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**EFFECT OF FINANCIAL RISK MANAGEMENT ON FINANCIAL PERFORMANCE OF
FIRMS LISTED IN THE NAIROBI SECURITIES EXCHANGE**

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Abstract

Purpose: The main purpose of this study was to determine the effect of financial risk management on financial performance of firms listed at the Nairobi Securities exchange.

Methodology: The study employed descriptive design. The target population for the study was all the chief financial officers of all the 61 listed firms at the Nairobi Securities Exchange. The study employed a census survey of the 61 CFO's of the listed firms at the NSE. The study utilized a semi-structured questionnaire to collect primary data. The collected data was coded into SPSS 23 for subsequent descriptive and inferential statistics. Descriptive statistics was presented through frequencies, percentages, means and standard deviation. The inferential statistics was presented using regression model summary and correlation coefficients. The findings were further presented using charts and tables.

Results: The findings of the research showed there was a positive and significant association between financial risk management strategies as evidenced by the coefficient of determination $R^2 = .205$. The results of the study further indicated that asset structuring management and risk avoidance practices had a positive and significant influence on financial performance. The study concluded that with proper asset structuring management practices a firm can improve its performance on the stock exchange. Further the research findings showed that risk avoidance practices can positively enhance the financial profitability of listed firms.

Unique Contribution to Theory, Policy and Practice: The study recommends that listed firms should enhance their financial risk management practices to be in tandem with growing international standards and globalization. The study also recommends that the regulatory authorities should establish policies laws that take note of the risks that company take and provide them with certain incentives on the bourse.

Keywords: *Financial Risk Management, Financial Performance and Nairobi Securities exchange*

1.0 INTRODUCTION

In today's modern world risk management is becoming a necessity instead of an option for an organization. Executives and Board of Directors of most companies have understood the importance of risk management and they have given the primary importance to implement it in their corporations. Financial risk consists of two kinds of risks, systematic and unsystematic risk. Systematic risk is the kind of risk that is inherent in the system or the universe in which all firms operate (Ross, Westerfield, Jordan, & Mazin, 2007). Unsystematic risk is specific to the firm or company. It is particular to the nature of projects the firm chooses to undertake. Unsystematic risk can be diversified away through various asset selection techniques. On the other hand, systemic risk cannot be diversified away through asset selection and is the main cause of financial instability and risk (Bansal & Clelland, 2004). Risk is an inherent part of conducting business and it is arguably a critical aspect of firms' strategic processes (Ruefli, Collins, & Lacugna, 1999).

Financial risk is the unexpected variability or volatility of returns (Holton, 2004). It includes credit, liquidity and market risks which contribute to the volatility of financial performance (Dimitropoulos & Asteriou, 2010). The hypothesis is that financial risk leads into failure of financial performance if it is not well managed. Strategic Risk Management is a process for identifying, assessing and managing risks and uncertainties, affected by internal and external events or scenarios that could inhibit an organization's ability to achieve its strategy and strategic objectives. The ultimate goal of strategic risk management is creating and protecting shareholder and stakeholder value (Nderi, 2013). Effective financial risk management strategies involves a comprehensive procedure undertaken by the financial institutions to avert the effects of risk factors in the organization (Smeeth, Douglas, Hall, Hubbard, & Evans, 2009), there are myriad of risk management strategies that will influence on the organization performance, these includes asset structuring management strategies, risk sharing strategies, risk transfer and risk avoidance strategies.

Risk management has become a significant part of firm management after the financial crisis; 2007 and 2008-: the business environment is enmeshed with financial risks which can have a negative impact on an organization existence and success. Firms have recognized the significance and necessity of managing risks and the importance of doing this in a more coordinated way by considering both internal and external environment to adequately understand and manage these risks. This way they avoid possible financial losses and damage to company reputation. Firms that fail to manage risk, fail to maximize on the opportunities that risky environment present to them for their own competitive advantage. Weak risk management system was a major contributing factor to the financial crisis in United States of America (USA) in 2008. The crisis affected the economy and financial markets in the USA leading to collapse of the mortgage industry (Soileau, 2010).

Although modern finance theories assert that risk management is irrelevant to firm value (Modigliani & Miller 1958; Sharpe 1964), the proponents of corporate risk management suggest that corporate risk management increases firm value, subject to the effectiveness of risk management in minimizing costs associate with imperfect capital market (Tufano, 1998).

However, empirical evidence from the perspective of strategic risk management is rather mixed and ambiguous. Several studies find positive correlation between risk management strategies implementation and firm performance or firm value (Baxter, Bedard, Hoitash & Yezegel 2013; Beasley, Pagach & Warr 2008; Gordon, Leob & Tseng 2009; Hoyt & Liebenberg, 2011), while others find negative relationship (Lin, Wen & Yu, 2012).

Although sub-Saharan Africa has witnessed a substantial improvement in informational efficiency, economic growth and, in some instances, political stability, managing financial risk for corporates on the continent still remains a high priority (Deloitte, 2013). Majority (97 %) of the Chief Executives Officers interviewed consented that in Sub-Sahara Africa, home grown risks are increasing and eroding financial performance of firms in the region. The International Monetary Fund (2014) survey report indicated that risks such as; fiscal vulnerabilities, security, declining prices for commodity goods and growing capital flows was dynamics for risk management. In Zambia, general increase in wages was affecting firms' income by increasing cost of production, while in Ghana growing deficits in the national budget and political instability was affecting the local currencies against the major currencies and therefore putting pressure on locally produced goods. Growing insecurity in Central Africa Republic and Southern Sudan was the main cause of slowdown in growth prospect and therefore affecting the local firms in the region (IMF, 2014).

Kenya adopted a new code of corporate governance for the public sector in 2015 called the Mwongozo code, it specifically states that organisations should have a risk management function and that boards needs to review the implementation of the risk management framework on a quarterly basis. It also says that boards must make a statement on risk management in the annual report, and that they have ultimate responsibility for monitoring whether risks taken are within set tolerance and appetite levels (Gathaiya, 2017).

Financial institutions with sound financial performance promote investment and accelerate growth economically. Likewise, unsound financial institutions performance has a potential of causing adverse implications on growth of the economy (Madiwe, 2014). According Gavrea, Ilies, and Stegorean (2011), there are two dimensions to measuring performance in organization. This is done by assessing either the financial or the non-financial indicators. Financial performance is important to investors and management in determining the future success of a business (Levine & Zervos, 2009). Jim (2014) mentioned that performance of financial institutions is measurable in several categories which include profit growth, employee growth, asset growth or any other type of variable an investor or management thinks is an important indicator of future success to the company. According to Glova and Gavurova (2012), financial indicators include among others, net profit, profitability, return on assets, return on equity, share prices and return on investments. In the current study financial performance will be assessed in terms of return on assets (ROA) and Return on Investments (ROI) and asset growth. Kosmidou, Pasiouras, and Tsaklanganos, (2007) points out, the ROA and ROI have emerged as key ratios for the evaluation of efficiency and has become the most common measure of returns in the literature. The current study utilized both ROA and ROE to measure the financial performance of listed firms.

The Nairobi Securities Exchange (NSE), formerly Nairobi Stock Exchange, is the principal stock exchange of Kenya. It began in 1954 as an overseas stock exchange while Kenya was still a British colony with permission of the London Stock Exchange. The NSE is a member of the African Securities Exchanges Association. It is Africa's fourth largest stock exchange in terms of trading volumes, and fifth in terms of market capitalization as a percentage of GDP (Iraya & Musyoki, 2013). The stock exchange provides investors with an efficient mechanism to liquidate their investments in securities. The very fact that investors are certain of the possibility of selling out what they hold, as and when they want, is a major incentive for investment as it guarantees mobility of capital in the purchase of assets. The Nairobi Securities Exchange is grouped into eleven sectors namely; agricultural, automobile and accessories, banking, commercial and services, construction and allied, energy and petroleum, insurance, investment, manufacturing and allied and telecommunication and technology and growth enterprise market segment, (NSE, 2016).

In 2012 the NSE 20 Share Index, which tracks the prices of the 20 most traded shares at the Nairobi Securities Exchange (NSE), rose by 28.95 per cent (Waweru, Munyoki, & Uliana, 2010). While the NSE All-Share Index rose by 39.42 per cent total income for the unit trusts rose to Ksh4.8 billion (\$56.1 million) in 2012 from a loss of Ksh 931.1 million (\$10.9 million) in 2011. While profit after tax increased to Ksh4.1 billion (\$48.4 million) from a combined loss after tax of Ksh2.4 billion (\$28.2 million) (ICI, 2015). According to Nairobi Business monthly 2013, published financial results for 13 asset managers out of 16 licensed by the Capital Markets Authority (CMA) to run collective investment schemes show that total assets under management rose by 24% to Sh29 billion in 2012 from Sh23.4 billion in 2011. This was majorly boosted by share price gains at the Nairobi Securities Exchange (NSE). There are currently 66 firms listed at the NSE.

1.2 Statement of the Problem

In recent years, financial risk management strategies have become increasingly relevant for managing corporate risk (Liebenberg, 2011). The need and demand for financial risk management strategy as a holistic and company-wide risk management framework is a result of several changing internal and external factors in the corporate environment, which involve a broader risk scope, a higher risk complexity, and increasing interactions and dependencies between risk sources (Pagach & Warr, 2011). The recent global financial crisis revealed the importance of risk management. For the last ten years firms in Kenya have been performing poorly due to increased risk in the firms, risk faced by the firms are, unpredictable business environment, globalization, Complexities in business organizations.

Statistics on the financial risks indicate that in Kenya the average financial risk were at 52% which is above the African average of 50% and substantially higher than the global average of 37% despite the fact that firms in Kenya have embraced strategic risk management (PWC, 2014). The common types of risks reported in the survey were; asset misappropriation, accounting fraud, bribery and corruption, procurement fraud and cybercrime. Increasing cases of theft, accounting fraud, bribery and corruption, procurement fraud and cybercrime was worrying and therefore increasing cost of business and hence affecting financial performance (PWC, 2014). In

2011, over 520 cases of fraud valued at US \$ 3.3 billion were reported (KPMG, 2011). Such cases of fraud not only erode firms' financial performance but in some instances have led to business failure. These risks indicate the presence of the need for firms to have in place appropriate risk management strategies. It is not clear how, even which strategies would be best.

The empirical evidence on financial risk management strategies and financial performance of firms in Kenya is hardly available; most of the studies have concentrated on adoption and implementation of Enterprise risk Management. Similarly, there is no consensus on how firms could leverage on risk management to improve financial performance. Findings indicated that risks were manifested in the increasing economic crime and fraud (PWC, 2014, Waweru & Kisaka, 2012; Deloitte & Touche, 2012; KPMG, 2011 and CBK, 2010). Further researchers such as (Jocye & Willy, 2016; Waweru, Munyoki, & Uliana, 2010) have indicated that adoption of financial risk management strategies is key to enhancing the corporate value of firm. Despite this there has been minimal research work focusing on how the high performing firms at the NSE have adopted financial risk management and its influence on their performance. The research sought to bridge this empirical gap by examining the influence of financial risk management strategies on financial performance of firms listed at the Nairobi Securities exchange.

2.0 LITERATURE REVIEW

2.1 Theories Related to the Study

2.1.1 The Stakeholder Theory

This theory was initially established by Freeman (1994) as a managerial tool, and has in time developed into a firm's theory with a high descriptive potential. It concentrates on the balance of stakeholders' interests as the determining factor of company policy. The most promising contribution to risk management is the extension of implicit contracts theory from employment to other agreements, including sales and financing (Cornell & Shapiro, 1997). Company value can be drawn from customers trust that a company will be able to offer its services in future. The value of the implicit claims however, can be sensitive to the anticipated costs of financial suffering and insolvency.

Since corporate risk management practices lead to a reduction in expected costs, company value rises (Klimczak, 2005). Therefore stakeholder theory, gives knowledge into the possible foundation for risk management. Stakeholder theory has it that the smaller the firms, the more they are likely to go through financial difficulties, and this should see them intensify their interest in risk management strategies adoption. The theory further indicates that companies need more efficient risk management strategies to improve the company value. However the theory falls short in determining how different risk management strategies influence the financial performance of firms. The theory was relevant in the current study in identifying how financial risk management strategies can be leveraged to improve the value of listed firms.

2.1.2 Enterprise Risk Management Theory

The underlying premise of Enterprise Risk Management (ERM) is that every entity exists to provide value for its stakeholders. All entities face uncertainty and the challenge for management

is to determine how much uncertainty to accept as it strives to grow stakeholder value. Enterprise risk management theory is one of the most common frameworks was introduced by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 2004, which defines ERM as (COSO, 2004) it is a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives. It also emphasizes that the organizational benefits of risk management can create value for firms (Nocco & Stulz, 2006).

According to Tseng (2007), Enterprise Risk Management (ERM) is a framework that focuses on adopting a systematic and consistent approach to managing all of the risks confronting an organization. ERM is an organizational concept that applies to all levels of the organization. Furthermore, a firm's total risk can be reduced, financial distress is less likely (Meulbroek, 2002). The traditional risk management causes inefficiencies due to the lack of coordination between the various risk management departments (Hoyt & Liebenberg, 2011). Whereas enterprise risk management is not strictly a serial process, where one component affects only the next. It is a multidirectional, iterative process in which almost any component can and does influence another (COSO, 2004). The theory does not inform on how identifying and mitigating risk increases firm value. This theory was relevant in the current study in examining how the different risk management strategies influence the value of a firm in terms of the financial performance.

2.1.3 Capital Asset Pricing Model

Capital Asset Pricing Model (CAPM) theory proponents were (Sharpe, 1964; Mossin, 1966). Capital Asset Pricing Model (CAPM) shows that total risk associated with an asset can be split up in two components: systematic (non-diversifiable) and unsystematic (diversifiable) risk. If the number of assets included in the portfolio is high and these assets are not perfectly correlated, the unsystematic component of the portfolio risk diminishes. The CAPM shows that investors only get compensated for holding systematic risk, since the firm-specific component of risk can be eliminated through diversification (Monda, Giorgino, & Modolin, 2013). Thus, agency problems between shareholders and managers arise just because managers face total risk (systematic risk as well as unsystematic risk), whereas shareholders face only the systematic component of total risk, since they can diversify away the firm-specific risk of their positions. Hence, the risk associated with managers' income is closely related to the firm's risk. The CAPM is fundamentally one of the most adopted model in helping financial analysts in making capital investment decisions. Holding other factors constant the CAPM model will be integral in the current study in highlighting the need for listed firms to diversify their capital holding as well as engaging in trading activities while ensuring that there are minimal risk facing the shareholders wealth. The theory does not tell us which diversified risk increases the value of the firm. The theory informed on the importance of the financial risk strategies on the financial performance of listed institutions.

2.2 Empirical Review

Hassan (2009) seeks to identify the risks posing the greatest exposure for Islamic banks in Brunei Darussalam and to examine the effectiveness of risk management techniques utilized in these banks. The results of the study reveal that the three major risks affecting the banks are foreign-exchange risk, credit risk and operational risk. Also, Islamic banks are reasonably efficient in managing risk; and risk identification, and risk assessment and analysis are the most influencing variables in risk management practices. The study however failed to examine the influence of the risk strategies on the performance of firms. Andrea (2010) in his study mentioned that Management failure can be easily recognized in losses resulting from over-aggressive lending practices and risk tolerances that were too high. However, as one digs deeper, more subtle failures can be recognized in operational inefficiencies, poor risk analysis and mitigation, weak internal control environments, and lack of management attention to detail.

Manab, Kassim, and Hussein, (2010) found that corporate governance and shareholder value to be the most important driver in risk management adoption and implementation among the public listed companies. This argument is aligned with who claimed that risk management components could not be attained without corporate governance compliance. Furthermore, there was a significant positive relationship between corporate governance practice and risk management. Fasika (2012) analyzes the operational risk management practices of selected Ethiopian Commercial banks by taking in to account the operational risk factors (Loss events) and their effect on entire banks performance. The result of the study reveals that the management should pay attention to those contributory operational risks so as to manage the operational risk effectively and efficiently, particularly, to operational risk management tools. The study focused on operational risk management tools and did not incorporate financial risk management and its influence on the firm performance.

Yung (2008) conducted a study on risk based internal auditing in Taiwanese banking industry. The study explored factors associated with Taiwanese Banks' demand for RBIA from perspectives of risk management, internal control, corporate governance and internal auditors' technical competence, by use of data from a survey of domestic banks together with information from corporate annual reports. The study findings indicated that firm's risk management framework is highly associated with the role of internal auditing in the firm. The study failed to indicate the association between firms risk management and financial performance of the firm.

Kirogo, Ngahu, & Wagoki (2014) conducted a study on effect of Risk-Based Audit on Financial Performance: A Survey of Insurance Companies in Nakuru Town, Kenya. Descriptive survey was employed. The target population comprised of 52 management employees in 27 insurance firms in Nakuru town. The study concludes that risk based auditing through risk assessment positively affected the financial performance of insurance companies in Nakuru Town. Risk assessment enables the insurance companies to detect risks on time and concentrate on high risk areas leading to better risk sharing strategies. The study focused only on insurance firms in Nakuru County whereas current study sampled all firms listed at the NSE.

Crawford and Seidel (2013) observe that some companies use insurance as a means of transferring risks associated with extreme events. They caution that companies must balance the

costs of insurance, which are likely to increase over time with more frequent extreme events, with the costs of taking action to reduce premiums and the potential for damages from such events. Lesourd and Schilizzi (2009) contend that removing a significant part of these risks and/or making them insurable will at least partially free up the firm from that hitherto latent or hidden financial burden, making some capital resources available for profitable ends going towards the firm's objectives, such as investment in new products or new technologies, and generally, making a more efficient use of the firm's capital assets. Yuvaraj and Abate, (2013) indicates that the efficiency of financial intermediation and transfer of risk can affect economic growth while at the same time institutional insolvencies can result in systemic crises which have unfavorable consequences for the economy as a whole. Hence it is imperative for large firms to adopt risk transfer strategies that will help in avoiding economic shocks or derailing firm growth.

Sivakumar and Sarkar (2014) examined how different organizations cushioned themselves from fluctuations in foreign currency in India and how they affected overall financial results of firms. The research findings showed that the studied firms were actively involved in cushioning themselves against possible risks arising from transacting in different currencies; SWAPS, forwards as well as various types of options for instance; put, cross currency, call and lastly range barrier options. The study however focused on foreign currency risk alone whereas the current research examined how general risk are managed by listed firms in Kenya and how these strategies influence the financial performance of the companies.

Leivesley (2006) contends that spreading investments and resources in new ways may reduce the residual risk profile which ensures business continuity in the case of loss. This primarily can be achieved through product diversification. Enderwick (2006) observes that diversification is a widely used strategy for increasing resilience whether of products, markets or sources of supply. Known as a basic rule in risk management, diversification is pursued by many organizations as a way to achieve organic growth, reduce volatility of income streams, and provide a degree of protection from market cycles (Talbot & Jakeman, 2011).

Naveed (2013) conducted research on Risk management practices and attitude of Pakistani Islamic banking system employees. This study was intended to explore the Risk Management Practices in Islamic Banks. The independent variable of the study was understanding risk, risk avoidance and analysis, risk identification, risk monitoring, credit risk analysis and the dependent variable was employee attitude. The research utilized both descriptive and inferential statistics with regression model adopted in examining the magnitude of association between the variables. The result showed that there was positive and significant association between risk avoidance and employee attitude. The current study however focussed on the financial performance of firms and its relationship with risk avoidance.

3.0 METHODOLOGY

The study employed descriptive design. The target population for the study was all the chief financial officers of all the 61 listed firms at the Nairobi Securities Exchange. The study employed a census survey of the 61 CFO's of the listed firms at the NSE. The study utilized a semi-structured questionnaire to collect primary data. Secondary data was sourced from annual

NSE reports and audited financial statements of listed firms from 2008 to 2017. The collected data was coded into SPSS 23 for subsequent descriptive and inferential statistics. Descriptive statistics was presented through frequencies, percentages, means and standard deviation. The inferential statistics was presented using regression model summary and correlation coefficients. The findings were further presented using charts and tables.

4.0 RESEARCH FINDINGS AND DISCUSSION

4.1 Demographic Data

4.1.1 Age of the Respondent

The findings of the research indicated that the majority of the respondents 42% (n=24) were between the ages 35-40 years; 29% (n=17) were over 40 years; 25% (n=14) were between ages 30-35 years as shown in figure 1 below.

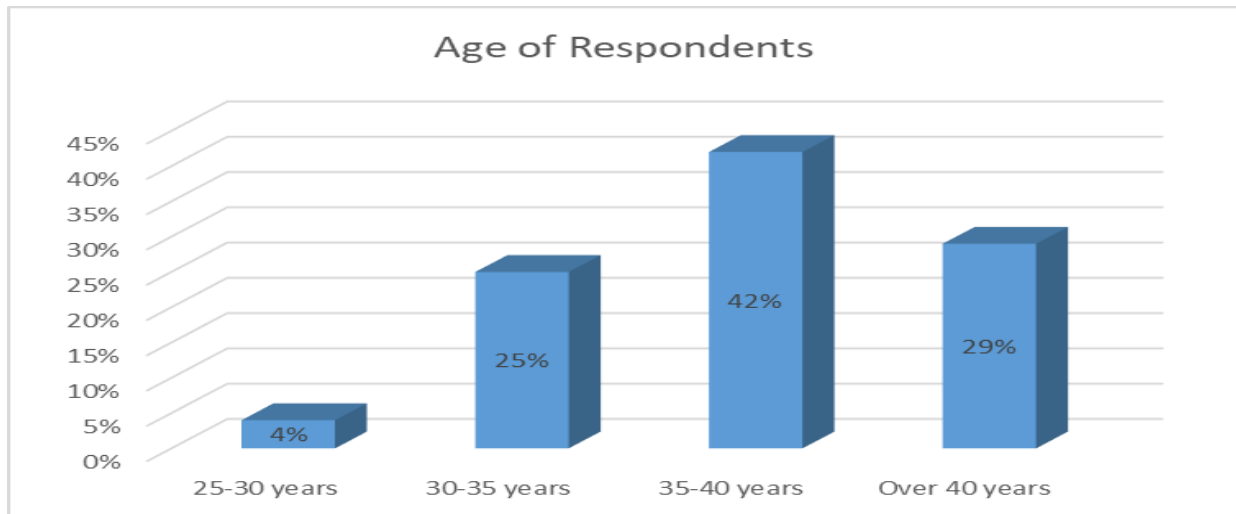


Figure 2: Age of the Respondents

4.1.2 Number of Years in the Position

The results of the study shown on Figure 2 below showed that the majority of the respondents 58% (n=33) had between 5-9 years of experience in the position while only 42% (n=24) were below 5 years of age.

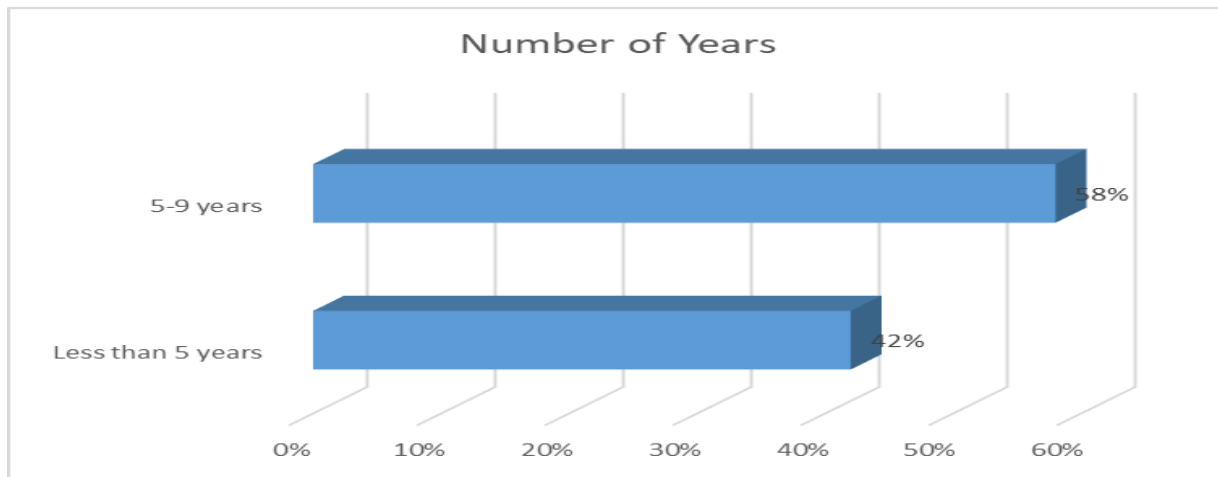


Figure 2: Number of Years in the Position

4.2 Descriptive Statistics

4.2.1 Financial Performance of Listed Firms

Table 1: Financial Performance Descriptive

	N	Minimum	Maximum	Mean	Std. Deviation
There is increased profitability and increase in investment income in the firms	57	1.00	4.00	2.5088	.80451
There is a positive increase in earnings and earnings per share in the firms	57	2.00	5.00	4.0175	.66792
There is positive increase in net assets value of the of listed firms	57	3.00	5.00	4.2982	.62578
There is increased financial soundness among listed firms	57	3.00	5.00	4.5614	.59814

The study sought to examine the financial performance of listed firms. The findings of the study on Table 1 showed that respondents moderately agreed that there is increase in profitability and investment income within the firms as shown by a mean value of 2.5088. In regard to, there is positive increase in earnings and earnings and earnings per share in the listed firms, there was strong agreement among respondents as shown by a mean value of 4.0175 and a deviation of .66792 indicating moderate dispersion on the responses obtained There is positive growth in the net assets of the listed firms and there was strong agreement as shown by a mean of 4.2982 and a deviation of .62578. Also there is increased financial soundness among listed firms as indicated

by the strong agreement among respondents as shown by a mean of 4.5614 and a deviation of .59814.

4.2.2 Influence of Asset Structuring on Financial Performance

Table 2 Asset Structuring and Financial Performance

	N	Minimum	Maximum	Mean	Std. Deviation
The firms are engaged in capital structuring practices	57	2.00	5.00	4.3684	.91869
Firms listed at the NSE undertake credit management	57	2.00	5.00	4.4211	.84404
Listed firms at the NSE are involved in portfolio management	57	2.00	5.00	4.2456	.82982
There is a review of working capital by listed firms	57	2.00	5.00	4.3333	.85217
Listed firms have asset management structures	57	2.00	5.00	4.5965	.77597

The study sought to examine how asset structuring management influenced the financial performance of listed firms. The results of the study on Table 2 above indicated that listed firms are engaged capital structuring which includes natural hedging practices and internal netting which are internal were employed. Also included in capital structuring is the debt equity mix management to reduce exposure. There was strong agreement as shown by a mean of 4.3684. Concerning Firms listed at the NSE, they undertake credit management which included credit enhancement, vetting, position limits and lines of credits, there was strong agreement as shown by a mean of 4.4211 and a deviation of .84404 showing moderate dispersion in the results. In regard to listed firms at the NSE, they are involved in portfolio management in their assets, which included portfolio rebalancing of securities held and buying of bonds as indicated by the strong agreement as shown by a mean of 4.2456. The findings further showed that there is a review and monitoring of working capital, firms are involved in working capital management, as indicated by a strong agreement among respondents by a mean of 4.3333. The listed firms, have developed asset structuring management, which to reduce firm exposure and increase profit, there was strong agreement among respondents as shown by a mean of 4.5965. The above results are consistent with Didraga (2013) who indicated that adoption of asset structuring management as internal risk models were positively related to growth in firm performance. Gupta (2011) also indicated that incorporating financial risk management in the corporate strategy of firms was a key predictor of better financial performance.

4.2.3 Influence of Risk Sharing on Financial Performance

Table 3: Risk Sharing and Financial performance

	N	Minimum	Maximum	Mean	Std. Deviation
Listed firms are using forwards trading in the over the counter markets	57	2.00	5.00	4.5088	.75882
Listed firms at the NSE are engaged in futures trading	57	2.00	5.00	4.3333	1.00593
Listed firms are undertaking joint ventures as a risk management strategy	57	3.00	5.00	4.3684	.85840
There is increased trading in swaps across listed firms in Kenya	57	2.00	5.00	4.4737	.73449
Risk sharing efforts within listed firms are embraced by senior management	57	2.00	5.00	4.4561	.82527

The study sought to examine the influence of risk sharing and financial performance of listed firms. The results on Table 3 above indicated that in regard to the listed firms, they are engaging in forwards trading over the counter stock market, there was strong agreement among respondents as shown by a mean of 4.3684. The findings also showed that firms listed at the NSE are adopting futures trading in other markets; there was a strong agreement among respondents as indicated by a mean of 4.4211. Findings of the research further showed that listed firms some firms had taken joint ventures as a risk management strategy in some departments of operations with private investors, there was an agreement as shown by a mean of 4.2456 and a deviation of .82982 showing moderate dispersion in the study findings. Recently there is increased trading in swaps, that is currency and interest rate swaps across listed firms in Kenya there was an agreement as shown by a mean of 4.3333. Results also showed that respondents were in strong agreement that risk sharing management within the listed firms are embraced by senior management as indicated by a mean of 4.5965. The study findings are consistent with Wet and Visser (2013) who indicated that adoption of risk management practices such as risk sharing resulted in better institutional performance. Similarly Gathaiya (2017) holds that risk management practices can help cushion financial institutions from a collapse.

4.2.4 Influence of Risk Transfer on Financial Performance

Table 4: Risk Transfer and Financial Performance

	N	Minimum	Maximum	Mean	Std. Deviation
Listed firms are engaging in options trading as risk transfer strategy	57	2.00	5.00	4.5614	.73235
There is increased use of credit derivatives as credit default swaps and others by listed firms in Kenya	57	2.00	5.00	4.2807	.90147
The organization has a mechanism for estimating potential losses at the time of entering into insurance contracts	57	2.00	5.00	4.5263	.82603
The company has a well-documented insurance policy in place to shield firm from market volatilities	57	2.00	5.00	4.4035	.88357

The study sought to examine the influence of risk transfer and the financial performance of listed firms in Kenya. The results on Table 4 indicated that respondents strongly agreed that Listed firms are engaging in buying options (put and call options) as a risk transfer strategy as shown by a mean of 4.5614 and a deviation of .73235. Results of the research showed that listed have increased the use of credit derivatives like credit default swaps and others, there was an agreement as shown by a mean of 4.2807 and deviation of .90147 showing a high dispersion in the results. Organizations have a mechanism for estimating potential losses at the time of entering into insurance contracts, respondents strongly agreed as shown by a mean of 4.5263. Findings also showed strong agreement among respondents that the company has a well-documented insurance policy in place to shield firm from market volatilities as indicated by a mean of 4.4035 and a deviation of .88357. The findings are in line with Kinyua, Ogollah, and Mburu (2015) who indicated that continuously identifying risk within an organization and managing them was key predictor of better performance. Njoroge, (2013) also concluded that adoption of better risk management instruments such as insurance policies was key to reducing financial losses within a business organization.

4.2.5 Influence of Risk Avoidance and Financial Performance

Table 5: Risk Avoidance and Financial Performance

	N	Minimum	Maximum	Mean	Std. Deviation
There is increased risk assessment within listed firms	57	2.00	5.00	4.3860	.92107
Listed institutions have also switched to alternative investment like private equity.	57	3.00	5.00	4.4386	.82413
There is a robust risk review process within the organization	57	2.00	5.00	4.5263	.84738
The firm has put in internal controls geared towards better risk management	57	2.00	5.00	4.5088	.75882
Risks are subdivided into individual levels for further analysis	57	2.00	5.00	4.3333	.98802

The study sought to establish the effect of risk avoidance and the financial performance of listed firms in Kenya. The results shown on Table 5 above indicate that in regard to firms listed, there is increased risk assessment within listed firms there was strong agreement among the respondents as shown by a mean of 4.386. Listed institutions have also engaged in alternative investment in private equity investments to avoid risk of failure and liquidity exposure. There was an agreement by respondents as indicated by the mean value of 4.4386 and a deviation of .82413. Findings further show that the listed firms are involved in robust risk review process within the organization there was strong agreement among respondents as shown by a mean of 4.5263. Results of the study also showed that, the listed firms have put in place internal controls geared towards better risk management; there was strong agreement among respondents as shown by a mean of 4.5088 and a deviation of .75882 indicating moderate dispersion in the responses. Risks are subdivided into individual levels for further analysis there was strong agreement among respondents as shown by a mean of 4.3333. These findings are in agreement with Adeuji, Akele, Adbisi and Olundunjoye, (2013) who indicated that adoption of risk management practices i.e. risk avoidance resulted in better financial performance of firms. Mwangi (2014) also indicated that risk avoidance had a positive influence on the financial performance.

4.3 Inferential Statistics

4.3.1 Test for Regression Assumptions

The study further sought to examine the link between financial risk management and financial performance. The study adopted regression model to test the magnitude of association between

the study variables. Regression assumptions that were tested in the study included collinearity statistics, normality tests, heteroscedasticity and autocorrelation analysis.

4.3.1.1 Collinearity Statistics

Table 6: Collinearity Statistics

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Asset Structuring	.669	1.496
	Risk Sharing	.583	1.716
	Risk Transfer	.758	1.319
	Risk Avoidance	.577	1.732

Findings on Table 6 show VIF values which are all less than 10. With this, the study found no presence of Multicollinearity problem in the variables for testing the relationship between the dependent and independent variables. The Tolerance value checks on the degree of Collinearity where a tolerance value lower than 0.1 shows that the variable could be considered as a linear combination of other independent variables. All the tolerance values for the study were above 0.1 hence no collinearity problems.

4.3.1.2 Normality Tests

The study sought to examine if the data utilized was from a normally distributed data. The results showed that;

Table 7: Normality Tests

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Asset Structuring	.296	57	.110	.856	6	.176
Risk Sharing	.295	57	.111	.884	6	.289
Risk Transfer	.258	57	.200*	.908	6	.426
Risk Avoidance	.125	57	.200*	.985	6	.974

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

For the current research, the Shapiro-Wilk test was adopted. The test states that for a normally distributed data, the sig. value should be 0.05 or greater. From the results on Table 7 above the significance value for all the predictor variables was above 0.05 hence the research concludes that the data was normally distributed.

4.4.1.3 Heteroscedasticity

In the study the Levene test was used to measure the uniformity of the study variables. The results showed that;

Table 8: Heteroscedasticity Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.206	4	7.052	3.355	.016 ^b
	Residual	109.302	52	2.102		
	Total	137.509	56			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Risk Avoidance, Risk Transfer, Asset Structuring, Risk Sharing

According to the findings in the table, Heteroscedasticity does not exist since the test regression results has a p value smaller than 0.05 testing at 5% significance one tailed test. The p-value calculated is 0.016 ($p < 0.05$).

4.3.1.4 Autocorrelation

Table 9: Autocorrelation Results

Model	Std. Error of the Estimate	Durbin-Watson
1	1.44982	1.615

a. Predictors: (Constant), Risk Avoidance, Risk Transfer, Asset Structuring, Risk Sharing

b. Dependent Variable: Financial Performance

The study utilized the Durbin-Watson statistic to measure for autocorrelation. The results indicated no autocorrelation as shown on Table 9. As a rule of thumb Durbin-Watson Scores between 1.5 and 2.5 indicate independent observations

4.3.2 Regression Summary

The study utilized a multiple regression equation to test for the relationship between financial risk management and the financial performance of listed firms.

Table 10: Regression Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.453 ^a	.205	.144	1.44982	1.615

a. Predictors: (Constant), Risk Avoidance, Risk Transfer, Asset Structuring, Risk Sharing

b. Dependent Variable: Financial Performance

The above generalized model sought to estimate the magnitude of the association between the predictor variables (*financial management strategies*) and the dependent variable (financial performance of listed firms). The results of the study indicate that holding all other factors constant there is a positive relationship between financial risk management and financial performance as shown by the coefficient of determination $R^2 = .205$. This indicates that 20.5% variations in the financial performance are explained by financial management strategies. These results are consistent with Joyce and Willy (2016) who concluded that there is significant positive effect of risk management practices on the financial performance of institutions.

Enderwick (2006) also indicated that adoption of financial risk management reduces exposure to the firm thus enhancing its financial soundness.

4.3.3 ANOVA Model Summary

The study conducted test of the significance of the model. The results are as shown below;

Table 11: ANOVA Model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.206	4	7.052	3.355	.016 ^b
	Residual	109.302	52	2.102		
	Total	137.509	56			

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Risk Avoidance, Risk Transfer, Asset Structuring, Risk Sharing

The study further analysed the statistical significance of the regression model. From the resulting findings it was evident that the regression model was significant sig = .0016 < .005 which is less than the critical sig value 0.05 testing at 95% confidence interval. The results also generated a F-value of 3.355 which is above the critical value of 2.76 indicating that the entire research model was statistically significant.

4.3.4 Regression Coefficients

Table 11: Regression Coefficients Statistics

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.580	2.248		5.151	.000
	Asset Structuring	.284	.089	.484	3.198	.002
	Risk Sharing	-.129	.112	-.187	-1.153	.254
	Risk Transfer	-.069	.079	-.123	-.868	.390
	Risk Avoidance	.089	.110	.132	.811	.421

a. Dependent Variable: Financial Performance

From the above findings in chapter four the resulting regression model is;

$$Y = 11.580 + .284X_1 + -.129X_2 + -.069X_3 + .089X_4 + 2.248$$

The first research hypothesis was asset structuring management does not have a significant effect on financial performance of Nairobi Securities listed firms in Kenya. The findings of the study indicated that there was a significant and positive effect of asset structuring on financial performance as indicated by $B=.284$, $Sig=.002 < .005$. This led to the rejection of the null hypothesis. Similarly Manab, Kassim, and Hussein, (2010) indicated that adopting adequate risk management practices positively influences the financial profitability of a firm.

The second hypothesis of the study indicated that risk sharing does not have a significant affect the financial performance of Nairobi Securities listed firms in Kenya. The findings of the study

indicated that there was a non-significant and negative effect of risk sharing on financial performance as indicated by $B = -.129$, $Sig = .254 > .005$. This led to the acceptance of the null hypothesis. These findings are not consistent with Catherine (2014) who concluded that risk sharing had a positive effects within the insurance industry. The results of this research are also inconsistent with Kipyegen, Mwangi, and Kimani (2012) who indicated that risk sharing was key determinant of increased profitability within organizations.

The third hypothesis of the study stated that risk transfer does not have a significant effect on the financial performance of Nairobi Securities listed firms in Kenya. The findings of the study indicated that there was a non-significant and negative effect of risk sharing on financial performance as indicated by $B = -.069$, $Sig = .39 > .005$. This led to the acceptance of the null hypothesis. These results are not in agreement with Bubere and Shihab (2013) who indicated that adoption of risk transfer strategies such as hedging positively influenced financial performance of firms.

The fourth hypothesis indicated that risk avoidance does not have a significant affect the financial performance of Nairobi Securities listed firms in Kenya. The findings of the study indicated that there was a nonsignificant and positive effect of risk avoidance on financial performance as indicated by $B = .089$, $Sig = .421 > .005$. This led to the rejection of the null hypothesis. These results are supported by Mwangi (2014) who concluded that there was significant positive effect of risk avoidance on the financial performance of firms listed in Kenya. Similarly Naveed (2013) indicated that risk avoidance influences organization performance of Islamic banks.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

The study concluded that with proper asset structuring management practices a firm can improve its performance on the securities exchange. Asset structuring management does not have to adversely affect the firm provided it follows set-up policies that prevent firm exposure and monitor risk with the aim of increasing profitability. When it comes to risk the study findings show that the all the elements of risk can be managed to make firms perform better. The findings show that risk can be shared with other third parties through joint ventures so long as the board and senior management supported the idea. This reduces the risks that the company faces and brings on board other partners that work in the interest of the company to make sure it performs well.

The study findings also showed that when it comes to risk transfer most companies are procuring insurance policies and carefully assessing potential losses before getting a policy. Companies are engaging in buying options and use of credit default swaps. All these steps work together to reduce the risk that a company faces by transferring risk to another entity thus guaranteeing survival of the firm should the company notice that their performance is falling.

The findings also show that companies are coming up with ways to avoid some risks all together since not every risk is a wise business move. They are employing strategies like robust risk

review processes and internal controls. Firms are even going the extra mile to increase firm's performance by speculating by use of forwards and futures and also to increase liquidity. Firms are also diversifying their investments by putting money into private equity investments that don't correlate with traditional investments to mitigate risks. Firms are taking position limits and portfolio rebalancing to reduce risk in value and increase performance of their portfolios. These actions are calculated steps to avoid unnecessary risks that may cause more harm than good to the company.

5.2 Recommendations

The main aim that public companies exist is to increase the wealth of the shareholders. One way of doing this is by adopting enterprise resource management practices that are engrained in the policies of the company and that have well defined structures. Risk is an inevitable part of business and the most profitable companies have learnt to leverage risk for growth. Some of these practices can include establishing a thorough and organized risk management structure that leverages on risk for growth. This can be done by creating a department headed by a Chief Risk Management Officer. Risk evolves from time to time and companies need to create suitable steps to regularly evaluate company risks and decide whether to take on the risks individually or with another party, transfer the risk or avoid the risk all together. This is the only way that firms can remain competitive in today's business environment. The study also recommends that the regulatory authorities establish policies laws that take note of the risks that company take and provide them with certain incentives on the bourse.

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