

**EFFECT OF RISK MANAGEMENT STRATEGIES ON FINANCIAL
PERFORMANCE OF COMMERCIAL AND SERVICES FIRMS LISTED AT
NAIROBI SECURITY EXCHANGE**

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DECLARATION

This inquiry is based on my own review and analysis and it has not been accepted anywhere.

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D61/20768/2019

This project has been accepted with my review as the university and student mentor.

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DEDICATION

This inquiry is devoted to my mother Priscillah Tanui for the tireless sacrifices of her precious family support and encouragement during the entire degree program and throughout my life.

ABSTRACT

Due to liberalization, globalization and the rapid and advancement growth in technology new business opportunities have been created and most of the industries are becoming highly exposed to risks as compared to the past. The firms that embed sound risk management strategies into their performance management strategies are having higher chances for achievement of operational and strategic objectives. Consequently, the study assessed the effect of strategies with respect to risk management on the success of the banks which are under the NSE. The presented conceptual framework which was guided by these theories: Capital asset pricing model theory, enterprise risk management theory and contingency theory. Quantitative research approach was applied using primary data for the sample period covered from 2016 to 2020. Analysis of the collected data was done through panel random effect of regression model. The results from the study indicated that assessment of risk as well as monitoring and evaluation have positive significant effect on the output on banks within NSE. Whereas identification of risk has negative effects on the productivity of these listed industries. The inquiry supports that management should emphasize on risk reviews and monitoring of internal controls to enhance risk-monitoring strategy. In addition, strict adherence to risk policies and standard should be ensured to enhance financial performance of commercial and service firms.

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ABBREVIATIONS AND ACRONYMS

CAPM	Capital Asset Pricing Model
CMA	Capital Market Authority
ERM	Enterprise Risk Management
NSE	Nairobi Securities Exchange
SPSS	Statistical tool and Package for the analysis in social disciplines

CHAPTER ONE: INTRODUCTION

1.1 Background of the study

Kassi *et al.*, (2019) alluded that due to liberalization, globalization and rapid and advancement growth in technology new business opportunities have been created and both the financial and economic bodies are becoming high level to risk exposures as compared to the past. In every industry risk is regarded as an inherent, however, firms that have embedded the sound strategies for risk management into management performance of business and planning are having a higher probability in achieving their operational and strategic goals. Risk management strategies like measurement, control and identification of risk have been given very little attention to most of the industries with respect to their strategic management. The major issues facing most of the institutions specifically those listed at Nairobi securities exchange is the risks related to financial, whereby the firms value is dependent on the conditions of the market. The most common risks to all industries includes; risk related to credit, liquidity, market and those risks that are non-financial related.

Risks can result to the possibility of both negative business results and pleasant surprises with general assumptions that the risk appetite is directly proportional to the impact on the potential expected returns. Industries involved in a riskier program are having the possibility of making either losses or profits. Therefore, well-informed decisions based on sound risk management practices must be followed strictly in these situations.

Similarly, the firm's management needs to initiate with proper strategies which will be able to mitigate and manage these risks by considering the benefit analysis on the

owners' equity whenever they are dealing with financial performance of these firms (Onsongo *et al.*, 2020). Consequently, of global finance crises (GFC) which was experienced around the period 2007-2008 of which most of the financial institutions made it a priority in the implementation of sound risk management strategies where their focus area was for financial sector stakeholders. The strategies for risk management are risk identifications, assessing and prioritization of risk then coordination and application of resources economically to help in minimization, monitoring and controlling the likelihood and the results from the unforeseen circumstances. The important role in risk management is by identification, measuring and most essentially monitoring the organization profile (Soyemi *et al.*, 2014).

The capital asset pricing model, enterprise risk management theory, and contingency theory are some of the theories that serve as the foundation for the suggested study. Yegon's (2015) study confirmed that firms that adopt risk policies can promote their success in the long run. This is because risk practices help to control errors in the firm operations. It is possible for resources to be used effectively and appropriately with the approval of the board, shareholders, and senior management at the top when risk management is adopted. This will intensify and strengthen risk management systems. The board diversity by their composition policy development on risk management and effective planning and coordination of company's activities, which will go a long way as the basis for sound risk management strategies.

Covid-19 pandemic majorly affected the operations of the economy globally and the commercial and services industries seems to have been the most hit sector. Also, most of

the commercial and services industries in Kenya are operating in a more volatile environment since they face a big number of potential risks impacting into the commercial and services industry 's survival and success. Management of Risks carried out at the company's' level is the most considerable topic of interest and has emerged to be the most recognized discipline of management and it is currently regarded as the key management and governance tool in the private and public firms.

1.1.1 Risk Management Strategies

Mokni and Proclidi (2012) defined risk management strategies as the major activities involving measurement, identification, monitoring and controlling of the risks that must be adopted by every institution in order to remain competitive. Risk management is defined by Samimi, (2020) as a procedure where its main aim is reducing the impact of harmful events through conscious action anticipation events which are unwanted and planning to avoid these risks. Management of risk can be defined as the situation which involves the measurement or evaluation of risk and thereafter developing of risk management strategies.

The degree of acceptable risk exposure must be determined for use in risk management methods, policies, and environments. The global economic crisis raised concerns about the efficient risk management techniques used by most organizations. It was thought that the crisis resulted from the use of inadequate risk management techniques (Kwasi et al., 2020).

Risk management is perceived as the strategy of advance identification of potential risks, measurement and analysis of these risks which will help in preventive measures which

will eventually help in reducing and avoiding these risks. Auditors are expected to recommend on the best strategies of risk management to be adopted by the companies when establishing a risk management process or initiatives (Yousfi, 2015). Poor risk management strategies could result to the collapse of many firms mostly those whose main business and daily operations is with handling of risks.

Risk management strategies involves the methodologies and specific procedures through which mission, business and managers in charge of information system risk performs assessment of risk, monitoring of risk and response activities. Risk management strategies require review and plans of the risk in order to address or mitigate these risks to an acceptable level (Gantz & Philpott, 2012). Hence risk management strategies should be prioritized by the organizations through integration into the process, system and firms' entire culture. Various organizations view it as the most important way of the strategic management of the firms (Abeyrathna *et al.*, 2020).

Risk management shows the firm's view on how it intends to manage risks. This will be measured through the evaluation of the policies and procedures, standards to be used for identification of risks, assessment, response and govern the risks (Gantz & Philpott, 2012). The current study intends to measure these risk management strategies using the policies, procedures, internal control systems and the standards for the identification of risks, assessment, response and monitoring.

1.1.2 Financial Performance

An industry with sound financial performance earns the trust of the shareholders which will help in retaining existing shareholders and attracting the potential ones. This is because there will be return on their investments in terms of dividend payments (Arnold,

& Valentin 2013). Sharma Nishi (2011) defined the financial performance as the outcomes of the business and the results indicating their general financial wellness for a specified period. This shows the firms' ability to utilize its resources so that they can achieve firms' main objective, that is the maximizing the wealth of their shareholders and at the same time the profit maximization. The measurement of financial performance can be determined by different financial ratios which include Return on Equity and on Assets.

Firms' financial performance is carried out for the reasons which are not limited to the following: helping investors in formulation of their expectations based on the future earnings of the potential firms and helping managers in evaluation of their operations (Venanzi, 2011). According to Kaliti, (2015) firm's financial performance should be related to parameters that includes the profitability, improved delivery of services, increased market share performance, and increased productivity and at the same time the increased values of sales. Individuals' inconsistency among their individual groups and employees can impact negatively on their individual production leading to a reduction in performance.

1.1.3 Risk Management Strategies and Financial Performance

Institutions with inadequate sound risk management strategies faces adverse financial performance which results to financial distress and crises. Risk management issues in the banking industry have an impact not only on the success of banks but also on the expansion of the economy. The risks that led to the bank's poor performance served as the driving force behind its risk management (Adeusi, 2014). Therefore, effective

financial risk management strategies are very vital in boosting the financial wellness of industries of various sizes.

Study by Musyoki & Kadubo (2012) alluded that generally effective strategies for risk management has very vital and important contributions of approximately over 35% to the success of the firms and it is advisable that the banks should prioritize on effective strategies for risk management so that they can achieve a sound overall performance. For the achievement of maximum financial performance by banks they need to reduce risks related to credit through the allocation of more funds to management of default rate and reducing the expenditure costs related to bad debts and costs per loan asset.

The Islamic banks have introduced a culture for an effective risk management which will enhance their competitive advantage and survival despite several crises and uncertainties. Therefore, they need to implement a more advanced and technically risk management strategies and practices which are techniques for risk mitigation compliant to achieve increased financial performance and sustainability of their market competitiveness (Ariffin & Kassim, 2011). Generally, companies' day to day activities are susceptible to risks and if no measures on the risk's mitigation, then the profitability of these firms is likely to be adversely affected. On the other hand, institutions with efficient risk management strategies results into sound financial performance (Omasete, 2014).

1.1.4 Nairobi Securities Exchange

Developed around 1954 through associations of stockbrokers voluntarily in European Community. In Kenya, the Nairobi Securities Exchange (NSE) Ltd is the main market for firms and it offers a platform, which is automated for trading and listing of these securities. In Africa the NSE Ltd is regarded as the second exchange in Africa to list and

demutualize its shares after the Johannesburg Securities Exchange. Equities for NSE and Bonds, are provided for by NSE. For the success of NSE their management requires professionals with more emphasis on innovativeness, operational and diversification in security trading. The operations of Brokers at the Nairobi Securities Exchange opened its operations remotely in the year 2007 after automating in the past years and due to the trading interval, which was increased from two hours to six hours (www.nse.co.ke, 2020).

In Kenya the sector under the category of commercial and services industries which are listed at NSE is regarded as one of the sectors that drives the economies for the less developed countries since they are regarded as one of the biggest players in the economic growth and development through promotion of investments and creation of employment. Unfortunately, this sector in Kenya has experienced an insignificant growth over the past years (Orayo & Ombaba, 2018).

These firms in Kenya face a lot of risks just like any other corporate industries. Therefore, there should be adequate and sufficient strategies in place for management of these risks. This sector has experience myriad of challenges in Kenya, which ranges from low economic growth, frauds perpetrated by both internal and external customers, huge claims, structural weaknesses, poor governance and liquidity problems, which in most cases has resulted to the collapse of many of these industries. It is therefore necessary to institute a program to be used for monitoring and be incorporated into the entire process for the evaluation and management of any emerging potential risks (Kinyua, 2010).

1.2 Research problem

Risk management practices have been regarded as most relevant for the survival of the commercial and services industries. Most of the organizations critically depends on the risk management efficiency for their survival and success (Ondigo, 2019). The firms therefore must periodically institute an effective risk control plans will enable them to report a better success in their major operations. Several failures in the corporate industries globally and locally are in most cases due to poor risk management strategies. Risk Management failures such as poor risk governance, failure by the board to focus on risk oversight and inability for the firms to execute effective strategies for risk management has led to the collapse of many industries.

Based on the contextual review it is evident that the findings have shown a mixed result since others have shown negative relationship for example study by Muteti (2014) found negative correlation between some risk management strategies and the Kenyan bank's financial performances. There is still disagreement on the link between the variables. However, analysis reveal that effective risk control can help them to manage their success. This is evident in a study by Mirza and Javed's (2013) , which showed how effective risk systems promote the firm success in the Pakistani stock market.

Research on the impact of risk reduction systems on the effectiveness of Nigerian banks was done by Soyemi et al. (2015). The results provided compelling evidence that risk management in Nigerian banks had led to success of the firm in the region. Kaliti (2015) looked at the hotel industry's financial performance in connection to risk management techniques. The study's conclusions demonstrated that the businesses' risk management techniques greatly enhanced both the hotel sector management. The inquiry also noted

that firms should manage their challenges to experience good outcome in their major operations.

Mwangi (2014) found a connection on effective risk management strategies and success of firms. The literature review makes it evident that there are unresolved issues about the connections between risk management strategies and financial success considering the contradictory outcomes. Furthermore, there is little evidence in the literature of any context-related outcomes that appear to apply to companies in the commercial and services sectors that are listed on the NSE. The suggested study aimed to evaluate the effect risk management models and practices have on the financial performance of the listed firms at NSE in order to fill this research gap.

1.3 Objective of study

To determine the effect of risk management strategies on financial performance of commercial and services firms listed at Nairobi Security Exchange.

1.4 Value of the Study

The proposed study would be beneficial to chief risk officers and risk management staffs from listed and non-listed commercial and services organizations who may utilize the research results and suggestions to create risk management strategies that improve financial performance. It would also help the stakeholders such as investors, suppliers and financiers in judging the degree of risks they are associated with in their relationships and interactions with these firms.

The study would help the commercial and services firms in Kenya so that there will be an improvement of their risk management process and in adoption of more effective and

efficient strategies which in the long run helps in improvement of the firm's profitability through the implementation of risk mitigation measures. This also could ensure that the commercial and services industries perform better and to improve their financial performance while maintaining a market competitive advantage. The study would also bring an addition to the already existing body of theories and literature associated with topic with respect to risk management strategies in the commercial and services industries.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

In this chapter the theories that the proposed study is anchored on is reviewed. They include Capital Asset Pricing Model (CAPM) Theory, Enterprise Risk Management (ERM) Theory and Contingency Theory. The empirical literature related to the study is also discussed which includes risk management strategies components and firm success.

2.2 Theoretical Review

The researcher discusses the approaches of risk management strategies. They are capital asset pricing model theory, enterprise risk management models and contingency theory.

2.2.1 Capital Asset Pricing Model theory

Jack Treynor first introduced this theory in 1961 and 1962 and was later developed by William Sharpe in 1964 and John Lintner in 1965, which was further advanced by Jan Mossin in 1966. This was based on diversification models and inquiry by Harry Markowitz. This theory entails two kinds of risks that shareholders face these includes, unsystematic (diversifiable) and systematic (non-diversifiable). Diversifiable risk is the portfolio risk component that are likely to be removed by adding the portfolio size, this is because the individual security specific risks like financial or business risks can be removed by a portfolio construction which is well-diversified. In contrast, non-diversifiable risks are those that are tied to overall market or economic fluctuations and are thus sometimes referred to as market risks since they are parts of the total risks that can be absorbed but not avoided by diversifying a portfolio (Galagedera, 2007).

In this theory the emphasis is only with diversification, or systematic, financial risk. Such variations are basically due to the cycles of economic activities which are linked to

market characteristics and products. It is therefore not connected with a more general types of risks, that includes political, social and environmental risks and in as much as their pricing can be done through capital markets. It also, not necessarily related to the other side of the industries-specific financial risks the investors are likely to avoid using diversifications of the portfolio (Toms, 2014).

This theory is based on the premise that not all the potential risks are likely to affect the prices of assets. This model therefore is very fundamental since it helps in providing insight for the risks that are related to the rate of returns. This theory also provides a strategies or techniques for risk translation into approximation of the expected return on equity. Since it is employed various models of evaluating capital flow and shareholder value rate, the theory is a highly important method. The CAPM describes the different models that firms use to improve their return on investment in the market. The primary model prediction shows that the predicted returns on any of the two assets will be directly related to how these assets' returns will vary from market portfolio returns. This theory opines that each of the assets has two categories of risks such as unsystematic (diversifiable), or 'unique risk and systematic (non-diversifiable)', or risks related to the market (Rossi, 2016).

This theory is based on too many assumptions, which seems to be unrealistic. It also ignores unsystematic risks, which may be of significant to the investors. Its relevant to the study is that it helps depict ways that manage can use to control risk and manage output.

2.2.2 Enterprise Risk Management Theory

This theory emerged in 1992 by Haimes who advocated for the ‘evolution towards a more holistic approach.’ Haimes termed it as ‘total risk management.’ It is mostly used as a management function and concept within the firms. It was developed by the people behind the Australian risk management standards and further developed by their counterparts from Canada. An institution can manage risks in one of two different fundamental ways which includes considering one risk at a time, on a largely compartmentalized and basis of decentralized; or the other one by considering the entire risks viewed at the same time within a strategic and coordinated structure. The latter approach is known as “enterprise risk management,” or abbreviated as “ERM”. The industries that have succeeded in institution of an effective ERM have a strong competitive advantage in the long run compared to the ones that manages and monitors risks individually. In summary their argument is that, by measuring and frequent risks management, consistently and systematically, and by granting those who makes decisions in the business with the incentives and information for optimization of the tradeoff between risk and return, an industry enhances its ability to carry out its strategical plans (Nocco & Stulz 2006).

This theory explains the procedure of risk identification and analysis from an integrated, perspective of the industry wide. It is regarded as disciplined and structured approach in alignment of strategies, process, technology, people and knowledge with main objective of evaluation and management of the unforeseen circumstances faced by the industry as it creates firms market share value and the shareholders’ value. This theory will ensure that all the important risks are well understood, and the mitigation of such risks are given

a priority. Information with respect to risks are acquired due to the risk management active engagements which can be arranged through an effective and informed decision making in terms of investments, capital budgeting, performance, reward and evaluations (Lai & Samad, 2010).

Enterprise Risk Management may evolve into an “umbrella function” for the discussions of some or all risk types. The risk advocates, the managers in charge of risk, may acquire control of significant agendas for an organization, which include planning, allocation of resources, and the systems of reward and standardization of tools and reports that will enable their firms to be able to manage the universal risks. Similarly, ERM may also remain highly contingent on political situations, opportunities, and demands, “plugging” the controlling gaps neglected and not addressed by other agents of control (Mikes & Kaplan, 2014).

Enterprise Risk Management suggests that industries should comprehensively and coherently be able to address all their risks instead of individually managing these risks. Harvard Business School Review listed Enterprise Risk Management theory as one of their “Breakthrough Ideas”. ERM suggests the integral management of all the risks organizations faced that inherently needs an alignment of risk management with strategy and corporate governance (Bromiley *et al.*, 2015). The fundamental problem with this theory is on the non-inclusion of the key factors affecting the portfolio values. The relevancy of the model is based on the view that it promotes alignment in managing risks in firms. This is important in improving the market output in industries.

2.2.3 Contingency Theory

This theory was developed by Thompson and Lorsch in 1967 and it is potentially very significant and powerful tool for improvement of the organization's performance. The correlations are always much easier, simple to understand and more elegant compared to the rest of other types of theories. The theory usually addresses problems and parameters of a wider perspective, scale and results compared to the rest of the other theories. The company management might not choose to apply this theory since there is perceived risk and they may not be willing in taking the risk since the guidelines might not be sufficient, mostly when the circumstances are likely to change (Betts, 2003).

Firms will successfully be capable of managing threats and fraud risk that might be resulting in reporting fraudulent financials if the industries understand the relationship between the contingency factors and the associated risk with these parameters related to fraud risk management. Uncertainty in environment as a result of regulatory and technological changes may have adverse effects on fraud risk. Large firms are having more likelihood to decentralization and implementation of decentralized controls coupled with their ability to get and allocate the adequate resources to mitigate any potential threat and risk of fraud (Lamprey & Singh 2018). The practical implementation of this theory is difficult since it has a complex and reactive approach. This makes it possible for majorly large firms with adequate resources to effectively apply this to mitigate the potential risks. The theory is very relevant as well as suitable in this inquiry since it can be used in reporting good values in the firm.

2.3 Empirical Literature

Assessment of the individualistic variables on risk management strategies will be discussed. These risk management strategies components include Identification of risks, the assessment, Monitoring and control.

2.3.1 Risk Identification

Lagat and Joel, (2017) analyzed effects of risk identification on the company's success..

The researchers adopted a target population of 291 managers derived from different financial institutions in Kenya. The results from the study indicated that identification of risk has a significant positive relationship with the financial institutions financial performances. It further recommended that appropriate and effective risk identification legislations should be instituted to enhance and strengthen the financial performance of these financial institutions.

Khalilzadeh, *et al.*, (2020) did an empirical study on risk prioritization and identification in banking projects for payment of service provider industries. The study employed a research sample of 30 experts involved with payment service provider companies. The study revealed that identification of critical risks and prioritizing these risk plays a very key role in the survival and successes of these companies and provides the basis for their sound financial performance and increase in the number of clients. For firms that can build their reputation for by implementation of risk management to make them acquire more trust with the stakeholders, increasing the customers' number and eventually increased profitability.

Risk identification and the success of banks in Burundi were evaluated by Biyahagumye & Phelista (2020). All of Burundi's commercial banks that are registered were taken into

consideration using the census technique. Findings showed that risk identifications help in managing every aspect of financial performance and it is more important and influential for financial institutions to achieve sound financial performance.

2.3.2 Risk Assessment

Wanjohi also evaluated how banks experience risk and manage their operations in late 2013. Kenya's 44 banks were used as target population, which are the registered commercial banks and including one mortgage firm. The study result indicated that risk assessment practices had a higher effect on the Kenyan's commercial banks financial performances.

Njeri, (2014) studied the impacts of internal control systems on the Kenya's manufacturing firms financial performance. The researcher used a target population of 65 manufacturing firms with a sample size of 20 manufacturing industries selected from the 65 manufacturing firms. The results showed that the manufacturing industry that strictly adhere and observe risk assessment techniques records a higher financial performance.

2.3.3 Risk Monitoring and Control

Lagat and Joel (2017) examined how risk management affects the performance of various financial organisations. They chose 291 managers from various financial institutions in Kenya as their target audience, and a response of 239 was achieved. The study's findings demonstrate a significant positive relationship between risk monitoring and the financial success of the financial sector. The likelihood that these financial businesses will perform financially increases with increased surveillance of high risks. An effective and proper practice of risk monitoring was applied to help in ensuring that risks are aligned to the

goals of management for the financial institutions to enable them to uncover occurrences at an initial stage.

In Kenyan manufacturing enterprises, Kiarie (2017) identified an association between risk control and monitoring, management approaches, and supply chain success. The inquiry used 412 industrial companies operating in Nairobi County and the results noted that having risks control and monitoring, management strategies positively influence the performance of supply chain in Kenyan manufacturing industries. However, the study was based on 2017 market systems.

Obondi (2022) looked at the effects that the use of risk systems has on the success of construction projects in the USA. The inquiry used many firms and using electronic survey tools for the study. The study's findings revealed that projects' success and performance were favourably and significantly correlated with risk monitoring and control.

2.4 Determinants of Financial Performance

The concept of finance and output framework is defined as a measure by evaluation of its traded value per annum and Returns on Assets. It can be determined also by computation of the core capital to its total risks weighted assets ratio. All investment measures that are adopted for computation of the financial success of a firm includes Returns on equity, return on capital, and return on assets (Wanjiku, *et al.*, 2021). In the proposed study the researcher intends to adopt the return on assets (ROA) since this measure considers the overall resources of the firm since it considers the performance with respect to net income and total assets.

2.5 Conceptual framework

Risk management strategies is the predictor concept and it is thought to comprise a subset of three dimensions which involve: risk identification, assessment and monitoring and control while the dependent variable which is market value of the firms.

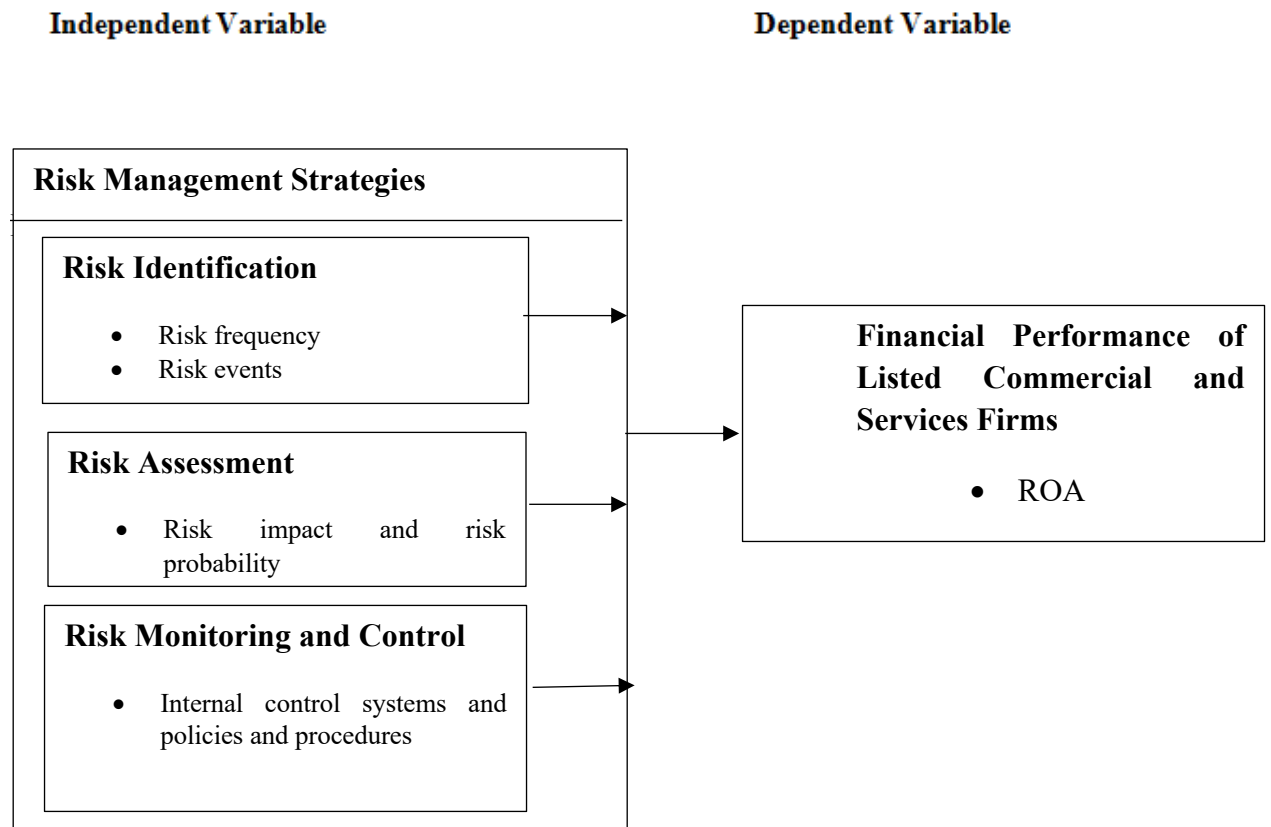


Figure 2. 1Conceptual Model

Source: Researcher, 2021

2.5 Summary of Literature Review

Even though firm output is affected by different variables, the reviewed literature shows evidence why various firms should institute proper risk management strategies. Research on the effectiveness of building projects in the USA was undertaken by Obondi (2022). The financial performance and risk management methods have been found to be

positively and significantly correlated by Kiarie (2017), Njeri (2014), Biyahagumye & Phelista (2020), and Lagat and Joel (2017).

These studies assert that risk management strategies guarantee the survival of these firms. Most of these studies have focused on manufacturing, construction, banking and insurance sectors. Additionally, a certain industry received disproportionate attention.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

In order to satisfy the objectives of this study, the researcher used various procedures. This section provides review of the plans. This includes ways of gaining information and other variables in the inquiry.

3.2 Research Design

It offers a path for achieving the goals of the study. Research design is referred to as the conceptual framework for the research (Akhtar, 2016). The researcher used a descriptive study design. The model helps to describe the characteristics of a certain group or a specific person (Kothari, 2004). This design was chosen by the researcher primarily because it allowed for the collection of an accurate description of the current conditions in the daily operations of the firms in questions. Additionally, it assisted the researcher in learning more about the topic.

3.3 Population

The researcher targeted a population of eleven commercial and services firms listed at NSE. According to obtained data from NSE website (www.nse.co.ke) as at January 2022, there are 11 listed firms. The researcher chose this sector because very little has been done in this sector with regards to risk management. Since the disclosure of financial statements is a necessity, the study focused on listed companies since their data is readily accessible and readily available. The researcher also relied on Capital Markets Authority (CMA) and their reports for this sector for more information.

3.3 Sample and Sampling Technique

The researcher adopted a census survey study, of which all the 11 firms were analyzed. Lagat and Joel (2017) listed departments that contribute great risk to operation and financial performance of service and commercial firms as finance, accounting or credit department, procurement and logistics department, production or operation department, and human resource department. Based on the same, the researcher therefore, purposively selected four departments as unit of analysis. For each firm, two respondents (department manager and staff) were randomly sampled as study participants, giving a total of 88 respondents (Department Managers 44; Department Staff 44).

3.4 Data Collection

Only field data were used in this investigation. The investigation used questionnaires. The survey gathered information on the topic. The study period was years 2016 through 2020. This was important in gaining good information and proper framework to understand the concepts.

3.5 Data Validity and Reliability

According to Mugenda & Mugenda (2004), the degree to which a study measures what it is intended to assess and demonstrates the efficacy of the research is known as validity. With the help of the supervisor and the study's technocrats, the validity in this study was done using both content and face validity.

In order to exclude it from the sampling list, the researcher ran a pilot study on one of the commercial and service businesses that is not listed at NSE. The unclear statements in the pilot questionnaire were identified and will be revised to increase the validity of the research instruments.

The researcher used the Cronbach's model to test the internal consistency to assess reliability since it produces a unique quantitative evaluation of the scale's internal consistency. Result of reliability test is presented in Table 3.3 and shows that all variable scored an alpha value greater than 0.7 thus they were considering valid and reliable as recommended by Lim *et al.*, (2009).

3.6 Diagnostics Tests

In order to perform this test, the linear regression model's independent and dependent variables' correlations were examined. The diagnostic procedures will be investigated based on the measures discussed subsequently.

3.6.1 Normality Tests

The test is conducted in order to established whether the data collected from the chosen sample represents a normally distributed population. According to Ghasemi and Zahediasl(2012) obtaining data from a sample does not necessarily mean that the population of the sample is normally distributed and therefore it is necessary to carry out normality test.

3.6.2 Multicollinearity Tests

This was done to ensure that the collected data is not bias. The analysis also helps to show how variables relate.

3.6.3 Serial Correlation

Serial correlation is also referred to as autocorrelation where it is done to establish correlation between a variable and its residual or the lagged version of the variable. To establish this, the study used the Durbin Watson statistic.

3.6.4 Heteroscedasticity Test

This was done based on the error term which may be similar across the perceptions. Breusch-Pagan was utilized to lay out whether the variety among examining units of a variable is nonstop in a regression model. The condition can be adjusted by applying remedied standard error. The Hypothesis is that the error terms are ordinarily disseminated.

3.7 Data Analysis

The raw data was adjusted with scientific care in order to ensure consistency, accuracy, and completeness. A Microsoft Excel spreadsheet as well as the SPSS model was used. The generated quantitative data was evaluated using statistical techniques for descriptive and inferential analysis. It was investigated to employ descriptive statistics and various valued provided. The data was analyzed, and conclusions were drawn using tables, charts, and percentages. Analysis using correlation and regression was done to see how risk management strategies would affect financial results.

3.7.1 Analytical Model

The aspects of the study in terms of risk assessment, risk identification, and risk monitoring and evaluation, were considered as independent factors while output on firm was regarded the as outcome concept. In order to tie the concepts in the inquiry, and to be able to predict the result variable using the predictor variables, a regression model was constructed from the regression analysis, and the model took the form:

$$Y = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \varepsilon$$

Where.

Y = Financial performance of the firm (Measured using ROA)

α_0 = Constant

α_1 , α_2 and α_3 = coefficients

X_1 = Risk Identifications (Measured using risk frequency and risk events)

X_2 = Risk Assessment (Measured using risk impact and risk probability)

X_3 = Risk Monitoring and Control (Measured using internal control systems and policies and procedures)

ε = Error term

3.7.2 Test of Significance

Both the t-test and f-test was applied for testing significance of individual coefficients and joint significance for all coefficients respectively.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND DISCUSSION OF FINDINGS

The section provides review and analysis of the results. For the purpose of presenting and discussing the inquiry issues, the section is divided into three sections: response rate, demographic findings, study objective findings discussions.

4.1 Response Rate

The study issued questionnaires to all 88 sampled respondents. 56 questionnaires were returned dully filled, 9 partly filled and 23 not returned, which corresponds to 63.64%, 10.22% and 26.14% respectively as shown in Table 4.1. The inquiry include all dully filled questionnaires for analysis giving a response rate of 63.64% which is good based on Kothari (2013).

Table 4. 1: Response rate

Questionnaires	Response	Percent (%)
Dully filled Returned forms	56	63.64
Partly filled Returned forms	9	10.22
Not returned forms	23	26.14
Total	88	100.00

4.2 Demographic results

The study assessed three demographic variables, namely gender, age and highest level of education in respect of the respondents. Analysis results are summarized on Table 4.2.

4.2.1 Respondent's Gender Distribution

The result of respondent's gender demographic analysis is shown in Figure 4.1. The result indicates that 64.3% (N=36) were the male gender who are most of the study participants while female gender accounts for 35.7% (N =20). The result suggests male gender are the dominant staffs in firms operating in commercial and service sector of economy in Kenya. The finding agrees with Johnston and Flower (2007) whose study reported a male gender majority in commercial enterprises in service industry.

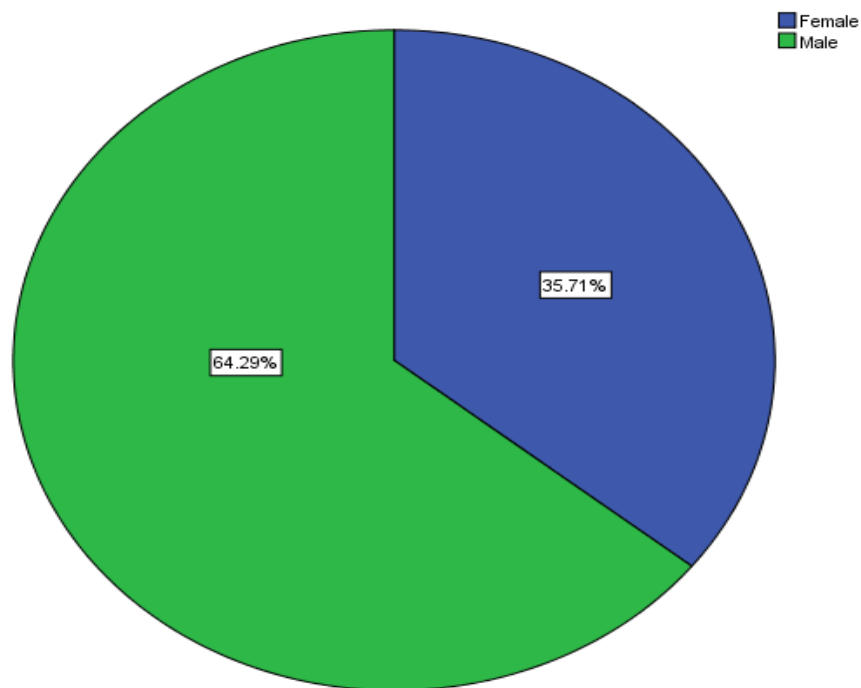


Figure 4. 1 Respondent's gender distribution

4.2.2 Respondents Age Distribution

Study results on respondents' age distribution is shown in Figure 4.2. This result showed that 3.6% (N=2) of respondents were below 20 years of age, 5.4% (N=3) were between 20-29 years old, 44.6% (N=25) were between 30-39 years old, 32.1% (N=18) were between 40-49 years and 14.3% (N=8) were 50 years and above. Findings showed that many participants in the study were of age bracket 30-39 years, followed by age bracket

40-49 years, and implied majority of staffs were mature adults and provide reliable response to research questions.

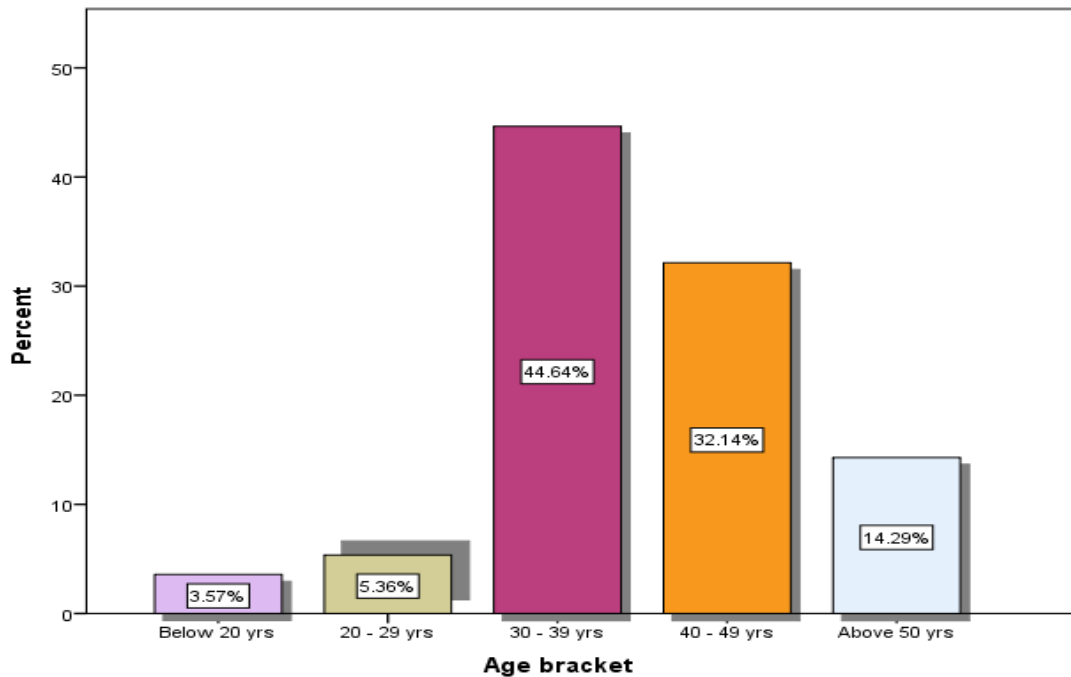


Figure 4. 2 Respondents age distribution

4.2.3 Respondents Level of Education

The study further assessed the respondents' highest level of education and result are presented in Figure 4.3. Results shows 17.9% (N =10) participants had attained diploma qualification as highest level of education, 48.2% (N=27) had attained degree, 3.6% (N=2) had masters and 30.4% (N=17) had attained other qualifications as highest level of education. Therefore, the finding suggests, majority of staffs have acquired degree and above qualification implying profession qualification is mandatory for employment in commercial and service industry.

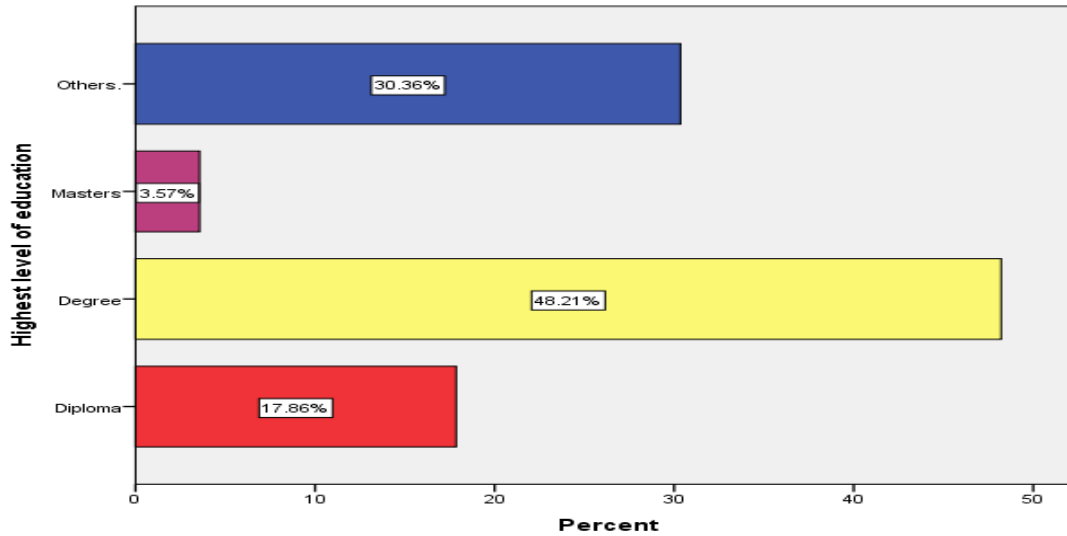


Figure 4. 3: Respondents level of education

4.2.4 Years of Experience

Results of how long the respondents have worked in the industry is shown in figure 4.5.

Finding shows that 23.2% (N=13) have worked for less than five years, 10.7% have worked for between 5-10 years, 32.1% have worked for between 11-15 years and 33.9% (N=19) have experience of above 15 years. Majority of participants therefore have worked for above 15 years implying they were well conversant with the industry operation and performance thus provided reliable response.

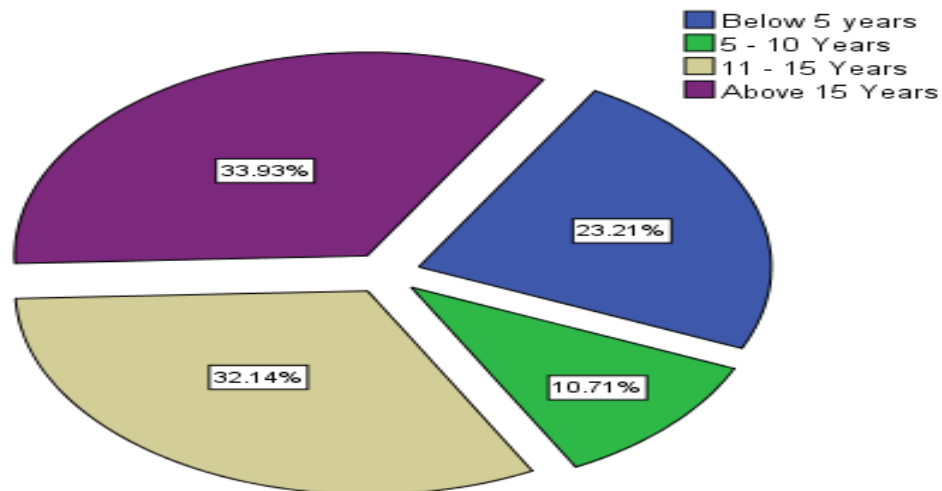


Figure 4. 4: Respondent years of service

4.3 Descriptive results

The analysis showed how risk systems influence firm success and this section summarizes the research's output. The findings are divided into three main, unbiased categories: risk assessment as well as risk identification. It also covers risk monitoring and evaluation. It was based on a five point scale with various points and values.

4.3.1 Risk models and firm output

Table 4. 2: Respondents agreement with risk identification questions

Statement	Min	Max	Mean	Medium	Mode	Std.Dev
The firm frequently checks the risks environment	1	5	4.07	4	4	0.628
The management set out duties to help in risk identifications	1	5	3.8	4	4	0.724
The firm uses risk ratings for classification of risks	1	5	3.88	4	4	0.81
The firm develops a well-defined structure for risk management framework	1	5	4.07	4	4	0.628
Risk identification helps the firm in improving its' financial performance	1	5	3.64	4	4	0.749
The firm engages in more detailed planning to avoid risk exposure	1	5	4.05	4	4	0.585
The firm identifies risks that can impact a firm's business outcomes	1	5	4.11	4	4	0.652

From Table 4.2, results shows that study participants were in agreement that their firms frequently checks the risks environment ($\mu=4.07$, Med=4, Mo=4, $d=0.628$); respondents were in agreement their firm sets the defined roles and responsibilities to help in risk identifications ($\mu=3.8$, Med=4, Mo=4, $d=0.724$); respondent were in agreement that their firms uses risk ratings for classification of risks ($\mu=3.88$, Med=4, Mo=4, $d=0.81$); respondents were in agreement their firms develops a well-defined structure for risk

management framework ($\mu=4.07$, Med=4, Mo=4, $d=0.628$). the inquiry noted that risk management helps the firms in improving success ($\mu=3.64$, Med=4, Mo=4, $d=0.749$); respondents were in agreement that their firms engage in more detailed planning to avoid risk exposure ($\mu=4.05$, Med=4, Mo=4, $d=0.585$); and respondents were in agreement that their firms identifies risks that can impact a firm's business outcomes ($\mu=4.11$, Med=4, Mo=4, $d=0.552$).

These findings implies that commercial and service firms, in enhancing risk identification practice, often check the risks environment, sets the defined roles and responsibilities to help in risk identifications, uses risk ratings for classification of risks, and develops a well-defined structure for risk management framework. Further results showed risk identification helps their firms in improving its' financial performance and firms engaging in more detailed planning to avoid risk exposure as well as identifies risks that can impact a firm's business outcomes.

4.3.2 Risk Assessment and Financial Performance of Commercial and Service Firms

Table 4. 3: Respondents agreement with risk assessment questions

Statement	Min	Max	Mean	Medium	Mode	Std.Dev
The firm assesses uncertainty of loss.	1	5	4.29	4	4	0.706
The firm uses risk assessment for potential loss.	1	5	4.14	4	4	0.724
The firm reduces risks occurrence probability	1	5	3.93	4	4	0.71

The firm uses different methods to assess every risk.	1	5	3.93	4	4	0.71
The firms' risk is categorized into different levels for further analysis.	1	5	4.00	4	4	0.603
Risks are clearly evaluated with assumptions and uncertainties	1	5	4.00	4	4	0.632

Source: Researcher (2022)

From Table 4.2, results shows that study participants were in agreement that their firms assesses uncertainty of loss ($\mu=4.29$, Med=4, Mo=4, $d=0.706$); respondents were in agreement their firm uses risk assessment for potential loss ($\mu=4.14$, Med=4, Mo=4, $d=0.724$); respondent were in agreement that their firms reduces risks occurrence probability ($\mu=3.93$, Med=4, Mo=4, $d=0.71$); respondents were in agreement their firms uses different methods to assess every risk ($\mu=4.93$, Med=4, Mo=4, $d=0.710$). Additional results showed majority of respondents agreed that their firms categorize risks into different levels for further analysis ($\mu=4.00$, Med=4, Mo=4, $d=0.603$); respondents were in agreement that their firms' risks are clearly evaluated with assumptions and uncertainties ($\mu=4.0$, Med=4, Mo=4, $d=0.632$).

These findings implies that commercial and service firms, in enhancing risk assessment practice, often check assesses uncertainty of loss, uses risk assessment for potential loss, reduces risks occurrence probability by use of different methods to assess every risk. In addition, firms' categorized risk into different levels for further analysis and evaluation with assumptions and uncertainties.

4.3.3 Risk Monitoring and Evaluation and Financial Performance of Commercial and Service Firms

Table 4. 4: Respondents agreement with risk monitoring and evaluation questions

Statement	Min	Max	Mean	Medium	Mode	Std.Dev
The firm's risk management program is well documented	1	5	4.25	4	4	0.58
All employees are educated in ways of managing risks.	1	5	3.95	4	4	0.616
The responsibilities and roles of employees on their efforts on risk management are well communicated and documented.	1	5	3.46	4	4	1.078
Monitoring is important in managing risks.	1	5	3.41	3	4	1.058
Risk management reviews are regularly conducted, and reports are done and documented to the senior management	1	5	3.38	4	4	0.906
The firm monitors internal control systems and standards	1	5	3.45	4	4	0.952
The firm adheres to their policies and procedures	1	5	3.3	3	3	0.893
The firm's risk management program is well documented			4.25	4	4	0.58

Source: Researcher (2021)

From Table 4.4, results shows that study participants were in agreement that their firms risk management program is well documented ($\mu=4.25$, Med=4, Mo=4, $d=0.58$); respondents were in agreement their all employees are well and adequately trained on risk management policies of the firms ($\mu=3.95$, Med=4, Mo=4, $d=0.616$); respondent were in agreement that responsibilities and roles of employees on their efforts on risk management are well communicated and documented ($\mu=3.46$, Med=4, Mo=4, $d=1.078$); respondents supported the need for effective control in the firm ($\mu=3.41$, Med=4, Mo=4, $d=1.058$). Additional results indicated that respondents were indifference that risk management reviews are regularly conducted and reports are done and documented to the

senior management ($\mu=3.38$, Med=3, Mo=3, $d=0.906$); respondents were also indifference that firm monitors internal control systems and standards ($\mu=3.45$, Med=4, Mo=4, $d=0.952$); and firm adheres to risk management policies and procedures ($\mu=3.3$, Med=3, Mo=3, $d=0.893$).

These results suggest that in order to improve risk monitoring and evaluation practices, commercial and service firms frequently make sure that risk management programs are well documented, employees are well and adequately trained on risk management policies with clear roles and responsibilities. This promoted success in the firms. In addition, there is disagreement with firm's risk management reviews and documentation to the senior management, monitoring of internal control systems and standards as well as firms adheres to risk policies and procedures.

4.3.3 Financial Performance of Commercial and Service Firms

Table 4. 5: Respondents agreement with financial performance questions

Statement	Min	Max	Mean	Medium	Mode	Std.Dev
The firm's sales revenue has been growing over the past five years.	1	5	3.61	4	4	0.928
The firm's asset value has been growing over the past five years.	1	5	3.64	4	4	0.943
The firm's operating cost has been below the margin or declining relative to revenue over the past five years.	1	5	3.48	4	3	1.144
The firm's operating profit has been growing over the past five years.	1	5	3.41	3	4	0.949
The firm's net asset value has been growing over the past five years.	1	5	3.3	3	3	1.043
The firm's non-operating income has been growing over the past five	1	5	3.63	4	3	0.983

years.

Source: Researcher (2021)

Result for financial performance, as shown in Table 4.5, reveals participants were in agreement that their farms sales revenue has been growing over the past five years ($\mu=3.61$, Med=4, Mo=4, $d=0.928$); respondents were in agreement their firm's asset value has been growing over the past five years ($\mu=3.64$, Med=4, Mo=4, $d=0.943$); respondent neither agreed or disagreed that their firm's operating cost has been below the margin or declining relative to revenue over the past five years ($\mu=3.26$, Med=3, Mo=3, $d=1.144$); respondents were in agreement that firm's operating profit has been growing over the past five years ($\mu=3.41$, Med=3, Mo=4, $d=0.949$). Besides, respondents were indifference that firm's net asset value has been growing over the past five years ($\mu=3.3$, Med=3, Mo=3, $d=1.043$); and respondents were also indifference that firm's non-operating income has been growing over the past five years ($\mu=3.33$, Med=3, Mo=3, $d=0.983$).

These findings implies that commercial and service financial performance indicators namely sales revenue, asset value and operating profit have been growing over the past five years. In the contrary, there is no agreement with reduction in firm's operating cost, growth in firm's net asset value and non-operating income over the past five years.

4.5 Diagnostic Test

A diagnostic test was used to determine if the regression data were appropriate considering the study's factors. This test includes the four fundamental statistical tests of heteroscedasticity, multicollinearity, normality and serial correlation.

4.5.1 Tests of Normality

The relevance of the test was due to the fact that they show how the data is distributed.

This confirms the reliable nature of the results Data in this model was normally distributed. Additionally, the model showed the level of kurtosis as well as the level of data skewness. This was done using Shapiro-Wilk test. Other test done showed normal plan and 0.05 values of significance. The data sets power and analysis on normal framework is shown below.

Table 4. 6: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Financial performance	.292	56	.000	.773	56	.000
Risk identification	.321	56	.000	.827	56	.000
Risk assessment	.239	56	.000	.892	56	.000
Risk monitoring and evaluation	.294	56	.000	.803	56	.000

a. Lilliefors Significance Correction

Since the data values continuously depart from the normal distribution, the Shapiro-Wilk test's significant value for all the variables in Table 4.6 above is less than 0.05, which suggests that the data are not normally distributed. In samples with values greater than 50, normality may be disrupted due to the dispersion of the sample data values; nevertheless, this may not be viewed as an issue when computing inferential statistics. In addition, a Linkert scale comprises of five points and therefore distribution of data may not bring a significant difference on the regression outcome.

4.5.2 Test for Multicollinearity

When independent variables in a regression model correlate with one another, multicollinearity arises. The occurrence of multicollinearity may pose a difficulty in the model because each independent variable should not correlate with one another. Additionally, challenges with fitting the model and understanding the model's predictions may occur if the degree of correlation among the independent variables is significant. The variables under consideration were examined for multi-collinearity using VIF model.

Table 4. 7 :Variance Inflation Factor

Model	Collinearity Statistics	
	Tolerance	VIF
1(Constant)		
Risk identification	.841	1.189
Risk assessment	.847	1.180
Risk monitoring and evaluation	.773	1.294

a. Dependent Variable: Financial performance

The VIF values obtained range from 1 to 10 and data on the output is shown in Table 4.7. The data is deemed to be free of multicollinearity when the VIF values approach the value 1. Thus, it can be asserted that there was no evidence of multicollinearity in the regression data. As a result, the data values were sufficient and regarded appropriate to provide credible inferential findings.

4.5.3 Serial Correlation

Serial correlation, alternatively autocorrelation, is used to determine if the research variables were consistently connected with their lagged residuals. The serial correlation

in the regression data was examined using the Durbin Watson (DW) statistic. This was based on 0 to 4 values.

Table 4. 6: Serial Correlation

Test	Statistic
Durbin Watson	2.684

Source: (2022)

Table 4.8's Durbin Watson serial correlation test findings showed that the DW value was 2.684, which is more than the value 2 by 0.684, indicating that there is only a negligible presence of serial correlation that might not have an impact on the outcomes of the regression analysis.

4.5.4 Heteroscedasticity

When the variability of an independent variable is unequally distributed among the possible values of the second variable that predicts it, this is known as heteroscedasticity. In this case, it is assumed that there should be very minimal heteroscedasticity issue if the value is more than 0.05.

Table 4. 7: Heteroscedasticity

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.372	.309		-1.203	.234
	Risk identification	.022	.060	.046	.366	.716
	Risk assessment	.117	.037	.388	3.132	.003
	Risk monitoring and evaluation	.087	.036	.314	2.416	.019

a. Dependent Variable: Abs

The value confirmed the view that the risk assessment and risk monitoring and evaluation are less than 0.05 implying that there is no heteroscedasticity in the dataset of the variables. However, risk identification had a significance value of 0.716 which is greater than 0.05. This implies that the dataset deviated slowly from the normal distribution. Based on the findings, the one variable did not affect the significance of the regression analysis since the residuals of other independent variables outweighs the one variable.

4.4 Inferential Analysis Results

This part represents the inferential results that assessed the relationship and interdependency between risk management strategies and financial performance of commercial and service industries listed at NSE. The relationship and interdependency were assessed through Pearson correlation and multiple regressions respectively. Results are discussed below.

4.4.1 Regression analysis of relationship between risk management strategies and financial performance

To determine the kind and strength of the association between risk management strategies and financial performance, Pearson correlation analysis was performed. The correlation results together with the levels significant are shown in the Table 4.10.

Table 4. 10: Result of correlation analysis

	Parsons Correlation	Financial Performance	Risk Identification	Risk Assessment	Risk Monitoring & Evaluation
Financial Performance	Correlation Sig. (2-tailed)	1			
Risk Identification	Correlation Sig. (2-tailed)	.752**	1		
Risk Assessment	Correlation Sig. (2-tailed)	.802**	.950**	1	
Risk Monitoring & Evaluation	Correlation Sig. (2-tailed)	.459**	.276*	.368**	1

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

Source: Researcher (2022)

According to Table 4.10's findings, financial performance exhibited high positive and substantial correlations with risk identification ($r=0.752^{**}$, $p0.001$), risk assessment ($r=0.802^{**}$, $p0.001$), and monitoring and evaluation of risks ($r=0.459^{**}$, $p=0.001$). The findings show that the financial performance of commercial and service enterprises listed on the NSE is significantly and favorably influenced by risk identification, risk assessment, and risk monitoring and evaluation.

4.4.2 Result of Multiple Regression

In order to determine the relationships between risk management methods and the financial success of commercial and service firms listed on the NSE, multiple regression analysis was utilized in the study. The results of the study, which included multiple regression analysis, are presented and extensively described here.

Result of coefficient of determination (R^2)

Table 4.11 displays the model summary findings, which show that $R=0.821$, R-square $R^2=0.674$, and adjusted R-square value $AdjR^2=0.656$ with $SEE=0.387$ (Standard Error

of Estimates). Risk management techniques such as risk identification, risk assessment, and risk monitoring and evaluation are responsible for 67.4% of the variance in financial performance of commercial and service enterprises listed on the NSE, according to the R-square finding, or coefficient of determination. In addition, other factors not included in the study accounts for 32.6% of variation in financial performance.

Table 4. 11: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.821a	.674	.656	.387

a. Predictors: (Constant), Risk Identification, Risk Assessment, Risk Monitoring and Evaluation

b. Dependent Variable: Financial Performance

Result of Analysis of Variance (ANOVA)

Table 4.12 shows the results of an analysis of variance (ANOVA) to help evaluate the goodness of fit of the study model utilized. In comparison to the sum of squares of residuals of 7.793 with a mean square of 0.150, the sum of squares of regression is 16.135 with a mean square of 5.378. The resulting F-value is 35.88, with a p-value of 0.001. The computed F statistics are more than the required F-value of $(df 3,52) = 2.46$. The model was fit for the study and at least one of its risk management plan components, as evidenced by the computed higher F-value, based on information on the financial performance of commercial and service organizations listed on the NSE.

Table 4. 12: Analysis of Variance (ANOVA)

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	16.135	3	5.378	35.886	.000b
Residual	7.793	52	.150		
Total	23.929	55			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Risk Identification, Risk Assessment, Risk Monitoring and Evaluation

Results of regression coefficients (β)

Table 4.13 displays the regression coefficient findings that explain the partial influence or parameter change on the dependent variable induced by the independent variable.

Table 4. 13: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.714	.482		-1.482	.144
Risk Identification	.058	.295	.052	.197	.845
Risk Assessment	.865	.344	.681	2.511	.015
Risk Monitoring and Evaluation	.261	.118	.195	2.213	.031

a. Dependent Variable: Financial Performance

The result indicates a constant value of 0.714 that denotes the level of performance not caused by any of the analyzed variable. Additionally, the results showed that risk identification has a standardized beta value of $\beta = 0.052$ ($p=0.845$), risk assessment has standardized beta $\beta = 0.681$ ($p=0.015$), and risk monitoring and evaluation has a standardized beta of $\beta = 0.195$ ($p=0.031$).

The results suggest that risk assessment and risk monitoring and evaluation have significant dependency with financial performance while risk identification has

insignificant dependence. These finding on significant effect of risk assessment agree with Wanjohi, (2013) study that reported risk systems promote firm output in Kenya; and Njeri, (2014) studied that reported manufacturing industries that strictly adhere and observe risk assessment techniques records a higher financial performance. In addition, the findings corroborated with Lagat and Joel (2017) study that also showed risk assessment is important in firm management.

Study finding on insignificant effect of risk identification contradicted results by Khalilzadeh, *et al.*, (2020) which reported that identification and prioritizing critical risks plays a very important role in the survival and successes of companies besides providing sound financial performance; as well as Biyahagumye and Phelista (2020) study that reported risk identifications has greater significance and influence on the financial institutions to achieve sound financial performance.

Proposed Model

The following model was adopted to show the link on the variables.

$$Y = 0.714 + 0.052X_1 + 0.681X_2 + 0.195X_3$$

Where Y= Financial performance

X₁=Risk identification

X₂= Risk assessment

X₃= Risk monitoring and evaluation

CHAPTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This section summarizes the research and examines the primary results in terms of objectives, conclusions and suggestions. The chapter also includes research recommendations.

5.2 Summary

The study purposed to determine the effect of risk control systems on the output of firms within NSE. To achieve this, primary data was collected on four risk management practices using questionnaire constructed with Likert scale questions. Summary of key result on risk management strategies are presented below.

5.2.1 Risk Identification and financial performance

Summary of findings for effect of risk identification on success of firms listed at the NSE shows that commercial and service firms often scan risks environment, sets defined roles and responsibilities to help in risk identifications, uses risk ratings for classification of risks, and develop structure for risk management framework. Similarly, risk identification helps firms improve financial performance and impact a firm's business outcomes. Risk identification helps to promote success of the firms.

5.2.2 Risk assessment and financial performance

For risk assessment summary, results show commercial and service firms in enhancing risk assessment practice often check assesses uncertainty of loss, uses risk assessment for potential loss, and reduces risks occurrence probability by use of different methods to assess every risk. In addition, firms' categorized risk into different levels for further

analysis and evaluation with assumptions and uncertainties. There is very strong and positive correlation between risk assessment and financial performance. The findings also show that financial performance of commercial and service firms highly and significantly depends on risk assessment.

5.2.3 Risk Monitoring and Evaluation and financial performance

Results shows that commercial and service firms in enhancing risk monitoring and evaluation ensures risk management program are well documented, employees are well and adequately trained on risk management policies with clear roles and responsibilities, monitoring and controls are in place to evaluate the efficiency and effectiveness of the risk management program. In the contrary, there is lack of consensus in risk management reviews and documentation to the senior management, monitoring of internal control systems and standards as well as firms adheres to risk policies and procedures. There also exist strong positive relationship between risk monitoring and evaluation with financial performance, beside strong and significant interdependency between the same.

5.3 Conclusions

The study finds that the return of enterprises listed on the NSE is significantly impacted by risk management approach. This effect is significantly contributed by risk assessment and risk monitoring and evaluation, with risk identification contributing insignificant effect. These conclusions are in tandem with Wanjohi, (2013) study that showed risk assessment practices had a higher impact on the financial performance of commercial banks in Kenya; and Njeri, (2014) studied that reported that manufacturing industries that strictly adhere and observe risk assessment techniques records a higher financial performance.

The results are also supported by Lagat and Joel (2017) that found a firm success depends on risk control adopted. A study by Kiarie (2017) that found that effective management promotes success of firms. This means that firms should use risk practices to improve their goals.

However on the contrary, the finding did not agree with finding on risk identification by others scholars since Lagat and Joel, (2017) study reported a contradicting result that risk identification has a positive relationship with the financial performance of the financial institutions; and also Khalilzadeh, *et al.* (2020) study also reported a contradicting result that risk identification and prioritization plays a very important role in the survival and successes of companies besides providing sound financial performance.

5.4 Recommendations for policy and practice

Study recommendations are based on key findings. The study found that there is lack of consensus on effect of risk management reviews and documentation, monitoring of internal control systems and standards, and adheres to risk policies and procedures. Thus, the study recommends that management should emphasis on risk reviews and monitoring of internal controls to enhance risk monitoring strategy. In addition, strict adherence to risk policies and standard should be ensured to enhance financial performance of commercial and service firms.

Based on the finding that risk identification has insignificant effect on financial performance the study recommends that commercial and service firm's management to review their risk identification strategy and adopt modern mechanism for detecting risk associated with the current market and operational dynamics.

5.5 Limitations of the Study

During the process the researcher faced myriad of challenges with respect to the research and more specifically during the data collection process. Even though the researcher tried to exhaust quite several the sample, population which were spread across the Country the resources in terms of finances was inadequate. Therefore, some regions were not covered during this data collection process. Some of the respondents were not able to give an accurate information for fear of victimization by their respective companies. The researcher also experienced a non-cooperation from some of the respondents who refused to give any attention to the researcher and therefore were not able to respond completely to the questions posed through the questionnaires.

5.5 Suggestions for further studies

The study suggests further investigation to determine the other significant components of organizations other than risk management strategies, which accounted for the remaining 32.6% of variance in financial performance, based on the result that risk management methods account for 67.4% of that variation. Similar research is suggested to be conducted in other NSE-listed companies that operate in different market areas, such as firms in manufacturing and allied sector.

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APPENDICES

APPENDIX I: LIST OF COMMERCIAL AND SERVICES FIRMS LISTED AT

NSE AS AT 2021.

1. Deacons (East Africa) Plc
2. Express Kenya
3. Kenya Airways
4. Longhorn Publishers
5. Nairobi Business Ventures Limited
6. Nation Media Group
7. Sameer Africa
8. Scan Group Limited
9. Standard Group
10. TPS Eastern Africa (Serena)
11. Uchumi Supermarket Limited

Source: www.nse.co.ke

APPENDIX II: DATA COLLECTION QUESTIONNAIRE

Kindly tick (✓) or write by providing responses to the questions.

SECTION A: PERSONAL INFORMATION

1. Gender

Male Female

2. Age

20- 29 years 30 - 39 years

40 - 49 years 50 years and above

3. Number of years of experience in the industry

Below 5 years 5-10 years 11- 15 years

Above 15 years

4. Level of education

Diploma Degree

Masters PHD

SECTION B: Risk Identification

From the below statement, kindly indicate your agreement or disagreement level to the statements below.

Statement	1	2	3	4	5
The firm frequently checks the risks environment					
The firm sets the defined roles and responsibilities to help in risk identifications					

The firm uses risk ratings for classification of risks					
The firm develops a well-defined structure for risk management framework					
Risk identification helps the firm in improving its' financial performance					
The firm engages in more detailed planning to avoid risk exposure					
The firm identifies risks that can impact a firm's business outcomes					

SECTION C: Risk Assessment

From the below statements, kindly indicate your agreement or disagreement level to the statements below.

Statement	1	2	3	4	5
The firm assesses uncertainty of loss					
The firm uses risk assessment for potential loss					
The firm reduces risks occurrence probability					
The firm uses different methods to assess every risk					
The firms' risk is categorized into different levels for further analysis					

Risks are clearly evaluated with assumptions and uncertainties					
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SECTION D: Risk Monitoring and Control

From the below statement, kindly indicate your agreement or disagreement level to the statements below.

Statement	1	2	3	4	5
The firm's risk management program is well documented					
All employees are well and adequately trained on risk management policies of the firms					
Each employee's roles and responsibilities in the efforts of risk management in the firm are well communicated and documented					
Monitoring reduce risks in the firm					
Risk management reviews are regularly conducted, and reports are done and documented to the senior management					
The firm monitors internal control systems and standards					
The firm adheres to their policies and procedures					

SECTION E: Financial Performance

From the below statement, kindly indicate your agreement or disagreement level to the statements below.

Statement	1	2	3	4	5
The company's sales revenue has been increasing over the last five years.					
The company's asset value has been increasing over the last five years.					
The company's operating cost has been below the margin or declining relative to revenue over the last five years.					
The company's operating profit has been growing over the last five years.					
The company's net asset value has been growing over the last five years.					
The company's non-operating income has been growing over the last five years.					