

BOARD STRUCTURE AND FINANCIAL PERFORMANCE OF COMMERCIAL AND SERVICE FIRMS LISTED AT THE NAIROBI SECURITIES EXCHANGE, KENYA

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Abstract: Board structure has specific country-based features that enables the efficient and effective handling of firms' financial performance. In Kenya, the all-round board structure importance in enhancing the commercial and service industry performance cannot be over stated as this potentially affects the profitability of these firms and the industry at large. However, the ineffectiveness and poor management of firms by the board over the years has led to the decline in the commercial and service firms' financial performance. With regard to this background, this inquiry attempts to close existing gaps in literature by investigating the manner in which board structure affects commercial listed and service listed firms' financial performance at the Nairobi Securities and Exchange Kenya. With the interest variables to be board size, independence, tenure and age affecting the traded firms' performance financially on Nairobi Securities and Exchange commercial and service firms in Kenya. An ex-post research design was utilized in this investigation. Relying on the presupposition in which the study employed, stewardship, agency and resources dependence theories were adopted to explain their relevance to the work. Eleven (11) listed commercial and service firms was used to determine how such board structure variables determine the listed firms financial performance between 2015 and 2022. Notably from the output, board size was noted to be insignificantly affected inversely Kenyan listed commercial and service firms' financial performance; board independence was considered by the output to be positive on the financial performance noting significance; board tenure was also revealed to have positive and yet insignificant on financial performance; while board age was negatively in a manner that is insignificantly affected performance financially. The drawn recommendation put across is that the Kenyan management of these firms should consider cutting down the size of the board to improve performance financially.

Keywords: Board Independence, Board Size, Board Age, Board Tenure, Firm Size and Financial Performance.

1. INTRODUCTION

1.1 Background to the Study

Corporate governance globally has been one of the pronounce business practice. It focuses on how corporate organizations providers ensure that their investments was profitable, and as a result, it is of utmost practical use (Lasisi, 2017). Financial scandals and dubious business practices that have been exposed in the corporate sector globally in recent years have contributed to the increasing focus given to corporate governance. Policymakers, investors, firms, and other stakeholders around the world use the OECD's corporate governance standards as a benchmark (Dharmadasa, Gamage & Herath, 2021). These principles were first accepted by Organization for Economic Cooperation for Development Ministers in 1999 and later amended in April 2004.

A significant milestone was reached in the US with the passage of the Sarbanes Oxley Act of 2002 (SOX), which sets new guidelines for board members of traded public US businesses, public accounting firms and management (Dharmadasa, Gamage & Herath, 2021). Corporate governance refers to the management of an institution's affairs, including the actions of the board, in a way that is efficient, open, and responsible. Corporate governance standards that have been created on a national and international level as well as by the governance literature have recognized the importance of board directors in influencing corporate governance practices in a firm (Nakpodia & Olan, 2022). Accordingly, the company board serves as a crucial tool for limiting managers' self-serving behavior as conceptually by the hypothesis of the agency (Madison, Holt, Kellermanns & Ranft, 2016). The board also has a duty to supervise, direct, and counsel the company's management to assure that it promotes the best stakeholders' interests (Squires & Elnahla, 2020). Many studies in the West have attempted to comprehend the "Boardroom" influence on corporate governance and subsequent firm performance (Guney, Karpuz & Komba, 2020; Nguimfack & Wamba, 2022).

The application of board structure in Africa depends on the country-specific factors. Due to different regulatory and economic climates, cultural variations, the capital markets size, and the value of the mechanism of governance, corporate governance products may not be applied generally across boundaries of nations (Aguilera, Florackis & Kim, 2016; Alm Mustafa, 2017; Lasisi, 2017). Organizational success is a result of the structures, procedures, systems and cultures that are in place in the hands of the directors. The structures and procedures established by a corporate body to reduce the severity of agency issues brought on by the disconnection of control from ownership.

The commercial and service firms listed have varied overtime because of the overture of regulations and policies of corporate governance in 2002 (Aluoch, 2019). These performances have continued to ravage the commercial and service industry thus, increasing the number of issues associated with corporate governance. Sound corporate framework promotes firms financial performance. Kenyan companies listed on the commercial and services division of the NSE has had variable financial performance over the last few years. With a fiscal year 2015–2016 performance of \$258 million US dollars, Kenya Airways (KQ), the national airline, which is part of the commercial and services department, had the worst corporate performance ever recorded in the country (Okoth & Achuka 2016; Kenya Airways 2016). While Longhorn Publishers, another company included within the business and services category, has consistently reported strong financial success (NSE 2016, 2017, 2022; Longhorn Publishers 2018).

The listed commercial and service firms' financial performance trend at Nairobi Securities Exchange has witnessed a declining trend within the period 2015 to 2021. Noting from the respective financial statements of some of the firms such as Sameer Africa Plc, Kenya Airways and Longhorn Publishers Plc, it is revealed that the return on assets for Sameer Africa Plc decline from 0.26 to 0.12 for the period 2015 to 2020 before witnessing an increase to 0.31 in 2021. Also, drawing from the financial statements of Kenya Airways, is revealed that for the period of 2015 to 2021, 0.61 ROA decreased to 0.45. Furthermore, Longhorn Publishers recorded a decline from 0.68 to 0.17. Therefore, it is regrettably that the trend of the listed firms on the NSE has been declining demonstrating a scary picture for investors in such firms which is detrimental to the growth of the subsector and the economy at large.

1.2 Statement of the Problem

Commercial and service firms' performance in Kenya have continued to decline over the past few years. This was evident in the nation's worst performance, as measured by Kenya Airways' (\$KQ) \$258 million US loss for the fiscal year 2015–2016 (Okoth & Achuka, 2016; Kenya Airways 2016). With 18 of the 67 registered firms signaling profit warnings merely in the 2016 fiscal year, the Authority of the Capital Markets asserts that there has been a decrease in the quality of financial performance data presented by NSE corporations (CMA Capital Markets Authority). The majority of the businesses that recorded poor results and were in danger of failing between 2013 and 2017 were from Kenya's Nairobi Securities Exchange's commercial and services sector. Among the businesses in this area that have received attention are Uchumi stores, Deacons, Kenya Airways, Longhorn publishers, Atlas Development, Hutchings Biemer, Express Limited, logistics company and Eveready (Kangethe 2015; Bwire 2015; Aglionby 2016; Munda 2017; Onsongo, *et al.*, 2020). These firms profit declined from 39% in 2015, 18% in 2016 and 25% in 2017 respectively (Onsongo, *et al.*, 2020).

Various research works have been undertaken to ascertain the linkage that affects financial performance coming from corporate governance. Tulung and Ramdani (2018) provided substantiation that independence and the size of the board significantly impacted positively on regional development banks' performance, however; it was carried out in Indonesia. Similarly Aluoch (2019) results, board independence showed a negative and insignificant connection with Tobin Q. Despite the study on listed firms, the focus was on all listed firms. The performance of businesses listed on the

Vietnamese stock exchange was found to be impacted by the proportion of directors under 45, according to Ngo, Pham, and Luu (2019), however, Vietnam was the point in which the study was conducted. Bennouri, Chtioui, Nagati, and Nekhili (2018) showed that the tenure of female as directors considerably boosts ROE and ROA and dramatically reduces Tobin's Q, however, the study was limited to the tenure of female directorship in France.

Following the examination of the different studies relating board structure with financial performance, various gaps has been identified which this study intends to fill. Conceptually, Tulung and Ramdani (2018) and Aluoch (2019) limits board structure to independence and size of the board isolating other board variables as tenure and age which influence decision making process of the firms finances thus elaborating the concept of board structure to be employed in this study. Further, the exposition of the contextual gap revealed that all the studies were conducted in different countries employing different sectors of their economies with the recent study evaluated within the contextualization of only commercial listed and service listed firms on the NSE. Additionally, methodology adopted for the studies was panel regression technique of analysis with none of the survey considering the moderation of firm size of the nexus between board structure and financial performance employing panel method based on the McClelland approach. The evidence of these gaps propelled the foundation upon which this study rested to evaluate how the financially performed firms is affected by the board structure for the NSE listed commercial and service firms in Kenya.

1.3 Objectives of the study

1.3.1 General objective

In pursuance of the survey objective, the board structure effect on the performance of commercial and service firms financially and traded on the NSE, Kenya was evaluated.

1.3.2 Specific objectives

With particular reference to the main aim of the research, the specific goals included to:

- i. Determine the effect of board size on the financial performance of commercial and service firms listed at the Nairobi Securities Exchange, Kenya.
- ii. Investigate the effect board independence on the financial performance of commercial and service firms listed at the Nairobi Securities Exchange, Kenya.
- iii. Examine the effect of board tenure on the financial performance of commercial and service firms listed at the Nairobi Securities Exchange, Kenya.
- iv. Assess the effect of board age on the financial performance of commercial and service firms listed at the Nairobi Securities Exchange, Kenya
- v. Determine the moderating effect of firm size on the relationship between board structure and commercial and service firms traded at the NSE financial performance.

2. LITERATURE REVIEW

2.1 Theoretical Review

Agency theory was put forth by Meckling and Jensen (1976) to explain the rising quagmire of agents and principals misunderstood interactions. According to the idea, an agency relationship describes a contract in which a principle and an agent work together to carry out a task on the principal's behalf. The primary grants the board of directors' access to a decision-making ability to ensure value addition to existing firms. Despite the fact that directors are frequently perceived as being self-centered, they cannot be relied upon to constantly decide in the firms' interests as a whole. The agency theory is the main theoretical framework that ties this supervisory role to firm performance theory (Muchemwa, Padia & Callaghan, 2016). The management is thought to be a rational player who strives to maximize their gains as opposed to that of their principal. There is no interest variation when the principals' and agents' interests are in line, and both parties strive to be as effective as possible. The agency's theory is opposed on the grounds that it presupposes a coherent individual is greedy and acts in that way just to increase their sense of value. Due to the absence of any moral ambiguous beliefs or systems, systems of practical ethics are not required to be developed (Jeremy & Gani, 2014). The argument states that challenges arise when two parties to a contract have competing interests. These issues might go on forever and

result in agency fees that could be interpreted as a loss of value for shareholders because corporate managers' interests differ from those of shareholders (Hecking, 2002).

Stewardship theory was coined by Donaldson and Davies (1989). The theory that directors who want to be good corporate stewards must act ethically and work together with all stakeholders to achieve a common objective of attaining the overall business purposes. The notion holds that managers behave as stewards who use shareholders' funds to promote their own efficacy goals by safeguarding and managing them through business operations. As a result, the notion of stewardship contends that trustworthy and loyal relationships between principals and stewards have a direct impact on corporate performance (Tonui & Olweny, 2018). According to the stewardship hypothesis, more numbers of internal executives will be associated with better firm performance as they logically strive to maximize owner profits. When making decisions, the capacity to gather information and carry out a thorough investigation is taken into consideration (Hassan & Lukong, 2012). Stewardship theory critics claim that if a family or a government entity is the major owner, boards may no longer be necessary. The establishment of some boards out of a sense of edifying tradition and an unquestioning faith in their efficacy or to give government-run a more appearance that is corporate (Tonui & Olweny, 2018).

Stakeholder theory was propounded by Freeman (1984). The idea laid the found for the understanding of the key actors in the determination of management issues resolution. The hypothesis is of the opinion that an organization does not exist in an area where there are no people or interacting units. Therefore, the involvement of these stakeholders is critical to the smooth running of the organization which determines the performance of the organization financially. This is based on the assumption of a stable environment which businesses exist. As such, the interacting units or elements within which the business exist is what Freeman (1984) called stakeholders. The provisions as outlined by this theory is that the interaction of a firm with people and other organizations around it has a direct effect on its performance and provides better understanding of situations around it, eventually, issues arises, thus easing the solution to the same problems (Meah & Chaudhory, 2019). This enhances the organizational role in the delivery of corporate social responsibility that has a direct effect on the lives of the people and other organizations. When viewed from the perspective of a stakeholder, a business can be thought as an asset of relationships between groups who have stakes in the activities that make up a firm (freeman, 1984; Mbalwa, 2015). With this, it beckons on the board to establish cordiality with these stakeholders who could include creditors, local society, distributions, institutions and others to augment the performance of the traded firms finances. To create additional value for the stakeholders and to manage how that value is distributed, the executives are tasked with preserving these relationships. When stakeholder-related concerns are reassessed and appropriate solutions are put forward, there is an increase in value. It is important to not minimize the need for this reevaluation (Freeman, 1984).

2.2 Empirical Review

2.2.1 Board Size and Financial Performance

The size of corporate boards and Ugandan private enterprises financial performance were compared by John, Kamukama, and Fredrick (2020). Along with a cross-sectional study methodology, a positivist paradigm was utilized by the study. In Western and Central Uganda, 394 companies provided researchers with quantitative data. Board members and company executives were given an open questionnaire. For data analysis, Pearson correlation and conventional regression methods were employed. According to study findings, board size and company performance are significantly positively correlated in private enterprises. Private companies in Uganda were the central point of the study. Kenyan traded Commercial and service on the NSE was examined in this research.

The board size effect on the Indian banks' asset quality and accounting returns, Shukla, Narayanasamy, and Krishnakumar (2020) examine this issue. The researcher utilised OLS, dynamic panel methods and robust regression records derived 29 sampled banks of India that are traded on the NSE and encompass a chunk of the NSE-500 index over the sequence of 2009 to 2016 were utilized. In light of the results, it was concluded that the governing board size had a positive influence on the Indian banks' accounting returns (as determined by ROA). The size of the board is also shown to have significantly tolerated how well-capitalized Indian banks are. Indian banks were the elements used in the study while Kenya is the location for the current study.

Board of directors distinctiveness effect on Nigerian banks' financial performance was explored by Aliyu, Yahaya, and Mohammed (2020). Using descriptive and inferential figures, data were gathered and examined. Results demonstrate that board size has significantly and positively impact on business piece. Board composition, however, becomes overly unimportant. Board meetings and gender failed to demonstrate significance. However, there are negative and significant

consequences of board member nationality and firm size. The study was conducted using Nigerian banks as a case study whose findings cannot be applied to commercial and service firms in Kenya traded on the securities exchange in Nairobi.

Tulung and Ramdani (2018) looked at the relationship between the size of regional development banks in emerging nations and board independence. Regression analysis was the method utilized to assess the study. Twenty-six development banks and 203 executive directors of Indonesian development banks were the target population. The finding of a study demonstrated that board size alongside its independence considerably encouraging impact on the performance of regional development banks. Kenya served as geographical setting in which this study is explored, as opposed to Indonesia, where the last study was undertaken.

2.2.2 Board Independence and Financial Performance

Aluoch (2019) examined the firms' performance traded on the NSE in relation to financial traits, macroeconomic conditions, corporate governance and performance. The study used the census approach, with 65 listed enterprises as its target population between the years of 2002 and 2016. The study design used was longitudinal descriptive. Techniques of analysis using panels and correlation were used. According to the results, board independence showed a negative and insignificant connection with Tobin Q. Despite the study on listed firms, this study focused on the commercially serviced firms traded on the NSE in Kenya.

Naciti (2019) conducted an empirical analysis to determine whether the Board of Directors' composition has a consequence on a firm's sustainability performance. The investigation concentrated on three crucial aspects of corporate governance: CEO duality, board diversity, and board independence. The study came to the conclusion that businesses with greater board diversity and a distinction between the roles of chair and CEO perform better in terms of sustainability. It made use of information for 362 organizations in 46 different countries from the Sustainalytics and Compustat databases. Additionally, the results showed that having more independent directors' results in poorer sustainability performance. Despite the study on board of directors, it applied the use of system generalized method of moment two-step estimator whereas this research employed the technique of regression panelly.

Shan (2019) asserts that board independence, managerial ownership, and company performance can be related. This article uses a data collection comprised of 9,302 firms' yearly observations of Australian traded companies from 2005 to 2015 in order to study the bi-directional links. A simultaneous three-stage equation model is also used. Outcomes showed that board independence and managerial ownership have opposing effects on corporate performance. Additionally, there is an inverse nexus of managerial ownership with board independence. Despite the fact that the study focused on the bond board independence has with business success, it was done in Australia with a focus on listed companies. Commercial listed and service firms traded at the NSE, Kenya was the focal point of this investigation.

Tulung and Ramdani (2018) established that board independence and size positively determine the performance of regional development banks in a manner that is significant. This was the outcome of the study conducted on the link board independence has with the size of regional development banks of emerging economies. The targeted survey's population was twenty six development banks with 203 executive directors of development banks in Indonesia. The technique used in evaluating the study was regression analysis. Indonesia was the geographical context where the study was conducted whereas Kenya was the context in which this study was investigated.

2.2.3 Board Tenure and Financial Performance

Aluoch (2019) investigated the performance of firms traded on the NSE in relation to financial traits, corporate governance, macroeconomic conditions, and performance. With 65 listed firms as its target population between the years of 2002 and 2016, the inquiry employed a census technique. Longitudinal descriptive was the study design chosen. Panel analysis and correlation techniques were employed. Outcomes noted that board tenure had an inverse bond with return on assets. Regressionally, corporate governance significantly found to be related to Kenyan firms' performance. Although Kenya was the ground for the inquiry, it concentrated on all listed enterprises listed at the NSE with this on traded commercial service firms.

Arnaboldi, Casu, Kalotychou, and Sarkisyan (2018) investigated the performance of EU-listed banks to determine how board heterogeneity affects these banks' performance after the global financial crisis. Both common board features (such age, tenure, member type and size) and board diversity traits were incorporated in a full setup (such as age diversity, employee representation, gender diversity and internationalization). Investigation has revealed a complex link of board diversity with bank performance, one that is impacted by both global and local cultural norms. Although there is little

evidence that board diversity affects bank performance generally, it has been found to lower performance variability in countries with more welcoming cultures and during the Eurozone crisis. Bank performance (size, tenure, and staff representation) is positively impacted by diverse boards and diversity components; the link is nonlinear, with diversity's influence being stronger when there are a lot of minority representatives. The participation of foreign directors tends to have a less negative impact for the duration of the Eurozone crisis and in nations that are more receptive of diversity, despite the fact that big board internationalization has an inverse consequence on bank performance. Having considered the inquiry in Europe zone, Africa with particular reference to Kenya was examined here.

Bennouri, Chtioui, Nagati, and Nekhili (2018) investigate how female directorship associates with firms' accounting and market-based outcomes on the sampled 394 French companies from 2001 to 2010. Results showed that female directorship tenure appreciably boosts ROA and ROE and dramatically declines Tobin's Q when system GMM regression was utilized on the data. The positive linkage of accounting performance with female directorship persisted even after the negative association between Tobin's Q and female directorship was eliminated when these factors were taken into account. It's noteworthy to notice that female directors' varied attributes don't necessarily affect financial reporting and stock performance. The survey was limited to the tenure of female directorship in France, however, the tenure of the directors was looked at in this study.

In Malaysia, Sin, Boon, Tze, and Wei (2016) looked at the connection of corporate governance characteristics with business performance financially. In order to determine whether board qualities and firm financial results are correlated, the association of board characteristics (CEO duality, board size, board tenure) was examined. From 2009 to 2013, 100 publicly traded firms were chosen at random from Bursa Malaysia. Using Stata, a random effect panel data regression was produced. According to this study, board size and tenure had a substantial impact on equity and assets returns. However, there is no discernible correlation between firm size and financial performance. Malaysia was the context of the survey performed as compared to this study which considered Kenya.

2.2.4 Board Age and Financial Performance

Ngo, Pham, and Luu (2019) looked into how board diversity affected listed companies' financial results on the stock exchange of Vietnam. 4 demographic traits of the board—gender, educational attainment, nationality and age—were utilized as stand-ins for diversity. A sample of 482 publicly traded firms from the years 2015 to 2017 were used to evaluate the data using a variety of techniques, including Pooled regression of OLS and Generalized Method of Moments (GMM). This revealed a statistically significant correlation between an improvement in financial performance and the ratio of female, international, and board members with post-graduate degrees. There was no proof, however, that directors under 45 affected the traded firms' performance on the Vietnamese stock exchange. Vietnam was the point in which the study was conducted as against NSE traded firms that are into commercial service rendering in Kenya.

Following the global financial meltdown, Arnaboldi, Casu, Kalotychou, and Sarkisyan (2018) looked at how board heterogeneity affected EU traded banks' performance. In a thorough setup, we took into account both typical board features (such as age, member type, tenure and size) and board diversity characteristics (such as age diversity, gender diversity, internationalization, and employee representation). A complex nexus of board diversity with bank performance has been revealed through analysis, one that is influenced by both global and national cultural norms. Board diversity is not shown to have an overall impact on bank performance, but reduces performance inconsistency throughout the Eurozone crisis and in nations with more accepting cultures. The performance of banks (size, tenure, and staff representation) is positively impacted by various board and diversity elements; the link is non-linearly influence by diversity importantly when there is a sizable share of minority representatives. The participation of foreign directors seems to have less of a negative effect during the Eurozone crisis and in nations that are more tolerant of variety, despite the fact that significant board internationalization has an inverse impact on bank performance. Although the study was conducted in Europe which is an advanced industrial zone, its findings cannot be application in Kenya which is the context of this study.

Bhatt and Bhatt (2017) looked into how the performance of Malaysia's listed firms was impacted by the Corporate Governance Code in Malaysia. For the years 2008 through 2013, multivariate examination was used to probe the association of governance factors with firm results. The model was estimated using the 2SLS approach in order to remove the simultaneous equation bias. The information discovered a significant and positive correlation of board age with corporate performance. Contextually, variation occurs from this study's own as the study was carried out in Malaysia while this shall be conducted in East Africa referencing Kenya.

The top 100 non-financial Malaysian companies' board diversity was examined by Abdullah and Ismail (2013), specifically the implications of the age, gender, and ethnicity of the directors on firm performance. The sampled firms' data was gathered using 2007 yearly reports. The evidence uncovered that there is no diversity among board of directors in Malaysia. Multivariate studies' findings showed that diversity of gender is inversely linked to ROA and Tobin q. ROA has been instituted negatively correlate with age diversity. On the other side, it is discovered that ethnic diversity is positively correlated with ROA.

2.2.5 Firm Size and Financial Performance

Under the period of the International reporting system (2012 to 2019), Obaje, Abdullahi and Ude (2021) determined whether firm size matter in the relationship of board structure with deposit money banks' performance in Nigeria financially. Proxies of the explaining variable included size of the board, diversity of gender and independence with return on assets as the explained factor with all dealing with traded firms. The randomized effect of the parameters was arrived at using panel technique of examination. Board size noted an insignificant moderation by firm size negatively in effect with ROA. The significance of diversity of the gender and independence was realized owing to the effect of moderation of firm size having on the structure of board and ROA negatively. Only randomized effect of the model was evaluated in the study which took place in Nigeria with this study focusing on both fixed and random effect evaluation of the effect of firm size that moderates within the contextualization of commercial listed and service listed firms on Kenya's NSE.

Tanui and Serebemuom (2021) evaluation was to discover the firm size moderating effect on the linkage of corporate diversity with Nairobi Securities Exchange listed firms' financial performance. The application of panel method of analysis informed the collection of 35 firms listed data at NSE. Corporate diversification and financial performance were significantly positively correlated as outlined by the products of the panel regression. The association between corporate diversification and financial success was significantly and negatively moderated by the addition of firm size as a moderating variable. Although the inquiry is on listed firms at NSE, the conceptualization of the study differs with this noting corporate diversity and performance financially that is moderated by the size of firm while the consideration of this study was tied up to board structure and listed firms of commercial and service providers that is moderated by firm size.

Hossain and Saif (2019) look into the profitability of Bangladeshi banking enterprises listed on the Dhaka Stock Exchange (DSE) and the influence of the size of firm. Regression of multiple factors was developed to identify the factors affecting a company's profitability. The outcomes of empirical research demonstrate a positive relationship between firm size (assets total, employees' number and branches number) and firm profitability. In addition to firm size, other firm-specific elements, like age and an independent director presence on the board, have a detrimental effect on the profitability of the firms engaged in Bangladesh's banking sector. The direct effect regression evaluation was adopted by the study whereas panel effect model framework served as an evaluation yardstick for this study.

Eyigege (2018) investigated firm size influence on Nigerian stock exchange quoted deposit money banks performance in a financial way. Five DMBs were adopted to under the evaluation of pooled OLS regression of the fixed and random effect. Only the log of asset total of the banks was used to explain profitability in the form of ROA. The computation from correlation and descriptive statistics were made available. Owing to scale of diseconomies, the investigation revealed firm size to negatively and insignificantly affect financially the performance of DMBs in Nigeria. Going by the survey's evaluation was regarded in Nigeria using only five DMBs with only total asset as the proxied of firm size while eleven (11) commercial and service NSE traded firms was considered in this inquiry.

3. RESEARCH METHODOLOGY

The study of the eleven (11) firms become pertinent between 2015 and 31/12/2022. This is because amongst all the commercial and service firms only 11 are traded on NSE. Hence, the target population comprise of 11 listed commercial and service firms. The panel regression equation that captures the direct interconnectedness between the variables is presented as follows:

$$FIP_{it} = \beta_0 + \beta_1BSZ_{it} + \beta_2BIP_{it} + \beta_3BTR_{it} + \beta_4BAG_{it} + \varepsilon_{it}$$

Where:

FIP_{it} = Financial Performance

β_0 = Constant

BSZ_{it} = Board Size

BIP_{it} = Board Independence

BTR_{it} = Board Tenure

BAG_{it} = Board Age

$\beta_1 - \beta_4$ = Estimated Parameters

ε_{it} = Stochastic term

Following from equation (1), the moderating equation was stated in line with the procedure set out by Whisman & McClelland (2005). Based on this, step one of stated as thus:

$$FIP_{it} = \beta_0 + \beta_1BST_{it} + \beta_2FSZ_{it} + \varepsilon_{it}$$

Where:

BST = Board Structure

FSZ = Firm Size

Step two involved the introduction of the interaction of firm size with board structure and it is as follows:

$$FIP_{it} = \beta_0 + \beta_1BST_{it} + \beta_2FSZ_{it} + \beta_3BST*FSZ + \varepsilon_{it}$$

Where:

BST*FSZ = interaction between board structure and firm size

4. RESEARCH FINDINGS AND DISCUSSIONS

4.1 Descriptive Statistics

In this fragment of the survey, the characteristics of the factors employed in the study are outlined. This result encompasses both the outcomes of the factors utilized in the survey in terms of central tendency measures and dispersion. As a result, a summary of the descriptive result is provided in Table 4.1.

Table 4.1 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Financial Performance	64	2.296807	6.376873	.0023162	45.87379
Board Size	64	9.515625	3.182253	4	16
Board Independence	64	5.234375	2.158352	2	10
Board Tenure	64	3.703125	2.075402	1	8
Board Age	64	59.07813	3.609092	53	66
Firm Size	62	6.343862	1.259593	3.974595	9.105164

Source: Study Data (2023)

The output of the descriptive assessment conducted revealed that the average performance financially relating to the commercial and service listed enterprise was 2.296807, with a deviation of 6.376873 from standard mean. The data used for assessing the financial performance indicated that all values fell within the range of 0.0023162 (the lowest value) and 45.87379 (the highest value). Furthermore, the results of the survey indicated 9.515625 mean of board size, with a deviation from standard mean of 3.182253. The data employed for board size lies from a value that is minimum at 4 to that which is maximum at a 16 value. These findings suggest that the board-sized impact on listed Kenyan firms varies among the firms, as indicated by the deviation from the standard value of the deviation.

In the survey, board independence was examined as a factor, and the average mean was found to be 5.234375. The data used for this assessment had a standard deviation of 2.158352. With regard to the purview of average mean score the investigation's standard deviation, the value that is lowest and highest values observed for the survey were 2 and 10,

respectively. Another factor considered in the study was board tenure. The mean value for board tenure was recorded as 3.703125, with a deviation value of a standard 2.075402. This demonstrates that the data applied deviated from the mean of the investigation. The range of values used for board tenure fell between 1 and 8.

After examining the outputs of the other factors in the survey, it was found that board age had a mean average of 59.07813, with a deviation of 3.609092 from the standard mean. This indicates that the age of the board members have 53 years as a value that is minimum to 66 years as maximum number of years. Further, the investigation revealed that size of the firm had a mean value of 6.343862, with a standard of 1.259593 deviating from the mean. The survey results indicated that the value of 3.974595 as minimum value for size of the firm, while 9.105164 was revealed as the values maximized.

4.2 Model specification test

In panel analysis, a set of observations is described over a specific time period. It is important to assess the estimation from both fixed and random effect models to determine if the estimated parameters significantly differ from each other. To examine the differences in the estimated parameters, the Hausman Test was utilized. The claim that is regarded as the null states that the randomized model effect is preferred over the model effect that is fixed with the outputs illustrated in 4.2 Table.

Table 4.2: Model Specification Results

	(b)	(B)	(b-B)	Sqrt (diag(V_b-V_B))
	Fixed	Random	Difference	S.E.
Board Size	-.1970725	.3457034	-.5427759	.5806031
Board Independence	4.638524	2.127891	2.510633	.6464846
Board Tenure	.5565251	.1568771	.399648	.0896133
Board Age	-.1102696	-.1339781	.0237085	.1036439
Chi2 (3)	19.56			
Prob>chi2	0.0006			

Source: Study Data (2023)

The test outputs as obtainable in Table 4.2, demonstrated that the null claim could not be discarded. The discovery of the analysis portrayed that the fixed model effect was favored than the random model effect. The assessment, conducted at a level of 0.05 significance, yielded a 0.0006 p-value, that is lower compared to the p-value of 0.05 threshold. The preference for the fixed effect regression model was upheld.

4.3 Regression Analysis

After conducting the Hausman test, the study proceeded with the utilization of a regression of fixed effect model to analyze the research hypotheses. This model was employed to construct a panel regression model, which was then utilized to evaluated board structure effect on the performed financially firms that are deals in commercial and services listed. The outcome of the direct effect model can be found in Table 4.3.

Table 4.3: Direct Effect Regression Results

Financial Performance	Coef.	Robust Std. Err.	t	P>t	[95% Conf. Interval]
Board Size	-.1970725	.7643905	-0.26	0.804	-2.004569 1.610424
Board Independence	4.638524	1.798485	2.58	0.037	.3857839 8.891265
Board Tenure	.5565251	.6264096	0.89	0.404	-.9246981 2.037748
Board Age	-.1102696	.2782456	-0.40	0.704	-.768216 .5476767
_cons	-15.65406	16.50482	-0.95	0.374	-54.68177 23.37365
R ²	0.1582				
F(4,7)	3.07				
Prob>F	0.0930				

Source: Study Data (2023)

Based on the output obtained, the model was evaluated using a value of 3.07, which corresponded to a p-value of 0.0930. This indicated the model's insignificant in examining how board structure affect the performed Kenyan commercial listed and service listed firms financially. The outputs also depicted the model's goodness of fit, suggesting that the board structure had insignificantly affected the financially performed firms. The R-square value, which measures the fraction of financial performance variation accounted for by the explanatory factors, indicated that board structure accounted for 15.82% of the performed variations of Kenyan listed firms financially. The negative value (-15.65406) of the regression line's constant captures the regression line's intercept.

The results of the analysis indicated that board size was -0.1970725 in value, which was found to be insignificant at the 5 percent level with 0.804 p-value. This suggests that board size insignificant adverse effect on the performed financially of listed Kenya's firms. Specifically, increasing the board size would amount in decreasing 0.1970725% in performance financially. Board independence was found to significantly affect on financially performed firms positively. The coefficient for board independence was 4.638524, with an equivalent p-value of 0.037. This means that an increase in board independence would lead to a rise in performance of 4.638524% financially for listed firms in Kenya. In contrast, board tenure was uncovered to have a positive but insignificant performed financially effect for listed commercial and service firms. The coefficient for board tenure was 0.5565251%, signifying that an increase in board tenure would consequence in a slight increase of 0.5565251% in financial performance. Furthermore, the analysis unraveled that board age had an insignificant but negative effect on financial performance. The coefficient for board age was -0.1102696, with a p-value of 0.704. This suggests that an increase in the age of the board would lead to a decrease in financial performance by 0.1102696%.

Moderation Effect, Step One

To determine the significance of the moderation effect in the study, it is necessary to include the moderating variable (Whisman & McClelland, 2005). The moderating factor is introduced into the moderation model as an additional variable in the progression to the next step. If the moderating variable has an effect of significant on the explained factor, it is considered as an explanatory variable. However, if it is found to be insignificant, it is utilized as a moderator. Drawing from the outputs of the initial step of the analysis, it was determined that firm size was insignificant. The outcomes of the moderation effect test for the first step can be found in Table 4.4.

Table 4.4: Moderation Effect, Step One Results

Financial Performance	Coef.	Std. Err.	Z	P> z	[95% Conf. Interval]
Board Structure	.8674941	.7940072	1.09	0.311	-1.010034 2.745023
Firm Size	.1323812	.6086637	0.22	0.834	-1.30688 1.571642
_cons	-15.29113	16.12627	-0.95	0.375	-53.42369 22.84143
R ²	0.0147				
F (2, 7)	0.61				
Prob> F	0.5713				

Source: Study Data (2022)

Following from the presented results in Table 4.4, the R-squared was 0.0147. This indicates that board structure and firm size only accounted for 1.47 percent of the variations in financial performance, suggesting a low level of explanatory power. The statistical value of 0.61 and the matching p-value of 0.5713 were utilized to assess the model's significance using the F-value. However, the F-value was unraveled to be insignificant at the level of 0.05 significance. Therefore, it can be reached with the conclusion that in Kenya, the performed firms financially is not significantly affected by both board structure and firm size.

As noted by the findings presented in Table 4.4, it was observed that both board structure and the insertion of firm size as explanatory variables had a positive impact on the performed firms of Kenyan financially. Additionally, the outputs designated that firm size, when considered as an explanatory variable, had a positive but insignificant effect financially performed listed firms. The insignificant firm size on performed financially effect meets the requirement for proceeding to the evaluation of the moderating model in the second step.

Moderation Effect, Step Two

The second phase of the moderation test was conducted following the completion of the first step of the moderation model, which noted firm size to not have significant impact on the performed financially firms. In this stage, the focus was on examining the moderator’s significance in the nexus of board structure and performance financially. This involved analyzing the explanatory variable (board structure) interaction with the moderator (firm size). The output associated with the step-two model is depicted in Table 4.5.

Table 4.5: Moderation Effect, Step Two Results

Financial Performance	Coef.	Std. Err.	Z	P> z	[95% Conf. Interval]
Board Structure	4.352627	5.927067	0.73	0.487	-9.66266 18.36791
Firm Size	9.805217	14.70214	0.67	0.526	-24.95982 44.57025
Board Structure*Firm Size	-.5359352	.8094521	-0.66	0.529	-2.449985 1.378115
_cons	-78.9338	109.7041	-0.72	0.495	-338.3429 180.4753
R ²	0.0166				
F (3, 7)	0.41				
Prob>F	0.7489				

Source: Study Data (2023)

Relating to the outcomes in Table 4.5, the R-squared value was found to be 0.0166, indicating that the combined effects of board structure, firm size, and their interaction had limited explanatory power. Only 1.66% of the performance variation financially of Kenyan listed firms of commercial and services could be attributed to these factors. The value of 0.41, along with the associated p-value of 0.7489, indicated the model was not statistically significant. Therefore, it can be financially fulfilled that the performed firms financially of listed Kenyan commercial and service firms was not significantly influenced by board structure, firm size, or their combined effect.

As shown by the outputs, the presence of the moderator and the interaction of board structure with firm size were uncovered to have a negatively impacted the performed firms financially of Kenyan listed firms. The coefficient of -78.9338 indicates that, when other factors are held constant, the interaction between board structure and firm size leads to a decrease in the performance financially of these firms. Specifically, an increase in the nexus connecting board structure and firm size results in a reduction of 0.5359352% in the performance of Kenyan listed firms financially. It can be arrived at that the performance of finances of these firms is insignificantly affected by the interaction between board structure and firm size.

4.4 Hypothesis Testing

4.4.1 Board Size and Financial Performance of Commercial and Service Firms

The survey’s primary core was to evaluate board size the effect on the performed firms financially of Kenya firms that are listed. The hypothesis guiding the survey was experienced and the results supported the null hypothesized statement, indicating insignificant effect of board size on the performance financially of these firms. Accordingly concluded that board size insignificant performed firms financially, despite a positive relationship being observed. The alignment of the investigation is with John, Kamukama, and Fredrick (2020) established that board size and enterprise performance are significantly positively linked in private enterprises. Shukla, Narayanasamy and Krishnakumar (2020) concluded that the governing board size had a positive influence on the Indian banks’ accounting returns. Aliyu, Yahaya, and Mohammed (2020) unraveled that board size has significantly and positively impact on business piece. Tulung and Ramdani (2018) demonstrated that board size alongside its independence appreciably encouraging impact on the performance of regional development banks. The inconsistent findings of the investigation could be due to the different measurement techniques utilized in the experiments and the specific conditions under which the studies were carried out.

4.4.2 Board Independence and Financial Performance of Commercial and Service Firms

The inquiry also aimed to examine board independence effect on the financially performed listed Kenyan firms. The survey utilized a significance level of 0.05 to test the null premise, which posited that board independence has no effect of significant on performance financially. The outputs of the investigation revealed a p-value below 0.05, indicative of effect significantly of board independence on the performance of Kenyan listed commercial and service firms financially. The

null statement was discarded, suggesting that board independence plays a decisive role in the performance of these firms financially in Kenya. This output corroborates Tulung and Ramdani (2018) who established that board independence and size positively determine the performance of regional development banks in a manner that is significant. But contrary to Aluoch (2019) concluded that board independence showed a negative and insignificant connection with Tobin Q. Naciti (2019) discovered that having more independent directors' results in poorer sustainability performance. Shan (2019) uncovered that board independence and managerial ownership have opposing effects on corporate performance.

4.4.3 Board Tenure and Financial Performance of Commercial and Service Firms

The investigated aim was to evaluate board tenure effect on the financially performed above listed Kenyan firms financially. To achieve this objective, the survey employed a null proposition, which stated that board tenure has no effect of significant on the performed firms in Kenya that are listed financially. Based on the results of the analysis, the null hypothesis was supported, indicating that board tenure has an effect of insignificant on the performed listed firms in Kenya financially. The product aligned with Aluoch (2019) noted that board tenure had an inverse bond with return on assets. Contrarily, Bennouri *et al.* (2018) showed that female directorship tenure appreciably boosts ROA and ROE and dramatically declines Tobin's Q when system. Sin, Boon, Tze, and Wei (2016) found out that board size and tenure had a substantial impact on equity and assets returns. The variations in the findings could be explained by the specific contextual factors in which the studies were carried out, as well as the specific indicators used to measure board tenure.

4.4.4 Board Age and Financial Performance of Commercial and Service Firms

The inquiry's aim was to analyze how board age affects the performed firms listed in Kenya financially. To attain this objective, the survey applied a null premise, which stated that board age insignificantly affected the performed Kenyan listed firms financially. Based on the outputs of the analysis, the null supposition was supported, indicating that board age does insignificantly affect the performance of these firms financially in Kenya. The outcome aligned with Abdullah and Ismail (2013) discovered that ROA has been instituted negatively correlate with age diversity. Uncooperatively, Bhatt and Bhatt (2017) noted a significant and positive correlation of board age with corporate performance. The diverse outcomes could be attributed to diverse contextual framework employed in the studies.

4.4.5 Moderating effect of Firm Size on the nexus between Board Structure and Financial Performance of Commercial and Service Firms

The investigative aim was to assess the manner through which the effect of moderation of firm size was on the nexus of board structure with the financially performed Kenyan listed firms. The inquiry utilized a significance level of 0.05 to evaluate the claim that firm size has insignificantly moderated the effect on this nexus. Relying on the results of the analysis, the null hypothesis was supported, indicating that firm size has significantly effect of moderation on the linkage board structure with performance financially of firms in Kenya. The output tallied with Obaje, Abdullahi and Ude (2021) that discovered that the significance of diversity of the gender and independence was realized owing to the moderation firm size effect has on board structure and ROA negatively. Tanui and Serebemuom (2021) also uncovered that the association between corporate diversification and financial success was significantly and negatively moderated by the addition of firm size as a moderating variable. Furthermore, Eyigege (2018) revealed that firm size negatively and insignificantly affect financial performance of DMBs in Nigeria. The discrepancies in the results of the investigation could be attributed to the heterogeneity in firm sizes and the diverse measurement methodologies employed in the various studies.

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The investigation's specific objectives led to various conclusions. The survey examined the effect of board structure on the performance financially of listed commercially and service firms in Kenya. Specifically, it analyzed the effects of board size, board independence, board tenure, and board age on the performed firms financially, with the size of the firm serving as a moderating factor in the linkage of board structure with performance financially. The outputs unraveled that board size inversely affected insignificant the performed listed Kenyan firms financially. Consequently, the investigation concluded that changes in board size would have an insignificant impact on the performance of these firms financially. Board independence was discovered to have positively and significantly affected the performed of listed firms in Kenya

financially. Therefore, the conclusion drawn from this finding is that board independence plays a crucial role in driving the financially performed Kenyan listed commercial and service firms.

The investigation's further conclusions unraveled that board tenure positively but insignificantly affected the performed of listed firms financially in Kenya. This suggests that board tenure has not been a significant determinant of financial performance in these firms. Despite the potential impact of board tenure on the performed commercial and service firms financially, its effectiveness has been limited in the Kenyan context. Additionally, board age was uncovered to insignificantly and inversely affect the performed listed firms financially. The survey concluded that board age has an insignificant impact on performance financially. The moderation test uncovered that firm size does insignificantly moderates the nexus of board structure with financially performed Kenyan listed commercial and service firms. Therefore, the investigation concluded that the linkage of board structure with financial performance in these firms is not significantly influenced by firm size.

5.2 Policy Recommendations

As contained in the output of the investigation, it is recommended that the management of Kenyan listed firms should consider reducing the size of the board to improve performance financially. The survey unraveled board size to negatively and insignificant affect financial performance. Therefore, by reducing the board size, the firms may enhance their performance financially.

Based on the evaluation of the specific objective, it was uncovered that board independence had a positive and significantly impact on the performance of commercial and service firms financially that are listed in Kenya. Therefore, it is recommended to enhance the independence of the board in order to further enhance the performance of these listed firms financially.

The outputs of the inquiry demonstrate a positive but insignificant impact of board tenure on the performance of the firms financially listed. The shareholders of the firms should device better ways through which the tenure of the firms can be increase to allow for the board to reach maximum performance.

The outcomes of the survey revealed a negative and insignificant nexus of board age with the performance financially of listed Kenyan firms. In view of this outcome, it is advice that the average age of the board should be reduce to allow more participation of the younger people who are digitally and technologically inclined compared to those who have advanced in age.

5.3 Suggestion for Further Research

The Kenyan listed commercial and service firms were the investigation' subject matter. The output of the survey suggests that additional survey can be conducted to determine why board size, board tenure and board age are insignificant on the listed commercial and service forms financial performance. Other studies can be conducted to establish the board structure effect on the profitability of the non-listed commercial and service firms. Furthermore, an investigation can be perform as well to find out the effect of board structure on the financial stability of all commercial and service firms in Kenya.

REFERENCES

- [1] Abdullah, S.N., & Ismail, K.N.I.K. (2013). Gender, Ethnic and Age Diversity of the Boards of Large Malaysian Firms and Performance. *Journal Pengurusan*, 38, 27-40.
- [2] Aguilera, R., Florackis, C. & Kim, H. (2016). Advancing the Corporate Governance Research Agenda. *Corporate Governance: An International Review*, 24(3), 172–180
- [3] Almustafa, H. H. (2017). *National governance, corporate governance and firm performance: Empirical evidence from two MENA countries –Jordan and UAE [PhD Thesis]*, University of Salford
- [4] Akisimire, R., Masoud, M.S., Baisi, M. D. & Orobia, L. A. (2016). Board Member Age Diversity and Financial Performance of Manufacturing Firms: A Developing Economy Perspective. *Journal of Economics and Behavioral Studies, AMH International*, 8(5), 120-132
- [5] Akims, M. A. & Akims, K. A. (2019). Prudential Regulations and Profitability of Commercial Banks Listed at the Nairobi Securities Exchange, Kenya. *IOSR Journal of Economics and Finance (IOSR-JEF)*, 10 (6): 68 – 74

- [6] Aluoch, M. O. (2019). *Corporate Governance, Financial Characteristics, Macroeconomic factors and Performance of Firms Listed at the Nairobi Securities Exchange [PhD Thesis]*, University of Nairobi.
- [7] Arnaboldi, F., Casu, B., Kalotychou, E., & Sarkisyan, A. (2018). The performance effects of board heterogeneity: what works for EU banks? *The European Journal of Finance*, 1–28. doi:10.1080/1351847x.2018.1479719
- [8] Besley, D. A. (1991). *Conditioning diagnostics: collinearity and weak data in regression*. New York: John Wiley
- [9] Bennouri, M., Chtioui, T., Nagati, H., & Nekhili, M. (2018). Female board directorship and firm performance: What really matters? *Journal of Banking & Finance*, 88, 267–291. doi:10.1016/j.jbankfin.2017.12.01
- [10] Bhandari, A. (2018). *Corporate Governance*. Retrieved from <https://www.researchgate.net/publication/325987114>.
- [11] Bhatt, P.R. & Bhatt, R.R. (2017). Corporate governance and firm performance in Malaysia. *Corporate Governance*, 17(5), 896-912. <https://doi.org/10.1108/CG-03-2016-0054>
- [12] Blumberg, B. F., Cooper, D. R., & Schindler, P. S. (2014). *Business Research Methods* (Fourth Edition ed.). McGraw Hill.
- [13] Chen, J., Leung, W. S., Song, W., & Goergen, M. (2019). When Women Are on Boards, Male Ceos Are Less Overconfident. *Harvard Business Review*.
- [14] Cooper, D., & Schindler, P. (2008). *Business research methods, (10th ed.)*. New York: McGraw-Hill/Irwin
- [15] Creswell, J. W. (2006). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research, (2nd ed.)*. Pearson Merrill Prentice Hall
- [16] Devi, S., Warasniasih, N. M.S., Masdiantini, P. R. & Musmini, L. S. (2020). The Impact of COVID-19 Pandemic on the Financial Performance of Firms on the Indonesia Stock Exchange. *Journal of Economics, Business, and Accountancy Ventura*, 23(2), 226 – 242.
- [17] Dharmadasa, P., Gamage, P. & Herath, S. K. (2021). Corporate Governance, Board Characteristics and Firm Performance: Evidence from Sri Lanka. *South Asian Journal of Management*, 21(1), 7-31.
- [18] Donaldson, L., & Davis, J. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Academy of Management Review*, 20(1), 65-73.
- [19] Dumay, J., Torre, M. L. & Farneti, F. (2014). Developing trust through stewardship Implications for intellectual capital, integrated reporting, and the EU Directive 2014/95/EU. Retrieved from <https://www.researchgate.net/publication/329426889>
- [20] Eyigege, A. I. (2018). Influence of Firm Size on Financial Performance of Deposit Money Banks Quoted on the Nigeria Stock Exchange. *International Journal of Economics and Financial Research*, 4(9), 297-302.
- [21] Field, A. (2009). *Discovering statistics using SPSS, second edition*. London: sage
- [22] Guluma, T. F. (2021). The impact of corporate governance measures on firm performance: the influences of managerial overconfidence. *Future Business Journal*, 7(1), 2-18
- [23] Guney, Y., Karpuz, A. & Komba, G. (2020). The effects of board attributes on corporate performance: evidence from east African frontier markets. *Research in International Business and Finance*, forthcoming. <https://doi.org/10.1016/j.ribaf.2020.101222>
- [24] Hair, J. F. (2010). *Multivariate Data Analysis (7 ed.)*. New York: Pearson.
- [25] Hassan, A., & Lukong, P. B. (2012). *Corporate governance in banking industry: Gender diversity in boardrooms: A quantitative study of Swedish-banks during the period 2001-2010 [Master's Thesis]*, Umea School of Business.
- [26] Hecking, S. (2002). *The relationship between shareholder value orientation and shareholder value creation [PhD Dissertation]*, Universitat Autònoma de Barcelona
- [27] Hidayat, A. A., & Utama, S. (2017). Board characteristics and firm performance: Evidence from Indonesia. *International Research Journal of Business Studies*, 8(3), 137-154

- [28] Hossain, M. S. & Saif, A. N. M. (2019). Impact of Firm Size on Financial Performance of Banking Companies in Bangladesh. *Journal of Banking & Financial Services*, 11(2), 144-160
- [29] Ichsan, R. N., Suparmin, S., Yusuf, M., Ismal, R. & Sitompul, S. (2021). Determinant of Sharia Bank's Financial Performance during the Covid-19 Pandemic. *Budapest International Research and Critics Institute-Journal*, 4(1), 298-309
- [30] Jermias, J., & Gani, L. (2014). The impact of board capital and board characteristics on firm performance. *The British Accounting Review*, 46(2), 135-153.
- [31] Jha, S. & Hui, X. (2012). A comparison of financial performance of commercial banks: A case study of Nepal. *African Journal of Business Management*, 6(25), 7601-7611.
- [32] John, R., Kamukama, N. & Fredrick, N. K. (2020). Corporate board size and financial performance of private limited companies in Uganda. *International Journal of Business Strategies*, 5(1/1), 1 – 14
- [33] Kabochi, A. W. (2020). *Effect of regulation on financial performance of commercial banks in Kenya*, [Master Thesis], University of Nairobi
- [34] Karlina, Y. & Lako, A. (2020). The Impact of Financial Performance, Financial Risk, Liquidity, and Corporate Governance on Corporate Value. *Journal of Management and Business Environment*, 1(2), 154-177.
- [35] Kothari, S. (2014). *Essays in Macroeconomics*. Stanford University. Retrieved from <http://purl.stanford.edu/ws388fk4159>
- [36] Kyereboah-Coleman, A. (2008). Corporate Governance and Firm Performance in Africa: A Dynamic Panel Data Analysis, *Studies in Economics and Econometrics*, 32(2), 1-24, DOI: 10.1080/10800379.2008.12106447
- [37] Lasisi, T. I. (2017). *The Relationship between Corporate Governance and Organizational Performance in Nigerian Companies [PhD Thesis]*, Walden University.
- [38] Madison, K., Holt, D. T., Kellermanns, F. W. & Ranft, A. L. (2016). Viewing Family Firm Behavior and Governance through the Lens of Agency and Stewardship Theories. *Family Business Review*, 29(1), 65–93.
- [39] Mbalwa, P. N. (2015). *Effect Of Corporate Governance On Performance Of Sugar Manufacturing Firms In Kenya: A Case Of Firms In Western Kenya [Master Thesis]*, Egerton University
- [40] Meah, M. R & Chaudhory, N. U (2019). Corporate Governance and Firm's Profitability: An Emerging Economy-based Investigation. *Indian Journal of Corporate Governance*, 12(1) 71–93, 2019
- [41] Meckling, W. H., & Jensen, M. C. (1976). Theory of the firm: Managerial behavior, agency costs and investment decisions. *Journal of Financial Economics*, 3(4), 305-360
- [42] Meme, F. K (2017). *Board Characteristics and Financial Performance of Manufacturing Firms Listed at the Nairobi Securities Exchange in Kenya [Master Thesis]*, Kenyatta University
- [43] Meng, F., Baud, P., Ge, H. & Wong, T. (2018). The effect of stress on limestone permeability and effective stress behavior of damaged samples – original data used for figures. *PANGAEA*, <https://doi.org/10.1594/PANGAEA.892173>.
- [44] Meyer, E., & de Wet, J. H. v. H. (2013). The impact of board structure on the financial performance of listed South African companies. *Corporate Board: role, duties and composition*, 9(3), 18-31. <https://doi.org/10.22495/cbv9i3art2>
- [45] Muchemwa, M. R., Padia, N., & Callaghan, C. W. (2016). Board composition, board size and financial performance of Johannesburg stock exchange companies. *South African Journal of Economic and Management Sciences*, 19(4), 497-513.
- [46] Mugenda, A., & Mugenda, O. (2013). *Research methods: Quantitative and Qualitative Approaches*. Nairobi: ACTS Press.
- [47] Muhindi, K. A. & Ngaba, D. (2018). Effect of firm size on financial performance on banks: Case of commercial banks in Kenya. *International Academic Journal of Economics and Finance*, 3(1), 175-190

- [48] Naciti, V. (2019). Corporate governance and board of directors: the effect of a board composition on firm sustainability performance. *Journal of Cleaner Production*, 117727. doi:10.1016/j.jclepro.2019.117727
- [49] Nakpodia, F. & Olan, F. (2022). Corporate governance reform in Nigeria: upstream and downstream interventions. *Corporate Governance*, 22(5), 979-1003. <https://doi.org/10.1108/CG-09-2021-0347>.
- [50] Ngo, M. T. ., Pham, T. H. V. ., & Luu, T. T. T. . (2019). Effect of Board Diversity on Financial Performance of the Vietnamese Listed Firms. *Asian Economic and Financial Review*, 9(7), 743–751. <https://doi.org/10.18488/journal.aefr.2019.97.743.751>
- [51] Ngugi, A.K., Bottomley, C., Scott, J.A.G., Mung’ala–Odera, V., Bauni, E., Sander, J.W., Kleinschmidt, I. & Newton, C. R. (2013). Incidence of convulsive epilepsy in a rural area in Kenya. *Epilepsia*, 54(8), 1352–1359
- [52] Obaje, F. O., Abdullahi, S. R. & Ude, A. O. (2021). Moderating Effect of Firm Size on the Relationship between Board Structure and Firm Financial Performance. *Journal of Good Governance and Sustainable Development in Africa*, 6(3), 97-117
- [53] Pfeffer, J. (1973). Size, composition, and function of hospital boards of directors: A study of organization environment linkage. *Administrative Science Quarterly*, 18: 349-364
- [54] Phung, D. N., & Mishra, A. V. (2016). Ownership structure and firm performance: Evidence from Vietnamese listed firms. *Australian Economic Papers*, 55(1), 63-98.
- [55] Puspitasari, E., Sudiyatno, B., Hartoto, W. E. & Widati, L. W. (2021). Net Interest Margin and Return on Assets: A Case Study in Indonesia. *Journal of Asian Finance, Economics and Business*, 8(4), 0727–0734.
- [56] Sangmi, M. and Nazir, T. (2010). Analyzing financial performance of commercial banks in India. *Pak. Commer. Soc. Sci.*, 4(1), 40-55.
- [57] Shan, Y. G. (2019). Managerial ownership, board independence and firm performance. *Accounting Research Journal*, 32(2), 203-220. <https://doi.org/10.1108/ARJ-09-2017-0149>
- [58] Shukla, A., Narayanasamy, S. & Krishnakumar, R. (2020). Impact of board size on the accounting returns and the asset quality of Indian banks. *International Journal of Law and Management*, 62(4), 297 313. <https://doi.org/10.1108/IJLMA-12-2018-0271>
- [59] Sin, H. N., Boon, H. T, Tze, S. O. & Wei, N. S. (2016). The relationship between board characteristics and firm financial performance in Malaysia. *Corporate Ownership & Control*, 14(1), 259-268
- [60] Siswanto, N., & Fuad, F. (2017). The impact of audit committee characteristics on Sweeney, A. P. (1994). Debt-covenant violations and managers’ accounting responses. *Journal of Accounting and Economics*, 17(3), 281–308
- [61] Squires, B. & Elnahla, N. (2020). The roles played by boards of directors: an integration of the agency and stakeholder theories. *Transnational Corporations Review*, 12(2), 126-139, DOI: 10.1080/19186444.2020.1757340
- [62] Tanui, P. J. & Serebemuom, B. M. (2021). Corporate Diversification and Financial Performance of Listed Firms in Kenya: Does Firm Size Matter? *Journal of Advanced Research in Economics and Administrative Sciences*, 2(3), 65-77.
- [63] Tulung, J. E., & Ramdani, D. (2018). Independence, size and performance of the board: An emerging market research. *Corporate Ownership & Control*, 15(2-1), 201-208. <http://doi.org/10.22495/cocv15i2c1p6>
- [64] Untoro, W., & Rahardian, R. (2015). Firm Size and Diversification Strategies: Does Labor Intensity Matter? *Corporate Ownership & Control*, 327.