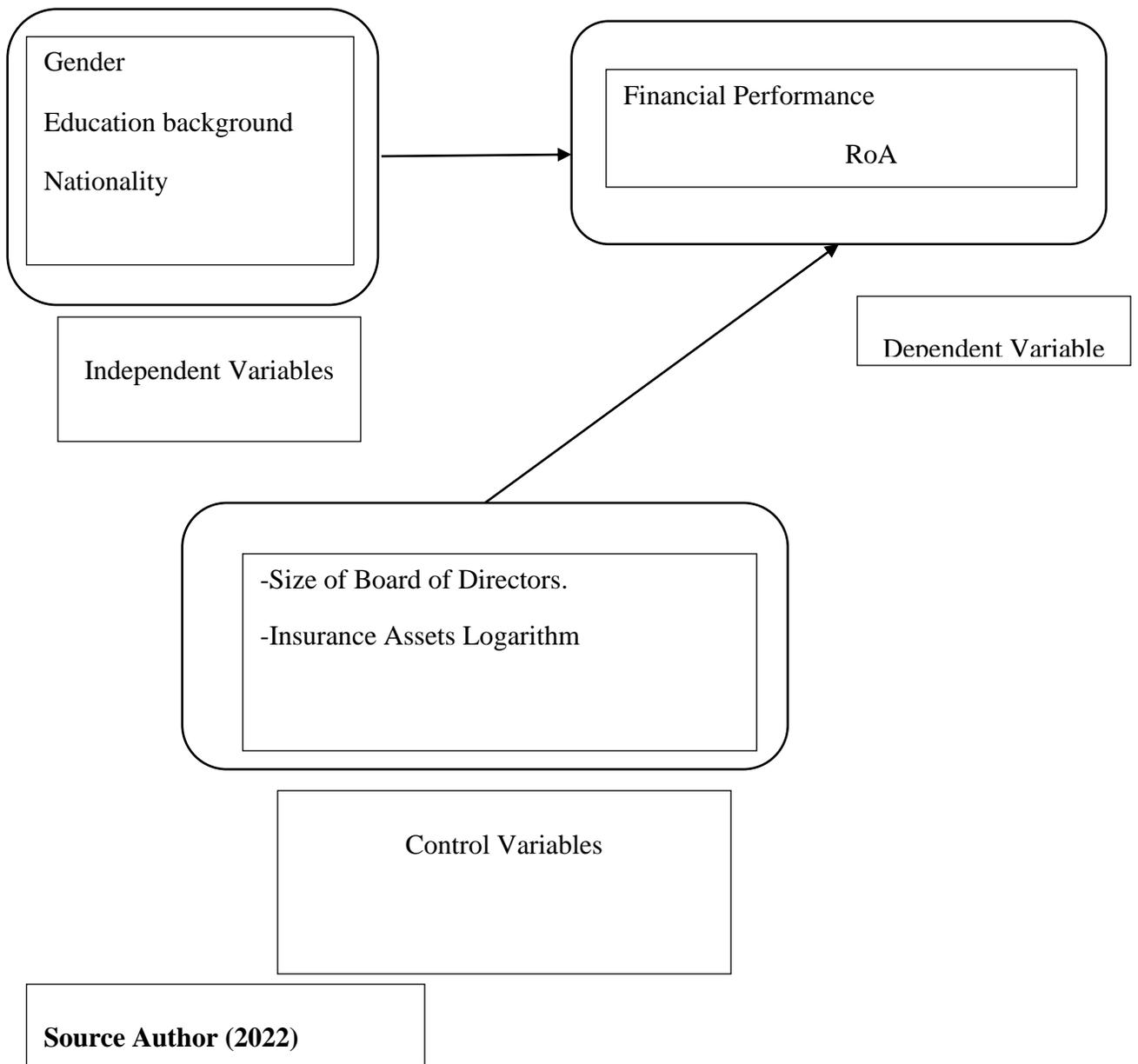
Studies done in Nigeria on listed banks (Okinwu, 2019) found that boards with diversified ethnicity posted better performance compared with those that were not ethnically diversified. The study was done over a ten-year period from 2009 to 2018. It was also found that boards that were more diverse in terms of educational background performed slightly better than their competitors that were less diverse. The study used asset base as the control variable, it was recommended that regulations should be effected by the regulator to ensure that banks have diversified boards for good corporate governance to be effected. It also recommended that there should be continuous education of board members in order to build their capability and effectiveness in managing and running the organizations given the sensitive nature the boards of the banks play.

In another study carried out in Ghana among its listed insurance firms it was found that insurance firms that had diversified boards in terms of age, nationality, and gender and race performed better compared to their competitors that were less diversified. The study was carried over a fifteen year period and asset logarithm of the listed insurance firm was used as the control variable. The study also found that ethnicity did not have an effect on the performance of insurance firms in hand and hence it was not a necessary requirement for improved better performance as ethnically diversified boards didn't show better performance as those whose boards were not ethnically diversified.

Locally, Letting et al. (2012) had found that while board members' specialties or occupations did not significantly affect ROE, ROA, or PE ratio, they did positively affect dividend yield. This study ignored other important factors including independence, gender, nationality and age and only looked at the technical knowledge of board members.

## **2.5 Conceptual Framework**

### **Figure 1: Conceptual Framework**



## **2.6 Literature Review Summary.**

For more than a hundred years, directors of corporate boards have been the focus of a consistent flow of management research, giving the governance literature a solid foundation. Perhaps issues like the crucial governance oversight role that boards are required to serve, the presumptive regularity with which they fail in this function, and their relationship with well-known firm failures support the unwavering interest in board studies.

Theories that supported the study were explored, their proponents and critics of the theories. The study also explored the linkage of the theories to the current study. While the theories were advanced ages ago they have been critiqued and built upon with time. Authors have written extensively on the subject and studies have been done in different fields on the subject.

Additionally, while some studies have found a connection between board composition and company success, others have found no discernible connection. However, empirical results show an astounding lack of consensus despite the continued interest and extensive investigation into the association between company boards and strong performance. This provided the basis for this study's assessment of how corporate board composition affects listed insurance businesses in Kenya's performance.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter covered the technique that was employed for data collection and analysis and was aided in attaining the research objectives.

### **3.2 Research Design**

Using secondary data obtained from target insurance firms, this study attempted to determine whether there is a correlation between diversity in boards (in terms of age, ethnic diversity, and gender) and the financial success of listed insurers. In order to establish the association, a correlation study design was best suited for this research. When a researcher wanted to find out if there was a relationship between two quantifiable variables, this methodology is acceptable.

### **3.3 Population**

The study's target population comprised of six listed insurance firm in Kenya (see appendix 1).

### **3.4 Data Collection**

The study employed secondary sources of financial data and it extracted audited data that is used as to measure financial performance including total asset and net earnings of individual insurance companies over a ten-year period. This research was also obtain data on the, age, gender, and ethnic makeup of the corporate boards of firms under inquiry.

### **3.5 Data Analysis**

Regression analysis was used in the study to determine the association between financial performance and board diversity. The median, mean, standard deviation, and other descriptive

statistics, as well as inferential statistics like as multiple regression, and correlation are used to assess board features.

### **3.5.1 Analytical Model**

The multiple linear regression model was used in the study. Through regressing variables including age, gender and ethnicity within the period under test, the multiple linear regression model attempted to establish the association between financial performance and board diversity of insurance firms. The following regression model was used:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where,

Y = insurance company performance as determined by ROA (return on assets)

$\beta_0$  = constant or intercept;

$\beta_1 - \beta_4$  = regression coefficients

X1 = gender of board of directors;

X2 = Education background of board members;

X3 = Nationality of board of directors

$\varepsilon$  = error term

A regression analysis involved the use of SPSS (statistical package for the social sciences) version 17, to establish the nature and strength of the association between financial performance and board diversity of the insurance company.

### **3.5.2 Diagnostic Tests**

Before trying to estimate equations, this section covers the significance of various diagnostic tests to make sure the assumptions of the linear regression model have not been violated;

violating the assumptions risks getting biased, ineffective, and inconsistent parameter values when estimating equations. Thus, it necessary to perform diagnostic tests.

### **3.5.2.1 Multicollinearity**

The correlation matrix used in the research was used to test for multicollinearity; the threshold for severe multicollinearity is 0.8. (Cooper & Schindler, 2013& Gujarati, 2013). While imperfect multicollinearity lead to significant standard errors, perfect multicollinearity often results in indeterminate regression coefficients along with infinite standard errors. Further, the precision of rejecting the null hypothesis was impacted by large standard errors. The issue with multicollinearity during estimate is not its absence but rather the issue is its severity. Therefore, the presence of severe multicollinearity is indicated by a correlation coefficient that exceeds 0.8.

### **3.5.2.2 Autocorrelation**

The Wooldridge test commonly used to determine serial correlation will be used to determine whether autocorrelation exists in the linear panel data. In order to accomplish the proper model specification, serial autocorrelation, a typical issue in panel data analysis, must be taken into consideration. Wooldridge (2012) explains that biased standard errors or inefficient parameter estimates would come from failing to recognize and take into account serial correlation in the idiosyncratic error term in a panel model. The absence of serial autocorrelation in the data is the test's null hypothesis. The feasible generalized least square (FGLS) estimate approach was used if serial autocorrelation was found in the study's data.

### **3.5.2.3 Heteroskedasticity**

The assumption of heteroskedasticity in the classical linear regression model (CLRM) needs to were checked in the data and, if found, correctly accounted for. In particular, the CLRM posits that the error term is homoskedastic, i.e., that its variance is constant. There washeteroskedasticity in the data if the error variance is not constant. Without taking heteroskedasticity into account, running a regression model would result in unbiased parameter values but invalid standard errors. The Likelihood Ratio (LR) test suggested by Poi and Wiggins (2011) was used in this study to determine whether panel level heteroskedasticity exists. The

error variance being homoskedastic was the null hypothesis for this test. Running a FGLS model was used to account for heteroskedasticity in the study data if it is determined that the null hypothesis must be rejected.

#### **3.5.2.4 Test for Fixed or Random Effects**

One must choose between running a random effects model or a fixed effects model when conducting panel data analysis. The Hausman specification test serves as the basis for choosing the kind of model to run. Based on the correlation between the individual effects and the regressors, this test primarily evaluates the consistency and effectiveness of the random and fixed effects estimators. The Hausman specification test looks for a significant connection between the regressors and the unobserved firm-specific random effects. If there is no such association, the random effects approach might be more effective. Therefore, the researcher would check if time-fixed effects were included in the study estimation if the Hausman test determined that the fixed effects model was adequate. If the dummies for all years are equal to zero, as tested by the time fixed effects, then there is no need to estimate time fixed effects in the model's specification. The investigation applied the F-test in line with Greene (2017) to determine whether the dummies for all years are equal to zero.

Conversely, if the Hausman test determines that the random effects model is the more appropriate one, it would be necessary to test if the data have panel effects in order to decide whether to use the random effects model or a straightforward Ordinary Least Square (OLS) regression. The Breusch-Pagan Lagrange multiplier test, introduced by Breusch and Pagan in 1980, was used in this study to decide between the random effects model and the straightforward OLS model. This test's null hypothesis is that there is no panel effect since the variance among the entities is equal to zero.

## CHAPTER FOUR:RESEARCH RESULTS AND ANALYSIS

### 4.1 Introduction

This segment contained the outcomes and the explanation of the study results.

### 4.2 Descriptive Results

Indicators of board gender diversity, firm size leverage, firm age, sales growth and financial performance of insurance firms outcomes are contained in this section. Financial performance was measured by ROA, board diversity was measured by the proportion of women in the board (If at least 1/3 proportional of board member are female firm  $i$ , in period  $t$  (%)=1 Otherwise=0), Firm size was measured by gross underwritings premiums, leverage was measured by leverage ratio which was equal to deferred insurance liabilities/shareholders equity, firm age was measured by number of years that the insurance firm was in operation.

**Table 4.1: Descriptive Results**

Variable	observation	mean	std.dev	minimum	maximum
ROA	60	11.111	5.674	2.579	24.639
board diversity	60	0.900	0.303	0.000	1.000
gross underwritings premiums	60	1137180.000	580701.100	263942.600	2521652.000
Leverage ratio	60	85.960	71.397	-89.216	233.622
age	60	66.517	18.797	43.000	102.000
Sales growth	60	8.152	4.122	1.781	18.326

The results showed that mean of ROA from 2012 to 2021 was 11.111. The minimum was 2.579 while the maximum was 24.639. The standard deviation was 5.674. The results showed mean of board diversity from 2012 to 2021 was 0.9. The least was 0 while the most was 1. The standard deviation was 0.303. Therefore most insurance firms had board diversity.

The results showed mean of gross underwritings premiums from 2012 to 2021 was Ksh 1137180.000. The minimum was Ksh263942.600 while the maximum was Ksh2521652.000. The standard deviation was 580701.100. The study results also showed that the mean of leverage ratio from 2012 to 2021 was 85.960. The minimum was -89.216 while the maximum was 233.622. The standard deviation was 71.397. The results showed the mean of age from 2012 to 2021 was 66.517 years. The minimum was 43.000 years while the maximum was 102 years. The standard deviation was 4.122. In addition the results showed that the mean of sales growth from 2012 to 2021 was 8.152%. The minimum was 1.781 while the maximum was 18.326. The standard deviation was 4.122.

### 4.3 Correlation Analysis

The student utilized the spearman's correlation evaluation approach to analyze the predictor values; capital adequacy, leverage, liquidity, operational efficiency, asset base and the response variable; economic overall performance (ROE) to set up the kind of statistical affiliation between every set of variables.

**Table 4.2: Correlation Results**

	<b>Financial performance</b>	<b>Board Diversity</b>	<b>firm size</b>	<b>leverage</b>	<b>firm age</b>	<b>sales growth</b>
Financial performance	1					
Board Diversity	0.167	1				
firm size	0.955	0.219	1			
leverage	-0.240	-0.026	0.343	1		
firm age	0.670	0.021	0.654	-0.204	1	
sales growth	0.980	0.196	0.927	0.264	0.640	1

The outcomes in Table 4.2 show that board diversity had a positive correlation ( $r=0.167$ ) with financial performance of listed insurance firms. This infers that an enhancement in board diversity would enhance financial performance of listed insurance firms. Further results deduced that firm size had a positive correlation ( $r=0.955$ ) with financial performance of listed insurance firms. This infers that an enhancement in firm size would enhance financial performance of listed insurance firms. The outcomes were in agreement with Mahfoudh (2013) who

located that association dimension have been positively related to company monetary performance. These findings additionally agreed with that of Njoroge (2014) whose find out about indicated that association dimension was once positively associated to monetary performance.

Leverage had a negative correlation ( $r=-0.240$ ) with financial performance of listed insurance firms. This infers that a decline in leverage would enhance financial performance of listed insurance firms. The outcomes were similar with Al-Tally (2014) who observed that economic leverage had a extensive impact on performance. The findings additionally agreed with that of Perinpanatha (2014) whose find out about confirmed a poor relationship between the monetary leverage and the economic overall performance of the plc.

Further, outcomes displayed that firm age had a positive correlation ( $r=0.670$ ) with financial performance of listed insurance firms. This infers that an enhancement in firm age would enhance financial performance of listed insurance firms. These findings were not in agreement with Pervan, et al. (2017) whose outcomes indicated that performance was highly affected by the period the organization was in operation. Further results showed that outcomes displayed that sales growth had a positive correlation ( $r=0.980$ ) with financial performance of listed insurance firms.

#### 4.4 Diagnostic Tests

Diagnostic tests that were conducted included; normality, multicollinearity, autocorrelation tests and heteroskedasticity.

##### 4.4.1 Test for Normality

Shapiro and Wilk test was used in this investigation.

**Table 4.3: Normality Test**

Variable	Obs	W	V	z	Prob>z
Financial Performance	60	0.801	44.237	8.916	0.060

Firm Size	60	0.180	0.370	5.120	0.500
Leverage	60	0.977	5.142	3.852	0.060
Firm Age	60	0.992	1.689	1.233	0.109
Sales growth	60	0.963	8.173	4.943	0.070

The outcomes confirmed the p values of all the variables had been above 0.05. This implied that all the learn about variables are commonly distributed.

#### 4.4.2 Test for Multi-collinearity

Multi-collinearity was carried out for this research.

**Table 4.4: Multi-collinearity Findings**

<b>Variable</b>	<b>VIF</b>	<b>1/VIF</b>
Firm Size	7.95	0.101
Sales Growth	7.33	0.136
Firm Age	3.00	0.333
Leverage	1.94	0.516
Board Diversity	1.16	0.860
<b>Mean</b>	<b>4.28</b>	

The least VIF was 1.16 while the most was 9.95. The average VIF was 4.28 showing that there was no multicollinearity.

#### 4.4.3 Autocorrelation Test

The Wooldridge test was applied in this investigation

**Table 4.5: Test of Autocorrelation**

#### **Wooldridge test for autocorrelation in panel data**

**H<sub>0</sub>: no first-order autocorrelation**

F= 6.567

Prob> F = 0.345

The test statistic reported is F-test which reported a value of 6.567. The P-value of the F-test is 0.345 for listed insurance firms indicating that the F-test is not statistically significant at 5% level hence no autocorrelation in the investigation.

#### 4.4.4 Heteroskedasticity Test

Heteroskedasticity outcomes were presented.

**Table 4.6: Heteroskedasticity Test**

---

**Breusch-Pagan test**

---

Ho: constant variance

Variables: Fitted values of ROA

chi2(1)=0.09

Prob> chi2=0.567

---

The p value was over 0.05 thus indicating that the investigation data had no heteroskedasticity.

#### 4.5.5 Hausman Test

Table 4.7 indicates the outcomes of Hausman test.

**Table 4.7: Hausman Test**

---

	(b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Capital Adequacy	0.000247	-0.050	0.0753	0.0037
Asset Quality	0.1907	0.355	-0.165	0.0196
liquidity	0.095	-0.114	0.209	0.056
operating efficiency	0.1162	0.048	0.068	0.0177
Financial leverage	0.012	0.0059	0.0061	0.0014
chi2(5)	=	(b-B)'[(V_b-V_B)^(-1)](b-B)		
	=	47.07		
Prob>chi2	=	0.000		

---

Random effects were preferred in the investigation than fixed effect. This is because the p value level was less than 0.000.

#### 4.6 Panel Regression Evaluation

Regression outcomes were displayed.

**Table 4.8: Regression Results**

<b>ROA</b>	<b>Coef.</b>	<b>Std.Err</b>	<b>t</b>	<b>P&gt; t </b>	<b>[95% Conf.Internal]</b>	
Board Diversity	0.478	0.287	1.660	0.103	1.056	0.099
firm size	11.981	1.957	6.120	0.000	8.049	15.913
leverage	-0.007	0.002	-3.420	0.001	-0.011	-0.003
firm age	0.006	0.043	0.140	0.888	-0.081	0.093
sales growth	0.702	0.073	9.650	0.000	0.556	0.848
_cons	-65.860	9.764	-6.750	0.000	-85.481	-46.239
sigma_u	0.779					
sigma_e	0.547					
rho	0.670					
R square = 97.99						
F(5,49)=590.71						

R Square in the investigation was 97.99. The outcomes inferred that board diversity, firm size, leverage, sales growth, firm age accounts for 97.99% of the financial performance change. This infers that 97.99% of performance change was affected by board diversity, firm size, leverage, sales growth, firm age. Since the p level was 0.000, board diversity, firm size, leverage, sales growth, firm age affected financial performance.

The outcomes were clear that the association amongst board diversity and monetary performance was favorable and unsubstantial with a coefficient of ( $\beta=0.478$ ,  $p=0.103$ ). Further outcomes were clear that the association amongst firm size and monetary performance was favorable and substantial with a coefficient of ( $\beta =11.981$ ,  $p=0.000$ ). The coefficient value was positive, and the p-values was 0.000 which is less than 0.05. The study findings agreed with Chen et al. (2015) who did not discover any connection between gender diversity on boards and financial performance

In addition, outcomes were clear that the association amongst leverage and monetary performance was negative and substantial with a coefficient of ( $\beta = -0.007$ ,  $p = 0.001$ ). This is in agreement with Ali (2014) who deduced that financial leverage on firm performance

Further outcomes were clear that the association amongst firm age and monetary performance was favorable and unsubstantial with a coefficient of ( $\beta = 0.006$ ,  $p = 0.888$ ). This is in agreement with Kaguri (2013) firm age and financial performance. Further outcomes were clear that the association amongst sales growth and monetary performance was favorable and substantial with a coefficient of ( $\beta = 0.702$ ,  $p = 0.000$ ).

$$Y = -65.860 + 0.478X_1 + 11.981X_2 - 0.007X_3 + 0.006X_4 + 0.702X_5 + \varepsilon$$

Where,

Y = insurance company performance

$\beta_0$  = constant or intercept;

$\beta_1 - \beta_4$  = regression coefficients

$X_1$  = Board Diversity

$X_2$  = Firm size

$X_3$  = leverage

$X_4$  = firm age

$X_5$  = sales growth

$\varepsilon$  = error term

## CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

### 5.1 Introduction

The summary of the outcomes, the outcome conclusions and the recommendations of the investigation were displayed in this chapter.

### 5.2 Summary of Major Research Results

First, the study sought to analyze the relationship between board diversity and the financial performance of insurance firms in Kenya. The results showed mean of board diversity from 2012 to 2021 was 0.9. Therefore most listed insurance firms had 1/3 of their board members being women. Correlation outcomes deduced that board diversity had a positive correlation ( $r=0.167$ ) with financial performance of listed insurance firms. Further, regression results showed that board diversity had a positive and irrelevant consequence on monetary performance ( $\beta =0.478$ ,  $p=0.103$ ).

Secondly, the study sought to analyze the relationship between firm size and the financial performance of insurance firms in Kenya. The results also showed that the mean of gross underwritings premiums which was the measure of firm size from 2012 to 2021 was Ksh1137180.000. Correlation results deduced that firm size had a positive correlation ( $r=0.955$ ) with financial performance of listed insurance firms. Regression results showed that firm size had a favorable and significant impact on monetary performance ( $\beta =11.981$ ,  $p=0.000$ ).

Thirdly, the study sought to analyze the relationship between leverage and the financial performance of insurance firms in Kenya. The investigation results also showed that the mean of leverage ratio from 2012 to 2021 was 85.960. Correlation results deduced that leverage had a negative correlation ( $r=-0.240$ ) with financial performance of listed insurance firms. In addition, outcomes were clear that the association amongst leverage and monetary performance had a negative and substantial with a coefficient of ( $\beta =-0.007$ ,  $p=0.001$ ).

Fourth, the study sought to analyze the association amongst firm age and the financial performance of insurance firms in Kenya. The results showed the mean of age from 2012 to 2021 was 66.517 years. Correlation outcomes displayed that firm age had a positive correlation

( $r=0.670$ ) with financial performance of listed insurance firms. Regression results showed that firm age had a positive and insignificant impact on financial performance ( $\beta =0.006$ ,  $p=0.888$ ).

Lastly, the study sought to analyze the association among sales growth and the monetary performance of insurance firms in Kenya. The mean of sales growth from 2012 to 2021 was 8.152%. Outcomes further displayed that sales growth had a positive correlation ( $r=0.980$ ) with financial performance of listed insurance firms. Regression outcomes were clear that the association among sales growth and monetary performance was favorable and substantial ( $\beta =0.702$ ,  $p=0.000$ ).

### **5.3 Conclusions**

The study concluded that board diversity had a positive and insignificant impact on financial performance of listed insurance firms.

The study further concluded that firm size had a positive and significant impact on financial performance of listed insurance firms. The size affects association of monetary overall performance due to the fact better insurance plan corporations can amplify with the aid of ploughing back a tremendous component of their profits. The association is in a position to have a dividend shape payout that takes care of shareholders and at the identical time lets in them to plough again their earnings for extra investments and savings.

The size influences a firm financial performance because bigger insurance firms can enlarge by ploughing back a significant portion of their profits. The firm is able to have a dividend structure payout that takes care of shareholders and at the same time allows them to plough back their profits for more investments and savings.

The investigation further concluded that leverage had a negative and significant impact on financial performance of listed insurance firms. Leverage approves a higher achievable return to the investor than in any other case would have been available, however the viable loss is additionally greater: if the funding will become worthless, the mortgage main and all accumulated hobby on the mortgage nonetheless want to be repaid. This

constitutes economic risk. The diploma of this monetary chance is associated to the firm's monetary structure.

The study further settled that firm age had a positive and insignificant impact on financial performance of listed insurance firms. Therefore the age of the firm does not matter in terms of their financial performance. Though younger companies are greater dynamic and extra unstable in their boom trip than older businesses, the older firms are reluctant to adjust to change or adopt new innovation that can enhance their performance. Therefore a firm being old does not have more advantage than the younger firms.

The study further concluded that sales growth had a positive and significant impact on financial performance of listed insurance firms. Firms that are able to make more sales are able to plough back the profits and invest more than the firms with small amounts of sales. Therefore, making more sales enhances the performance of the firms.

#### **5.4 Recommendations of the Study**

The study recommends that management on insurance firms listed in NSE to focus on leverage, firm size, sales growth since they were found to have a significant effect on the financial performance. However, the insurance firms should not concentrate on gender diversity as it does not play any role in enhancing their performance. In addition, younger insurance firms should be intimidated by the older insurance firms since they are not more advantaged than them.

The association size is necessary in a organization due to their market energy large companies are capable to cost greater costs and for this reason earn greater profits. Additionally, greater earnings ought to additionally be end result of economies of scale and superior negotiating strength that gives large corporations extra favorable financing conditions.

The insurance firms' managers should also aim to maintain low leverage levels in their firms. This is because high level of debt has an adverse influence on financial growth. Excessive debt beyond certain levels begins to have a negative effect on a company's performance and survival

due to the high interest costs the company is paying to its creditors. This is likely to lead to cash flow problems and survival of the firm.

Firm size was found to have significant effect on the financial performance of companies. The management of the insurance firms should focus on achieving growth in asset base as this was shown to give competitive advantage over smaller firms. This was reflected in the pricing of insurance products attraction of new customers and settling of claims.

### **5.5 Areas for Further Research**

This investigation about sought to decide the impact of board range on monetary overall performance of Listed insurance plan Firms in the Nairobi Securities Exchange only, therefore vicinity for in addition research should reflect on consideration on different insurance plan businesses in Kenya that are now not listed in NSE for reason of making an assessment of the findings with these of the present day study. This study used only four determinants of financial performance and thus further studies could focus on liquidity, asset tangibility.

Future studies should widen the scope and investigate the impact of a diversified board on all insurance firms and not just the listed ones as this study focused on. A broader study will help understand and draw insights on the subject in a way that a narrow focus on listed firms cannot provide. Future studies can also categories the sectors into general insurance, life insurance and see if the variables will impact the different categories the same way or there will be varied results.

## REFERENCES

- Abu-Tapanje. (2011). An Insight into the perspective of Jordanian Industrial Companies. *Good Corporate governance Mechanism* 3 (2), 231-279
- Adams, R. B., & Daniel, F.. (2009). Women in the Boardroom and Their Impact of Governance and Performance. *Journal of Financial Economics* 94:2, 291-309
- Deloitte, (2012). *Aftershock: Adjusting to the new world of risk management*, Deloitte LLP, London.
- Demsetz, G.K & Lehn, W. (2005). *The Ownership of Enterprise*, Cambridge, MA: Harvard University Press.
- Fields, M.A. & P.Y. Keys, (2003). The emergence of corporate governance from wall st.: Outside directors, board diversity, earnings management, and managerial incentives to bear risk. *The Financial Review*, 38(1): 1-24.
- Gordon, L. A., Loeb, M. P., & Tseng, C. (2009). Enterprise risk management and firm performance: A contingency perspective. *Journal of Accounting and Public Policy*, 28, 301–327.
- Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: integrating agency and resource dependence perspectives. *Academy of Management Review*, 28(3), pp. 383-396.
- Hoffer, R.G. & Sandberg, D. (1999), Understanding the determinants of managerial ownership and the link between ownership and performance, *Journal of Financial Economics*, 53, 252-284.
- Jensen, M. C., (1986). Agency Costs of Free Cash Flow, Corporate Finance Takeovers. *American Economic Review*, 76, 323-339
- Liebenberg, A. & Sommer, D., (2008), Effects of corporate diversification: Evidence from the property-liability insurance industry, *Journal of Risk and Insurance* 75, 893–919.

- Marimuthu, M. & Koladaisamy, I (2009a). Ethnic and gender diversity in board of directors and their relevance to financial performance of Malaysian companies. *Journal of Sustainable Development*, 2(3): 139-148.
- Makove, S. M. (2014). African Policy Approaches: Microinsurance in Kenya. AIO –A2ii Regulators’ Workshop, Victoria Falls, Zimbabwe May 26, 2011.
- McShane, M. & Cox, L., (2009), Issuance decisions and strategic focus: The case of long-term care insurance, *Journal of Risk and Insurance* 76, 87–108
- Mirie, M. & Murugu, W.J. (2015). The Determinants of Financial Performance In General Insurance Companies In Kenya, *European Scientific Journal*, 11 (1)
- Mutua, F. (2013) Relationship between board diversity and financial performance of Insurance underwriters in Kenya, Unpublished MBA Project, University of Nairobi
- Murphy, A., B., Simkins, J. & Gary, S., W. (2006). Corporate Governance, Board Diversity and Firm Value. *The Financial Review*, 38: 33-53
- Najjar, N., (2013). The impact of corporate governance on the insurance firm’s performance in Bahrain. *International Journal of Learning & Development*, 3(2): 56 – 65.
- Ngugi, M.D (2012). Effects of board diversity on the financial Performance of commercial banks in Kenya, Unpublished MBA Project, University of Nairobi
- Pagach, D. & Warr, R., (2011). ‘The characteristics of firms that hire chief risk officers’, *Journal of Risk and Insurance*, 78, 185–211
- Van der Walt, N., & Ingley, C. (2013). Board dynamic and the influence of professional background, gender and ethnic diversity of directors, *Corporate Governance: An International Review*, 11(3), pp. 218–234.
- Zainal- Abidin, Z., N.M. Kamal & Jusoff, K. (2009). Board structure and corporate performance in Malaysia. *International Journal of Economics and Finance*, 1(1): 150-164.

Zainali, N; Zulkifli, N and Saleh, Z (2013). Corporate board diversity in Malaysia Analysis of a longitudinal characteristic of Gender and Nationality Diversity, International Journal of Academic Research in Accounting Finance and Management Science, 3 (1), 136-1

#### **APPENDIX 1: LISTED INSURANCE COMPANIES**

1. Jubilee Holdings
2. Kenya Re-Insurance Corporation
3. CIC Insurance Group
4. Sanlam Insurance Holdings
5. Liberty Insurance
6. British American Investments