

**EFFECT OF CORPORATE GOVERNANCE ON INTELLECTUAL  
CAPITAL DISCLOSURE QUALITY AMONG COMMERCIAL BANKS  
IN KENYA**

**BY**

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## DECLARATION

### STUDENT'S DECLARATION

I declare that this project is my original work and has never been submitted for a degree in any other university or college for examination/academic purposes.

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

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## **DEDICATION**

To my dad, mum and sister Marion for their support in my pursuit for further education. They gave me valuable strength to excel and achieve my goals.

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## **ABSTRACT**

The banking industry is very important in the financial system as commercial banks' financial performance gives managers and policy makers great concern. However, over a third of banks worldwide are experiencing weak financial results. As a result, it is the responsibility of the corporate governance framework to ensure sufficient transparency relating to this value engine, as well as that the information disseminated by managers is accurate and trustworthy, which may be accomplished by maintaining a reliable control system internally as a vital part of a suitable corporate governance system. The study aimed to determine the effect of corporate governance on the intellectual capital disclosure quality among the commercial banks in Kenya. The specific objectives include: to investigate the effect of board independence, audit committee, board gender diversity, and board meetings on the intellectual capital disclosure quality among the commercial banks in Kenya. A descriptive research design was adopted. The study's target population was 43 commercial banks operating in Kenya as at December 2020. The study included all the 43 commercial banks since all the elements of the population were included in the study because the population is small. The research employed secondary data obtained from Central Bank of Kenya annual reports and banks financial reports between 2015 and 2020. The data was cleaned, coded, and structured in such a way that it could be analyzed using the Statistical Package for Social Sciences (SPSS version 25.0). The study used descriptive statistics such as central tendency measures, frequency counts, kurtosis and skewness, and mean and standard deviation. The findings were presented on tables and graphs. The study found that board independence positively and significantly affected the intellectual capital disclosure quality among commercial banks in Kenya. The study also established that audit committee positively and significantly affected intellectual capital disclosure quality among commercial banks in Kenya. The study established that board gender diversity positively and significantly affected intellectual capital disclosure quality among commercial banks in Kenya. The study also established that board meetings positively and significantly affected intellectual capital disclosure quality among commercial banks in Kenya. The study concluded that corporate governance has significantly contributed to intellectual capital disclosure quality among commercial banks in Kenya. The study recommends that intellectual capital disclosure practices and requirements should apply across board no intellectual capital disclosure policies and requirements should be applied uniformly across the board, regardless of bank size, in order to disclose as much information to all interested stakeholders as possible. Corporate governance measures should be highlighted in all processes, and disclosure levels should not be limited to annual reports alone, as the data on annual reports may not provide all of the information that investors may need to assist in decision making.

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## **ABBREVIATIONS AND ACRONYMS**

<b>ADF</b>	Augmented Dickey-Fuller
<b>BOD</b>	Board of Directors
<b>CBK</b>	Central Bank of Kenya
<b>CEO</b>	Chief Executive Officer
<b>CG</b>	Corporate Governance
<b>CIMA</b>	Chartered Institute of Management Accountants
<b>CSR</b>	Corporate Social Responsibility
<b>DFT</b>	Dickey-Fuller Test
<b>IC</b>	Intellectual Capital
<b>ICD</b>	Intellectual Capital Disclosure
<b>IIRC</b>	International Integrated Reporting Council
<b>IT</b>	Internet Technology
<b>LM</b>	Lagrange Multiplier
<b>NPL</b>	Non-Performing Loan
<b>NSE</b>	National Stock Exchange
<b>OLS</b>	Ordinary Least-Squares
<b>R&amp;D</b>	Research and Development
<b>VAR</b>	Value at Risk
<b>VIF</b>	Variance Inflation Factor

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

In assessing discretionary disclosure of economic capital not mandated in financial statements, directors' business acumen becomes critical. The inclusion of unaccounted economic resources in annual reports, which have a bearing on future profits, will boost stock prices and help companies lower their cost of funds (Shehata, 2013). In this study, Intellectual capital (IC) resources are used as a substitute for unaccounted economic resources. Though there are many meanings of intellectual capital (Akisik & Gal, 2011), one generally accepted description is that it refers to the “unaccounted economic capital” of potential profits that is not accounted for in financial statements (Latif, Shahid, Haq, Waqas & Arshad, 2018, p. 2). Such transparency is especially relevant in Kenya, where Kenyan listed commercial banks are looking to expand and benefit from the East African community's economic integration (Rashid, 2015).

Despite the value and importance of IC for businesses and nations alike, it must be closely monitored. There is an urgent need to establish consistent monitoring structures to be certain that these ambiguous wealth sources are not mishandled by executive management. As a result, the value of Corporate Governance (CG) for IC investment is critical. Hagi and Bărbulescu (2016) describe CG as a framework that specifies the rules and guidelines for management of businesses. In this study, firms with corporate governance are expected to be able to mitigate individual shortcomings in their skills in business by shared decision-making, according to this report. To obtain a thorough understanding of the impact of the size of board on strategic and tactical resources disclosure of internal, external and human capitals,

the study divides IC resource products into the three categories. In many aspects, this study adds to the conversation about IC disclosure. It examines how it is affected by corporate governance variables including board independence, audit committee, board gender diversity, and board meetings on the ICD quality among the commercial banks in Kenya.

### **1.1.1 Corporate Governance**

Corporate governance (CG) is referred by Ramzan, Amin and Abbas (2021) as a mechanism by which businesses are directed and regulated. Whereas CG is described by Johl, Kaur and Cooper (2015) as a group of connections amid the firm's management, board of directors (BOD) and shareholders. Opinions are, however, split as to whether the concept of CG should include other stakeholders or particular stakeholders. Mungai (2012) describes corporate governance primarily by two methods: one is to specifically compare firm performance and the other is to analyze the sensitivity of the link of top management turnover and CG.

Okoth and Coskun (2016) first used stock returns as the corporate governance index. The sensitivity of the association between top management turnover and organizational performance is also discussed (Fakhari & Pitenoei, 2017). Any corporation's valuation can only rise when there is fair and efficient corporate governance. For sustainable growth and higher company valuations, good and efficient corporate governance is very critical. Therefore, there must be continuous progress in the standard of governance. It's hard to change something that can't be calculated. There is, therefore, a need to assess the efficacy of CG in order to increase performance.

The effectiveness of the BOD governance is demonstrated by the organization's success. Based on the market outputs generated by the organization, the organization's performance is

continuously calculated. Business performance is the product of activities carried out by companies on the basis of strategies developed by the Board and carried out by management and others. The Board should conduct continuous evaluation of the performance of the organisation. Monitoring the output of the company and decision-making by the board is only possible when appropriate inputs/information is given to the board by management in time. Finally, the board also needs to research the effect of their decisions on the organization's production, results and learn about their errors and failures to enhance their own performance (Shehata, 2013).

Robiyanto, Putra and Lako (2021) used Corporate Governance Perception Index (CGPI), the ASEAN Corporate Governance Scorecard (ACGS), and the Financial and Development Supervisory Agency (FDSA) as proxies to assess the CG. The CGPI, ACGS and FDSA are the results of assessments in the form of numbers that can represent the CG implementation in a firm based on the assessment of the principles of CG, commitment, leadership, strategy, vision, mission, ethics, culture, and values of a firm. As defined by Adekoya (2012), the mechanisms of corporate governance are the means and procedures by which countries' corporate governance regulations and business laws are implemented (p. 40). Among these methods of corporate governance are board composition, board equity ownership, board size, and more recently, board diversity. Board independence, audit committee, gender diversity and board meetings were used to assess corporate governance in this research.

### **1.1.2 Intellectual Capital Disclosure Quality**

Intellectual capital (IC) is defined by the International Institute for Intellectual Capital (IIRC) as knowledge-based assets such as intellectual property, protocols, tacit knowledge, and systems. IC is the most essential part in the company's potential prospective income, with a

close connection and contingency amid investing in research and development, innovations, human resource, and associations externally, which could ascertain the firm's competitiveness (Ramadhan, 2014; Hussain-Alkdai, 2012).

Bansal, Lopez-Penez, and Lazaro (2018) provided a more detailed description of the IC, describing it as the ownership of information, practical experience, technology, consumer associations, and specialized skills that give a firm a competitive edge. The general notion of IC is broken into three key categories: According to CIMA, human capital refers to the worth of "any intellectuality inferred by the firm's workers at the conclusion of a task." This encompasses all talents, insights, tacit knowledge, technical training, imagination, innovations, employee loyalty, management competencies, and other qualities associated with high-quality staff. Relational Capital: comprise valuable resources linked to external partners who have a connection with firms. This includes clients, vendors, R&D partners, and all indirect relationships that arise from working with these groups, such as credibility, a mental image of the firm, and customer loyalty. A company's capital is described as the tacit information that remains at the organization that the close of the day, which involves processes, plans, copyrights, IT infrastructures and intellectual properties such as trademarks, patents and franchises (Lubale, 2012).

The aggregate score of the ICD index was used to evaluate the quality of intellectual capital disclosure in this study. This displays the level of understanding of the importance of IC as well as information about corporate strategy and future plans among Kenyan commercial banks. The three categories of intellectual capital revealed were human intellectual capital, structural intellectual capital, and relational intellectual capital.

### **1.1.3 Corporate Governance and Intellectual Capital Disclosure Quality**

The basis for efficiency and probity, as well as the openness and accountability of businesses, is established by corporate governance. Corporate governance is concerned with ways to ensure that companies' suppliers get a return on their investment (Carragher, 2015). A majority of developing nations, like Kenya, made formal the best practice codes of corporate governance in 2001 (a year before this research), based on developed-country best practice codes, with little regard for the underlying market conditions whereby the codes are applied and put into practice. While close replication of firm's governance practices in developed nations is not always suitable for companies in developing countries, improved practices of governance are expected to ensure firms become more transparent and accountable through stakeholders disclosure.

In addition, Literature (Nazar & Rahim, 2015; Fakhari & Pitenoei, 2017) suggests that information asymmetry is anticipated to be greater between managers and investors in IC-dependent firms than in physical capital-dependent firms, as a result of IC's unique nature, which makes it vague for information users lacking enough detail in regard to the products, classifications, costs, and future plan. Finally, as compared to tangible assets that are present on the face of financial statements, reporting on IC is still not well controlled. All of these factors emphasize the significance of a proper CG mechanism in protecting intangible assets and ensuring an adequate level and high quality of ICD.

Uyar and Kilic (2012) focused on CG and ownership features impact on disclosure by corporates of Kenyan listed companies. The present research varies from theirs in a number of ways. To begin with, rather than looking at every disclosure by a corporate, this study focus is on IC disclosure with an economic emphasis. Second, rather than looking at all aspects of corporate governance, this study focuses on the impact of board size. Other related

corporate governance characteristics listed in the literature are used as control variables in this analysis. Allegrini and Greco (2013) adopted the agency theory viewpoint to investigate part of directors who are independent and the audit committee role. Due to the resource dependence underpinning the report, which is discussed later, the present study makes use of the independent directors on the board and independent directors number on committees. Third, unlike Allegrini and Greco (2013), the current study looks at intellectual capital disclosures in both strategic and tactical categories.

Mulenga and Bhatiaa (2020) looked into how European biotechnology companies disclosed their intellectual resources. They evaluated the quality and quantity of intellectual capital (defined in terms of economic signs, perspective orientation and content of data), the size of boards, the fraction of independent directors and their leadership. Li et al. looked at 100 publicly traded companies in the United Kingdom. They divided IC into three categories: human, institutional, and relational capital; they used a disclosure index built specifically for this study to assess disclosure in each category; and they looked into the impact of CG characteristics on disclosure categories. However, neither study focused on the effect of governance features on strategic and tactical IC disclosures. Furthermore, both studies were conducted in developed nations and used the agency theoretical viewpoint to establish theories and interpret results.

#### **1.1.4 Commercial Banks in Kenya**

The Kenyan banking industry is governed by the firms, the banks, the CBK Acts, and other rules supplied by the CBK. According to the GOK, Kenya has 43 registered commercial banks (2019). Three of them are public financial institutions, with the government and other state firms owning the lion's share of the shares. The remaining private banks are made up of

27 local commercial banks and 13 overseas banks. Banks are also categorized based on weighted composite indices that include loan accounts, net assets, customer deposits, capital reserves, and deposit level. There are seven Tier 1 banks with a 58.2 percent market share, twelve Tier 2 medium-sized banks with a 32.42 percent market share, and twenty-one Tier 3 small banks with a 9.24 percent market share. Commercial banks play a significant part in Kenya's economy by providing a financial infrastructure for both domestic and foreign investors.

Over the past decade, Kenya's commercial banks have experienced a variety of financial and regulatory reforms, resulting in a number of structural changes in the sector that have allowed multinational banks to join and grow their operations in Kenya (Lagat & Nyandema, 2016). The banking sector, according to Jean-Paul and Martine (2018), has been the "glue" that has kept the country's economy together. The overall asset base of the sector in 2017 was Ksh. 4.1 trillion, equity was Ksh. 600 billion, pretax profit gross was Ksh. 148 billion, and the loan portfolio was Ksh. 2.7 trillion, compared to Ksh 2.3 trillion in Kenya's 2016/17 national budget (CBK, 2017).

Notably, throughout the last two decades, the banking industry has seen a progressive transition, as indicated by improved intellectual capital disclosure quality, financial innovations, deposit development, and the sector's resistance to global economic catastrophe (CBK, 2017). According to a CBK (2016) poll, 82.6 percent of Kenyans are financially self-sufficient. In addition, audit committees were found to be more widespread in the study than conventional banking.

Despite improved intellectual capital disclosure quality, the industry is beset by a slew of issues that have weighed heavily on interest revenue (Chelogoi, Cheboi & Tenai, 2020).

Kenya's financial results have worsened since the Banking Amendment Act (2016), which imposed interest rate capping, as seen by pre-interest cap returns on assets of 2.9 percent (2015) and post-interest cap returns on assets of 2.7 percent (2017).

## **1.2 Research Problem**

Many businesses are doomed to collapse as a result of poor corporate governance. The bankruptcy of three Kenyan commercial banks, Chase Bank, Dubai Bank, and Imperial Bank, shows that bank management failed to properly identify and manage bank risks. Such incidents have shattered investors' faith in the capital markets, as well as the efficacy of existing CG regulations in promoting openness and accountability in intellectual capital disclosure quality among Kenyan commercial banks. The banks waste expensive resources and reduce the predicted future worth of their revenues by ineffectively deploying their intellectual capital (CBK, 2017). As a result, it is the responsibility of the corporate governance (CG) framework to ensure sufficient transparency relating to this value engine, as well as that the information disseminated by managers is accurate and trustworthy, which may be accomplished by maintaining a reliable control system internally as a vital part of a suitable CG system. There is, without a doubt, an important connection between IC and corporate governance that has yet to be explored in the literature (Mulenga & Bhatiaa, 2020). It is in light of this that this study aims to fill a gap in the literature by looking into the impact of corporate governance on the quality of ICD among Kenyan commercial banks.

Since the banking industry is so important in the financial system, commercial banks' financial performance gives managers and policy makers great concern. However, over a third of banks worldwide are experiencing weak financial results (Fakhari & Pitenoei, 2017). Bank-specific obstacles like high costs of operation, poor operating productivity and high

NPL have hampered these banks' financial results. Financial liberalization and deregulation have intensified these issues, resulting in financial instability and high competition (IMF, 2014). For example, the financial performance of Kenya's banking sector fell by 9.6% in 2017, owing to a greater decrease in income in relation to a marginal decrease in expenses (CBK, 2017).

Previous studies have been done on CG but related it to various variables. For example, Abeysekera (2010) investigated the impact of board size on IC disclosures by Kenyan listed companies but did not focus on the commercial banks as their scope. Waweru, Mangena, and Riro (2019) investigated CG and corporate internet reports in Sub-Saharan Africa in Kenya and Tanzania. The study however, did not focus on the impact of the CG on intellectual capital disclosure quality, and the study also focused on Tanzania. Chelogoi, Cheboi, and Tenai (2020) investigated CEO tenure as the moderating effect on the link of IC and financial results of Nairobi Securities Exchange-listed firms. This study ran the Panel regression model whereas the current study adopted the regression analysis. Wakari (2019) looked into the impact of CG on the disclosure standard of Nairobi Securities Exchange-listed firms. However, the study cannot be compared with the current one because the study did not focus on commercial banks. There is therefore dearth of literature to evaluate the link of CG and IC disclosure on the case of Kenya. The purpose of this study was to determine the effect of CG on intellectual capital disclosure quality among Kenyan commercial banks by examining the effect of board independence, board expertise, audit committee, board gender disparity, and board meetings on intellectual capital disclosure quality among Kenyan commercial banks. This research intended to address the following question: To what degree does corporate governance influence the quality of intellectual capital disclosure across Kenyan commercial banks?

### **1.3 Research Objectives**

The general objective of the study was to determine the effect of corporate governance on the intellectual capital disclosure quality among the commercial banks in Kenya. The specific objectives include:

- i. To investigate the effect of board independence on the intellectual capital disclosure quality among the commercial banks in Kenya.
- ii. To evaluate the effect of audit committee on the intellectual capital disclosure quality among the commercial banks in Kenya.
- iii. To assess the effect of board gender diversity on the intellectual capital disclosure quality among the commercial banks in Kenya.
- iv. To establish the effect of board meetings on the intellectual capital disclosure quality among the commercial banks in Kenya.

### **1.4 Value of the Study**

The need of providing appropriate and consistent information on such instruments is underscored by the IC's widely accepted usefulness in producing value, leveraging commercial banks' market value, and enhancing operational efficiency and connectivity to third parties. Other parties (such as suppliers, potential investors, financial analysts, and creditors) want sufficient information about IC in order to make well-informed decisions. As a result, it is the responsibility of the CG system to ensure that adequate disclosures are made in relation to this value driver, as well as that the information disseminated by management is accurate and trustworthy, which can be accomplished by ensuring a reliable internal control system as a critical component of a proper corporate governance system.

A proper CG framework in a company is critical for improving the transparency and implementation of intellectual capital disclosure quality regarding the IC, which could otherwise be easily exploited by management through the transfer of false information or the concealment of information to gain benefits through information asymmetry. As a consequence, in IC-intensive commercial banks, a sound and solid CG system is more vital, since IC and intangible qualities might extend the asymmetry of information: information consumers may be fooled or confused about commercial banks' financial and operational roles.

Furthermore, openness and knowledge availability would shrink asymmetry of information and enable investors, analysts, and other stakeholders to make accurate estimates. Exploring the association between the CG and the ICD thus appears to be an exciting and demanding area of research.

It would also support businesses, professionals, analysts, academics and investors, by expanding awareness and presenting new scientific indication regarding the CG and ICD's potential effects: this is the primary motivation for this research.

Furthermore, this research would be very useful to Kenyan policymakers in preparing and implementing IC policies. It would show how IC can be used to raise the value of commercial banks while also promoting access to capital markets and ensuring proper resource allocation. Additionally, the study's deliverables would support policymakers by highlighting the value of establishing a legislative structure for IC component disclosure.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter entails the study theoretical foundation, a broad review of literature related to study variables: CG and the IC disclosure quality. And, a summary of reviewed literature which support the knowledge gaps that are addressed by the study and projected conceptual framework are provided.

#### **2.2 Theoretical Review**

A theoretical framework applies to the gathering of concepts based on theories that are interrelated. It is a sequence of prepositions derived and backed by facts or evidence. A theoretical structure describes a phenomenon or explains it.

##### **2.2.1 Agency Theory**

One of the major corporate governance theories is the Agency's theory. A great area of research is therefore focused on this in the literature. In order to operate a business in the greatest shareholders' interests, Jensen and Meckling (1976) described the agency contract as a contract between owner (principals) and manager (agents). However, this may not imply that Jensen and Meckling (1976) were the first to establish the theory of agencies or to say that there may be agency disputes between owners and managers of companies. Indeed, the presence of such possible agency disputes often rooted in separating ownership (shareholding) and control (management) in modern enterprises has long been recognized by economists such as the famous British economist Adam Smith.

In reality, agency theory attempts to minimize the issues amid shareholders and administrators by streamlining the needs of administrators with the needs of shareholders. It is also seeking to ensure that the money of the shareholders is not expropriated. As a result, agency theory implies that it is possible to incorporate corporate governance frameworks to alleviate management opportunism, hence minimizing the cost of agency. More specifically, agency theory calls for the formation by shareholders of various legal contracts of management of the organization of governance mechanisms. Firstly, the number of members of the Executive Board is limited, thus increasing the Board's independence. This can also help shareholders keep members of the board to account.

In addition, sub-committees of boards, such as audit, appointment and remuneration committees, are valuable tools for tracking management behavior. Second, setting up an internal control structure will help restrict the expropriation of resources by the management of a company. Third, designing a financial performance-related compensation and managerial reward framework will inspire top managers to enhance their performance. In turn, the misuse of management resources by the company for their personal interests could be reduced (Jensen & Meckling, 1976).

Furthermore, critics of the agency theory have pointed out that control mechanisms based on agency theory are not only costly, but also ineffective, because mechanisms protecting shareholders' interests may interfere with the implementation of strategic decisions and restrict collective actions, distort investment plans, and ignore the interests of other stakeholders, leading to a decrease in their commitment to the creation of economic value (Segrestin & Hatchuel, 2011, p. 487). On the basis of agency theory, several scholars highlight significant legal reservations about how to describe interactions between

shareholders and management. For example, stockholders aren't the only ones who are exposed to risk. Other stakeholders who contribute to the development of value offer crucial resources to the company and carry risk associated with its operations. Another point of contention is the ownership of a business. According to the law, shareholders are not the exclusive claimants to a company's assets, but simply to its shares. As a result, shareholders' exclusive rights alter the risk that is carried by a wide range of stakeholders, even if it means abandoning innovative development or ignoring other vital goals for the firm. The idea is relevant to this research because in commercial organizations, stakeholders' willingness to invest their money in the company is based on their view that the firm's operational actions are desired and acceptable within social systems. The influence of the audit committee, board independence, board gender assortment, and board gatherings on the intellectual capital disclosure quality was founded on this theory.

### **2.2.2 Managerial Signaling Theory**

Michael Spence investigates the signaling equilibrium that may be achieved in such a scenario. Assume, for the sake of argument, that there are two sorts of employees—good and bad—and that the good type of employee is entitled to a greater income than the bad type. As an extension of the theory of agencies, this hypothesis is taken into consideration. It was created to clarify the asymmetry of knowledge between executives and shareholders. The theory shows that insiders (i.e. administrators and managers) have more expertise, such as shareholders, about the company than outsiders. Agents may then theoretically use this data to optimize their personal interests (Jensen & Meckling, 1976). Arguably, poor ethics and opportunistic conduct within modern companies is the root of this problem (Kapopoulos & Lazaretou, 2007).

In order to reduce the asymmetry of knowledge and business volatility, good corporate governance practices are required to be followed by businesses. Data asymmetry reduction could: provide fair access to knowledge for large and small shareholder companies that can reduce agency issues and cost of capital; (ii) promote local and international investment and provide more liquidity; and (iii) boost the market as a means to govern businesses. A critical part of this paper's aim is to understand how unintentional (negative) messages might mislead the receivers (employees in this case). First, the theory has to answer the following question: How can negative signals disrupt signaling? However, without the receiver of the signal, the signaling process cannot be completed (Connelly, Certo, Ireland & Reutzel, 2011).

The theory is important because it demonstrates that when information is asymmetric in the market, investors without inside information, such as human capital data, are at a disadvantage when assessing the quality of businesses, which has an impact on the firms' business results. Principals also use intermediaries such as financial analysts and rating agencies to obtain private information in order to discover superior information held by managers (Reuer, Tong & Wu, 2012).

### **2.2.3 Stewardship Theory**

This theory, as contrasting to agency theory forecasts, reflects on the idea that managers are not compelled by individual needs, but by main goals (Davis, Schoorman & Donaldson, 1997). Therefore, the hypothesis indicates the trustworthiness of executives who manage businesses. The hypothesis was based as follows on different assumptions. Next, the interests of managers contribute to the interests of owners (shareholders). Secondly, CEO duality can be the most effective strategy for running an organization as long as managers are reliable. Agents have access to business experience, which allows them to function very well for the

well-being of the company. Finally, the managers of businesses aim to use the resources of the companies in the best way possible to optimize the profit of the companies. This is because any wrongdoing in the use of these services will harm their integrity and potential career opportunities (Conyon & He, 2011). The philosophy of stewardship, based on these claims, will lead to enhancing corporate governance.

Related to the philosophy of the organization, which suggests that agents and directors have conflict of interest, the above discussion illustrates how stewardship theory exists (Donaldson & Davis, 1991). Due to the reciprocal trust between insiders and shareholders, stewardship theory suggests that there is no agency issue. Although family members may be designated as a problem (i.e. the agency issue between agents/managers and shareholders/principals) to manage Type I agencies, it is noteworthy that the problem of type II agencies (i.e. the question of agency among small and large shareholders) may be further compounded (Jensen & Meckling, 1976).

An issue with stewardship theory is that the principal will have to commit more time in resolving difficulties, making collaborative decisions, as well as exchanging information and ideas with the steward (Davis, Schoorman & Donaldson, 1997).

This theory is important to this research since it demonstrates how different interest groups, such as those involved in corporate governance, are considered to have an interest in regulating certain aspects of a company. These involve effectively communicating via the annual report and willingly sharing details such as human capital to meet the needs of stakeholders with the authority to monitor the organization's resources. It thus formed a basis for investigating the effect of CG on the IC disclosure quality among the commercial banks in Kenya.

#### **2.2.4 Resource-Based View Theory**

In the book "The Theory of Firm Growth," Penrose (1959) presented the resource-based view for the first time. The theory looks at how companies handle and distribute internal capital to gain a sustainable competitive advantage. For many purposes, Penrose's (1959) work is important. For starters, it connects capital, skills, and a competitive edge. Secondly, it recognizes that competitive edge hardly comes from resource ownership, but rather from the prudent and creative use of certain resources. As advocates of dynamic capabilities contend, this statement is an extension of RBV (Teece et al., 1997). Thirdly, it recognizes the significance of manager's skills in the creation and conversion of company resources and abilities into products. Lastly, a company's growth rate and course are determined by managerial abilities and excess resources. The resource-based view theory was later refined by numerous academicians (Wernerfelt, 1984; Prahalad & Hamel, 1990; Barney, 1991). Superior output is attributed to firm capital, according to the theory. "All properties, skills, firm procedures, characteristics, data, expertise, etc. managed by a company enabling it to devise and execute policies to grow," as per Barney (1991). Though the resources in a firm are intangible and tangible, increased globalization, and competition stress on resources that are intangible.

Knowledge tools are critical to a company's strategic success because they are the only source of long-term superior results and competitiveness. Intangible resources, according to proponents of the resources-based view theory, are increasingly displacing conventional production factors such as land, labor, and financial capital as competitive edge sources. According to Bansal, Lopez-Penez, and Lazaro (2018), "Today, knowledge is the only

resource that matters. Land (i.e., natural resources), labor, and capital—the conventional "factors of production"—have not vanished." Nonetheless, they have been relegated to the background. They can be accessed quickly and easily if one has the necessary information. And knowledge in this novel sense means "knowledge as a utility, a tool for achieving social and economic goals." Furthermore, Ramzan, Amin, and Abbas (2021) contend that a firm's physical resources are widespread and simply replicated.

Nevertheless, not every type of firm capital, have a competitive edge. Resources ought to be appreciated, uncommon, imperfectly replicated, and non-replaceable (Barney, 1991). According to the author, valuable possessions are those which allow a company to capitalize on an opportunity or eliminate a hazard. Rare means that a company's resources are unavailable to current and potential rivals. The term "inimitability" refers to the difficulty of copying or reproducing a resource. If there are no strategically comparable alternatives, resources are non-substitutable. Furthermore, the theory proposes that a corporation is a collection of interconnected tangible and intangible assets that generate worth (Shehata, 2013).

Intellectual capital is made up of talents, abilities, competencies, and processes, all of which are known as knowledge tools (Lubale, 2012). Intellectual capital, according to Uyar and Kilic (2012), refers to intangible assets that provide competitive edge in the long-run. Human, method, innovation, and consumer capitals are all parts of IC, according to Allegrini and Greco (2013). Intellectual capital consists of firm-specific, non-tradeable, valuable elements that promote competitive edge and long-term improvement. Investments in such components help companies perform better.

As a result, banks ought to focus their IC resources and skills on tasks where they can get a competitive edge over rivals, regardless of size or venue (Fakhari & Pitenoiei, 2017). Ventures into non-lending industries, in particular, may provide synergies and economies of scale for banks. Finally, this research proposed that IC, as a firm-specific resource, has a substantial impact on financial results.

Management implications for the theory, on the other hand, are nonexistent. There are too few applications for the resource-based theory and the value of a resource cannot be reliably predicted to be a useful theory. As a result, RBV theory is founded on the fact that there is no empirical basis for measuring performance. Compiling a homogenous sample is difficult or impossible because of the variety of businesses represented. In addition, the RBV does not take into account the market's demand side (Kaufman, 2015).

### **2.3 Determinants of Intellectual Capital Disclosure Quality**

Intellectual capital (IC) is generally documented as a valuable resource for generating value and gaining a competitive edge for businesses, and it is the primary mechanism for outperforming rivals due to its rapidly evolving existence (Birjandi, Hakemi & Sadeghi, 2015). However, in certain industries and geographical areas, empirical evidence of its effect on company results is lacking. This may be linked to the construction measurement problem, which, despite being the most technically interesting element, cannot be specifically observed and defined. Intellectual capital is a term that has been developed and applied through a variety of scientific subjects, and it is highly becoming an interdisciplinary study area (Shehata, 2013).

Unfortunately, its value in businesses does not correspond to the degree of transparency, resulting in a lack of knowledge about intellectual capital. According to these arguments, it's

important to look into the factors that influence IC disclosure, like scale, leverage, provocation capacity, industry type, and ownership structures (Sudibyo & Basuki) (2017). However, the majority of recent research has concentrated on developed nations, with just a few studies focusing on developing countries. Furthermore, the majority of these studies are limited to examining company characteristics such as scale, profitability, leverage, market, and age. CG, conversely, has become progressively vital in deciding IC disclosure in recent years (Uyar & Kilic, 2012).

Human resources are one of the most important aspects of the company's intellectual capital (Al-hamadeen & Swaidan, 2014). So far, physical resources have been used mostly in the assessment of company success. It is quite accurate to measure company success from a financial standpoint, but the foundation for enhancing the finance value is human capital, with all of their expertise, ideas, and inventions. IC is an intangible resource that consists of evidence that knowledge resources and can help a business boost its competitiveness and efficiency. Since IC is a component that includes human resources, social, and firm capital, it differs from human resources. There are several different perspectives on what constitutes intellectual capital, which has contributed to the recognition of the three key components (Eddine et al., 2015), which are individual, systemic or firm, and relational or consumer capitals. Furthermore, the disclosure of IC in yearly report indicated current and prospective investors the intangible resources held by a firm, and the signaling theory can be used to predict market reaction to the details disclosed.

## **2.4 Empirical Studies**

This section reviews the existing empirical studies on corporate governance on voluntary financial disclosure. Empirical studies on board independence, audit committee, and board gender diversity were sought.

#### **2.4.1 Board independence**

Yanesari, Gersayli, Maatooft, and Abadi (2012) used 95 publicly listed Iranian enterprises to investigate certain board features and intellectual capital disclosure quality across a six-year period from 2005 to 2010. Board independence, as measured by the number of independent directors on the board, chief executive officer duality, and board ownership were the particular features of the board under investigation. The quality of intellectual capital disclosure was measured using 46 information items that expressed disclosure policy, whereas board independence was measured using the number of independent directors. The empirical test revealed that when there was a high degree of board independence, there was a corresponding improvement in the amount of disclosure using multiple linear regression.

Bansal, Lopez-Perez, and Lazaro (2018) investigated how board independence influences CSR disclosures in Egypt. The moderating effect of family ownership was also explored. A panel research technique was employed from 2006 to 2014, with a sample of 29 firms picked from 29 nations. In this study, Tobit regression analysis was employed. Board independence has a negative and significant influence on CSR disclosure, according to the findings. The researchers came to the conclusion that having a family business reduces the amount of information asymmetry between independent directors and management.

In their research on board independence and IC disclosure quality of corporations listed on the NSE, Letting, Nicholas, Aosa, and Machuki (2012). The OLS regression was utilized in the research, and the findings revealed a modest positive correlation between board

independence and financial success. Overall, their findings show that board independence has no statistically significant impact on financial ICD quality performance and dividend yield.

After the introduction of integrated reporting, [Vitolla, Raimo, Marrone, and Rubino \(2020\)](#) looked at the role of the board of directors in intellectual capital disclosure. The influence of board features on intellectual capital disclosure quality (ICDQ) in the context of integrated reporting is investigated using agency theory. It does this by creating a new scoring system to assess ICDQ. The findings reveal a favorable association between board size, independence, diversity, and involvement with ICDQ, based on a sample of 130 worldwide enterprises operating in various industries.

[Kweh, Lu, Ting, and Le \(2021\)](#) investigated whether the cubic S-curve connection between board independence and intellectual capital efficiency is affected by the size of the business. To assess IC efficiency, the researchers used a stochastic nonparametric envelopment of data (StoNED) framework, which is generated from the estimating process of converting structural, relational, and human components into accounting- and market-based performance metrics. Over the years 2011–2018, the researchers ran regression analysis on 1,104 firm-year data of Taiwanese semiconductor businesses. According to the findings of the StoNED study, sample businesses' IC efficiency may be enhanced by almost 80%. The findings of the regression show that there is a cubic S-curve link between board independence and IC efficiency, with company size moderating the nonlinear impacts.

#### **2.4.2 Audit Committee**

An audit committee is established to efficiently supervise and monitor the accuracy of accounting data and ensure the consistency of information disclosed (McMullen, 1996 in Nurunnabi et al, 2011). A successful audit committee should be able to strengthen internal

control and function as a party with authority to monitor the company's operations so as to increase the value of IC disclosure.

The influence of the auditor committee on the quality of intellectual capital disclosure in Sri Lankan enterprises was studied by Nazar and Rahim (2015). The study used a cross-sectional design. Secondary data was obtained from publicly traded companies' year-end financial data. Purposeful sampling was used to choose 109 publicly traded firms out of a total of 109. According to the conclusions of the research, board size has a negative and considerable impact on ROA. The board's size, and, had a strong inverse influence on ROE. The frequency and size of heterogeneous committees were shown to be impacted by the size of the board of directors.

Audit boards have a significant impact on the quality of IC disclosure, according to a study by Othman, Ishak, Arif, and Aris (2014). Text analysis and multiple regressions were used to analyse these companies' annual reports and discover the correlations between the variables. In terms of intellectual capital disclosure quality, long stay on the committee, several directorships, and large committee size and competence had little impact.

Mukaba (2016) investigated the relationship between audit committees and manufacturing firm disclosure in NSE voluntary financial statements. The study's target group consisted of 130 top executives from 12 Kenyan state-owned enterprises in which the government had a stake. Primary data was collected using standardized questionnaires, while secondary data was collected using secondary data collection sheets. It was determined that state companies targeted committed participants in the committees who had financial expertise and experience. The research found a favorable and significant correlation between audit

committees and manufacturing enterprises reporting voluntary financial statements on the NSE.

Buallay (2018) investigated the impact of audit committee characteristics on the efficiency of intellectual capital. 59 banks were studied over five years (2011-2015), yielding 295 observations. Audit committee characteristics are the study's independent variable. Intellectual capital components (Human: human capital efficiency [HCE]; Structural: structural capital efficiency [SCE]; Relational: relational capital efficiency [RCE]; Physical/Financial: capital employed efficiency [CEE]) are the dependent variables. In addition, four bank-specific control variables were employed in the research. The conclusions derived from the empirical data revealed that audit committee features had a considerable beneficial influence on intellectual capital. Furthermore, when examined separately, the association between the audit committee and the intellectual capital components (HCE, SCE, RCE, and CEE) exhibited a strong positive relationship.

For the five years from 2012/2013 to 2017/2018, Balasundaram (2019) investigated the influence of audit committee features on Intellectual Capital Disclosure (ICD) of listed businesses on the Colombo Stock Exchange (CSE). In terms of Relational Capital Disclosure (RCD), Structural Capital Disclosure (SCD), and Human Capital Disclosure (HCD), the ICD index had 30 components (HCD). Correlations and regression analysis were used to examine the data. In their annual reports, the majority of Sri Lankan Listed firms provided ICD in text, phrases, photos, tables, and graphs in accordance with the Global Reporting Initiative (GRI) criteria. The independent factors were audit committee size, frequency of audit committee meetings, and audit committee independence, and the ICD was assessed by a disclosure index score. The analysis reveals that the audit committee's size and meetings are critical factors in

explaining ICD in Sri Lanka. The research showed, however, that ICD and audit committee independence had a negative significant association.

### **2.4.3 Board Gender Diversity**

A study conducted by Abad, Lucas-Pérez, Minguez-Vera, and Yagüe (2017) sought to determine whether the presence of women on the boards of publicly traded Spanish companies lowers the degree of information asymmetry. Information asymmetry was quantified by the bid-ask spread, and gender diversity was examined by looking at the number of women on the boards of directors in a sample of 99 companies from 2004 to 2009. According to the data, gender diversity on corporate boards has a significant and negative association with the degree of information asymmetry in the stock market. Women are more likely than men to improve a company's information environment at all levels, not just at the CEO level, according to this study.

IC disclosure quality was examined by Fakhari and Pitenoei in relation to board gender makeup (2017). The audit attributes of independence, financial understanding, gender diversity, and the size of the audit committee were all considered. From 2008 to 2015, panel data was collected using a study approach based on panels. The 41 companies were selected via the use of deliberate sampling. The data was analyzed using descriptive, correlational, and regression methods. The gender composition has a positive and substantial impact on the business knowledge climate.

The influence of gender diversity on firm intellectual capital disclosure quality of manufacturing enterprises in Kenya was researched by Latif, Shahid, Haq, Waqas, and Arshad (2018). From 2005 through 2012, a panel study approach was used to collect secondary data from 12 manufacturing businesses. The data was analyzed using regression,

correlation, and descriptive metrics. An investigation of the impact of boardroom gender diversity (BGD) on IPO prospectus disclosures in China revealed that gender diversity had a positive and significant effect on the quality of the company's voluntary intellectual capital (IC) disclosure. There is a significant positive relationship between BGD and IC disclosure, in line with resource dependence theory, a significant negative impact of female independent directors on IC disclosure, contrary to agency theory predictions, and the BGD–IC disclosure relationship is geologically significant. Finally, family ownership has a negative influence on the BGD–IC disclosure link, according to this research. These findings hold up to a battery of sensitivity tests.

#### **2.4.4 Board Meetings**

The impact of board meetings on financial voluntary disclosures was studied by Setiany, Hartoko, Suhardjanto, and Honggowati (2017). The size of the audit committee, the diversity of members' educational backgrounds, the independence of audit committees, the tenure of audit committee members, and the frequency of meetings were all expected to impact financial voluntary disclosure. The 100 Indonesian publicly listed companies that make up the index were identified through purposeful sampling. On-board meetings were demonstrated to be necessary for financial voluntary disclosure.

Madi, Ishak, and Manaf studied the impact of board meetings on voluntary disclosure in Malaysian listed companies in 2009. (2014). On disclosure, a sample of 146 companies was chosen and content analysis data from annual reports was used. A weighted disclosure checklist was used to correlate certain audit committee criteria. Although the frequency of meetings was inconsequential, the audit committee's independence, size, and numerous directorships were shown to have a favorable link with voluntary disclosures.

In Kenya, Mulili and Wong (2011) discovered a link between board meetings and corporate voluntary disclosure. The NSE selected a group of 100 non-financial companies. From 2005 to 2014, data was gathered from the authorized businesses' annual reports. The fixed effect model and the panel data regression model were used in the investigation. Board meetings and voluntary disclosure have a meaningful and positive link, according to the results.

Studying the influence of corporate governance systems on the efficiency and effectiveness of Islamic banks' intellectual capital (IC) was done by Saruchi, Zamil, Basiruddin, and Ahmad (2019) using 59 Islamic banks as a sample from 2006 to 2017. There are several features of a board, including the size of the board, the percentage of female board members, the frequency of board meetings, the number of board members with financial and accounting competence, and the diversity of board members' nationalities (board nationality diversity). IC efficiency has been evaluated using the value-added intellectual coefficient (VAIC). IC efficiency is positively correlated with board knowledge, according to this study. Board meetings had a beneficial effect on HCE and SCE, but no meaningful impact on CEE, according to this study.

## **2.5 Summary of the Literature Review and Knowledge Gaps**

The study was grounded on agency theory, managerial signaling theory, and stewardship theory. Literature revealed that the asymmetry of information between management and shareholders causes agency difficulties. According to the signaling theory, firms will at their own will provide data on their competitiveness as a positive sign to the market and achieve the rights of stakeholders, it is anticipated that the larger ICD and execution of CG will rise the market value. Companies, particularly banks, that can effectively manage their resources

and apply excellent CG will meet the firm's aim, which is to rise its value. As a result, it's critical to investigate if ICD and CG will add to business value in the new economy.

Prior studies mainly investigated the impact of CG mechanism on firm value since the outcomes of prior research had not yielded conclusive outcomes. Some studies have indicated that the CG mechanisms positively influence the firm value, while others noted that it has no effect on firm value. Moreover, most of them were done outside Kenya and focused on other industries apart from the banking industry. Therefore, this study sought to ascertain the effect of corporate governance on the ICD quality among the commercial banks in Kenya.

## **2.6 Conceptual Framework**

It is a diagrammatic representation of variables that shows the relationship between the independent and dependent variables. The independent factors in this research include board independence, audit committee, board gender diversity, and board meetings, whereas the dependent variables are intellectual capital disclosure quality. The conceptual framework is shown in Figure 1.

The percentage of nonexecutive directors on the board was used to determine board independence, the audit committee was determined by the number of audit committee members to total board members, board gender diversity was determined by the percentage of female board members, and board meetings were determined by the number of meetings held in a year. The response variable, intellectual capital disclosure quality was measured by the ICD index.

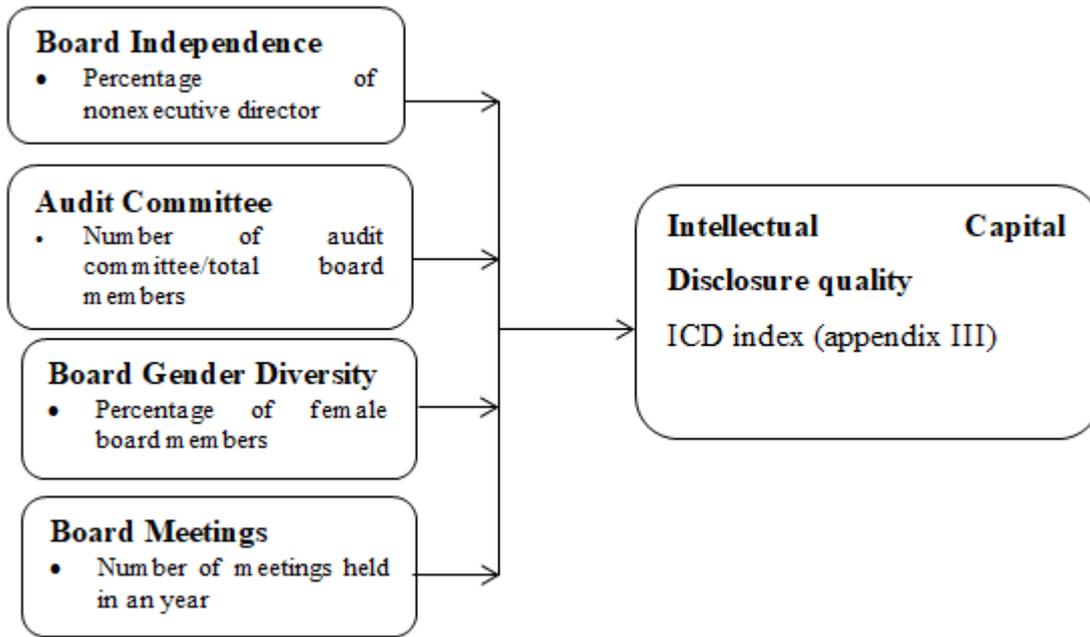


Figure 2. 1: Conceptual Model

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter is a presentation of the research methodology. It affords a description and techniques which were used in carrying out the study. They comprise the research design, target population, sample population, data collection and analysis techniques.

#### **3.2 Research Design**

Research design alludes the technique or approach adopted to collect, calculate, and analyse data. It similarly refers to the link between variables or problem at hand structure (Snyder, 2019). A descriptive research design was used since it is appropriate in this study as it intends to obtain detailed data through explanations which would be useful for identification of variables. This design aimed at ascertaining the frequency of occurrence of something or the association of variables. The researcher opts for this design because the data obtained from CBK would be analyzed without subjecting them to further manipulation. Mohajan (2018) alludes that descriptive research aims to obtain information that explains a present situation by posing questions connected with individual attitudes and perceptions.

#### **3.3 Population**

A population is a whole set of people, events or objects which have similar noticeable features (Ørngreen & Levinsen, 2017). The parameters whose features the research tried to describe are referred to as a population. The study's target population included all 43 commercial banks in Kenya as of December 2020 (Appendix II lists all the commercial banks). This was a census study of all commercial banks.

### **3.4 Data Collection**

The data was obtained through secondary sources from CBK annual reports and banks financial reports between 2015 and 2020. The study collected data on the effect of CG on the IC disclosure quality among the Kenyan commercial banks. Data was gotten on proportion of nonexecutive directors, presence of audit committees, number of female board members, number of held meetings annually and components of the ICD. The study chose the period from 2015 to 2020 since the aspect of intellectual capital disclosure quality has just started being implemented among commercial banks. The study used the IC disclosure index to measure IC disclosure.

### **3.5 Diagnostic Tests**

Before the actual analysis, diagnostic tests were run on the acquired data to evaluate the multiple regression models' assumptions. Stationarity/unit root test, cointegration test, normality test, multicollinearity, and autocorrelation were among the diagnostic tests used in the research.

#### **3.5.1 Stationarity Test/ Unit Root Test**

Using Augmented Dickey-Fuller (ADF) tests, the study carried out a stationarity test to determine the unit root presence. The test was undertaken to assist in avoiding the spurious problem and regression results inconsistency. Generally, a p-value of below 5% indicates that the unit root of the null hypothesis was rejected. The calculated DFT statistics was also linked to the critical value tabulated. If the DFT statistics was less than the value in the table, the null hypothesis of a unit root would be rejected. It was of importance to know that the stronger the evidence for rejecting the null hypothesis of a unit root, the more negative the DF test statistic.

### **3.5.2 Cointegration Test**

Cointegration was used before the VAR analysis to see whether the variables had a long-run or short-run relationship. The Johansen test was employed to identify the existence of cointegration in the research.

### **3.5.3 Normality Test**

Jarque-Bera was used to test the data's normality and establish it for all variables. The data is deemed non-normally scattered if the resulting p-value is less than 0.05. If the data is not normal, the Shapiro–Wilk test, a well-known nonparametric test for determining if the observations vary from the normal curve, returns a result of 0.894 (P 0.000), rejecting the hypothesis of normality.

### **3.5.4 Multicollinearity**

It is common in time series kind of data if two separate variables have a linear relationship. Its existence causes an increase in the variance of parameter approximates, resulting in the provision of incorrect magnitude and sign estimates. This could lead to even more incorrect conclusions. To test for multicollinearity, the study used VIF values for each variable. If a variable's VIF values are less than 10, the variable is considered to have no Multicollinearity issues. In the event of multicollinearity, the study would eliminate some of the highly correlated independent variables, linearly combine the independent variables (for example, by adding them together), or perform an analysis designed for highly correlated variables (for example, principal components analysis or partial least squares regression).

### **3.5.5 Autocorrelation**

The term "autocorrelation" denotes to a condition in which the error term is correlated with the error term before it. Its existence has no influence on the estimates' unbiasedness, but it

leads to inaccurate conclusions as a consequence of improper hypothesis testing. The Breusch Godfrey LM test was performed to see whether there was any autocorrelation in the data. The empirical model's residuals are not auto correlated if the Chi-square p-value statistic is less than 0.05. To minimize autocorrelation, there are two main approaches. The first step is to make the data more structured in an effort to enhance model fit. An AR1 model may be used if other predictors are not available. By using an AR1 model, the GAMM takes into account the structure of the residuals and reduces the predictors' confidence accordingly.

### 3.6 Data Analysis

The data was used to conduct a multiple regression analysis to determine how corporate governance affects the quality of ICD among Kenyan commercial banks. The regression model ran from Kenyan commercial banks financial reports and whose annual reports have been available for the periods 2015 to 2020. The study employed quantitative analysis in the form of descriptive statistics like measures central tendencies to produce relevant percentage, frequency, kurtosis and skewness, as well as means and standard deviations.

#### 3.6.1 Analytical Model

To calculate the association of CG and the IC disclosure quality among commercial banks, the study adopted the regression formula as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where;  $Y$  is the intellectual capital disclosure quality (ICD index)

$\beta_0$ , is the constant

$X_1$  is the board independence (Percentage of nonexecutive director)

$X_2$  is the audit committee (Number of audit committee/total board members)

$X_3$  is the board gender diversity (Percentage of female board members)

$X_4$  Board Meetings (Number of meetings held in an year)

$\beta_1, \beta_2, \beta_3, \beta_4$  are the regression coefficients

### **3.6.2 Tests of significance**

To measure the extent to which the variations in intellectual capital disclosure quality amid the commercial banks were explained by corporate governance, the study used the coefficient of determination ( $R^2$ ). The research also calculated F- and t-statistics at a 95% confidence level to see whether there is a significant influence of CG on the quality of IC disclosure across Kenyan commercial banks.

## CHAPTER FOUR

### DATA ANALYSIS, RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter shows sections that give the analysis of the data collected concerning the relationship between CG (board independence, audit committee, board gender diversity, board meetings) and intellectual capital disclosure quality, its presentation (in tables) and the subsequent interpretation of the findings that were drawn.

#### 4.2 Descriptive Statistics

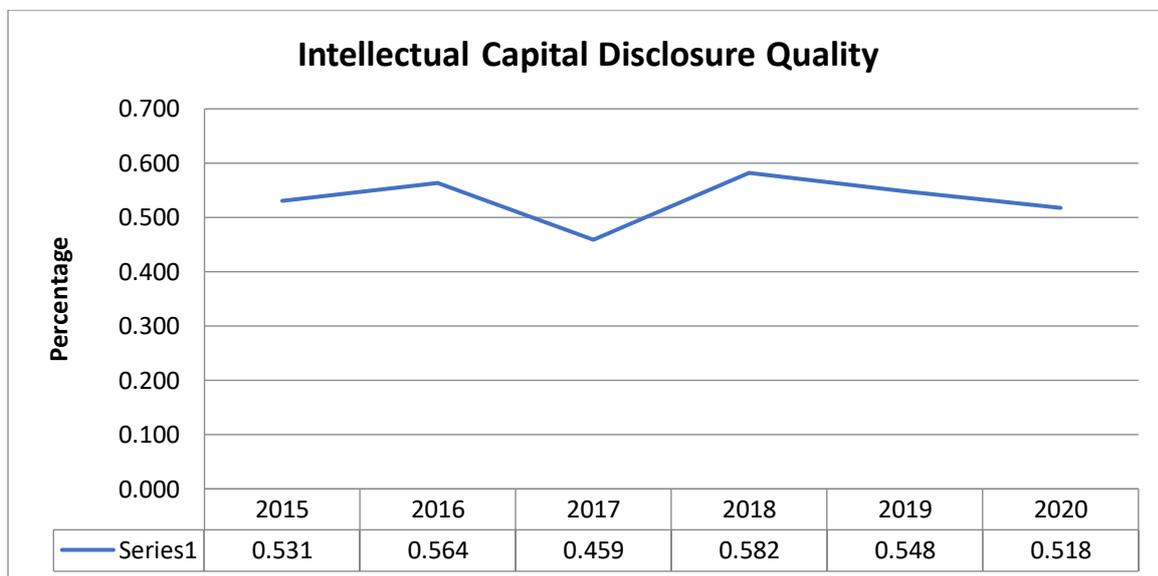
For the 43 commercial banks in Kenya between 2015 and 2020, this section provides a summary of the research variables' characteristics, including mean, standard deviation (Std. Dev), Skewness, and Kurtosis.

**Table 4.1: Descriptive Statistics**

	Minimum	Maximum	Mean	Std. Dev.	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Intellectual capital disclosure quality	11.61	15.20	13.994	1.207	-1.170	0.661	-0.007	1.279
Board independence	13.85	14.84	14.353	0.377	0.236	0.661	-1.635	1.279
Audit committee	15.51	20.96	19.448	1.632	-1.647	0.661	2.660	1.279
Board gender diversity	15.49	20.96	19.446	1.637	-1.654	0.661	2.694	1.279
Board meetings	7.21	15.20	13.980	2.289	-3.095	0.661	9.917	1.279

From the findings, the study revealed that intellectual capital disclosure quality (mean = 13.994), board independence with a mean of 14.353, audit committee a mean of 19.448, board gender diversity (mean = 19.446), and board meetings (men = 13.980). On skewness the results showed that ICD quality, audit committee, board gender diversity and board meetings are asymmetrical to the right around their mean. On the kurtosis, intellectual capital disclosure (ICD) quality, and board independence exhibited negative kurtosis while audit committee, board gender diversity and board meetings exhibited positive kurtosis.

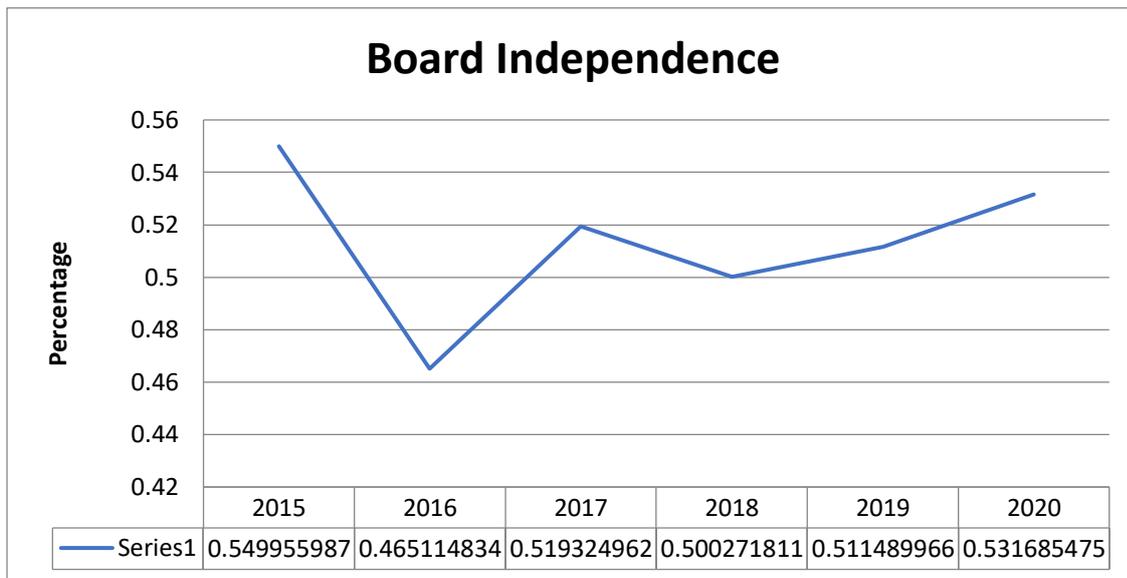
#### 4.2.1 Intellectual Capital Disclosure Quality



**Figure 4.1: Trend Analysis for the Intellectual Capital Disclosure Quality (2015-2020)**

ICD quality was assessed using the ICD index in the banks. Figure 4.1 shows that the ICD index in the banks fluctuated during the period 2015-2020. The number of customers rose in 2015 to 2016 and decreased gradually in 2017. In 2018, it rose and further decreased gradually till 2020.

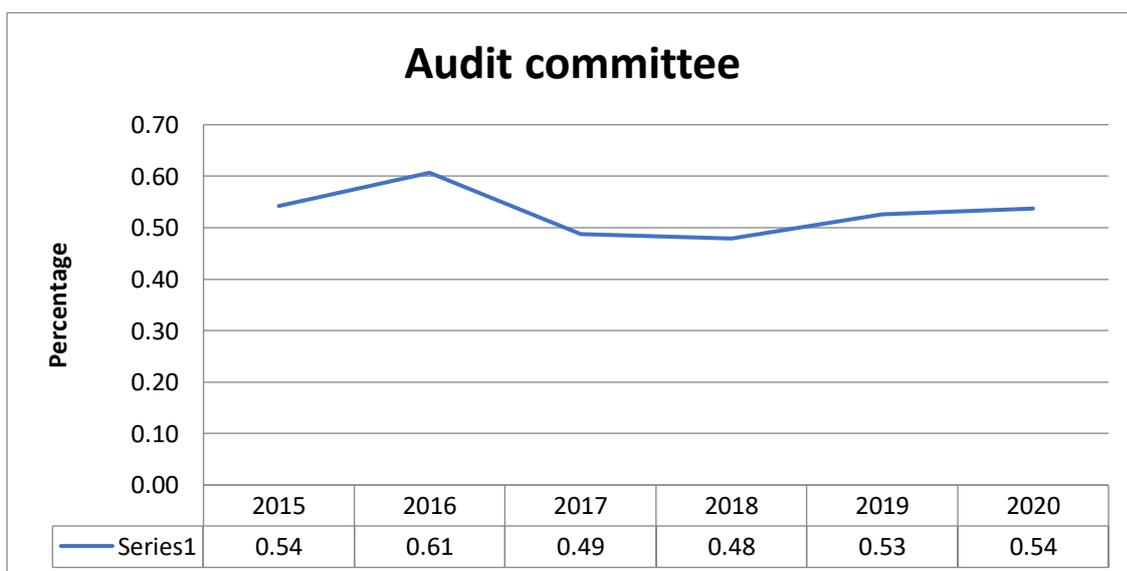
### 4.2.2 Board Independence



**Figure 4.2: Trend Analysis for the Percentage of Nonexecutive Director (2015-2020)**

To assess board independence, the study sought the percentage of nonexecutive directors. From the period 2015-2020, this number was fluctuating. Figure 4.2 shows how in 2016 it decreased and later rose in 2017. In 2018, the nonexecutive directors decreased and started to increase from 2019 through 2020.

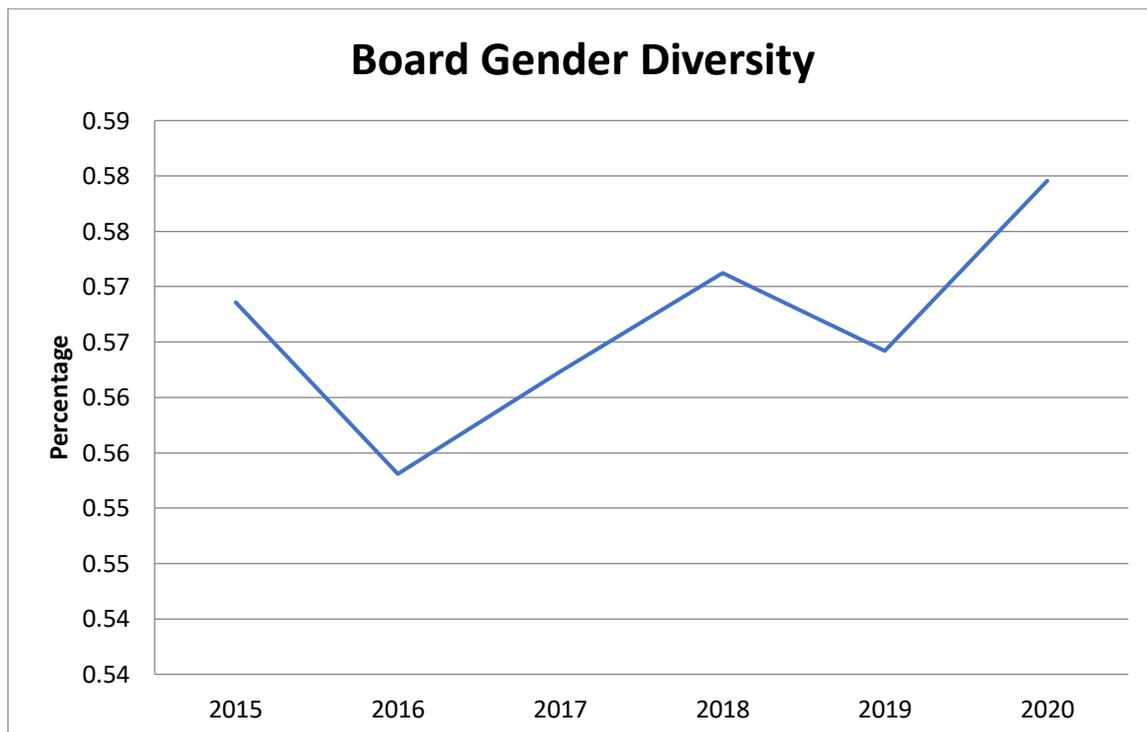
### 4.2.3 Audit Committee



**Figure 4.3: Trend Analysis for the Number of Audit Committee/Total Board Members**

The number of audit committee members/total board members was also sought to measure audit committee. Figure 4.3 revealed that the audit committee/total board members fluctuated through the 5 year period (2015-2020). This decrease is mainly seen in the years 2017 and 2018.

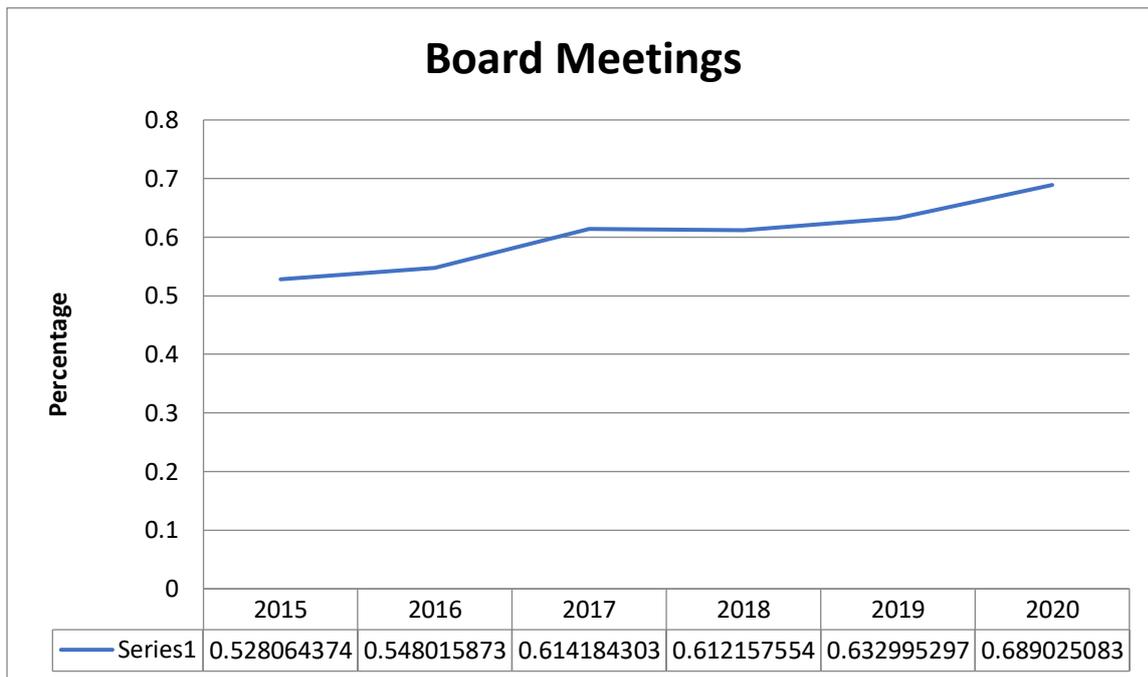
#### 4.2.4 Board Gender Diversity



**Figure 4.4: Trend Analysis for the Percentage of Female Board Members (2015-2020)**

The study measured diversity on board gender using the percentage of female members of the board. The study found that the percentage of female board members increased in 2016-2018 and 2019-2020 as shown in Figure 4.4.

#### 4.2.5 Board Meetings



**Figure 4.5: Trend Analysis for the Number of Meetings Held in a Year (2015-2020)**

Further, board meetings were assessed using the proportion of meetings held annually. The study found as seen in Figure 4.5 that the number of meetings of the 43 commercial banks operating in Kenya gradually increased throughout the 5-year period (2015-2020).

#### 4.3 Diagnostic Tests

Diagnostic tests were used to evaluate the model assumptions and to see whether there were any data that had a big, unfavorable impact on the analysis. The researcher used stationarity/unit root, cointegration, normality, multicollinearity, and autocorrelation tests.

##### 4.3.1 Stationarity Test/ Unit Root Test

Using Augmented Dickey-Fuller (ADF) tests, the researcher used a stationarity test to determine the presence of a unit root. Table 4.2 shows the findings.

**Table 4.2: Stationarity Test/ Unit Root Test**

	<b>Critical value at 95%</b>	<b>DFT statistic</b>	<b>P-value</b>
Intellectual capital disclosure quality	2.661	3.170	0.001
Board Independence	2.573	3.236	0.043
Audit committee	2.462	4.647	0.000
Board gender diversity	2.185	3.654	0.006
Board meetings	2.843	3.095	0.002

From the findings, the p-values for each variable was less than 0.05 and the DFT statistic were more negative than their corresponding critical values. This is an indication that null hypothesis that there is a unit root was rejected and study settled that the variables did not have unit roots.

#### 4.3.2 Cointegration Test

The presence of cointegration was detected using the Johansen test. The findings are as indicated in Table 4.3.

**Table 4.3: Cointegration Test Results**

	<b>Eigen Value</b>	<b>Trace Statistic</b>	<b>Critical value at 95%</b>	<b>P-value</b>
Board independence	0.134	23.45	26.09	0.000
Audit committee	0.094	61.23	62.12	0.001
Board gender diversity	0.307	21.09	26.90	0.009
Board meetings	0.068	18.78	19.11	0.011
Intellectual capital disclosure quality	0.193	27.32	28.92	0.010

From the findings, the study shows that all the factors had their p values below 0.05 and hence the study concluded that variables exhibit long-run or short run relationship.

#### 4.3.3 Normality Test

Jarque-Bera was used to ascertain the normality of the data. The outcomes are shown in Table 4.4.

**Table 4. 4: Normality Test Results**

	<b>Jarque-Bera Coefficient</b>	<b>P-value</b>
Board independence	5.304	0.202
Audit committee	1.763	0.315
Board gender diversity	2.153	0.227
Board meetings	3.239	0.300
Intellectual capital disclosure quality	3.145	0.201

From the findings, the p-values for board independence, audit committee, board gender diversity, board meetings and ICD quality were greater than 0.05. Therefore, the study resolved the data was deemed to be normally distributed.

#### 4.3.4 Multicollinearity

The study used collinearity statistics to find out if the predictor variables are adequately correlated to show a substantial causal correlation. The outcomes of the test were presented in Table 4.5.

**Table 4.5: Collinearity Statistics**

	Collinearity Statistics	
	Tolerance	VIF
Board independence	0.266	3.759
Audit committee	0.203	4.926
Board gender diversity	0.178	5.618
Board meetings	0.176	5.682
Intellectual capital disclosure quality	0.471	2.123

From the coefficients output, board independence had a VIF value of 3.759, audit committee had a VIF value of 4.926, board gender diversity had a VIF value of 5.618 and board meetings had a VIF value of 5.682 while ICD quality had a VIF value of 2.123. All of the VIF values were below 10, indicating that there were no signs of Multicollinearity as indicated by Keith (2006).

#### 4.3.5 Autocorrelation

The study used the Breusch Godfrey LM test to see if there was any autocorrelation. The findings are indicated in Table 4.6.

**Table 4.6: Autocorrelation Results**

F-Statistic	18.308	Prob. (5,37)	.000
Obs*R-square	40.936	Prob. Chi-Square (2)	.001

From the outcomes, it's clear that p-values for the Chi-square statistic were less 0.05 and hence the residuals of the empirical model had no autocorrelation.

#### 4.4 Inferential Statistics

The study used inferential statistics to conduct regression analysis to determine the association between CG and intellectual capital disclosure quality among Kenyan commercial banks. To calculate the link between CG and ICD quality among Kenyan commercial banks the study adopts a regression formula:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon.$$

**Table 4.7: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.882	0.777	0.754	0.543

From the outcomes as represented by the adjusted R<sup>2</sup>, the predictor variables that were studied explained 75.4% of the variations in intellectual capital disclosure quality between Kenyan commercial banks. This hence means the four variables contributed 75.4% of the variations in intellectual capital disclosure quality among Kenyan commercial banks in while other factors not studied in this study contributes 24.6%.

**Table 4.8: ANOVA Analysis**

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	42.213	4	10.553	33.126	6.47E-12
1	Residual	12.106	38	0.319		
	Total	54.319	42			

The significance level for the outcomes was 0.000, indicating that the data is adequate for drawing inferences about the variables. The F value was 33.126 when evaluated at a significance level of 0.05. The model was significant since it was greater than the F critical

(value = 6.47E-12), indicating that there was a strong connection between corporate governance and ICD quality across Kenyan commercial banks.

**Table 4. 9: Regression Coefficients**

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	0.983	0.855		2.999	.004
Board independence	0.769	0.293	0.618	2.618	.012
1 Audit committee	0.741	0.214	0.598	3.439	.000
Board gender diversity	0.816	0.239	0.713	3.452	.001
Board meetings	0.671	0.278	0.581	2.367	.021

The coefficient regressions were fitted in the model as follows:

$$Y = 0.983 + 0.769X_1 + 0.741X_2 + 0.816X_3 + 0.671X_4.$$

Where:

$X_1$  = Board Independence;  $X_2$  = Audit committee;  $X_3$  = Board gender diversity;  $X_4$  = Board meetings

From the findings, taking all factors (board independence; audit committee; board gender diversity; and board meetings) constant at zero, intellectual capital disclosure quality among Kenyan commercial banks was 0.983. Further, taking every predictor variable at zero, a unit growth in board independence would cause to a 0.769 rise in intellectual capital disclosure quality among commercial banks; a unit upsurge in audit committee causes to a 0.741 upsurge in intellectual capital disclosure quality; a unit rise in board gender diversity will translate to a 0.816 improvement in intellectual capital disclosure quality; and a unit rise in board meetings will lead to 0.671 rise in ICD quality among commercial banks in Kenya.

#### **4.5 Summary and Interpretation of the Findings**

The study revealed that, board independence; audit committee; board gender diversity; and board meetings; had a positive and significant relationship with intellectual capital disclosure quality among commercial banks in Kenya. The study resolved that the intercept was 0.983 for all years.

The study found that four independent variables that were studied (board independence, audit committee, board gender diversity, and board meetings) explained a substantial 75.4% of intellectual capital disclosure quality. This was as shown by adjusted  $R^2$  (0.754). This meant that the four variables add to 75.4% of intellectual capital disclosure quality among Kenyan commercial banks, while other elements not studied in this study contribute 24.6%.

The study found that board independence ( $r=0.769$ ,  $p=.012<0.05$ ) positively and significantly affected the ICD quality. The study also revealed that audit committee ( $r=0.741$ ,  $p=.000<0.05$ ) positively and significantly affected intellectual capital disclosure quality. The study established that board gender diversity ( $r=0.816$ ,  $p=.001<0.05$ ) positively and significantly affected intellectual capital disclosure quality. The study also revealed that board meetings ( $r=0.671$ ,  $p=.021<0.05$ ) positively and significantly affected intellectual capital disclosure quality among commercial banks in Kenya.

The findings demonstrate that board independence has a good and substantial impact on ICD quality across Kenyan commercial banks. The findings support the findings of Yanesari, Gerayli, Maatoofi, and Abadi (2012), who claimed that a high level of board independence is linked to increased transparency. However, these findings contradict those of Bansal, Lopez-Penez, and Lazaro (2018) and Letting, Nicholas, Aosa, and Machuki (2012), who claimed that board independence had a statistically insignificant impact on financial intellectual

capital disclosure quality. They also added that there was a weak link of board independence and financial results. Other researches such as Christen, Lauer, Lyman and Rosenberg (2011) could not be compared with the current one since they looked at different aspects. According to Christen, Lauer, Lyman, and Rosenberg (2011), the quality of ICD has a critical role in minimizing household income declines, increasing household access to simple financial services, and improving the household's overall poverty status.

Moreover, it was discovered that audit committee positively and significantly affected intellectual capital disclosure quality among commercial banks in Kenya. Mukaba (2016) agreed with the findings that audit committees have a positive and substantial link and the manufacturing companies on the NSE report voluntary financial statements. The study also added that audit committees who had financial expertise and experience in the committees were vital. There are a number of factors that contribute to a high amount of disclosure of intellectual capital, including a lengthy tenure in the committee and many directorships. The composition of committees among board members had a negative influence on the frequency and size of diverse committees, which had a negative impact on board size, according to Nazar and Rahim (2015).

According to the findings of Abad, Lucas-Pérez, Minguéz-Vera, and Yagüe (2017), the level of equity's market information asymmetry was not negatively correlated with gender diversity on the board. For Kenyan commercial banks in particular, a research indicated that board gender diversity positively and considerably improved intellectual capital disclosures. According to this, women tended to improve the data environment of the firm at all levels, not just at the corporate level. A favorable and important influence of gender diversity on business IC disclosure quality was found by Latif Shahid Haq Waqas and Arshad (2018) as well as Fakhari and Pitenoel (2017).

To support the findings that board meetings positively and significantly affected intellectual capital disclosure quality among commercial banks in Kenya, Setiany, Hartoko, Suhardjanto and Honggowati (2017); Madi, Ishak and Manaf (2014); Mulili and Wong (2011) found that board meetings and voluntary disclosure have a relevant and constructive relationship.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter contains a summary of the findings, as well as their conclusion and recommendations on link between corporate governance and ICD quality among commercial banks in Kenya. This chapter contains a summary of the findings, the study's conclusions, the study's recommendations, the study's limitations, and suggestions for future research.

#### **5.2 Summary**

The study aimed at establishing the link between corporate governance and ICD quality among commercial banks in Kenya. The study focused on the effect of board independence, audit committee, board gender diversity, and board meetings on ICD quality. A descriptive study design was adopted since it is appropriate in this study as it intends to obtain detailed data through explanations which would be useful for identification of variables. The study's target population was 43 commercial banks operating in Kenya as at December 2020. The study included all the 43 commercial banks since all the elements of the population were included in the study because the population is small. The research employed secondary data gotten from CBK annual reports and banks financial reports between 2015 and 2020. The collected data was cleaned, coded and methodically organized in a manner that enables analysis by use of Statistical Package for Social Sciences (SPSS version 25.0). The study utilized quantitative analysis through descriptive statistics like the central tendency measures in generating relevant percentages, standard deviation, frequency counts, skewness, mean and kurtosis.

The study found that four independent variables that were studied (board independence, audit committee, board gender diversity, and board meetings) explained a substantial 75.4%

of intellectual capital disclosure quality. It was revealed that board independence positively and significantly affected the ICD quality. The study also established that audit committee positively and significantly affected quality of intellectual capital disclosure. The study established that board gender diversity positively and significantly affected intellectual capital disclosure quality. The study also established that board meetings positively and significantly affected ICD quality among commercial banks in Kenya.

### **5.3 Conclusion**

The study concluded that corporate governance has significantly contributed to intellectual capital disclosure quality amid commercial banks in Kenya. This was seen by board independence having a positive and significant effect on ICD quality among commercial banks in Kenya. Also, corporate governance contributed to ICD quality among the commercial banks through audit committee, board gender diversity and board meetings which were found to affect intellectual capital disclosure quality among commercial banks in Kenya significantly.

The study concluded that board independence positively and significantly affected the intellectual capital disclosure quality among Kenyan commercial banks in Kenya. The study concluded that having independent directors on the board is beneficial to banks, and that banks may not need to re-evaluate their nomination procedures and board composition in order to pick future board members. The findings also suggest that a bank with a larger board of directors, greater board interlocking, and greater diversity will outperform its smaller counterparts in terms of IC performance.

The study concluded that audit committee positively and significantly affected ICD quality among commercial banks in Kenya. The audit committee is in charge of overseeing corporate reporting systems in order to assist the board in its function of overseeing

management actions. In this regard, the audit committee's function encompasses not only the financial reporting process, but also the reporting of non-financial data, such as IC data. The audit committee would influence IC information disclosure to the stock market to lessen the acute information asymmetry linked with the generation of value capabilities of IC assets, the study says, to the degree that IC information is significant for the valuation of the firm's shares.

The study deduced that board gender diversity positively and significantly affected intellectual capital disclosure quality among commercial banks in Kenya. Also, board gender diversity can strengthen a company's communication and connect it to the outside world in order to gain critical resources. The study also found that this association is stronger in companies with two or more women on the BOD and weaker in family-owned businesses. From a governance viewpoint, this study suggests that board gender diversity has positive capital market implications in the transition economy, since corporations face enormous pressure to expand female participation on boards due to demands by stakeholder globally.

The study concluded that board meetings positively and significantly affected intellectual capital disclosure quality among commercial banks in Kenya. Additionally, it was concluded that board meetings serve as a forum for directors to debate the company's current and future issues, as well as its overall performance and any necessary changes to its policies. In principle, board meetings should be a location and time when the directors can give the most helpful advice and support. They are mainly to ensure the creation of efficient communications between the Board & Shareholders, and; they can demonstrate where management and control of the Company is located.

## **5.4 Recommendations**

### **5.4.1 Recommendations for Practice**

More information was found to be released by major banks than by smaller institutions. This is due to the fact that firms listed on the NSE are required under corporate governance practices to publish obligatory and optional information to all stakeholders. According to one theory, public interest in the annual reports of publicly traded corporations may lead them to provide more information voluntarily in order to maintain their market value. This might be another rationale for voluntary disclosure. Because of this, the report proposes using the same intellectual capital disclosure policies and criteria regardless of the size of the bank to ensure that all interested parties have access to the same amount of information.

In order to provide investors with the information they need to make informed decisions, corporate governance principles should be emphasized throughout the company's operations, and disclosure levels should not be confined just to annual reports. As a result, banks should make sure that all of their operations throughout the duration of operation are open and transparent in order to aid investors in making decisions.

The firm managers should begin to pay attention to the existed intangible assets of the firm. This is because not only tangible assets can bring benefits, but intangible assets can also increase profits for the firm. The intangible asset referred to in this study is the IC. Furthermore, the firm manager must also apply a good CG to the firm because it enables the firm to improve the corporate financial performance and firm value which can attract the attention of the investors to invest their funds in the firm concerned. Good CG will also be able to increase the confidence of investors to increase their investment in the firm. Moreover, the study recommends that the proportion of female directors on the company boards to be increased due to the slow progress of gender equality in the senior ranks of

commercial banks in Kenya. This can be done by creating gender equality training programs within the board members. The program can increase the gender awareness. Perhaps by increasing the gender awareness, it will remove the barriers and other issues between male and female director when they work together and create an equal environment of work. The action should involve setting aspirational targets to improve the gender diversity in senior roles across an institution, especially in the boardroom.

#### **5.4.2 Recommendations for Policy**

In compliance with existing legislative provisions, banks ought to implement CG policies for the selection of independent members of the board, create and sustain better relationships with stakeholders, and develop the unitary model of board system. Banks should create training programs for its management and board members with the goal of strengthening and enhancing their corporate governance processes in accordance with OECD guidelines.

Banks need to exercise caution and adhere to regulations, which can be accomplished through the execution of corporate governance. ICD should be controlled by professional and standard-setting organizations, as this will serve to strengthen the financial market's openness and efficiency, as well as support and enforce market discipline. Furthermore, regulating intellectual capital disclosure will encourage corporations to be more innovative and competitive by requiring them to provide more information than is necessary by law. Students should have the opportunity to learn about intellectual capital and its importance to companies and nations by taking courses in economics and business that include modules on intellectual capital.

#### **5.5 Limitations of the Study**

This study was limited to 5 years from 2015 to 2020. The study relied on secondary data from reports published by CBK as well as data on CBK website. Due diligence was followed in

capturing the data, however the accuracy of the data could not be guaranteed that it was free from bias and errors since CBK compiles this data from returns made by financial institutions on quarterly basis.

The study was limited to only commercial banks in Kenya. This makes the results of the study not generalizable to the financial sector since these institutions make part of a larger financial sector thus cannot be used a representation of the entire sector. Using disclosure index and the quality score may be subjective because scoring by different analysts may produce different results and the assumptions made are that the higher the scores the better the quality. Quality may be viewed by users differently.

These banks were not willing to disclose some information in the index which in their view reveals a lot of information to competitors. To mitigate this, the researcher assured all subjects of this study that the information was for academic goals only and all given information will be treated confidentially.

The study was limited in its data collection due of COVID-19 pandemic protocols, which are currently affecting the world. To address this challenge, the researcher approached some bank officials online where possible and where physical meetings were possible, observed the Ministry of Health guidelines and protocols.

## **5.6 Recommendations for Further Research**

The study used secondary data. Primary data should also be used to see if the same result findings still hold. This study targeted Commercial banks. Further research should be done targeting all financial institutions which includes MFIs and Sacco. Observations made during a five-year period in a single nation could not be typical, and the findings could not be applicable to all developing nations.

The study was conducted from the Kenyan context as a country. Similar study can be conducted at a broader scope such regional level or on a smaller scope such as county level to ascertain if the findings will be consistent. Other corporate governance and performance elements, like social performance metrics, should be taken into account as well.

Finally, a similar study can be carried out by triangulation both primary and secondary data to provide a clear picture of what influences intellectual capital disclosure quality in Kenya.

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## APPENDICES

### Appendix I: Secondary Data Collection Sheet

	2015	2016	2017	2018	2019	2020
Number of nonexecutive directors						
Number of executive directors						
Presence of audit committee						
Number of female board members						
Number of male board members						
Number of meetings held in an year						
Number of independent commissioners on the audit committee						

## **Appendix II: Licensed Commercial Banks**

1. ABC Bank (Kenya)
2. Bank of Africa
3. Bank of Baroda
4. Bank of India
5. Barclays Bank of Kenya
6. Chase Bank Kenya
7. Citibank
8. Commercial Bank of Africa
9. Consolidated Bank of Kenya
10. Cooperative Bank of Kenya
11. Credit Bank
12. Development Bank of Kenya
13. Diamond Trust Bank
14. Dubai Islamic Bank
15. Ecobank Kenya
16. Equity Bank
17. Family Bank
18. Fidelity Commercial Bank Limited
19. First Community Bank
20. Giro Commercial Bank
21. Guaranty Trust Bank Kenya
22. Guardian Bank
23. Gulf African Bank
24. Habib Bank AG Zurich
25. Housing Finance Company of Kenya
26. I&M Bank
27. Imperial Bank Kenya (In receivership)
28. Jamii Bora Bank
29. Kenya Commercial Bank
30. Mayfair Bank
31. Middle East Bank Kenya
32. National Bank of Kenya

33. NIC Bank
34. Oriental Commercial Bank
35. Paramount Universal Bank
36. Prime Bank (Kenya)
37. Sidian Bank
38. Spire Bank
39. Stanbic Bank Kenya
40. Standard Chartered Kenya
41. Trans National Bank Kenya
42. United Bank for Africa
43. Victoria Commercial Bank

### **Appendix III: ICD Index**

Disclosure of intellectual capital is a voluntary disclosure. Intellectual property A disclosure index based on a content analysis of annual reports is used to measure disclosure. The method used in this research is basically dichotomous, with the score of an item being one when disclosed and zero when it fails to be disclosed. In each firm, the extent of disclosure is afterwards calculated in from of an index through division of the total number of items scored by the sum of disclosures. The checklist of items in the IC adopted in this study was created by Li et al. (2008). It is the greatest detailed list of IC data, consisting of 61 items culled from examination of numerous prior studies (Guthrie and Petty, 2000; Bozzolan et al., 2003) and best practice statements. In accordance with prior studies (Sonnier, 200; Abeysekera, 2008; Mangena et al., 2010; Li et al., 2008;), the items on IC disclosure were classified in terms of human intellectual, structural intellectual, and relational intellectual capital. The importance of IC disclosure is due to the needs of stakeholders for non-financial information so as to make the right decision. The code used the dichotomous model by giving a score of 1, if the IC item is disclosed in the yearly report and a score of 0, if an item is not disclosed in the company's annual report. The index used is:

$$\text{ICD}_i = \frac{\Sigma \text{Score of disclose ICD of intellectual capital}}{\Sigma \text{Score of total framework ICD}}$$

**Classification of intellectual capital, Li et al (2008)**

<b>Human Capital</b>	<b>Relational Capital</b>
Number of Employee	Customers
Employee age	Market presence
Employee Diversity	Customer relationships
Employee Equality	Customer acquisition
Employee Relationship	Customer retention
Employee Education	CTE
Skills/ know-how	Customer involvement
Employee Competences	Company image
Employee Knowledge	Company awards
Employee Attitudes	Public relation
Employee Commitments	Diffusion & networking
Employee Motivation	Brands
Employee Productivity	Distribution channels
Employee Training	Relationship with suppliers
Vocational Qualifications	Business Collaboration
Employee Developments	Business agreements
Employee Flexibility	Favourite contract
Entrepreneurial Spirit	Research collaboration
Employee Capabilities	Marketing
Employee Teamwork	Relationship with stakeholders
Employee Community Involvement	Market leadership
Other Employee Features	
<b>Structural Capital</b>	
Intellectual Property	Technology
Process	Financial dealings
Management Philosophy	Customer support function
Corporate Culture	Quality management & improvement
Organization Flexibility	Knowledge-based infrastructure
Structure	Accreditations (certificate)
Learning	Overall infrastructure/ capability
Research & Development	Networking
Innovation	Distribution Network

## Appendix IV: Secondary Data

### Intellectual Capital Disclosure Quality

	2015	2016	2017	2018	2019	2020
ABC Bank Kenya	0.39	0.50	0.61	0.72	0.83	0.50
Bank of Africa	0.47	0.50	0.53	0.56	0.58	0.61
Bank of Baroda	0.44	0.25	0.06	0.25	0.25	0.25
Bank of India	0.64	0.38	0.12	0.14	0.40	0.66
Barclays Bank Kenya	0.75	0.75	0.13	0.34	0.54	0.75
CfC Stanbic Holdings	0.75	0.75	0.75	0.75	0.75	0.75
Chase Bank Kenya	0.92	0.33	0.50	0.63	0.96	0.98
Citibank	0.75	0.75	0.75	0.75	0.75	0.75
Commercial Bank of Africa	0.75	0.75	0.75	0.87	0.54	0.75
Consolidated Bank of Kenya	0.50	0.55	0.63	0.88	0.88	0.50
Cooperative Bank of Kenya	0.63	0.63	0.63	0.63	0.63	0.63
Credit Bank	0.38	0.38	0.38	0.38	0.38	0.38
Development Bank of Kenya	0.50	0.50	0.50	0.50	0.50	0.50
Diamond Trust Bank	0.63	0.63	0.63	0.63	0.63	0.63

Dubai Bank Kenya	0.28	0.38	0.48	0.58	0.68	0.78
Ecobank Kenya	0.34	0.38	0.38	0.38	0.38	0.38
Equatorial Commercial Bank	0.38	0.88	0.39	0.89	0.40	0.90
Equity Bank	0.50	0.69	0.50	0.93	0.94	0.50
Family Bank	0.50	0.50	0.50	0.50	0.50	0.50
Fidelity Commercial Bank Limited	0.58	0.31	0.25	0.25	0.72	0.25
First Community Bank	0.64	0.62	0.38	0.38	0.77	0.38
Giro Commercial Bank	0.70	0.93	0.50	0.50	0.82	0.50
Guaranty Trust Bank Kenya	0.76	0.68	0.50	0.62	0.50	0.50
Guardian Bank	0.82	0.06	0.38	0.74	0.38	0.38
Gulf African Bank	0.88	0.38	0.38	0.86	0.38	0.38
Habib Bank	0.25	0.25	0.25	0.98	0.25	0.25
Habib Bank AG Zurich	0.31	0.95	0.25	0.44	0.41	0.38
Housing Finance Company of Kenya	0.63	0.90	0.63	0.63	0.63	0.63
I&M Bank	0.95	0.85	0.63	0.63	0.63	0.63

Imperial Bank Kenya	0.63	0.73	0.63	0.76	0.63	0.63
Jamii Bora Bank	0.31	0.88	0.38	0.85	0.38	0.38
Kenya Commercial Bank	0.63	0.63	0.63	0.94	0.63	0.63
K-Rep Bank	0.95	0.38	0.38	0.38	0.38	0.38
Middle East Bank Kenya	0.25	0.25	0.25	0.25	0.46	0.25
National Bank of Kenya	0.50	0.50	0.50	0.50	0.46	0.50
NIC Bank	0.12	0.75	0.75	0.75	0.46	0.75
Oriental Commercial Bank	0.25	0.25	0.25	0.25	0.25	0.25
Paramount Universal Bank	0.04	0.25	0.25	0.50	0.25	0.25
Prime Bank (Kenya)	0.38	0.75	0.38	0.53	0.38	0.38
Standard Chartered Kenya	0.72	0.51	0.88	0.88	0.88	0.88
Trans National Bank Kenya	0.25	0.64	0.25	0.25	0.25	0.25
United Bank for Africa	0.25	0.77	0.37	0.28	0.57	0.25

**Percentage of nonexecutive director**

	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
ABC Bank Kenya	0.54	0.61	0.68	0.54	0.61	0.54
Bank of Africa	0.26	0.46	0.66	0.85	0.46	0.46
Bank of Baroda	0.35	0.31	0.63	0.71	0.79	0.87
Bank of India	0.19	0.16	0.61	0.87	0.80	0.96
Barclays Bank Kenya	0.52	0.54	0.58	0.96	0.90	0.54
CfC Stanbic Holdings	0.54	0.57	0.56	0.11	0.54	0.54
Chase Bank Kenya	0.83	0.68	0.54	0.62	0.62	0.62
Citibank	0.71	0.80	0.51	0.47	0.37	0.62
Commercial Bank of Africa	0.59	0.91	0.49	0.56	0.51	0.54
Consolidated Bank of Kenya	0.54	0.40	0.44	0.49	0.54	0.54
Cooperative Bank of Kenya	0.22	0.46	0.46	0.46	0.46	0.46
Credit Bank	0.30	0.54	0.78	0.54	0.54	0.54

Development Bank of Kenya	0.38	0.62	0.76	0.62	0.62	0.62
Diamond Trust Bank	0.46	0.46	0.85	0.46	0.46	0.46
Dubai Bank Kenya	0.54	0.46	0.46	0.46	0.46	0.46
Ecobank Kenya	0.62	0.42	0.54	0.54	0.54	0.54
Equatorial Commercial Bank	0.70	0.38	0.46	0.46	0.46	0.46
Equity Bank	0.78	0.34	0.54	0.54	0.54	0.54
Family Bank	0.11	0.30	0.54	0.54	0.54	0.54
Fidelity Commercial Bank Limited	0.06	0.26	0.38	0.38	0.38	0.38
First Community Bank	0.35	0.46	0.46	0.46	0.46	0.46
Giro Commercial Bank	0.64	0.46	0.46	0.46	0.46	0.46
Guaranty Trust Bank Kenya	0.62	0.62	0.62	0.62	0.62	0.62
Guardian Bank	0.46	0.46	0.46	0.46	0.46	0.46

Gulf African Bank	0.46	0.46	0.46	0.46	0.46	0.46
Habib Bank	0.92	0.31	0.31	0.31	0.31	0.31
Habib Bank AG Zurich	0.89	0.23	0.23	0.23	0.23	0.23
Housing Finance Company of Kenya	0.86	0.54	0.54	0.54	0.54	0.54
I&M Bank	0.83	0.46	0.46	0.46	0.46	0.46
Imperial Bank Kenya	0.80	0.46	0.46	0.46	0.46	0.46
Jamii Bora Bank	0.76	0.46	0.46	0.46	0.46	0.46
Kenya Commercial Bank	0.73	0.57	0.57	0.57	0.57	0.57
K-Rep Bank	0.70	0.46	0.46	0.46	0.46	0.46
Middle East Bank Kenya	0.67	0.38	0.38	0.38	0.38	0.38
National Bank of Kenya	0.64	0.46	0.46	0.46	0.46	0.46
NIC Bank	0.60	0.54	0.54	0.54	0.54	0.54
Oriental Commercial Bank	0.57	0.46	0.46	0.46	0.46	0.46

Paramount Universal Bank	0.49	0.54	0.59	0.65	0.70	0.75
Prime Bank (Kenya)	0.46	0.46	0.46	0.46	0.46	0.80
Standard Chartered Kenya	0.42	0.42	0.54	0.18	0.54	0.90
Trans National Bank Kenya	0.46	0.35	0.46	0.42	0.46	0.46
United Bank for Africa	0.49	0.30	0.49	0.32	0.38	0.39

**Number of audit committee/total board members**

	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
ABC Bank Kenya	0.54	0.54	0.54	0.54	0.54	0.54
Bank of Africa	0.46	0.46	0.46	0.46	0.46	0.46
Bank of Baroda	0.31	0.31	0.31	0.31	0.31	0.31
Bank of India	0.54	0.54	0.54	0.54	0.54	0.54
Barclays Bank Kenya	0.52	0.54	0.54	0.54	0.54	0.99
CfC Stanbic Holdings	0.56	0.54	0.54	0.54	0.54	0.87

Chase Bank Kenya	0.60	0.62	0.62	0.62	0.62	0.75
Citibank	0.64	0.51	0.62	0.57	0.56	0.62
Commercial Bank of Africa	0.68	0.51	0.54	0.44	0.37	0.54
Consolidated Bank of Kenya	0.72	0.54	0.54	0.42	0.54	0.38
Cooperative Bank of Kenya	0.76	0.46	0.46	0.26	0.46	0.39
Credit Bank	0.80	0.54	0.54	0.54	0.54	0.54
Development Bank of Kenya	0.84	0.62	0.62	0.62	0.62	0.62
Diamond Trust Bank	0.88	0.46	0.46	0.46	0.46	0.46
Dubai Bank Kenya	0.92	0.46	0.46	0.46	0.46	0.46
Ecobank Kenya	0.96	0.54	0.54	0.54	0.54	0.54
Equatorial Commercial Bank	0.46	0.46	0.46	0.46	0.46	0.46
Equity Bank	0.54	0.54	0.54	0.54	0.54	0.54

Family Bank	0.24	0.54	0.54	0.54	0.54	0.54
Fidelity Commercial Bank Limited	0.38	0.38	0.38	0.38	0.38	0.38
First Community Bank	0.46	0.46	0.46	0.46	0.46	0.46
Giro Commercial Bank	0.58	0.46	0.46	0.46	0.46	0.46
Guaranty Trust Bank Kenya	0.62	0.98	0.62	0.62	0.62	0.62
Guardian Bank	0.46	0.95	0.46	0.46	0.46	0.46
Gulf African Bank	0.46	0.92	0.46	0.46	0.46	0.46
Habib Bank	0.31	0.90	0.31	0.31	0.31	0.31
Habib Bank AG Zurich	0.23	0.87	0.23	0.23	0.23	0.23
Housing Finance Company of Kenya	0.54	0.84	0.54	0.54	0.54	0.54
I&M Bank	0.59	0.82	0.46	0.46	0.86	0.46
Imperial Bank Kenya	0.71	0.79	0.46	0.46	0.82	0.46
Jamii Bora Bank	0.46	0.76	0.46	0.46	0.77	0.46

Kenya Commercial Bank	0.46	0.74	0.57	0.57	0.73	0.57
K-Rep Bank	0.39	0.71	0.46	0.46	0.69	0.46
Middle East Bank Kenya	0.33	0.68	0.38	0.38	0.65	0.38
National Bank of Kenya	0.26	0.66	0.46	0.46	0.60	0.94
NIC Bank	0.54	0.63	0.54	0.54	0.54	0.86
Oriental Commercial Bank	0.46	0.60	0.49	0.54	0.56	0.78
Paramount Universal Bank	0.54	0.58	0.49	0.57	0.45	0.70
Prime Bank (Kenya)	0.51	0.55	0.46	0.45	0.43	0.62
Standard Chartered Kenya	0.51	0.54	0.54	0.54	0.54	0.54
Trans National Bank Kenya	0.51	0.46	0.46	0.46	0.46	0.46
United Bank for Africa	0.51	0.49	0.46	0.43	0.41	0.38

### Percentage of female board members

	2015	2016	2017	2018	2019	2020
ABC Bank Kenya	0.39	0.39	0.39	0.39	0.39	0.39
Bank of Africa	0.33	0.33	0.33	0.33	0.33	0.33
Bank of Baroda	0.41	0.41	0.41	0.41	0.41	0.41
Bank of India	0.43	0.43	0.43	0.43	0.43	0.43
Barclays Bank Kenya	0.41	0.49	0.49	0.49	0.49	0.52
CfC Stanbic Holdings	0.35	0.35	0.35	0.35	0.35	0.35
Chase Bank Kenya	0.25	0.29	0.33	0.37	0.41	0.45
Citibank	0.18	0.25	0.28	0.05	0.10	0.06
Commercial Bank of Africa	0.11	0.27	0.30	0.11	0.2033333333	0.206
Consolidated Bank of Kenya	0.17	0.29	0.32	0.17	0.24	0.25
Cooperative Bank of Kenya	0.23	0.31	0.34	0.23	0.28	0.29
Credit Bank	0.29	0.33	0.37	0.29	0.33	0.33

Development Bank of Kenya	0.35	0.35	0.35	0.35	0.35	0.35
Diamond Trust Bank	0.41	0.41	0.41	0.41	0.41	0.41
Dubai Bank Kenya	0.37	0.43	0.47	0.47	0.47	0.47
Ecobank Kenya	0.13	0.13	0.23	0.33	0.43	0.53
Equatorial Commercial Bank	0.27	0.13	0.47	0.47	0.47	0.47
Equity Bank	0.27	0.13	0.59	0.59	0.59	0.59
Family Bank	0.27	0.13	0.65	0.65	0.65	0.65
Fidelity Commercial Bank Limited	0.27	0.13	0.47	0.47	0.47	0.38
First Community Bank	0.18	0.13	0.23	0.23	0.26	0.28
Giro Commercial Bank	0.11	0.13	0.15	0.16	0.18	0.20
Guaranty Trust Bank Kenya	0.15	0.13	0.06	0.14	0.14	0.08
Guardian Bank	0.19	0.13	0.53	0.53	0.53	0.13

Gulf African Bank	0.22	0.13	0.59	0.59	0.59	0.19
Habib Bank	0.26	0.13	0.24	0.24	0.24	0.24
Habib Bank AG Zurich	0.30	0.13	0.35	0.35	0.35	0.35
Housing Finance Company of Kenya	0.33	0.13	0.15	0.15	0.15	0.15
I&M Bank	0.14	0.13	0.16	0.16	0.16	0.16
Imperial Bank Kenya	0.14	0.13	0.11	0.11	0.11	0.11
Jamii Bora Bank	0.14	0.13	0.16	0.16	0.16	0.16
Kenya Commercial Bank	0.14	0.13	0.19	0.19	0.19	0.19
K-Rep Bank	0.14	0.13	0.22	0.22	0.22	0.22
Middle East Bank Kenya	0.14	0.13	0.24	0.24	0.24	0.24
National Bank of Kenya	0.14	0.13	0.27	0.27	0.27	0.27
NIC Bank	0.14	0.13	0.19	0.19	0.19	0.19
Oriental Commercial Bank	0.14	0.13	0.22	0.22	0.22	0.22

Paramount Universal Bank	0.34	0.34	0.34	0.34	0.34	0.34
Prime Bank (Kenya)	0.24	0.27	0.27	0.27	0.27	0.27
Standard Chartered Kenya	0.14	0.13	0.12	0.11	0.10	0.19
Trans National Bank Kenya	0.04	0.13	0.22	0.12	0.12	0.12
United Bank for Africa	0.14	0.13	0.12	0.18	0.24	0.04

**Number of meetings held in a year**

	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
ABC Bank Kenya	49	59	69	79	89	99
Bank of Africa	29	4	77	53	7	77
Bank of Baroda	41	41	85	41	41	41
Bank of India	66	53	93	97	53	91
Barclays Bank Kenya	71	35	71	64	76	83
CfC Stanbic Holdings	65	47	65	75	65	58
Chase Bank Kenya	75	59	74	68	68	67

Citibank	81	71	71	98	71	8
Commercial Bank of Africa	87	83	71	71	71	71
Consolidated Bank of Kenya	59	95	59	71	71	82
Cooperative Bank of Kenya	65	65	65	65	65	88
Credit Bank	53	63	73	83	93	94
Development Bank of Kenya	5	54	65	65	65	65
Diamond Trust Bank	36	45	71	71	74	71
Dubai Bank Kenya	3	36	47	55	74	54
Ecobank Kenya	22	53	53	53	74	53
Equatorial Commercial Bank	47	47	47	47	74	83
Equity Bank	5	59	59	59	59	59
Family Bank	58	65	72	78	85	91

Fidelity Commercial Bank Limited	67	71	75	79	83	87
First Community Bank	84	77	7	63	53	95
Giro Commercial Bank	93	83	53	22	53	93
Guaranty Trust Bank Kenya	65	33	65	54	54	81
Guardian Bank	43	53	63	74	84	95
Gulf African Bank	41	59	59	71	8	89
Habib Bank	4	41	41	41	41	41
Habib Bank AG Zurich	39	35	35	35	35	35
Housing Finance Company of Kenya	37	21	65	65	65	65
I&M Bank	4	59	59	59	59	59
Imperial Bank Kenya	42	76	53	53	53	53
Jamii Bora Bank	43	67	47	47	47	47

Kenya Commercial Bank	45	19	59	59	59	59
K-Rep Bank	47	31	47	42	42	47
Middle East Bank Kenya	48	41	41	41	41	41
National Bank of Kenya	5	59	59	59	59	59
NIC Bank	52	65	65	65	65	65
Oriental Commercial Bank	53	47	47	47	47	47
Paramount Universal Bank	55	53	53	45	53	53
Prime Bank (Kenya)	57	41	41	39	41	41
Standard Chartered Kenya	26	65	57	65	41	65
Trans National Bank Kenya	47	65	65	77	86	89
United Bank for Africa	68	71	74	76	79	82