

**THE EFFECT OF BOARD CHARACTERISTICS ON FIRM VALUE OF LISTED
BANKS IN KENYA**

BY

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DECLARATION

I declare that this dissertation is my original work and has not been published or submitted elsewhere for award of degree. I also declare that it contains no material written or published by other people except where due reference is made and author duly acknowledged.

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ABSTRACT

Primarily, the role of governing boards is to oversight and also support management in its pursuit of increasing the economic value of the corporation. To achieve these, governing boards require an appropriate structure and this according to research, involves several dimensions. The most highlighted dimensions are diversity and complementarity; while others relate to the number of “inside” vis-à-vis “outside” directors, experience, director’s knowledgeability, and board size. Thus, this study sought to examine the effect of board characteristics on firm value of listed banks at the NSE. Specifically, this research sought to determine if board meetings, board size and board gender diversity have an effect on firm value. The study was based on agency theory, resource-based view theory and resource dependency theory. The study employed a correlational research design to attain its objective. The target population for the study was 10 banks listed at the Nairobi Securities Exchange during FY’s 2008 to 2021, 14-year data being collected from secondary sources and analysed using STATA version 12. The study established that, board gender had a positive but insignificant relationship with firm value as proxied by Tobin’s Q, while board size had a positive and significant relationship with firm value, whereas board meetings had a negative and insignificant relationship with firm value.

Key words: Board of Directors Characteristics, Firm value, Board Size, Board Gender Diversity, Board Meetings.

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DEDICATION

My family has been a bedrock and pillar throughout the study period; hence I dedicate this proposal to them. May Yahweh protect and shower you with His blessings.

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ACRONYMS AND ABBREVIATIONS

CalPERS California Public Employees Retirement System

AIMA Alternative Investment Management Association

IFSA International Financial Services Authority

CEO Chief Executive Officer

CMA Capital Markets Authority

KBA Kenya Bankers Association

NSE Nairobi Securities Exchange

KCB Kenya Commercial Bank

NBK National Bank of Kenya

CAK Competition Authority of Kenya

CFO Chief Financial Officer

FY Financial Year

RBV Resource Base View

RDT Resource Dependency Theory

OPERATIONAL DEFINITION OF TERMS

Board Gender Diversity: The ratio of female members serving on a given board (Nhan & Quy, 2013).

Board Meetings: The number of times that directors of governing boards meet on a daily basis (Ali & Oudat, 2021).

Board Size: The sum total of directors serving on the board of a given firm (Nhan & Quy, 2013)

Firm Value: The sum total of actual market worth of ordinary shares and estimated market worth of preferential shares and debt (Abdullah, Mazurina & Haron, 2017).

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Several events in the recent past have increased interest in corporate governance practices in both developed and developing economies (Naseem, Xian, Riaz & Rehman, 2017). Koech, Namusonge and Mugambi (2017), concur that, the recent past has seen increased interest in corporate governance among scholars, media and practitioners due to high profile collapses of major world corporations due to failure of governance systems in the prevention of corruption and the implementation of risk management processes. Contextually, according to Naseem *et al.* (2017), good corporate governance helps emerging economies achieve a raft of policy objectives such as strengthening property rights, minimizing the likelihood of financial crises, reduction in the cost of capital and operational costs thereby leading to efficient market development.

The spectacular collapse of giants such as Coloroll, Ferranti, and Maxwell Empire in the UK, WorldCom, Lehman Brothers and Enron among others in the US had a serious impact on corporate governance practice (Naseem *et al.*, 2017). The Asian economic crisis of 1997 also contributed significantly to the rise in the profile of corporate governance practices as it was linked to weak corporate governance practices. In developing countries, Meme (2017), posits that corporate governance frameworks continued to decline. She argues that, Kenya for example lagged behind other nations due to failure by companies in complying with requirements of board composition. Thus, due to poor governance practices, large corporates such as CMC Motors and Unga Group experienced corporate failures occasioned by weak financial performance.

Scholars such as Koech *et al.* (2017), aver that, there was widespread erosion of corporate governance standards all over the global financial markets, arguing that, unethical and questionable practices were being accepted, in addition to allegations of gross malfeasance in corporate activities. These had a net effect of undermining investor and shareholder faith in global financial markets.

Failures occasioned by governing boards led to increased focus and regulation by Congress and Regulators in the US (Naseem *et al.*, 2017). The Sarbanes-Oxley Act of 2002 for example, requires independence of audit committees, financial literacy and at least one member possessing accounting or expertise in financial management. After the passage of SOA, NYSE and NASDAQ reviewed their listing requirements with regard to the independence of the audit committee. In Kenya, the Capital Markets Authority (CMA) Act of 2015 prescribes board composition. This code of corporate governance practices, is for adoption by both firms listed at the NSE and non-listed public firms.

The CMA Act of 2015 presupposes that, balanced boards constitute effective boards. Thus, board structure is key in this code as it allots more weight to the composition of the board. Implicit in the requirements by regulators, is that oversighting by governing boards is viewed as a key aspect of governing boards, as it is argued that a well-designed governing board can have a positive impact on the value of a firm (Naseem *et al.*, 2017). Firm value is a key asset for the business as it helps organizations in reputation building, attraction of funds and also boosting a country's economy for sustainable development (Nhan & Quy, 2014).

However, Koech *et al.* (2017), argue that, there is still lack of congruence on ideal structures of corporate governance that safeguard shareholder assets while at the same time promoting

ventures that serve as avenues for wealth creation. According to Gharaibeh and Qadar (2017), the ultimate objective of any organization is to maximize stockholder value.

Boards of directors collectively hold the position of highest governing authority in the organization, responsible for the long-term success of the organization (Westby, 2014). He further posits that, shareholders in publicly held organizations appoint the board of directors, overseen by the Chairman, who are legally obliged to represent their interests by monitoring and supervising managers to ensure their behavior is aligned with their interests; as well as providing opinion and direction for key strategic business decisions and ensuring effective implementation of strategy.

Ideal governing boards provide independent advice and oversight of management that is appropriate with the needs of the organization (Zahra & Pearce II, 1989) as cited in Nhan and Quy (2013). These functions are usually key around decisions deemed strategic for example mergers, which can potentially and significantly impact firm value. They further posit that, based on conventional wisdom, higher levels of board independence enable greater monitoring and improved organizational performance.

Thus, governing boards play a key role in the administration of organizations, hence an understanding of how the characteristics and effectiveness of governing boards affects governance of corporations is key, not least because agency theory postulates that the role of governing boards is to make sure that resolutions made by the owners of the firm are implemented in their interest (Farhan & Shanikat, 2019). Viewed from the theory of agency, governing boards' role is to act as ratifiers of decisions that need implementation; and as controllers in the monitoring of the implementation and performance of these decisions. They posit that, primarily, the role of governing boards is to support management's pursuit to increase the economic value of the corporation.

Board characteristics are a key aspect of corporate governance practice and copious literature is available on the relationship between parameters of a governing board and financial performance of a firm (Naseem *et al.*, 2017). However, in spite of the abundant literature about this association and the progress in the day-to-day area of corporate governance, inconclusive results on the relationship still abound in previous studies (Azar, Rad & Botyari, 2014). Thus, a study on the nexus between board characteristics and firm value is useful in understanding corporate governance practices especially in Kenya. Naseem *et al.* (2017), posit that, even in developed countries, the association is not strongly established. The lack of convergence is the key driver behind this study.

According to Gompers *et al.* (2003) as cited in Koech *et al.* (2017), good governance increases the valuation and also boosts the bottom line of a corporation. The value of a firm is a key resource for any business, since besides helping firms build good reputations and attract capital, it's a significant contributor to a country's economic development (Garg & Tanwer, 2020). The presence of this characteristic enables prospective investors make decisions on new investments, with current investors taking decisions on either holding onto their investments or divesting the same (Abubakar, Olayoonu, Adewale & Kpanga, 2020). Gharaibeh and Qader (2017), argue that the main objective of firms is to maximize stockholder wealth or value. Stockholder wealth can be augmented either through earning dividends or through capital gains.

Thus, firm administration concerns itself with how financiers of capital to firms assure themselves of earning expected returns; and governing boards act as bridges between stockholders (financiers) and managers (Nhan & Quy, 2013). Sheikh and Rees (1995), as cited in Darko, Aribi and Uzonwane (2015), posit that, the concept of firm administration is majorly grounded in

governing boards' accountability to stockholders in lieu of their responsibilities in ensuring maximization of wealth.

According to Rajhan and Kaur (2013), in order to enhance firm value, a fundamental question is determining factors that play a key role in affecting market price of a firm. Muller (2013), argues that, logically (though disputable) managerial capabilities of governing boards should supposedly impact organizational financial performance significantly; however, it is not reasonably proven if board composition significantly influences firm performance. Thus, boards of directors require an appropriate structure and this according to their research, involves several dimensions.

According to Nhan and Quy (2013), the dimensions to be put into consideration include the independence of the board, the size of the board, the diversity of the board, and the leadership structure of the board. Salem, Metawe, Youssef and Mohamed (2019), aver that, studies tend to dwell particularly on five board directorship characteristics which are, CEO duality, board size, independent directors, board meetings and gender diversity. However, this study will focus on three board characteristics which are board meetings, board size and board gender diversity; and will seek to answer questions on the relationship between these three characteristics and firm value.

Because CEO duality was not observed in the Kenyan context, and board independence was highly correlated to board size in an earlier analysis, these two constructs were omitted from the study. Mugo (2015), posits that, the preferred board structure according to the commonwealth code of corporate governance is unitary; consisting of executive and non-executive directors, both in balanced proportions. It further recommends the separation of the role of the Chairman and CEO. However, where these positions are occupied by the same person, the independence of the non-executive directors should be sufficient to effectively check the office-bearer.

The first dimension of board characteristics which is board meetings, is defined as a formal setup that deliberates on important matters and issues that are critical for a firm's progress and growth (Eluyela *et al.*, 2018). Ali and Oudat (2021), define board meetings as, the number of times that directors of governing boards meet on a daily basis. Frequent board meetings are important for overall effectiveness and efficiency of every governing board; and the expectation is that each and every board member attends all board meetings as it also forms a base for re-nomination. Johl, Kaur and Cooper (2015), aver that, it can be argued that, the frequency and attendance of board meetings is a key channel for directors to obtain firm-specific information and enabled to discharge their role as monitors of management.

According to Ali and Oudat (2021), the significance of board meetings is that they improve jointly agreed-upon decision-making, which then increases the awareness of a firm's financial and non-financial position hence allowing it to improve its control efficiency. According to Eluyela *et al.* (2018), the frequency of board meetings serves as a critical medium to effectively harmonize opinion geared towards the achievement of company objectives. Ntim and Osei (2011), contend that, frequent board meetings offer board members ample time to confer, to set strategy and to appraise management. This helps board members remain knowledgeable and informed regarding critical developments within the organization thus placing them in good stead to address emergent critical problems in a timely fashion. Francis, Hassan and Wu (2014), posit that, in a financial crisis, firms with poor attendance of board meetings perform significantly lower than firms with good attendance.

The second dimension which is board size is the sum total of directors serving on the board of a given firm and which includes the Chairman, the CEO, executive directors, non-executive directors and independent outside directors (Nhan & Quy, 2013). Badu and Appiah (2017), posit

that, board size's importance in influencing firm performance, is backed by literature. They add that, different governance theories are supportive of this relationship with agency theory advocating for larger boards, while stewardship theory advocates for much smaller boards for easier governance. Agency theory presupposes that a large board enhances the performance of a firm through effective monitoring. The resource dependency theory is also supportive of this view with its proposition that, a large board enhances firm performance by bringing in a wide range of knowledge and expertise from different fields.

Lastly, board gender diversity is the ratio of female members serving on a given board (Nhan & Quy, 2013). According to Freitas (2018), in the recent past, there has been political pressure, projects and public movements for the advancement of diversity. He adds that, a major shift in the paradigm of management has been the ever-increasing attribution to the importance of board diversity; be it religious, ethnic or gender. He argues that, in Europe, legislation has been a key driver of diversity through imposition of mandatory quotas for women to serve on governing boards. This has created major challenges since not only are firms forced to move out of comfort zones and put effort in the finding of new female board members, but also because diversity in gender brings new perspectives and increased discussion regarding corporate activities, which may lead to improved monitoring.

Theoretically, according to Freitas (2018), arguments that are supportive of the view that a more diverse board leads to increased financial health of a firm abound. He posits that, women serving on governing boards bring "a unique set of cognitive understanding," that is not distributed uniformly across the population and which tends to vary with gender and other characteristics, thus enhancing innovation and creativity, which can be utilized either for business development or

solving problems. Syamsudin, Setiany & Sajidah (2018), aver that, board diversity through various ways, affects firm financial value both in the short and long run.

However, heterogeneous boards according to Hambrick and Mason (1984), as cited in Syamsudin *et al.* (2018), tend to cause top management to spend a lot of time on debates, such that a firm is not able to respond promptly to changes in the market, especially for firms operating in competitive environments. Thus, diversity may amplify conflicts, and even though better decisions may be taken, a firm may still experience a negative effect, that is, a decision-making process that is slow.

Thus, governing boards play a critical role in corporate performance. However, the critical roles of governing boards which form part of a sound firm management system, have given impetus to researchers interested in determining the value relevance of effective boards of directors (Dunstan, Keeper, Truong & Zijl, 2011). Heenetigala and Armstrong (2018), argue that, corporate governance research should be country specific, since the organization of corporate governance differs among countries based on their social, political and economic constructs. According to Muller (2013), to identify and analyze factors that impinge financial performance of firms, is of significant relevance to both practitioners and academia.

Despite the call, there still exists a gap in literature on corporate governance mainly in developing economies (Darko *et al.*, 2016). Mburu and Kagiri (2015), posit that, the subject matter of firm administration has received much attention in advanced market economies for some time now, mainly among large corporates. Subsequently, the concept is consistently gaining cognizance in the policy agenda of African countries such as South Africa and Ghana. According to Ntim (2013), most research on corporate governance gives a glance into board and financial

performance relationships in advanced economies of Europe, emerging economies of the Americas and Asia-Pacific. In developing economies, especially Sub-Saharan Africa, less insights regarding the relationship between board characteristics and financial performance is available. Assenga, Aly and Hussainey (2011), argue that, the East Asian crisis of 1997 and the never-ending cycle of poor performance of the corporate sector in Africa, have amplified debate on the concept of corporate governance, especially in reference to economic development.

According to Van den Berghe and Levrau (2004), as cited in Muller (2013), boards of directors require an appropriate structure and this according to their research, involves several dimensions. The most highlighted dimensions are diversity and complementarity; while others relate to the number of “inside” vis-à-vis “outside” directors, experience, director’s knowledgeability, and board size (Muller, 2013). He adds that, boards should be composed of a mix of individuals with differing personalities, functional, occupational and educational backgrounds, but above all, complementarity is emphasized.

1.1.1 Board Characteristics

Governing boards engage in administration of firms, both as executive directors and non-executive directors (Muller, 2013). Boards of directors are said to be the bedrock of firm administration as it is argued that, effective boards improve firm administration (Tricker, 2012). According to Westby (2014), the board of directors collectively hold the position of highest governing authority in the organization, responsible for the long-term success of the organization.

A board of directors is a firm governance mechanism aimed at protecting the interests of a firm’s stockholders (Madison, 2014). It is therefore, a key internal governance mechanism because of its role in overseeing managers, ratifying decisions and setting the strategic direction for the

organization (Santos, Barros & Da Silveira, 2017). According to Nhan and Quy (2013), a board of directors oversees management on behalf of shareholders, and also serves as a bridge between management and shareholders. Thus, using governing boards effectively as an internal governance mechanism is key to ramping up organizational performance and profitability.

One of the prominent features of a board of director's characteristics is the frequency of board meetings (Ntim & Osei, 2011). A key proxy in the measurement of the effectiveness and intensity of managerial monitoring and disciplining, regularity of board meetings is looked at as an important avenue for improving corporate governance. Johl, Kaur and Johl (2015), categorize board meetings as one of the important governance tools that help advise and guide management in their pursuit of shareholder interest.

According to Johl *et al.* (2015), there exists no stated corporate governance law that determines the base number of meetings that a board member has to attend. They posit that, the code of corporate practice in Malaysia mandates governing boards to disclose the number of board meetings and the attendance details of individual board members with respect to board meetings held in a given year. Locally, the CMA code of corporate practice requires more disclosure by listed firms thus ensuring transparency. The implication is that, control over directors' individual diligence is subjective and internal to the Chairman of that meeting. Johl *et al.* (2015), argue that, generally as relates to frequency of board meetings, the fewer the board meetings the better the performance of the organization as a whole.

From the agency theory perspective, Ntim and Osei (2011), contend that, directors are appointed by shareholders to create an atmosphere of discipline, set timely and achievable strategic plans, and effectively control management thus ensuring performance that leads to maximization

of stockholder value. To achieve these, it is important for governing boards to meet frequently thus increasing their advising capacity and control, and ensuring discipline is maintained in the firm which enhances performance of the corporation. They add that, board decisions can also be effectively monitored through regular meetings of the board.

In the same vein, from the agency theory perspective, Atty, Moustafasoliman and Youssef (2018), aver with Ntim and Osei (2011), in the sense that, if a governing board is conscientious in its discharge of responsibilities, it gains more control and the level of oversight is enhanced. Viewed from this lens, regular board meetings afford directors the opportunity to persistently perform their duties while considering the interests of the shareholder. Sawalqa (2021), posits that, the belief of agency theory is that, regular meetings of the board enhance the value of the firm as it keeps managerial activities under board control, which then forces management to perform in shareholders' favor. Jensen (1983), as cited in Sawalqa (2021), argues that, from this premise, regular meetings of the board are critical because of their coordination of plans, and provision of opportunity to different managerial levels to understand their activities and desires in the organization.

The second dimension of board of directors' characteristics is board size. Board size is seen as a key factor that can be used to influence the monitoring function and the decision-making process of a governing board (Badu & Appiah, 2017). They define board size as, the sum total of directors on the governing board of a given firm. However, Adebayo, Ringim and Shaibu (2022), argue that, identifying an appropriate board size that affects its ability to function effectively has been a matter of unending debate.

According to Adebayo *et al.* (2022), some scholars are in favor of smaller boards by suggesting that, larger boards are faced with problems of free-riding. Others endorse smaller boards because they are deemed as efficient since they have lesser problems of communication and decision making due to greater coordination. Badu and Appiah (2017), posit that, small governing boards are deemed to be more effective, and that organizations with smaller board sizes achieve higher market valuation. They add that, evidence supporting smaller boards effectiveness in the monitoring of a firm's CEO due to reduced coordination and the free-rider problem abound.

Contrarily, Badu and Appiah (2017), posit that, other scholars are in favor of larger boards, with the assumption that, they provide organizations with superior monitoring, since they have more experience and time as compared to smaller boards. Adebayo *et al.* (2022), aver that, effective monitoring of a governing board is closely linked to larger boards due to their ability to share out their workload over a larger number of board members. They add that, research also associates large boards with either higher or lower levels of earnings management and poor firm performance.

From the perspective of agency theory, a large board reduces the risk of a CEO dominating within a governing board, protects stockholder interest, and is effective at the role of monitoring (Badu & Appiah, 2017). A large board increases its bargaining position vis-à-vis the CEO. It also makes it easier to apportion specialized responsibilities. According to the resource dependency theory, large boards are chosen due to their importance in the provision of key resources to the firm, thus increasing board size helps firms secure key resources by linking them to the external environment. In responding to regulatory pressures and resource dependency, firms create larger boards so as to encompass members with differing backgrounds. In a nutshell, Badu and Appiah (2017), argue that in as much as smaller boards run the risk of CEO domination, which result in

higher costs of agency, larger governing boards are beneficial to firms through oversighting management, availing requisite resources and enabling the co-optation of different stakeholders into the organization.

Nguyen, Rahman, Tong and Zhao (2015), posit that, organizations with larger boards are associated with lower market valuation. They argue that, investors ascribing lower values to organizations with large governing boards are justified; reason being that these firms are associated with less profitability and increased operating costs; higher CEO remuneration that is not related to organizational performance but related to the organizations balance sheet. This kind of remuneration likely encourages assets accumulation at the expense of stockholder value. Thus, evidence supporting the relationship between board size and organizational performance is nuanced and inconclusive (Badu & Appiah, 2017).

Lastly, the third dimension of board of directors' characteristics is board gender diversity. Gender diversity is integral to board diversity (Hassan & Marimuthu, 2016). They posit that, board diversity is a reflection of society and it's represented in the form of gender, professional experience, ethnicity, age and background. They argue that, diversity in boards brings innovation, leadership, a good understanding of the industry, enhanced creativity, effective global relationships, and better decision-making. However, there is low female participation on governing boards in the corporate world. They add that, results from the Catalyst census of women involvement on corporate boards, shows that, the US has 12.4% representation, UK is at 6.4% and Norway requires a minimum of 40% representation.

According to Freitas (2018), board diversity is defined as the number of women or race minorities (African, Asian, Hispanic and African American) on a governing board. He posits that,

the relationship between women and minorities serving on governing boards and firm value as measured by Tobin's Q, is positive and statistically significant. Additionally, evidence between synergies and groups in analysis is available, since a higher number of women in an organization stimulates the organization to hire more minorities. Although Carter, D'Souza, Simkins and Simpson (2010), as cited in Freitas (2018), established no significant relationship between board diversity and firm value, they argue that, the lack of relationship between firm value and board diversity shouldn't discourage the addition of diversity to governing boards.

The number of female members reflects the diversity of a governing board (Syamsudin *et al.*, 2017). They advance three reasons that underpin the importance of female directors serving on governing boards. First is that, compared to male members of the board, female members most times have a better understanding about the market. Consequently, this understanding enhances the decision-making process of the board. Secondly, female members portray a better corporate image in the community, thus contributing positively to the value of the firm. Lastly, because of the presence of female members on the board, other board members understanding of the corporate environment improves. Female members also have a positive effect on career development of female members of staff. As a consequence, the value of a firm may improve either directly or indirectly.

1.1.2 Banking Institutions in Kenya

The banking industry in Kenya plays a pivotal role in developing the country's capital market (KBA, 2019). With parliament repealing the capping of interest rates, the banking industry expects an increase in net interest margins, as well as consumers accessing more credit facilities. Currently there are 41 licensed commercial banks, and seven representative offices of foreign banks in Kenya. According to the Cytonn Report (2019), there are ten banks listed at the NSE.

After parliament repealed interest rate capping, it also did away with the deposit rate due to lenders, hence banks are expected to earn higher profits, due to the low cost of funds and increased access by a diverse number of customers (Cytonn Report, 2019). On another note, the industry experienced consolidation with the Central Bank of Kenya (CBK) approving a number of mergers and acquisitions. Listed banks on the other hand, launched a number of initiatives with a view of ramping up revenues.

On acquisitions, after receiving approval from the market regulator, KCB group acquired a 100% stake of NBK; Equity Group acquired a 62% stake of Banque Populaire du Rwanda, a 100% stake of ABC bank Mozambique, ABC bank Zambia and ABC bank Tanzania. It further acquired a 66.5% stake of BCDC bank, DRC. Commercial International Bank sought approval from CAK for acquisition of a majority stake of Mayfair bank, while Access Bank sought to acquire a 93.57% stake of Transnational Bank (Cytonn Report, 2019). While on rebranding, Barclays Africa Group rebranded to ABSA Group, realigning the lender to its South African roots, while NCBA, the merged entity of NIC Bank and CBA Bank, amended its logo as a way of publicizing its strategy (Cytonn Report, 2019).

1.1.3 Firm Value

In analyzing an organization's financial health or when considering its acquisition, the most important feature to look at is firm value (Rajhan & Kaur, 2013). With a higher worth, better is the position of the organization financially, and better is the opportunity for investors. Gharaibeh and Qader (2017), posit that, the ultimate aim of any organization is to enhance shareholder value. They add that, shareholder wealth can be maximized by either getting dividends or having capital gains (i.e., the difference between sale price and purchase price of a stock).

Macheroochego, Omagwa and Muathe (2020), posit that firm value is contingent upon firm governance which leads to an increase in value. Highly valued organizations attract more investors. They add that, in Kenya to protect firm value, the Central Bank of Kenya increased minimum capital requirements on commercial banks from Ksh 250 million to Ksh 1 billion to cushion stockholder value.

Firm value is the sum total of actual market worth of ordinary shares and the estimated market worth of preferential shares and debt (Abdullah, Mazurina & Haron, 2017). This study employs Tobin's Q as a proxy in measuring firm value. Many previous studies used Tobin's Q as a proxy to measure firm value (Abdullah *et al.*, 2017). It can be considered as the best measurement for firm quality and managerial performance.

Firm value is a key asset for the business as it helps organizations in reputation building, attraction of funds and also boosting a country's economy for sustainable development (Nhan & Quy, 2014). Additionally, as corporations list on stock exchanges, firm value becomes a critical aspect. With the main objective of firms being to maximize stockholder wealth or value as argued by Gharaibeh and Qader (2017), corporate governance then concerns itself with how stockholder wealth can be augmented either through earning dividends or through capital gains. The absence of a strong firm governance mechanism can impinge organizational efficiency and impair internal controls, since all organizational functions are correlated with one another (Nhan & Quy, 2014).

1.2. Statement of the Problem

Studies on board characteristics and firm value have been a hot subject of discussion by both scholars and practitioners in the recent past. This has been prompted by rapidly growing statistics of corporate failures and the reported inability of corporate boards to monitor top management

effectively (Adebayo *et al.*, 2022). Globally, we have heard giants such as WorldCom and Enron experiencing financial depressions while locally, the likes of Kenya Airways, Uchumi Supermarkets Limited amongst others have also been found in the bait of mismanagement and lack of proper corporate governance standards (Oguda, 2015).

The Central Bank of Kenya (2016), warned that about three quarters of small-scale enterprises risk collapse within their first three years in operation. Also, it has been confirmed that it is not only small firms that collapse but also big firms such as Imperial Bank and Chase Bank among others (Bank Supervision Report, 2016).

Results on board characteristics and firm value have allowed for conclusions in their own right, but exhibit mixed reactions in the making. Nhan and Quy (2013), from the context of Vietnam established a positive relationship between board characteristics and firm value. Similarly, Nuryanah and Islam (2011), under the Indonesian context established that board size has a significant and positive relationship on firm value. Kamwana and Ombati (2018), from the Kenyan perspective also established a positive and significant relationship between board characteristics and firm value. Contrarily, Kumar and Singh (2013), from the context of India established a negative relationship between board size and firm value.

While it is recommended that theory should be applied to certain issues to generate new insights, M'ithiria, Musyoki, and Shawa (2017), argue that, no single theory is able to fully explain the relationship between board characteristics and firm value holistically. Further, Ntim and Osei (2011), argue that, existing studies are heavily concentrated in a dozen developed economies of North America and Europe, which is a depiction of same institutional contexts in comparison and that it is not possible to generalize findings from developed countries to those that are developing.

Research findings on board characteristics and firm value especially on the context of listed banks needs to be evaluated in order to provide new policy recommendations that can provide clear futuristic directions to firms that are affected by inadequate corporate governance standards and their adherence. This study aimed to fill these gaps by establishing the effect of board characteristics on firm value of listed banks in Kenya.

1.3 Research Objectives

1.3.1 General Objective

To establish the effect of board characteristics on firm value of listed banks in Kenya.

1.3.2 Specific Objectives

1. To determine the effect of frequency of board meetings on firm value of listed banks in Kenya.
2. To establish the effect of board size on firm value of listed banks in Kenya.
3. To evaluate the effect of board gender diversity on firm value of listed banks in Kenya.

1.4 Research Questions

1. How does the frequency of board meetings have an effect on firm value of listed banks in Kenya?
2. How does board size have an effect on firm value of listed banks in Kenya?
3. How does board gender diversity have an effect on firm value of listed banks in Kenya?

1.5 Significance of the Study

Findings from the research are beneficial to different stakeholders as shown below:

1.5.1 Scholars and Researchers

By examining board of directors' characteristics such as board meetings, board size and board gender diversity, this research hopes to bring new insights for regulators and researchers on the importance of board directors' characteristics and firm value. Locally and globally, the value relevance of board of directors' characteristics is still contested. This study will help enhance the understanding of corporate governance practices especially the impact of board meetings on the banking industry since most studies omit board meetings due to missing or inadequate data. It also adds to the existing governance literature, and helps spur researchers inquire into the relationship between board of directors' characteristics and firm value of organizations operating in other industries.

1.5.2 Capital Markets Authority (CMA)

The Code of Corporate Governance (2015), succeeded the Code on the Guidelines on Corporate Governance Practices (2002), for publicly listed firms. The issuance of this revised governance code sparked interest especially the requirement that firms listed at the NSE must have a third of their board members being outside directors. As the policy maker entrusted with the task of reviewing policy guidelines for listed firms, the findings of this study provide it with knowledge that will help it understand the implications of its policy guidelines especially relating to board characteristics for listed firms; and provides a foundation upon which revision of future corporate guidelines may be based.

1.5.3 Investors

Understanding the value relevance of corporate governance practices especially as relates to the characteristics of governing boards is key for any investment decision. According to existing literature, though all scholars are not agreed, board of directors' characteristics have an impact on

corporate governance practices especially as relates to corporate market value, hence appointment of board members as reliable representatives of owners and other stakeholders in overseeing management is key. Since most investors are interested in ROE, the findings of this study enrich their knowledge regarding the importance of corporate governance practices on firm value. This study will guide their future investment decisions.

1.5.4 Central Bank of Kenya (CBK)

With the governance code containing mandatory provisions which are taken as minimum standards for firms to implement, this study's findings will enhance the regulators' understanding on how corporate governance practices, especially board characteristics affect firm value. Thus, being the regulatory authority, results obtained from this study may be helpful especially when reviewing current regulations to ensure that boards are properly constituted, to not only ensure adequate oversight but also enhance firm value.

1.6 Scope of the Study

This research inquired into the corporate governance practices of firms in Kenya. However, it limited itself to board characteristics and firm value, and covered listed banks at the NSE in FY's 2008 to 2021. The characteristics of governing boards that the study limited itself to include, frequency of board meetings, board size and board gender diversity. It utilized Tobin's Q to measure firm value, with the Chung and Pruitt's approximate Q being deemed suitable for the study. The study was conducted between May 2020 and May 2022.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Contained in this chapter are areas that inform the background of the study. They include the theoretical review, where literature that discusses the theories underpinning the study is based; the empirical literature that looks at previous studies regarding corporate governance and their findings is based, the conceptual framework and lastly, the operationalization of variables.

2.2 Theoretical Review

According to Kothari (2014), a theoretical review or framework is an amalgamation of interrelated ideas that are based on established theories. It's a set of prepositions derived and supported by evidence or data. According to Mugenda & Mugenda (2012), theoretical framework accounts for or explains a phenomenon.

2.2.1 Agency Theory

Considered as one of the oldest theories in the literature of economics and management, agency theory looks at issues that arise in corporations due to separation of ownership from control and places emphasis on trying to reduce the same (Panda & Leepsa, 2017). It helps in the implementation of diverse governance mechanisms to check the actions of the agent in corporations that are jointly held. A governing boards role to oversight managers is one of the most fundamental concepts of agency theory.

From the viewpoint of agency theory, a governing board is a key monitoring tool that is used to reduce problems that arise from the relationship between the principal and the agent

(Madhani, 2019). Thus, increased oversighting by the board, helps reduce opportunities for managers to act selfishly hence lowering agency costs and owners enjoying superior returns or superior profits. Governing boards act as fiduciaries of owners, helping to reduce issues around separation of ownership from control of firms (Fama & Jensen, 1983), also referred to as the problem of agency such as moral hazard in the form of hidden action by managers; and adverse selection in the form of hidden information (Millson & Ward, 2005).

Agency theory helps in the implementation of diverse governance mechanisms in a bid to tame the actions of the agent in a corporation (Panda & Leepsa, 2017). However, Perrow (1986), argues that, agency researchers base their argument mainly from the “principal-agent problem” viewpoint and that, problems may originate from the principal’s side, where this theory doesn’t concern itself. He opines that, because this theory is unconcerned with the principal’s behavior in the firm, they do exploit, and deceive agents in addition to shirking responsibility. He adds that, principals act opportunistically, drag agents without knowledge into hazardous working environments and without any space for encroachment. In his belief, people are generally noble and work for the organization’s betterment.

According to M’ithiria *et al.* (2017), the assumptions underpinning agency theory, form the basis of corporate governance frameworks that focus on governing boards. Reddy and Jadhav (2019), argue that, because of the existence of information asymmetry between owners and managers, there exists a possibility of managers filtering information. With such control over critical information, the problem between managers and owners becomes complicated. Based on agency theory, a diverse board increases the independence of the board, thus increasing the board’s capacity to effectively monitor management.

In their argument, Pearce and Zahra (1992), posit that, agency theory's main locus is the internal control role and the function of governance as the principal activity of a governing board, with the assumption that, independent directors act more effectively than internal directors in the control of management and protection of stockholder interests. Thus, the composition of governing boards has a significant influence on firm governance and the monitoring function. Accordingly, the base idea of this theory, according to Sawalqa (2021), is that, governing boards with frequent board meetings enhance firm value as they keep the activities of management under their control which then forces management to perform in shareholders' favor.

According to Badu and Appiah (2017), proponents of agency theory argue that, large boards consisting of many directors are effective monitors of managerial activities thus enhancing firm performance. Fauzi and Locke (2012), support this argument, stating that larger boards give organizations greater firm value. They posit that, from the agency theory perspective large governing board sizes are equated with enhanced managerial monitoring which then reduces CEO domination of the board leading to enhanced organizational performance.

According to Tornyeva and Wereko (2012), it's interesting to observe that, managers tend to entrench themselves in power thus expropriating stockholders by sticking to their jobs even if their competence to run the firm has been brought to question. The expropriation of funds may take an elaborate form than merely siphoning cash such as transfer pricing. Transfer pricing, dilution of investor shareholding and asset stripping though legal have a detrimental effect equal to theft. Additionally, the expropriation may also take the form of overpayment of company executives, installation of family members who may be unqualified in key management positions, diverting opportunities away from the organization, and usage of corporation profits for self-benefit instead of returning the same to investors. These results in agency loss due to the behavior

of self-interested and opportunistic managers. Jensen and Meckling (1976), define agency loss as the extent to which the return due to owners falls below what they would have otherwise earned if they had exercised direct control of the organization.

The remedy to the conception of the problem of agency according to Tornyeva and Wereko (2012), is either the creation of sanctions or incentives that help align the self-interest of the executives with that of shareholders or incur costs to monitor the conduct of executives so as to be able to constrain the opportunism. Thus, as adopted for this study, frequent meetings by board members enhances the value of a firm, since it places checks on managerial activities under the control of the board of management (Sawalqa, 2021). Also, governing boards that have diverse backgrounds bring different experiences and perspectives, perform strategic functions such as monitoring and advising, and bring diversity in ideas, business knowledge and superior decision-making processes to boardrooms, which eventually results in increased firm performance (Westby, 2014).

According to Panda and Leepsa (2017), agency theory ignores managers competence and views them as opportunistic, even though its assumption is that, the board of directors' role in the firm is limited to overseeing managers; though its further role is not defined clearly. They argue that, the same applies for shareholders whose role in the organization is limited and whose main interest is maximization of return. Core, Holthausen, & Larcker (1999), posit that, with an incentive package that is proper, coupled with a periodic revision of compensation, managers can be motivated to work harder for superior firm performance; and by extension, the wealth of owners can be maximized. They argue that, compensation packages that are inadequate, act as drivers for the use of the owner's property for private gain by managers.

Agency theory has received some criticism (Winberg & Alm, 2015). As opposed to resource dependency theory, as much as effective oversight of top management might result in solid financial performance, this theory fails to provide a distinct link between board diversity and firm financial performance. M'ithiria *et al.* (2017), posit that, based on reviewed literature, agency theory is one of the main theories in firm governance. However, it does not provide a comprehensive explanation on the effect of board characteristics on firm value.

2.2.2 Resource Based View Theory

The resource-based view (RBV) theory, views the corporation as a bundle of tangible and intangible resources (Madhani, 2019). An organization's resources can be a source of sustained competitive advantage if these resources are rare, valuable, not substitutable, and imperfectly imitable. Viewed from the lens of resources being "rare, valuable, not substitutable, and imperfectly imitable," RBV theory can be applied to the unique combination of resources found within governing boards.

From RBV's viewpoint, a governing board's characteristics, such as a board members' experience and knowledge, cannot be easily imitated by the competition as compared to other aspects of the board such as number of executive or outside directors or size of the board (Madhani, 2019). These characteristics can be easily imitated and are not so significant in the creation of sustainable competitive advantage. The theory is linked to board characteristics that can be termed as idiosyncratic resources that may prove to be a source of competitive advantage to a given firm.

According to Madhani (2014), valuable resources are those that enable firms behave in ways and do things that lead to superior margins, lowered costs, increased sales; or put differently, they enable firms behave in ways that add to their financial value. Barney (1991), emphasizes that,

resources are seen as valuable if they enable firms conceive or implement strategies that help improve their efficiency and effectiveness. He adds that, resources deemed as valuable provide strategic value to a firm. These resources provide value if they help a firm exploit opportunities in the market or help in the reduction of threats. He argues that, firms bear no advantage, if they are in possession of a resource that doesn't enhance or add value.

However, scholars of resource-based view theory have been accused of adoption of an all-encompassing definition of the word "resource" (Truijens, 2003). He posits that, RBV scholars consider anything that can be virtually associated with an organization as a "resource," and that, prescriptive implications of RBV theory that concern resources which are inherently difficult to manipulate and measure such as tacit knowledge have limitations for practitioners. Barney (2001), is in agreement with this assertion that resources are defined as all-inclusive. However, he doesn't accept the conclusion that this impedes the prescriptive implications of the resource-based view theory.

Accordingly, Barney (2001), argues that, the all-inclusive definition of resources enhances the prescriptive implications of RBV. He posits that, there is no pretense by RBV scholars in their ability to generate a list of resources deemed as critical for an organization to be in possession of, so as to be able to gain sustained strategic advantage. Thus, RBV scholars describe the attributes of critical resources to help executives apply the logic of RBV to any valuable resource; that is, resources whose value can be determined from a market's context within which the resource can be applied. However, Foss (2000) counters that, the base attributes of RBV that resources that are valuable and rare cause sustained competitive advantage is pleonastic. He posits that, from the economic viewpoint, resources can only be valuable if they are rare; thus, a resource that is valuable, is a resource that is rare.

Contrasted to agency theory, RBV underscores the role that governing boards play so as to bring unique resources to the organization (Stiles, 2001). It lays emphasis on the structure of governance and composition of the board as a resource that can be value adding to the organization. Thus, governing boards are seen as valuable resources to firms when they are actively engaged in strategic decision-making, since this process requires skills and in-depth knowledge (Ruigrok, Peck & Keller, 2006).

According to Madhani (2019), board knowledge is a reflection of a director's understanding of operations of the firm, and is inclusive of knowledge of an organization's industry, customers, its competition, and technology, among others. He argues that, board directors provide different experiences and perspectives from other organizations and industries. Under this theory, governing boards are seen as tacit, unique, socially complex and internal resources that help organizations ramp up performance (Hart, 1995). All the resources provided by governing boards are key for the success of organizations and act as a crucial support for their existence.

According to Fama and Jensen (1983), the in-depth knowledge of an organization creates a unique and valuable resource, which is crucial for governing boards to exercise their oversight role over management. Such in-depth knowledge of the corporation helps governing boards focus on relevant decision alternatives and enables them to comprehend business operations and internal managerial issues efficiently. This knowledge is an implicit intangible asset and its utility is difficult to substitute, hence an important source of a governing board's ability to perform its various tasks.

As adopted for this study, board gender diversity is associated with resources that female directors bring to the boardroom, through their abilities, knowledge and experience, which then

determines the board's potential and should be seen as essential for creating value (Madhani, 2019). Large boards diverse expertise and in-depth knowledge represents a source of competitive advantage, which can lead to enhanced firm performance. Madhani (2019), adds that, included in the diverse expertise are scarce resources such as strategic expertise, better governance and industry-specific knowledge.

RBV has received some criticism (Sanchez, 2008). Despite its popularity, RBV is deemed to suffer from problems of logic and fundamental deficiencies in conceptualization and doesn't have a defensible claim as a strategy or a theory of management (Sanchez, 2008). Kraaijenbrink, Nikos and Spender (2010), aver that, the criticism labeled at RBV is that, it is tautological and that it fails to fulfil the criteria for a true theory of management. They posit that, RBV lacks law-like generalizations that should be expected of a true theory, but rests on analytical statements that are true by definition, tautological and not testable.

2.2.3 Resource Dependence Theory

Developed by Pfeffer and Salancik (1978), its base assumption is that organizational actions and decisions are influenced by "critical" and key resources, and views resources as key relative to anything else. Salem *et al.* (2019) posits that, this assumption views governing boards as one among other tools used to gain access to "critical" resources that may aid organizational success. From the RDT perspective, an organization cannot sustain itself because resources are limited, hence it has to create external linkages with its environment so as to be able to flourish (Assenga *et al.*, 2011).

From the RDT perspective, an organization cannot sustain itself because of scarce resources thus has to connect with the outside environment for it to succeed (Assenga *et al.*, 2011).

Muth and Donaldson (1998), posit that, resource dependence theory signifies that, community links formed through independent directors are key in enhancing organizational performance. Accordingly, governing boards are not only seen as a resource that alternates other resources, but also stewards the environment in the direction that favors the organization thus improving organizational performance.

RDT provides a theoretical foundation where the role of governing boards is seen as a resource to the organization (Hillman, Canella & Paetzold, 2000). Penrose (1959), stresses the importance of these resources that an organization controls and which are crucial for growth. Barney (1991), posits that, these resources include all organizational processes, attributes of the firm, assets, knowledge and information that the firm controls, and firm capabilities, that helps improve efficiency and effectiveness. Viewed from this lens, board composition and governance structure of the firm are viewed as a resource that may add to firm value.

According to Hillman *et al.* (2000) outside directors inject resources such as skills, information, access to basic parts and legitimacy. Additionally, directors possess the ability to identify gaps in knowledge thus enhancing economic potentialities. These resources aid the organization when making strategic decisions (Arora & Sharma, 2016) and can increase its legitimacy (Luckeath-Rovers, 2013). Chambers, Harvey, Mannion, Bond, and Marshall (2013), aver that, the theory focuses on how to minimize uncertainty brought about by environmental factors that are external to the firm. They add that board directors bring some benefits such as legitimacy, access to information, advice and access to resources.

However, RDT has received some criticism for its emphasis on the external locus of control construct (Chambers *et al.*, 2013). It downplays views regarding directors' role in determining

their future through strategy formulation and overseeing managerial actions and performance. Davis, Schoorman and Donaldson (1997), posit that, though RDT addresses some of the base assumptions of the theory of agency, it is hampered in this regard as it is considered static; since it views the relationship of the principal and agent at a single point in time; and that individuals do not learn from their interactions with each other.

As adopted for this study, the base assumption of this theory is that organizations are not as independent as they might appear from the surface, hence the importance of external resources in aiding their success over time cannot be downplayed (Ribeiro & Colauto, 2013). Put differently, no matter how autonomous the firm is, resources from third parties will always be needed. Outside directors provide links between these firms to be able to access these external resources, since they strive for a common objective (Zald, 1969); thus, outside directors are seen as facilitative to firms access to external economic resources, prompting firms to seek board members who are already performing managerial roles in other firms with the sole aim of enhancing access to third party resources.

Furthermore, resource dependence theory presents cogent arguments for the promotion of board diversity (Reddy & Jadhav, 2017). For example, a diverse board acts as a bridge to key constituencies in the external environment, that may result in access to more talent. Diverse boards also possess unique information that has the potential to improve its advisory role to top management that helps in decision-making. Outside directors also send positive signals to labor and product markets, since being non-business experts and outsiders, they bring with them diverse perspectives and non-traditional approaches to problem-solving thus presenting a valuable set of resources that may help the organization achieve superior economic outcomes.

According to Chambers *et al.* (2013), since organizations are dependent on each other for survival, RDT assumes that managing outside relationships is the key purpose of governing boards. Thus, board directors' selection is based on their skills in "boundary-spanning," contacts and background. Moreover, Nguyen *et al.* (2015) posit that, RDT explains the positive relationship between board gender diversity and firm value.

2.3 Empirical Review

While there is a strong belief that corporate governance is key to organizational performance especially at the level of the board, empirical evidence has not been supportive of this view (Lawal, 2012). Discrepancies in findings can partially be attributed to empirical flaws driven by wrong conceptualization and weak methodology. Anis, Chizema, Lui and Fakhreldin (2017), aver that, the inconsistencies may also be partially attributed to the fact that, previous studies used different measurements for exogenous variables, performance proxies, different hypotheses, sample time frames, control variables, estimation techniques and country and contextual differences.

According to Hou (2014), consensus exists on the conceptual literature while empirical literature, which is mainly focused on developed economies provides inconsistent evidence. Ntim (2013), avers that, studies linking integrated indices on corporate governance and firm performance are focused mainly on developed economies of Europe and America and emerging ones such as the Asia-Pacific region. However, for Africa, previous studies are concentrated on the impact of individual corporate governance mechanisms on firm performance. Al-Matari, Al-Swidi, Hanim and Al-Matari (2012), aver that, several studies examining the relationship between board characteristics and firm performance, have been mostly undertaken in developed and emerging economies. However, they report that, a thorough review of relevant literature reveals a

paucity of studies examining performance implications of board characteristics in developing economies in general and the gulf region in particular. Thus, they put forth a call that further research to examine this relationship be conducted. They posit that, most studies have concentrated on investigating the impact of board characteristics such as CEO tenure, CEO duality, board size, audit committee and board composition.

Governing boards play a key role in the governance of firms, hence gaining insights into the effectiveness and characteristics of these boards effect on firm performance is critical, since agency theory assumes that, board director's role is to make sure that resolutions made by the executive are in the investor's best interests (Deschenes *et al.*, 2014), as cited in Freihat, Farhan, and Shanikat. (2019). Freihat *et al.* (2019), argue that, a governing board is one among other factors of governance mechanisms, and good firm governance is urgently required in many organizations. They further argue that, the key advantage of establishing good corporate governance practices, is that it is helpful to enterprises and consequentially aids host countries access to international capital markets and that firms gain better premia when they seek international investment.

According to Azar, Rad and Botyari (2014), in spite of the availability of copious literature about the relationship between board of directors' characteristics and firm performance, and the progress in the area of day-to-day corporate governance, there still abounds nuanced results in studies. They posit that, facts from different empirical studies in the last two decades support different suggestions on the subject. They argue that, some of their findings are in agreement with, and also in disagreement with previous studies. Johl *et al.* (2015), aver that, one stream of research established that board characteristics had a positive impact on firm performance while another stream established no relationship between the two.

According to the resource dependence theory, boards with gender diversity act as bridges to critical constituencies in the external environment, that result in more access to talent, send a positive signal to labor and product markets, and bring diverse and non-traditional approaches to problem-solving (Reddy & Jadhav, 2019). However, a bulk of literature focusing on the relationship between gender diversity and firm performance is mixed. They cite for example, the Carter, Simkins and Simpson (2003), study on the impact of board diversity and firm value established a positive relationship between women serving on boards and firm performance as measured by Tobin's Q. This finding elicited a number of studies to be carried out in diverse country settings. However, the findings remained mixed. Erhardt, Werbel, and Shrader (2003), examined the impact of diversity on US boards and established a positive relationship between financial indicators of firm performance and gender diversity. Contrarily, Carter, D'Souza, Simkins and Simpson (2010), study, on the relationship between gender diversity on governing boards established neither a negative nor positive effect on firm financial performance.

Controversy also abounds on whether governing boards should comprise of large or small boards (Meme, 2017). Meme (2017), argues that, though many studies have examined the relationship of this board characteristic and firm performance, the results are nuanced. She cites a study by Raymond *et al.* (2010) which established a positive relationship with revenue growth, but a negative relationship with financial leverage. She also cites a study by Muigai (2012), that established a negative association between the size of the board and firm financial performance. Johl *et al.* (2015), posit that board size seems to differ from country to country. They further posit that, there is no ideal board size but the right size for a governing board should be determined by how the board is able to operate effectively as a team.

Governing boards should examine their sizes with a view of determining their impact based on their numbers (Johl *et al.*, 2015). They argue that, there exists conflicting arguments regarding the size of a board and firm financial performance. They cite a study by Yermack (1996), which utilized Tobin's Q as a proxy for market value and established an inverse association between the size of the board and firm value. Yermack (1996), argued that small boards exhibited more favorable values of financial ratios and provided strong performance incentives for the CEO through compensation and also threat of dismissal. Contrarily they also cite a study by Andres and Vallelado (2008), that established that larger boards were efficient in monitoring and creating more value for organizations.

From the agency theory perspective, large boards are more effective in reducing conflicts between owners and management because of increased watchfulness and monitoring of a firm's managerial actions (Atty, Moustafasoliman & Youssef, 2018). They posit that, large boards provide enhanced links and access to a firm's resources. They further posit that, data from Australian firms deduced a positive association between the size of a board and Tobin's Q. They argue that large boards are associated with enhanced financial and operational performance of the firm as a whole.

2.3.1 Board Meetings and Firm Value

In a study titled, "Influence of board meetings on financial performance of sugar industries in Western Kenya," using a descriptive research design, and where Return on Investment (ROI), Return on Assets (ROA) and Tobin's Q were calculated and used as measures of financial performance of the sugar industries, Lukhoma, Kariuki and Gichure (2018), established that, there

is a positive and significant relationship between board meetings, and financial performance as measured by ROI, ROA and Tobin's Q.

In a study titled, "Effect of corporate governance practices on the market value of listed insurance firms in Kenya," with specific objectives being to determine the effect of board gender diversity, board independence, board size and board meetings on market value; using a descriptive and inferential research design, and having collected quantitative data which was analyzed descriptively, Mbelenga (2018) established that, board meetings is positive and statistically significant in explaining market value as proxied by Tobin's Q.

In a study titled, "Board meeting frequency and firm performance: Examining the nexus in Nigerian deposit money banks," Eluyela *et al.* (2018), sought to establish the relationship between board meetings frequency and firm financial performance as proxied by Tobin's Q. Using panel data regression analysis to test the hypothesis that, board meeting frequency has no significant relationship with firm performance of deposit money banks, established a positive but insignificant relationship between Tobin's Q and frequency of board meetings. They concluded that a 1% change in board meeting frequency among Nigerian banks, will result in a 1% change in Tobin's Q.

In a study titled, "Boards of directors' characteristics and firm value: A comparative study between Egypt and USA," adopting a positive philosophy and quantitative approach, while utilizing GLS regression to test hypotheses, Salem *et al.* (2019), established that, the relationship between board meetings and firm value as measured by Tobin's Q, in Egypt is positive and significant.

In the same study titled, “Boards of directors’ characteristics and firm value: A comparative study between Egypt and USA,” adopting a positive philosophy and quantitative approach, while utilizing GLS regression to test hypotheses, Salem *et al.* (2019), established that, the relationship between board meetings and firm value as measured by Tobin’s Q, in the USA is positive and significant.

In a study titled, “The impact of corporate governance on firm value: Evidence from listed manufacturing companies in Sri Lanka,” using descriptive statistics and multiple regression analysis to analyze data, Wijesinghe, Bandara, Dassanayake and Undugoda (2019), established that, board meetings frequency had an effect on listed manufacturing companies in Sri Lanka capable of improving firm value. Specifically, they established that frequency of board meetings had a positive and significant relationship with firm value

2.3.2 Board Size and Firm Value

In a study titled, “Board characteristics and firm value of listed non-financial firms at the Nairobi Securities Exchange,” using both correlational and descriptive research designs, and relying on panel data regression, Patel (2022), with one of the objectives being to establish the influence of board size on firm value of non-financial firms listed at the Nairobi Securities Exchange, established that, the relationship between board size and firm value of non-financial firms listed at the NSE is positive and significant.

In a study titled, “Board characteristics and financial performance of listed manufacturing and allied firms in Kenya,” using panel data fixed effects model, and utilizing the explanatory research design while employing a quantitative approach, and the main objective being to examine the influence of board characteristics on financial performance of listed manufacturing and allied

firms in Kenya, Manini and Abdillahi (2018), established that, the relationship between board size and firm performance as measured by Tobin's Q was significant at 5% significance level.

In a study titled, "Board size, corporate regulations and firm valuation in an emerging market: A simultaneous equation approach," using Two Stage Least Squares regression, Ntim, Opong, and Danbolt (2018) investigated the association between board size and firm valuation for a sample of 169 firms from 2002 to 2011 in South Africa, and established a positive and significant relationship between board size and firm value as proxied by Tobin's Q.

Contrarily, in a study titled, "Boards of directors' characteristics and firm value: A comparative study between Egypt and USA," adopting a positive philosophy and quantitative approach, while utilizing GLS regression to test hypotheses, Salem *et al.* (2019), established that, the relationship between board size and firm value as measured by Tobin's Q, in Egypt is negative and significant.

In the same study titled, "Boards of directors' characteristics and firm value: A comparative study between Egypt and USA," adopting a quantitative approach, while utilizing GLS regression to test hypotheses, Salem *et al.* (2019), established that, the relationship between board size and firm value as measured by Tobin's Q, in the USA is negative and significant. Similarly, in a study titled, "The impact of corporate governance on firm value: Evidence from listed manufacturing companies in Sri Lanka," using descriptive statistics and multiple regression analysis to analyze data, Wijesinghe, Bandara, Dassanayake and Undugoda (2019), established that, board size had an effect on firm value of listed manufacturing companies in Sri Lanka. Specifically, they established that board size had a negative and insignificant relationship with firm value.

In a study titled, “The impact of corporate governance practices on firm’s performance: An empirical evidence from Indian tourism sector,” adopting multiple correlation and utilizing ordinary least square (OLS) regression model to estimate the results, Yameen, Farhan and Tabash (2019), established that, board size and the size of the audit committee have a negative effect on the performance of Indian hotels. They measured firm performance using proxies such as Return on Assets (ROA), Return on Capital Employed (ROCE) and Tobin’s Q. From their analysis, board size has a negative and insignificant relationship with firm performance as measured by ROA. Similarly, board size has a negative and insignificant relationship with firm performance as measured by ROCE. However, board size has a positive but insignificant relationship with firm performance as measured by Tobin’s Q.

In a study titled, “Effect of board characteristics on firm value: Evidence from India,” Rakesh and Kapil (2018) sought to explore the relationship between board characteristics and firm performance for Indian companies using Structural Equation Modelling (SEM) methodology, while employing both accounting and market-based measures as proxies for firm performance, established a positive and significant relationship between board size and firm performance as measured by both Tobin’s Q and ROA.

2.3.3 Board Gender Diversity and Firm Value

In a study titled, “Board characteristics and financial performance of listed manufacturing and allied firms in Kenya,” using panel data fixed effects model, and utilizing the explanatory research design while employing a quantitative approach, and the main objective being to examine the influence of board characteristics on financial performance of listed manufacturing and allied firms in Kenya, Manini and Abdillahi (2018), established that, the relationship between board gender diversity and firm performance as measured by Tobin’s Q was significant at 5% significance level.

In a study titled, “Effect of gender diversity on the financial performance of insurance firms in Kenya,” Ibrahim, Ouma and Koshal (2019) with the objective of assessing the effect of gender diversity in the board on the performance of insurance firms using descriptive and inferential statistics, established a statistically positive and significant relationship between board gender diversity and accounting measures of ROA and ROE and marketing measure of Tobin’s Q.

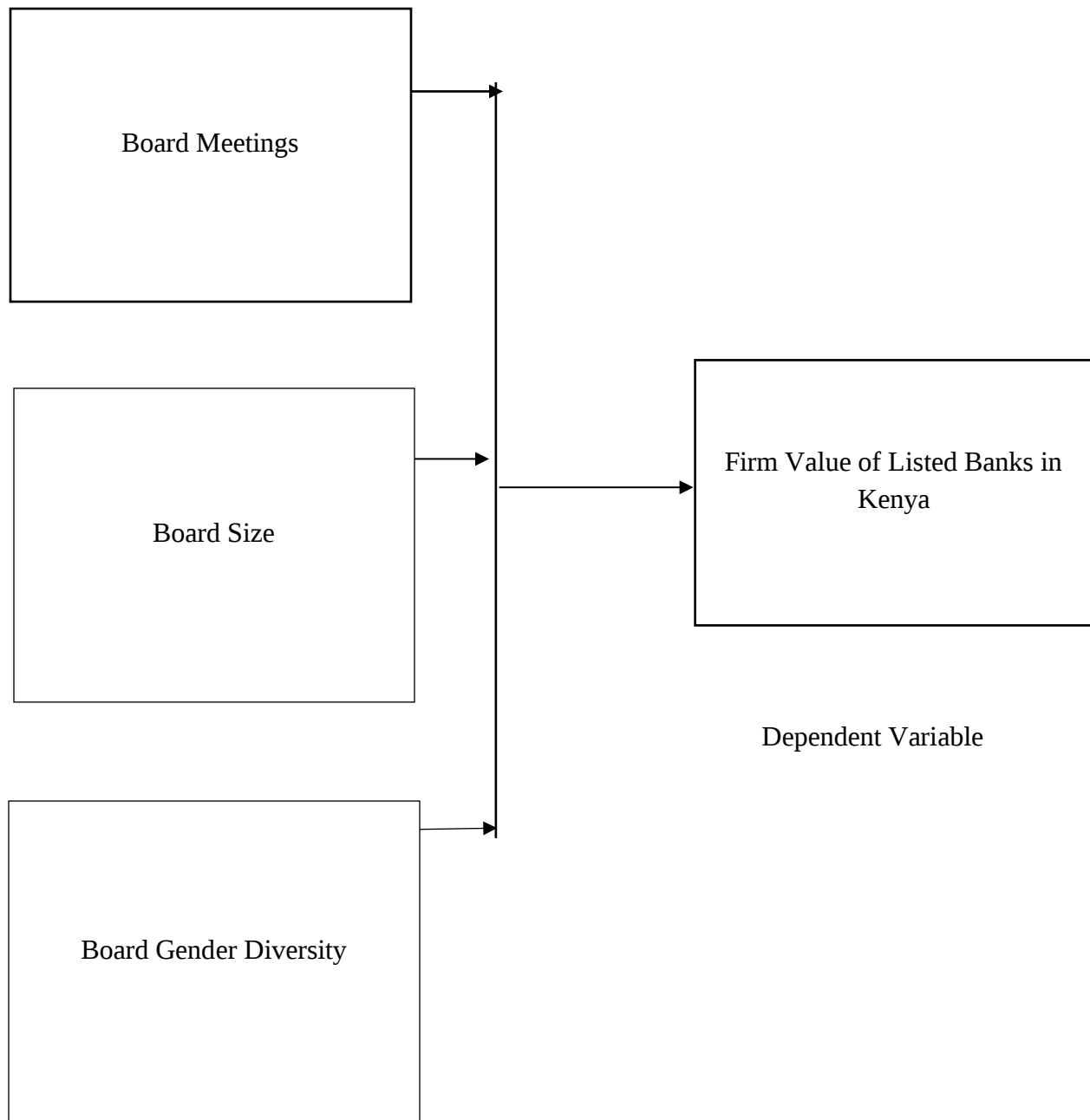
In a study titled, “Impact of corporate governance on firm’s performance,” Dabor, Isiavwe, Ajagbe, and Oke (2018), examined the impact of corporate governance on financial performance of quoted companies in Nigeria using two models, the Pooled Ordinary Least Squares (OLS) method and the Random Effects model. Return on Equity (ROE), Return on Assets (ROA) and Tobin’s Q were used as proxies to measure firm performance. In their analysis, they established that board gender diversity had a negative and insignificant relationship with firm performance across all the three measures.

In a study titled, “Boards of directors’ characteristics and firm value: A comparative study between Egypt and USA,” adopting a positive philosophy and quantitative approach, while utilizing GLS regression to test hypotheses, Salem *et al.* (2019), established that, the relationship between board gender diversity and firm value as measured by Tobin’s Q, in Egypt is positive and significant.

In the same study titled, “Boards of directors’ characteristics and firm value: A comparative study between Egypt and USA,” adopting a positive philosophy and quantitative approach, while utilizing GLS regression to test hypotheses, Salem *et al.* (2019), established that, the relationship between board gender diversity and firm value as measured by Tobin’s Q, in the USA is positive and significant.

In a study titled, “The impact of board gender diversity on firm value: Evidence from Kuwait,” using a balanced panel dataset and employing the two-step system Generalized Method of Moments (GMM) estimation, Issa *et al.* (2019) established that board gender diversity is positively associated with firm value as proxied by Tobin’s Q.

2.4 Conceptual Framework



Independent Variables

FIGURE 1: Conceptual Framework

According to the above conceptual framework, the characteristics of the board of directors are defined as the independent variables, and the dependent variable is firm value. This study employed Tobin's Q or the asset market-to-book ratio to measure firm value. Tobin's Q score is computed in the periods that fit within the time frame. According to Abdullah *et al.* (2017), most previous studies used Tobin's Q to measure firm value.

2.5 Operationalization of Variables

TABLE 1: Operationalization of Variables

Variable Type/Variable	Specific Measure	Scale	Measurement
Independent Board Meetings	Total number of board meetings held	Interval	Total number of board meetings held in one FY
Independent Board Size	Total number of directors serving on the board	Interval	Total number of directors serving on the board in one FY
Independent Board Gender Diversity	Total number of women directors on the board	Ratio	Total number of women directors on the board in one FY/Total number of directors
Dependent Firm Value	Tobin's Q	Ratio	Market value of outstanding stock and debt divided by the replacement cost of the company's assets

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The chapter describes in detail how the study was conducted in terms of the methodology used, the research design, the model specification etc. This study attempts to justify the methods and procedures employed by contrasting it with the methods and procedures employed in other studies. Specifically, the chapter looks at the research design, the sample design, the study population, methods and techniques employed to collect and analyze data.

3.2 Research Design

A research design is the architecture that helps smooth the research operation making it efficient resulting in maximum acquisition of information while reducing expenditure (Kothari, 2014). This study used correlational research design, as it sought to provide information on potential relationships. A correlational research design concerns itself with the establishment of relationships between two or more variables in the same population (Curtis, Comiskey & Dempsey, 2016). According to Cohen, Manion and Morrison (2005), as cited in Curtis *et al.* (2016), correlational techniques seek to answer three questions which are; one, “Is there any relationship between the two variables (or the sets of data)?” and if the answer to the question is “yes,” then the other two questions will be: “What is the direction of the relationship?” and “What is the magnitude?”

3.3 Target Population

The study's population of interest was all the 10 banking institutions listed at the NSE for a period of fourteen years from 2008 to 2021. The study was limited to 10 listed banks due to the utilization of Tobin's Q as a proxy for firm value. In computing Tobin's Q, the market value of ordinary stock is required, information that is unavailable for non-listed banks. Because of the small population, a census was carried out. Gill and Johnson (2011), posit that, a census is a systematic process of information recording of members of a population. They argue that, a census eliminates the sampling error by providing a true measure of the population.

3.4 Data Collection Procedure

Data collection can be either from a secondary source or from a primary source. The study used secondary sources of data. Yusuf (2013), argues that, secondary data is not associated with the loopholes of primary data, since it is derived from a wide range of sources such as published literature, online sources, and government agencies among others. Cooper and Schindler (2011), posit that, secondary data is desirable because it allows a researcher to perform a longitudinal analysis; which means that studies spanning over a large period of time can be performed.

3.5 Data Processing and Analysis

Data was compiled, edited, coded then analyzed using STATA version 12. STATA is quite useful in graphical presentation of raw data. Cooper and Schindler (2011), argue that editing is undertaken to obtain accuracy, consistency and uniformity of the data and is achieved through detecting errors and omissions, correcting where possible to ensure that maximum standards of data have been realized. The results of this study are presented in the form of tables and figures. The equation for the random effects model is expressed below:

$$Y_{it} = \beta_1 X_{it} + \alpha_i + u_{it}$$

Where:

$\alpha_i = (i = 1 \dots n)$ is the unknown intercept for each entity (n entity-specific intercepts).

Y_{it} = Represents the dependent variable; where i = entity and t = time.

X_{it} = Represents one independent variable

β_1 = Represents the coefficient for that independent variable

u_{it} = The error term

Value = Tobin's Q (as measured by the market value of outstanding stock and debt) divided by the replacement cost of the company's assets of firm i in year t as a proxy of the value of the firm.

3.6 Diagnostic Tests

The econometric model used for the study is multiple linear regression, which sought to express the relationship between endogenous and exogenous variables. Diagnostic tests were conducted to ascertain that the regression assumptions were met and sampled data appeared to be from a population that met regression assumptions.

3.6.1 The Breusch and Pagan LM Test

Breusch and Pagan LM test is aimed at aiding the researcher choose an appropriate model to fit between the Ordinary Least Squares (OLS) and the Random Effects model (Musyoka (2017)). The null hypothesis of the Breusch Pagan LM test is that there exists uniform variance across panels under investigation against the alternative that states that there is no uniformity in variance across

the panels. A p-value of less than 0.05 indicates that the appropriate model to fit is the Random Effects model.

3.6.2 The Hausmann Test

When dealing with panel data, a decision on the treatment of individual specific effects, that is if one has to employ a fixed effects model or a random effects model has to be made (Bole & Rebec, 2013). This decision is dependent on the correlation between the unobserved effects and the independent variables. The Hausmann test is a standard test to discriminate between a fixed effects model and a random effects model in panel data analysis (Bole & Rebec, 2013). Ali, Mumtaz, Kibria, and Sajid (2014), aver that the Hausmann test is applied in empirical studies to help determine if a fixed effects model or a random effects model will be utilized in panel regression analysis. This study employed the Hausmann test to determine if the fixed effects model was suitable or if the random effects model was the most suitable.

According to Ali *et al.* (2013), two hypotheses exist to determine which model is appropriate and they are:

H_0 = The random effect model is the most suitable and consistent for panel regression analysis.

H_1 = The random effect model is inconsistent for panel regression analysis.

The null hypothesis is accepted if the p-value of the Hausman test is greater than 0.05. However, if the p-value is less than 0.05, (i.e., significant), then the null hypothesis is rejected.

3.6.3 The Test of Normality

Normality tests are performed to examine whether or not the observations follow a normal distribution (Mwaura, 2014). Normality of residuals is a necessary assumption for building a

regression model (Mwaura, 2014). The test of normality of residuals aids in assessing if the random error in the association between the endogenous variable and the exogenous variable in the model follow a normal distribution. There are a number of statistics available to test for violation of normality assumption including skewness and kurtosis (Mwaura, 2014). The assumption can also be tested by assessing graphical depictions of the error terms in normal probability plots.

The study used the Shapiro-Wilk test to test for normality. The test statistic W may be written as the square of the Pearson correlation coefficient between the ordered observations and a set of weights which are used to calculate the numerator. Since these weights are asymptotically proportional to the corresponding expected normal order statistics, W is roughly a measure of the straightness of the normal quantile-quantile plot. Hence, the closer W is to one, the more normal the sample is (Shapiro & Wilk, 1965).

3.6.4 Test of Multicollinearity

Multicollinearity is a statistical phenomenon in which two or more independent variables in a multiple regression model are highly correlated (Daoud, 2017). Severe multicollinearity can raise the variance of the coefficient estimates and make them very sensitive to minute changes in the model (Mwaura, 2014). In regression analysis, the assumption is that independent variables are not correlated with each other. The study utilized the correlation analysis to examine the strength of the relationship between variables under investigation. According to Musyoka (2017), a correlation coefficient higher than 0.8 is not desirable.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSION

4.0 Introduction

This chapter presents the analysis and findings in relation to the main objective, which is to establish the effect of board characteristics on the value of listed banks in Kenya. The chapter looks at exploratory data analysis, diagnostic tests and the conceptualized model. Both tables and graphs are utilized to present the data.

4.1 Exploratory Data Analysis

Both linear and overlay graphs are utilized to present data as shown below:

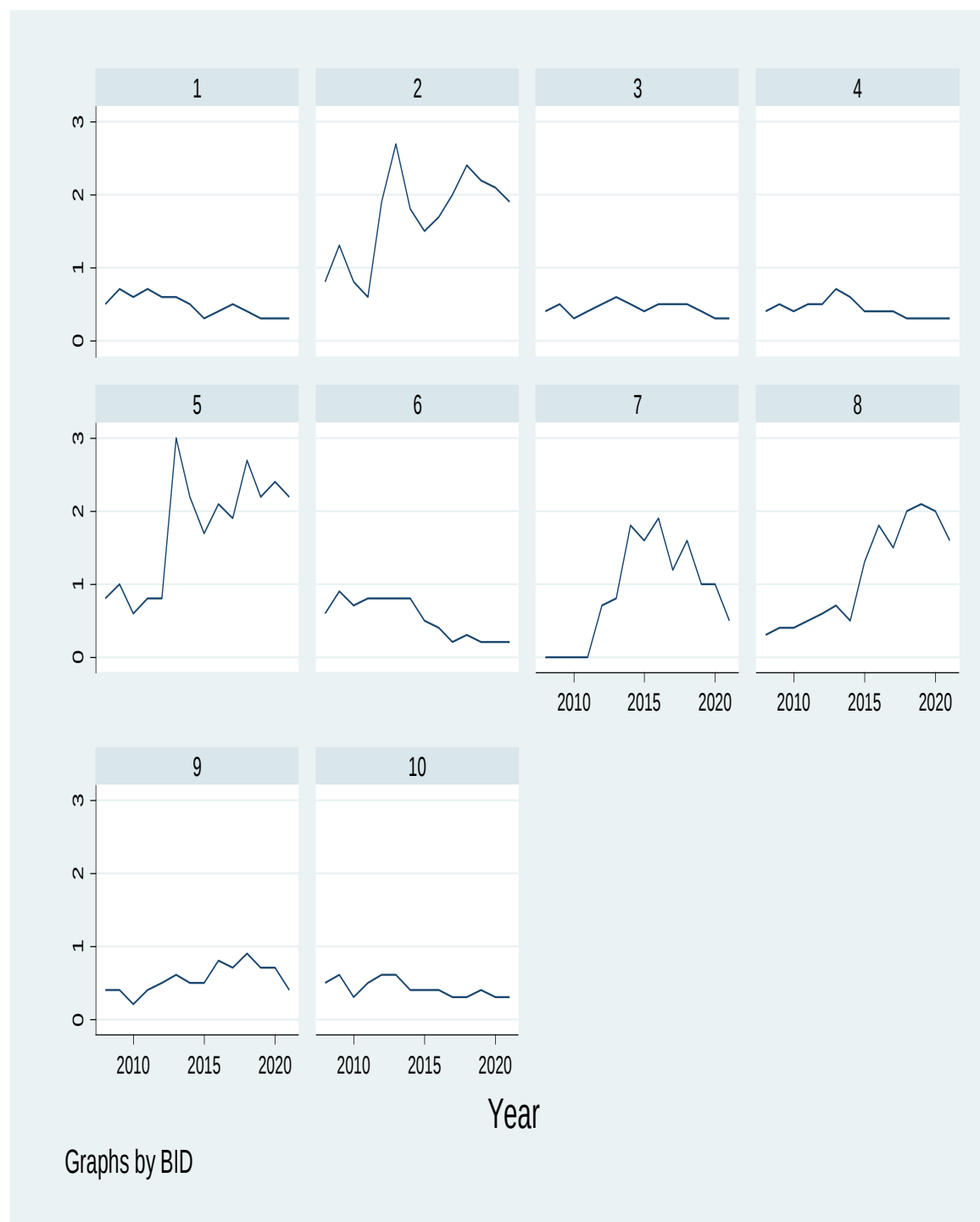


FIGURE 2: Trend Analysis of Tobin's Q

Source: Author (2022)

As indicated in figure 4.1 above, a downward and upward trend is observed for the listed banks as shown by Tobin's Q.

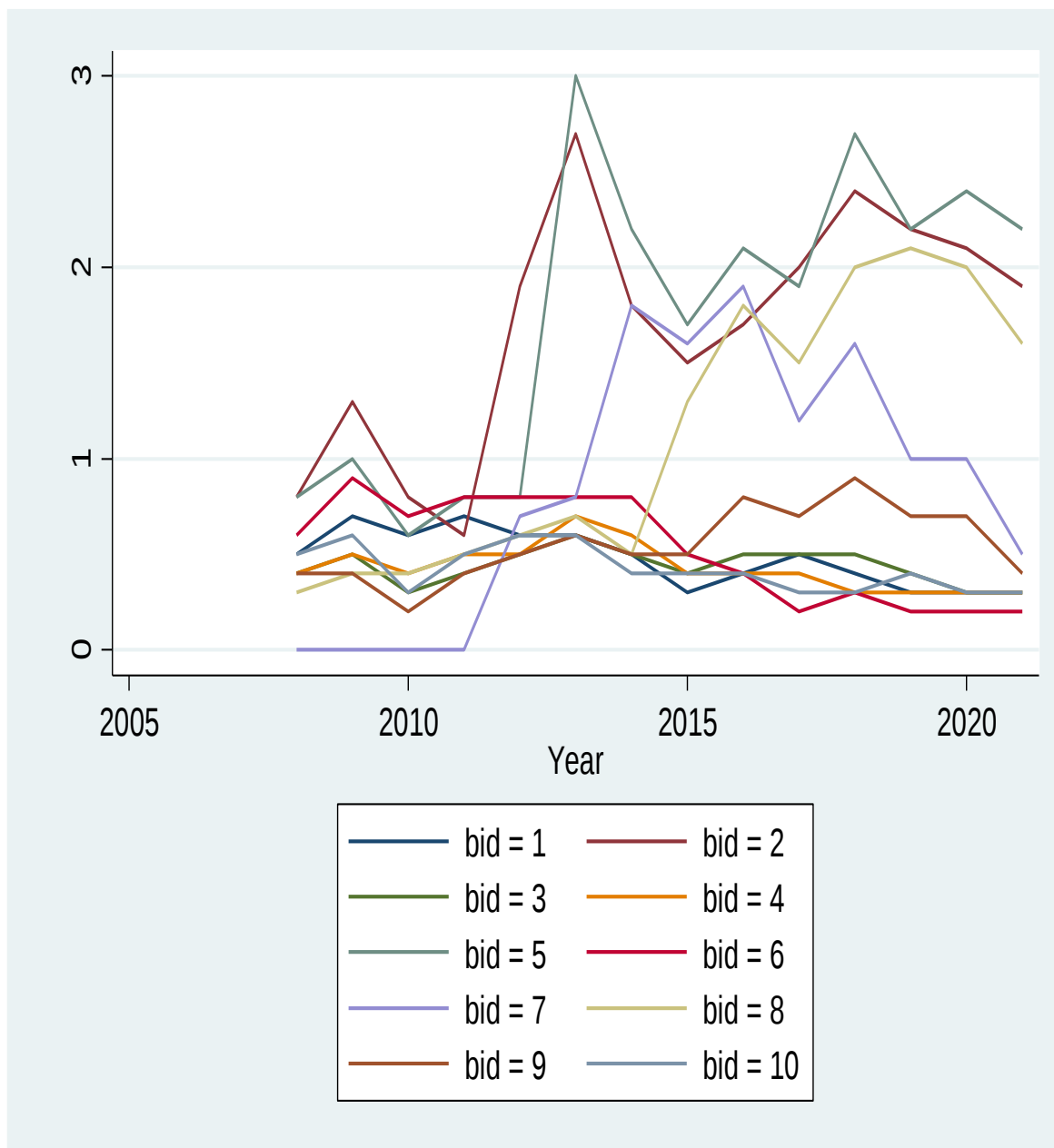


FIGURE 3: Overlay Graph of Tobin's Q

Source: Author (2022).

From the above graph, it can be deduced that the ten listed banks at the NSE had different slope coefficients and intercepts with some banks exhibiting higher slope coefficients as compared to others.

4.2 Descriptive Statistics

Descriptive statistics is useful in summarizing information about a population through output that conveys information that is precise about the behavior of the variables (Berenson, Levine & Krehbiel, 2012) through measures of dispersion (standard deviation, range) and central location (median, mean) (Wegner, 2001), as cited in Oguda (2015). These measures compress large volumes of data to simple formats that ease understanding of sample populations.

TABLE 2: Descriptive Statistics

Variable	Mean	Std.Dev.	Min	Max	Observations		
tobinsq overall	0.826	0.670	0	3	N	=	140
between	0.521	0.421	1.743	n	=		10
within	0.450	-0.316	2.084	T	=		14
boardg~r overall	2.329	1.278	0	5	N	=	140
between	1.021	0.786	3.929	n	=		10
within	0.829	-0.314	4.543	T	=		14
boards~e overall	9.950	2.293	0	14	N	=	140
between	1.776	5.857	12.214	n	=		10
within	1.548	4.093	14.093	T	=		14
boardm~s overall	6.236	2.976	0	20	N	=	140
between	2.585	3	11.714	n	=		10
within	1.674	1.521	14.521	T	=		14

Source: Research data (2022)

From the results in Table 2 above, the mean Tobin's Q is 0.8264286 with a standard deviation of 0.669759. Since the mean value of Tobin's Q is less than one, the implication is that the firms are undervalued, that is the market value of the firms' stock are lower than their stated book values. Thus, the companies are trading undervalued (Meme, 2013).

Board size as a characteristic of governing boards was measured using total number of directors serving on the board. From table 2 above, the mean number of directors serving on governing boards is 9.95 with a standard deviation of 2.2927 and a maximum of 14 directors. According to the CMA Code of Corporate Governance (2015), a governing board shall be comprised of such a number that enables the company meet its business requirements. The number should also not be too large that it undermines interactive discussions during board meetings or too small such that it compromises the inclusion of wider skills and expertise so as to improve board effectiveness and the formation of board committees.

From Table 2 above, most governing boards are male-dominated, since on average the mean ratio of female directors is 2.328571 with a standard deviation of 1.277604 and a maximum of 5. In as much as article 27(8) of the Constitution of Kenya (2010), on the gender make-up of governing boards stipulates that, one gender shall not dominate the other gender in appointive or elective posts, women still have low representation on governing boards.

Lastly, is board meetings which was measured using the total number of meetings held in one financial year. From Table 2 above, the mean value for board meetings is 6.235714 with a standard deviation of 2.97619 and a maximum value of 20. This shows that there is approximately a mean of 6.235714 board meetings held per year for all the sampled banks in the study.

4.3 Study Variables

4.3.1 *Tobin's Q as a proxy of Firm Value*

Sometimes referred to as the general equilibrium theory or Q theory, Tobin's Q is at times written as "Tobin's-q," "Tobin's Q," Tobin's Quotient or simply "Q", since Q stands for Quotient. Others call it the Brainard Tobin Q (Bond & Cummins, 2004), as cited in Ali, Mahmud & Lima (2016). Tobin's Q plays a critical role in most financial relations (Chung & Pruitt, 1994), as cited in (Alajlani & Posecion, 2018). The beauty of Tobin's Q is its ability to account for both financial and market data (Alajlani & Posecion, 2018).

Tobin's Q, thus counters some criticisms levelled at both accounting measures as well as stock returns as performance measurement tools (Alajlani & Posecion, 2018). Q is attractive because of its accuracy, precision, and relationship with valuation of investments thus showing the investment's real performance (Alajlani & Posecion, 2018). It is attractive in the valuation of investment opportunities, managerial performance, and stock mispricing. It's defined as the ratio of the market value of a firm to the replacement cost of its assets.

Most investment analysts agree that measuring Tobin's Q is not easy due to unavailable data, lack of ease of access to data, or non-disclosure of data for public usage (Alajlani & Posecion, 2018). They add that, dialogue with senior managers of finance suggests little if any, reliance on Tobin's Q in analysis of decisions. They argue that, the probable reason managers shun Tobin's Q may be due to lack of familiarity with this tool and its many facets. They further argue that, the unavailability of timely and accurate Q data is limiting as compared to established sources of other important financial variables like beta.

To overcome the issue of unavailable data, some researchers devised their own operational measures of Tobin's Q (Alajlani & Posecion, 2018). The most common estimation methods for Tobin's Q are those developed by Lang and Litzenberger (1989), and Lindenberg and Ross (1981), (referred to as L-R procedure). The L-R procedure divides a firm's assets into three components namely, inventory, plant and equipment, and other assets, where they apply a different methodology for each. However, researchers deem the procedures typically employed to calculate Q values in the L-R procedure and Lang and Litzenberger (1989), method as cumbersome and complex to the extent that even dedicated financial analysts never dare attempt them (Alajlani & Posecion, 2018).

Hall (1990), as cited in Alajlani and Posecion, (2018), proposes a method that uses a recurrent model. Hall's method does not utilize other asset components in the replacement cost. The Chung and Pruitt (1994), model used basic accounting information to model an accurate approximation of Q called the approximate q. They then ascertained the values obtained by the approximate q with those of Lindenberg and Ross (1981), and found them theoretically correct, and that the model indicated that approximate q explained at least 96.6% of the variability in Tobin's Q.

To help achieve the objective of the research, this study sought to utilize a simplified method of data gathering which may be reliable and accurate for investors who may want to use it as a guide in market valuation. Chung and Pruitt's approximate q was deemed suitable for this study. Chung and Pruitt's approximation of Q is extremely conservative with regard to data requirements and effort employed to compute it. It simply approximates Q as below:

Approximate Q = (MVE + PS + Debt)/TA where:

MVE = The product of the share price of a firm and the number of outstanding ordinary shares;

PS = The liquidating value of a firm's outstanding preference shares;

Debt = The value of a firm's short term liabilities net of its short-term assets, plus the book value of a firm's long-term debt;

TA = The book value of a firms' total assets.

Interpretation

Tobin's $Q > 1$ = Overvalued firm. The implication to an investor is that the market value of the firm's stock is higher than its stated book value (Ali *et al.*, 2016). They add that, in this scenario, the market is pricing the firms' assets above its stated book value. Thus, the stock is more expensive than the cost of the assets.

Tobin's $Q < 1$ = Undervalued firm. The implication to an investor is that the market value of the firm's stock is lower than its stated book value (Ali *et al.*, 2016). Thus, the market value is below the cost of the assets.

Tobin's $Q = 1$ = Fairly valued firm. The implication to an investor is that the market value of the firm's stock reflects its book value (Ali *et al.*, 2016).

Ali *et al.* (2016), argue that if Tobin's Q is less than one, it means that it costs a firm more to replace its assets than it is worth, thus it would be in a better position shedding off its assets instead of trying to put them to use. The ideal scenario is where Tobin's Q is approximated to equal one, indicating that the firm is in equilibrium.

The study adopted the Chung and Pruitt (1994), method, because it assumes that book values are good estimates of market values (Alajlani & Posecion, 2018). This method is also supported by the simple Q, another commonly used approximation of the True Q (Switzer & Emery, 1996), as cited in Alajlani and Posecion (2018), which assumes that book values are good estimates of market values. Thus, it provides an empirically fruitful framework for individual firm analysis.

TABLE 3: Tobin's Q of listed banks in Kenya

		Years													
	Bank	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1	Absa	0.5	0.7	0.6	0.7	0.6	0.6	0.5	0.3	0.4	0.5	0.4	0.3	0.3	0.3
2	Cfc	0.8	1.3	0.8	0.6	1.9	2.7	1.8	1.5	1.7	2	2.4	2.2	2.1	1.9
3	Co-op	0.4	0.5	0.3	0.4	0.5	0.6	0.5	0.4	0.5	0.5	0.5	0.4	0.3	0.3
4	DTBK	0.4	0.5	0.4	0.5	0.5	0.7	0.6	0.4	0.4	0.4	0.3	0.3	0.3	0.3
5	Equity	0.8	1	0.6	0.8	0.8	3	2.2	1.7	2.1	1.9	2.7	2.2	2.4	2.2
6	HF	0.6	0.9	0.7	0.8	0.8	0.8	0.8	0.5	0.4	0.2	0.3	0.2	0.2	0.2
7	I & M	0	0	0	0	0.7	0.8	1.8	1.6	1.9	1.2	1.6	1	1	0.5
8	KCB	0.3	0.4	0.4	0.5	0.6	0.7	0.5	1.3	1.8	1.5	2	2.1	2	1.6
9	NCBA	0.4	0.4	0.2	0.4	0.5	0.6	0.5	0.5	0.8	0.7	0.9	0.7	0.7	0.4
10	SCBK	0.5	0.6	0.3	0.5	0.6	0.6	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3

Source: Author (2022)

Based on table 3 above, the value of Tobin's Q ratio of all sampled banks is less than one, which implies that the banking industry's stocks are undervalued between FY 2008 to FY 2011. However, Cfc Stanbic's stock is overvalued in FY 2009 and FY's 2012-2021. For an investor, with Tobin's Q ratio less than one, the implication is that the company's stated book value is higher than its market value. Thus, the market is selling the assets of the company below the stated book value; hence, the market value is lower than the cost of assets (Ali *et al.*, 2016).

Equity bank's Tobin's Q ratio is also greater than one for FY 2013 through to FY 2021 which means the stock is overvalued. I & M's stock is overvalued for FY 2014 through to FY 2018, while KCB bank's stock is overvalued for FY 2015 through to FY 2021. I & M's stock is then undervalued from FY 2019-FY 2021. For an investor the implication is that the stated book value of the company is lower than its market value, thus the stock is expensive relative to its cost of assets (Ali *et al.*, 2016). However, it is important to note that the stocks of these banks are undervalued in the preceding years, since their Tobin's Q ratio is less than one.

4.3.2 Board Gender and Firm Value

From the descriptive statistics, on average, Kenyan banks listed at the NSE have two female directors sitting on their governing boards. Results from Table 8 exhibit a positive though statistically insignificant relationship with firm value as proxied by Tobin's Q, with a p-value of 0.209. This implies that, board gender diversity is not a significant determinant of firm value of listed banks at the Nairobi Securities Exchange.

This study's finding is in agreement with studies that find that, the increase in firm value is greater when governing boards have three or more female directors (Gyapong, Monem & Hu, 2016). In their study, Gyapon *et al.* (2016), established a positive relationship between both board

gender and ethnic diversity and firm value. They aver that a single female director sitting on a governing board exerts a significant impact on the value of a firm as compared to boards without female directors. Specifically, they found that, boards with one female director are associated with a higher Tobin's Q of 0.246%. Gyapon *et al.* (2016) posit that, the high firm valuation may be attributable to legitimacy benefits that firms enjoy when they announce their first appointment of a female director, since a token female may be marginalized by dominant males serving on the same board.

They also established that, with two female directors serving on a governing board, firm value increases, though marginally lower than the increase associated with a single female director. They posit that, boards having two female directors are associated with a 0.221% increase in Tobin's Q. Liu, Wei and Xie (2013), study also established that governing boards having three or more women directors have a stronger effect on firm performance compared to boards with two or fewer women directors. However, they found that the impact of women directors on firm performance is not significant in state-controlled organizations but significant in legal person-controlled companies. Agyemang-Mintah and Schadewitz (2017), posit that generally, board gender diversity debate is premised on two arguments.

The first argument is premised on the view that females with requisite skills, qualifications and experience deserve an opportunity to serve on governing boards; while the second argument holds that positive board gender diversity results in better governance and enhances firm performance. This second argument implies that female representation on governing boards should serve purely to improve firm performance, otherwise organizations will be engaging in the act of "tokenism," which they define as the practice of representing a minority group on a governing

board so as to give an appearance of a sexual or racial equality within a workforce. According to Zimmer (1988), as cited in Agyemang-Mintah and Schadewitz (2017), firms engaged in tokenism are making a perfunctory gesture of inclusiveness towards groups deemed as minority.

The finding is also consistent with Syamsudin *et al.* (2017), study which established that board gender diversity in both the board of directors and board of commissioners has a positive effect on firm value. They argue that, gender diversity will through various ways impact the financial value of a firm either in the short or long term. They define the board of commissioners as a committee that has a duty to supervise and provide suggestions to directors of a company. They aver that, women are considered to be inherently more stable than men, and that they employ a collaborative style of leadership, which provides dynamic benefits through win-win solutions. They add that, women are more risk averse, have higher circumspection, and are more thorough than their male counterparts. Thus, the presence of women on governing boards assists boards take more precise decisions. Levi *et al.* (2014) as cited in Gyapong *et al.* (2017), argue that, female directors make fewer acquisitions and that when they do make any acquisition, they pay lower bid premia, which leads to an increase in the value for the stockholder.

However, the findings of this study are in contrast with Freitas (2018), study that established that, the percentage of female directors serving on a governing board has a negative relationship with firm value. He posits that, the study demonstrated that female directors tend to impact positively the value of well governed corporations but tend to harm organizations that are poorly governed probably due to constraints placed on them by entrenched directors. Thus, Freitas (2018), finding supports the argument that, mandatory board quotas primarily serve the purpose of ramping up equality of opportunities and gender diversity.

Overall, the findings are consistent with studies that anchored their argument on agency theory which suggests that, gender diversity enhances monitoring by the board and brings new perspectives and experiences, diversity in ideas, and business knowledge to the decision-making process in boardrooms, thus enhancing a firm's financial value (Agyemang-Mintah & Schadewitz, 2017).

4.3.3 Board Size and Firm Value

From the descriptive statistics, on average, Kenyan banks listed at the NSE have 9.95 directors sitting on their governing boards. Results from Table 8 exhibit a positive and statistically significant relationship with firm value as proxied by Tobin's Q, with a p-value of 0.016. This implies that, board size is a significant determinant of firm value of listed banks at the Nairobi Securities Exchange.

This study's finding is in agreement with Rashid and Islam (2011), study that established a positive relationship between board size and firm value. They found that, bigger boards affect shareholder value positively especially in developing markets. They posit that, directors serving on large boards, come from diverse backgrounds, possess high levels of intellectual skills and make rational and value-adding decisions. They argue that, executive and non-executive directors observe optimal combination on the board. Additionally, executive directors do not dominate the vision of non-executive directors and the CEO, which results in decisions that enhance the value for shareholders. This is also in agreement with the Kalsie and Shrivastav (2016), study that established a positive and significant relationship between board size and firm value as proxied by Tobin's Q. Furthermore, Nguyen *et al.* (2015), study also established that smaller boards are associated with higher firm valuations.

According to Rashid and Islam (2011), the roles of bigger boards in affecting firm value is premised on both the resource dependency theory and agency theory. Proponents of resource dependency theory argue that, large boards help improve organizational performance as directors have higher levels of expertise in making decisions that are related to the affairs of the firm. They also possess investment know-how, and skills such as planning and strategic skills. Furthermore, the benefits that are related to large boards, suggests that members represent different departments and due to their diverse backgrounds and greater capacity, offer professional judgement related to the corporation's affairs. They also don't allow the CEO to dominate their vision. Thus, projects with negative present values (NPV) are easily rejected due to board independence and greater knowledge possessed by board members. From the agency theory viewpoint, Kalsie and Shrivastav (2016), posit that, large boards comprise of more directors who work in the interests of shareholders through monitoring and controlling thus enhancing firm performance. Agency theory believes that, bigger boards enhance performance through enhanced monitoring of large groups of people.

Additionally, from the resource dependency theory perspective, Kalsie and Shrivastav (2016), argue that, large boards are associated with a wide variety of knowledge and expertise from diverse backgrounds. Larger boards, also avail scarce resources to the firm due to connections with people from the same or different industries. Thus, members gain access to different resources and when the number of directors increases, resource availability also increases, which in turn increases firm value.

This is in contrast to Adebayo *et al.* (2022), study that established a negative relationship between board size and financial performance. They posit that, large boards lower the financial performance, that is the higher the size of the board, the lower the financial performance and vice-

versa. They cite a study by Zahra and Pearce (1989), which argues that there may be a threshold, above which board size may exhibit a negative effect on firm performance. Jensen (1993), as cited in Adebayo *et al.* (2022) argues that, as groups increase in size, their effectiveness is impaired due to process and coordination problems that overwhelm the advantage of having more people to draw from.

On large boards, Nguyen *et al.* (2015) argue that, shareholders are justified when they assign lower valuations to companies with large boards, since in their view, smaller boards are more effective in the representation of shareholder interests. They also reason that, large boards are associated with increased operating costs, are less profitable and offer CEO compensation that depends on the size of the balance sheet of an organization, though unrelated to organizational performance.

From agency theory viewpoint on the role of board size in affecting firm value, critics argue that large boards make for less intense decisions which deteriorates firm value due to free-riding among directors. Free-riding happens when a majority of directors do not monitor and act as observers on the board, thus increasing costs of agency which leads to delayed and irrational decisions due to poor performance by board members (Rashid & Islam, 2011). They add that, there is less cohesion among large boards, which leads to unproductive discussions. The absence of cohesion may lead to poor management and an adverse level of coordination by directors. Board members serving on large boards, do not obtain either a proper turn or gain sufficient time to voice their opinion.

In sum, the study findings are in tandem with those studies that premised their argument on the agency and resource dependence theories that support boards with a large number of

members, since a greater number of directors improves firm value (Kalsie & Shrivastav, 2016). When taken together, both the agency and resource dependency theory signify that, there exists a positive relationship between the size of the board and firm value.

4.3.4 Board Meetings and Firm Value

From the descriptive statistics, on average, Kenyan banks listed at the NSE conduct 6.235 board meetings in a financial year. Results from Table 8 exhibit a negative and statistically insignificant relationship with firm value as proxied by Tobin's Q, with a p-value of 0.301. This implies that, board meetings are not a significant determinant of firm value of listed banks at the Nairobi Securities Exchange.

The study's finding is in tandem with Rodriguez-Fernandez *et al.* (2014), study that established a negative but statistically insignificant relationship between the number of board meetings and firm performance as proxied by Tobin's Q. They posit that, their finding is not in congruence with agency theory which emphasizes board meetings do help coordinate the efforts of the board in monitoring different managerial actions. Bhat *et al.* (2018), study also established that board meetings have an insignificant relationship with firm performance as measured by Tobin's Q, proffering a possible reason that frequent board meetings may ratchet up firm costs, but are not productive enough to increase firm value due to the limited time spent in meetings by board members.

According to Bhat *et al.* (2018), the justification for such an insignificant result is that board meetings are expensive and take a short time which may not affect firm value. Additionally, Al-Musali and Ismail (2015), who also established a negative relationship between board meetings and intellectual capital, posit that, board meetings non-contribution to intellectual capital is due to the inability of board members to access requisite information that relates to the strategic agenda

of meetings which in turn impedes their ability to actively participate in the decision-making process. Lipton and Lorsch as cited in Al-Musali and Ismail (2015), argue that, meetings require several regulatory and preparatory procedures to be effective in supporting directors perform their monitoring role. Most importantly, they further argue that, holding board meetings may be performed solely to comply with regulatory requirements.

The study's findings are in contrast with Ntim and Osei (2011), study which established a positive and significant relationship between frequency of board meetings and firm performance; buttressing the empirical support of agency theory, which holds that, governing boards that hold frequent meetings increase their capacity at advising, monitoring and disciplining management, thus increasing financial performance of the firm.

In sum, the finding of this study is consistent with existing literature that evidences that, theoretically consensus exists on the important role that board meetings play in the governance, conformance and performance of firms; while empirical literature on its impact on firm performance is nuanced (Ntim & Osei, 2011). According to Conger *et al.* (1998), as cited in Ntim and Osei (2011), frequency of board meetings is aimed at improving board effectiveness, which translate to board knowledge, ties and expertise that improve organizational outcomes. However, Carcello *et al.* (2002), as cited in Ntim and Osei (2011), argue that, the only measure that is publicly available for researchers is the number of board meetings.

4.4 Diagnostic Tests

TABLE 4: The Breusch and Pagan LM Test

	Var	sd = sqrt (Var)
tobinsq	.4485771	.669759
e	.2030085	.4505646
u	.3829762	.6188507
Test: $\text{Var}(u) = 0$		
chibar2(01) = 255.60		
Prob > chibar2 = 0.0000		
Source: Author (2022)		

The aim of the Breusch and Pagan LM test is to help the researcher choose the appropriate model between the ordinary least squares (OLS) model and the random effects model. In this study the most appropriate model to adopt is the Random Effects since the p-value is 0.0000 which is less than 0.05, we fail to reject the null hypothesis and conclude that the random effects model is the most suitable and consistent for panel regression analysis.

TABLE 5: The Hausman Test

	Coef.
Chi-square test value	.098
P-value	.992

Source: Author (2022)

The Hausman Test is aimed at assisting the researcher choose the appropriate model in panel data regression analysis between the random effects model and the fixed effects model. In this study, the most appropriate model to fit is the random effects model since the p-value is 0.992 which is greater than 0.05. Since the p-value is greater than 0.05, we fail to reject the null hypothesis and conclude that the random effects model is the most suitable and consistent for panel regression analysis.

TABLE 6: Test of Normality

Variable	Obs	W	V	Z	Prob>z
residuals	140	0.943	6.269	4.146	0.000

Source: Author (2022)

Testing for normality in a model helps determine if the residuals behave normally (Meme, 2013). To detect all departures from normality of data, the study employed the Shapiro–Wilk test for normality. The Shapiro-Wilk test is a non-graphical test, that is used to test if the distribution of residuals is normal (Meme, 2013). Table 4 above shows the output of the W statistic at 0.94245. Based on the Shapiro–Wilk, W , statistic, the closer W is to one, the more normal the sample is deemed to be, and hence we can conclude that overall residuals were found to be normally distributed.

TABLE 7: Test of Multicollinearity

Variables	(1)	(2)	(3)	(4)
(1) tobinsq	1.000			
(2) boardgender	0.142	1.000		
(3) boardsize	0.196	0.548	1.000	
(4) boardmeetings	0.004	0.312	0.321	1.000

Source: Author (2022)

When analyzing for multicollinearity, the assumption is that the independent variables are not correlated with each other (Musyoka, 2017). This study utilized the correlation analysis to test the strength of the relationship between the variables under study. The best and quickest method of identifying highly correlated variables is the use of a correlation matrix. The correlation matrix as presented in Table 7, shows the correlation between every single pair of numeric features from the dataset. With reference to the assumptions on multicollinearity, we can conclude that, multicollinearity was not detected since the reported values are within the acceptable range. From table 7 above, no independent variable exhibited a correlation coefficient higher than 0.8.

4.5 Model Fitting

To test the overall validity of the regression model, analysis of variance (ANOVA) was employed. The results are presented in table 8 below.

TABLE 8: Board Characteristics and Firm Value Model Fit

tobinsq	Coef.	St.Err.	t- value	p- value	[95% Conf	Interval]	Sig
boardgender	.062	.049	1.26	.209	-.035	.159	
boardsize	.066	.027	2.42	.016	.013	.12	**
boardmeetings	-.023	.023	-1.03	.301	-.068	.021	
Constant	.168	.317	0.53	.596	-.454	.79	
Mean dependent var	0.826		SD dependent var		0.670		
Overall r-squared	0.045		Number of obs		140		
Chi-square	12.115		Prob > chi2		0.007		
R-squared within	0.085		R-squared between		0.021		
*** $p < .01$, ** $p < .05$, * $p < .1$							

Source: Author (2022)

Since the Hausman test showed that the most appropriate model for the study is the random effects model and not the fixed effects model, a random effects model was fitted to examine the effect of board characteristics on firm value of listed banks at the NSE. A rho of 0.653 was obtained which indicates that 65.3% of the variance is due to differences across panels. From Table 8 above, we also see the Chi-Squared value generated by the Wald test, as well as the p-value associated with a chi-square of 12.12 with three degrees of freedom. Based on the p-value of 0.0070, we reject the null hypothesis, and indicate that the coefficients for board gender, board size and board meetings are not simultaneously equal to zero, meaning that the inclusion of these three variables creates a statistically significant improvement in the fit of the model.

To answer the first research question, which is, “How does the frequency of board meetings have an effect on firm value of listed banks in Kenya? The results show that, there is a negative and insignificant relationship between frequency of board meetings and firm value as measured by Tobin’s Q among listed banks at the NSE ($\beta = -0.023$, $p\text{-value} = 0.301$). The implication of this is that, a unit change in the frequency of board meetings, lowers (decreases) firm value by 0.023 units *ceteris paribus*.

To answer the second research question, which is, “How does board size have an effect on firm value of listed banks in Kenya? The results indicate that, there is a positive and significant relationship between the size of the board and firm value as proxied by Tobin’s Q among listed banks at the NSE ($\beta = 0.066$, $p\text{-value} = 0.016$). The implication of this is that, a unit change in the size of the of board, increases firm value by 0.016 units *ceteris paribus*.

To answer the third research question, which is, “How does board gender diversity have an effect on firm value of listed banks in Kenya? The results show that, there is a positive and insignificant relationship between board gender diversity and firm value as measured by Tobin’s

Q among listed banks at the NSE ($\beta = 0.062$, p-value=0.209). The implication of this is that, a unit change in board gender diversity, increases firm value by 0.062 units ceteris paribus.

The resultant regression model becomes:

$$\hat{y} = 0.168 + 0.062X_1 + 0.066X_2 - 0.023X_3$$

Where:

Y= Firm Value (as proxied by Tobin's Q)

X1 = Board Gender

X2 = Board Size

X3 = Board Meetings

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study, and the conclusions reached based on the results obtained during the research, and makes recommendations for investors, policy makers and industry practice. To aid in settling the never-ending debate on corporate governance policy recommendations, this study further recommends areas for further research.

5.2 Summary

This study's objective was to investigate the effect of board characteristics on firm value of listed banks in Kenya. The study's specific objectives were to determine the effect of board gender diversity on the value of listed banks in Kenya; to establish the effect of board size on the value of listed banks in Kenya and to assess the effect of board meetings on the value of listed banks in Kenya.

Data was collected from ten banks listed at the NSE. It was analyzed and presented in chapter four with specific objectives being utilized as parameters in analysis. To gain an understanding of the research results from previous studies, empirical and theoretical literature played a crucial role in comparison of results from previous studies.

5.2.1 Board Meetings and Firm Value

The finding of this study established that there is a negative and statistically insignificant relationship between the number of board meetings held by directors of Kenyan banks listed at Nairobi Securities Exchange and firm value as measured by Tobin's Q. In respect to objective one,

the implication of this finding is that, board meetings are not an important determinant of firm value as measured by Tobin's Q.

The insignificant effect of board meetings on firm value as established by this study, suggests that merely having frequent meetings does not add to firm value. Findings of this study show that, to have effective meetings, management should provide directors with appropriate and sufficient information particularly related to strategic issues that may help increase shareholder wealth. This will enable board members better prepare and be more involved in board meetings. The findings also repudiate the empirical support lent to agency theory, which holds that, governing boards that engage in frequent board meetings increase their capacity to effectively monitor, advise and discipline management hence improving corporate market value.

The findings of this study offer numerous applications to different stakeholders, especially scholars and regulators. For scholars, they should put into consideration the results of this study especially when building the empirical relationship between frequency of board meetings and firm value. For regulators, the insignificant relationship between board meetings and firm value is a warning signal that they activate their monitoring role on board meetings in terms of time, agenda and outputs.

5.2.2 Board Size and Firm Value

The finding of this study established that there is a positive and statistically significant relationship between the number of directors serving on governing boards of Kenyan banks listed at Nairobi Securities Exchange and firm value as measured by Tobin's Q. In respect to objective two, the implication of this finding is that, board size is an important determinant of firm value as measured by Tobin's Q.

The significant and positive relationship between board size and firm value implies that, a large board enhances firm value of listed banks at the NSE. From the findings, it can be argued that, Kenyan banks listed at the NSE, require large boards that enhance their ability to comprehend and respond to diverse stakeholder interests. This finding buttresses the agency theory perspective which postulates that large boards enhance firm performance through effective monitoring and the resource dependency theory which postulates that, large boards bring varied knowledge and expertise from different fields thus providing enhanced monitoring capacity that enhances a firm's ability to generate external linkages that boosts its market value.

The results of this study are relevant to scholars and policy makers. For academics, the detailed comparative analysis provided in the study as relates to the relationship between board size and firm value may form part of the empirical literature. For policy makers, they should refrain from prescribing what can be described as an “optimum” number of directors to serve on a governing board.

5.2.3 Board Gender and Firm Value

The finding of this study established that there is a positive though statistically insignificant relationship between the number of female directors serving on governing boards of Kenyan banks listed at Nairobi Securities Exchange and firm value as measured by Tobin's Q. In respect to objective three, the implication of this finding is that, board gender diversity is not an important determinant of firm value as measured by Tobin's Q.

A possible explanation for the insignificant but positive relationship between board gender diversity and firm value, could be borrowed from reviewed literature that posits that, the weak relationship is due to the limited number of women serving on governing boards of listed banks in

Kenya. The study established that, boards in Kenya are still male-dominated. The positive impact of board gender diversity on firm value, may be due to firms appointing female directors to serve on their boards in order to exploit the benefits associated with female directors which include their knowledge, skills and ideas as premised by the resource dependency theory. From reviewed literature, firm value is greater where boards are comprised of three or more female directors. However, reviewed literature also reveals that, women are perceived to be incompetent if they are appointed to serve on governing boards simply to comply with policy or quotas requirement, and this may undermine their effectiveness.

Board gender diversity is deemed as a critical factor in the composition of boards. From the finding of this study, governing boards are still male-dominated which in turn calls for researchers to inquire into the potential benefits of female directors in boardrooms, especially in developing markets such as Kenya. For regulators, the findings point to the need for continuous enforcement of the one-third gender rule in order to lock in the benefits that are associated with female directors, since reviewed literature establishes that, boards with one female director are associated with a higher Tobin's Q.

5.3 Conclusions

On board meetings, this study concludes that frequent board meetings contribute negatively but insignificantly to firm value. Regarding the role of board meetings in affecting firm value, from the reviewed literature, there is need for the provision of requisite and sufficient information to board members particularly as relates to strategic matters that are useful in enhancing the corporate market value of firms. This helps board members better prepare and get more involved in the meetings.

On board gender diversity, this study concludes that female directors contribute positively but insignificantly to firm value. There are theoretical arguments that suggest the existence of a nexus between board gender diversity and improved corporate performance. From the agency theory perspective, the inclusion of women on governing boards, strengthens corporate governance mechanisms through efficient monitoring and control which may help restrain top management from enhancing their positions thus mitigating costs of agency. While the proposition of resource dependency theory is that, women directors bring diverse viewpoints and professional backgrounds to boardrooms which differ from those of what can be termed as the “Old Boys Club.”

On board size, this study concludes that the size of the board contributes positively and significantly to firm value. Importantly, there are arguments that support the agency theory’s view that large boards comprised of more directors’ work in the interests of shareholders through monitoring and controlling which enhances firm performance. Additionally, the resource dependency theory perspective is also supported by the argument that, large boards avail scarce resources to the firm due to connections with people from the same or different industries. Thus, members gain access to different resources and when the number of directors increases, resource availability also increases, which in turn increases firm value.

5.4 Recommendations

The study recommends that, for corporate governance to be more effective, policy makers should not focus primarily on designing regulatory frameworks that emphasize “apply-or-explain” rules for listed companies, but rather focus on the equally important but often not stressed issue of how board characteristics can be utilized to add a strategic value to a company. This is because, well-balanced boards play crucial roles and can be sources of competitive advantage for companies in terms of value creation and innovation.

Since the relationship between board size in affecting firm value is positive, regulators should refrain from prescribing what can be described as an “optimum” number of directors to serve on a governing board as advocated for by Garg’s (2007), study that suggested a board of six or less members, or Jensen’s (1993), study that advocates for board members to be between six and eight. The study recommends that policy makers should refrain from prescribing the number of directors to serve on a governing board since the finding reinforces the fact that Kenyan banks require large boards that enhance their ability to comprehend and respond to diverse stakeholder interests. It can be argued that, by both inside and outside directors collaborating, outside directors can obtain firm specific information from inside directors which aids them make robust financial decisions and reduce information asymmetries from the market, hence creating value for shareholders.

5.5 Recommendations for Future Research

This study provides empirical evidence on the effect of board characteristics on firm value of listed banks in Kenya. However, due to the limitations of the study, the researcher recommends a wider study which will cover a longer period of time. Secondly, the study focused on listed banks only, which calls for another study that entails all players in the banking industry. Lastly, since the study focused on the banking industry, another study should be conducted in a different industry. This will help in providing results for generalization purposes.

5.6 Limitations of the Study

As much as the variables in the study are either explained individually or in relation to others, the absence of sufficient local literature on board characteristics and firm value presented limitations which potentially presents opportunities for further research as recommended by the researcher. First, the study is limited to the banking sector which limits its generalization to all the sectors of

the economy. Secondly, the study sample used can be considered relatively small, thus future research could utilize larger samples with a view to further improve the generalizability of the results. Lastly, the study was limited to banks listed at the Nairobi Securities Exchange, thus the study cannot be generalized to non-listed banks in Kenya. As such future research could look at the nature of the relationship between characteristics of the board and firm value of non-listed banks in Kenya.

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APPENDIX I: Secondary Data Collection Sheet

FY	Name of Company	Total no. of Directors	No. of Female Directors	Total no. of Board Meetings	Mkt Value of Equity	Value of Preference Shares	Total Assets
2008	Absa	10	3	8	45.00	0	165,151,000,000
2009	Absa	10	3	7	62.50	0	172,415,000,000
2010	Absa	9	3	9	13.05	0	167,029,000,000
2011	Absa	10	2	8	15.75	0	184,825,000,000
2012	Absa	11	3	7	17.60	0	207,011,000,000
2013	Absa	8	3	8	16.70	0	225,844,000,000
2014	Absa	11	5	8	13.60	0	240,877,000,000
2015	Absa	9	3	8	9.10	0	259,718,000,000
2016	Absa	9	4	10	9.60	0	271,572,000,000
2017	Absa	9	4	10	10.95	0	325,313,000,000
2018	Absa	11	5	8	13.35	0	374,904,000,000
2019	Absa	9	3	8	12.15	0	376,313,000,000
2020	Absa	9	2	8	12.60	0	379,441,000,000
2021	Absa	10	3	6	11.85	0	428,768,000,000

APPENDIX II: Sampling Frame

1	ABC Bank Kenya
2	Absa Bank Kenya PLC
3	Bank of Africa
4	Bank of Baroda
5	Bank of India
6	Chase Bank
7	Citibank
8	Consolidated Bank of Kenya
9	Co-operative Bank of Kenya
10	Credit Bank
11	Development Bank of Kenya
12	Diamond Trust Bank
13	Dubai Islamic Bank
14	Ecobank Kenya
15	Equity Bank
16	Family Bank
17	Firxt Community Bank
18	Guaranty Trust Bank Kenya
19	Guardian Bank
20	Gulf African Bank
21	Habib Bank AG Zurich
22	Housing Finance Company of Kenya
23	I & M Bank
24	Jamii Bora Bank
25	Kenya Commercial Bank
26	Mayfair Bank
27	Middle East Bank of Kenya
28	M Oriental Bank
29	National Bank of Kenya
30	NCBA Bank Kenya
31	Paramount Universal Bank
32	Prime Bank Kenya
33	SBM Bank Kenya Ltd
34	Sidian Bank
35	Spire Bank
36	Stanbic Bank Kenya
37	Standard Chartered Bank Kenya
38	Transnational Bank
39	United Bank of Africa
40	Victoria Commercial Bank
41	Imperial Bank

APPENDIX III: Listed Banks in Kenya

1	Absa Bank Kenya PLC
2	NCBA
3	I & M
4	Equity
5	DTBK
6	KCB
7	Co-operative Bank
8	SCBK
9	CfC Stanbic
10	HFCK