

**THE EFFECT OF AUDIT COMMITTEE CHARACTERISTICS ON THE  
FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS LISTED AT THE  
NAIROBI SECURITIES EXCHANGE IN KENYA**

**BY**

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### **DECLARATION/APPROVAL PAGE**

This research project is my original work and has not been presented for a degree in any other university.

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## **ABSTRACT**

Audit committees are established by regulations to help stem financial irregularities in corporates thus enhancing the financial performance of firms. However, financial crises experienced by listed firms, poor performance and collapses of others have raised concerns about the role of audit committees on financial performance. As a result, this study's major objective was to evaluate the effect characteristics of the audit committee had on the financial performance of manufacturing firms listed on the Nairobi Securities Exchange in Kenya. Guided by the agency theory as the anchoring theory and stakeholder, stewardship, and resource-based theories as to the other guiding theories, the study examined the effects of; audit committee independence, the expertise of audit committee members, audit committee gender diversity, audit committee meetings, and audit committee size on the financial performance of manufacturing firms listed at the NSE. The study adopted a mixed research design combining descriptive research design and longitudinal research design. The target population of the study is all the 17 manufacturing firms listed in the manufacturing and allied, construction and allied, agricultural and commercial and services sectors of the Nairobi Securities Exchange. As the target population was small, the study did not result in sampling but carried out a census. Secondary data used in the study was collected from published financial statements using a data collection sheet. STATA statistical software was used to test the model as well as carry out diagnostic tests. To analyse the data, this study utilised pooled ordinary least squares regression on 127 firm years of observations. The findings of the study revealed that jointly, audit committee characteristics accounted for a 22 per cent change in financial performance. nevertheless, mixed findings concerning each specific influence of each disaggregated variable was reported. Findings revealed that individually the size, expertise and independence all had a positive and statistically significant association with firms financial performance. The negative but statistically significant effects were found on the relationship between audit committee meetings and financial performance. However, audit committee gender diversity was found to have a statistically insignificant association with financial performance. This research study offers useful insights to the regulator of listed firms, investors and managers of the manufacturing companies. They may find the findings in this study useful and hence look for ways to enhance the effectiveness of the audit committees and eventually financial performance. Policymakers and regulators should make recommendations to manufacturing firms to develop efficient governance structures in audit committees that fit with the unique features of such entities.

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## **DEDICATION**

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## **ABBREVIATIONS AND ACRONYMS**

|              |                                     |
|--------------|-------------------------------------|
| <b>AC:</b>   | Audit Committee                     |
| <b>CMA:</b>  | Capital Markets Authority           |
| <b>GDP:</b>  | Gross Domestic Product              |
| <b>KNBS:</b> | Kenya National Bureau of Statistics |
| <b>NSE:</b>  | Nairobi Securities Exchange         |

## OPERATIONAL DEFINITION OF TERMS

|                                              |                                                                                                                                                                                                                                                                    |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Audit Committee:</b>                      | A team consisting of part of the board of directors' members whose responsibilities include assessment of financial information and control of management behaviour in a bid to improve the quality, accuracy, and financial information (Bouaine & Hrichi, 2019). |
| <b>Audit Committee Accounting Expertise:</b> | The experience of specialization in using financial information indicated by possession of professional qualification in accounting or auditing and being a member of good standing in a professional body (Salehi, Tahervafaei, & Tarighi, 2018).                 |
| <b>Audit Committee Independence:</b>         | Audit committee' members who are not involved in either the daily operation of the company, or in the executive team and without any material association with the entity (Al Farooque, Buachoom, & Sun, 2020).                                                    |
| <b>Audit Committee Gender Diversity:</b>     | Inclusion of female representation in the audit committee. Alternatively, the number of female directors in the audit committee (Kılıç & Kuzey, 2016).                                                                                                             |
| <b>Financial Performance:</b>                | The attainment of financial objectives of the firm measured in financial measures (Haider, Khan, & Iqbal, 2015).                                                                                                                                                   |
| <b>Listed Manufacturing Firms:</b>           | Firms engaged in the manufacturing business and are placed either in the manufacturing, construction, or commercial sectors of the Nairobi Securities Exchange (CMA, 2021).                                                                                        |

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Introduction**

This chapter introduces the concepts and contextual setting of the study. The concepts are reviewed from global, regional, and local perspectives. This leads to the statement of the problem that details the ideal situation, the reality, and the consequences while highlighting the gaps. The study's objective and research hypotheses are presented. The chapter also discusses the significance of the study

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

Financial performance relates to the capabilities of corporations to attain their goals such as shareholders' wealth maximisation and hence firm value (Korir & Tenai, 2020). Mohamed and Mwengei (2019) posit that financial performance is crucial to the survival of firms and has implications for the future of the firm. However, certain events such as the global financial crises, insider dealings among some firms, financial mismanagement, and misreporting have occasioned poor financial performance and loss of shareholders' value (Matanda, Oyugi, & Lishenga, 2015). Corporate governance structures, among them the internal audit committee of the board of directors have been put in place to serve the interests of the shareholders by enhancing the financial performance of the organizations (Ongeti & Machuki, 2018). According to Ashari and Krismiaji (2020), the audit committee aid in supervising the activities of the managers as well as protecting the interest of the shareholders. The support and protection of shareholders' interests are better manifested in the financial performance of the company (Herdjiono & Sari, 2017). As a result, audit committees are recognized by regulatory authorities including the Capital Markets Authority in Kenya as being an integral part of the governance and performance of both public and private corporates.

There is empirical literature linking audit committee characteristics to firm financial performance (Ashari & Krismiaji, 2020; Herdjiono & Sari, 2017; Ibrahim, Ouma, & Koshal, 2019). This literature however inconclusive. Some extant literature has reported that audit committee characteristics impact financial performance (Musallam, 2020; Ashari & Krismiaji, 2020). However, the same researchers disagree on whether the effects are positive or negative. For instance, In Sri Lanka, a study by Balagobei and Velnampy (2018) revealed that audit committee characteristics impact positively on financial

performance. Similarly, Oussii and Taktak (2018) provided evidence that audit committee effectiveness was positively related to financial reporting timeliness and by extension, the financial performance of listed companies in Tunisia. This positive association was collaborated by Mohamed and Mwengei (2019) in a study that investigated the influence of the independence of the audit committee on the financial performance of listed financial services firms in Kenya. Nevertheless, several studies have contended that audit committee characteristics influence firms' financial performance negatively. A case in point is a study in Nigeria by Akpey and Azembila, (2016) revealing that audit committee expertise was negatively associated with performance. Moreover, other studies have found that characteristics of the audit committee had no relationship with entities' financial performance (Kallamu & Saat, 2015; Oroud, 2019).

Audit committee characteristics are premised on the agency theory (Jensen & Meckling, 1976; Fama & Jensen, 1983), Stakeholder Theory (Freeman, 1984), Stewardship Theory (Donaldson & Davis, 1991) and Resource Dependence Theory (Pfeffer & Salancik, 1978). The scholarly debate relating the impact of audit committee characteristics on financial performance is, theoretically, not conclusive. While Jensen and Meckling (1976) on one hand and Fama and Jensen (1983) posit separation of ownership from control creates an agency problem difficult to overcome without incurring agency costs, stewardship theory by Donaldson and Davis (1991) holds that financial performance of a firm can be enhanced if trust and goodwill are created between managers and shareholders. Donaldson and Davis (1991) in complete contrast with the theories postulated by agency theorists held in absence of self-motivation managers may not achieve great firm performance. The stakeholder's theory views an organization from a broader perspective that incorporates other interested parties, unlike the selfish agency theory whose interest is the welfare of the owners. The external stakeholders who include employees, the society among others have legitimate expectations in terms of claims, purpose and control regarding the firm (Puni & Anlesinya, 2020).

Kenya's manufacturing sector is a fundamental channel for promoting the country's integration into the regional and international markets, as well as, a major source of job opportunities. Considering the nature of manufacturing firms together with their length of turnover period and processes, the level of risk they are exposed to is much higher. The Kenyan context is a bit particular in that before the entry of the guidelines on corporate governance practices by public listed companies in Kenya, 2002 and its successor, the

Code of Corporate Governance Practices for Issuers of Securities to the Public 2015, Kenyan companies were not compelled by law to set up an audit committee (Chartered Institute for Securities & Investment, 2016). With the existence of efficient audit committee structures being touted as having the potential to minimise the risk profile of the manufacturing firms and enhance their profitability and survival, it is necessary therefore to investigate the influence of audit committee characteristics on the financial performance of listed manufacturing firms in Kenya.

### ***1.1.1 Audit committee characteristics***

Audit committees' principal purpose is the provision of an oversight role on the financial reporting process, the audit process, the system of internal controls, and compliance with the legal framework (Ofoeda, 2017). Bouaine and Hrichi (2019) posit that audit committees act as an additional control in the protection of shareholders' interests. They view the audit committee as an independent observer allowing for mitigation of agency problems and maximization of business performance. Thus, audit committee adoption enhances the confidence of the shareholders and capital markets (Bouaine & Hrichi, 2019).

Audit committees have increasingly been taken as a critical part of modern control structures and governance practices in underwriting the integrity of public accountability and shoring up credibility in the financial data declared (Ashari & Krismiaji, 2020). According to Herdjiono and Sari (2017), audit committees play a key role in safeguarding the external auditors' independence ensuring they carry out the audit work without undue influence from the management. To this extent, therefore, audit committees are deployed as a means of reducing the agency conflict (Jensen & Meckling, 1976). The way the audit committee is composed, and its characteristics are crucial in invigorating the financial performance of an organisation (Deloitte, 2018). Audit committee independence is cited by several empirical works of literature as one of the key features of such committees (Ashari & Krismiaji, 2020; Ibrahim et al., 2019). Other characteristics include audit committee financial expertise (Chaudhry, Roomi, & Aftab, 2020; Nawafly & Alarussi, 2018), audit committee meetings (Bouaine & Hrichi, 2019); audit committee size (Al-Okaily & Naueihed, 2020; Musallam, 2020); and audit committee gender diversity (Kılıc & Kuzey, 2016; Gordini & Rancati, 2017; Al-Jaifi, 2020).

The independence of the audit committee usually increases its effectiveness in carrying out its functions including auditing function quality, a transparent and independent

nomination, and compensation policy (Al Farooque et al., 2020). In addition, the functions entrusted to the audit committee in particular reviewing the system of financial reporting and at the same time supervising the activities of senior managers are linked to the firm's success. According to Al Farooque et al., (2020) an independent board committee can effectively monitor the behaviour of executives and, as a result, help in improving financial performance and shareholders value creation.

To ensure effective supervision by the audit committee, it is paramount that the members hold such qualifications in auditing and accounting to allow for independent evaluation of the various emerging issues (Salehi et al., 2018). Capital Markets Authority (2016) issued guidelines that required audit committees of listed firms to have at least one member holding a professional qualification in audit or accounting. According to Salehi et al., (2018) financial expertise is a critical issue with its main purpose is to improve the effectiveness of the audit committee in monitoring the financial reports. Accordingly, audit committee financial expertise is critical to enhancing financial reporting and is helpful while supervising finance and audit departments (Kapkiyai, Cheboi, & Komen, 2020). Gender diversity through a female representative in the board of directors and equally in the audit committee is slowly but steadily taking shape (Kılıc & Kuzey, 2016). Different countries are enacting legislations requiring both genders are represented in the boards of directors of public companies. In Norway for instance, no more than 60 per cent of the board members should be from one gender as Kılıc and Kuzey, (2016) confirm. In Kenya, studies on gender diversity in the board of directors are scanty. However, there are regulations requiring gender diversity not just on the board, but also in the board committees. This has prompted an inquiry to establish the effect of gender diversity in the audit committees and firms' performance.

The more frequent audit committee meetings, the easier for an audit committee to oversee the activities of a firm (Susanto, 2016). According to Bouaine and Hrichi (2019), the audit committee meeting frequency is one of the indicators highlighting the effectiveness of the board sub-committee on audit. The study argued that the higher the frequency of meetings the higher the likelihood that the committee will attain and surpass its goals. However, the findings of the study on the impact of audit committee meetings on the financial performance of France firms contradicted the assertion arguing that the number of meetings can only be beneficial if their costs were lower than benefits (Bouaine & Hrichi, 2019). While the existing extant literature has focussed on the impact of



individual audit committee characteristics, the focus of the present study, distinct from the previous studies, is to investigate the individual and joint effects of diverse audit committee features on the financial performance of Kenya's quoted manufacturing corporates.

### ***1.1.2 Financial performance***

Firms are institutions of purpose that are manifested by their clear objectives and goals. Though the intents and purposes may not be consistent across the organizations or even in the same institutions, evaluating the attainment of the goals is part of the ongoing scholarly discourse (Ongeti & Machuki, 2018). With the cross-cutting goal of the firms in business or in other ventures being the desire to succeed, performance thus remains a critical cog in business and at the heart of corporate governance. In this respect, therefore, performance has remained a recurring theme not only for researchers but also for practising managers (Ashari & Krismiaji, 2020). Most scholars continue to observe performance as a dependent variable (Herdjiono & Sari, 2017; Orjinta & Nkem, 2018; Bouaine & Hrichi, 2019; Mohamed & Mwengei, 2019). Despite the unanimity in the recurring theme, the challenge remains in building a consensus on the best measure of performance. Past studies on financial performance have adopted different measures such as return on equity (Bouaine & Hrichi, 2019; Chaudhry et al., 2020; Ibrahim et al., 2019), return on assets (Ofoeda, 2017; Mohamed & Mwengei, 2019; Ashari & Krismiaji, 2020) Tobin's Q ratio (Al Farooque et al., 2020; Balagobei & Velnampy, 2018). Thus, debate remains on the best financial performance measures pitting the various measures of performance. Tobin's Q ratio has been criticized due to its ability to predict if a company is overvalued or undervalued (Chaudhry et al., 2020). On the other hand, return on assets has the possibility of being manipulated in addition to its ability to compare companies of different sizes. In light of this, and similar to the studies identified, the present study adopts the return on equity as the proxy for financial performance, due to its comparability across company peers irrespective of their size.

### ***1.1.3 Audit committee characteristics and financial performance***

Agency theory proposes the board as one of the main solutions to the agency conflict. With the board transacting most of its functions through board subcommittees, the focus should be more on the subcommittee, as opposed to the entire board (Puni & Anlesinya, 2020). The audit committee is one of the mandatory sub-committees of the main board with its primary purpose is to provide oversight of the financial reporting process (Oussii

& Taktak, 2018). Thus, the need to determine the effect of audit committee characteristics on financial performance has become the focus of increasing attention among academicians and scholars. This debate is, however inconclusive.

Globally, studies investigating the linkage and the influence of audit committees on financial performance offer mixed findings. For instance, while Nawafly and Alarussi, (2018) found a positive association between the variables, Bouaine and Hrichi (2019) found a negative association. On their part, Al-Okaily and Naueihed (2020) had an inconclusive study. Nawafly and Alarussi (2018) had investigated the influence of size, expertise, and meeting frequency of the audit committee on the financial performance of listed Malaysian firms. In France, Bouaine and Hrichi (2019) examined the impact of audit committees' characteristics on the financial firm performance of companies listed on the Paris Stock Exchange. They investigated if the independence of the committee, expertise of the members, and the frequency in which they held their meetings had any bearings on financial performance, and found out that though there was a significant influence, it affected performance negatively. Al-Okaily and Naueihed (2020) focused on UK listed firms and sought to find out if audit committee characteristics influenced their financial performance and if this relationship was moderated by family ownership. The findings were mixed. While audit committee characteristics positively influenced the financial performance of non-family-owned businesses, it was insignificantly related to the financial performance of family-owned businesses.

In Ghana, a study by Ofoeda (2017) showed mixed results regarding corporate governance mechanisms and profitability of non-bank financial institutions in the country. The study showed that there existed a positive relationship among audit committee size, meetings of the audit committee and profitability. However, audit committee independence was found to exhibit show a negative relationship with performance. In contrast, Orjinta and Nkem (2018) study revealed a positive and significant association between independence of audit committee, number of annual meetings, and financial performance. In the study, the characteristics of the audit committee were taken as independent variables and regressed against the financial performance of non-financial firms listed in Nigeria. A similar study in Ghana by Akpey and Azembila (2016) found that audit committee characteristics, proxied by independence, expertise and frequency of meetings, had a negative association with financial performance.

Locally, the findings have been inconclusive. For instance, Ibrahim et al. (2019) study revealed a positive and significant association between the independence of the audit committee and the financial performance of insurance firms in Kenya. In contrast, Kapkiyai et al., (2020) found that committee independence, the financial competence of its members, and frequency of meetings negatively influenced earnings management of firms listed in the Nairobi Securities Exchange in Kenya. Korir and Tenani (2020) focused on board characteristics, and by the extension audit committee and found out independence and size had a statistically positive association with firm performance of listed firms in Kenya. The proposition that audit committee characteristics have a significant influence on firm performance is contestable.

#### ***1.1.4 Listed manufacturing firms in Kenya***

Kenya has 17 listed manufacturing firms spread across three sectors of the Nairobi Securities Exchange which include; the manufacturing sector, the commercial sector, and the construction sector (CMA, 2021). However, a number of the firms have been facing financial distress raising doubts about their financial viability. Kenya's manufacturing sector is a fundamental channel for promoting the country's integration into the regional and international markets, as well as, a major source of job opportunities. The sector contribution to Gross Domestic Product (GDP) has declined from a high of 9.4 per cent in 2015 to 7.5 per cent in 2019, in contrast to an average of 10 per cent in the decade up to 2014. In 2019, the manufacturing sector provided the highest share of wage employment accounting for 15.9 per cent in the country representing a 2.4 per cent change compared to the previous year (KNBS, 2020). This demonstrates the enormity of economic development, which a country can enjoy if it manages the manufacturing industry in the right way.

The goal of the National Government is to ensure that the manufacturing industry increases its contribution to the national economy by about 15 per cent of the GDP come 2022. Several transformational policies such as Vision 2030, National Trade Policy, Kenya Industrial Transformation Program, Buy Kenya Build Kenya, Investment Policy, and the big four have been developed to boost the manufacturing sector in the country (KNBS, 2020). The government has prioritized the manufacturing sector as one of the key four agendas that are to drive the Kenya Transformation Agenda (KNBS, 2020). However, the

global financial crisis of 2008 and 2009 and now the coronavirus pandemic critically impacted the manufacturing industry performance in Kenya. Exacerbating the situation is the fact that the period between the two crises saw a destabilising decline in securities market performance and lengthy periods of price volatility in addition to worsening economic outlook exposing manufacturing firms to risks and deteriorating performance (Korir & Tenai, 2020). For instance, in Kenya, a report by CMA (2021) indicates that Marshall East Africa Limited, ARM Cement Plc, and Mumias Sugar Plc are some of the listed manufacturing firms that have recorded declined performance.

It is widely believed that periods during and immediate to financial crises and risk exposure might result in agency problems that can be cured by corporate governance measures such as audit committee (Proença, Augusto, & Murteira, 2020). Global financial crises have brought to the fore issues relating to the composition and effectiveness of audit committees and their role in enhancing the financial performance of business entities (Gordini & Rancati, 2017). This has awakened the need to re-examine the role played by corporate governance practices in firms across different parts of the globe (Mohamed & Mwengei, 2019).

## **1.2 Statement of the Problem**

The manufacturing sector has traditionally made a decisive contribution to gross domestic product (GDP) growth in Kenya and has become extremely important as it provides high-wage jobs, commercial innovation and is key to reducing the trade deficit (CMA, 2020). However, the destructive global effect of the financial crisis of 2009 and the coronavirus pandemic critically impacted the manufacturing industry's performance in Kenya. From a macro perspective, the sector grew by 3.2 per cent in 2019 compared to 4.3 per cent growth in 2018. In 2020, the growth was expected to drop to 0.6 per cent. In addition, the share of manufacturing in GDP has been reducing over time from 9.4 per cent in 2015, 9.3 per cent in 2016, 8.1 per cent in 2017; 7.8 per cent in 2018, and 7.5 per cent in 2019 (KNBS, 2020). As a result, it can be argued that Kenya is going through premature deindustrialization in a context where manufacturing and industry are still relatively under-developed. Exacerbating the situation is the fact that the period between the two crises witnessed a major stock market decline and volatility, coupled with general economic conditions that rendered the manufacturing sector more vulnerable to risk and deteriorating performance (Korir & Tenai, 2020). For instance, in Kenya, a report by CMA (2020)

indicates that Marshall East Africa Limited, ARM Cement Plc, and Mumias Sugar Plc are some of the listed manufacturing firms that have recorded declined performance.

The audit committee is invoked in the corporate governance of an organization and plays a critical role in its organization, accountability, and control (Al Farooque et al., 2020). As a subcommittee of the board of directors, the main role of the audit committee is facilitating both internal and external audits, financial reporting risk management, and enhancement of the financial performance (Herdjiono & Sari, 2017). Despite the presence of an audit committee in companies listed in the Nairobi Securities Exchange, recent financial scandals in listed companies such as Mumias Sugar Plc, ARM Cement Plc, and Uchumi supermarkets have raised concerns on the role of audit committees in enhancing performance (Kapkiyai et al., 2020). The global and all too frequent financial crises and insolvency of some listed firms precipitated by poor financial performance have equally put audit committees into sharp focus ignited the need to examine the role of audit committees on financial performance (Matanda, Oyugi, & Lishenga, 2015).

A review of empirical research established divergent views on the relationship between audit committee characteristics and financial performance. Several studies have examined the relationship between audit committee characteristics and financial performance in the Kenyan context. However, not only are the studies fragmented, but the results are equally inconclusive and sometimes even contradictory. For instance, Kapkiyai et al., (2020) find an inverse relationship between audit committee effectiveness and performance of quoted companies in Kenya. On the other hand, Ibrahim et al. (2019) find that audit committee independence leads to superior performance amongst insurance firms. Nonetheless, the study by Ibrahim et al. (2019) was in the context of insurance companies and manufacturing firms were not studied. The contradictions in findings reduce the reliability of the findings as well as casting aspersions as to whether a firm's financial performance is influenced by the characteristics of internal audit.

Most of the studies on audit committee characteristics have examined a single aspect of corporate governance. Mohamed and Mwengei (2019) focused only on independence whereas Chaudhry et al., (2020) was on expertise. It is implausible that financial performance can be explained by a single factor (Ongeti & Machuki, 2018). This study thus extends previous research by incorporating independence, expertise, gender diversity, meetings and committee size to provide a broader perspective. Methodologically, most

studies have used a cross-sectional research design. Few studies are longitudinal and thus fail to provide a wider view of the influence of audit committee characteristics within a specific sector and a longer period of data.

Despite the proliferation of literature on the effects of audit committee characteristics on financial performance, there appears to be a lacuna around the context of the various studies. Few studies, to the researcher's knowledge, are contextualized from the perspective of listed manufacturing firms in Kenya. Conceptually, few studies have linked audit committee characteristics with financial performance. In addition, the few studies are cross-sectional and thus fail to take into account the long-run association among the variables. To fill the gaps identified in the literature, this study seeks to investigate the effect of audit committee characteristics on the financial performance of listed manufacturing companies in Kenya.

### **1.3 Objectives of the Study**

#### **1.3.1 General objective**

The general objective of this study was to analyze the effect of audit committee characteristics on the financial performance of manufacturing firms listed at the Nairobi Securities Exchange (NSE) in Kenya.

#### **1.3.2 Specific objectives**

The specific objectives were to:

- i. Evaluate the effect of audit committee independence on the financial performance of manufacturing firms listed at the NSE in Kenya.
- ii. Determine the effect between audit committee accounting expertise and financial performance of manufacturing firms listed at the NSE in Kenya.
- iii. Ascertain the effect of audit committee gender diversity on the financial performance of manufacturing firms listed at the NSE in Kenya.
- iv. To ascertain the effect of audit committee meetings on the financial performance of manufacturing firms listed at the NSE in Kenya.
- v. Examine the effect between audit committee size and financial performance of manufacturing firms listed at the NSE in Kenya.

### **1.4 Research Hypotheses**

The study formulated and tested the following hypotheses at a 95 per cent level of confidence.

- H<sub>01</sub>: Audit committee independence does not have a statistically significant effect on the financial performance of manufacturing firms listed at the NSE in Kenya.*
- H<sub>02</sub>: There is no significant relationship between audit committee accounting expertise and the financial performance of manufacturing firms listed at the NSE in Kenya.*
- H<sub>03</sub>: There is no significant relationship between audit committee gender diversity and financial performance of manufacturing firms listed at the NSE in Kenya.*
- H<sub>04</sub>: Audit committee meetings do not have a significant effect on the financial performance of manufacturing firms listed at the NSE in Kenya.*
- H<sub>05</sub>: There is no significant relationship between audit committee size and financial performance of manufacturing firms listed at the NSE in Kenya.*

## **1.5 Significance of the Study**

The main focus of this study is to establish the effect of audit committee characteristics on the financial performance of manufacturing companies quoted at the Nairobi Securities Exchange in Kenya. The study is expected to make several contributions to theory advancement, policy, management practice, and academia.

### **1.5.1 Contribution to theory**

This study is premised on the agency theory, the stakeholder theory, stewardship theory, and the resource dependence theory. The main proposition of agency theory is that financial performance is enhanced when audit committees and other corporate governance structures are put in place. As some critics have argued that the tautological assertions lack empirical grounding, this study will help add empirical grounding to the agency theory.

### **1.5.2 Contribution to policy**

This study hopes to serve as an of information to policy makers not only in the manufacturing sector but also to the regulator of capital markets, the CMA. The manufacturing industry is one of the sectors envisioned to play a key role in the realization of Kenya's Vision 2030 by contributing to the country's economic growth. The results of the study will thus provide an indicator of corporate governance that is useful to the Capital Markets Authority in formulating policies.

### ***1.5.3 Contribution to managerial practice***

The findings of this study will help managers of manufacturing firms focus on critical governance factors which will lead to improved financial performance. In addition, it shall make it possible for listed manufacturing firms to identify the audit committee characteristics that are best utilized and look at how they could be integrated to ensure enhanced financial performance.

### ***1.5.4 Contribution to academia***

Academically, this research hopes to make contributions to the growing body of knowledge and identify the drivers of and causes of variation in financial performance by elucidating conceptual linkage between audit committee characteristics and financial performance.

## **1.6 Scope of the Study**

This study focused on audit committee characteristics and financial performance for the period 2010 to 2019. The period is chosen since the enhanced guidelines on the formation and operationalization of audit committees in the public sector became effective in 2009. The year 2019 is selected as the latest published financial statements relate to that period. The population of the study will comprise all the listed firms whose one of their major principal activity is manufacturing. As of June 30, 2020, 17 manufacturing companies were listed across four sectors on the Nairobi Securities Exchange. Appendix I is a list of the companies.



## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter presents a review of the literature. At first, theories anchoring the study are presented and reviewed. This is followed by a review of extant literature along with the hypothesized relationships. In doing so, gaps in empirical literature are identified and summarised. The chapter also presents the conceptual framework and concludes by identifying how the variables of the study will be operationalized.

#### 2.2 Theoretical Review

The concepts in this study are anchored on the agency theory (Jensen & Meckling, 1976), the stakeholder theory (Freeman, 1984), the stewardship theory (Donaldson & Davis, 1991), and the resource-based theory (Wernerfelt, 1984). Agency theory is the anchoring framework of the present study. The study links the theories to provide an inclusive explanation of audit committee characteristics and their effect on the financial performance of listed manufacturing firms in Kenya.

##### 2.2.1 *Agency Theory*

Jensen and Meckling (1976) postulated the agency theory is premised on the principal-agent relationship. In this study, agency theory is employed as the anchoring theoretical framework. According to the agency framework, the principal, who are the owners of the business delegates control to managers, and agents. The main proposal of this theory is that firms have specific goals, such as profit maximization that they seek to pursue and meet. However, due to the separation of ownership and control, shareholders engage managers to run the business on their behalf. According to the theory, this creates an agency relationship and the principal expects that managers would carry on their duties in tandem with shareholders' goals (Jensen & Meckling, 1976). According to the agency theory, there are possibilities of managers pursuing a self-seeking goal and as a result, propose stricter monitoring and accountability measures. Agency theory thus argues that an entity's financial performance would be improved through audit committees. In this regard, audit committees are viewed as monitoring mechanisms more so in the area of financial reporting, and thus reduce the agency problem (Oussii & Taktak, 2018).

The audit committee framework finds its grounding in the agency theory. Fama and Jensen, (1983) suggest that skilful and competent audit committee members play a key

role in shareholders' wealth maximization. Accordingly, when the committee has members with financial expertise, the chances of effective monitoring and control to enhance shareholders' wealth maximization are ensured (Fama & Jensen, 1983).

According to Chaudhry et al., (2020), expert and independent audit committee members play a key role in the reduction of agency costs due to their effective monitoring and control thus ensuring favourable contribution to financial performance. In contrast, firms without competent and independent audit committees cannot guarantee sustainable shareholders' wealth creation as the corporate governance mechanism will be inadequate to hold executives accountable for their stewardship (Puni & Anlesinya, 2020). The supporters of agency theory advocate for independent and competent audit committee members and the roles should not be assigned to executive board members to ensure proper checks and balances between the executive and the audit committee members (Kyere & Ausloos, 2020). Despite its attractiveness, agency theory suffers a major defect due to its inability to consider and incorporate other stakeholders and view the firm from the perspective of the owners only.

To help explain the effect of the characteristics of the board audit committee on the financial performances of quoted manufacturing entities in Kenya, this study employs the agency theory and hence contributes to the existing literature. Audit committees act for the best interests of the shareholders and therefore a proper functioning audit committee has a key role in mitigating agency conflicts arising between shareholders and the management. In this respect, therefore, and based on the agency theory, improved financial performance will be realized when conflicting interests are mitigated or solved at the appropriate time a role that audit committees can effectively play. Based on the agency theory, audit committee members with accounting expertise enhanced their effectiveness and hence the financial performance of a firm. In this context, therefore, agency theory informed the audit committee's accounting expertise and audit committee independence variables.

### **2.2.2 Stakeholder Theory**

The stakeholders' theory was proposed by Freeman (1984) as an expansion of the agency theory. The stakeholders' theory was proposed by Freeman (1984) as an expansion of the agency theory. In this respect, therefore, the theory examines the performance of the organization from the context of a wide range of internal and external stakeholders. The stakeholders include the firm staff, those institutions owned monies by it, customers, suppliers, government, and the community (Freeman, 1984). All the stakeholders are affected by or effect the activities of the organization.

According to Freeman (1984), a firm and its audit committee should work for the best interests of all the shareholders as they have legit expectations, and monetary claims and have the need and purpose of controlling the organization. This broad-based approach to corporate governance advocates for audit committee members to be recruited from a varied pool of interest groups, and thus has implications for the audit committee's gender diversity (Ongeti & Machuki, 2018).

Freeman (1984) posits that the interrelated and interconnected stakeholders' interests impact the decision-making process of the organization and further, the firm performance. Accordingly, the committee should conciliate the conflicting interests and create substantial cohesion. Thus, the theory expands the narrow agency theory view and argues that the audit committee should put into consideration the interest of the varied stakeholders. Not only does the stakeholder theory have implications on a firm's governance structures', it equally has a bearing on organizational performance. However, the different stakeholders have different performance outlooks. Shareholders' goals revolve around seeking financial value such as financial performance, while other stakeholders have their eye on non-financial goals. The theory asserts that it not only increases shareholders' returns but honours the objectives of all other stakeholders. (Ongeti & Machuki, 2018).

### **2.2.3 Stewardship Theory**

The proponent of the stewardship theory, Donaldson and Davis (1991) presents it as an alternative perspective of the agency framework. The theory regards managers acting as agents of the shareholders as not being conflicted. Further, the theory holds that managers align their goals to those of the shareholders thus monitoring costs are not necessary. The theory suggests that directors are capable of attaining the shareholders' wealth maximizing

goal rather than being self-serving (Donaldson & Davis, 1991). The theory argues that the main goal of a firm's managers and directors is to deliver superior performance while being good stewards of the resources of the enterprise. In addition, Donaldson and Davis (1991) posit that allowing managers discretion encourages them to work better as managers are not always driven by financial rewards but also other concerns such as reputation, and career progression among others.

Matanda, Oyugi, and Lishenga (2015) point out that allowing managers discretion as opposed to micro-managing them enhances their job satisfaction and eventually improves the firms' financial health. Further, directors have access to information that would raise firms' profitability compared to members of the internal audit committee (Fama & Jensen, 1983). As such, managers, due to information asymmetry as expected to have accurate knowledge of the firm's operation to facilitate them in making well-considered decisions. Given the arguments, stewardship theory routes for few members of the audit committee in favour of insider dominated committee arguing that such a committee asserts authority and is responsible (Donaldson & Davis, 1991). According to the theory, managers are taken as the important agents of the firm and assume that a leadership structure consisting of executive directors would be better placed to achieve the shareholders' wealth maximization goal.

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

The resource-based theory of the firm proposes that the resources a firm owns can influence its performance positively (Wernerfelt, 1984). According to the theory, the resources of an organization comprise human capital such as the audit committee. An audit committee is a major resource used in monitoring the usage of other resources that are responsible for the success of the firm. Four major types of resources are supplied by the audit committee: Advice and knowledge; reputation and legitimacy; communication channels to external parties and access to and support from important external actors (Wernerfelt, 1984). Knowledge has been argued to be a resource controlled by an organization that if well utilized can enhance its performance (Barney, 1991). The knowledge definition implies that the audit committee composition is regarded as a resource that can be used to enhance firm performance. Wernerfelt (1984) argued that audit committees, and in particular independent members, are crucial in monitoring the usage and control of financial assets of the firm.

According to Pfeffer and Salancik (2003), resource-based theory audit committees are part of the resources from firms' external environment as they bring with them knowledge, ideas and contacts. Proponents of the audit committee gender diversity, women bring new ideas which positively impact business financial performance. Further, in resource-based theory, an independent audit committee with the necessary expertise contributes to its effectiveness in monitoring and hence driving up the financial performance of the firm. The theory proposes that audit committee members who are knowledgeable and have accounting expertise convey crucial resources allowing for proper monitoring. Considering the vast amount of resources available in a given manufacturing firm which is controlled by managers who are agents of the shareholders, appointing independent audit committee members who are independent and experts in the field of accounting would aid in improving the financial performance of the entities (Wernerfelt, 1984). Public limited companies in Kenya are required to appoint at least three independent and independent non-executive directors with diverse business-related qualification that is relevant to the company's business; well versed in the interests of the investing public; keen awareness of the interests of the investing public; and with at least one of the committee members holding a professional qualification in audit or accounting (CMA, 2016). From the resource-based theory outlook, audit committee independence, gender diversity, size and expertise as a resource is the primary source of sustained performance of an entity (Barney, 1991). According to Pfeffer and Salancik (2003) and consistent with the resource-based theory, large audit committee sizes are expected to improve the financial performance of firms. This expectation stems from having access to a larger pool of people with diverse expertise. The resource-based theory, therefore, informs the gender diversity, audit committee independence, size and audit committee accounting expertise variables.

## **2.3 Empirical Review**

In this part, literature from prior researchers regarding audit committee characteristics and financial performance from various contexts is reviewed. This brings to the forefront the state of knowledge and reveals the gaps that the study hopes to address and help in understanding how the variables influence financial performance.

### ***2.3.1 Audit committee independence and financial performance***

Ofoeda (2017) investigated the extent to which corporate governance structures influenced the profitability of non-banking financial institutions in Ghana over the period 2006 to 2014. The moderating effects of firm size were also considered. Audit committee

independence, measured as the ratio of non-executive committee members; audit committee size measured as the number of audit committee members; and audit committee meetings taken as the number of meetings held in a year proxied the independent variable corporate governance structures. The control variable firm size was measured as the log of total assets while profitability, the dependent variable, was measured as return on assets (Ofoeda, 2017). The study employed panel data analysis and employed the corrected standard errors model to estimate the study's variables. Negative and significant effects were found to exist between audit committee independence and profitability. However, the meeting of the audit committee had a direct and significant association with profitability. Firm size was similarly found to have a moderating effect on profitability. The study, however, was contextualized on non-banking financing institutions in Ghana while the present study has conceptualized financial performance from the context of listed manufacturing firms in Kenya.

Oussii and Taktak (2018) sought to investigate the effects of audit committee effectiveness and financial reporting timelines of listed Tunisian firms. The study focussed on a sample of 54 firms listed on the securities market in Tunisia and covered the years between 2011 and 2013 with 162 firm-year observations. Oussii and Taktak (2018) adopted the longitudinal research design and used pooled data while employing multivariate analysis. Oussii and Taktak (2018) anchored their study on the agency theory as proposed by Jensen and Meckling (1976) and Fama and Jensen (1983). External audit delay proxied the dependent variable, financial reporting timelines whereas five audit committee characteristics independence, authority, financial expertise, size, and diligence were taken as the explanatory variables. Findings of the study indicated that audit committee independence and audit committee authority has a negative but not statistically significant association with reporting timelines. Audit committee financial expertise had a negative and statistically significant influence on reporting timelines. The study further revealed that the size and meeting of the audit committee had a positive but insignificant association with reporting timeliness. The study however focused on audit committee characteristics on reporting timelines of listed Tunisian firms. The current study is industry-specific and focuses on audit committee characteristics and their impact on the performance of quoted manufacturing firms in Kenya.

Balagobei and Velnampy (2018) examined the effect of the audit committee on organization performance using 15 hotel and travel firms listed on Sri Lanka's Colombo Stock Exchange for the period 2012 to 2016. The study adopted Tobin's Q ratio the proxy for organization performance arguing that market measures were more objective than accounting-based measures. Audit committee the dependent variable was indicated by its independence, size, financial expertise of the members, and the number of meetings held. The firm size indicated by the natural log of total assets was introduced as a moderating variable. Findings of the study revealed that audit committee independence had a significant negative influence on organization performance. Similarly, audit committee meetings were observed to have a significant negative effect on organization performance. Further, the size of the audit committee was found to have a negative but statistically not significant effect on firm performance. Concerning audit committee financial expertise, the results of the study indicated that it positively and in a statistically significant way impacted firm performance. This relationship was moderated by firm size. Balagobei and Velnampy (2018) study was conducted in Sri Lanka and focused on the hotel and travel sector while the focus of the current study is manufacturing firms in Kenya.

Ibrahim et al. (2019) examined the relationship that existed between the independence of audit committees and the financial performance of insurance companies in Kenya and focussed on the period between 2017 and 2018. The study adopted a correlational research design and focused on 55 insurance firms that were licensed to operate in Kenya in the years 2017 and 2018. Audit committee independence, the independent variable was operationalized as the proportion of audit committee members without any affiliation to the insurance firms. Two accounting measures of financial performance, return on equity and return on assets were employed as the proxies for the dependent variable. The study used questionnaires to gather primary data from 412 respondents all serving as board members, chief executive officers, chief finance officers, and internal auditors (Ibrahim et al., 2019). The findings of the study indicated a positive and statistically significant association between audit committee independence and financial performance amongst Kenyan insurance firms. However, the study by Ibrahim et al. (2019) was in the context of insurance firms in Kenya while the present study focus is on Kenyan quoted manufacturing companies. Further, the research by Ibrahim et al. (2019) only focussed on the influence of a single variable while the present study shall focus on independence, financial expertise, size in addressing the conceptual gap.

Mohamed and Mwengei (2019) examined audit committee independence and its impact on the financial performance of listed commercial banks and insurance firms in Kenya. The study assessed the relationship between audit committee independence measures (presence of non-executive directors, transparency in chairman selection, and transparency in appointment of members) that were taken as independent variables. Return on assets was adopted as the proxy for the independent variable, financial performance. Mohamed and Mwengei (2019) anchored their study on agency and stakeholder theories. Published financial statements were used as the source of the secondary data on financial performance relating to the period 2011 and 2016 whereas data on audit committee independence was obtained from individual firms (Mohamed & Mwengei, 2019). The study was undertaken on 20 commercial banks and insurance firms that were listed at the Nairobi Securities Exchange. The study employed a causal explanatory research design and analyzed the quantitative data using the statistical package for social sciences. Findings of the study indicated that audit committee independence had a positive and statistically significant effect on the financial performance of quoted financial companies in Kenya. While the study by Mohamed and Mwengei (2019) focused on the influence of audit committee independence on the financial performance of listed commercial banks and insurance firms in Kenya, the present study aims at establishing the effect of audit committee characteristics on the financial performance of listed commercial banks in Kenya.

Ashari and Krismiaji (2020) investigated the relationship between the characteristics of the audit committee and financial performance using a sample of 660 manufacturing companies that had their shares quoted at the Indonesian securities market and covered the period between 2016 to 2017. Return on assets was adopted as a financial performance measure (dependent variable) whereas audit committee independence, competency of audit committee members, and the number of audit committee meetings were adopted as independent variables. The research used three control variables; external auditor being one of the big four firms, firm size, and leverage. The study revealed that the independence of the audit committee, the committee's accounting expertise, its size, and the frequency of the committee's meeting positively impacted the performance of the companies. However, the study focussed on a very short period, two years, for the impact of the committee to be felt. In addition, the study focused on Indonesian firms for two years limiting the generalizability of the result.



### **2.3.2 *Audit committee accounting expertise and financial performance***

Kallamu and Saat (2015) examined the impact of audit committee attributes on the performance of 37 financial companies that were listed on the Malaysian stock exchange in the period between 2007 and 2011. The audit committee attributes that were examined included audit committee financial expertise and independence. Audit committee expertise was indicated by the number of directors in the committee with an accounting qualification. On the other hand, independence was measured by the proportion of independent directors to the total number of directors in the audit committee. The dependent variable, performance was measured as return on assets using Tobin's Q ratio (Kallamu & Saat, 2015). The study employed pooled data and ordinary least square estimation using the random-effects model. The study findings indicated that audit committee expertise insignificantly influenced performance. However, audit committee independence was found to have a direct and statistically significant association with profitability thus supporting the agency theory.

Akpey and Azembila (2016) examined the association between audit committee characteristics and firm performance of 36 firms listed on the Ghana Stock Exchange in the financial year 2015. The number of audit committee members with accounting knowledge and frequency of audit committee meetings were taken to be predictors of performance. Performance was taken as the difference between the previous and current stock prices. Firm size measured as the logarithm of the book value of the total asset was taken as the control variable. The cross-sectional study used both primary data, obtained by use of a questionnaire and secondary data, obtained from audited financial reports. To test the hypothesis for the study, Logit cross-sectional regression was utilized (Akpey & Azembila, 2016). Results revealed the number of independent members of the audit committee with finance or accounting degrees impacted negatively on the firm's performance. Similarly, findings revealed that the frequency of audit committee meetings had a negative relationship with financial performance. The cross-sectional nature of the study made it difficult to capture the effects of the variables on the dependent variable due to the lagged nature of the influences.

Nawafly and Alarussi (2018) examined the relationship between corporate governance components and the financial performance of 150 non-financial firms listed in Malaysia in the year 2014. Audit committee expertise measured as the number of members with requisite finance or auditing knowledge, size and independence was adopted as the proxies

for the independent variable, corporate governance components whereas the return on assets was employed as the indicator of the dependent variable, financial performance. A cross-sectional research design was adopted by the study with ordinary least squares being used to estimate the model (Nawafly & Alarussi, 2018). The finding of the study indicated that audit committee expertise, independence, and size were all significantly and positively associated with financial performance.

Agwor and Onukogu (2018) examined the effect of financial expertise of the audit committee on the management of earning of 15 listed food and beverage manufacturing companies domiciled in Nigeria. Agwor and Onukogu (2018) employed time-series data covering the years 2006 to 2016. The dependent variable of the study was taken as earning management, defined as manipulation of reported earnings, as measured by discretionary accruals (Agwor & Onukogu, 2018). The independent variable was proxied by the number of committee members with accounting knowledge. The study adopted the ordinary least squares regression model while estimating the coefficients. The study findings revealed a statistically significant and negative association between audit committee expertise and earnings management and concluded that audit committee expertise can reduce the element of financial statement misreporting.

Oroud (2019) investigated the effect of the characteristics of the audit committee on the profitability of firms in Jordan. The study targeted 51 industrial companies that had their shares traded at the Jordan's Amman securities exchange covering the period 2013 to 2017. The study was founded on both agency and resource dependence theories (Oroud, 2019). The audit committee characteristics, the independent variable was proxied by the number of committee members knowledgeable in financial matters, the number of times the audit committee held its meetings, the size, and independence of the committee. Profitability was taken as the dependent variable and operationalized by return on investment and return on equity. The study employed panel data and used the fixed effects model to examine the relationship between the variables. The findings of the study indicated that audit committee expertise had no significant relationship with profitability as proxied by return on investment and return on equity. Similarly, no significant association was found to exist between audit size and profitability. Positive and statistically significant effects were established between audit committee independence and profitability as was the case with the frequency of meetings and profitability.

Though the study focused on the industrial sector, it was however contextualised in Jordan and the findings may not be generalised to a Kenyan context.

Chaudhry et al., (2020), analyzed the influence of financial expertise of the audit committee chairperson on the financial performance of 50 purposively sampled non-financial firms listed in the Pakistan Stock Exchange for the period 2016. The study employed a cross-sectional research design on secondary data that was collected from firms' financial statements. The dependent variable, financial performance was proxied by various profitability measures that included return on assets, net profit margin and return on equity.

Independent variable financial expertise of the chairperson of the audit committee was proxied by a dummy variable where one was assigned in the event the chairperson had the requisite expertise otherwise zero (Chaudhry et al., 2020). The study introduced a control variable, firm size which was indicated by the natural logarithm of total assets. The study findings revealed that the financial expertise of the chairperson of the audit committee had a positive and statistically significant effect on financial performance. A positive but statistically insignificant relationship was found to exist between firm size and performance. The study however used non-probability sampling techniques and as a result, it was not possible to confirm if the sample represented the population. In addition, the study was cross-sectional. The present study adopts a longitudinal design and the entire population will be considered.

### ***2.3.3 Audit committee gender diversity and financial performance***

Kılıç and Kuzey (2016) evaluated the impact diversity of board members of boards of directors had on the financial performance of Turkish firms. The study targeted 149 non-financial firms listed on the Borsa Istanbul in Turkey over the period 2008 to 2012. The study's theoretical underpinnings were anchored on resource dependence theory and agency theory. The study adopted return on assets, return on equity and return on sales as proxies for the dependent variable, financial performance. Gender diversity was employed as the independent variable. The variable gender diversity was operationalized by three proxies with the first being an index that was developed to measure gender diversity. The ratio of female directors to the total directors in the firms was adopted as the second measure. Further, a dummy variable was introduced and took the value of one when there was at least one female director and zero when there was none. In analyzing the

association, the study conducted regression analysis on three models, one each for every dependent variable. Based on the study findings, gender diversity positively and in a statistical way influenced financial performance.

Gordini and Rancati (2017) investigated the association between board gender diversity and financial performance of 918 quoted Italian firms covering the period 2011 to 2014. The study utilized panel data research methodology and utilized pooled ordinary least squares to estimate the coefficient of the variables. The Tobin's Q ratio measured as the sum of the market capitalization and book value of debt divided by the value of total assets was employed as the measure of the dependent variable, financial performance. Blau index, Shannon index, the proportion of female directors to total directors, and a dummy variable were adopted as the independent variables. Data on the financial performance of the company was obtained from the Thomson Reuters database whereas data on gender diversity was obtained from individual company's corporate governance reports. The study revealed that on its own, the presence of female board members did not have a significant impact on financial performance. Nonetheless, the percentage of female members of directors had a statistically significant direct impact on financial performance. Further, according to the findings of the study, gender diversity as measured by both Shannon index and Blau index positively and in a significant matter influenced the performance of the firms as measured by Tobin's Q (Gordini & Rancati, 2017).

Lafuente and Vaillant (2019) carried out a study that sought to find out the extent to which the financial performance of Costa Rican banking institutions was influenced by the gender diversity of firms board members. Lafuente and Vaillant (2019) assessed the relationship between selected indicators of diversity in terms of gender, women leadership in the corporate hierarchy, and gender diversity in the board as the independent variables. A dummy variable of 1 if a woman chaired the board was adopted as the proxy for women's leadership while gender diversity was equally measured by a dummy variable of one if the proportion of women in the board was more than 40 per cent of all board members. Return on assets, net intermediation margin, and non-performing loans portfolio was adopted as economic performance measures. The study targeted 48 commercial banks in Costa Rica during the period 2000 to 2012 with a total of 571 bank-year observations. Data on the financial performance of obtained from the Central Bank in Costa Rica on the other hand, gender diversity data was collected from each of the commercial banks. The study adopted the panel data methodology with coefficients being estimated by the fixed

effects model (Lafuente & Vaillant, 2019). The study revealed that fluctuations in the ratio of women board members did not have a significant influence on all three measures of financial performance. However, results showed that a gender-balanced board positively and significantly influenced banks' economic performance. The study further revealed that while women as a board chair lowered the non-performing loans ratio, it had had no statistically significant influence on either return on assets or net intermediation margin.

Al-Jaifi, (2020) sought to analyze how board diversity of commercial banks in five countries in the Association of South-East Asian Nations (ASEAN) region affected their corporate performance. The study targeted 26 banks from Malaysia, Singapore, Thailand, Indonesia, and the Philippines in the period between 2011 and 2016 with 130 bank year observations. Board gender diversity was adopted as the independent variable and was operationalized as the ratio of total female directors on the board to total directors while three non-financial performance measures; environmental performance, social performance, and corporate governance performance were adopted as the proxies for the dependent variable corporate performance. Data on performance scores were obtained from the Thomas Reuters data base while data on gender diversity was obtained from each of the bank's corporate governance reports. The study adopted the longitudinal data methodology and employed the generalized method of moments in analyzing the relationship. The findings from the study indicated gender diversity had a statistically significant and direct influence on corporate performance. However, gender diversity was found to have insignificant effects on both environmental and social performance (Al-Jaifi, 2020).

Proença et al., (2020) investigated the influence of gender diversity on the performance of the banking industry in the Eurozone and covered the period between 2013 and 2017. Three proxies, return on assets, return on equity, and loan loss provision was used as the indicator of the dependent variable performance of the banking sector. The explanatory variable gender diversity was indicated by the proportion of women in the board's audit committee (Proença et al., 2020). The study sampled 83 banks supervised by the European Central Bank in the 19 countries that adopted the euro currency out of 117 banks based on data availability and the aim of the study in using balanced panel data. The researchers used the generalized moment method to estimate hypothesized relationship. Findings from the study suggested that gender diversity had a negative impact on banking performance as

measured by return on average assets, return on average equity, and the positive effect on loan loss provisions to total loans (Proença et al., 2020).

#### **2.3.4 *Audit committee meetings and financial performance***

Orjinta and Nkem, (2018) investigated the influence of the frequency of audit committee meetings on the financial performance of Nigerian companies. In particular, the study targeted fifty non-financial firms that were quoted in the main securities market in Nigeria during the period 2007 to 2016. The study measured financial performance as return on assets while audit committee meeting was proxied by the number of meetings each year. The study employed panel data obtained from published financial statements of each firm. The data collected were analyzed using panel least square regression. The result revealed that there was a significant positive relationship between audit committee meetings and firm performance of non-financial firms in Nigeria.

Bouaine and Hrichi (2019) examined the extent to which the diligence of the audit committee influenced financial performance using a sample of 100 French non-financial companies that were listed on the Paris Stock Exchange between 2007 and 2015. The dependent variable financial performance was indicated by financial measures, Return on Equity, and Return on Assets. The number of times the audit committee held its meetings was taken as the indicator of the independent variable, the diligence of the audit committee. The study employed a longitudinal research methodology and used a data collection matrix to obtain secondary data from individual companies' annual reports. Results from the study indicated that audit committee meetings while modelled on return on assets had a negative and significant influence on the financial performance of listed non-financial firms in French. However, an insignificant though negative association was found when financial performance was indicated by return on equity (Bouaine & Hrichi, 2019).

Al Farooque et al., (2020) surveyed the effects of varied characteristics of the audit committee on the market-based financial performance of firms listed in Thailand for the period 2000 to 2016. A system of the generalized method of moments and fixed effect panel regression was applied to the sampled 452 companies that were listed on the Thailand securities market. Audit committee characteristics were proxied by the frequency of audit committee meetings whereas the dependent variable, firm financial performance was measured as return on equity using Tobin's Q measure. The findings of the study

indicated a significant positive association between the frequency of board committee meetings and financial performance. This implied that the more frequent audit committee meetings significantly led to improvement in market-based performance.

Kapkiyai et al., (2020) investigated the role of an effective audit committee in controlling earnings management of corporations whose shares traded in the Nairobi Securities Exchange between the years 2004 and 2017. The proxy for the dependent variable, earnings management was taken as the discretionary accruals. Audit committee meetings were measured as the number of audit committee meetings held during the year. The research controlled for firm size measured as the natural log of total assets arguing that bigger firms are likely to have superior oversight measures and are exposed to greater public scrutiny, unlike small organisations whose additional costs are higher. Such costs compare unfavourably with larger entities enjoying advantages of expansion (Kapkiyai et al., 2020). Kapkiyai et al., (2020) used a longitudinal explanatory design and had a population of 35 public entities with four hundred and ninety yearly observations. The study used panel data that was obtained from the financial statements of each firm. Further, the study employed pooled regression analysis. The study results revealed that the frequency of audit committee meetings negatively and significantly affected earnings management. This implied that the higher the number of audit committee meetings in a year, the lower would be earnings management. Firm size, which the study had adopted as a control variable, was found to positively and in a statistically significant way influence earnings management.

### ***2.3.5 Audit committee size and financial performance***

Kipkoech and Rono (2016) examined the extent to which the size of audit committees influenced the performance of companies quoted in the Kenyas security market between the periods 2006 to 2013. Anchoring the research was the agency theory which pointed out that extant literature recognised that audit committee played a key role in reducing agency problems. The study employed an explanatory design and adopted a content analysis method. Secondary data analysed by the study was obtained from the financial reports of each organisation. Financial performance was proxied by return on assets, on the other hand, the size of the audit committee was indicated by the members appointed to that committee. (Kipkoech & Rono, 2016). Using the regression analysis method to fit the

model, the study revealed audit committee size had a negative and statistically significant relationship with the financial performance of listed firms in Kenya.

Salehi et al., (2018) evaluated the relationship between audit committee characteristics on the profitability of firms listed on the Tehran Stock Exchange in Iran over the period 2010 to 2015. Audit committee characteristics were indicated by audit committee size which was measured as the number of audit committee members. The independent variable, profitability was proxied by the profit-loss ratio measured as the absolute value of profits of the current period less the absolute value of profit in the previous period all divided by the absolute value of profit in the previous period. The study employed a linear panel regression model and used the fixed-effect model to estimate the coefficients of the model. The findings of the study revealed that no association existed between audit committee size and corporate financial performance.

Musallam (2020) used a sample of 31 listed non-financial firms in Palestine to investigate the effect of the audit committee on corporate performance. The study used panel data from the firms for the period 2010 to 2016 with a total of 217 company year observations. Data on the variables were obtained from the annual reports from the website of the Palestine Stock Exchange. Corporate performance was measured as return on assets, while audit committee characteristics were operationalised as audit committee size measured as the number of directors in each of the firms. The study used the generalised least square method to estimate the regression model. The results of the study showed that the effects of audit committee size on corporate performance were significant and positive.

Al-Okaily and Naueihed (2020) empirically examined audit committee effectiveness on financial performance in the United Kingdom listed public family firms and non-family firms. Specifically, the study investigated the connection between characteristics of the audit committee including size and expertise in firm performance, and whether family ownership and involvement moderate the latter relationship. The study sampled 359 firms listed on the London Stock Exchange, for the nine years between 2005 and 2013 and yielded a total of 1,877 firm-years observations. The study employed two proxies for the dependent variable firm performance, return on assets (ROA) and Tobin's Q ratio. To measure the independent variable, audit committee effectiveness, the study analyzed three audit committee characteristics. Audit committee size was measured as the number of members that served on the committee. Audit committee meeting frequency was



measured as the number of meetings that the committee held during a particular year. Audit committee expertise was taken as the percentage of audit committee directors with relevant financial expertise that encompasses both accounting and finance competence relevant to the sector in which the company operated. The paper estimated a two-way fixed effects model. A sub-sample analysis was used by first examining the impact of audit committee effectiveness on firm performance only in non-family firms and then only in family firms. The findings of the paper were that the audit committee meeting frequency, audit committee size and audit committee expertise were all positively and significantly related to non-family firm performance, while insignificantly related to family firm performance (Al-Okaily & Naueihed, 2020).

## **2.4 Summary of Research Gaps**

The literature reviewed in sections 2.3.1 to 2.3.3 presents mixed findings linking characteristics of the audit committee on financial performance thus creating knowledge gaps. The gaps identified are due to different methodologies used, the conceptualisation of variables and contextual factors. The methodological gaps include population, sample size, the adopted study designs as well as gaps relating to the way data was analysed. The contextual gaps relate to listed manufacturing firms in Kenya. The conceptual gaps identified by the study relate to the hypothesized relationship along with the study constructs. Based on the reviewed literature, several matters come to the fore. On one hand, most studies have proxied audit committee characteristics by a single measure such as independence, and expertise. The joint role of all the characteristics and consequently their joint influence on financial performance have been ignored. Further, most studies have been conceptualised as audit characteristics influencing performance. Studies that have been conceptualised as audit committee characteristics and financial performance are rare. Studies reviewed were also not contextualised from the perspective of listed manufacturing firms in Kenya. This study is thus expected to offer great insights into the conceptualised variables in the context of manufacturing firms quoted in the Nairobi Securities Exchange. In this respect, therefore, greater insights will be offered. Presented in Table 2.1 is a summary of previous studies and knowledge gaps.

**Table 1****Summary of Research Gaps**

| <b>Research Study</b>                                                                                                   | <b>Research Gaps</b>                                                                                                                                      | <b>How the current study addresses the gap(s)</b>                                                          |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Ibrahim et al. (2019)<br>Independence of the audit committee and financial performance of insurance companies in Kenya. | Only considered independence and ignored other characteristics.                                                                                           | The impact of other characteristics and their joint influence on financial performance will be considered. |
| Bouaine and Hrichi (2019)<br>Audit committee characteristics and financial performance of French companies.             | The context was in France.                                                                                                                                | The present study will be contextualised in Kenya.                                                         |
| Akpey and Azembila (2016)<br>Audit committee characteristics and firm performance of quoted companies in Ghana.         | The study was cross-sectional and only considered a specific period                                                                                       | The current study is longitudinal                                                                          |
| Kapkiyai et al., (2020).<br>Characteristics of the audit committee and earnings management of Kenya's listed entities.  | Audit committee characteristics were regressed against earnings management.<br>Focused on all firms and findings may not be portable to specific sectors. | The study will be sector-specific and its dependent variable is financial performance.                     |
| (Salehi et al., 2018)<br>The effect of audit committee characteristics on firm performance.                             | The study was contextualised in Iran. The finding may not be generalised to the Kenyan manufacturing sector.                                              | The present study is in the context of manufacturing companies in Kenya.                                   |

**Source: Researcher (2022)****2.5 Conceptual Framework**

A conceptual framework is a diagrammatic representation of the theorized interrelationships among the study variables. A conceptualisation of the variables is important as it forms the basis of hypotheses testing and coming up with generalizations in the findings of the study (Cooper & Schindler, 2014). The conceptual framework is developed from a literature review and assumes that financial performance is affected by the following aspects of the audit committee: Audit committee independence; Audit committee accounting expertise; and audit committee gender diversity. The conceptual framework is presented in figure 1.

## Conceptual Framework



## 2.6 Operationalisation of Study Variables

To enable the testing of the formulated hypotheses, the study variables must be operationalised. According to Cooper and Schindler (2014), operationalisation gives meaning to a concept by specifying the operations necessary to measure it. The variables of this study included audit committee characteristics as the regressor while the regressand was adopted as financial performance. Operationalisation of the variables is based on the examination of previous empirical studies. A summary of the operationalised variables is presented in Table 2

**Table 2**

**Operationalisation of the Study variables**

| Variable                             | Label    | Measurement                                                                    | Supporting Literature/Justification                                         |
|--------------------------------------|----------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <b>Independent Variables</b>         |          |                                                                                |                                                                             |
| Audit Committee Independence         | ACIndep  | Number of independent directors in the audit committee.                        | (Ibrahim et al., 2019; Ofoeda, 2017)                                        |
| Audit Committee Accounting Expertise | ACExper  | Number of directors with financial or audit experience in the audit committee. | (Kallamu & Saat, 2015; Agwor & Onukogu, 2018; Nawafly & Alarussi, 2018)     |
| Audit Committee Gender Diversity     | ACGender | Number of female directors in the audit committee                              | (Kılıc & Kuzey, 2016; Gordini & Rancati, 2017; Lafuente & Vaillant, 2019)   |
| Audit Committee Meetings             | ACMeets  | Number of audit committee meetings                                             | Bouaine and Hrichi (2019) Kapkiyai et al., (2020)                           |
| Audit Committee Size                 | ACSize   | Number of audit committee members                                              | Salehi et al., (2018) Musallam (2020)                                       |
| <b>Dependent Variable</b>            |          |                                                                                |                                                                             |
| Financial Performance                | FirPer   | Return on Equity = $\frac{\text{Net Income}}{\text{Shareholders Equity}}$      | (Kallamu & Saat, 2015; Balagobei & Velnampy, 2018; Gordini & Rancati, 2017) |

**Source: Literature Review (2022)**

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

In this chapter, the methodology to be adopted for data collection and analysis which will assist in achieving the research objectives is outlined and discussed. The chapter covers research design, population, method of data collection as well as the method of analysis. The chapter also presents the tests of significance and the diagnostic tests applied.

#### **3.2 Research Design**

The research design is a road map detailing the steps to be undertaken by the researcher while fulfilling the objectives of the study (Saunders, Lewis, & Thornhill, 2015). Hence, it is the heart of planning for research to be undertaken. This study employs a longitudinal research design. Longitudinal studies include repeated measurement over an extended period of time while tracking changes in variables over time (Cooper & Schindler, 2014). Longitudinal studies are better in establishing changes over time and they provide an insight into cause-and-effect relationships (Gujarati & Sangeetha, 2013).

#### **3.3 Target Population**

the target population of a study is the total number of items a researcher seeks to make inferences on (Cooper & Schindler, 2014). This study targeted firms listed on the Nairobi Securities Exchange whose principal activities include manufacturing. Data from the Capital Markets Authority indicates that as of June 30, 2021, there were 17 manufacturing companies listed on the Nairobi Securities Exchange (NSE). Appendix 1 is a tabulation of manufacturing firms listed at the NSE in Kenya. Due to the small size of the target population, this study did not result in sampling. The study thus employed a census survey. Census inquiry refers to the complete enumeration of all items in the population (Cooper & Schindler, 2014). A census is highly recommended as it eliminates errors that are associated with sampling (Saunders et al., 2015). Moreover, the availability of secondary data from published financial statements supports the use of the census.

#### **3.4 Data Collection, Processing, Analysis and Presentation**

A data collection template was used to collect data for a 10-year period from 2010 to 2019. This period corresponded to the period that guidelines on corporate governance were instated in Kenya and a robust reporting mechanism on the same was installed. The data collection

template is presented in Appendix 2. The secondary panel data was obtained from each listed company's annual financial reports. Secondary data is data collected for some other purpose other than the problem at hand (Cooper & Schindler, 2014).

Once data was collected, it was analysed using regression models that were estimated using STATA software. As the study was employing panel data regression analysis model, the Hausman specification test was to be utilized to evaluate which model between the fixed-effect model and random-effects model is appropriate. However, the study was to make the decision only if the assumptions of the classical linear regressions were violated. In the event of non-violation would adopt the pooled ordinary least squares regression. The model is presented in equations (i).

Equation (i) represents the direct effects of the independent variable on the dependent variable.

$$\text{FinPer}_{it} = \beta_0 + \beta_1 \text{ACIndep}_{it} + \beta_2 \text{ACExper}_{it} + \beta_3 \text{ACGender}_{it} + \beta_4 \text{ACMeet}_{it} + \beta_5 \text{ACSizer}_{it} + \epsilon$$

..... (i)

$\text{FinPer}_{it}$  = Financial Performance per firm over time

$\beta_1, \beta_2, \beta_3, \beta_4$  are regression coefficients of the four independent variables

$\text{ACIndep}_{it}$  = Audit Committee Independence per firm over time

$\text{ACExper}_{it}$  = Audit Committee Accounting Expertise per firm over time

$\text{ACGender}_{it}$  = Audit Committee Gender Diversity per firm over time

$\text{ACMeet}_{it}$  = Audit Committee Meetings per firm over time

$\text{ACSize}_{it}$  = Audit Committee Size per firm over time

$\epsilon$  = Error term

While interpreting the findings depicted by the regression equation, the summary provided in Table 3 was considered.

**Table 3****Regression Model Interpretation**

| <b>Test</b>                                              | <b>Statistic</b>      | <b>Outcome</b>                                                                                                                                                                         |
|----------------------------------------------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Assessing the correlation amongst variables              | R                     | The higher the value of R the stronger the correlation.                                                                                                                                |
| The explanatory power of the model                       | $R^2$                 | Values of $R^2$ above 50 per cent indicate that the independent variable explains more than half of the variations in the dependent variable.                                          |
| Is the model statistically significant                   | p-value               | If the computed p-value is less than the critical p-value, the model is significant.                                                                                                   |
| The direction of the relationship amongst study variable | Beta coefficient sign | If the beta coefficient has a positive value, then the dependent variable has a direct influence on the independent variable. A negative beta value indicates an inverse relationship. |
| Significance of the individual variable                  | p-value               | If the computed p-value less than the critical p-value indicates that the individual variable has a significant effect.                                                                |

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**Source: Researcher (2022)**

**3.5 Diagnostic Tests**

To ensure that the assumptions underpinning the multiple linear regression model were not violated, several tests, to diagnose the assumptions were carried out. The tests and the decision criteria are summarised in Table 4.

**Table 4****Diagnostic Tests**

| <b>Key Assumption Test</b>                                          | <b>Preferred Test</b>                | <b>Results</b>                                                                                              |
|---------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Normality Tests                                                     | Jarque-Bera test                     | If p-value < 0.05, data is normally distributed.<br>If the p-value > 0.05, data was not normally disturbed. |
| Multicollinearity Test                                              | Variance Inflation Factor (VIF) test | There is assumed to be no multicollinearity if the VIF values obtained are less than 10.                    |
| Autocorrelation Test                                                | Wooldridge test for autocorrelation  | p-value greater than 0.05 means no autocorrelation exists.                                                  |
| Heteroscedasticity Test                                             | Breusch-Pagan / Cook-Weisberg test   | p-value > 0.05, this indicates that the data is homoscedastic                                               |
| Model Specification<br>(Only if any of the assumptions is violated) | Hausman specification test           | p-value less than 0.5 use random effect p-value greater than 0.5 use fixed effects                          |

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**Source: Researcher (2022)**



## CHAPTER FOUR

### DATA ANALYSIS, FINDINGS AND DISCUSSIONS

#### 4.1 Introduction

This chapter is a presentation of data analysis, empirical findings interpretations and discussion of the study findings.

#### 4.2 Descriptive Statistics

Descriptive statistics relating to the mean, standard deviation, minimum and maximum are presented in this section. The statistics help describe data in terms of its general nature and distribution. The study had 130 firm-year observations; however, three extreme values were dropped and the final data set had 127 firm-year observations. The summary of descriptive statistics is presented in Table 5.

**Table 5**

**Summary of Descriptive Statistics**

| Variable                         | Obs. | Mean  | Std. Dev. | Min    | Max   |
|----------------------------------|------|-------|-----------|--------|-------|
| Financial Performance (ROE)      | 127  | 0.263 | 0.447     | -1.520 | 2.064 |
| AC independence (number)         | 127  | 1.205 | 1.064     | 0      | 5     |
| AC accounting expertise (number) | 127  | 2.323 | 0.907     | 1      | 6     |
| AC gender diversity (number)     | 127  | 0.929 | 0.953     | 0      | 4     |
| AC meetings (number)             | 127  | 3.984 | 0.776     | 2      | 7     |
| AC size (number)                 | 127  | 4.173 | 1.878     | 2      | 11    |

The results presented in Table 5 indicate that financial performance measured as the return of equity had a mean of 0.263 with a standard deviation of 0.447 indicating a moderately large variability in financial performance over time. The minimum value of financial performance is -1.520 while the maximum value was 2.064. This implied that while some companies offered a positive return to shareholders, other companies did not realize returns exceeding shareholders' equity.

The results for the audit committee show an average number of independent board members in the audit committee was 1.205, say approximately one member implying that the majority of audit committees in sampled firms had at least one independent member. However, The deviations from the mean were 1.064 indicating that there was a wide variation

in the number of independent audit committee members amongst the firms reviewed over the study period. Moreover, the minimum number of audit committee members was zero while the maximum was five. This could have been attributed to the fact that prior to the year 2016, there were no guidelines requiring the audit committee to have at least one independent member and prior to that date, the distinction between a non-executive director and an independent director was blurred. The maximum number was five indicating that some committees had up to five independent directors in audit committees.

The results also show that the mean of audit committee members with accounting expertise was 2.323 implying that on average, most board committees had at least two members with accounting expertise. The standard deviation of 0.907 implied a large variability in relation to the variable over time. The minimum value was 1 implying that all the audit committees had complied with the requirements that at least one member of the committee held professional qualifications in auditing or accounting with good standing with the relevant professional body. The maximum value was 6 and this implied that in some committees, expert members were up to six.

Gender diversity was measured by the number of female directors on audit committees. The result in table 5 reveals that on average most of the committees had at least one female member. However, the minimum value for the construct was zero indicating that some committees were not diverse in terms of gender. This could be because there exist no guidelines relating to gender diversity in audit committees' composition. Nonetheless, some committees had 4 female members as evidenced by the maximum value. Concerning the number of meetings, results in table 5 indicate a mean value of 3.984 implying that on average, audit committees held 4 meetings in a year, the standard deviation of 0.776 indicated that there were no large disparities in terms of the meeting held. The minimum number of meetings was two with the maximum being seven.

The total mean audit committee size over the study period was 4.173 with a standard deviation of 1.878 indicating moderate variability in relation to size over time. The minimum and maximum values over the same period were 2 and 11 respectively. The minimum number of two indicates that some audit committees had 2 members. The corporate governance legislation requires that the size of the audit committee be at least three members, but with no upper value. However, the guidelines were applicable after 2016.

### 4.3 Diagnostic Tests Results

Diagnostic tests that included a test for normality, multicollinearity, autocorrelation and heteroscedasticity were conducted. The tests were carried out to ensure that the assumptions of classical linear regression were not violated.

#### 4.3.1 Tests for normality

This study adopted the Jarque Bera test for normality as it is more conclusive than the graphical method. The null hypothesis for the test is that residuals are normally distributed. If the p-value is less than 0.05. The results of the Jarque Bera test are presented in Table 6.

**Table 6**

**Results for Jarque-Bera Test for Normality**

| Variable  | Observations | Chi-Square | p-value |
|-----------|--------------|------------|---------|
| Residuals | 127          | 24.79      | 0.000   |

The results in Table 6 reveal a p-value of 0.000 which is less than the critical value of 5 per cent. Thus, the study failed to reject the null hypothesis and thus the conclusion is residuals are normally distributed.

#### 4.3.2 Tests for multicollinearity

The study adopted the variance inflation factor test to assess for the presence of harmful multicollinearity. Values greater than ten would indicate the presence of multicollinearity. The results are presented in Table 7

**Table 7**

**Multicollinearity Test Results**

| Construct                            | VIF         | $1/VIF$ |
|--------------------------------------|-------------|---------|
| Audit Committee independence         | 2.09        | 0.480   |
| Audit committee accounting expertise | 1.92        | 0.521   |
| Audit committee gender diversity     | 1.84        | 0.542   |
| Audit committee meetings             | 1.37        | 0.731   |
| Audit committee size                 | 1.08        | 0.925   |
| <b>Mean VIF</b>                      | <b>1.66</b> |         |

The results in Table 7 indicate that all the variables had VIF values of less than 10. The results implied that there was absence of harmful multicollinearity.

#### **4.3.3 Heteroscedastic test**

The study adopted the Breusch-Pagan/Cook-Weisberg test to check if heteroskedasticity was present. heteroscedasticity implies that the error term doesn't have a constant variance whereas the assumptions of the classical linear regression model assume that the error terms have constant variance. The null hypothesis for the test is that the error terms have constant variance, which is homoscedastic. The study failed to reject the hypothesis if the p-value was greater than 0.05. The results of the tests are presented in Table 8.

**Table 8**

#### **Results of Heteroscedasticity Test**

| <b>Test of Homoscedastic</b> |       |
|------------------------------|-------|
| Chi-Square (1)               | 3.56  |
| P -Value                     | 0.089 |

The results of the test for heteroskedasticity showed that the p-value was 0.089. The study, therefore, did not reject the null hypothesis but concluded that the error terms had constant variance.

#### **4.4.4 Results of the autocorrelation test**

The study used the Wooldridge test for autocorrelation whose null hypothesis was no first-order autocorrelation. The results of the study are presented in Table 9.

**Table 9**

#### **Results for Autocorrelation Test**

| <b>Wooldridge test for autocorrelation in panel data</b> |        |
|----------------------------------------------------------|--------|
| F (1,12)                                                 | 1.360  |
| Prob > F                                                 | 0.2662 |

The results for autocorrelation as indicated in Table 9 shows a p-value of 0.2662. The decision to reject or fail to reject the null hypothesis was dependent on this value. As the p-value was greater than the 5 per cent level of significance, the study failed to reject the null hypothesis and concluded that residuals are not autocorrelated. Noting that none of the

assumptions of the classical linear regression was violated, the specification tests to determine between the random and fixed effect were not necessary. The study adopted the pooled ordinary least squares regressions.

#### 4.4 Correlation Analysis

To examine the nature of the statistical association between the variables, the study undertook a correlational analysis. The findings are presented in Table 10.

**Table 10**

**Correlational Matrix**

| Variable              | Financial performance | Indep. | Accounting expertise | Gender diversity | Meetings | Size  |
|-----------------------|-----------------------|--------|----------------------|------------------|----------|-------|
| Financial performance | 1.000                 |        |                      |                  |          |       |
| Independence          | 0.270*                | 1.000  |                      |                  |          |       |
| Accounting expertise  | 0.255*                | 0.531* | 1.000                |                  |          |       |
| Gender diversity      | 0.136                 | 0.461* | 0.421*               | 1.000            |          |       |
| Meetings              | -0.194*               | -0.025 | 0.199*               | -0.012           | 1.000    |       |
| Size                  | 0.420*                | 0.646* | 0.600*               | 0.433*           | -0.009   | 1.000 |

(\*) represents a 5 per cent level of significance

The Matrix in Table 10 presents the results of the correlational analysis. The results reveal that audit committee independence, accounting expertise and size had a positive and significantly associated with financial performance. The results further reveal that gender diversity had a positive association with financial performance. This relationship was however not significant. Audit committee size had a negative was significantly related to financial performance.

#### 4.5 Regression Analysis

The study sought to examine the effect of audit committee characteristics on the financial performance of listed manufacturing firms in Kenya. The study adopted the pooled ordinary least squares regression as none of the diagnostic tests were violated. To meet audit

committee characteristics were decomposed into five independent variables and each regressed against financial performance. The results are presented as per the objectives.

#### 4.5.1 *Effect of audit committee independence on financial performance*

The first objective of the study was to determine the influence of audit committee independence on the financial performance of listed manufacturing entities in Kenya. The formulated null hypothesis was audit committee independence has no significant effect on financial performance. Audit committee independence was measured by the number of independent directors in the audit committee. The independent variable financial performance was operationalised as return on equity measured as the ratio of net income to shareholders' equity. The results of the analysis are presented in Table 11.

**Table 11**

#### **Audit Committee Independence and Financial Performance**

| <b>Financial Performance</b> | <b>Coef.</b> | <b>Std. Err.</b> | <b>t</b> | <b>P&gt; t </b> | <b>[95% Conf. Interval]</b> |       |
|------------------------------|--------------|------------------|----------|-----------------|-----------------------------|-------|
| AC Independence              | 0.118        | 0.038            | 3.13     | 0.002           | 0.043                       | 0.193 |
| Constant                     | 0.121        | 0.061            | 2.00     | 0.048           | 0.001                       | 0.241 |
| Number of observations       | 127          |                  |          |                 |                             |       |
| F (1, 125)                   | 9.79         |                  |          |                 |                             |       |
| Prob > F                     | 0.002        |                  |          |                 |                             |       |
| R-squared                    | 0.073        |                  |          |                 |                             |       |

Table 11 shows the regression results for the influence of audit committee independence on financial performance. The R-squared value was 0.073 indicating that 7.3 per cent of variations in financial performance was explained by the independence of the audit committee. The remaining 92.7 per cent was explained by other factors not considered by the study. The overall model had a p-value of 0.002 which revealed a statistically significant model. Moreover, the results revealed that audit committee independence is positively and significantly related to financial performance ( $\beta = 0.118$ ,  $p = 0.002$ ). This revealed statistically significant results for the individual effect of audit committee independence on financial performance. The study, therefore, rejected the hypothesis and concluded that audit committee independence had a positive and significant influence on financial performance. The relationship in table 11 was therefore represented by equation (ii).

$$\text{FinPer}_{it} = 0.121 + 0.118\text{ACIndep}_{it} \text{ ----- (ii)}$$

Where:  $FinPer_{it}$  represents financial performance and  $ACIndep_{it}$  represents audit committee independence.

The results imply that a unit increase in the number of independent members in the audit committee would account for an 11.8 increase in financial performance. The results are supported by empirical literature. Ibrahim et. al., (2019) study revealed that audit committee independence had a positive and significant effect on financial performance. According to Mohamed and Mwengei (2019), audit committee independence has a positive and significant effect on financial performance. Furthermore, the results are consistent with Ashari and Krismiaji (2020) study which observed that audit committee independence is a good enhancer of a firms financial performance. However, the results contradict Ofoeda (2017) study that indicates that audit committee independence does not necessarily lead to better financial performance and concluded that the two are inversely related. The study findings are further in variance with Balagobei and Velnampy (2018) study that observed that audit committee independence had a negative and statistically significant association with financial performance.

#### **4.5.2 Influence of audit committee accounting expertise on financial performance**

The study's second objective was to examine the influence of audit committee members accounting expertise on financial performance. Based on the objective, a corresponding hypothesis was formulated as audit committee accounting expertise has no statistically significant effect on financial performance. This was tested and the results are presented in Table 12

**Table 12**  
**Accounting Expertise and Financial Performance**

| <b>Financial Performance</b> | <b>Coef.</b> | <b>Std. Err.</b> | <b>t</b> | <b>P&gt; t </b> | <b>[95% Conf. Interval]</b> |       |
|------------------------------|--------------|------------------|----------|-----------------|-----------------------------|-------|
| AC Accounting expertise      | 0.131        | 0.044            | 2.95     | 0.004           | 0.043                       | 0.219 |
| Constant                     | -0.041       | 0.111            | -.37     | 0.712           | -0.260                      | 0.178 |
| Number of observations       | 127          |                  |          |                 |                             |       |
| F (1, 125)                   | 8.68         |                  |          |                 |                             |       |
| Prob > F                     | 0.004        |                  |          |                 |                             |       |
| R-squared                    | 0.065        |                  |          |                 |                             |       |

The results in Table 12 indicates that the independent effects of audit committee accounting expertise on financial performance are statistically significant (p-value = 0.04 which is less than 0.05) and explain 6.5 per cent (R-Square 0.065) variation in financial performance. This proportion that is explained by accounting expertise is statistically significant as evidenced by a higher F-value with a p-value of 0.004. Based on these results, the study rejected the second null hypothesis and concluded that accounting expertise has a positive and statistically significant effect on financial performance. The findings are depicted in equation (iii).

$$\text{FinPer} = -0.04 + 0.131\text{ACExper} \text{----- (iii)}$$

Where: FinPer represents financial performance and ACExper is audit committee accounting expertise.

The results show that the Beta value for accounting expertise is 0.131. This implies that an additional audit committee member with accounting expertise contributes to a 13.1 per cent increase in financial performance. The results corroborate the finding in Ashari and Krismiaji (2020) whose findings were accounting expertise positively and significantly impacted profitability. The results are in agreement with Chaudhry et. al (2020) findings that financial expertise had a positive and significant influence on performance. Nawafly, et. al, 2018) had similar findings. However, the study results contradict Balagobei and Velnampy (2018) findings that accounting expertise has no impact on financial performance.

#### ***4.5.3 Effect of audit committee gender diversity on financial performance***

The third objective of the study was to determine the effect of audit committee gender diversity on the financial performance of listed manufacturing firms in Kenya. The objective had a corresponding hypothesis styled as  $H_{03}$  stating that there is no significant relationship between audit committee gender diversity and financial performance of manufacturing firms listed at the NSE in Kenya. The hypothesis was tested and the results are presented in Table 13.



**Table 13****Audit Committee Gender Diversity and Financial Performance**

| <b>Financial Performance</b> | <b>Coef.</b> | <b>Std. Err.</b> | <b>t</b> | <b>P&gt; t </b> | <b>[95% Conf. Interval]</b> |       |
|------------------------------|--------------|------------------|----------|-----------------|-----------------------------|-------|
| AC Gender Diversity          | 0.067        | 0.043            | 1.54     | 0.127           | -0.019                      | 0.153 |
| Constant                     | 0.201        | 0.058            | 3.49     | 0.001           | 0.087                       | 0.315 |
| Number of observations       | 127          |                  |          |                 |                             |       |
| F (1, 125)                   | 2.36         |                  |          |                 |                             |       |
| Prob > F                     | 0.127        |                  |          |                 |                             |       |
| R-squared                    | 0.018        |                  |          |                 |                             |       |

The regression results in Table 13 show that the coefficient of determination was 0.018 which indicates that only 1.8 per cent of the variations in financial performance are explained by gender diversity. The remaining 97.8 per cent of the variations were explained by other factors not considered in the study. The overall model had a p-value of 0.127. The results indicate a statistically not significant model which is not robust to explain these results. This indicates that audit committee gender diversity does not influence performance. The study, therefore, failed to reject the hypothesis and thus concluded that gender diversity has no statistically significant effect on financial performance.

**4.5.4 Influence of audit committee meetings on financial performance**

The fourth objective of the study was to examine the influence of audit committee meetings on the financial performance of listed manufacturing firms in Kenya. This objective had a corresponding hypothesis stated in its null form as audit committee meetings did not significantly influence the financial performance of listed manufacturing firms in Kenya. This hypothesis was tested and the results are presented in Table 14

**Table 14****Audit Committee Meetings and Financial Performance**

| <b>Financial Performance</b> | <b>Coef.</b> | <b>Std. Err.</b> | <b>t</b> | <b>P&gt; t </b> | <b>[95% Conf. Interval]</b> |        |
|------------------------------|--------------|------------------|----------|-----------------|-----------------------------|--------|
| AC Meetings                  | -0.116       | 0.527            | -2.21    | 0.03            | -0.221                      | -0.012 |
| Constant                     | 0.727        | 0.214            | 3.40     | 0.001           | 0.303                       | 1.151  |
| Number of observations       | 127          |                  |          |                 |                             |        |
| F (1, 125)                   | 4.87         |                  |          |                 |                             |        |
| Prob > F                     | 0.03         |                  |          |                 |                             |        |
| R-squared                    | 0.038        |                  |          |                 |                             |        |

The results in Table 14 show the regression results for the influence of audit committee meetings on financial performance. The coefficient of determination was 0.038 indicating that 3.8 per cent of the variation in financial performance was explained by audit committee meetings. The remaining 94.2 per cent was explained by other factors not considered in the study. The overall model had a p-value of 0.03 and a high F-value, which means that audit committee meetings had a significant influence on financial performance. The hypothesis was therefore rejected. The study thus concluded that audit committee meetings had a statistically significant but negative effect on the financial performance of listed manufacturing companies in Kenya. The relationship in Table 14 was represented by equation iv.

$$\text{FinPer}_{it} = 0.727 - 0.116 \text{ ACMeet} \dots\dots\dots (\text{iv})$$

Where: FinPer = Financial Performance, ACMeet = Audit Committee Meetings

Negative effects were observed for audit committee meetings. This implied that a unit change in the number of audit committee meetings held would cause an 11.6 per cent decline in financial performance, this was found to be statistically significant. The findings concur with Kapkiyai et al., (2020) who found out that the frequency of audit committee meetings had a negative and statistically significant effect on the performance of listed firms in Kenya. Similarly, the results of the study concur with findings in Bouaine and Hrichi (2019) who argued that audit committee meetings had a negative and statistically significant influence on financial performance. However, the results were in variance with the findings in Orjinta and Evelyn (2018) that showed that audit committee meetings had a positive and statistically significant influence on performance. The findings of this study were further in variance with (Al Farooque et al., 2020) whose findings were that audit committee meetings had a positive and statistically significant influence on financial performance.

#### ***4.5.5 Effect of audit committee size and financial performance***

The last objective of the study was to investigate the influence of audit committee size on financial performance. To realize the objective, the study formulated and tested a corresponding hypothesis stating as audit committee size did not have a statistically significant influence on the financial performance of manufacturing firms listed at the NSE in Kenya. The results are presented in Table 15.

**Table 15****Audit Committee Size and Financial Performance**

| <b>Financial Performance</b> | <b>Coef.</b> | <b>Std. Err.</b> | <b>t</b> | <b>P&gt; t </b> | <b>[95% Conf. Interval]</b> |       |
|------------------------------|--------------|------------------|----------|-----------------|-----------------------------|-------|
| Audit committee size         | 0.104        | 0.020            | 5.18     | 0.000           | 0.064                       | 0.144 |
| Constant                     | -0.173       | 0.092            | -1.87    | 0.064           | -0.355                      | 0.010 |
| Number of observations       | 127          |                  |          |                 |                             |       |
| F (1, 125)                   | 26.80        |                  |          |                 |                             |       |
| Prob > F                     | 0.000        |                  |          |                 |                             |       |
| R-squared                    | 0.177        |                  |          |                 |                             |       |

The results presented in Table 15 show that the R-squared value was 0.177 indicating that 17.7 per cent of variations in financial performance was accounted for by the audit committee size. The remaining 82.3 per cent was explained by other factors not considered in the model. The results show a statistically significant model (p-value 0.000). The results indicate that audit committee size has a significant influence on financial performance. The study thus rejected the hypothesis. The study, therefore, concluded that audit committee size has a statistically significant relationship with financial performance. The relationship was found to be positive. This relationship is depicted by equation v.

$$\text{FinPer} = -0.173 + 0.104 \text{ ASize} \dots\dots\dots (v)$$

Where: FinPer= Financial Performance, ASize= Audit Committee Size.

The regression results in equation (v) indicate that each additional audit committee member, caused a positive change of 0.104 in financial performance and this change was statistically significant. The results concur with the findings of Al-Okaily and Naueihed (2020) who found that audit committee size relates positively and significantly to financial performance. The results agree with Musallam (2020) whose results revealed that audit committee size had a positive and significant correlation with financial performance. However, the finds were contrary to those of Kipkoech and Rono (2016) that indicated that the size of the audit committee had a negative and significant association with financial performance. The findings were also in variance with Salehi et al., (2018) conclusions that audit committee size was unrelated to financial performance.

#### **4.5.6 Joint influence of audit committee characteristics on financial performance**

The study also sought to determine the combined influence of audit committee characteristics. The results of the study are presented in Table 16

**Table 16****Audit Committee Characteristics and Financial Performance**

| <b>Financial Performance</b> | <b>Coef.</b> | <b>Std. Err.</b> | <b>t</b> | <b>P&gt; t </b> | <b>[95% Conf. Interval]</b> |        |
|------------------------------|--------------|------------------|----------|-----------------|-----------------------------|--------|
| AC Independence              | -0.004       | 0.048            | -0.08    | 0.935           | -0.101                      | 0.093  |
| AC Accounting expertise      | 0.047        | 0.056            | 0.84     | 0.403           | 0.064                       | 0.158  |
| AC Gender diversity          | -0.036       | 0.046            | -0.79    | 0.429           | -0.128                      | 0.055  |
| AC Meetings                  | -0.126       | 0.050            | -2.51    | 0.014           | -0.225                      | -0.026 |
| AC Size                      | 0.100        | 0.029            | 3.46     | 0.001           | 0.043                       | 0.157  |
| Constant                     | 0.277        | 0.214            | 1.30     | 0.197           | -0.146                      | 0.701  |
| Number of observations       | 127          |                  |          |                 |                             |        |
| F (1, 121)                   | 6.82         |                  |          |                 |                             |        |
| Prob > F                     | 0.000        |                  |          |                 |                             |        |
| R-squared                    | 0.220        |                  |          |                 |                             |        |

The results in Table 16 show the R-Squared value for the model is 0.22. The results indicate that jointly, audit committee characteristics account for a 22 per cent variation in financial performance. The rest of the variations, 78 per cent are on account of other factors not considered by the model. The proportion of financial performance explained by audit committee characteristics was statistically significant (High F-value of 6.82, p-value < 0.05).

This relationship was explained by equation vi.

$$\text{FinPer} = 0.278 - 0.004\text{ACIndep} + 0.047\text{ACExper} - 0.036\text{ACGender} - 0.126\text{ACMeet} + 0.1\text{ACSize} \dots\dots\dots (\text{vi})$$

FinPer = Financial Performance; ACIndep= Audit Committee Independence; ACExper = Audit Committee Accounting Expertise; ACGender = Audit Committee Gender Diversity; ACMeet = Audit Committee Meetings and ACSIZE = Audit Committee Size.

The results in model (vi) reveal that jointly, audit committee independence, audit committee gender diversity and audit committee meetings were inversely related to financial

performance while audit committee accounting expertise and audit committee size had a positive impact.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary of findings, conclusions and recommendations. Further, limitations are highlighted and areas for further studies are suggested.

#### **5.2 Summary of Findings**

This section presents a summary of the findings of the study. The study's main objective was to investigate the influence of audit committee characteristics on the financial performance of manufacturing firms in Kenya. This was disaggregated into five specific objectives out of which five corresponding hypotheses were developed and tested. The summary of findings is presented per the specific objectives.

The first objective of the study was to evaluate the effect of audit committee independence on the financial performance of listed manufacturing firms in Kenya. The results established a positive and statistically significant association between internal audit independence and financial performance. The hypothesis that there was no significant relationship between audit committee independence and financial performance was therefore rejected. This is consistent with prior literature, for instance, Oussii and Taktak (2018) that suggest that a more independent audit committee is better able to enhance financial performance. Similarly, Ibrahim et al., (2019) provided evidence that audit committee independence positively enhanced the financial performance of insurance companies in Kenya. However, Ofoeda, (2017) found that audit committee independence impacts negatively on the financial performance of non-bank financial institutions in Ghana. Equally, Bouaine and Hrichi (2019) contented that audit committee independence had a negative impact on financial performance arguing that higher fees paid to the independent committee members impacted profitability.

From a theoretical perspective, the findings in this study are consistent with the resource-based theory which contends that superior financial performance is linked to the composition of audit committees. The results of the study also substantiate the agency theory by showing how strong independent audit committees would enhance the financial performance of

manufacturing firms by incorporating best governance in monitoring the activities of the firms. The results, however, contrast the stewardship theory which holds that the presence of non-independent directors in the audit committees provides the firm with focused committees that encourage participation thus resulting in superior and enhanced financial performance.

### ***5.2.2 Audit committee accounting expertise and financial performance***

The second objective of the study sought to investigate the influence of audit committee accounting expertise on the financial performance of listed manufacturing firms in Kenya. In investigating this relationship, the hypothesis that there was no significant relationship between the variables was tested. The results led to the rejection of the hypothesis and the study revealed that audit committee accounting expertise had a positive and statistically significant effect on the financial performance of manufacturing entities listed on the Nairobi Securities Exchange.

The results of this study are consistent with the findings of Oussii and Taktak (2018) who emphasized that audit committee accounting expertise enhances financial performance. Moreover, the findings of the study agree with (Chaudhry et al., 2020) results that audit committee expertise was proven to have an impact financial performance of firms. Additionally, the findings are consistent with those in Al-Okaily and Naueihed (2020) who concluded that matters reviewed by audit committee members were technical and thus required members to have substantial resources in terms of financial expertise. Accounting experts are better able to understand financial reports. The findings obtained parallel those of (Kallamu & Saat, 2015; Oroud, 2019) who found that audit committee independence had an insignificant influence on financial performance. Further conflicting the position where the results (Agwor & Onukogu, 2018; Akpey & Azembila, 2016), that audit committee accounting experience negatively influenced financial performance.

The findings are consistent with the agency theory that suggests that audit committee members are expected to be accounting experts who are expected to scrutinize the external auditors' work, and consequently improve financial performance. The findings are in line with the agency theory which views audit committees as an agency cost that helps mitigate the agency conflicts between shareholders and managers. Agency theory considers audit committee members with professional qualifications as experts who can understand better the financial statements and reports. Furthermore, the results of this study confirm the resource

based-theory that considers audit committee members as executives that afford firms with external resources such as expertise and experience.

### ***5.2.3 Audit committee gender diversity and financial performance***

The third objective of the study was to determine the effect of audit committee gender diversity on the financial performance of listed manufacturing firms in Kenya. The results revealed that the relationship was not statistically significant and, on the basis, of the study failed to reject the hypothesis that audit committee gender diversity did not have a statistically significant relationship with financial performance and thus confirmed it. The findings, consistent with Gordini and Rancati (2017), demonstrated that on its own, audit committee gender diversity did not influence the financial performance of Italian listed companies. The findings are in line with the results of Al-Jaifi (2020) which showed that gender diversity was considered to have no impact on the level of performance of ASEAN banks. However, the findings contradicted those in (Kılıç & Kuzey, 2016) indicating that gender diversity had a significant positive impact on the performance of Turkish companies.

### ***5.4.4 Audit committee meetings and financial performance***

The fourth objective of the study was to determine the effect of audit committee meetings on financial performance. The study established that the beta coefficient for audit committee meetings was negative implying that an increase in the number of meetings led to reduced financial performance. Regression analysis revealed that a statistically significant relationship existed between audit committee meetings and financial performance. Therefore, the study rejected the hypothesis and concluded that audit committee meetings had a negative and statistically significant relationship with financial performance. The findings are not entirely inconsistent with past literature. The findings are consistent with Bouaine and Hrichi (2019) conclusions that the meetings of the audit committee had a negative impact on performance.

The results in this study however contradict the propositions of the resource-based theory that more and more frequent audit committee meetings allow for a stage for deliberations that has the potential to contribute to financial performance. In the same vein, merely holding meetings might be sufficient to impact positively on financial performance. As such, the audit committee meetings should be properly structured to enhance performance. The meetings are an important criterion for determining audit committee control and its effectiveness in

monitoring the affairs of the firm. The findings in this study were also inconsistent with Orjinta and Nkem (2018) who argued that the frequency of audit committee meetings was an indicator of committee activities and productivity with an active committee positively impacting the financial performance of non-financial firms in Nigeria. In contrast with the findings in this study, Al Farooque et al., (2020) points out that periodical committee meeting allowed for engagement through decision making that yielded positive and significant effects on the market-based performance of listed firms in Thailand.

#### **5.4.5 Audit committee size and financial performance**

The fifth objective of the study was to determine the effect of audit committee size on the financial performance of listed manufacturing companies in Kenya. The results indicated that the beta coefficient for audit committee size was positive implying that an increase in the number of audit committee meetings was accompanied by an improvement in financial performance. Further, the results of regression analysis revealed that the effect of audit committee size on financial performance was statistically significant and positive. The study, therefore, failed to confirm the five null hypotheses and thus confirmed them. The implication of the rejection of the hypothesis was that the audit committee size was found to have a positive and statistically significant influence on the financial performance of the listed manufacturing firms in Kenya. This analysis indicated that a large audit committee size enhanced the financial performance of quoted manufacturing firms in Kenya.

Specifically, audit committee size was found to improve financial performance thus supporting the resource-based view on size. The bigger the committee size the better indicator for financial performance due to the diverse skills and knowledge which might not be present in smaller ones. Furthermore, the findings confirm agency theory delineations that larger audit committees are better in monitoring the firm thus minimizing agency costs and hence enhancing financial performance. In addition, the findings of the study are consistent with Al-Okaily and Naueihed (2020) findings that the size of the audit committee was positively and significantly related to the financial performance of UK public firms. Similarly, Musallam, (2020) findings were that audit committee size impacted positively on the performance of non-financial firms listed in Palestine. However, Salehi et al., (2018) found audit committee size to be insignificantly linked, and hence no association with the profitability of quoted firms in Iran. Thus, the assumption of one size fits all for audit committee size may be inappropriate to all firms.





### 5.3 Conclusion

This study sought to establish the influence of audit committee characteristics on the financial performance of listed manufacturing companies in Kenya. To attain this goal, five specific objectives and a similar number of hypotheses were stated. The study used secondary data which was analysed using the pooled ordinary least squares method. Descriptive statistics and pooled regression were done and the results were varied. The results were compared with extant literature. In this respect, several conclusions can be drawn.

Overall, there is evidence of a significant relationship between audit committee characteristics and financial performance. Audit committee characteristics explained 22 per cent of variations in financial performance. Independently, audit committee independence, accounting expertise and its size positively and significantly influence the financial performance of manufacturing companies in Kenya. The audit committee meeting was found to have a negative but significant effect on financial performance. However, audit committee gender diversity was found to have an insignificant influence on financial performance. From the findings of this study, it is clear there are mixed results regarding audit committee characteristics and financial performance of Kenya's listed manufacturing entities. This however is not uncommon as it is consistent with other extant literature.

The results imply that the manufacturing industry may react differently to varied audit committee characteristics. Based on the positive impacts of the audit committee independence on the financial performance of listed manufacturing firms in Kenya, the study concluded that the independent audit committee plays a crucial role in enhancing the financial performance of the firms. Independent audit committee members come onto the board with a wealth of valuable expertise and experience that helps in improving the quality of decisions of the audit committee, accountability and transparency all that lead to improved firms' financial performance.

The result demonstrates that on its own, audit committee gender diversity does not affect the financial performance of manufacturing companies in Kenya. Furthermore, the present findings imply that large audit committee sizes are a well of knowledge that allows for greater scrutiny of financial statements and other financial dealings of the firm.

## **5.4 Recommendations**

This study sought to establish the relationship between audit committee characteristics and the financial performance of listed manufacturing companies in Kenya. The study came up with findings that will enhance the understudying of how audit committee characteristics drive the financial performance of manufacturing firms in Kenya. based on the findings the study made recommendations to policymakers and regulators, practice, theory and made suggestions for further studies.

### ***5.4.1 Recommendations to policymakers and regulators***

The findings of this study have an application to policymakers. The question of audit committee composition has implications for regulators and policymakers as they have a key role in the establishment of those committees. This research study offers useful insights to the regulator of listed firms, investors and managers of the manufacturing companies. They may find the findings in this study useful and hence look for ways to enhance the effectiveness of the audit committees and eventually financial performance. Policymakers and regulators should make recommendations to manufacturing firms to develop efficient governance structures in audit committees that fit with the unique features of such entities.

### ***5.4.2 Recommendations to practice***

While the regulator of listed firms has put guidelines on audit committees' characteristics, the data collected indicated that some listed manufacturing firms did not adhere to these guidelines. This could have negatively impacted the performance of these companies. In light of the foregoing, this study recommends the following: First, take into consideration the financial expertise of the members of the audit committee to ensure the professional performance of their duties. Second, to set the ceiling for the number of audit committee members to allow for efficient and effective decision-making. Third, to update the corporate governance code of conduct to allow for full disclosure of independence, gender diversity, qualifications and practical experience of individual audit committee members. In light of the foregoing, the results of this study have practical managerial implications. manufacturing entities have to relook on how further to enhance the diversity in audit committees particular in the composition to enhance their financial performance.

### ***5.4.3 Recommendations for theory***

The findings of this study make contributions to theory by strengthening the extant literature by empirically confirming that audit committee characteristics influence the financial performance of listed manufacturing firms in Kenya. The study contributes to agency theory

by establishing the specific audit committee characteristics and their influence on financial performance. The study further extends the theoretical discourse of the stakeholder, stewardship and resource-based theories by empirically illustrating the extent to which audit committee characteristics impact performance. The study, therefore, recommends to future researchers consider the implication of diverse theories in the relationship between audit committee characteristics and financial performance of corporates.

### **5.5 Suggestions for Further Studies**

The study had some gaps that would provide pointers to future research directions. Firstly, the study results confirmed some of the previous positive results as well as reinforced the negative findings in the past empirical literature. This might imply that the relationship between audit committee characteristics and financial performance might not necessarily be direct. There could be some moderating and mediating variables in this association that future studies should purpose to establish. Second, the current study only focussed on listed manufacturing firms in Kenya. As a result, the findings of the current findings may not be generalized to non-manufacturing entities. Therefore, it is suggested to future researchers to assess this relationship in non-manufacturing firms to allow for the generalization of results to all firms. Furthermore, the current study focussed on Kenyan firms only, while the influence of audit committee characteristics on financial performance may vary from country to country. Therefore, cross-country assessment of the role of audit committee characteristics and financial performance is required in future research studies.

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## APPENDICIES

### Appendix 1 Manufacturing Companies Listed at the NSE

| MANUFACTURING FIRMS |                                                       |
|---------------------|-------------------------------------------------------|
| 1.                  | ARM Cement Public Limited Company                     |
| 2.                  | Bamburi Cement Public Limited Company                 |
| 3.                  | BOC Kenya Public Limited Company                      |
| 4.                  | British American Tobacco Kenya Public Limited Company |
| 5.                  | Carbacid Investment Public Limited Company            |
| 6.                  | Crown Paints Kenya Public Limited Company             |
| 7.                  | East Africa Portland Cement Public Limited Company    |
| 8.                  | East African Breweries Public Limited Company         |
| 9.                  | East African Cables Public Limited Company            |
| 10.                 | Flame Tree Group Holdings Public Limited Company      |
| 11.                 | Kapchorua Tea Co.                                     |
| 12.                 | Kenya Orchards Public Limited Company                 |
| 13.                 | Mumias Sugar Public Limited Company                   |
| 14.                 | Sameer plc                                            |
| 15.                 | Sasini PLC                                            |
| 16.                 | Unga Group Public Limited Company                     |
| 17.                 | Williamson Tea Kenya plc                              |

Source: CMA (2022)

## Appendix 2: Data Collection Template

| Year  | Firm           | ROE | No. of AC Independent directors | No. of AC members with accounting/audit qualification | No of AC members who are female | Total No of AC directors | No of AC meetings | No of AC members | Board Size |
|-------|----------------|-----|---------------------------------|-------------------------------------------------------|---------------------------------|--------------------------|-------------------|------------------|------------|
| 2002. | ARM Cement PLC |     |                                 |                                                       |                                 |                          |                   |                  |            |
| 2003. | ARM Cement PLC |     |                                 |                                                       |                                 |                          |                   |                  |            |
| 2004. | ARM Cement PLC |     |                                 |                                                       |                                 |                          |                   |                  |            |
| 2005. | ARM Cement PLC |     |                                 |                                                       |                                 |                          |                   |                  |            |
| 2006. | ARM Cement PLC |     |                                 |                                                       |                                 |                          |                   |                  |            |
| 2007. | ARM Cement PLC |     |                                 |                                                       |                                 |                          |                   |                  |            |
| 2008. | ARM Cement PLC |     |                                 |                                                       |                                 |                          |                   |                  |            |
| 2009. | ARM Cement PLC |     |                                 |                                                       |                                 |                          |                   |                  |            |
| 2010. | ARM Cement PLC |     |                                 |                                                       |                                 |                          |                   |                  |            |
| 2011. | ARM Cement PLC |     |                                 |                                                       |                                 |                          |                   |                  |            |
| 2012. | ARM            |     |                                 |                                                       |                                 |                          |                   |                  |            |

|       |                              |  |  |  |  |  |  |  |  |
|-------|------------------------------|--|--|--|--|--|--|--|--|
|       | Cement<br>PLC                |  |  |  |  |  |  |  |  |
| 2013. | ARM<br>Cement<br>PLC         |  |  |  |  |  |  |  |  |
| 2014. | ARM<br>Cement<br>PLC         |  |  |  |  |  |  |  |  |
| 2015. | ARM<br>Cement<br>PLC         |  |  |  |  |  |  |  |  |
| 2016. | ARM<br>Cement<br>PLC         |  |  |  |  |  |  |  |  |
| 2017. | ARM<br>Cement<br>PLC         |  |  |  |  |  |  |  |  |
| 2018. | ARM<br>Cement<br>PLC         |  |  |  |  |  |  |  |  |
| 2019. | ARM<br>Cement<br>PLC         |  |  |  |  |  |  |  |  |
| 2020. | ARM<br>Cement<br>PLC         |  |  |  |  |  |  |  |  |
| 2002. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2003. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2004. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2005. | Bambur<br>i                  |  |  |  |  |  |  |  |  |

|       |                              |  |  |  |  |  |  |  |  |
|-------|------------------------------|--|--|--|--|--|--|--|--|
|       | Cement<br>PLC                |  |  |  |  |  |  |  |  |
| 2006. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2007. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2008. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2009. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2010. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2011. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2012. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2013. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2014. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2015. | Bambur<br>i                  |  |  |  |  |  |  |  |  |

|       |                              |  |  |  |  |  |  |  |  |
|-------|------------------------------|--|--|--|--|--|--|--|--|
|       | Cement<br>PLC                |  |  |  |  |  |  |  |  |
| 2016. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2017. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2018. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2019. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2020. | Bambur<br>i<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2002. | BOC<br>Kenya<br>PLC          |  |  |  |  |  |  |  |  |
| 2003. | BOC<br>Kenya<br>PLC          |  |  |  |  |  |  |  |  |
| 2004. | BOC<br>Kenya<br>PLC          |  |  |  |  |  |  |  |  |
| 2005. | BOC<br>Kenya<br>PLC          |  |  |  |  |  |  |  |  |
| 2006. | BOC<br>Kenya<br>PLC          |  |  |  |  |  |  |  |  |
| 2007. | BOC<br>Kenya<br>PLC          |  |  |  |  |  |  |  |  |

|       |                     |  |  |  |  |  |  |  |  |
|-------|---------------------|--|--|--|--|--|--|--|--|
| 2008. | BOC<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2009. | BOC<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2010. | BOC<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2011. | BOC<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2012. | BOC<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2013. | BOC<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2014. | BOC<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2015. | BOC<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2016. | BOC<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2017. | BOC<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2018. | BOC<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2019. | BOC<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2020. | BOC<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2002. | BAT                 |  |  |  |  |  |  |  |  |

|       |                     |  |  |  |  |  |  |  |  |
|-------|---------------------|--|--|--|--|--|--|--|--|
|       | Kenya<br>PLC        |  |  |  |  |  |  |  |  |
| 2003. | BAT<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2004. | BAT<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2005. | BAT<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2006. | BAT<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2007. | BAT<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2008. | BAT<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2009. | BAT<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2010. | BAT<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2011. | BAT<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2012. | BAT<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2013. | BAT<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2014. | BAT<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2015. | BAT<br>Kenya        |  |  |  |  |  |  |  |  |



|       |                                    |  |  |  |  |  |  |  |  |
|-------|------------------------------------|--|--|--|--|--|--|--|--|
|       | PLC                                |  |  |  |  |  |  |  |  |
| 2016. | BAT<br>Kenya<br>PLC                |  |  |  |  |  |  |  |  |
| 2017. | BAT<br>Kenya<br>PLC                |  |  |  |  |  |  |  |  |
| 2018. | BAT<br>Kenya<br>PLC                |  |  |  |  |  |  |  |  |
| 2019. | BAT<br>Kenya<br>PLC                |  |  |  |  |  |  |  |  |
| 2020. | BAT<br>Kenya<br>PLC                |  |  |  |  |  |  |  |  |
| 2002. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2003. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2004. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2005. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2006. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2007. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |

|       |                                    |  |  |  |  |  |  |  |  |
|-------|------------------------------------|--|--|--|--|--|--|--|--|
| 2008. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2009. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2010. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2011. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2012. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2013. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2014. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2015. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2016. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2017. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |

|       |                                    |  |  |  |  |  |  |  |  |
|-------|------------------------------------|--|--|--|--|--|--|--|--|
| 2018. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2019. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2020. | Carbaci<br>d<br>Investm<br>ent PLC |  |  |  |  |  |  |  |  |
| 2002. | Crown<br>Paints<br>Kenya<br>PLC    |  |  |  |  |  |  |  |  |
| 2003. | Crown<br>Paints<br>Kenya<br>PLC    |  |  |  |  |  |  |  |  |
| 2004. | Crown<br>Paints<br>Kenya<br>PLC    |  |  |  |  |  |  |  |  |
| 2005. | Crown<br>Paints<br>Kenya<br>PLC    |  |  |  |  |  |  |  |  |
| 2006. | Crown<br>Paints<br>Kenya<br>PLC    |  |  |  |  |  |  |  |  |
| 2007. | Crown<br>Paints<br>Kenya<br>PLC    |  |  |  |  |  |  |  |  |
| 2008. | Crown<br>Paints<br>Kenya<br>PLC    |  |  |  |  |  |  |  |  |

|       |                                 |  |  |  |  |  |  |  |  |
|-------|---------------------------------|--|--|--|--|--|--|--|--|
| 2009. | Crown<br>Paints<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2010. | Crown<br>Paints<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2011. | Crown<br>Paints<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2012. | Crown<br>Paints<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2013. | Crown<br>Paints<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2014. | Crown<br>Paints<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2015. | Crown<br>Paints<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2016. | Crown<br>Paints<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2017. | Crown<br>Paints<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2018. | Crown<br>Paints<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |

|       |                                             |  |  |  |  |  |  |  |  |
|-------|---------------------------------------------|--|--|--|--|--|--|--|--|
| 2019. | Crown<br>Paints<br>Kenya<br>PLC             |  |  |  |  |  |  |  |  |
| 2020. | Crown<br>Paints<br>Kenya<br>PLC             |  |  |  |  |  |  |  |  |
| 2002. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2003. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2004. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2005. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2006. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2007. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2008. | East<br>Africa                              |  |  |  |  |  |  |  |  |

|       |                                             |  |  |  |  |  |  |  |  |
|-------|---------------------------------------------|--|--|--|--|--|--|--|--|
|       | Portland<br>Cement<br>PLC                   |  |  |  |  |  |  |  |  |
| 2009. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2010. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2011. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2012. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2013. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2014. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2015. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2016. | East<br>Africa                              |  |  |  |  |  |  |  |  |

|       |                                             |  |  |  |  |  |  |  |  |
|-------|---------------------------------------------|--|--|--|--|--|--|--|--|
|       | Portland<br>Cement<br>PLC                   |  |  |  |  |  |  |  |  |
| 2017. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2018. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2019. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2020. | East<br>Africa<br>Portland<br>Cement<br>PLC |  |  |  |  |  |  |  |  |
| 2002. | East<br>African<br>Breweri<br>es PLC        |  |  |  |  |  |  |  |  |
| 2003. | East<br>African<br>Breweri<br>es PLC        |  |  |  |  |  |  |  |  |
| 2004. | East<br>African<br>Breweri<br>es PLC        |  |  |  |  |  |  |  |  |
| 2005. | East<br>African<br>Breweri<br>es PLC        |  |  |  |  |  |  |  |  |
| 2006. | East                                        |  |  |  |  |  |  |  |  |

|       |                                  |  |  |  |  |  |  |  |  |
|-------|----------------------------------|--|--|--|--|--|--|--|--|
|       | African<br>Breweries PLC         |  |  |  |  |  |  |  |  |
| 2007. | East<br>African<br>Breweries PLC |  |  |  |  |  |  |  |  |
| 2008. | East<br>African<br>Breweries PLC |  |  |  |  |  |  |  |  |
| 2009. | East<br>African<br>Breweries PLC |  |  |  |  |  |  |  |  |
| 2010. | East<br>African<br>Breweries PLC |  |  |  |  |  |  |  |  |
| 2011. | East<br>African<br>Breweries PLC |  |  |  |  |  |  |  |  |
| 2012. | East<br>African<br>Breweries PLC |  |  |  |  |  |  |  |  |
| 2013. | East<br>African<br>Breweries PLC |  |  |  |  |  |  |  |  |
| 2014. | East<br>African<br>Breweries PLC |  |  |  |  |  |  |  |  |
| 2015. | East<br>African<br>Breweries PLC |  |  |  |  |  |  |  |  |
| 2016. | East                             |  |  |  |  |  |  |  |  |



|       |                                  |  |  |  |  |  |  |  |  |
|-------|----------------------------------|--|--|--|--|--|--|--|--|
|       | African<br>Breweries PLC         |  |  |  |  |  |  |  |  |
| 2017. | East<br>African<br>Breweries PLC |  |  |  |  |  |  |  |  |
| 2018. | East<br>African<br>Breweries PLC |  |  |  |  |  |  |  |  |
| 2019. | East<br>African<br>Breweries PLC |  |  |  |  |  |  |  |  |
| 2020. | East<br>African<br>Breweries PLC |  |  |  |  |  |  |  |  |
| 2002. | East<br>African<br>Cables<br>PLC |  |  |  |  |  |  |  |  |
| 2003. | East<br>African<br>Cables<br>PLC |  |  |  |  |  |  |  |  |
| 2004. | East<br>African<br>Cables<br>PLC |  |  |  |  |  |  |  |  |
| 2005. | East<br>African<br>Cables<br>PLC |  |  |  |  |  |  |  |  |
| 2006. | East<br>African<br>Cables<br>PLC |  |  |  |  |  |  |  |  |
| 2007. | East                             |  |  |  |  |  |  |  |  |

|       |                                  |  |  |  |  |  |  |  |  |
|-------|----------------------------------|--|--|--|--|--|--|--|--|
|       | African<br>Cables<br>PLC         |  |  |  |  |  |  |  |  |
| 2008. | East<br>African<br>Cables<br>PLC |  |  |  |  |  |  |  |  |
| 2009. | East<br>African<br>Cables<br>PLC |  |  |  |  |  |  |  |  |
| 2010. | East<br>African<br>Cables<br>PLC |  |  |  |  |  |  |  |  |
| 2011. | East<br>African<br>Cables<br>PLC |  |  |  |  |  |  |  |  |
| 2012. | East<br>African<br>Cables<br>PLC |  |  |  |  |  |  |  |  |
| 2013. | East<br>African<br>Cables<br>PLC |  |  |  |  |  |  |  |  |
| 2014. | East<br>African<br>Cables<br>PLC |  |  |  |  |  |  |  |  |
| 2015. | East<br>African<br>Cables<br>PLC |  |  |  |  |  |  |  |  |
| 2016. | East<br>African<br>Cables<br>PLC |  |  |  |  |  |  |  |  |
| 2017. | East                             |  |  |  |  |  |  |  |  |

|       |                                            |  |  |  |  |  |  |  |  |
|-------|--------------------------------------------|--|--|--|--|--|--|--|--|
|       | African<br>Cables<br>PLC                   |  |  |  |  |  |  |  |  |
| 2018. | East<br>African<br>Cables<br>PLC           |  |  |  |  |  |  |  |  |
| 2019. | East<br>African<br>Cables<br>PLC           |  |  |  |  |  |  |  |  |
| 2020. | East<br>African<br>Cables<br>PLC           |  |  |  |  |  |  |  |  |
| 2002. | Flame<br>Tree<br>Group<br>Holding<br>s PLC |  |  |  |  |  |  |  |  |
| 2003. | Flame<br>Tree<br>Group<br>Holding<br>s PLC |  |  |  |  |  |  |  |  |
| 2004. | Flame<br>Tree<br>Group<br>Holding<br>s PLC |  |  |  |  |  |  |  |  |
| 2005. | Flame<br>Tree<br>Group<br>Holding<br>s PLC |  |  |  |  |  |  |  |  |
| 2006. | Flame<br>Tree<br>Group<br>Holding<br>s PLC |  |  |  |  |  |  |  |  |

|       |                                        |  |  |  |  |  |  |  |  |
|-------|----------------------------------------|--|--|--|--|--|--|--|--|
| 2007. | Flame<br>Tree<br>Group<br>Holdings PLC |  |  |  |  |  |  |  |  |
| 2008. | Flame<br>Tree<br>Group<br>Holdings PLC |  |  |  |  |  |  |  |  |
| 2009. | Flame<br>Tree<br>Group<br>Holdings PLC |  |  |  |  |  |  |  |  |
| 2010. | Flame<br>Tree<br>Group<br>Holdings PLC |  |  |  |  |  |  |  |  |
| 2011. | Flame<br>Tree<br>Group<br>Holdings PLC |  |  |  |  |  |  |  |  |
| 2012. | Flame<br>Tree<br>Group<br>Holdings PLC |  |  |  |  |  |  |  |  |
| 2013. | Flame<br>Tree<br>Group<br>Holdings PLC |  |  |  |  |  |  |  |  |
| 2014. | Flame<br>Tree<br>Group<br>Holdings PLC |  |  |  |  |  |  |  |  |

|       |                                        |  |  |  |  |  |  |  |  |
|-------|----------------------------------------|--|--|--|--|--|--|--|--|
| 2015. | Flame<br>Tree<br>Group<br>Holdings PLC |  |  |  |  |  |  |  |  |
| 2016. | Flame<br>Tree<br>Group<br>Holdings PLC |  |  |  |  |  |  |  |  |
| 2017. | Flame<br>Tree<br>Group<br>Holdings PLC |  |  |  |  |  |  |  |  |
| 2018. | Flame<br>Tree<br>Group<br>Holdings PLC |  |  |  |  |  |  |  |  |
| 2019. | Flame<br>Tree<br>Group<br>Holdings PLC |  |  |  |  |  |  |  |  |
| 2020. | Flame<br>Tree<br>Group<br>Holdings PLC |  |  |  |  |  |  |  |  |
| 2002. | Kapcho<br>rua Tea<br>PLC               |  |  |  |  |  |  |  |  |
| 2003. | Kapcho<br>rua Tea<br>PLC               |  |  |  |  |  |  |  |  |
| 2004. | Kapcho<br>rua Tea<br>PLC               |  |  |  |  |  |  |  |  |
| 2005. | Kapcho                                 |  |  |  |  |  |  |  |  |

|       |                          |  |  |  |  |  |  |  |  |
|-------|--------------------------|--|--|--|--|--|--|--|--|
|       | rua Tea<br>PLC           |  |  |  |  |  |  |  |  |
| 2006. | Kapcho<br>rua Tea<br>PLC |  |  |  |  |  |  |  |  |
| 2007. | Kapcho<br>rua Tea<br>PLC |  |  |  |  |  |  |  |  |
| 2008. | Kapcho<br>rua Tea<br>PLC |  |  |  |  |  |  |  |  |
| 2009. | Kapcho<br>rua Tea<br>PLC |  |  |  |  |  |  |  |  |
| 2010. | Kapcho<br>rua Tea<br>PLC |  |  |  |  |  |  |  |  |
| 2011. | Kapcho<br>rua Tea<br>PLC |  |  |  |  |  |  |  |  |
| 2012. | Kapcho<br>rua Tea<br>PLC |  |  |  |  |  |  |  |  |
| 2013. | Kapcho<br>rua Tea<br>PLC |  |  |  |  |  |  |  |  |
| 2014. | Kapcho<br>rua Tea<br>PLC |  |  |  |  |  |  |  |  |
| 2015. | Kapcho<br>rua Tea<br>PLC |  |  |  |  |  |  |  |  |
| 2016. | Kapcho<br>rua Tea<br>PLC |  |  |  |  |  |  |  |  |
| 2017. | Kapcho<br>rua Tea<br>PLC |  |  |  |  |  |  |  |  |
| 2018. | Kapcho<br>rua Tea        |  |  |  |  |  |  |  |  |

|       |                           |  |  |  |  |  |  |  |  |
|-------|---------------------------|--|--|--|--|--|--|--|--|
|       | PLC                       |  |  |  |  |  |  |  |  |
| 2019. | Kapcho<br>rua Tea<br>PLC  |  |  |  |  |  |  |  |  |
| 2020. | Kapcho<br>rua Tea<br>PLC  |  |  |  |  |  |  |  |  |
| 2002. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2003. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2004. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2005. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2006. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2007. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2008. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2009. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2010. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2011. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2012. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |

|       |                           |  |  |  |  |  |  |  |  |
|-------|---------------------------|--|--|--|--|--|--|--|--|
| 2013. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2014. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2015. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2016. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2017. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2018. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2019. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2020. | Kenya<br>Orchard<br>s PLC |  |  |  |  |  |  |  |  |
| 2002. | Mumias<br>Sugar<br>PLC    |  |  |  |  |  |  |  |  |
| 2003. | Mumias<br>Sugar<br>PLC    |  |  |  |  |  |  |  |  |
| 2004. | Mumias<br>Sugar<br>PLC    |  |  |  |  |  |  |  |  |
| 2005. | Mumias<br>Sugar<br>PLC    |  |  |  |  |  |  |  |  |
| 2006. | Mumias<br>Sugar<br>PLC    |  |  |  |  |  |  |  |  |
| 2007. | Mumias                    |  |  |  |  |  |  |  |  |



|       |                        |  |  |  |  |  |  |  |  |
|-------|------------------------|--|--|--|--|--|--|--|--|
|       | Sugar<br>PLC           |  |  |  |  |  |  |  |  |
| 2008. | Mumias<br>Sugar<br>PLC |  |  |  |  |  |  |  |  |
| 2009. | Mumias<br>Sugar<br>PLC |  |  |  |  |  |  |  |  |
| 2010. | Mumias<br>Sugar<br>PLC |  |  |  |  |  |  |  |  |
| 2011. | Mumias<br>Sugar<br>PLC |  |  |  |  |  |  |  |  |
| 2012. | Mumias<br>Sugar<br>PLC |  |  |  |  |  |  |  |  |
| 2013. | Mumias<br>Sugar<br>PLC |  |  |  |  |  |  |  |  |
| 2014. | Mumias<br>Sugar<br>PLC |  |  |  |  |  |  |  |  |
| 2015. | Mumias<br>Sugar<br>PLC |  |  |  |  |  |  |  |  |
| 2016. | Mumias<br>Sugar<br>PLC |  |  |  |  |  |  |  |  |
| 2017. | Mumias<br>Sugar<br>PLC |  |  |  |  |  |  |  |  |
| 2018. | Mumias<br>Sugar<br>PLC |  |  |  |  |  |  |  |  |
| 2019. | Mumias<br>Sugar<br>PLC |  |  |  |  |  |  |  |  |
| 2020. | Mumias<br>Sugar        |  |  |  |  |  |  |  |  |

|       |               |  |  |  |  |  |  |  |  |
|-------|---------------|--|--|--|--|--|--|--|--|
|       | PLC           |  |  |  |  |  |  |  |  |
| 2002. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2003. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2004. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2005. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2006. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2007. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2008. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2009. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2010. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2011. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2012. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2013. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2014. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2015. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2016. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2017. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2018. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2019. | Sameer<br>PLC |  |  |  |  |  |  |  |  |
| 2020. | Sameer<br>PLC |  |  |  |  |  |  |  |  |

|       |               |  |  |  |  |  |  |  |  |
|-------|---------------|--|--|--|--|--|--|--|--|
| 2002. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2003. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2004. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2005. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2006. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2007. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2008. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2009. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2010. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2011. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2012. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2013. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2014. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2015. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2016. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2017. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2018. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2019. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2020. | Sasini<br>PLC |  |  |  |  |  |  |  |  |
| 2002. | Unga          |  |  |  |  |  |  |  |  |

|       |                      |  |  |  |  |  |  |  |  |
|-------|----------------------|--|--|--|--|--|--|--|--|
|       | Group<br>PLC         |  |  |  |  |  |  |  |  |
| 2003. | Unga<br>Group<br>PLC |  |  |  |  |  |  |  |  |
| 2004. | Unga<br>Group<br>PLC |  |  |  |  |  |  |  |  |
| 2005. | Unga<br>Group<br>PLC |  |  |  |  |  |  |  |  |
| 2006. | Unga<br>Group<br>PLC |  |  |  |  |  |  |  |  |
| 2007. | Unga<br>Group<br>PLC |  |  |  |  |  |  |  |  |
| 2008. | Unga<br>Group<br>PLC |  |  |  |  |  |  |  |  |
| 2009. | Unga<br>Group<br>PLC |  |  |  |  |  |  |  |  |
| 2010. | Unga<br>Group<br>PLC |  |  |  |  |  |  |  |  |
| 2011. | Unga<br>Group<br>PLC |  |  |  |  |  |  |  |  |
| 2012. | Unga<br>Group<br>PLC |  |  |  |  |  |  |  |  |
| 2013. | Unga<br>Group<br>PLC |  |  |  |  |  |  |  |  |
| 2014. | Unga<br>Group<br>PLC |  |  |  |  |  |  |  |  |
| 2015. | Unga<br>Group        |  |  |  |  |  |  |  |  |

|       |                                    |  |  |  |  |  |  |  |  |
|-------|------------------------------------|--|--|--|--|--|--|--|--|
|       | PLC                                |  |  |  |  |  |  |  |  |
| 2016. | Unga<br>Group<br>PLC               |  |  |  |  |  |  |  |  |
| 2017. | Unga<br>Group<br>PLC               |  |  |  |  |  |  |  |  |
| 2018. | Unga<br>Group<br>PLC               |  |  |  |  |  |  |  |  |
| 2019. | Unga<br>Group<br>PLC               |  |  |  |  |  |  |  |  |
| 2020. | Unga<br>Group<br>PLC               |  |  |  |  |  |  |  |  |
| 2002. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2003. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2004. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2005. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2006. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2007. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |

|       |                                    |  |  |  |  |  |  |  |  |
|-------|------------------------------------|--|--|--|--|--|--|--|--|
| 2008. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2009. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2010. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2011. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2012. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2013. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2014. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2015. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2016. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2017. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |

|       |                                    |  |  |  |  |  |  |  |  |
|-------|------------------------------------|--|--|--|--|--|--|--|--|
| 2018. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2019. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |
| 2020. | William<br>son Tea<br>Kenya<br>PLC |  |  |  |  |  |  |  |  |