

**INTERNAL CONTROL SYSTEMS AND FINANCIAL PERFORMANCE OF
MANUFACTURING FIRMS LISTED ON THE NAIROBI SECURITIES
EXCHANGE, KENYA**

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**A Thesis Submitted to Graduate School in Partial Fulfilment of the Requirement
for the Award of the Degree of Master of Business Administration of Tharaka
University**

THARAKA UNIVERSITY

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DECLARATION AND RECOMMENDATION

Declaration

This thesis is my original work and has not been presented for an award of a diploma or conferment of a degree in any other University or institution.

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DEDICATION

I dedicate this work to the entire family of Mr. David kiragu, my son Lionel Aiden, my lovely wife Florida, my Mum Margaret, my brothers Norbert, Maurice, Felix and Dedan, my sister Maurine for their encouragement and total support. My friend Samuel and all my colleagues. May almighty God see you through and always fulfill the desires of your hearts.

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ABSTRACT

Effective internal control systems determine the firm's earnings, quality, and success. The last decades have witnessed a significant rise in the number of manufacturing firms listed on the Nairobi Securities Exchange failing or seeking bailouts from the government. The study pursued to assess the effect of internal control systems (ICS) and FP of manufacturing firms listed on the Nairobi Securities Exchange, Kenya. Explicitly, the study aimed to define the effect of risk evaluation controls on the FP of manufacturing firms listed on the Nairobi Securities Exchange, Kenya; assess the influence of information communication on the FP of manufacturing firms listed on the Nairobi Securities Exchange, Kenya; establish the outcome of monitoring activities on the FP of manufacturing firms listed on the Nairobi Securities Exchange, Kenya. Also, the moderating effect of firm size on the connection between internal control systems (ICS) and FP of manufacturing firms listed on NSE, Kenya was assessed and to assess the joint effect of internal control systems and firm size on the FP of manufacturing firms listed on the Nairobi securities exchange, Kenya. The research study was steered by Agency theory, system theory, institutional theory, in addition to efficient structure hypothesis theory. A descriptive study design was used. A population of 9 manufacturing firms listed on the Nairobi Securities Exchange as of April 2022 was applied in the study. A purposive sample of 7 firms listed on the Nairobi Securities Exchange and under normal operations during the study period was chosen. The study used a structured questionnaire to collect primary data using a 5-point Likert Scale, whereas secondary data was collected by means of a checklist. The study utilized a linear regression model to assess the connection between internal control systems (ICS) and FP, along with the firm size moderating effect of the listed manufacturing firms on the NSE. Analysis of Variance (ANOVA) and F-test statistics were used to test the overall significance of the regression model, respectively, at a 5% significance level. Specifically, data was analysed with the aid of Statistical Package for the Social Sciences (SPSS) version 23.0. The findings revealed that risk assessment practices have a positive and statistically significant impact on the FP of the manufacturing firms listed on the Nairobi Securities Exchange (NSE). Additionally, the study found that information communication controls also have a positive and statistically significant effect on the FP of these firms. Monitoring activities were similarly shown to have a positive and statistically significant influence on the FP of the selected firms. Finally, the study examined the moderating effect of firm size on the relationship between internal control systems (ICS) and FP. It was found that firm size positively influenced the relationship between risk assessment and monitoring activities, but had a negative effect on the relationship between information communication and FP. It is recommended that manufacturing companies enhance their internal control systems (ICS) to boost their FP. Furthermore, additional research should be conducted in other sectors of the Nairobi Securities Exchange (NSE). A comparative study focusing on the moderating effect of firm size on the relationship between internal control systems (ICS) and FP in different industries would also be valuable.

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ABBREVIATIONS AND ACRONYMS

COSO	-	Committee of sponsoring organizations
FP	-	FP
GDP	-	Gross domestic product
ICSs	-	Internal control systems
MVA	-	Market value added
NSE	-	Nairobi Securities Exchange
SDGs	-	Sustainable development goals
SMEs	-	Small and medium-size enterprises.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The manufacturing industry plays a crucial role in every economy by generating employment and supporting other sectors, such as agriculture. It is also a key driver of innovation, contributing to the development of new technologies and processes (Wang, Lu, & Hung, 2020). According to Eloit, Huang, and Lehnich (2013), In china, the manufacturing sector contributes to about 40% of the countries GDP. This sector offers significant strategic benefits, particularly for developing countries that have not yet fully industrialized. It serves as a key pillar in achieving the global Sustainable Development Goals (SDGs), promoting economic growth, infrastructure development, and innovation. The SDG Goal number 9, which is concerned with industrialization, infrastructure, and innovation is significantly going to be realized upon building sustainable manufacturing firms with technical and financial resilience to stand the test of time (UN report, 2021). However, the United Nations report highlights that global manufacturing has experienced a decline, with the contribution of manufacturing value-added to GDP decreasing by 0.6% between 2019 and 2020. Equally, manufacturing sector employment levels dwindled by 5.6 per cent in 2020 (UN report, 2021).

Africa's manufacturing sector is even more worrying compared to the global perspective. According to Correa and Tondorov (2021), manufacturing value-added (MVA) to GDP in Africa was only 2 per cent in 2019. This is approximately nine times lower than the global MVA per capita, which was recorded at 18 per cent. Equally, the MVA per capita growth in Africa is much less than the global growth. Between 2012 and 2019, it grew by an average of 0.7 per cent compared to the global growth of 2.1 per cent. Also, manufacturing firms in Africa have been recording slow growth in profits, and assets on average. In the 2018 state of the nation report, president Cyril Ramaphosa promised to address the continued decline of the South African manufacturing to facilitate employment and export (Umezurike, & Mthimkhulu. 2019). This was with the main intention of achieving economic growth and stability. All these dynamics continue to accelerate the industrial and investment gaps in the manufacturing sector in most African countries. It is widely believed that effective internal control

systems (ICS) within an organization contribute to improved FP, which in turn enhances the overall success of the organization (Dixon et al., 1990).

1.1.1 Internal Control Systems

Internal control systems are strategic measures implemented by an organization's leadership to ensure operational efficiency, maintain integrity, and establish order in order to achieve the company's goals (Muhunyo & Jagongo, 2018). ICSs are concerned with an assurance of adherence to achieving objectives relating to operations, reporting, and compliance. They provide a structure that guides the institute on how to carry out activities. In essence, strictly following the systems established results in an logical business whose integrity cannot be questioned. Based on the Committee of Sponsoring Organizations (COSO) model, Hanoon et al. (2020) and Al-Waeli et al. (2020) described the five essential elements of internal control systems (ICS) in a company's accounting process. These elements consist of information communication, monitoring activities, control activities, control environment, and risk assessment. They emphasized continuous improvement of these activities to recover the value of the entire system for better results. Effective ICS determines the firm's earnings quality and success (Jokipii, 2010). Oseifuah and Gyekye (2013) agreed with Jokipii's (2010) view, emphasizing that the overall effectiveness of internal controls depends on how well each component of the internal control system functions. For instance, they demonstrated these activities are interdependent meaning they give enhanced results when all are executed well because they strengthen each other. Control environment looks at the elements which have the capability of deciding the adequacy levels of arrangements, strategies, and techniques explicit to the interaction. It is a significant indicator of the mentality and the board strategies concerning the significance of internal audits in the financial unit.

While all five components of ICS are paramount for ensuring the achievement of operational, reporting, and compliance objectives, risk assessment, information communication, and monitoring activities are particularly crucial. These components help minimize potential risks, improve decision-making, and ensure that the company's operations align with relevant guidelines and policies. These three variables ensure the financial strength of a firm and its long-term success (Cosentino & Giudici, 2017;

Adelaja & Adebisi, 2017; Goh & Salleh, 2018). Risk assessment helps to identify and prioritize potential risks, while effective information communication helps to confirm that the relevant information is properly disseminated to the decision makers. Monitoring activities ensure that the risk mitigation plans are properly implemented and that the company's operations remain in compliance with regulations and policies. By considering these three variables, a comprehensive ICS can be established that helps to minimize the risks, enhance decision-making, and ensure that the manufacturing companies' operations remain in compliance with regulations and policies.

The three most important components of internal control systems were the subject of this investigation, based on compelling evidence, authority, and the relevance of prior research that highlighted these variables in relation to the FP of listed firms globally (Cosentino & Giudici, 2017; Adelaja & Adebisi, 2017; Goh & Salleh, 2018). The primary objective was to assess the impact of these elements on the FP (FP) of manufacturing firms listed on the Nairobi Securities Exchange (NSE), Kenya. While the researcher acknowledges that other components of ICS may also influence FP, their impact is considered to be less significant in this context.

Risk assessment component is responsible for identifying, analysing, and responding to the dangers a firm could be facing (Hanoon, Rapani & Khalid, 2020). Any antagonistic condition ahead can be assessed and the extent and severity established well in advance. Risk assessment helps the firm to decide the circumstances that could result in monetary loss or law breaches. Control exercises allude to strategies and techniques which guarantee that the administration mandates are completed as required. They guarantee that important activities that address risks are taken to complete the element's defined objectives and goals (Mwakimasinde et al., 2014)

Information communication activities focus on the timely dissemination of relevant information to the appropriate individuals. The frameworks or cycles support empowering employees to undertake their obligations by availing the required information (Ndamenu, 2011). The information to be passed is identified, captured and passed to the right party. Information is typically considered to be the channel that which control systems and strategies are introduced and offered support. On the other

hand, communication is the approach to making workers careful of the board's obligation to the ICS (Osiefuah & Gyekye, 2013).

Monitoring is the process of evaluating the execution of ICS along with desired timeframes to ensure operational performance quality. It is generally finished by continuous monitoring exercises and by assessments of internal control like self-evaluations in line with the reporting performance quality and legal performance quality (Ndamenu, 2011). Monitoring focus on the assurance of whether internal controls in an entity are satisfactory, appropriately executed, and powerful. Overall, these components relate to each other with synergy as Oseifuah and Gyekye (2013) demonstrated.

1.1.2 Firm Size

The scale of a business and its operations is referred to as firm size. Asset base, net sales, workforce size, and market capitalization are some examples of metrics that can be used to quantify it (Sonfield & Lussier, 2015). Because they have less access to economies of scale, finance, and bargaining strength, smaller businesses may find their potential limited. However, compared to their smaller counterparts, larger companies typically possess a wider base of resources, including human and financial capital, which can enable them better withstand financial crises (Sonfield & Lussier, 2015). According to this study, the size of listed manufacturing companies may significantly moderate the firm's financial performance. Better ICS can be implemented by listed companies, which will enhance the quality of their management and reporting and lead to better financial results. The moderating impact of firm size on the association between internal control systems and the financial performance of manufacturing companies listed on the Nairobi Securities Exchange in Kenya was investigated in this study.

1.1.3 Financial Performance (FP)

FP refers to the extent to which a company meets its financial objectives. These objectives are typically measured through monetary outcomes, which are recorded in relation to the specific policies, strategies, and operations implemented by the organization (Weber et al., 2008). The overall FP entails sustainably achieving financial

goals for a specified period (Waeli et al., 2020). The authors argued that FP should be assessed from two dimensions: accounting goals and investors' goals. This perspective implies that while shareholders expect strong returns on their investments, the management team must implement policies and strategies that help achieve the company's accounting objectives, such as profitability and cost efficiency. Sometimes, the two indicators may not be positive because of some agency conflicts that rise among the shareholders' and managers' interests. Measuring FP using the two indicators, therefore, gives the researcher a better understanding of the enterprise and the risks that may be existing.

Firms that fail to meet their FP targets are often encountered with severe challenges such as financial distress, bankruptcy, and even liquidation. Kangogo and Irungu (2020) elucidated the connection between prudential financial management and financial health of firms, including those listed. Incidentally, adverse financial challenges including falling profitability, cash shortages, a decline in revenues, and general non-compliance have been common observations in firms that eventually collapse as a result of management failure (Mutua & Atheru, 2020). This study postulated that by regularly evaluating risks, strong internal control systems can recognize and avert such situations, ensuring the effective communication of information, and closely monitoring accounting and financial activities.

1.1.4 Internal Control Systems and Financial Performance

Given the background evidence outlined above, it is likely that the manufacturing sector is facing significant economic challenges. For instance, the figures showing the declining manufacturing sector from global and regional perspectives signal massive deindustrialization although some countries recorded positive results. However, there can also be possibilities of management failure to secure shareholders' wealth by failing to institute strong internal controls at the firm level. Equally, they could point to potential monetary value loss by governments, institutions, and individuals investing in this sector due to poor performance recorded.

Numerous investigations have been carried out to examine the connection between FP and internal control systems. For instance, a study on internal control systems and their

effect on FP in telecommunications companies was carried out by Ahmed and Muhammad (2018), specifically focusing on Asiacell. The study found a significant positive effect between the presence of strong ICS and improved FP. Ideally, poor FP scares away investors from the manufacturing sector firms and they could move to invest in the more seemingly profitable service industry. The topic of financial management is thus essential in assessing the financial health and resilience of manufacturing firms across the globe as they strive to improve infrastructure and promote technological innovations to remain competitive. Internal control systems are fundamental requirements in firms to ensure orderly and efficient business management according to laid policies (Muhunyo & Jagongo, 2018). There is a likelihood that as the firm becomes bigger and even goes public, the more it becomes complex and disorderly thereby requiring stricter internal control systems.

According to Ibrahim et al. (2017), in the research “The Impact of ICS on FP: The Case of Health Institutions in Upper West Region of Ghana”. The study discovered a favorable correlation between FP and ICS. High levels of credit and financial risk are frequently seen in manufacturing companies that have been deemed insolvent or financially unstable, which significantly impact their profitability. Poor corporate performance is significantly attributed to poor management systems (Muhunyo & Jagongo, 2018). Primarily, it means strict adherence to strong internal control systems could reverse the performance records posted by manufacturing firms in Kenya.

1.1.5 Manufacturing Firms in Listed in Nairobi Securities Exchange, Kenya

According to Dalla and Zwaan (2017), Kenyan manufacturing companies are essential to raising the nation's GDP and propelling economic growth in order to achieve the Vision 2030 and Sustainable Development Goals (SDGs). According to Macharia et al. (2022), the government's "Big Four" plan places manufacturing as one of its top goals, with the aim of raising its GDP contribution from 8% to 15% by that year. However, it only made up 10% of the total in 2021, making this objective unattainable. Recent years have seen a drop in the manufacturing sector's FP, despite the critical role it plays in guiding the nation's economy towards achieving Vision 2030 and the Sustainable Development Goals (SDGs) (Masira, 2018; Omenyo & Muturi, 2019). The sector's GDP contribution decreased from 8.74% in 2017 to 8.41% in 2018, marking a

decreasing trend. With 7.90% in 2019, 7.61 percent in 2020, and 7.24% in 2021, the trend persisted in the following years (World Bank, 2022). Once more, given the manufacturing sector's current financial performance, the Kenya Vision 2030 long-term program, which aims to create a newly industrialized, upper-middle-income nation by 2030, may not be realized.

The decrease in FP has been attributed to poor internal control systems of these firms (Kinyua, 2016; Juma, 2020). This scenario is demonstrated by the Nairobi Securities Exchange, which showed almost half 44 % of NSE listed firms failed ICS control test in 2019. Even yet, the manufacturing companies that were listed on the exchange made Ksh.6.47 billion in profit after taxes in 2016, which was less than the Ksh.14.17 billion they made in 2010 (KNBS, 2017). There have been numerous requests for government bailouts in the last 10 years due to the failure of numerous manufacturing enterprises listed on the Nairobi Securities Exchange. For example, Mumias Sugar Company was barred from trading on the Nairobi Securities Exchange in 2019 due to financial instability, after Deacons E.A Plc and ARM Cement Plc. These FP concerns are witnessed at a time Kenya has been experiencing various fallout of major manufacturing firms despite the government's commitments to prioritizing the manufacturing industry to create jobs and wealth.

1.1.6 Nairobi Securities Exchange

Nairobi is home to the Nairobi Securities Exchange, an exchange market, Kenya, where stockbrokers and traders can trade (buy, hold, and sell) financial instruments such as shares, bonds, stock shares. It is among the largest bourse or security markets in Sub-Saharan Africa. The market was established in 1954 and was formally referred to as the Nairobi Stock Exchange. The market mainly offers a venue for exchanging debt and equity products a global trading platform for investors targeting Kenyan and African economic growth exposure. Firms listed in the securities market such as NSE enjoy several advantages such as easy capital raising, fair pricing, better disclosure and corporate governance practices (Fadaei Nejad & Delshad, 2018).

1.2 Statement of the Problem

Manufacturing companies are essential to raising the GDP of the nation and in stimulating the Kenyan economy towards achievement of vision 2030 and Sustainable

development goals (SDGs) (Dalla & Zwaan, 2017). Over the past decade, a notable number of manufacturing firms listed on the Nairobi Securities Exchange (NSE) have faced financial difficulties, resulting in their failure. Many of these companies have subsequently sought bailouts from the government in an effort to stabilize their operations. These FP concerns are witnessed at a time Kenya has been experiencing various fallout of major manufacturing firms despite the Government's commitments to prioritizing the manufacturing industry to create jobs and wealth. Manufacturing was one of the big four agendas of the Kenyans fourth regime, whose aim was to increase its contribution to GDP from 8 per cent to 15 per cent by 2022. However, the sector's contribution to GDP has had a downward trend from the year 2018 with a contribution of 8.41% from 8.74% in 2017. The trend continued in the subsequent years with 7.90% in 2019, 7.61 in% in 2020 and 7.24% in 2021. The government has tried to intervene the situation by issuing state related bailouts which have failed to revive these firms. Kenya's Vision 2030, which aims to transform the country into a newly industrializing, upper-middle-income nation by 2030, may face challenges in achieving its goals given the current FP of the manufacturing sector. There remains significant debate over the reasons behind the financial underperformance of firms, as various studies suggest different causes for these issues (Bett & Memba, 2017; Asiligwa & Rennox, 2017; Muhunyo & Jagongo, 2018; Al-Waeli et al., 2020). While some studies claim firms, such as established manufacturing firms fail due to macro and microeconomic factors, the majority of scholars tend to point to mismanagement and fraudulent activities as the major cause. However, it is also widely believed that ICSs are the gateway to detecting and preventing mismanagement and fraudulent activities in firms. There is also very few research done on the manufacturing sector in regard to the ICS and the few have research done were not tested on the joint effect neither did they have a moderator. This study aims at filling the empirical literature gaps brought by inconsistent studies.

1.3 General Objective

The general objective of this study was to examine the effect of internal control systems on the FP of manufacturing firms listed on the Nairobi Securities Exchange, Kenya.

1.3.1 Specific Objectives

This study aimed to achieve the following specific objectives:

- i. To determine the effect of risk assessment controls on the financial performance of manufacturing firms listed on the Nairobi Securities Exchange, Kenya.
- ii. To establish the effect of information communication on the financial performance of manufacturing firms listed on the Nairobi Securities Exchange, Kenya.
- iii. To establish the effect of monitoring activities on the financial performance of manufacturing firms listed on the Nairobi Securities Exchange, Kenya.
- iv. To determine the moderating effect of firm size on the relationship between internal control systems and the financial performance of manufacturing firms listed on the Nairobi Securities Exchange, Kenya.
- v. To assess the joint effect of internal control systems and firm size on the financial performance of manufacturing firms listed on the Nairobi securities exchange, Kenya.

1.4 Research Hypotheses

This study was guided by the following null hypotheses:

H0₁: There is no statistically significant effect of risk assessment controls on the financial performance of manufacturing firms listed on the Nairobi Securities Exchange, Kenya.

H0₂: There is no statistically significant effect of information communication controls on the financial performance of manufacturing firms listed on the Nairobi Securities Exchange, Kenya.

H0₃: There is no statistically significant effect of monitoring activity on the financial performance of manufacturing firms listed on the Nairobi Securities Exchange, Kenya.

H0₄: There is no statistically significant moderating effect of firm size on the relationship between the internal control systems and financial performance of manufacturing firms listed in the Nairobi securities exchange, Kenya.

H0₅: There is no statistically significant joint effect of internal control systems and firm size on the financial performance of manufacturing firms listed on the Nairobi Securities Exchange, Kenya.

1.5 Significance of the Study

The findings will be useful to the firms listed in the manufacturing and allied segment of the NSE. The study will highlight the importance of having robust ICS to help in realising financial goals. Investors looking for opportunities to invest in publicly traded manufacturing firms could also back off and miss chances to grow their wealth for fear of the continued downward trend.

The results of the study might also be used by the government to create regulations requiring listed companies to meet a certain ICS standard. Such policies will save the government from cases it is required to inject more funds to bail out already collapsed manufacturing firms.

This study will expose important accounting and financial management practices, activities, and policies that will add to the empirical literature. It will fill the theoretical and empirical gaps from the previous studies that have majorly concentrated on the economic variables as the major elements of financial health and performance of manufacturing firms listed in NSE. It will also suggest areas for future studies that researchers can investigate.

1.6 Scope of the Study

This study focused to define the effect of ICS on the FP of manufacturing firms listed in NSE. The study concentrated on ICS components namely, risk assessment, information communication and monitoring activities. While all the five components are essential in ensuring proper adherence to achieving objectives relating to operations, reporting, and compliance, risk assessment, information communication, and monitoring activities are considered crucial components in internal control systems of firms because they help to minimize potential risks, enhance decision making and ensure that the company's operations are in compliance with relevant regulations and policies (Goh & Salleh, 2018). The study also had the firm size as the moderator which was measured the log of total assets. The period chosen for the study was 5 years, from 2018 to 2022. This approach provided an adequate period for the study (Stupp, Hegi, Mason, Van Den Bent, Taphoorn, Janzer & Mirimanoff, 2009). This was also the period in which manufacturing sector was placed to be among the country's 'The Big Four'

agendas aimed at fostering Kenya's economic growth. NSE was chosen for this research because it is a leading African exchange that is positioned in Nairobi, Kenya, which is one of the fastest growing economies in Sub-Saharan Africa (Bhorat, Kimani, Lappeman & Egan, 2021).

1.7 Limitations of the Study

The researcher anticipated a problem of isolating the effect of other factors that influence the FP of firms listed on NSE from that of internal control factors. To address this limitation, the researcher accounted for other factors by assuming they remained statistically constant and were incorporated into the error term for the five-year period (2018–2022) under study. This approach helped isolate and compute the specific effect of ICS on the FP of listed manufacturing firms in Kenya. Also, the findings were limited to a small number of listed manufacturing firms on NSE which are nine in number. This was overcome by doing a census survey of all the 9 manufacturing firms listed on NSE.

1.8 Assumptions of the Study

The study assumed that the audited financial statements and periodic reports filed with the Nairobi Securities Exchange accurately reflected the true and fair state of affairs of the manufacturing firms, and that these reports were free from bias. The study further assumes that the statistics collected was linear and normally distributed hence fitting the requirement for regression analysis.

1.9 Operational Definition of Terms

Financial Performance FP:	Sustainably achieving financial goals for a specified period such as profitability, liquidity etc.
Firm Size:	Scale of business operations volume as measured by a Company's total assets or equity market value.
Information communication:	Identification, capturing and relaying of important information to the organization effectively.
Internal Control Systems:	Strategic interventions implemented by company leadership to ensure operational efficiency, maintain integrity, and establish a structured approach to achieving the organization's objectives.
Monitoring controls:	The process of evaluating the execution of internal controls along with desired timeframes. It is generally finished by continuous monitoring exercises and by assessments of internal control like self-evaluations.
Nairobi Securities Exchange:	Is an exchange market located in Nairobi, Kenya, where stockbrokers and traders can trade (buy, hold, and sell) financial instruments such as shares, bonds, stock shares etc. It is among Sub-Saharan Africa's biggest stock exchanges or securities markets. The market was established in 1954 and was formally known as Nairobi Stock Exchange
Risk Assessment:	The process established by an institution to identify and assess when creating financial statements that follow widely accepted accounting principles, management risks.

CHAPTER TWO

LITERATURE REVIEW

2.1 Empirical Review

Several studies (Bett & Memba, 2017; Asiligwa & Rennox, 2017; Muhunyo & Jagongo, 2018; Al-Waeli et al., 2020) among others have observed the topic of ICS and revealed different results. This study was restricted to risk evaluation activities, information communication, and monitoring activities and their contribution to the firms' FP highlighted in the securities exchange in Nairobi, Kenya considering they have been significantly attributed to the FP of firms across different sectors.

2.1.1 Risk Assessment and Financial Performance

Studies by Alawattagama (2018) elaborated financial performance and enterprises of banks. Financial banking industry and banking of Sri Lanka were the roots of the evaluation. Primarily, the study utilized a sample of 45 respondents in banking institutions; the link between FP and risk assessment of Sri Lankan Banks was found insufficient. In that case, the study employed both primary and secondary data. The researcher postulates that the outcomes on this variable are not certain considering the results show mixed ideas. This study argues that while risk evaluation is a crucial factor influencing the FP of organisations piloting amidst different sectors, its influence on listed firms in NSE can only be ascertained through a scientific investigation. It is, thus, hypothesized missing statistically enormous impact of risk assessment on the FP of firms conducting manufacturing operations recited on the NSE, Kenya. The research was conducted on a different sector whose operations are different from those of the manufacturing sector. Further, the research was conducted on a different operational environment.

According to Abiodun (2020), risk assessment procedures impacts fulfillment of firms in south-west region of Nigeria. The researcher adapted an ex-post-facto and survey research design. Data was collected from 77 firms listed in Nigeria that had been operational for over 7 years. Using a multi-level random sampling, they sampled 141 senior managers who filled the questionnaires and the data analysed using regression analysis. Abiodun (2020) relied on the stakeholder theory. The results highlighted prevalence of notable and beneficial impact of risk assessment on FP of the firms listed

in Nigeria studies. Although the research was conducted on listed firms, it did not specifically focus on the manufacturing sector. Additionally, the study was carried out in different countries, each with its own unique economic factors.

Ntongo (2012) investigated the role of risk assessment and other accounting factors in health sector service delivery. The study utilized a quantitative methodology and was supported by a cross-sectional research design to gather data from 97 participants. MLR model was utilized by this research to explore the sample's primary statistics. The results lead to a conclusion that risk assessment was a significant contributor to quality services because it significantly influenced among other things operational efficiency. This proposed study finds those results relevant and applicable although the results could vary since the sectors under investigation are different. However, considering all firms have inherent risks, there might be similarities in results. The study was done in Uganda a country whose operating environment is not same. Further, health sector was the also the area of focus by the evaluation with a contrary impact to that of MFG firms.

Korir, Naibei, and Lydia (2022) conducted a study on selected banks in Bomet and Kericho Counties as an examination of risk assessment on FP. They employed causal and correlational research designs, collecting data through questionnaires. The sample included 86 respondents from 15 commercial banks. The analysis, which involved correlation and descriptive statistics, showed that risk assessment has a favorable effect on the institutions' financial performance. But it's crucial to realize that this study was carried out in the banking sector, whose operating dynamics are very different from those of the manufacturing sector.

Bett and Memba (2017) conducted a study to determine how risk assessment influence Kenyan processing firms' FP, focusing Menengai's Company case study. Quantitative methodology was adopted by the research and specifically scrutinizing the reminifications of the control environment, information communication, and risk assessment on Menengai Company's FP. The research focused on diverse sort of risk evaluations, such as CRA, Risk assessments for operational, fraud, and consumer vulnerabilities. A total of 189 respondents were interviewed. Based on the study's results, risk evaluation influences the FP of Menengai Company positively. Researchers

argued that effective risk evaluation can either be preventive or reactive, depending on the type of risk the company faces. For example, if risks are identified before they occur, they can be mitigated. Additionally, early detection of risks can prevent them from causing serious problems. However, the study was limited to a single company, and its findings may not accurately represent the broader manufacturing sector.

2.1.2 Information Communication and Financial Performance

Rapani and Malim (2020) appraisal focused on the correlation allying information communication besides the FP of Iraqi banks. This study endorsed a survey approach, reviewing and comparing research papers published over a seven-year period. The findings revealed that the intercnection of information communication and FP was 94.28%. However, the study mainly relied on published data and did not employ a descriptive survey to directly evaluate the current situation. Additionally, the study was conducted within the banking sector in Iraq, whose operational environment differs significantly from that of manufacturing firms in Kenya. This difference in sectoral context and geographical location may limit the generalizability of the findings to the manufacturing sector in Kenya.

Ejoh and Ejom (2014) found an insignificant relationship between information communication as well as the FP of Nigerian tertiary learning organiations. Mixed-methods approach were utilized by the research to collect both primary and secondary data, using a stratified sampling procedure to gather data from 150 respondents via questionnaires. To sum up, the study culminated that information communication was not in a position of impacting FB of the surveyed organizations effectively. However, the operational environment in Nigeria, where this study was carried out, is very different from Kenya's. Moreover, the study focused on learning institutions, which primarily engage in service delivery, an industry whose activities differ greatly from those of the manufacturing sector. Therefore, the manufacturing firms in kenya would not appreciate such findings.

In their appraisal, Korir, Naibei, and Lydia (2022) used causal and correlational research approaches to survey information communication reaction on the FP of banks in Bomet and Kericho Counties. The authors adopted both causal and correlational

research designs, collecting data through questionnaires. A total of 86 respondents from 15 selected commercial banks were sampled; descriptive and correlational analysis were effective in analysing the data was analyzed. Regarding the finding, the study evaluated that information communication systems had a positive, but insignificant effect on the FP of the banks. But it's crucial to remember that this study was carried out in the banking industry, which has distinct dynamics and difficulties than the manufacturing industry. Therefore, the findings may not be directly applicable to manufacturing firms, as the operational contexts of these two sectors are quite distinct.

A study by Ahmed and Nganga (2019) explored the effect of information communication on organizations, focusing on county governments in Kenya. The study targeted four coastal counties: Taita Taveta, Mombasa, Kilifi, and Kwale. The data from a sample of 40 respondents was gathered and analyzed through Quant. Meth, all finance managers from the Finance and Planning Ministry in these counties. Questionnaires and descriptive and In accordance with the descriptive survey design, inferential statistics were used for both data collection and analysis. In this case, beneficial and remarkable results of information communication on FP were showed. The authors argued that effective information communication enables employees to receive and send clear messages, ensuring that instructions are followed. This clarity of communication helps individuals and teams understand their responsibilities and empowers them to take action. But it's crucial to remember that the study was conducted in the framework of county government activities, which are focused on public service rather than profit-making. The dynamics of government operations differ from those in the manufacturing sector, where the focus is on production and market-driven goals. In a related study, Asiligwa and Rennox (2017) used a qualitative technique and descriptive research design to investigate how internal control mechanisms affected the financial performance of Kenyan commercial banks. They discovered a strong and favorable correlation between FP and internal control systems, with information communication ranked as the second most important factor. However, since this study was conducted within the banking sector, which primarily focuses on service delivery, the results may not directly apply to the manufacturing sector, where the emphasis is on production and manufacturing processes.

2.1.3 Monitoring and Financial Performance

Odunko (2022) used a selection of companies listed on the Nigerian market to survey the correspondence between monitoring efforts and the firm's performance. Analyzing the effects of cash control, RA, and ICS on these enterprises' FP was the goal of the inquiry. The researcher employed several regression models and descriptive statistics in a quantitative study to assess the suggested connections, ex-post-facto research design. The results showed a significant positive correlation between the chosen enterprises' FP and their internal control systems (ICS). According to the study's findings, rigorous adherence to monitoring procedures increased compliance, which in turn decreased mistakes and fraudulent activity. In order to facilitate their FP, the report suggested that listed enterprises increase their ICS, especially their monitoring efforts. However, since the study was conducted on the Nigerian Stock Exchange, its findings may not fully reflect the dynamics of the Nairobi Securities Exchange (NSE), where operational factors differ.

Ibrahim et al. (2017), on the other hand, discovered no discernible effect of monitoring efforts on the financial performance of Ghanaian healthcare facilities. The study, which focused on the FP of healthcare institutions in Ghana's Upper West Region, using a quantitative research methodology and random sampling. Fifty participants from five healthcare facilities were included in the study. Even if FP was not significantly impacted by monitoring efforts, the study did show that internal control actions generally had a favorable impact. As for the control variables, just three of them continued to be statistically significant. Study's results might not be directly applicable to the manufacturing environment in Kenya because it was carried out in the Ghanaian healthcare sector, whose activities differ from those of the Kenyan manufacturing sector.

Similarly, a study by Muhunyo and Jagongo (2018) explored associated reaction of monitoring activities on the FP of higher learning institutions in the county of Nairobi City, Kenya. The researchers aimed to assess the impact of risk assessments, control environment, control activities, information communication, and monitoring activities on the FP of higher learning public institution. A qualitative methodology and descriptive research design were employed, with data collected using open and closed-

ended questionnaires from a sample of 96 respondents drawn from relevant departments in public universities. The results indicated that internal control systems, particularly monitoring operations, impacted FP positively. The research finalizes that institutions with strict monitoring activities were more compliant and better equipped to detect and prevent fraud, ultimately improving FP. However, as the research focused on the education sector, its findings may not fully represent the dynamics of the manufacturing sector, where operational and financial management practices differ.

2.1.4 Firm Size and Financial Performance

Madhushani and Jayasiri (2021) explored the moderating role of the size of firm on the interrelationship between internal controls and fulfilment in Sri Lankan manufacturing firms. They aimed to determine if the size of the firm influenced how internal controls affected performance. Their evaluation revealed that positive association with firm satisfaction had positive impact; however, this relationship was statistically insignificant. This finding suggests that, although larger firms may appear to perform better, other factors beyond firm size likely influence performance. The results imply that internal control systems may not significantly vary in their effectiveness based on the firm's size in Sri Lanka's manufacturing sector, thus prompting a need for further investigation into how internal controls are implemented across different firm sizes.

Stock Exchange between 2005 and 2010 to investigate the relationship between company size and FP among publicly traded companies in Nigeria. Adeyemo found a positive and significant correlation between firm size and financial performance using regression analysis using return on assets (ROA) as the measure of FP. They also came to the conclusion that large firms in Nigeria typically outperform small ones. There is indications that these beneficiaries may be driven by such factors as economies of scale, improved capital in addition to better positioning in the market. The study corroborates prior research postulations that firm size is truly an important determinant of corporate profitability in Nigeria. However, it also accepts that firm size does not decide its performance; it also depends on factors such as corporate governance, condition in the industry, and the structure of the market.

In contrast, Adeyemi and Adediran (2017) focused on the Nigerian banking sector to explore the link within firm size and FP. Using data from the money deposited in banks over a five-year period (2012–2016), the interrelationship between FP and firm sizes was realised to be inappropriate, measured by return on equity (ROE). Although larger banks may benefit from economies of scale, they also face obstacles including stricter competition, higher operational costs, and increased regulatory scrutiny, which could impair their profitability, as evidenced by the fact that larger banks had lower ROE than smaller banks. This result emphasizes that business size by itself does not ensure improved FP; instead, other factors including market conditions and regulatory restrictions need to be taken into account.

Omenyo and Muturi (2019) conducted a study to explore the relationship between firm size and financial performance (FP) in manufacturing firms that operate on the NSE in Kenya. Specifying the review of literature on firms in 2012-2018, the authors pinpointed the inefficiency of the capital structure as a major reason for a decline in the FP of these firms. The cross-sectional analysis of the study established that firm size had a significant effect on FP, and that overall performance was, indeed better in large firms. But the researchers also discovered that there was little correlation between the size of the company and the number of workers, suggesting that the financial success of larger firms may depend more on other factors like financial resources and capital structure. To further understand how firm size affects FP across industries, they suggested more research to examine this link in various sectors and over a longer time frame.

2.1.5 Internal Control Systems, Firm Size and Financial Performance

Li et al.'s (2019) recent study examined the impact of internal controls on Chinese companies' performance. Data gathered from 22,310 firms between 2005 and 2017 was used in this study's multiple regression analysis to assess the impact of internal controls on firm performance. The findings demonstrated a favorable correlation between improved internal controls and improved financial outcomes as measured by returns on assets (ROA) and Tobin's Q. Furthermore, larger firms appeared to benefit more from robust internal controls due to their complex operational structures. Larger firms often face a higher degree of operational complexity and risk, so strong internal controls help

mitigate these challenges, leading to better performance. The significance of internal control systems in enhancing FP is demonstrated by this study, particularly for larger businesses that function in more complex situations. Although the research was carried out in China, its findings suggest that similar dynamics may exist in other emerging markets, such as Kenya, where firms face complex operational and regulatory environments.

Mulenga and Vuyo (2019) investigated the connection between FP and internal control systems in South African municipalities from 2013 to 2018 in a similar study. Their study found that municipalities with effective internal controls demonstrated better financial management and performance. Larger municipalities, with greater resources, were more capable of implementing robust internal control systems, which, in turn, contributed to better financial outcomes. The study focused on public-sector organizations, but it also highlighted how important internal controls are to FP improvement. The findings have implications for the private sector as well, indicating that robust internal control systems can enhance financial management and stability for larger companies operating in intricate marketplaces. But since this study was carried out in the public sector, more research is required to find out how private-sector businesses, particularly those in developing nations, might also profit from these control systems.

Internal control systems' impact on 53 non-governmental organizations' (NGOs') FP in Zimbabwe was examined by Mwanza (2020). Mwanza used a descriptive research design and discovered that NGOs with more robust internal controls performed better and were more financially stable. Better financial results resulted from larger NGOs' ability to establish and keep up more effective internal control systems since they have more resources. This study emphasizes the value of internal control systems in enhancing FP, especially for businesses with greater resources. While the research focused on NGOs, the findings could be relevant for other types of organizations, including businesses, as they highlight how internal controls can contribute to financial success, especially for larger organizations with greater operational complexity.

Mugambi and Gichira (2019) investigated how Kenyan SMEs' financial performance was affected by their internal control system. In order to achieve this, their study used a survey research approach to assess how internal controls affected these organizations' growth and sustainability. The findings demonstrated a positive correlation between improved FP and effective internal control systems, with medium-sized enterprises reaping greater benefits from strong controls than smaller ones. This implies that even smaller businesses can also benefit from internal controls, medium-sized firms because of their more complex operations are likely to experience greater improvements in FP. The report emphasizes how crucial internal controls are to Kenyan SMEs' performance. But it also highlights the possibility that, because of their more structured internal control systems, larger companies like those listed on the Nairobi Securities Exchange may have different effects of internal controls on performance.

2.1.6 Summary of Research Gaps

Table 1: Summary of the Empirical Literature Review Gaps

Author	Study Purpose	Research Findings	Research Gaps	Focus of the current study
Ntongo (2012).	To determine the relationship between internal controls, service quality financial accountability in hospitals	risk assessment was a significant contributor to performance (quality of service)	The study Kampala Uganda focuses on health sector of service delivery. Ignored the role of firm size in FP	The study will focus on FP in the Kenyan context, with a relatively smaller and manageable sample, considering the firm size factor
Bett and Memba (2017)	conducted a study to assess the effect of internal controls on the FP of Kenyan processing firms. A case study of Menengai of Menengai company	Significant effect of risk assessment, control, and information communication environment, on the FP of Kenyan processing firms. A case study of Menengai of Menengai company	Used a case study (Menengai company only) hence a narrow approach Utilized only primary data Interviewed 189 respondents	This study will cover all the 9 manufacturing firms listed in NSE Will utilize both primary and secondary data Will interview 36 respondents

Alawattega ma (2018)	To assess the impact of enterprise risk management on firm performance	Insignificant relationship	positive	Inconsistent results with other previous studies.	To empirically assess the relationship in manufacturing firms listed in NSE
Ahmed and Nganga (2019)	assessed the effect of internal controls on organisations using the context of county governments.	there was a positive and significant effect of all the components of internal controls on the FP of the surveyed organizations.		Focused on government service delivery Did not consider all parts of the country Considered only county governments	Will consider corporate body management as opposed to government body representing different regions in the country
Ejoh and Ejom (2014)	To establish the relationship between internal controls and FP of Nigerian tertiary learning institutions in Nigeria.	Found insignificant relationship between internal controls and FP of Nigerian tertiary learning institutions in Nigeria		Conducted in Nigeria within the education sector Interviewed 150 respondents using questionnaires Inconclusive and inconsistent with other researchers	To be conducted in Kenya focusing on the manufacturing industry Will utilize purposive sampling to interview 36 respondents

Author	Study Purpose	Research Findings	Research Gaps	Focus of the current study
Ibrahim, S., Diibuzie, G., & Abubakari, M. (2017).	To determine the impact of internal control systems on FP: The case of health institutions in the upper west region of Ghana	Found mixed results of some variables with no significant impact of internal control systems on FP.	Used case (The case of health institutions in the upper west region of Ghana) Focused on health institutions' FP Found no significant relationship Broad study because it studied all the 5 components of ICS	Will study manufacturing firms in Kenya Will use census and purposive sampling to obtain a sample covering all manufacturing listed firms in NSE
Niresh & velnapy,(2014)	effects of firm size on profitability of listed manufacturing firms in Sri Lanka	The study showed no indicative relationship between firm size and profitability	The study focused on firms listed on Colombo Stock Exchange for the year between 2008 and 2012	The study will focus on FP in the Kenyan context, with a relatively smaller and manageable sample, considering the firm size factor
Author	Study Purpose	Research Findings	Research Gaps	Focus of the current study

Akinyomi and Olagunju (2013)	Effect of firm size on profitability:Evidence from Nigerian manufacturing sector	The study showed firm size in terms of total assets and total sales had a significant impact on profitability of manufacturing firms in Nigeria	The study was conducted in manufacturing firms in Nigeria for the period between 2005 and 2012	This study will focus on manufacturing firms listed in NSE which is a smaller scope that can reveal the ideal situation needed in the sector.
Ramasamy, Ong and Yeung, (2005)	Firm size, ownership and performance in the Malaysian Palm Oil Industry	The study revealed there is a negative relationship between the firm size and performance.	The study focused on the oil industry based in Malaysia	Our study will focus on manufacturing industry based in Kenya which give a bigger scope and different location that might critic the study

Author	Study Purpose	Research Findings	Research Gaps	Focus of the current study
Palangkara ya, Stierwald and Yong (2005)	Is Firm Productivity Related to Size and Age? The Case of Large Australian Firms	The study showed evidence, though weak, that bigger firms and older firms are a little less productive.	The study focused on large firms in Australia.	Our study is more specific to manufacturing firms listed in NSE. This study differs in both the context and the location of study.

2.2 Theoretical Framework

The roots of this study were based on a theoretical framework involving 4 aspects explaining the need for controls or structures and the importance of pursuing goals that maximize the wealth of shareholders. Each theory explained one or more variables of this research as they relate to FP of manufacturing firms.

2.2.1 Agency Theory

Agency theory as formulated by Jensen and Meckling in 1976 refers to the problem of self-interest that's likely to arise between the principals and agents where the former act on behalf of the latter with an aim of running a business with the latter being the shareholders, the company owners. The theory posits that such wars can result in the agency cost; this is a cost in which managers' self-interests are considered different from the owners' self-interests as seen by Waterman and Meier (1998). This misalignment can be caused by issues like incompetence, fraud, or personal interests that influence managerial decisions. In some cases, managers may act in ways that are contrary to the shareholders' interests, such as failing to establish effective internal controls. These decisions can severely harm the firm's FP, potentially leading to the company failing to meet its financial obligations.

In most social science cases, this model is referred to as an open model. It reflects the characteristics of all variables of the model are open to influences from the external environment. In this theory, managers and supervisors act as agents to shareholders of manufacturing firms. These managers and supervisors take a vital role in decision making of these firms. The shareholders are the financiers of capital and they expect maximization of their profit from the invested capital. Managers and supervisors provide knowledge and skills and human capital required. In exchange to this, managers and supervisors expect better remuneration and good working conditions. Later, customers purchase products or services hence providing a source of income. They in exchange, expect value for money and satisfactory services (Williamson, 1984).

According to the observations of Leitch (2016) risks are infinitely inherent in all organizations and that risk evaluation is a perpetual activity hence agents must be subjected to scrutiny to ensure financial goals are not abandoned. Putting in place effective systems improves compliance and quality of operations. The application of this theory will be instrumental in illustrating how risk evaluation can be an effective method of mitigating financial losses in firms. This study hypothesizes a relationship between risk assessment and the FP of manufacturing firms listed on the Nairobi Securities Exchange in Kenya. By applying this theory, the researcher aims to explore the significance of this relationship and draw conclusions that can be generalized to the broader industry.

2.2.2 Systems Theory

Whitaker (2018) noted that systems theory, initially proposed in 1940s by Ludwig von Bertalanffy and later advanced by Ross Ashby in the 1950s, explains how institutions function as complex systems composed of interrelated and interdependent parts working together. The theory highlights how the growth of organizations brings about complexities, and it connects these complexities to social causes. Many different fields have made extensive use of systems theory, including science, management, law, and social studies, to explain how individual components of an organization interact to contribute to the overall system. Additionally, researchers have highlighted the significance of the environment in open systems, demonstrating how both internal and external inputs are essential to the operation of an organization.

In the context of internal control systems and organizational FP, systems theory helps to argue that elements like information communication are vital for achieving organizational goals. According to Ahmed and Nganga (2019), the process of identifying, capturing, and effectively communicating important information within an organization is critical. However, these processes can become more complex as organizations grow. For instance, the process involves disseminating information across different levels of the firm, ensuring that all units receive and share the necessary information for achieving common objectives. This theory supports the argument in the present study that there is a relationship, albeit insignificant, between information communication and the FP of manufacturing firms listed on the Nairobi Securities

Exchange. The study aims to examine the nature of this relationship and assess its significance.

2.2.3 Institutional Theory

Institutional theory, coined by John Meyer and Brian Rowan in the late 1970s, define institutions as long lived structures in societies. These structures comprise of what is termed as cultural-cognitive, normative as well as regulative structures, which combined with activities and resources, define and shape social interactions. According to this theory, organizations and institutions are influenced by societal norms, rules, and expectations, which guide their behavior and operations.

Ebrahimi and Koh (2021) applied institutional theory alongside the life-cycle concept to show how manufacturing firms evolve into large institutions over time. They emphasized the importance of organizational structures and formal systems in achieving growth. Formal organizations, such as manufacturing firms, are characterized by clear structures, defined authority, and specific responsibilities and obligations for individuals within the organization. In this context, manufacturing firms listed on the Nairobi Securities Exchange (NSE) can be seen as formal entities with well-established rules and guidelines, including accounting and reporting standards, which are crucial for ensuring transparency, compliance, and sustainable growth.

Formal organizations have ways of ensuring compliance with the established rules to ensure the stability of organizations. In the context of listed firms in Kenya, there are specified rules for publishing financial statements and auditors' reports to the public. These accounting documents are supposed to be of high quality and show the stability of the firm. It means that strong ICS are instituted in such established firms to mitigate risks of losses as the goals of ICS in any company. Considering that monitoring control activities are crucial in ensuring organizations attain the desired compliance threshold and ICS objective achievement (Al-Waeli et al., 2020), this study informs the assertion that there exist no significant effect of monitoring activity controls on the FP of manufacturing firms listed on Nairobi Securities Exchange, Kenya.

2.2.4 Efficient Structure Hypothesis

The Efficient Structure Hypothesis, first proposed by Demsetz (1973), asserts that in a competitive market environment, effective businesses have a higher chance of expanding, turning a profit, and capturing a bigger market share. According to this theory, businesses with well-structured operations can better respond to market pressures, outperform competitors, and create a competitive advantage. According to this theory, the efficiency of a firm's structure directly influences its ability to achieve superior performance in the marketplace, especially with regard to market share growth and profitability (Jeon & Miller, 2005).

The Efficient Structure Hypothesis serves as the theoretical foundation for comprehending how internal control systems might enhance a company's efficiency in the context of this investigation. Internal controls are viewed as mechanisms that ensure the smooth functioning of operations by enhancing risk management, improving the accuracy and reliability of financial reporting, and making certain that all applicable laws and regulations are followed. Effective internal controls reduce operational inefficiencies, mitigate the risks of fraud, and protect the organization from financial losses. These controls include processes such as risk assessment, information communication, and monitoring systems that collectively contribute to reducing errors, improving decision-making, and maintaining the integrity of financial operations (Al-Waeli et al., 2020).

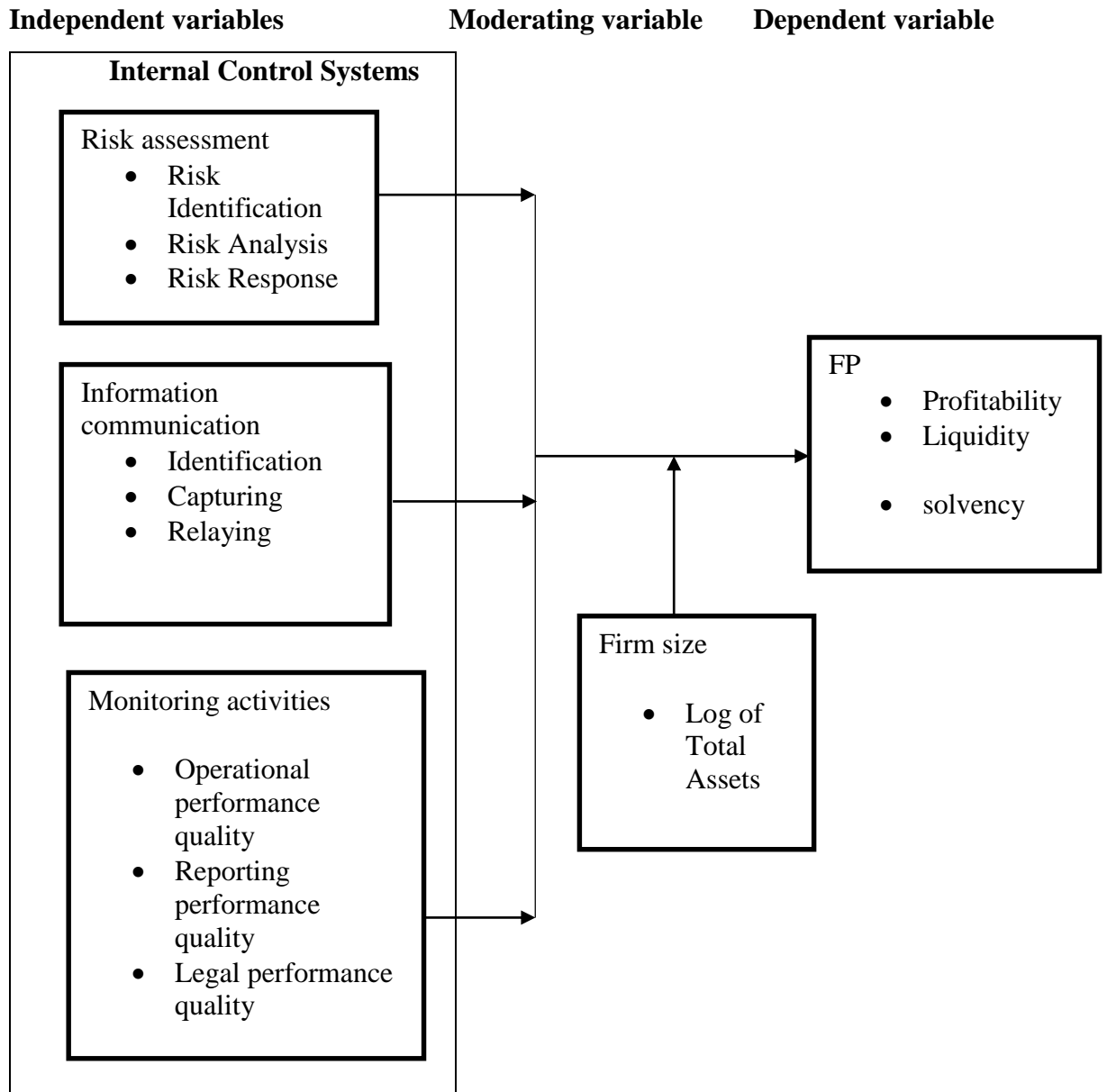
Practically speaking, internal control systems are essential organizational structures that have a direct bearing on how well a company performs. Businesses may detect and manage possible hazards, efficiently monitor operations, and guarantee correct and dependable financial transactions by putting in place a strong ICS. Strong internal controls, for example, assist firms in spotting possible fraud, guaranteeing adherence to financial standards, and confirming that financial statements accurately depict the state of the company. In addition to protecting the organization's resources, these procedures help make better decisions, which enhances overall performance.

Specifically, within the manufacturing sector, firms listed on the Nairobi Securities Exchange face unique challenges that make the implementation of efficient internal controls even more critical. As these firms grow and expand, they become more complex, and their operations involve a greater number of stakeholders, processes, and financial transactions. Effective internal controls ensure that the FP of these firms is not compromised by risks such as fraud, operational inefficiencies, or non-compliance with industry standards and regulations. By maintaining sound internal control systems, manufacturing firms can improve their profitability and strengthen their competitive position in the market.

This study builds on the Efficient Structure Hypothesis to investigate the relationship between internal control systems and the FP of manufacturing firms listed on the NSE. It hypothesizes that the presence and quality of internal controls in these firms can lead to better financial outcomes, such as increased profitability, reduced financial risk, and improved organizational efficiency. The study seeks to test whether this relationship is significant and to assess how effective internal controls contribute to the overall FP of these firms.

2.3 Conceptual Framework

The conceptual framework described in this project defines the dependent, moderating, and independent variables within the view of the researcher. The dependent variables include: Risk assessment; Information communication; and Monitoring activities.



Source: Researcher (2022)

Figure 1: Relationship between Internal Control Systems and FP

The theoretical model utilized in this study to investigate the relationship between IS and RE of manufacturing companies listed on the NSE is provided in Figure 1. The conceptual framework highlights how ICS are essential to effectively managing current assets and current liabilities and guaranteeing their best possible usage. By strengthening internal controls, organizations can enhance resource management, minimize financial risks, and ultimately improve their FP.

A good financial performance will be archived if better internal controls are adopted by manufacturing listed under NSE. In the study, independent variables are components of internal controls namely; Risk Assessments, Information Communication and Monitoring activities. The dependent variable was the FP which was measured by profitability, liquidity and solvency. The moderator was firm size of respective firms.

Internal control activities is related to FP in a manner that if manufacturing firms are able to maintain their internal control activities at optimal level, they will not be faced with liquidity problems. This translates into better FP. Risk assessment forms an integral part of any organisation. They help to reduces chances of an incidence occurring without the know how of organisations' management. Risk assessment was assessed in comparison to the level of perceived effectiveness in existing systems to identify relevant risks, analyze them, and respond appropriately. Information communications is crucial in any organizational for it helps to foster a good relationship between you and your staff. This improves the morale and the efficiency.

Information communication was assessed considering the process of information identification, capturing, and relying on the appropriate users. Monitoring is essential to any project being undertaken. This is a process that involves collection and analysis of statistics to check whether an organizational is running towards its desired goals. Monitoring activities ensured that there is efficient utilization of firms resources and identification of problems early enough which will help the management to adjust to avoid any predicaments. Monitoring activities was looked into from the angle of quality of operational performance, reporting, and legal compliance. The effect of firm size as a moderator was measured using a logarithm of the firm's total assets to identify which firms are larger and assess the effect of such changes in size.

Table 2: Operationalization of study variables

Variable	Type	Indicator	Measurement
Risk Assessment	Independent	➤ Risk Identification ➤ Risk Analysis ➤ Risk Response	5-point Likert scale
Information Communication	Independent	➤ Information identification ➤ Capturing ➤ Relaying	5-point Likert scale
Monitoring activities	Independent	➤ Operational performance quality ➤ Reporting performance quality ➤ Legal performance quality	5-point Likert scale
Firm size	Moderating	➤ Natural log of total assets ➤ Profitability ➤ Liquidity	Log of Assets 5-point Likert scale
FP	Dependent	➤ Solvency	

CHAPTER THREE

METHODOLOGY

3.1 Location of Study

Kenya was selected for the study because it has the most active stock market in East and Central Africa. Specifically, manufacturing firms registered on the Nairobi Stock Exchange (NSE) were considered. The NSE is situated at $1^{\circ} 17' 11.0004''$ S, $36^{\circ} 49' 2.0028''$ E.



Figure 2: Map of Nairobi County

3.2 Research Design

Because it adheres to the research methodology and aids in providing sufficient answers to the research questions, the study used a descriptive survey design. Lune and Berg (2017) emphasized the need to choose a research design that complements the methodology. A descriptive survey design is suited to describing more than one variable and explaining the variability in each factor (Rahi, 2017). The proposed descriptive survey design applied in this study because it helped the investigator to explain the effect of each study variable. For example, the design was ideal for collecting data to

assess how risk evaluation, information communication, monitoring activities, and firm size impact internal controls and the FP of manufacturing firms listed on the Nairobi Securities Exchange in Kenya. It also made it possible to examine how these variables worked together. Additionally, the researcher was able to do descriptive data analysis and clearly and methodically convey the results thanks to the descriptive survey design.

3.3 Study Population

Employees in the finance and auditing departments of manufacturing companies listed on the Nairobi Security Exchange in Kenya comprised the study's target demographic. Nine companies in the manufacturing and related industries were listed on the NSE as of April 2022, and 307 employees worked in the finance and audit departments, respectively (NSE, 2022).

Table 3: Study Population

Company	Ticker	Finance		Total
		Dept	Audit Dept	
BOC Gases	BOC	16	7	23
British American Tobacco	BAT	34	16	50
Carbacid Investments	CARB	12	6	18
East Africa breweries Ltd	EABL	62	18	80
Unga Group ltd	UNGA	25	11	36
Orchard Funding Group PLC	ORCH	5	0	5
Flame Tree Group	FTGH	32	11	43
Mumias Sugar Co. Ltd	MUMIAS	18	12	30
Eveready East Africa Ltd	EVEREADY	14	8	22
TOTAL		218	89	307

Source (Respective firm 's websites)

3.4 Sampling Procedures and Sample Size

A multistage sampling strategy was employed in this study. Seven manufacturing companies that were active during the study period and listed on the NSE were purposefully chosen for the first stage. In the second phase, 93 workers from the audit and finance divisions of these seven companies were chosen using a stratified proportionate simple random selection technique. For a descriptive survey, a sample of

thirty percent of the population is sufficient (Mugenda Mugenda, 2008). The sample frame, which includes all seven publicly traded companies in Kenya's manufacturing and related industries, is displayed in Table 4..

Table 4: Sample Frame

Company	Ticker	Population		Sample Proportionate			
		Finance Dept	Audit Dept	Total	Finance Dept	Audit Dept	Total
BOC Gases	BOC	16	7	23	8	4	12
British American Tobacco	BAT	34	16	50	11	5	16
Carbacid Investments	CAR	12	6	18	4	3	7
East Africa breweries ltd	EA	62	18	80	22	5	27
Unga Group ltd	UNGA	25	11	36	8	5	13
Orchard Funding Group PLC	ORCH	5	0	5	3	0	3
Flame Tree Group	FTGH	32	11	43	10	5	15
TOTAL		186	69	255	58	19	93

Source (Respective firm 's websites)

3.5 Research Instruments

This suggested study collected primary and secondary data for analysis using a structured questionnaire and a checklist, respectively. A structured questionnaire with closed-ended questions was the most effective way to collect survey data (Ponto, 2015). It was intended to include several items that reflected the study's objectives and contributing variables. The questionnaire's first section collected each respondent's

initial personal information, including age, gender, experience, and educational attainment. This information was fundamental in understanding and comparing different subgroups of the target population participating in this study. The research questions was fully addressed by filling in the questionnaire.

Awang et al. (2016) demonstrated how to use a 5-point Likert scale to statistically assess a statement's strength or intensity toward a variable. To express their level of agreement with the statements on the questionnaire, respondents could choose Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, and Strongly Disagree. Public financial statements provided the secondary data used to calculate the firm size.

3.6 Piloting

In addition to the main study, a pilot study was conducted on a number of companies listed on the Nairobi Securities Exchange. This initial investigation was carried out at Brookside Kenya and Bamburi Cement. It made it possible for the researcher to assess the instrument's correctness and rule out any discrepancies found in the primary study.

3.6.1 Validity

Taherdoost (2016) defines an instrument's validity as the degree to which it accurately measures what it was intended to measure. This study emphasized content validity to ensure the instrument assesses the variables comprehensively. This emphasis ensured that the instrument gathered relevant and valid data, enabling the drawing of accurate conclusions. The main focus was to effectively answer the research questions. While it may be difficult to be statistically determined to what extent the questionnaire was reliable, the instrument was reviewed in consultation of the supervisors as experts to improve it further by considering pertinent issues that would be found after the pilot study.

3.6.2 Reliability

According to Taherdoost (2016), the instrument's reliability is determined by its capacity to convey consistent findings from several testing. They imply that a trustworthy tool can be applied to several groups with comparable traits and still yield consistent findings. The results were anticipated to be consistent because the pilot study

evaluated a cohort with similar characteristics to the main study population. An extension of the Kuder-Richardson Formula (KR-20) test, the Cronbach's alpha (α) test was used to determine the reliability of the research questionnaire. If the alpha coefficient is higher than 0.7 ($\alpha > 0.7$), the instrument should be accepted; if not, it should be rejected (Mhembere, 2020).

3.7 Ethical Consideration

One of the ethical considerations in research is ensuring that no one is hurt in any way. This investigation ensured that the data collection process was non-invasive. The questionnaires were designed solely for academic purposes and to collect data for this study. Prior to data collection, the researcher additionally received a study permit from NACOSTI, an introductory letter from the institution, and an authorization letter from the institution Ethics Committee. The author also asked the seven manufacturing companies that were the focus of the study for permission to use the material, assuring the response that it would only be used for academic purposes. The researcher also ensured that the respondents were concealed.

3.8 Data Collection Procedures

Survey method with structured questionnaires was used for data collection purposes, as outlined in the research instrument section above. The questionnaires was self-administered to 93 finance department and audit department employees identified from the manufacturing firms listed in the NSE. The identified respondents responded to the questionnaires and sent back the filled questionnaires to the researcher via email. This process was expected to be completed in 2 weeks, after which, the data gathered was ready for analysis.

3.9 Data Analysis

Data was analyzed using SPSS version 22.0, and the results were displayed using both descriptive and inferential statistics. Particularly in the preliminary phase, descriptive statistics were helpful in characterizing the respondents. The impact of the independent variable on the dependent variable was estimated inferentially using probability forecasting. Regression analysis, correlation, and ANOVA were used.

3.9.1 Model Specification

The researcher used simple and multiple linear regression model to look at the effect of the ICS on the FP of manufacturing firms listed on NSE Kenya. The following models were used.

Model 1: $Y = \beta_0 + \beta_1 X_1 + \varepsilon$ for testing risk assessment controls

Model 2: $Y = \beta_0 + \beta_2 X_2 + \varepsilon$ for testing information communications controls

Model 3: $Y = \beta_0 + \beta_3 X_3 + \varepsilon$ for testing monitoring activities

Model 4: $Y = \beta_0 + \beta_1 \ddot{X} + \beta_2 Z + \beta_3 \ddot{X} \cdot Z + \varepsilon$ for testing moderating effect

Model 5: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 Z + \varepsilon$ for testing joint effect of internal controls

Where;

$Y = \text{FP}$

$\beta_0 =$ intercept of equations

$\beta_1, \beta_2,$ and $\beta_3 =$ regression co-efficient

$X_1 =$ risk assessment

$X_2 =$ information communication

$X_3 =$ monitoring

$\ddot{X} =$ composite effect of internal control factors

$Z =$ moderating variable (firm size)

$\varepsilon =$ error terms

3.9.2 Diagnostic Tests

The researcher conducted diagnostic tests comprising normality tests, heteroskedasticity tests and multicollinearity tests.

3.9.2.1 Normality Test

Furthermore, the linear regression model makes the assumption that error terms are selected from a normal distribution and have identical variance in each value. The researcher used the coefficient of skewness and descriptive statistics to assess if the data had a normal distribution. The validity of the linear regression model depends on normally distributed data, which makes the findings more reliable. To be considered normal, the skewness value must be within the acceptable range of ± 3 (Aczel & Sounderpadian, 2002).

3.9.2.2 Multicollinearity

A considerable degree of correlation between two or more independent variables in a multiple regression model is referred to as multicollinearity in statistics (Daoud, 2017; Shrestha, 2020). When the correlation is either 1 or -1, estimating the regression coefficient is challenging or inaccurate. In severe cases, multicollinearity can raise the variance of the coefficient estimates, making the model exceedingly sensitive to even little changes, even though it is usually not a serious issue. To test for multicollinearity, the researcher examined the interactions between the independent variables and searched for recurrent patterns in the regression analysis. According to Shrestha (2020), multicollinearity is likely to exist if the correlation coefficient's absolute value is close to or greater than 0.8.

3.9.2.3 Heteroscedasticity

Heteroscedasticity is the condition that arises when the variance of the error term in a regression equation differs from one observation to another. It may stem from such factors as variation in an item on two different samples or quasi-availability of an item. Heteroscedasticity influences standard errors, which impacts test statistics and confidence intervals, but it does not cause bias in coefficient estimators. The fourth condition of the conventional linear regression model, that the error terms (μ_i) must have constant variance (homoscedasticity), is broken by heteroscedasticity. The researcher employed residual plots to determine whether the residuals showed constant error variance in order to test for heteroscedasticity. The standardized residuals are plotted against the standardized anticipated values in a residual plot. When the residuals' width changes in response to changes in the anticipated values, this is known as heteroscedasticity.

3.9.3 Data Analysis Matrix

Data analysis matrix showing hypothesis, independent variables and test statistics presented in Table 5.

Table 5: Data Analysis Matrix

Hypothesis	Independent Variable	Dependent Variable	Test Statistic
H0₁: There is no significant relationship between risk assessment controls have with the manufacturing firms' financial performance, as operated in the Nairobi Securities Exchange in Kenya.	Risk Assessment	FP	t-Test
H0₂: There is no significantly influence with proprietary and communication control mechanisms do not the financial performance of manufacturing firms in Kenya as indexed by the Nairobi Security Exchange.	Information Communication	FP	t-Test
H0₃: There is no statistically significant effect of monitoring activity control on the financial performance of manufacturing firms-listed on NSE, Kenya..	Monitoring activities	FP	t-Test
H0₄: There no moderating effect on the strong relationship between the ICS and FP of manufacturing firms in the NSE, Kenya..	Firm size	FP	t-Test
H0₅: There is no statistically significant increase in the financial performance of manufacturing firms under study in Kenya after using ICS when this is tested for statistical significance..	Joint effect	FP	t-Test

The F-test was used to assess the overall significance of the model at a 5% level of significance.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Preliminary Findings

This study investigated the relationship between ICS and FP with a focus on industrial enterprises listed on the NSE Kenya. Internal control constructs included risk assessment, information exchange, and monitoring activities. Each industrial company that participated in the study had its questionnaires personally delivered by the researcher. The researcher distributed 93 questionnaires to respondents, who were distributed across all listed manufacturing enterprises; 77 of these were completed after screening and verification, resulting in an overall completion percentage of 82.8%. A 70% response rate is enough for reporting and analysis (Mugenda & Mugenda, 1999). A 77% response rate was enough for analysis, as Table 6 demonstrates.

Table 6: Response Rate

Questionnaire Status	Number of Questionnaires	Percentage (%)
Distributed	93	100
Completed and returned	77	82.8
Incomplete/not returned	16	17.2
Total Response Rate:		82.8%

Source: Researcher, 2024

93 respondents from seven industrial companies listed on the Nairobi Stock Exchange were given standardized questionnaires to complete in order to gather data. Following a two-week period of data collecting, the researcher returned to analyze the completed questionnaires and discovered that 77 of them, or 82.8%, were deemed suitable for use in the study. For analysis, interpretation, and drawing conclusions from the study's findings to meet its goals, the resulting response rate was deemed statistically acceptable (Krishnamurty, 2018).

4.2 Reliability

The reliability of the study was assessed using Cronbach's Alpha, with the results presented in Table 7.

Table 7: Reliability Test

Variable	No. of Items	Cronbach's Alpha	Comment
Risk Assessment	12	0.843	Reliable
Information Communicatio	6	0.732	Reliable
Monitoring activities	15	0.857	Reliable
FP	6	0.742	Reliable
Aggregate	39	0.769	Reliable

Source: Researcher, 2024

The results presented on Table 7 shows the overall reliable of coefficient alpha at 0.769. The variables' coefficient alpha values varies from 0.742 to 0.857 where they were above the minimum acceptable level of coefficient alpha above 0.7.

4.3 Demographic Characteristics of Respondents

The study participants' gender, age range, greatest degree of education, present department, and years of experience were among the personal details requested in the first section of the questionnaire. The demographic profile of the study participants is shown in the next subsections according to how the data collected from these items was organized and assessed.

4.3.1 Gender of Respondents

The respondents gender was analysed and the results presented on Table 8.

Table 8: Distribution of the Respondents by Gender

	Frequency	Percent	Cumulative Percent
Valid Male	43	55.8	55.8
Valid Female	34	44.2	100.0
Total	77	100.0	

Source: Researcher, 2024

Results shown in Table 8 shows that the study got data from 43 male and 34 female study participants. Contextually, the gender distribution for this study’s participants underpinned the diverse perspectives that were considered in analysing the effects of ICS on FP in this context. Specifically, the male respondents, comprising 55.8% of the sample, contributed to understanding into their historical perspectives on the interplay between ICS mechanisms and FP. Simultaneously, the 44.2% representation of female respondents ensured a balanced and comprehensive historical exploration of women’s viewpoints on the subject. This inclusive approach aligned with the principles of research diversity, which facilitated a richer understanding of the dynamics of ICS and FP of manufacturing firms.

4.3.2 Distribution of Respondents by Age

The respondents age was determined and analysed in the research and the results presented on Table 9.

Table 9: Distribution of respondents across age brackets

	Age bracket	Frequency	Percent	Cumulative Percent
	18- 27 years	16	20.78	20.78
	28-37 years	25	32.47	53.25
Valid	38-47 years	27	35.06	88.31
	48 and above	9	11.69	100.0
	Total	77	100.0	

Source: Researcher, 2024

Table 9 presents the data, which indicate that 35.06% of the respondents were between the ages of 38 and 47. Next in line were those between the ages of 18 and 27 (20.78%) and 28 and 37 (32.78%). Those above the age of 48 made up the smallest group (11.69%). These results imply that manufacturing companies are mostly using employees in the 28–47 age range, which is typically thought to be the most productive age range in terms of energy and experience.

4.3.3 Educational Attainment

The respondents' educational attainment was examined and analyzed in the study, with the results presented in Table 10.

Table 10: Educational Attainment

Education level	Frequency	Percent	Cumulative Percent
Certificate	2	2.6	2.6
Diploma	7	9.1	11.7
Bachelor's Degree	37	48.1	59.8
Masters	28	36.4	96.2
PhD	3	3.8	100.0
Total	77	100.0	

Source: Researcher, 2024

The results in Table 10 on educational attainment indicate that the majority of employees held a bachelor's degree, accounting for 48.1%, closely followed by those with a master's degree at 36.4%. The smallest group, with 2.6%, had a certificate-level education. This suggests that manufacturing firms listed on the NSE primarily employ individuals with middle to high levels of education, which supports the need for quality financial reporting.

4.3.4 Department

The respondents' department was examined and analyzed in the study, with the results presented in Table 11.

Table 11: Department of the Respondents

Department	Frequency	Percent	Cumulative Percent
Audit	17	22.1	22.1
Finance	60	77.9	100.0
Total	77	100.0	

Source: Researcher, 2024

The results in Table 11 show that the majority of respondents were from the finance department, making up 77.9%, while 22.2% were from the audit department. This indicates that most of the financial reporting and analysis work is carried out in the

finance department, which requires a larger workforce compared to the audit department.

4.3.5 Years of Experience

The respondents' years of experience were examined and analyzed in the study, with the results presented in Table 12.

Table 12: Respondents Experience in Years

Experience	Frequency	Percent	Cumulative Percent
0-4 years	17	22.1	22.1
5-9 years	21	27.3	49.4
10-14 years	24	31.2	80.6
15 years and above	15	19.4	100.0
Total	77	100.0	

Source: Researcher, 2024

According to Table 12, the largest percentage of respondents (31.2%) have between 10 and 14 years of experience, while the smallest percentage (19.4%) have 15 or more years of experience. This implies that a large number of workers in these companies have a great deal of experience, which allows them to efficiently deliver the required financial services.

4.4 Descriptive Statistics

Descriptive statistics were applied to the following variables: Risk assessment, Risk information communication, Risk monitoring and supervisory activities, FP and Firm size. A series of statements was created in order to gauge respondents' perspectives, and they were asked to score their answers on a Likert scale from 1 to 5; “Strongly Disagree” (1) to “Strongly Agree” (5), including “Disagree”(2), “Neutral”(3), “Agree”(4).

4.4.1 Risk Assessment

Descriptive statistics for Risk Assessment were considered based on indicators derived from the literature review, which included Risk Identification, Risk Analysis, and Risk Response. The results are presented in Table 13.

Table 13: Risk Assessment

Statements	N	Mean	Std. Deviation
Proper risk management processes	77	3.8442	.72665
Comprehensively documented risk management policy	77	3.9610	.73344
Effective credit risks identification processes at financial statement preparation	77	3.8961	.69933
Effective fraud risk identification processes at financial statement preparation	77	3.9610	.67749
Effective credit risks analysis processes	77	4.0519	.53548
Effective fraud risks analysis processes	77	3.9481	.66681
Effective customer risk analysis processes	77	4.1299	.69492
Effective operational risk analysis processes	77	3.9221	.66424
Effective credit risk response processes during F/S preparation	77	4.0130	.59590
Effective fraud risks response processes during F/S preparation	77	4.0649	.69467
Effective customer risks response processes during F/S preparation	77	4.0519	.72359
Effective operational risks response processes during F/S preparation	77	4.0260	.68775
Aggregate	77	3.9892	.67502

Source: Researcher, 2024

The descriptive statistics for risk assessment have an overall mean of 3.9892 and an overall standard deviation of 0.67502, according to the results in Table 13. This indicates that the majority of respondents support the organization's risk assessment procedures. The highest mean, 4.1299, indicates that many respondents agreed on the

effectiveness of customer risk analysis processes. The lowest mean, 3.8442, reflects agreement that the credit risk identification processes during financial statement preparation are also effective.

With some respondents agreeing and some disagreeing with the risk assessment methods in place, the aggregate standard deviation of 0.67502 indicates that there is little diversity in the responses. According to the maximum standard deviation of 0.73344, there was substantial disagreement with the assertion that "There is a comprehensively documented risk management policy." The smallest standard deviation, however, of 0.53548, suggests that few respondents didn't agree with the assertion that "There are effective credit risk analysis processes." According to the responses obtained, the descriptive statistics indicate that the risk assessment procedures and policies in place are generally thought to be effective.

4.4.2 Information Communication

Descriptive statistics for information communication were considered based on indicators derived from the literature review, which included identification, capturing, and relaying of information. The results are presented in Table 14.

Table 14: Information communication

Statements	N	Mean	Std. Deviation
Functional information communication channels	77	4.0779	.64413
“Suggestion Boxes” are present for obtaining sensitive information	77	4.2468	.65204
Whistleblowing is established and it is an effective approach to getting crucial information to curb corruption cases	77	4.1558	.60838
There are online channels to obtain sensitive information for management to act	77	3.9870	.67849
There are existing policies on information communication addressing compliance issues relating to finances	77	3.9610	.67749

There is a clear segregation of duties for various financial roles	77	3.9870	.69762
Aggregate	77	4.0625	.65969

Source: Researcher, 2024

The results in Table 14 show the responses on information communication. The aggregate mean was 4.0625, indicating that the majority of respondents agreed that the firms have clear policies regarding information communication. The highest mean, 4.2468, reflects broad agreement that "Suggestion Boxes" are in place for gathering sensitive information. The lowest mean, 3.9610, still shows general agreement that policies on information communication effectively address compliance issues related to finances.

These findings suggest that most employees believe the measures in place for information communication are sufficient for ensuring good FP in manufacturing firms listed on the NSE. The aggregate standard deviation of 0.65969 indicates minimal variance in responses, meaning the majority of respondents had similar views regarding the communication measures. The highest standard deviation, 0.69762, suggests some disagreement with the statement, "There is a clear segregation of duties for various financial roles." The lowest standard deviation, 0.60838, indicates less variation in responses to the statement, "Whistleblowing is established and an effective approach to addressing corruption cases." Overall, the results suggest that the information communication methods implemented by the firms are largely agreed upon by the respondents and should be maintained to support effective financial management.

4.4.3 Monitoring Activities

Descriptive statistics for monitoring activities were considered based on indicators derived from the literature review, which included operational performance quality, reporting performance quality, and legal performance quality. The results are presented in Table 15.

Table 15: Monitoring Activities

Statements	N	Mean	Std. Deviation
Robustness of mechanism for ensuring no lapses in financial records	77	3.9351	.63531
A functional internal audit unit in the company	77	4.0519	.64678
Autonomy of the internal audit functions with resources for performing its duties	77	3.9870	.65882
The audit process follows proper timing	77	4.0649	.59245
Internal audit manual assist the execution of the audit processes	77	3.8831	.70662
Timely completion of all internal and external audits	77	3.7922	.63531
Irregularities are directly escalated to top management	77	3.9091	.67242
Accreditation status of the audit personnel	77	3.8571	.70177
Efficient and effective internal audit unit processes in detection and prevention of fraud	77	3.7662	.68626
Recommendations of the internal audit unit are taken seriously	77	3.7922	.63531
Objective and professional internal auditor(s) conduct	77	3.9481	.72359
Assures management team on addressing internal audit issues	77	3.5455	.71718
The audit committee are part of the internal audit department	77	3.4156	.86375
The head of the internal audit directly reports to the Chief Executive Officer	77	3.6883	.78237
Established mechanisms and procedures for addressing financial non-compliance issues	77	3.4545	.98067
Aggregate	77	3.8059	.70431

Source: Researcher, 2024

The majority of respondents agreed with the assertions pertaining to monitoring activities, as evidenced by the monitoring activities' aggregate mean of 3.8059 in Table 15. Strong agreement that the audit procedure adheres to appropriate timing is indicated by the highest mean, 4.40649. The statement that the audit committee is a part of the internal audit department was neither agreed nor disagreed with by the majority of respondents, according to the lowest mean (3.4156).

The overall standard deviation of 0.7043 suggests that there was some diversity in the respondents' views about how monitoring efforts affected the financial performance of companies listed on the NSE. The highest standard deviation, 0.98067, suggests that there was significant disagreement with the statement, "There are established

mechanisms and procedures for addressing financial non-compliance issues." The lowest standard deviation, 0.59245, shows that fewer respondents disagreed with the statement, "The audit process follows proper timing." The descriptive statistics suggest that the monitoring activities in place have the potential to positively impact the FP of manufacturing firms listed on the NSE, though there is some variability in respondents' opinions.

4.4.4 FP

Descriptive statistics for FP were considered based on indicators derived from the literature review, which included profitability, liquidity, and solvency. The results are presented in Table 16.

Table 16: FP

Statements	N	Mean	Std. Deviation
Our company has consistently met or exceeded its profitability targets over the past three years	77	3.8312	.78477
Our return on equity (ROE) is higher than the industry average	77	3.3636	.87222
We have sufficient cash flow to meet our operating expenses and debt obligations	77	3.6494	.85480
Our current ratio is well above the industry benchmark	77	3.6883	.89236
Our debt-to-equity ratio is within a reasonable range	77	3.6104	.78062
We are able to meet our long-term financial obligations	77	3.4935	.73670
Aggregate	77	3.6061	.82025

Source: Researcher, 2024

Table 16 presents the results of the descriptive statistics for FP, with an aggregate mean of 3.6061, indicating that most respondents slightly agreed that the firms performed well financially. The highest mean, 3.8312, suggests that many respondents agreed their company has consistently met or exceeded its profitability targets over the past three

years. The lowest mean, 3.3636, indicates that some respondents neither agreed nor disagreed with the statement that the return on equity (ROE) is higher than the industry average.

The aggregate standard deviation of 0.82025 shows variability in the responses, meaning some respondents agreed while others disagreed with the FP statements. The highest standard deviation, 0.89236, indicates significant disagreement with the statement, "Our current ratio is well above the industry benchmark." The lowest standard deviation, 0.73670, shows less variation in responses to the statement, "We are able to meet our long-term financial obligations." The overall results suggest some level of agreement regarding the FP of the firms, though there is noticeable variation in how respondents perceive different aspects of FP.

4.4.5 Firm Size

Descriptive statistics for firm size were considered based on indicators derived from the literature review, which included the log of total assets. The results are presented in Table 17.

Table 17: Firm Size

	N	Minimum	Maximum	Mean	Std. Deviation
Boclog	5	21.34	28.30	22.7688	3.09180
BATlog	5	23.17	30.55	24.7687	3.23326
EABLlog	5	29.57	31.86	30.4726	1.00128
CarLlog	5	21.38	28.73	22.9324	3.24479
OrchardsLlog	5	25.06	25.72	25.3253	.32190
FlameLlog	5	27.76	28.89	28.4672	.43076
UngaLlog	5	29.93	30.12	29.9887	.07810
Aggregate	5	25.46	29.17	26.3890	1.62884

Source: Researcher, 2024

The results of Table 17 indicates that aggregate mean of the firm size in terms of log of total assets is 26.3890. The firm with the highest mean was EABL with a mean of 30.4726 over the 5 years of study and the firm with the least mean was BOC with a mean of 22.7688. The aggregate standard deviation was 1.62884 showing that the log of total assets varied differently in all the firms across the 5 years of study. Meaning there was drastic changes in number assets over the 5 years of study in all the manufacturing firms listed on NSE. The highest standard deviation was 3.24479 meaning that the figures of CarL total assets varied mostly across the 5 years of study and the lowest standard deviation was 0.07810 meaning that assets of UngaL varied least over the 5 years of study.

4.5 Diagnostic Tests

To ascertain whether the data deviated from the Ordinary Least Squares method's presumptions, diagnostic tests were carried out. In particular, tests for heteroscedasticity, multicollinearity, and normality were conducted.

4.5.1 Normality Test

To find out if the data was regularly distributed, a normality test was performed. To evaluate the data's normalcy, the researcher employed skewness statistics. The data is considered regularly distributed if the skewness value falls between -3 and +3 (Aczel & Sounderpadian, 2002). Table 18 displays the findings of the skewness statistics..

Table 18: Normality test results

Varibales	N	Skewness statistics	Std. Error of Skewness
Risk_Ass	77	-.385	.274
Info_Comm	77	.070	.274
mon_Act	77	-.085	.274
FP	77	-.628	.274
Log(Firm Size)	77	-.400	.274

Source: Researcher, 2024

The skewness results represented on Table 18 indicate that risk assessment, information communication, monitoring activities, FP and log of firm size were -0.385, -0.070, -0.085, -0.628 and -0.400 all falling within the accepted range of -3 and +3 hence, all the variables were normally distributed and fit for analysis using linear regression models.

4.5.2 Multicollinearity Tests

To find out whether the predictor variables were related in any way, a multicollinearity test was used. The econometric model's multicollinearity was evaluated using the Variance Inflation Factor (VIF). Multicollinearity is absent when the VIF value is less than 10, and it is present when the VIF value is larger than 10.

Table 19: The results of Multicollinearity

Model	VIF
(Constant)	
Risk_Ass	1.499
Info_Comm	1.280
mon_Act	1.665

Source: Researcher, 2024

According to the findings in Table 19, the VIFs for monitoring, information sharing, and risk assessment were 1.665, 1.280, and 1.499, respectively. There was no problem with multicollinearity among the independent variables, as indicated by the fact that all of the VIF values were less than 10. Consequently, the data can be analyzed with linear regression models.

4.5.3 Heteroscedasticity Tests

The study used residual plots and ocular inspection to determine whether heteroscedasticity was present. A graphical depiction of regression-standardized residuals in relation to regression-standardized predicted variables (observed values) is called a residual plot.

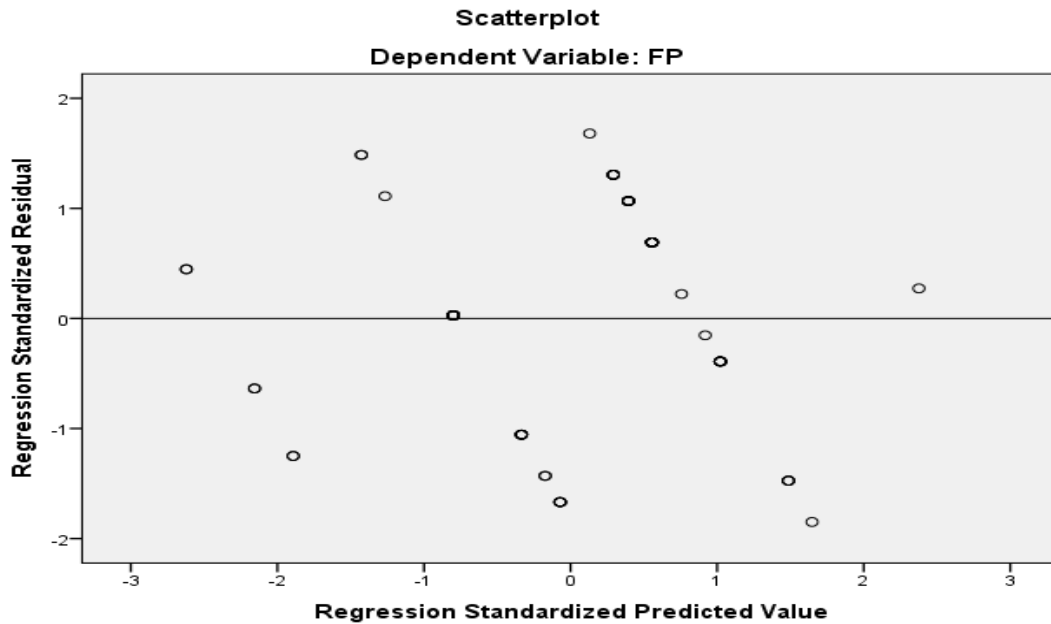


Figure 3: The results of heteroscedasticity test

Source: Researcher, 2024

The heteroscedasticity test results are shown in Figure 3. When there is no discernible pattern in the distribution of the residuals, heteroscedasticity is deemed to be missing. Heteroscedasticity in the data is not a problem, as shown by the results in Figure 3, which show no clear pattern in the residuals' distribution.

4.6 Correlation Analysis

Since determining the direction and strength of the relationship between the independent and dependent variables was the aim of this investigation, a correlation coefficient test—the Pearson product moment correlation—was used. Correlation coefficients, which can range from -1 to +1 at a 5% significance level, reveal the nature of the link.: When +1 is selected as the outcome, -1 is selected as the ideal negative result, and 0 is selected as the measure of no correlation, casting +1 is said to have a perfect positive correlation. Weak positive correlation is indicated by correlation values between 0.1 and 0.3, and weak negative correlation is indicated by correlation values between -0.1 and -0.3. Where the value is between 0.3 and 0.7 there is positive but low correlation and where the value is between -0.3 and -0.7 than there is negative low correlation. The results of the analysis carried out in this study are presented in Table 20.

Table 20: Correlation analysis results

		FP	Risk_Ass	Info_Comm	mon_Act	
Spearman's rho	FP	Correlation	1.000			
		Coefficient				
		Sig. (2-tailed)	.			
		N	77			
	Risk_Ass	Correlation	.720**	1.000		
		Coefficient				
		Sig. (2-tailed)	.000	.		
		N	77	77		
	Info_Comm	Correlation	.630**	.310**	1.000	
		Coefficient				
		Sig. (2-tailed)	.000	.006	.	
		N	77	77	77	
	mon_Act	Correlation	.773**	.516**	.411**	1.000
		Coefficient				
		Sig. (2-tailed)	.000	.000	.000	.
N		77	77	77	77	

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Researcher, 2024

Pearson correlation statistics and results are summarized on the data collected in table 20 below. The obtained figures for risk assessment and FP exhibit a positive correlation of 72% being statistically significant ($r = 0.720$, $p = 0.000 < P = 0.01$). Moreover, the value of the correlation coefficients for information communication with FP is also 0.630 with percent of agreement of 63% and significant at 0.000 less than 0.01 ($p < 0.01$). These results are consistent with those who were established by Rapani & Malim (2020) where there is a positive correlation between information communication and FP.

Additional results show that monitoring activities also had a positive correlation coefficient of 0.773 and it is also statistically significant ($\text{sig.} = 0.000 < P = 0.01$). However, these findings contradict the study by Korir, Naibei, and Langat (2022), which established that the risk assessment, information communication, and monitoring activities each had a very weak positive and insignificant correlation with FP. The differences could be attributed to the varying nature of operations between the entities studied. While the authors of the previous studies focused on banking firms, this study specifically examined manufacturing companies.

4.7 Regression Analysis

Finding out how internal control operations impact FP at a bank was the aim of the study. Key elements of internal control systems, such as risk assessment, information sharing, and control activities, were defined with the aid of an analysis of the body of existing literature.

4.7.1 Regression Analysis for Risk Assessment and Financial Performance

The study's primary goal was to ascertain how risk assessment controls and the financial performance (FP) of Kenyan manufacturing firms listed on the NSE relate to one another. The literature review identified key components of risk assessment: These three tasks risk response, risk analysis, and risk identification are crucial. A hypothesis (**H0₁**) was developed to investigate the connection between FP and risk assessment.

H0₁: There is no statistically significant effect of risk assessment controls on the FP of manufacturing firms listed on the Nairobi Securities Exchange, Kenya.

In order to examine this hypothesis, the simple regression analysis was carried out between risk assessment and FP. The statistical analysis results of this study is summarized in Table 21 The model summary, overall model significance and predictor importance are given in Table 21(a), 21(b) and 21(c) respectively.

Table 21: Risk Assessment and FP

Table 21 (a) Model Summary for Risk Assessment and FP

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.761 ^a	.580	.574	.431

a. Predictors: (Constant), Risk_Ass

Table 21 (b) Overall Significance of the Model for Risk Assessment and FP.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.259	1	19.259	103.451	.000 ^b
	Residual	13.962	75	.186		
	Total	33.221	76			

a. Dependent Variable: FP

b. Predictors: (Constant), Risk_Ass

Table 21 (c) Individual Significance of the Model for Risk Assessment and FP.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	.663	.281		2.356	.021
	Risk_Ass	.813	.080	.761	10.171	.000

a. Dependent Variable: FP

Source: Researcher, 2024

Financial performance and risk assessment results are efficiently positively correlated (FP = 0.761), as shown in table 21(a). The relevance of risk assessment to the financial performance of manufacturing firms listed on the NSE is confirmed by the fact that risk assessment has a 58% impact on the firms' financial performance. This means that that other factors account for the remaining 42% of the variability in FP not captured in this model. This finding supports the notion that enhancing risk assessment processes can lead to better FP in manufacturing firms, aligning with previous studies, such as Abiodun (2020), which also found that risk assessment procedures positively affected firm performance in Nigeria.

The model used to predict FP based on risk assessment controls has an excellent fit, as shown by the ANOVA findings in Table 21(b) ($F = 103.451$, $p = 0.000$, < 0.05). Given that the significance level of 0.000 is below the 5% threshold, the model is statistically significant and can be used to forecast FP in the context of manufacturing businesses listed on the NSE.

Additional analysis in Table 21(c) indicates that, when all other factors are held constant, the baseline is 0.663. A significant threshold of 0.000 ($p < 0.05$) indicates that the impacts of risk assessment on financial performance (FP) can be considered with an acceptable degree of confidence and at a 95% confidence level. The conclusion derived from these results provides strong evidence that risk assessment controls have an impact on the financial performance of industrial firms that are listed on the NSE.

The null hypothesis (H_0), which proposed that there is no meaningful connection between risk assessment controls and the FP of manufacturing companies listed on the NSE, was disproved in light of the results of the following hypothesis testing. The study comes to the conclusion that risk assessment negatively affects these companies' financial performance. Consequently, it is believed that improved risk assessment practices lead to improved financial performance for NSE-listed manufacturing companies. Additionally, the coefficient of beta is 0.813, indicating that a 1% increase in risk perception results in a 0.813% improvement in performance. Therefore, $Y = 0.663 + 0.183RA + \varepsilon$ is the definition of a simple linear regression.

$Y = FP$

0.663 = constant

0.183 = regression coefficient of risk assessment

RA = Risk Assessment

E = error term

The results findings addressed the concern of the study by showing that risk assessment affects the FP significantly. The researcher viewed that the findings indicate importance of risk assessment in improving the FP of an organisation. This is also supported by the

descriptive statistics that showed better risk assessment methods are critical in any organisation.

The results are also in favour of agency theory which was formulated by Jansen and Mickling in 1976 to explain that principals and agents have conflicting interests that result in the agency problem. The agency theory refers to capital owners or shareholders of a firm while the agents depict managers tasked with the responsibility of running the firm on behalf of the shareholders. This study argues that conflicts arise between the principals and the agents or the managers due to factors such as incompetence, fraud, or vested interests in running the company. Similarly, management could be running the firms against the wish of the shareholders thereby failing to institute effective internal control systems. Such severe decisions could lead to such firms failing to attain their financial goals due to poor performance. In this theory, managers and supervisors acts as agents to shareholders of manufacturing firms. These managers and supervisors takes a vital role in decision making of these firms. The shareholders are the financiers of capital and they expect maximization of their profit from the invested capital. Managers and supervisors provide knowledge and skills and human capital required. In exchange to this, managers and supervisors expect better remuneration and good working conditions. Later, customers purchase products or services hence providing a source of income.

These findings are in line with earlier research; Abiodun (2020) showed how risk assessment procedures affect the performance of companies in southwest Nigeria; Bett and Memba (2017) investigated the effect of risk assessment on the performance of processing companies in Kenya; Korir, Naibei, and Lydia (2022) investigated the impact of risk assessment controls on the financial performance of a select group of banks in Bomet and Kericho County; and finally, Ntongo.

4.7.2 Regression Results for Information Communication and Performance

The second research purpose was to determine the relationship between information communication and the financial performance of industrial enterprises listed on the Kenyan Stock Exchange (NSE). Identification, capturing, and relaying are the three essential components of information communication, according to the literature. These

pieces were used to create Hypothesis H02, which examined the connection between FP and information communication.

H02: There is no statistically significant effect of information communication controls on the FP of manufacturing firms listed on the Nairobi Securities Exchange, Kenya.

To test **H02** a simple regression analysis against FP and information communication was carried out and the results thereof presented on Table 22. The model summary, overall significance of the model and individual significance of the model are presented in Tables 22(a), 22(b) and 22(c) respectively.

Table 22: Regression Results for Information Communication and FP.

Table 22(a) Model Summary for Information Communication and FP

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.643 ^a	.414	.406	.510

a. Predictors: (Constant), Info_Comm

Table 22(b) Overall Significance of the Model for Information Communication and FP

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.748	1	13.748	52.950	.000 ^b
	Residual	19.473	75	.260		
	Total	33.221	76			

a. Dependent Variable: FP

b. Predictors: (Constant), Info_Comm

Table 22(c) Individual Significance of the Model for Information Communication and FP

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error			
			Beta		

	(Constant)	1.420	.289		4.912	.000
1	Info_Comm	.592	.081	.643	7.277	.000

a. Dependent Variable: FP

Source: Researcher, 2024

As indicated in table 22(a) above, 64.3% (R = 0.643) of the variability in information communication may be accounted for by financial performance (FP). Information transmission explained 41.4 percent of the variation of FP, with other factors outside the model accounting for 58.6 percent, according to the R-squared value of 0.414. This implies that the financial success of industrial enterprises listed on the NSE is significantly impacted by communication. Presumably, it is feasible to increase contact within these businesses to the point where it improves their financial results. These findings support the study done by Ahmed & Nganga (2019) whose research topic focused on the impact of information communication on organizational performance based on county governments.

From the analysis in Table 22(b), the overall measure of how well the model fits in predicting performance reveals that information communication is reliable in its prediction of financial performance for listed manufacturing firms on the NSE as $F = 52.95$ $p = 0.000 < \alpha = 0.05$.

The baseline performance is 1.42 units when all other factors are maintained constant, as indicated by the coefficient results in Table 22(c). Additionally, information communication has a beta coefficient of 0.592, meaning that a one-unit change in information communication results in a 0.592 change in FP. This offers a basic model for linear regression:

$$Y = 1.42 + 0.592(IC) + \varepsilon.$$

Where

Y= FP

1.42= a constant

0.5921= regression coefficient of Information Communication

IC= Information Communication

E= error term

The null hypothesis (**H0₂**), It is rejected because the calculated p-value is 0.000, which is below the 0.05 significance level, and it shows that information communication regulations have no appreciable effect on the financial performance (FP) of manufacturing companies listed on the Kenyan Stock Exchange (NSE). Consequently, there is evidence that knowledge exchange significantly affects FP.

By showing that information sharing significantly contributes to FP improvement, the study's findings answer the main research issue. The study emphasizes how crucial it is for a business to have efficient channels of communication in order to improve its financial performance. This is supported by the descriptive statistics, which show that firms with robust communication systems perform better financially.

Furthermore, these results align with systems theory, proposed by Ludwig von Bertalanffy in 1940 and further developed by Ross Ashby in the 1950s. Systems theory explains that organizations are complex systems made up of interrelated and interdependent parts. Each part works together to achieve the organization's overall goals. This theory emphasizes the complexities organizations face as they grow and illustrates how every unit within the organization plays a vital role in the larger system. The theory is also used to highlight the importance of the organizational environment, showing that both internal and external inputs are crucial for the system's functioning. This idea highlights how crucial it is to recognize, record, and effectively communicate information at all organizational levels in the context of information communication. This process gets more complicated as businesses expand, necessitating efficient information sharing across departments to accomplish shared goals.

The findings are consistent with other studies by Ahmed and Nganga (2019) on how information communication affects the performance of Kenyan county governments and Asiligwa & Rennox (2017) on how ICS affect the performance of Kenyan commercial banks, and Rapani & Maalim (2020) on the role of information communication as a mediator on Iraqi banks' financial performance. All these studies

denied the fact that communication is useful in improving performance of the organization and this finds support in this study.

4.7.3 Regression Results for Monitoring Activities and Financial Performance

The third objective of the research was concerned with establishing the relationship between monitoring activities and FP among the manufacturing firms listed on NSE, Kenya. Based on our literature review, we identified the following components of monitoring activities: , that includes the operational performance quality of the company, reporting performance quality and finally the legal performance quality. Hypothesis **H03** was formulated to test the-monitoring activities- FP nexus in the hypothesis testing process.

H03: There is no statistically significant effect of monitoring activity controls on the FP of manufacturing firms listed on the Nairobi Securities Exchange, Kenya.

A straightforward regression analysis was performed against FP and monitoring activities in order to evaluate hypothesis **H03**. Table 23 displayed the findings. Table 23(a), 23(b), and 23(c) display the model summary, overall significance of the model, and individual significance of the model. Correspondingly.

.Table 23: Regression findings for Monitoring Activities and FP

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.797 ^a	.634	.630	.402

a. Predictors: (Constant), mon_Act

Table 23(b) Overall Significance of the Model for Monitoring Activities

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	21.078	1	21.078	130.192	.000 ^b
	Residual	12.143	75	.162		
	Total	33.221	76			

a. Dependent Variable: FP

b. Predictors: (Constant), mon_Act

Table 23(c) Individual Significance of the Model for Monitoring Activities

Model	Unstandardized Coefficients		Standardized	T	Sig.
	B	Std. Error	Coefficients		
1	(Constant)	1.032		4.701	.000
	mon_Act	.725	.797	11.410	.000

a. Dependent Variable: FP

The findings in Table 23(a) indicate a strong positive correlation of 79.7% ($R = 0.797$) between monitoring activities and performance. Additionally, the R-squared value is 0.634, meaning that 63.4% of the changes in performance can be attributed to the monitoring activities. The remaining 36.6% of variations in FP was triggered by other aspects not included in this model. The results means that monitoring activities affected FP of manufacturing firms listed on NSE and therefore, improvement in monitoring activities would result into improved FP of manufacturing firms listed on NSE. These results are in support of previous works such as Muhunyo and Jagongo (2018) who established the effect of monitoring and FP established a significant relationship.

Results show in Table 23(b) there is satisfactory goodness of fit between monitoring activities and FP of manufacturing firms listed on NSE ($F=130.192$, $p = 0.000 < \alpha = 0.05$). This suggests that the suggested model for prediction of FP of manufacturing firms listed on NSE using monitoring activities as independent variable was appropriate for prediction purposes.

Coefficient results shown in Table 23(c) shows that performance was naturally occurring at 1.032 units as shown by the constant element. Beta coefficient is 0.725, meaning a unit increase in monitoring activities led to 0.725 units rise in performance and is statistically significant. A simple linear regression takes the form;

$$Y = 1.032 + 0.725M + \varepsilon.$$

Where;

Y=Financial Performance

1.032= constant

0.725= regression coefficient of monitoring activities

M= Monitoring Activities

E= error term

Monitoring efforts are therefore found to have a statistically significant effect on performance and rejects **H0**: The financial performance of industrial enterprises listed on the Kenyan Stock Exchange is not statistically affected by monitoring activity regulations. The results showed that monitoring efforts have a significant impact on FP, allaying the study's concerns. The study's conclusions highlight how crucial activity monitoring is to raising an organization's FP. This was supported by the descriptive statistics that organisations set up better monitoring activities for better performance.

The findings are consistent with the institutional theory, which was first put forth by John Meyer and Brian Rowan in the late 1970s. The idea holds that social structures with a high level of resilience are institutions. To generate a meaningful social existence, institutions consist of normative, regulative, and cultural-cognitive elements that collaborate with pertinent resources and activities. Ebrahimi and Koh (2021) applied this theory alongside the life-cycle concept to illustrate how manufacturing firms grow to become big institutions. They recognized the role of structures and formal organizations in achieving growth. Formal organizations have structures and authorities clearly defined and individuals have responsibilities as well as obligations. Formal organizations have ways of ensuring they are in agreement with the set rules to ensure the stability of organizations. In the context of listed firms in Kenya, there are specified rules for publishing financial statements and auditors' reports to the public. These accounting documents are supposed to be of high quality and show the stability of the institution. It means that strong ICS are instituted in such established firms to mitigate risks of losses as the goals of ICS in any company. Considering that monitoring activities are crucial in ensuring organizations attain the desired compliance threshold and ICS objective achievement.

These results are in tandem with prior research works like that of Muhunyo and Jagongo (2018), who established that monitoring activities significantly correlated with FP. Similarly, using data on firms listed on the Nigerian Stock Exchange, Odunko (2022) also found monitoring to have a significant effect on the performance of Nigerian firms. On the other hand, unlike Ibrahim's (2017) assertion, this study revealed that excessive or restrictive monitoring avertments, had no negative impact of FP of health care organisations.

4.7.4 Regression Results for Moderation Effect of Firm Size on Relationship Between Internal Control Systems and Financial Performance.

The study aimed to ascertain the impact of company size on the internal control systems and financial performance of manufacturing firms listed on the Kenyan National Stock Exchange (NSE). The log of assets was used as the construct for business size, per the literature research. The following was the hypothesis that was examined:

H04: There is no statistically significant moderating effect of firm size on the relationship between the internal control systems and FP of manufacturing firms listed in the Nairobi securities exchange, Kenya.

4.7.4.1 Regression Results for Moderating Effect of the Firm Size on the Relationship Between Risk Assessment and Financia Performance

The study also aimed to compare how closely large and small businesses' financial performance and risk assessment relate to one another. Table 24 displays the findings of this investigation. Table 24(a), 24(b), and 24(c) present the model summary, the model's overall significance, and the model's individual significance, respectively.

Table 24: Regression Results for Moderation Effect for Firm Size on the Relationship Between Risk Assessment and FP.

Table 24(a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.761 ^a	.580	.574	.431
2	.766 ^a	.587	.570	.434

a. Predictors: (Constant), RAF, Log(Firm Size), Risk_Ass

Table 24(b) Overall Significance of the Model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.259	1	19.259	103.451	.000 ^b
	Residual	13.962	75	.186		
	Total	33.221	76			
2	Regression	19.501	3	6.500	34.587	.000 ^b
	Residual	13.720	73	.188		
	Total	33.221	76			

a. Dependent Variable: FP

b. Predictors: (Constant), RAF, Log(Firm Size), Risk_Ass

Table 24(c) Individual Significance of the Model

Model		Unstandardized Coefficients		Standardized	T	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	.663	.281		2.356	.021
	Risk_Ass	.813	.080	.761	10.171	.000
2	(Constant)	1.507	3.201		.471	.639
	Risk_Ass	.753	.896	.706	.841	.403
	Log(Firm Size)	-.085	.330	-.110	-.256	.798
	RAF	.005	.093	.052	.057	.954

a. Dependent Variable: FP

Source: Researcher, 2024

Under the moderating influence of company size, the correlation between risk assessment and performance is 76.6%, which is somewhat higher than 76.1%, according to Table 24(a). According to additional findings, the coefficient of determination marginally rose from 58% to 58.7% when business size was taken into

account. This demonstrates that firm size mediates the association between risk assessment and FP of manufacturing businesses listed on the NSE, Kenya, improving the model's accuracy by 0.007 points (0.7%).

As shown in Table 24(b), the multiple linear regression analysis that was utilized to determine the moderating effect of business size on the relationship between risk assessment and FP (FP) was statistically significant both before and after moderation. The precise Sig in the unmoderated analysis was 000, which is less than 0.05, and the F-statistic was 103.451. Table 4 below shows that the model was statistically significant at the 5% level after adjusting for the moderating variable of firm size. The F-statistic was 34.587 with a p-value = 0.000 ($p < 0.05$). The F-statistic's 68.864 reduction suggests that firm size acts as a mediator between FP and risk perception. Consequently, upon moderation, the model can still be used to make predictions.

From the coefficient results in table 24(c), it is seen that under natural circumstances, performance was 0.813. Risk analysis is seen to have a coefficient of 0.753, meaning that an increase in one unit of risk assessment, holding other variables constant, performance increased by 0.753 units. Regarding the firm size, an increase in one unit was associated with a drop in performance by 0.06 keeping other factors constant. A unit of the composite of risk assessment and firm size led to 0.005 units increase in performance. The multiple regression equation takes the form;

$$Y = 1.507 + 0.753RA - 0.085F + 0.005RAF + \epsilon.$$

Where;

Y= FP

1.507=constant

RA= Risk Assessment

F= Firm size

E= error term

It is determined that the moderating influence of company size on the link between risk assessment and performance was statistically insignificant because all of the coefficients are over the 0.05 significance level, and **H04** is not rejected.

4.7.4.2 Regression Results for Moderation effect of firm size on the relationship between information communication and firm performance

As indicated in table 25, the primary objective of the study was to ascertain the impact of company size on the relationship between information sharing and the performance of manufacturing enterprises. The model summary, the overall significance of the model, and the individual significance of the model are shown in Table 25(a), 25(b), and 25(c), respectively.

Table 25: Regression Analysis of the Moderation Impact of Firm Size on the Association Between Firm Performance and Information Communication.

Table 25(a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.643 ^a	.414	.406	.510
2	.659 ^a	.434	.410	.508

a. Predictors: (Constant), ICF, Log(Firm Size), Info_Comm

Table 25(b) Overall Significance of the Model

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.748	1	13.748	52.950	.000 ^b
	Residual	19.473	75	.260		
	Total	33.221	76			
2	Regression	14.405	3	4.802	18.630	.000 ^b
	Residual	18.815	73	.258		
	Total	33.221	76			

a. Dependent Variable: FP

b. Predictors: (Constant), ICF, Log(Firm Size), Info_Comm

Table 25(c) Individual Significance of the Model

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	1.420	.289		4.912	.000
	Info_Comm	.592	.081	.643	7.277	.000
2	(Constant)	1.799	3.163		.569	.571
	Info_Comm	.785	.911	.853	.862	.392
	Log(Firm Size)	-.039	.325	-.050	-.119	.906
	ICF	-.020	.094	-.230	-.216	.830

a. Dependent Variable: FP

Source: Researcher, 2024

According to the findings in table 25(a), the correlation between performance and the combined effects of information communication, firm size, and their interaction increased from 64.3% to 65.9%. Additionally, it is noted that these factors may account for a greater percentage of performance variability (43.4%) as opposed to 41.4%. This shows that the model's predictive precision improved by 0.02 (2%) as a result of firm size's moderating influence on the link between information communication and FP of manufacturing companies listed on the Kenyan Stock Exchange.

The first multiple linear regression model of examining the mediated influence of company size on the relationship between information communication and FP was statistically significant (F-test = 52.950, p-value = 0.000; <0.05), according to the results from table 25(b). The model remained significant (F-statistics = 18.630 p <0.05) at the 5% level of significance even when the moderating variable of company size was included. The effects of information communication on FP were lessened by business size, as seen by the F-statistics of 52.950 dropping to 18.630. Additionally, the model seemed to be helpful in prediction, using the firm's size as the moderator.

As further observed, coefficients of information communication, firm size and interaction of the two in table 25(c) were; 0.785, -0.039, and -0.020 respectively, and statistically insignificant. Other than the information communication that had a positive

effect on performance, the rest resulted in a decline in performance. A multiple linear regression takes the form: $Y = 1.799 + 0.785IC - 0.039F - 0.020ICF + \epsilon$.

Where

Y= FP

1.799=constant

IC= Information Communication

F= Firm Size

E= error term

Since all coefficient are insignificant, $H0_4$ is not rejected and, thus, concluded that the moderation effect of firm size on the relationship between information communication and performance was statistically insignificant.

4.7.4.3 Regression Results for Moderation effect of firm size on the relationship between monitoring activities and firm performance

Table 26 presents the study's findings, which also aimed to determine how company size impacted the connection between manufacturers' FP and monitoring activities. The model summary, the model's overall significance, and the model's individual significance are shown in Tables 26(a), 26(b), and 26(c), respectively.

Table 26: Regression Analysis of the Moderation Impact of Firm Size on the Association Between Monitoring Practices and Firm Outcomes.

Table 26 (a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.797 ^a	.634	.630	.402
2	.797 ^a	.636	.621	.407

a. Predictors: (Constant), MAF, Log(Firm Size), mon_Act

Table 26 (b) Overall Significance of the Model

Model	Sum of Squares	df	Mean Square	F	Sig.
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	Regression	21.078	1	21.078	130.192	.000 ^b
1	Residual	12.143	75	.162		
	Total	33.221	76			
	Regression	21.120	3	7.040	42.472	.000 ^b
2	Residual	12.100	73	.166		
	Total	33.221	76			

a. Dependent Variable: FP

b. Predictors: (Constant), MAF, Log(Firm Size), mon_Act

Table 26 (c) Individual Significance of the Model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error				
	(Constant)	1.032	.219	4.701	.000	
1	mon_Act	.725	.064	.797	11.410	.000
	(Constant)	2.214	2.712	.816	.417	
	mon_Act	.435	.767	.478	.568	.572
2	Log(Firm Size)	-.120	.276	-.156	-.435	.665
	MAF	.029	.079	.322	.375	.709

a. Dependent Variable: FP

Source: Researcher, 2024

Results in table 26(a) show that monitoring activities, firm size and their composite, and performance had a correlation of 79.7%, which were similar results without a moderator. It is also observed that these variables could explain a higher variability in performance 63.6% from 63.4%. This implies that the predictive power of the model improved by 0.02 (2%) as a result of moderating effect of firm size on the relationship between monitoring and FP of manufacturing firms listed on NSE, Kenya.

The results displayed in table 26(b) indicate that the multiple linear regression model utilized to assess the mediating role of firm size on the relationship between monitoring activities and financial performance (FP) was statistically significant. First, before adjusting for moderation, the F-statistic showed an outstanding fit: $F(3, 413) = 130.192, p = 0.000 < 0.05$. When the variable firm size was considered as a moderator, the F-statistic was 42.472 ($p\text{-value} = 0.000 < 0.05$), and the hypothesis remained significant at the 5% level. The F-statistic's decreasing value also suggests that the kind of business size influences the nature of the connection between FP and monitoring activities. This suggests that firm size moderates telecom and the proposed model is still suitable for predictive purposes and yields significant results despite moderation.

Considering the beta coefficients in Table 26 (c), the multiple regression model is written as:

$$Y = 2.214 + 435MA - 0.120FZ + 0.029MAF + \epsilon.$$

Where

Y=FP

2.214= constant

MA= Monitoring Activities

F= Firm size

E= error term

There are several ways to discuss the findings about the moderating effect of firm size on the link between ICS and FP. First off, H04 cannot be dismissed because its three non-significant coefficients show that business size has no moderating effect on the association between performance and monitoring activities. Similar to the models that used total internal control system activities, the log of total assets and the variables of risk assessment, information communication, and monitoring activities were also not significant; at the 5% level of significance, the corresponding coefficients were 0.005, $p=0.954$, $-0.020, p=0.830$, and $0.029, p=0.709$. This implies that when company size is controlled by the log of total assets, an increase in risk assessment, information transmission, and monitoring activities will lead to an increase in FP by a factor of 0.005, -0.020 , and 0.029 , respectively. The results show that when company size is regulated, FP is unaffected by an increase in internal control systems.

Second, the study's findings corroborate previous research, like that conducted by Madhushani and Jayasiri (2021), who looked at the ICS on FP in connection with Sri Lankan companies. Their results show that, as a moderating variable, company size has a moderately beneficial effect on ICS and firm performance. This is further supported by the current study's hypothesis and findings that company size may mitigate the relationship between internal control mechanisms and FP, however the kind of moderation may vary depending on the circumstances.

4.7.5 Regression Results for Joint Effect of Internal Control Systems and Financial Performance

The sixth study objective was to assess how internal control systems (ICS) moderated the financial performance of industrial firms listed on the Kenyan Stock Exchange (NSE). The literature analysis focused on several ICS components, including risk assessment, monitoring, and information communication. The following hypothesis was developed **H0₅** in order to evaluate the combined impact of ICS and FP.

H0₅: There is no statistically significant joint effect of ICS on FP of manufacturing firms listed on the NSE, Kenya.

To test **H0₅**, FP and ICS were compared using a multiple regression analysis, and the findings are shown in Table 27. Tables 27(a), 27(b), and 27(c) display the model summary, overall significance of the model, and individual significance of the model, respectively.

Table 27: Multiple Regression Results for Joint Effect of ICS and FP.

Table 27(a): Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.922 ^a	.851	.843	.262

a. Predictors: (Constant), Log(Firm Size), Info_Comm, Risk_Ass, mon_Act

Table 27(b): Overall Significance of the model

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	28.271	4	7.068	102.798	.000 ^b
	Residual	4.950	72	.069		
	Total	33.221	76			

a. Dependent Variable: FP

b. Predictors: (Constant), Log(Firm Size), Info_Comm, Risk_Ass, mon_Act

Table 27(c): Individual Significance of the Model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error				
1	(Constant)	-.010	.411	-.025	.980	
	Risk_Ass	.444	.059	.416	7.471	.000
	Info_Comm	.286	.047	.311	6.031	.000
	mon_Act	.375	.054	.411	6.930	.000
	Log(Firm Size)	-.032	.036	-.042	-.905	.019

a. Dependent Variable: FP

According to the model summary in Table 26(a), risk assessment, information sharing, and monitoring activities impacted performance by 84.3%, as indicated by the adjusted R of 0.843. Other dynamics not covered by this model were responsible for the remaining 16.7% of FP fluctuations. The findings indicate that the FP of manufacturing firms listed on the NSE was impacted by risk assessment, information communication, and monitoring activities; thus, these activities would lead to an improvement in the FP of the manufacturing firms listed on the NSE.

The Adjusted R results are consistent with a study on the relationship between internal control quality and company performance by Li et al. (2019) in China, which shows that internal control quality significantly and favorably affects firm performance. Additionally, the study has validated the findings of Mulenga and Vuyo (2019), who looked at business performance and internal control systems in a few South African municipalities. They continued by drawing the conclusion that their study's analysis demonstrated that municipalities' ICS performed better and had superior financial credits.

Additionally, the results of Table 27(b) show that, at the 5% level of significance, a fitted regression model relating the relationship between ICS and FP of manufacturing businesses listed on the NSE is statistically significant ($F=102.798$, $PV=0.000 < 0.05$). This suggests that the suggested model is suitable for prediction purposes. This implies that the suggested model for prediction of FP of manufacturing firms listed on NSE using risk assessment, information communication and monitoring activities as independent variable was appropriate for prediction purposes.

The ICS and FP of manufacturing companies listed on the NSE, Kenya, show a statistically negative significant linear joint connection (Coefficients $R_A = 0.444$, $P=0.000 < 0.05$; Coefficient $I_C = 0.286$, $P=0.000 < 0.05$; Coefficient $M_A = 0.375$, $P=0.000 < 0.05$) in Table 27(c). A statistically significant negative effect of company size was also seen (Coefficient $\log F_S = -0.032$, $P = 0.019 < 0.05\%$). The null hypothesis, which held that company size and ICS do not jointly affect the FP of manufacturing companies listed on the Kenyan Stock Exchange, was rejected as a result ($F = 102,798$ $p < 0.05$). Third, this finding implies that the financial success of these businesses is positively correlated with both ICS and firm size.

The multiple linear regression model for forecasting the financial performance (FP) of manufacturing firms listed on the NSE is represented by the following equation, which is based on the findings. The model uses firm size as a moderator and risk assessment, information communication, and monitoring activities as independent variables;

$$Y = -0.010 + 0.444X_1 + 0.286X_2 + 0.375X_3 + -0.032Z$$

Where;

Y= FP

-0.010= constant

0.444, 0.286, 0.375, -0.032= regression coefficient of joint effect of ICS and firm size

X1= Risk Assessment

X2= Information Communication

X3= Monitoring Activities

Z= Firm Size

The results obtained can be explained in various ways. Firstly, it addressed the concern of the study by showing a negative but a significant joint effect of ICS, firm size and FP. This imply that an increase in ICS and firm size increases in FP by a factor of 0.444 in risk assessment, 0.286 in information communication, 0.375 in monitoring activities and -0.032 in firm size. This shows that an increase in ICS and firm size will better FP.

Secondly, the results align with a 2019 study by Li et al. that looked at Internal Control Quality and Firm Performance: Evidence from China and discovered that FP is greatly improved by higher internal control quality. Additionally, the findings supports the research on ICS and FP in South African municipalities conducted by Mulenga and Vuyo (2019). The findings showed that superior financial management and performance were seen by municipalities with strong internal control systems. Better financial results were a result of larger towns' ability to establish stronger internal controls.

According to the study's findings, manufacturing companies that have robust internal control systems in place especially those with a sizable enough workforce are better positioned to sustain high FP. Ensuring financial stability and success requires the ability to share information, monitor actions, and manage risk efficiently.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of the Research Findings

This study's primary goal was to assess the connection between Kenyan industrial companies' FP and ICS on the NSE. A number of ICS components were included in the independent variables: program/award risk assessment, information sharing among implementation stakeholders, and activity monitoring. FP was the study's dependent variable, and the external environment was its independent variable. Descriptive and correlational research approaches were used to gather data. Ninety-three respondents from seven manufacturing businesses listed on the NSE provided formally gathered primary data through questionnaires for the years 2018–2022. Using a checklist, secondary data was also obtained from the audited financial accounts for the same time period.

The empirical analysis of the collected data reveals a positive correlation between FP and ICS. Moreover, the regression result showed that each of these three elements information sharing, risk assessment, and monitoring activities had a significant effect on the financial performance of the manufacturing companies listed on the NSE at the 0.001 level of significance. Additionally, the combined examination of the composite ICS index revealed a positive combined influence on the FP of these businesses. Thus, the researchers discovered a positive and statistically significant link between them and the overall ICS score.

The moderating factor that was used was firm size. The study found that the link between ICS and FP was not significantly impacted by the size of the seven manufacturing enterprises. The results demonstrate that although ICS are essential for improving financial performance, the asset base of the company has little bearing on ICS for the NSE-listed industrial enterprises' FP.

This study used both basic and complicated regression models to evaluate the relationship between internal control systems, with FP as the dependent variable and internal control systems as the independent variables. T-tests and F-tests were used to

assess the significance of these associations. Mean and mean Beta coefficients were also described; SD was also used in the analysis of descriptive statistics. The initial response percentages revealed an 82.8 per cent response rate. The normality tests carried out included the Kolmogorov Smirnov, Shapiro Wilk, Anderson Darling and Lilliefors Tests all of which showed that the data was normally distributed as indicated by the p value of 0.643 while the test for multicollinearity did not exist hence their means 0. No evidence of heteroscedasticity was detected from the Breusch Pagan test as its resulting p-value A statistical correlation was established to show that internal controls have a positive and statistically significant relationship with the FP of manufacturing firms in the NSE.

Consequently, the study sought to capture certain distinct goals. Its initial objectives were to examine, among other things, the sector of manufacturing companies listed on the Kenyan Stock Exchange (NSE) and the relationship between risk assessment controls and the company' financial performance. Second, it attempted to ascertain how much information transmission affects the financial success of these firms. Third, it looked at how monitor actions influenced FP decision-making. The fourth goal looked into how firm size affected the way internal control mechanisms affected FP. Finally, the study assessed how the FP of manufacturing companies listed on the NSE was influenced by firm size and internal control systems. These objectives were designed to give a comprehensive perspective of how various aspects of internal controls, coupled with firm size do impact on FP in the manufacturing segment.

The study's main goal was to investigate how risk assessment affected the financial performance of particular industrial enterprises that were listed on Kenya's Nairobi Securities Exchange. The correlation study indicates that risk assessment and financial planning have a statistically significant positive relationship. Additional regression analysis showed that performance improvement is directly and statistically significantly impacted by risk assessment. These results led to the rejection of the null hypothesis (H01), which held that risk assessment had no discernible impact on manufacturing enterprises' FP. It has been demonstrated that risk assessment significantly affects the financial performance of industrial firms listed on the NSE.

The second goal was to investigate the relationship between information communication and the financial performance of industrial firms that are listed on the Nairobi Stock Exchange. Additionally, correlation studies demonstrated a statistically significant beneficial association between information communication and financial performance. A regression study found that information communication had a statistically significant impact on listed industrial enterprises' performance. This led to the disproof of the null hypothesis H0₂, which claimed that information exchange had no appreciable effect on FP. Information communication has a favorable and statistically significant impact on the financial performance of industrial enterprises listed on the Nairobi Securities Exchange, according to the study.

The results relating to the third study goal demonstrated that monitoring activities had a positive and statistically significant impact on the FP of the selected manufacturing businesses listed on the NSE. Monitoring efforts and FP had a positive and significant association, according to a correlation study. Additionally, monitoring measures had a statistically significant effect on FP improvements, according to regression analysis. Therefore, the study found that monitoring efforts had a positive and statistically significant impact on the financial performance of manufacturing companies listed on the NSE, rejecting the null hypothesis H0₃.

The fourth objective of the research studied the impact of firm size on the interaction between the selected manufacturing companies' FP and internal control systems. Although this effect was not statistically significant, the results showed that business size favorably attenuated the link between risk assessment and FP. Similarly, company size had a negative and statistically insignificant moderating effect on the association between FP and information communication. Additionally, it was discovered that the relationship between monitoring efforts and FP was statistically unaffected by the size of the organization.

Determining the connection between internal control systems, company size, and financial performance of manufacturing firms listed on the Nairobi Securities Exchange in Kenya was the sixth study goal. Information sharing, risk assessment, and monitoring activities the three ICS components were all assessed within the framework of FP. The

findings demonstrated that, at the 5% significance level, the null hypothesis which held that there was no statistically significant joint effect on FP was rejected. This result suggests that the FP of the manufacturing companies listed on the NSE was significantly impacted by the combined influence of the ICS components.

5.2 Conclusions

The following conclusions have been drawn from the investigation's findings. First, risk assessment measures have a favorable and statistically significant impact on the financial performance (FP) of the selected industrial businesses listed on the NSE. Second, information communication control techniques have a favorable and statistically significant impact on the financial performance (FP) of the selected industrial enterprises listed on the NSE. Third, monitoring operations has a statistically significant favorable impact on the FP of the selected manufacturing companies listed on the NSE.

Finally, it is found that the impact of different ICS elements on firm performance is moderated in a number of ways by the size of the company. Particularly for the chosen industrial firms listed on the NSE, firm size had a negative impact on information communication and its influence on FP, but a positive moderating effect on risk analysis and monitoring activities. This moderation effect was not statistically significant, according to other findings.

5.3 Recommendations

Based on the study's results, the researcher makes a number of recommendations.

- i. The study discovered that the performance of manufacturing companies listed on the NSE is statistically impacted by risk assessment. Therefore, the firms should ensure the following risk identification activities in place and effective: proper process to identify risks relating to the management when preparing financial statements, a comprehensively documented risk management policy, an effective process to identify credit risks when preparing financial statements, and an effective process to identify fraud risks when preparing financial statements. The following risk analysis approaches must also be

executed: an effective process to analyse credit risks, fraud risks, customer risks, and operational risks when preparing financial statements.

- ii. The results demonstrated that information communication had a favorable and statistically significant impact on the FP of industrial businesses listed on the NSE. Therefore, it is essential for firms to maintain functional communication channels, such as suggestion boxes for collecting sensitive information, whistleblowing systems, and online platforms. Additionally, firms should implement policies that address compliance issues related to finances and ensure proper segregation of duties to enhance transparency and performance.
- iii. It was determined that the FP of manufacturing companies listed on the NSE was positively and statistically significantly impacted by minoring operations. Firms are recommended to undertake a number of measures that include having a robust mechanism for ensuring no lapses in financial records, functional internal audit unit, independent internal audit functions with the required resources, and audit process follows proper timing. Additionally, an internal audit manual exists, internal and external audits are completed within the required timelines, internal audits' findings are reported to the top management and risk-management committees, and audit unit comprises professionals.
- iv. The study found that business size had little bearing on the relationship between internal control practices and the financial performance of manufacturing companies listed on the NSE. These findings imply that management ought to focus on optimizing the organization's assets in order to enhance the role of internal control systems in raising FP.

5.4 Suggestions for Further Research

- i. Examining the impact of internal control systems on the financial performance of manufacturing firms listed on the NSE was the primary objective of the study. Therefore, it is advised that future research broaden to include more NSE sectors

and a larger sample size in order to provide a more comprehensive understanding of the relationship between internal control systems and FP across different businesses.

- ii. The study discovered that the relationship between internal control systems and the financial performance of manufacturing companies listed on the NSE is influenced by the size of the organization. To further understand how the moderating influence of firm size varies amongst the manufacturing firms in the study, future research should compare these firms. This could offer more profound understanding of how firm size affects how well internal control mechanisms enhance FP.

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APPENDICES

APPENDIX 1: CONSENT FORM

TITLE OF STUDY: INTERNAL CONTROL SYSTEMS AND FP OF MANUFACTURING FIRMS LISTED ON THE NAIROBI SECURITIES EXCHANGE, KENYA.

PRINCIPLE INVESTIGATOR

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PURPOSE OF THE STUDY

You are being requested to assist us in this study. Kindly, making a decision to participate in this study, it is of importance you understand why the research study is being carried out and what will it involve. Read the provided information carefully and seek clarification where possible from the researcher.

The purpose of the study is to *Determine the Effects of Internal Control Systems on FP of Manufacturing Firms Listed on The Nairobi Securities Exchange, Kenya.*

CONSENT

I have read and understood the provided information and I had opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily agree to take part in this study.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

APPENDIX 2: RESEARCH INSTRUMENTS

This questionnaire is an integral part of the study under the title: **INTERNAL CONTROL SYSTEMS ON FP OF MANUFACTURING FIRM IN KENYA: A CASE OF MANUFACTURING FIRMS LISTED ON THE NAIROBI SECURITIES EXCHANGE, KENYA.**

All the data collected will be strictly purposed for the academic research work relating to the above topic and the confidentiality of the respondents is guaranteed. Please fill in this questionnaire following the instructions in each section. You are requested to put a tick[✓] against your selected answer.

SECTION 1: BACKGROUND INFORMATION

1.1. Please indicate your gender by a tick [✓]

Male Male []

Female []

1.2. Please indicate your age bracket [✓]

18 to 27 years

28 to 37 years

38 to 47 years

48 and above years

1.3. Please indicate your highest attained education level [✓]

Certificate

Diploma

Bachelor's Degree

Master's Degree

P.Hd.

1.4. Please indicate your department

Accounting []

Finance []

Others []

1.5. Indicate your years of experience

0-4 years

5-9 years

10-14 years

15 year and above

SECTION 2: INTERNAL CONTROL SYSTEMS

In this section you are required to rate the various aspects of internal controls in your organization as presented in 2A, 2B, 2C and 2D. A 5-point Likert scale will be used [where 1-Strongly disagree (SD), 2-Disagree (D), 3-Neutral (N), 4- Agree (A) and 5-Strongly Agree (SA)] is provided. Please tick in the appropriate box to indicate your level of agreement with the various statements provided.

SECTION 2A: RISK ASSESSMENT

Please tick in the appropriate box to indicate your level of agreement with the following aspects of risk assessment in your organization.

Statement	5 SA	4. A	3. N	2. .D	1. SD
<i>Risk identification</i>					
a. The company has a proper process to identify risks relating to the management when preparing financial statements					
b. The company has a comprehensively documented risk management policy					
c. The company has an effective process to identify credit risks when preparing financial statements					
d. The company has an effective process to identify fraud risks when preparing financial statements					
<i>Risk Analysis</i>					
a. The company has an effective process to analyze credit risks when preparing financial statements					
b. The company has an effective process to analyze fraud risks when preparing financial statements					
c. The company has an effective process to analyze customer risks when preparing financial statements					

<p>d. The company has an effective process to analyze operational risks when preparing financial statements</p>					
<i>Risk Response</i>					
<p>a. The company has an effective process to respond to credit risks when preparing financial statements</p>					
<p>b. The company has an effective process to respond to fraud risks when preparing financial statements</p>					
<p>c. The company has an effective process to respond to customer risks when preparing financial statements</p>					
<p>d. The company has an effective process to respond to operational risks when preparing financial statements</p>					

SECTION 2B: INFORMATION COMMUNICATION

Please tick in the appropriate box to indicate your level of agreement with the following aspects of information communication in your organization.

<p>a. The company has functional information communication channels</p>					
<p>b. This organization has adopted “Suggestion Boxes” to obtain sensitive information</p>					
<p>c. Whistleblowing is established and it is an effective approach to getting crucial information to curb corruption cases</p>					
<p>d. There are online channels to obtain sensitive information for management to act</p>					

e. There are existing policies on information communication addressing compliance issues relating to finances					
f. There is a clear segregation of duties for various financial roles					

SECTION 2C: MONITORING ACTIVITIES

Please tick in the appropriate box to indicate your level of agreement with the following aspects of monitoring activities in your organization.

i. The organization has established a robust mechanism for ensuring no lapses in financial records					
ii. There is a functional internal audit unit in the company					
iii. The internal audit functions are independent with the required resources to perform its duties					
iv. The audit process follows proper timing					
v. The company has established an internal audit manual in the audit department which assists in the planning and execution of the audit process					
vi. All internal and external audits are completed within the required timelines					
vii. When internal audits make findings, they are reported directly escalated to the top management and risk-management committees of the board					
viii. The audit unit comprises professionals majority of who are members of					

<p>ICPAK or other internationally recognized bodies</p> <p>ix. The company's internal audit unit has demonstrated efficiency and effectiveness through the detection and prevention of fraud</p> <p>x. The organisation takes very seriously the recommendations of the internal audit unit.</p> <p>xi. The company's internal auditor(s) have always demonstrated objectivity and professionalism in their work.</p> <p>xii. The company audit department/unit offers assurance to the management team that there are no significant internal weaknesses reported</p> <p>xiii. The audit committee of internal control from the internal audit department.</p> <p>xiv. The head of the internal audit function is a member of the senior management team reporting to the Chief Executive Officer.</p> <p>xv. There are established mechanisms and procedures to address financial non-compliance issues</p>					
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SECTION 2D: FP

Please tick in the appropriate box to indicate your level of agreement with the following aspects of FP in your organization.

<p><i>Profitability</i></p> <p>i. Our company has consistently met or exceeded its profitability targets over the past three years.</p> <p>ii. Our return on equity (ROE) is higher than the industry average.</p> <p><i>Liquidity</i></p> <p>i. We have sufficient cash flow to meet our operating expenses and debt obligations.</p> <p>ii. Our current ratio is well above the industry benchmark.</p> <p><i>Solvency</i></p> <p>i. Our debt-to-equity ratio is within a reasonable range.</p> <p>ii. We are able to meet our long-term financial obligations.</p>					
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PART 3: TO BE COLLECTED FROM AUDITED FINANCIAL STATEMENTS

FIRM SIZE

Year	2018	2019	2020	2021	2022
Company's total assets					

APPENDIX 3: NACOSTI PERMIT

 <p>REPUBLIC OF KENYA</p>	 <p>NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION</p>
Ref No: 289156	Date of Issue: 31/October/2023
RESEARCH LICENSE	
	
<p>This is to Certify that Mr. duncan kimathi kiragu of Tharaka University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nairobi on the topic: INTERNAL CONTROL AND FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS LISTED ON THE NAIROBI SECURITIES EXCHANGE, KENYA for the period ending : 31/October/2024.</p>	
License No: NACOSTI/P/23/30849	
Applicant Identification Number 289156	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Verification QR Code	
	
<p>NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.</p>	
See overleaf for conditions	

APPENDIX 4: UNIVERSITY INTRODUCTORY LETTER

THARAKA

P.O BOX 193-60215,
MARIMANTI, KENYA



UNIVERSITY

Telephone: +(254)-0202008549
Website: <https://tharaka.ac.ke>
Social Media: tharakauni
Email: info@tharaka.ac.ke

**OFFICE OF THE DIRECTOR
BOARD OF POSTGRADUATE STUDIES**

REF: TUN/BPGS/PL/ CMT11/00832/20

18th October 2023

To Whom It May Concern,

Dear Sir/Madam,

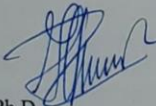
**RE: INTRODUCTORY LETTER FOR DUNCAN KIMATHI KIRAGU OF
ADMISSION NUMBER: CMT11/00832/20**

The above named is our postgraduate student undertaking a Masters' Degree Programme in **Business Administration**. The student has finished coursework and is expected to collect data. The title of the research is "**Internal Control Systems and Financial Performance of Manufacturing Firm Listed on Nairobi Securities Exchange in Kenya.**"

The candidate has defended the proposal successfully at the Faculty and has submitted the required number of corrected copies to the Office of the Director, Board of Postgraduate Studies. The candidate is expected to begin collecting data, analyse and write a report on the findings. The study is expected to be completed within one year. Any assistance accorded to him will be highly appreciated.

Thank you in advance.


Yours faithfully,


Dr. Denis Obote, Ph.D.
Director,
Board of Postgraduate Studies.



APPENDIX 5: ETHICS COMMITTEE LETTER

THARAKA UNIVERSITY



P.O BOX 193-60215,
MARIMANTI, KENYA

Telephone: +(254)-0202008549
Website: <https://tharaka.ac.ke>
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INSTITUTIONAL SCIENTIFIC AND ETHICS REVIEW COMMITTEE

17th October, 2023

REF: TUNISERC/NSEC/M004
Dear, Duncan K. Kiragu

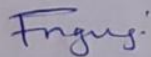
RE: Internal Control systems and financial performance of manufacturing firm listed on Nairobi Securities Exchange in Kenya

This is to inform you that *Tharaka University ISERC* has reviewed and approved your above research proposal. Your application approval number is *ISERC04023*. The approval period is **17th October 2023 –17th October, 2024**.

This approval is subject to compliance with the following requirements;

- i. Only approved documents including (informed consents, study instruments, MTA) will be used
- ii. All changes including (amendments, deviations, and violations) are submitted for review and approval by *Tharaka University ISERC*.
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to *Tharaka University ISERC* within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to *Tharaka University ISERC* within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions.
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- vii. Submission of an executive summary report within 90 days upon completion of the study to *Tharaka University ISERC*.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI)
<https://research-portal.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely,

Dr. Fidelis Ngugi
Chair, ISERC Tharaka University

APPENDIX 6: LIST OF FIRMS LISTED ON NSE

BOC Kenya Plc.

British American Tobacco Kenya Plc.

East African Breweries Ltd.

Carbacid Investments Plc.

Mumias Sugar Co. Ltd.

Unga Group Ltd.

Kenya Orchards Ltd.

Flame Tree Group Holdings Ltd.

Eveready East Africa Ltd.