RELATIONSHIP BETWEEN ENTERPRISE RISK MANAGEMENT PRACTICES AND THE FINANCIAL PERFORMANCE AMONG COMMERCIAL STATE CORPORATIONS IN KENYA

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DECLARATION

This research project is my original work and has not been submitted for any award in any other university.

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DEDICATION

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LIST OF ABBREVIATIONS

AFC   Agricultural Finance Corporation

CAPM   Capital Asset Pricing Model (CAPM)

CEO   Chief Executive Officer

CMA   Capital Market Authority

ERM   Enterprise Risk Management

GoK   Government of Kenya

IMF   International Monetary Fund report

KMC   Kenya Meat Commission

KR   Kenya Railways

MFI   Microfinance Institution

MPT   Modern Portfolio Theory

ORM   Operational Risk Management (ORM)

RIVATEX   Rift Valley Textile Company Limited

ROA   Return on Assets

SC   State Corporations

SME   Small and Medium Enterprise

SPSS   Statistical Package for Social Sciences

ABSTRACT

This study sought to establish the relationship between ERM practices and Financial Performance among Commercial State Corporations in Kenya. Specifically, the study aimed at establishing the influence of Operational risk management practices, Strategic risk management practices, Financial risk management practices and Governance risk management practices on the Financial Performance of Commercial State Corporations in Kenya.The underpinning theories of the study included; the Modern Portfolio Theory, Modigliani and Miller Proposition and the Capital Assets Pricing Model (CAPM)

The study used a descriptive research design and the target population comprised of all the 55 Commercial SC in Kenya. Quantitative and qualitative data was collected using a semi-structured questionnaire. Quantitative data was collected for a period of 5 years from 2010-2014 and analyzed using descriptive statistics and factor analysis while qualitative data was analyzed using content analysis.

The results of the study indicated that Operational, Strategic, Financial risk and Governance risk Management Practices had positive effects on the Financial Performance of Commercial SCs to an extent of 70%, 71%, 66% and 72% respectively.

The study concludes that Enterprise Risk Management Practices influence the Financial Performance of Commercial SCs in Kenya to a very large extent. The study recommends that all the Commercial SCs in Kenya employ robust Enterprise Risk Management practices, fully implement their ERM frameworks and on a frequent basis evaluate the Enterprise Risk Management Practices and the Government to encourage more firms to institute ERM practices as well as create more awareness on the need for the same in all organisations.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Governments have established State Corporations (SCs) to enhance sustainable economic growth by developing and promoting key sectors that are considered of strategic importance to the overall socio-economic development objectives of the country (Kariuki, 2014). SCs therefore play a major role in economic growth and development through supporting the development of vibrant public and private sectors in developing countries. They invest in sustainable projects; maximise impacts on development; remain financially viable in the long term; and mobilise private sector capital. Some SCs provide finance (e.g. loans, guarantees, equity investment) to the public sector or to the private sector (Odoyo et al., 2014).

In the execution of their mandate, SCs have no way of avoiding risk without giving up their core function. To achieve their goals, SCs must learn how to manage risk intelligently by identifying risks early, expecting the unexpected and knowing which risks are worth taking and which to avoid (Namusonge, 2010). The SCs are embracing an all-encompassing risk management concept that has gained substantial acceptance in the recent years, the Enterprise Risk Management (ERM). Kleffner et al. (2003) define ERM as the management of operational and financial risks simultaneously in order to maximize the cost effectiveness of risk management within the constraints of the organization's risk tolerance.

ERM has continued to grow in recent years and increasing numbers of organizations worldwide are considering ERM strategies that enable them manage a wide array of risks in

an integrated, holistic fashion (Liebenberg and Hoyt, 2006). ERM strategically considers the interactive and effects in various risk events with the goal of balancing an enterprise's entire portfolio of risks to be within the stakeholders' appetite or tolerance for risk (Beasley et al., 2006).

In the face of major scandals leading to the collapse of big corporations, especially State Owned ones, with disastrous social and economic consequences, it is inevitable that the wider society has started questioning how organizations in Kenya and the world at large are run. Most state corporations have performed poorly since inception and large amounts of money have been injected by the Government to meet operating and capital expenses. In the 1990s, many State Corporations collapsed and closed shop due to mismanagement, conflict of interest by members of the Board, including the board chairmen. A case in point is the Kenya Meat Commission (KMC), which collapsed in the early 1990s and it was only in 2006 that it was revived by the Government which pumped in Kshs. 500 million. The Agricultural Finance Corporation (AFC) is another corporation which was on the verge of collapse due to huge portfolio of nonperforming loans until the Government came to its rescue to support its mandate of facilitating the development of the agricultural sector by giving low-interest loans to farmers. The Government extended KSh. 900 million grant to AFC to lend to farmers and this have been effectively utilized through good governance practices. The Kenya Railways (KR), a key player in economic development of Kenya has been going through internal financial and operational risks and problems. Taking into account that most of these corporations are big players in their respective sectors, it is difficult to understand why they have continued to report deficits. Part of the reason for these deficits is the ineffective management of risks (Odoyo et al., 2014).

1.1.1 Enterprise Risk Management

Enterprise Risk Management refers to the the process applied in strategy setting and across the enterprise 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 (Gordon et al., 2009; Gupta, 2009). The underlying principles of ERM encompass an integrated approach to risk management backed by corporate risk philosophy or strategy with the aim of maximizing organization value (Beasley et al., 2006). According to Nocco and Stulz (2006), FDIs are faced by a number of risks including Operational, Strategic, Financial, Credit, Market and Liquidity risks.

Dorfman (2007) observes that once risks have been identified and assessed, all techniques to manage the risk fall into one or more of these four major categories, risk avoidance,risk abatement, risk allocation and risk retention. Risk avoidance involves not performing an activity that could carry risk. While avoidance sounds like the answer to all risks, it may also imply losing out on the potential gain that comes along if the risk was allowed. Risk abatement implies combining loss prevention or loss control to minimize a risk. Risk allocation means sharing the risk burden with other parties.

In Kenya, institutions hardly publish any comprehensive information about their existing risk management systems, practices or plans (Ngare, 2008). Locally therefore, the empirical literature is faced with the challenge of gathering information about whether or not an ERM practices have been adequately and effectively adopted and to what degree they contribute to Financial Performance. On the global front, research studies on ERM practices indicate that ERM focus should shift to strategic and risk involvement must be universal and thorough in

the organization (Moeller, 2007; Yow and Sherris, 2008). Doherty (2006) added that ERM practices suffers from the problem of duality in the sense that institutions can either remove the risk or its effect (accommodate) while Berinato (2006) argues that ERM practice is crucial in balancing risk as is becoming the only effective way to manage a corporation in a complex world.

In Kenya, ERM is still weak and risk to most of the organizations is increasing while the traditional risks are constantly evolving. Most of the investment institutions have developed ERM framework but they still face challenges due to weak ERM system because complexity, unpredictability, evolving risks and globalization of trading activities (Gisemba, 2010). The weak ERM has affected the performance of Kenya as a country in terms of competiveness making it rank poorly in terms of GDP as well as attractiveness as a business destination compared to other states like Singapore, Taiwan and Malaysia (Odoyo et al., 2014).

The ERM legal framework in Kenya is underpinned in the Capital Market Authority (CMA) regulations on Corporate Governance of 2002 Legal Notice Number 3362 (Mwangi, 2012). The legal notice did not require firms to disclose measures taken to manage risk. Thus, it's not easy to evaluate effectiveness of ERM in Kenya; a problem that is manifested in high rate of fraud in the banks and financial institutions. It has however been generally agreed that ERM adds value to businesses by reducing the volatility and enhancing liquidity problem of firms (Mwangi, 2012).

1.1.2 Financial Performance

The Performance of an institution can be measured using either financial or non-financial measures. The former remains an important part of measuring performance of an entity, especially in the current economic climate. The performance of SCs is portrayed by the levels of asset base, revenue growth, and the level of customer satisfaction (Adhiambo and Memba, 2012). Most SCs target increased profits, liquidity and solvency as a measure of their sound financial health. Liquidity measures the ability to meet financial obligations as they come due, without disrupting the normal, ongoing operations of SCs while solvency measures the amount of borrowed capital used by the institution relative the amount of owner's equity capital invested in the business. Profitability as a measure of financial performance indicates the extent to which an institution is generating profits from the factors of production. Mesquita and Lara (2003) argue that profitability analysis focuses on the relationship between revenues and expenses and on the level of profits relative to the size of investment in the institution.

Venkatraman et al. (1986) cited that the Financial Performance of an institution can be assessed using the return on investment, growth of sales, profit, organization effectiveness, and business performance. Delaney et al. (2006) assert that organization financial performance can be evaluated using return of investment, margin on sales and capacity utilization. According to Green et al. (2007), in addition to return on investment, sales, market growth and profit stand out as very important factors that be used by organizations to assess their fiancial performance.

As a key partner, the Government is always interested in ensuring that SCs fulfill their

policy mandate in a financially sustainable manner and according to an explicit set of operational objectives and financial performance targets. According to Rudolph (2009), the financial performance of SCs and development outcomes go hand-in-hand because financially successful projects contribute to economic growth, which in turn naturally results in improved development outcomes. Most of the SCs generally prefer larger investments over smaller ones, and report better financial returns and better development impacts for larger projects. Moreover, an International Monetary Fund report (IMF, 2008) calculates the financial rates of return (to investors) and economic rates of return (to society, including external and qualitative benefits) and argues that economic returns to society as a whole exceed financial returns on investment in 91% of cases.

1.1.3 Enterprise Risk Management and Performance

Most organizations perform the basic elements of risk management. Still, organizations with more mature risk practices are bound to do better financially bacause they tend to outperform the rest by making stronger decisions, more efficiently deploying scarce resources and reducing their exposure to negative events (Okochi, 2008). Globally, firms have made substantial investments in personnel, processes and technology to help control business risk (Riley, 2012). Most of these risk investments have focused primarily on financial controls and regulatory compliance. Effective ERM starts at the top with clarity around ERM strategy, practice and governance. It is critical that the proper oversight and accountability exist at the board and executive levels (Searle, 2008).

In linking the ERM practices and Financial Performance for SCs, the mean scores of each risk management practices will be correlated with the ROA and ROE. ERM practices will be

explained by Operational, Strategic, Financial and Governance risk management practices. The study will use the correlations analysis between ROA/ROE and all ERM practices to show whether there is any correlation between ROA and ERM practices and also to explain how strongly the variables correlate (Searle, 2008).

According to Anderson (2008), ERM leads to reduction on a firm's average capital expenditure and contract costs as it eases access to resources which in turn enhances their financial performance. This argument has been advanced by Stulz (2003), Nocco and Stulz (2006), Wang and Reuer (2006) and Andersen (2008) who have shown that ERM practices could be value increasing to a firm and its stakeholders in the presence of agency costs, market imperfections and information asymmetries which interfere with the operation of perfect capital markets. ERM practices guide firms in dealing with negative earnings shocks and help them to avoid the direct, and indirect costs commonly associated with financial distress (Alrashidi and Baakeel, 2012).

1.1.4 Commercial State Corporations in Kenya

State Corporations are state owned entities established under the State Corporations Act, chapter 446 of the laws of Kenya. The State Corporations Act's main goal is that of controlling and regulating State Corporations. Consequently, it created an institutional framework with many actors, a reality that tends to undermine the effectiveness and efficiency of State Corporations. The Act created roles for the Presidency, Parent Ministry, the Treasury, Board of Directors, State Corporations Advisory Committee, and the Inspectorate of State Corporations, State Corporations Appeal Tribunal amongst others. Some of these roles have over the years proved detrimental as they have become obstructive

to efficient operations of State Corporations. At the same time, the problems, which the Act was meant to address, have persisted. Notably, there has been problems with; definition, ownership, establishment, mergers and dissolution, staffing, rewards and incentives, and governance and oversight (The Presidential Taskforce on Parastatal Reforms, 2013).

SCs were formed to provide strategic and essential services to the Kenyans such as electricity, railway transport and port services. Included here also are statutory bodies formed for the purpose of regulating various sectors. They are partially or fully Government owned or controlled entities. There are 148 State Corporations in Kenya but according to a recent classification by the State Corporations Contracting and Performance Evaluation Unit, in the Prime Minister's Office, only 34 are commercially oriented. A comprehensive promotion of the SCs after independence in 1963 resulted to the rapid growth of Government's participation in commercial activities. This was driven by a national desire to accelerate economic social development; redress regional economic imbalances; increase Kenyan Citizen's participation in the economy; promote indigenous entrepreneurship; and promote foreign investments (through joint ventures). This aspiration was expressed in the Sessional Paper No. 10 of 1965 on African Socialism and its application to planning in Kenya (Wamalwa, 2003).

Commercial SCs' operations are governed by a competitive profit driven market and can be performed commercially but serves a strategic socio-economic purpose (The Presidential Taskforce on Parastatal Reforms, 2013). Commercial SCs exist for various reasons including to correct market failure, to exploit social and political objectives, provide education, health, redistribute income or develop marginal areas (Oketch, 1995). The initial thought of setting up commercial SCs was noble, but most of the political leaders at the time were capitalists

and the vision got lost along the way (Kariuki, 2014). Influential individuals turned to these enterprises with a single desire to reap maximum personal benefits at the expense of the rest of the public. This led to mismanagement and therefore massive losses (Namusonge, 2010). To stem some of these losses, an attempt was made to shed off some of the government shareholding to private investors by issue of shares through the Nairobi Stock Exchange. However, as it is seen in the management of such firms, as National Bank of Kenya and Kenya Commercial Bank, the government still maintains a substantial shareholding.

1.2 Research Problem

Risk management has emerged as a new standard for managing the wide range of risks that face organizations and policy makers continue to focus on mechanisms to improve risk management. Dynamic business practices and demanding regulatory requirements mean that commercial SCs require a broader and clearer perspective on enterprise-wide risk than ever before (Crouhy et al., 2006). Enterprise risk management (ERM) is thus fast becoming the norm rather than the exception in most commercial SCs. While risk is inherent in every business, organizations that embed the right ERM strategies into business planning and performance management are more likely to achieve their strategic and operational objectives amid any risks (Kaplan, 2009).

The activities of SCs expose them to a variety of risks such Operational, Strategic, Financial and Governance risk. The goal of the SCs is to achieve an appropriate balance between risk and return and minimize potential adverse effects on its financial performance. This requires more dynamic and sound ERM practices to perform well in an ever dynamic business environment. According to Jorion (2001), the success of organizations depends upon the ERM practices and understanding properly the firm's sensitiveness to different types of risk.

Lam (2001) further states that ERM reduces earning volatility, maximizes value for shareholders and promotes job security and financial security in the organization.

The adoption of ERM practices is driven by the right organization structure, proper internal controls and sound rules and regulations. ERM leads to reduction on a firm's average capital expenditure and contract costs (Anderson, 2008) and increases firm value (Stulz, 2003; Nocco and Stulz, 2006; Wang and Reuer, 2006; Andersen, 2008; Alrashidi and Baakeel, 2012). Thus it can be seen that organizations will be advantageous to establish ERM practices so as to mitigate various risks facing them (Hardy, 2010). Manab et al. (2010) argues that compliance of corporate governance with ERM practices helps in the reduction of the risk level.

Despite the advantages of having ERM practices in organizations, there is limited empirical evidence in Kenya with regard to ERM practices and Financial Performance of organizations. The few studies on Enterprise Risk Management in Kenya have focused on Credit Risk Management (Njiru, 2003; Kioko, 2008; Ngare, 2008; Simiyu, 2008; Gisemba 2010; Wambugu, 2008), Information Systems Risk Management (Weru, 2008) and Foreign Exchange Risk Management (Kipchirchir, 2008). There exists a knowledge gap which this study seeks to fill by assessing the relationship between ERM practices and the Financial Performance among Commercial State Corporations in Kenya. These have not been studied as far as ERM practices and Financial Performance is concerned. There is therefore a gap as far as studying the relationship between ERM practices and Financial Performance of Commercial State Corporations in Kenya. The research question was therefore: what is the relationship between ERM practices and Financial Performance of Commercial State Corporations in Kenya?

1.3 Objectives of the Study

The general objective of this study was to establish the relationship between ERM practices and Performance of Commercial State Corporations in Kenya.

The specific objectives were;

i) To determine the influence of Operational risk management practices on Financial Performance in commercial state corporations in Kenya.

ii) To establish the effects of Strategic risk management practices on Financial Performance in Commercial State Corporations in Kenya.

iii) To evaluate the influence of Financial Risk Management practices on Financial Performance in Commercial State Corporations in Kenya.

iv) To assess how Governance risk management practices affects Financial Performance in commercial State Corporations in Kenya.

1.4 Value of the Study

The outcome of the research was expected to be most beneficial to the Commercial State Corporations in providing the Management and Directors with insight into the various approaches towards risk management techniques, how effectively risk management techniques are in mitigating risks and influence Financial Performance.

Findings of this study were anticipated to benefit the Management of Commercial State Corporations how to successfully manage risks by adopting good ERM practices. It was expected that the findings of the study would help Commercial State Corporations

appreciate the opportunities that come along risks and therefore embrace the ERM practices which may lead to better financial performance.

Government Officers would gain insight on critical role of ERM practices in Financial Performance of Commercial State Corporations. The policy makers would know how well to incorporate risk based internal audit in Public Organizations. The study findings are expected to be a guide in formulating and fine tuning the policies and regulation related to Commercial State Corporations.

It was also expected that academicians and researchers would be furnished with relevant information regarding the relationship between ERM and Financial Performance in Commercial State Corporations. The study adds to the body of empirical literature on ERM practices and forms a basis for further research. This contributes to the existing body of knowledge and also suggests possible areas of improvement. The study is also helpful in the Development Financial Sector and enhances the understanding of ERM practices in risk management.

Shareholders will get to know the various mechanisms through which they can exercise their control. Potential investors will also benefit as they will be able to determine which Commercial State Corporations are properly governed hence make more informed investment decisions.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter provides theoretical and empirical information from publications on topics related to the research problem. It examines what various scholars and authors have written about ERM, the related theories of ERM, determinants of financial performance in relation to various aspects of ERM and Performance, empirical review and the conceptual framework of the study.

2.2 Theoretical Review

The study relating ERM and organization performance cannot not be exhausted without considering the underpinning theories and models of risk management. Numerous theories have been proposed regarding risk management in organizations with the aim of providing guidance in identifying the key tenets of risk management in institutions globally. In this study, the underpinning theories reviewed include; the Modern Portfolio Theory, Modigliani and Miller Proposition and the Three Lines of Defense Theory.

2.2.1 Modern Portfolio Theory

Modern Portfolio Theory (MPT) is a theory of investment which tries to maximize return and minimize risk by carefully choosing different assets (Markowitz, 1952). It is a mathematical formulation of the concept of diversification in investing so as to select a collection of investment assets that has collectively lower risk than any individual asset. This is possible, in theory, because different types of assets often change in value in opposite

ways. For instance, a fall in the prices in the stock market often implies that the prices in the bond market increase and vice versa. Mandelbrot and Hudson (2004) found that a collection of both types of assets can therefore have lower overall risk than either individually.

The primary principle upon which MPT is the random walk hypothesis which states that the movement of asset prices follows an unpredictable path: the path as a trend that is based on the long-run nominal growth of corporate earnings per share, but fluctuations around the trend are random (Chandra et al., 2007). For ERM therefore, the MPT has important implications in terms of risk minimization by investing in portfolios that have lower overall risks. The pension fund management firms invest on behalf of the pension schemes members and therefore must strive to invest in portfolios that maximize returns and minimize risks. Barton et al. (2002) found that MPT enables firms' ERM, using a holistic approach, to identify and manage its risk so as to create, protect and enhance shareholder value. Olsson (2008) adds that MPT recognizes that risk management has evolved into a major industry and is still evolving with the evolution of the financial community and the development of new complex financial instruments.

2.2.2 Capital Asset Pricing Model

The concept of risk is closely related to the insights of portfolio theory and the most important paradigm of risk is part of a set of results known in the financial economics literature as the Capital Asset Pricing Model (CAPM) developed by Sharpe (1964) and Lintner (1965). CAPM is an extension of Markowitz's (1952) model that was the first to model a relationship between risk and return. In this model, there are as many efficient portfolios as there are investor risk preferences. All efficient portfolios must lie on the mean-

variance investment frontiers where investors can get a higher return only by accepting a higher level of risk (Gossy, 2008). The CAPM argues that all investors will hold the same efficient portfolio (the market portfolio) regardless of their individual risk preferences. Thereby, the CAPM is capable of determining the market price for risk and an appropriate risk measure for a single asset (Gossy, 2008).

There have been numerous anomalies of the CAPM that have been discovered by finance researchers. This has initiated a discussion of the usefulness of the CAPM for the field of strategic management starting with the contribution by Bettis (1983). He detects a conundrum regarding the role of risk in strategic management context and states the main points of controversy between finance and strategy (Vicente-Lorente, 2001). In particular, he seriously questions the implications of the CAPM on strategic management but especially corporate risk management. He identifies an implied recommendation in the CAPM to corporate management not to be concerned at all about firm-specific risks. Bettis (1983) argued that business risks are associated with firm specific resources and competencies and are strongly related to the firm-environment interface. This theory implies that for ERM, firms should institute efficient portfolios that offer maximum returns and minimum risks.

2.2.3 Modigliani-Miller Proposition

In the broad literature on risk management decisions for firms in general, Modigliani and Miller (1958) state that in a world of perfect and complete markets, financial decisions are irrelevant as they do not alter the value of the shareholder's stake in the firm. The only way to increase shareholder's wealth is to increase value of the firm's assets. Neither the capital structure nor the risk management decisions have an impact on shareholder's wealth. According to Gossy (2008), important deviations from the perfect capital markets in the

Modigliani and Miller setting have been identified, giving motivations for firms to care about risk management, such as taxes, bankruptcy costs, agency costs and others. When these are incorporated into the firm's objective function; in other words, when all risks are perfectly tradable, the firm maximizes shareholder value by hedging completely (Gossy, 2008; Mozumdar, 2001).

Modigliani and Miller (1958) state that under the restrictive neoclassical assumptions, corporate financial decisions do not influence the value of the firm. These decisions simply redistribute the income stream among different investors. As long as investors can act in the capital markets at the same terms and conditions as the firm itself, the only way to impact firm value is by influencing the expected level of firm cash flows (Gossy, 2008). Since ERM is part of an overall financing policy, the MM findings directly have important implications for the ERM strategy of the firm.

Under the MM proposition, any investor's wealth position is unaffected by corporate risk management activities on the part of the firm (Gossy, 2008). Following this argument, a MM disciple would argue against doing any risk management at all since it is a purely financial transaction (Gossy, 2008). The immense importance of the MM proposition for corporate risk management, however, becomes apparent when it is used as a starting point for identifying conditions under which corporate risk management makes economic sense. Such a positive theory of corporate risk management can be derived by relaxing the neoclassical assumptions of the MM proposition.

2.3 Determinants of Financial Performance

To distinctly isolate the relationship between ERM and value of the company, there is need to control for other factors that could influence firm performance (Liebenberg and Hoyt, 2003; Beasley et al, 2005). The controlling variables we will use are similar to those used by Hoyt et al (2008).

2.3.1 Operational Risk Management Practices

Operational risk, broadly speaking, is the risk of loss from an operational failure. It encompasses a wide range of events and actions as well as inactions and includes, for example, inadvertent execution errors, system failures, acts of nature, conscious violations of policy, law and regulation, and direct and indirect acts of excessive risk taking. Operational risk management (ORM) is at the core of any institution's operations in integrating risk management practices into processes, systems and culture (Carey, 2001).

In ERM, the value ORM practices lies in supporting and challenging firms to align their business control environment with the their ERM strategies by measuring and mitigating risk exposure, contributing to optimal return for stakeholders. Firms may choose to invest heavily in understanding customer behavior through new systems initially designed for fraud detection but leverage beyond compliance to address more effective customer service (Tadesse and Brans, 2012). ORM practices should be incorporated within firms' policies that deal with specific risks and as a direct corollary, therefore, manage their own risks (Cummins and Mahul, 2009a).

Bhattamishra and Barrett (2008) opine that operational risk management practices should be geared towards operational risks like fraud, employee infidelity, processing errors, people

and skills attrition and product misspelling which remain a challenge in many sectors. In addition, an elaborate operational risk management policy should be supported by risk manuals and checklists developed through consultative process. Nguguna and Arunga (2013) warn of possible challenges that face operational risk management including the mutating nature of fraud risks, loss of key staff to competition and lengthy process of system acquisition and any sound firm management is dependent on how well operational risks are managed across the organization.

2.3.2 Strategic Risk Management Practices

Mango (2007) defines Strategic Risk Management Practices as actions targeted towards detecting and mitigating the risk to earnings or capital arising from adverse business decisions or improper implementation of those decisions. There risks in this case are a function of the compatibility between an organization's strategic goals, the strategies developed to achieve those goals the resources deployed against these goals and the quality of implementation (Andersen and Schroder, 2010). Strategic risk management ensures the resources (tangible and intangible) needed to carry out business strategies including communication channels, operating systems, delivery networks and managerial capacities and capabilities are availed. Mango (2007) adds that strategic risk management practices focus is on how plans, systems and implementation affect the franchise value while incorporating how management analyzes external factors that impact on the firm's financial performance.

According to Chorafas (2010), Strategic Risk management practices enhances the identification, assessment and management of reputational risks that may result from the insolvency, low profitability, inadequate customer handling processes and poor quality

customer service, low contract certainty and a lack of proper complaints monitoring and handling processes. Fraser and Henry (2007) found that strategic risk management practices impact positively on overall firm performance if the top management continuously takes ownership and drive the risk agenda across the business. They add that while Senior Management is involved in management of risks, the oversight by the Top Management cannot be delegated.

Ekka et al. (2011) assert firms' boards may experience rapid increases both in the speed with which risk events take place and the contagion with which they spread across different categories of risk. In particular, they may shift their focus to the escalating impact of 'catastrophic' risks, which can threaten a firm's very existence and even undermine entire industries. Gilbert (2007) advises that firms should strategically make a decision between spending too much time and money on running their current risk management processes and moving quickly and flexibly to identify and tackle new risks. This way, the firms will be able to gauge whether their return on spending on ERM is fully justified by the level of protection they gain from it.

According to Wenk (2005), shortcomings reveal that current approaches to strategic risk management may not necessarily fit for purpose. It is thus important to develop and expand existing frameworks and tools, drawing on outside experience and knowledge wherever possible. Indeed, the external viewpoint that independent directors can bring to the boardroom will play an essential part in ensuring this breadth of risk-thinking enhances the adoption of appropriate strategic risk management practices.

2.3.3 Financial Risk Management Practices

Financial Risk Management refers to the practice of creating economic value in a firm by using financial instruments to manage exposure to risk, particularly Credit risk and Market risk (Tapiero, 2004; Holton, 2004). Just like in the case for general Enterprise Risk Management, Financial Risk Management requires identifying its sources, measuring it, and plans to address them (Conti and Mauri, 2008). Therefore, Financial Risk management practices are those activities and procedures that are employed by managers in an effort of safeguarding an organization from Credit risks, Liquidity risks and Market risks. These practices fall into three major categories; Credit Risk Practices, Liquidity Risk Practice and Market Risks Practices (Kithinji, 2010).

Ndung'u (2013) argues that Financial Risk Management Practices should be in conformity with the general development strategy of the organization and also match the general financial strength of the firm. In addition, there should be an interaction and conversion of Financial Risk Management Practices and other risks. These findings concur with those of Riksbank (2011); that Financial Risk Management Practices should be a top priority for firms' managers. Commercial SCs are required to put in place Financial Risk Management thresholds as part of the overall Enterprise Risk Management Framework (Yakup and Asli, 2010; Kombo et al., 2011; Mokoro et al., 2010).

2.3.4 Governance Risk Management Practices

Governance risk management practices are geared towards enhancing the efficiency and effectiveness of the organization with the help of proper supervision and control, thereby plating a very important role in aligning the interest of shareholders and management to

reduce the agency conflict (Gomez, 2005). Firms with good Governance risk management practices face less agency problems as management is stimulated to take actions for the best interest of shareholders and increase shareholders wealth managers (McGee, 2009).

Good governance is necessary in order to attract investors, create competitive and efficient companies and business enterprises, enhance the accountability and performance of those entrusted to manage corporations and promote efficient use of limited resources (Clarke, 2007). The Kenya Capital Market Authority (CMA) provides guidelines on corporate governance practices by the public companies in Kenya. The guidelines were developed in recognition on the role of good governance in corporate performance, capital formation and maximization of shareholders values and protection of investors' right (Wamalwa, 2003). Any state corporations can enhance its governance risk practices to promote the standards of self-regulations so as to bring the level of governance in line with international risk management standards.

2.4 Empirical Studies

Njuguna et al. (2013) undertook an investigation to establish the effect of Financial Risk Management Strategies on the growth of microfinance sector in Kenya. The study used a sample of 17 microfinance institutions (MFIs) selected using the random sampling approach from the population of 57. The study adopted a correlation survey research design and used a questionnaire and an interview schedule to gather primary data. Qualitative data was analyzed using content analysis while quantitative data was analyzed using descriptive and regression analysis to determine the relationship between financial risk management strategies and growth of MFI. The study results were that financial risk management strategies are a significant determinant of growth in MFIs. Most of the MFIs have effective

financial risk management strategies as evidenced by the presence of effective credit risk management practices, liquidity risk management practices, interest risk management practices and price risk management practices.

Gordon et al. (2009) studied 112 US companies to examine the impact of ERM on performance using linear regression. ERM was measured using ERM index created by the author and performance was measured using excess stock market return. The results showed a significant positive relation between ERM and firm performance. The study also revealed that this was contingent upon proper match between a firm's ERM system and five firm specific factors. Pagach and Warr (2010) also examined 106 US companies focusing on the impact of ERM on financial performance using logit and matched sample model. ERM was measured using CRO keywords as proxies and financial performance was measured using several financial variables. The results showed a significant decrease in stock price volatility after introducing ERM.

Waweru and Kisaka (2013) examined the effect of ERM implementation on the value of 20 companies listed on the Nairobi Securities Exchange. A survey was carried out where ERM was measured using the level of implementation while firm value was measured using Tobin Q. The results showed that there was a positive relation between level of ERM implementation and firm value. Similar results were found by Tahir and Razali (2011) in their examination of the impact of ERM on shareholder value of 528 Malaysian firms in 2007 using linear regression model. ERM was measured using secondary data from Osiris database and shareholder value was measured using Tobin's Q. The study found a positive but insignificant relation between ERM and shareholder value.

McShane et al. (2013) examined the impact of ERM on performance of 523 US Insurers between 2004 and 2006 using linear regression model. A survey was carried out where ERM was measured using ERM activity while performance was measured using cost and revenue efficiency using Data Envelopment Analysis (DEA). The study found a significant positive impact of ERM on cost and revenue efficiency depending on ERM activity. Hoyt and Liebenberg (2008) examined the impact of ERM on shareholder value of 125 US insurers between 2000 and 2005 using a maximum likelihood model. ERM was measured using ERM and CRO key words as proxies while performance was measured using Tobin's Q. The study found a significant positive relation between firm value and ERM. The results showed that ERM improves shareholder value by approximately 17%.

Njiru (2003) sought to examine how Coffee Cooperatives in Embu District manage their Credit risks. The results revealed that the methods of managing Credit risk were similar to the ones commonly espoused in finance textbooks and lead to better performance by the co-operatives. The findings are consistent with those of Kioko (2008) who examined the Credit risk management practices used by Commercial Banks in Kenya to manage unsecured loans. The study revealed that the Banks used a combination of credit management methods for unsecured loans.

Further, Kipchirchir (2008) examined the practices of motor vehicle firms towards Foreign Exchange Risk Management. The study was a survey of the motor vehicle industry in Kenya. The results revealed that the most commonly used Foreign Exchange Risk management method was hedging. In another study by Ngare (2008), credit risk management practices by commercial banks were sought. This was a survey of commercial

banks in Kenya. The results revealed a combination of credit risk management methods used by commercial banks in Kenya.

Althonayan et al., (2011) undertook a study on aligning enterprise risk management with business strategy and information systems. The aim of their study was to determine the factors contributing to the failures and successes of risk management programmes in enterprises. The findings indicated that alignment of ERM with business strategy and information systems steers risk management initiatives and strategies in the same direction and consequently allows enterprises to improve on organizational effectiveness, increase shareholders value, and gain competitive advantage in the market.

Nayak and Mohanty (2009) explained that effective system on risk management usually improves business performance and most companies usually focus on the limited resources they have at their disposal so as to effectively and efficiently control risks, whenever a major problem occurs. Nayak and Mohanty (2009) added that the degree to which a firm can utilize the leverage of its IT risk management processes to exploit commercial business opportunities depends on factors such as governance, product management, customer management, and knowledge management and how each of these processes of the firm in question are matched. The interaction between these generalizations in business processes and a firm's IT risk management process characterizes the company's culture in managing risks.

According to a survey done by PricewaterhouseCoopers on risks in Kenya in 2011, 81% of the chief executive officers (CEOs) interviewed from various firms felt that risk to their firms was increasing while traditional risks were evolving (PWC, 2012). Waweru and

Kisaka (2011) examine the state of ERM in Kenya and found out that performance of firms was influenced by effectiveness of enterprise risk management method adopted. According to Nyang'aya (2012), traditional risks such as; operational, regulatory and market was rated at 95%, 89%and 83% respectively. These were the key risks affecting firms in Kenya and this was a manifestation that ERM framework in Kenya was not effective or inadequate.

2.5 Summary of the Literature Review

Most of the highlighted studies in the literature review do not explicitly address the effect of ERM practices on the Financial Performance of Commercial State Corporations in Kenya. A scarcity of literature in the area of study exists, particularly in the developing states like Kenya. The few that have been conducted in the third world nations have eluded criticism in the criteria, title, scope; methodology used hence the research gaps in terms of literature.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the procedure that will be used to conduct the empirical research. It describes the procedural plan that will be used by the researcher to validly, objectively, economically and accurately answer the research questions. This section of the study therefore describes the research design, target population, data collection method, pre-test of the instrument, data collection and analysis technique and data presentation.

3.2 Research Design

Research design is the ultimate blue print for the collection, measurement and analysis of data (Kothari et al., 2010). The study used a descriptive research design described by Cooper and Schindler (2006) as a detailed description of events, situations and interactions between people and things. According to Mugenda and Mugenda (2003), the design is deemed ideal as it portrays clear pictures of the relationship between ERM practices and financial performance of commercial State Corporations. Borg and Gall (1996) noted that descriptive survey research is intended to produce statistical information about aspects of a study that interest policy makers.

3.3 Population

Kothari (2008) defines population as an entire group of individuals, events or objects having common observable characteristics. The target population for this study comprised of all the 55 Commercial SCs in Kenya as presented by Inspectorate of SCs (Report of the Presidential Taskforce on Parastatal Reforms, 2013). The study carried out a census survey

of all the 55 Commercial State Corporations presented in Appendix III.

3.4 Data Collection

Both primary and secondary data was used. Primary data was collected using a semi-structured questionnaire based on the objectives of the study (Appendix II). The questionnaires were administered through mail and drop and pick later methods. A three week period was given for the respondents to fill in the questionnaires after which they were collected for analysis. Secondary data was derived mainly from published Financial Statements of the Commercial State Corporation over a 5 year period from 2010-2014. This was supplemented with data from records of the Nairobi Securities Exchange and from various Government publications such as Central Bank of Kenya – Annual Bank Supervision Report and the Central Bureau of Statistics data (Economic Surveys).

3.5 Data Analysis

The data collected was both qualitative and quantitative data. Qualitative data was analyzed using content analysis. This is an approach which included sorting and coding raw data and use of Statistical Package for Social Sciences (SPSS) and organizing them into similar themes. Using SPSS, quantitative data was analyzed and findings presented and organized in tables for easy understanding. The model below was used to indicate the extent to which each independent variable affects Financial Performance in Commercial SCs. The model is as below

$$\textit{ROA} = \textit{f}(X_1, X_2, X_3, X_4)$$

More specifically, the regression was of the form

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

Where

Y = Return on Assets. It was measured by the Return on Asset (ROA) – calculated as the net income divided by total assets.

β_0 = Constant

X_1 = Operational Risk Management Practices. It was measured by the Level of compliance to Policies and Procedures

X_2 = Strategic Risk Management Practices. It was measured by the Achievement of the Strategic Objectives and Implementation of the budget

X_3 = Financial Risk Management Practices. It was measured by management of working Capital and Financial leverage.

X_4 = Governance Risk Management Practices that was measured by Board Composition, Size and Competency.

ε = Error Term for the Model.

Table 3.1: Operationalization of the Variables

Objective	Variables	Indicators	Data Collection Type	Tool of Analysis
To determine the influence of operational risk management practices on financial performance in commercial state corporations in Kenya.	Independent Variable: Operational Risk Management Practices	Implementation level of : • Risk Management Policy • Finance Policy • Procurement Policy • HR policy • ICT policy • Legal Compliance Policy	Questionnaire	Correlation and descriptive statistics
To establish the effects of strategic risk management practices on financial performance in commercial state corporations in Kenya.	Independent Variable: Strategic Risk Management Practices	Level of achievement of; • Strategic objectives • Budget implementation	Questionnaire	Correlation and descriptive statistics
To evaluate the influence of financial risk management practices on financial performance	Independent variable: Financial Risk Management	• Current ratio • Debtors Collection Period. • Days to sell inventory	Secondary data from Audited Financial Statements.	Correlation and descriptive statistics

in commercial state corporations in Kenya.	Practices	• Gearing ratio		
To assess how governance risk management practices affects financial performance in commercial state corporations in Kenya.	Independent variable: Governance Risk Management Practices	• Board Size • Board Competency • Board independence • Board tenure • Succession planning	Questionnaire	Correlation and descriptive statistics
Dependent variable: Performance of commercial state corporations in Kenya.	Dependent variable: Performance of commercial state corporations in Kenya.	Return on Investment = Net Income / Total Assets	Secondary Data retrieval from Audited Financial Statements	Descriptive statistics

3.6 Ethical Considerations

The respondents were asked to indicate their willingness to participate in the study. The freedom of respondents was taken into consideration which indicated that their rights are respected. The primary data was handled with care to ensure anonymity and rights to privacy of respondents. Thus, the identity of the respondents was secured as names were associated with the data.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results of the study and analysis of the data collected from the respondents. Data is analyzed and evaluated according to research objectives. The data was analyzed using descriptive statistics such as mean scores, percentages and standard deviations. The data was presented in tables, charts and graphs where necessary

4.1.1 Response Rate

The study targeted all the 55 Commercial SCs in Kenya. As shown in Table 4.2, out of the 55 questionnaires that were administered, 33 filled questionnaires were collected translating to a 60% response rate which is satisfactory according to Babbie (2002) who argues that any response of 50% and above is adequate for analysis. This response rate was made possible after several personal calls were made and visits to remind the respondents to fill-in and return the questionnaires as well as explaining the importance of their participation in this study. The response rate largely demonstrates a willingness of the respondents to participate in the study.

Table 4.2: Response Rate

Response	Frequency	Percentage
Responded	33	60
Not responded	22	40
Total	**55**	**100**

4.2 Background Information

In order to get the background information, the demographic data of the respondents was investigated in the first section of the questionnaire. They are presented in this section under gender, age, level of education, designation and the years of experience in their current department.

4.2.1 Gender of the Respondents

The research sought to find out the gender of the respondents. Table 4.3 shows a summary of the findings on the gender of the respondents.

Table 4.3: Gender of the Respondents

Gender	Frequency	Percent
Male	18	55%
Female	15	45%
Total	**33**	**100%**

From the study, majority of the respondents were male staffs, shown by 55%, while 45% of them comprised of female staffs. The findings show that Commercial SCs in Kenya have both male and female members; however the majority of them are males. This implies that the views expressed in these findings are gender sensitive and can be taken as representative of the opinions of both genders as regards to the study topic.

4.2.2 Age of the Respondents

The study investigated the composition of the respondent in terms of age. As shown in Table 4.4, majority (43%) of the respondents were aged between 36 and 44 years, 21% of the respondents were aged between 26 and 35 years, 18% of the respondents were aged below 25 years. In

addition, 12% were aged between 45 and 54 years while only 6% indicated that they were aged over 55 years above.

Table 4.4: Age of the Respondents

Age Bracket	Frequency	Percentage
Below 25 years	6	18%
26 – 35 years	7	21%
36 – 44 years	14	43%
45 – 54 years	4	12%
55 years and above	2	6%
Total	**33**	**100%**

The study findings show that more than majority of them were well distributed in terms of age and that they are active in productivity and hence can contribute constructively in this study.

4.2.3 Level of Education

Commercial SCs in Kenya offer employment to staffs with varying academic qualifications. This section sought attempted to establish the highest academic qualifications attained by the respondents. As shown in Table 4.5, most (58%) of the respondents had acquired a Bachelor's or undergraduate degrees level of education, 24% of the respondents indicated that they had acquired college certificates or diplomas, while 18% of them indicated that they had acquired post graduate level.

Table 4.5: Education

Education	Frequency	Percent
Diploma	8	24%
Undergraduate Degree	19	58%
Masters Degree	6	18%
Total	**33**	**100%**

These findings show that most of the respondents had at least an undergraduate degree and hence understood the information sought by this study. In addition, the findings imply that all the respondents were academically qualified and also familiar with their duties and could dispense them effectively in terms of professional work ability and performance.

4.2.4 Designation of the Respondents

Section 4.2.4 sought to establish the various positions held by the respondents in their organizations. The respondents indicated to be working either in the Audit or Risk departments in their organizations. Table 6.6 shows their management levels where study findings in table 4.6, 34% of the respondents indicated that they were officers; 27% supervisors; 24% middle level managers and 15% as senior managers.

Table 4.6: Designation

Designation	Frequency	Percent
Senior Manager	5	15%
Middle Level Manager	8	24%
Supervisor	9	27%
Officer	11	34%
Total	**33**	**100%**

Therefore, the respondents for the study were drawn from all the levels within the organizational structure of the commercial SCs as representative of the views of the various departments involved in ERM.

4.2.5 Length of Experience

The length of service and working in an organization determines the extent to which one is aware of the issues sought by the study. Table 4.7 shows a summary of the findings. The study findings on the length of time that the respondents had been working in their respective commercial SCs

where 36% of the respondents unanimously indicated that they had worked with their commercial SC for a period of 11 – 15 years; 24% for 6 – 10 years and 15% for 1 – 5 years. The rest (25%) had been working with their commercial SCs for at least 16 years.

Table 4.7: Length of Experience

Length of Experience	Frequency	Percent
1 – 5 years	5	15%
6 – 10 years	8	24%
11 – 15 years	12	36%
16 – 20 years	4	13%
21 – 25 years	4	12%
Total	**33**	**100%**

This implies that most of the staffs participating in this study had been operating for an ample time thus they were conversant of the information that the study sought pertaining to the ERM practices and their impact on Financial Performance among Commercial SCs.

4.3 ERM Practices in Commercial SCs

Section 4.3 attempted to establish the state of the ERM among Commercial SCs in Kenya. Table 4.8 shows a summary of the findings.

Table 4.8: State of ERM in Commercial SCs.

ERM State	Frequency	Percentage
a) ERM framework is well formulated across the business and fully implemented.	14	42%
b) ERM framework is well formulated across the business, with implementation in progress and a clear timetable for completing implementation.	11	33%
c) ERM framework is well formulated across the business, with a clear timetable for implementation but implementation has not started.	5	15%
d) ERM framework is a partially developed concept and there is no clear timetable for implementation	3	10%
Total	**33**	**100%**

Most (42%) of the respondents indicated that SCs' ERM frameworks are well formulated across the business and fully implemented; 33% indicated that ERM framework was well formulated across the business, with implementation in progress and a clear timetable for completing implementation. In addition, 15% of the studied population indicated that ERM framework is well formulated across the business, with a clear timetable for implementation but implementation has not started while 10% reiterated that SCs' ERM framework is a partially developed concept and there is no clear timetable for implementation. No respondent indicated that they had no plans of introducing an ERM system in their commercial SCs.

The findings show that all commercial SCs recognize some benefit of implementing ERM whether from an anticipated regulatory compliance perspective or from a business value addition perspective. However, most commercial SCs are still at the planning stages where ERM is not a regulatory requirement. The findings shows that most of the commercial SCs are compliant with the Capital Market Authority (CMA) regulations on Corporate Governance of 2002 Legal Notice Number 3362 (Mwangi, 2012). Most of them have therefore have developed ERM framework but they still face implementation challenges due to weak ERM system, complexity, unpredictability, evolving risks and globalization of trading activities (Gisemba, 2010; Beasley et al., 2005).

The study sought to establish the extent to which they are involved in ERM policies formulation. Table 4.9 shows a summary of the findings. Most (46%) of the studied population indicated to be involved in ERM policies formulation to a great extent, 27% to a very great extent and 18% to a moderate extent. Only 9% indicated to be involved to a least extent.

Table 4.9: Extent of Involvement in ERM Policies Formulation

Extent of Involvement in ERM Policies Formulation	Frequency	Percentage
a) Least Extent	3	9%
b) Moderate Extent	6	18%
c) Great Extent	15	46%
d) Very Great Extent	9	27%
Total	**33**	**100%**

The findings show that commercial SCs promote employee participation in ERM policy formulation and therefore the SCs are likely to exhibit better and acceptable decisions from employees. These findings are similar to those of Daud et al. (2010); that participatory policies formulation enhances performance and increases profitability levels for the firm.

Attempts were also made to establish the parties' that champion ERM implementation in commercial SCs. Table 4.10 shows a summary of the study findings. Employees in risk (46%) and audit (33%) are the main champions of ERM implementation compared to those in operations (21%).

Table 4.10: ERM Implementation Champions

ERM Implementation Champions	Frequency	Percentage
Chief Risk Officer	9	27%
Risk Management Committee	7	21%
Chief Operations Officer	7	21%
Head of Internal Audit	10	31%
Total	**33**	**100%**

The findings show that ERM implementation is mainly championed by the Audit and Risk department employees in the commercial SCs as indicated by 79% of the respondents. Daud et al. (2010) found that employee involvement in ERM formulation enhances firm performance and increases profitability levels for the firm.

4.4 ERM Practices and Financial Performance

In this section, the study sought to establish the effect of ERM and Financial Performance among Commercial SCs in Kenya. On a scale of 1 – 5 where 1-1.499 not at all (NA), 1.500 - 2.499 was least extent (LE); 2.500 - 3.499 was moderate extent (ME); 3.500 - 4.499 was great extent (GE) and 4.500 - 5.000 was very great extent (VGE), the respondents were requested to indicate the extent to which their respective commercial SCs have adopted ERM practices. Table 4.11 shows a summary of the findings.

Most (average of 70%) of the respondents agreed that Operational risk management practices have been adopted by Commercial SCs to great extent; 15% to a moderate extent and 5% to a least extent. On Strategic risk management, 71% of the studied population unanimously agreed Commercial SCs have adopted Strategic risk management to a great extent, 12.5% to a very great extent and 4.5% to a moderate extent. In regard to Financial risk management, 66% of commercial SCs have adopted the practice to a great extent, 16.5%b to a moderate extent and 9.4% to a very great extent. Finally, the findings show that most (72%) of the commercial SCs have adopted Governance risk management practices to a great extent, 18.4% to a moderate extent and 7% to a least extent.

Table 4.11: ERM Practices in Commercial SCs

ERM Practices	Rating					
Operational Risk Management Practices	NA	LE	ME	GE	VGE	Total
a) Adequacy of internal processes	0%	4%	7%	79%	10%	100%
b) Presence of Policy Manuals	1%	6%	15%	63%	15%	100%
c) Internal Controls embedded in processes	2%	4%	17%	72%	5%	100%
d) Operating procedures	2%	6%	21%	62%	9%	100%
e) Poor equity, incidence and targeting	3%	6%	15%	74%	2%	100%
Strategic Risk Management Practices						
a) Achievement of strategic objectives	1%	5%	6%	79%	9%	100%
b) Budget implementation	2%	4%	15%	63%	16%	100%
Financial Risk Management Practices						
a) Credit risk management	0%	2%	19%	70%	9%	100%
b) Market risk management	6%	7%	21%	61%	5%	100%
c) Liquidity risks management	3%	4%	11%	62%	20%	100%
d) Credit risk management	4%	6%	15%	70%	5%	100%
Governance Risk Management Practices						
a) Maintaining the appropriate size of the board	4%	8%	22%	62%	4%	100%
b) Promoting board independence	1%	6%	17%	75%	1%	100%
c) Succession planning	0%	7%	15%	78%	0%	100%
d) Advocating for duality in board structure	0%	7%	19%	74%	0%	100%

4.5 Inferential Statistics

The study used inferential statistics in trying to reach conclusions that extend beyond the immediate data alone. Inferential statistics was used to infer from the sample data what the population might think or to make judgments of the probability that an observed difference between groups is a dependable one or one that might have happened by chance in this study.

4.5.1 Pearson Correlation Analysis

The study sought to establish the relationship between ERM practices and Financial Performance among commercial SCs in Kenya. Pearson Correlation analysis was used to achieve this end at 95% confidence level ($\alpha = 0.05$). Table 4.12 shows that there were significant

correlation coefficients were established between the ERM practices and Financial Performance: Operational Risk Management Practices (R=0.680, p=0 .025); Strategic Risk Management Practices (R=0.729, p=0.045); Financial Risk Management Practices (R=0.528, p=0.001) and Governance Risk Management Practices (R=0.747, p=0.021). This depicts that ERM practices positively influences Financial Performance in commercial SCs.

Table 4.12: Pearson Correlation Analysis

Interest Rates	Correlations	
Operational Risk Management Practices	Pearson Correlation	0.680*
	Sig. (2-tailed)	0.025
Strategic Risk Management Practices	Pearson Correlation	0.729**
	Sig. (2-tailed)	0.045
Financial Risk Management Practices	Pearson Correlation	0.528**
	Sig. (2-tailed)	0.001
Governance Risk Management Practices	Pearson Correlation	0.747**
	Sig. (2-tailed)	0.021

Correlation is significant at the 0.05 level (2-tailed).*
Correlation is significant at the 0.01 level (2-tailed). **

This finding contradicts studies undertaken by Modigliani and Miller (1958), Nain (2004), Lookman (2004) and Jin and Jorion (2004) which concluded that ERM practices and implementation were irrelevant to the financial performance of firms. The findings are however consistent with literature reviewed, that indicates a significant relationship between ERM practices and firm performance (Hoyt et al., 2008; Beasley et al., 2005; Kleffner et al., 2003).

4.5.2 Regression Analysis

The study also conducted a regression analysis to evaluate the relationship between operational, strategic, financial risk and governance risk management practices and financial performance of commercial SCs in Kenya. The regression equation was

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

Table 4.13 shows a summary of the regression analysis.

Table 4.13: Multiple Regression Analysis

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	**Std. Error**	**Beta**		
(Constant)	4.374	0.882		4.009	0.000
Operational risk management practices	0.205	0.105	0.0909	0.849	0.007
Strategic risk management practices	0.118	0.084	0.0823	0.954	0.046
Financial risk management practices	0.853	0.146	0.1330	2.276	0.002
Governance risk management practices	0.753	0.088	0.1167	1.379	0.004

a. Predictors: (Constant), operational, strategic, financial risk and governance risk management practices.

b. Dependent Variable: Financial Performance of Commercial SCs.

Using the results in Table 4.24, the regression model ($Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$) now becomes:

$Y = 4.374 + 0.0909 X_1 + 0.0823 X_2 + 0.1330 X_3 + 0.1167 X_4$

Whereby;

Y	=	Financial Performance,
X₁	=	Operational Risk Management Practices.
X₂	=	Strategic Risk Management Practices.
X₃	=	Financial Risk Management Practices.
X₄	=	Governance Risk Management Practices.
β1, β2, β3 β4	=	Standardized coefficients of determination
ε	=	Error term

From the above regression model, for every added unit increase in Operational, Strategic,

Financial Risk And Governance Risk Management Practices, there will be an increase in the Financial Performance Of Commercial SCs. For example, a unit increase in Operational risk management will lead to 9.09% increase in Financial Performance and a unit change in Strategic risk management will lead to 8.2% increase in Financial Performance among Commercial SCs. Further, a unit increase in Financial risk management will result in 13.3% increase in Financial Performance while a unit increase in Governance risk management will lead to 11.6% increase in Financial Performance among Commercial SCs.

These results infer that ERM practices have a positive effect on the Financial Performance among Commercial SCs in Kenya. This finding is important in motivating Commercial SCs executives to make a deeper commitment to the practice and implementation of ERM so as to return more value to their shareholders. The findings are consistent with those of other past studies whose results from the regression model indicated a positive and statistically significant coefficient for the ERM practices and firm performance. Lam and Kawamoto (1997) and Meulbroek (2002) also found that Enterprise Risk management makes risk management part of the firm's overall strategy and enables firms to make better risk adjusted decisions that maximizes their revenue. As discussed by Hoyte et al. (2008), firms that engage in ERM practices are able to better understand the aggregate risk inherent in different business activities.

Table 4.14: Model's Goodness of Fit Statistics

R	R^2	Adjusted R^2	Standard Error of the Estimate
0.761[a]	0.632	0.600	0.321

a. Predictors: (Constant), operational, strategic, financial risk and governance risk management practices.

The findings in Table 4.19 showed a correlation value of 0.761 as this illustrates a linear relationship between the dependence and independent variables. An R^2 value of 0.632 was established and adjusted to 0.600. This coefficient of determination shows that Operational, Strategic, Financial risk and Governance risk management practices affect the Financial Performance among commercial SCs at a rate of 63.2%. The remaining 36.8% of variations are brought about by factors not captured in the objectives.

4.5.3 Analysis of Variance

Analysis of Variance (ANOVA) was further carried out to test the significance of the regression model in relations to the differences in means of the dependent and independent variables. Table 4.15 shows a summary of the ANOVA analysis. The findings ANOVA test produced an f-value of 32.043 which was significant at $p < 0.001$. This illustrates that the regression model is significant at 95% confidence level. That is, the model has less than 1% probability of misrepresentation.

Table 4.15: Analysis of Variance

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5.44	4	2.71	32.043	0.000$_a$
Residual	3.32	28	0.235	12.003	0.002
Total	**8.76**	**32**	**2.945**	**44.046**	

a. Independent Variable: Operational, Strategic, Financial risk and Governance risk management practices.
b. Dependent Variable: Financial Performance of Commercial SCs in Kenya.

The findings ANOVA test produced an f-value of 32.043 which was significant at $p < 0.001$. This illustrates that the regression model is significant at 95% confidence level. That is, the model has less than 1% probability of misrepresentation.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the research findings and discusses the broader implications of the findings for theory, practice, policy and further research in Commercial SCs in Kenya. The study sought to assess the relationship between ERM practices and Financial performance of commercial SCs in Kenya. Specifically, the study highlighted the relationship between operational, strategic, financial risk and governance risk management practices and financial performance of commercial SCs. The presentation is organized around specific objectives and research questions to assess the results by evaluating and interpreting them. The study conclusions are in tandem with the specific objectives and research questions while the recommendations refer to suggestions for further study or proposal for change.

5.2 Summary of the Findings

5.2.1 ERM Practices in Commercial SCs

The findings show that a significant number, 40%, of the SCs' ERM frameworks are well formulated across the business and fully implemented; others (33%) have well formulated ERM frameworks and implementation in progress with clear timeframe. On the other hand, 13% of the studied Commercial SCs have well formulated ERM frameworks and implementation plan but the implementation is yet to commence while 10% of the studied Commercial SCs' ERM framework is a partially developed concept and there is no clear timetable for implementation.

Most of the SCs therefore have ERM frameworks while the implementation process is at different stages. The commercial SCs therefore recognize the benefit of implementing ERM whether from an anticipated regulatory compliance perspective or from a business value addition perspective.

The study findings indicate that over 84% of the staff in the Commercial SCs are involved in ERM policies formulation to a great extent while the rest to a moderate extent. Commercial SCs therefore promote employee participation in ERM policy formulation and therefore the SCs are likely to exhibit better and acceptable decisions from employees. Participatory policies formulation enhances performance and increases profitability levels for the firm.

5.2.2 ERM Practices and Financial Performance of SCs

The study examined the extent to which commercial SCs had adopted ERM practices. The results show that the SCs had adopted operational risk management, strategic risk management financial risk management and governance risk management practices to great extent at 70%, 71%, 66% and 72% respectively. This means that all the studied ERM practices affect the Financial Performance of commercial SCs in Kenya.

The regression results revealed that the model accounted for 63.2% of the variance in financial performance as shown by the R^2 value. The F-statistic of 32.043 was significant at 5% level, suggesting that the model was fit to explain the relationship between enterprise risk management practices and financial performance. The coefficient results showed that operational, strategic, financial risk and governance risk management practices had positive effects on the financial performance of commercial SCs in Kenya.

Specifically; the regression results established that a unit increase in operational risk management will lead to 9.09% increase in financial performance and a unit change in strategic risk management will lead to 8.2% increase in financial performance among commercial SCs. Further, a unit increase in financial risk management will result in 13.3% increase in financial performance while a unit increase in governance risk management will lead to 11.6% increase in financial performance among commercial SCs.

5.3 Conclusion

The study examined the relationship between ERM practices and Financial Performance of Commercial SCs in Kenya.

The first conclusion is that most of the Commercial SCs in Kenya have ERM frameworks as well as implementation plans. They acknowledge the importance of implementing ERM from both regulatory compliance perspective (with CMA) and business value addition perspective.

The second conclusion is that a significant number of the Commercial SCs are still at the planning stages where ERM is not a regulatory requirement. Their Performance may be threatened due to weak ERM system, complexity, unpredictability, evolving risks and globalization of trading activities.

The third conclusion is that Commercial SCs promote employee participation in ERM policy formulation. They are likely to realize better and acceptable decisions from employees. This will enhance performance and increases profitability levels for the firm.

The fourth conclusion is that Operational risk management, Strategic risk management, financial risk management and Governance risk management practices had positive significant effects on

the Financial Performance of Commercial SCs in Kenya. Overall Enterprise Risk Management practices accounted for most of the variance in Financial Performance of the firms. Thus, the study concludes that Enterprise risk management practices influence the Financial Performance of Commercial SCs in Kenya to a very large extent.

5.4 Limitations of the Study

The study was limited to a sample size of 55 firms used for the study, had we compiled a larger sample size by including other industries it may have resulted in a more significant analysis.

The study was based on a 5 year period between 2010-2014, a duration within which ERM concept is evolving within the public sector and hence may not reflect the depth regarding the maturity of implementation of ERM in the entire Public Sector.

The study focuses on Commercial State Corporations; other Corporations especially Public Corporations not included in this study may have reported challenges in adoption ERM.

There could be other risks such as Compliance risks, Reputation risks, Integrity risks not necessarily categorized under the risks reviewed that adversely affect the Financial Performance of the CS corporations.

There was a time constraint limiting collection of information for the study particularly where the respondents delayed in filling the questionnaires.

5.5 Recommendations

Based on the findings, the study makes a number of recommendations.

First, the study recommends that all the commercial SCs in Kenya not only should employ robust enterprise risk management practices but also fully implement their ERM frameworks. Both are likely to influence their financial performance in one way or another.

Secondly, the study recommends that in order for commercial SCs to improve on their financial performance, they should focus on full involvement of all relevant stakeholders at all the ERM implementation stages.

Lastly, the study recommends that the government, on a frequent basis, evaluate the enterprise risk management practices and measures put in place by the commercial SCs in Kenya and reward those with excellent practices. This will encourage more firms to institute ERM practices as well as create more awareness on the need for the same in all organisations.

5.5 Suggestions for Further Research

There is need for more studies in this area to examine how ERM influences Financial Performance of State-Owned institutions in Kenya. This can be done by including all other State Agencies in Kenya and by conducting a panel regression analysis.

More studies should be done to examine other factors that may influence Financial Performance of Commercial SCs in Kenya. This study only assessed how ERM practices can influence Financial Performance and more studies need to examine other factors that may influence their Financial Performance.

It is also important that future research examine the issue of ERM deeply by examining the practice of ERM in State Corporations and the trends in ERM practice. This will inform policy makers on what areas need changes for the ERM practices to be effective.

Further research should be done on other types of risks that affect Financial Performance of State Corporations such as effects of Reputation Risks on Financial Performance or effects of Integrity Risks on Financial Performance of State Corporations.

Research can also be done to compare Effects of Implementation of ERM on Financial Performance among different Industries within the Economy.

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APPENDICES

Appendix I: Introduction Letter

The Respondent,

Dear Sir/Madam,

Re: Request for Research Data

I'm a Postgraduate student pursuing a Master's degree in Master of Science (Finance) at the **University of Nairobi**. My research project topic is Relationship between Enterprise Risk Management Practices and the Performance among commercial SCs in Kenya.

You have been selected to form part of those to provide the necessary data needed for this study. You are therefore kindly requested to assist by granting an opportunity for the filling in of the attached questionnaire at your convenience when contacted for an appointment.

The information you provide will be treated in strict confidence and is purely for academic purpose. In no way will your name appear in the final research report. Your assistance and cooperation will be highly appreciated.

Student   **Supervisor**

Grace Kimotho   **Nyamute Winnie**

Appendix II: Research Questionnaire

Relationship between Enterprise Risk Management Practices and the Financial Performance among Commercial State Corporations in Kenya

Dear Sir/Madam

Thank you for taking time to answer this short questionnaire regarding the Relationship between Enterprise Risk Management Practices and the Performance among commercial SCs in Kenya. Am a student at the University of Nairobi and this research is in partial fulfilment of the degree of Masters of Science (Finance). Your participation in this study is completely voluntary and there are no foreseeable risks associated with it. Please tick (□) the box that matches your answer to the questions and give the answers in the spaces provided as appropriate. The information you provide will be treated with utmost confidentiality. Your questionnaire responses will be strictly confidential and data from this research will be reported anonymously.

PART A: Background Information

1. Indicate your Gender
   a) Male   [ ]
   b) Female   [ ]
2. What is your age bracket?
   a) Below 25 years   [ ]
   b) 26-35 years   [ ]
   c) 36-44 years   [ ]
   d) 45-54 years   [ ]
   e) 55 years and above [ ]
3. What is your highest level of education?
   a) Diploma Level   [ ]
   b) Bachelor's Degree [ ]
   c) Master's degree   [ ]
   d) Doctorate   [ ]
4. Designation of the Respondent: _____
5. How many years have you worked in your organization?
   a) 1-5 years   [ ]
   b) 6-10 years   [ ]
   c) 11-15years   [ ]
   d) 16-20 years   [ ]

e) 21-25 years   [ ]

f) 26-and above   [ ]

PART B: ERM Practices in Commercial SCs

6. Which of the following best describe the state of the ERM system your organization?

ERM State	Tick One
a) ERM framework is well formulated across the business and fully implemented	
b) ERM framework is well formulated across the business, with implementation in progress and a clear timetable for completing implementation.	
c) ERM framework is well formulated across the business, with a clear timetable for implementation but implementation has not started.	
d) ERM framework is a partially developed concept and there is no clear timetable for implementation	
e) No ERM framework is in place but there is a plan to introduce one in the short-term	
f) No ERM framework and no plans to introduce one	

7. To what extent are you involved in the formulation of ERM policies?

     a) Very little extent   [ ]

     b) Less extent   [ ]

     c) Moderate extent   [ ]

     d) Large extent   [ ]

     e) Very great extent.   [ ]

8. Who champions ERM implementation in your organization?

     a) Chief Risk Officer   [ ]

     b) Risk Management Committee   [ ]

     c) Chief Operations Officer   [ ]

     d) Head of Internal Audit   [ ]

     e) Others (specify)   [ ]

9. To what extent are the following major roles of ERM practices in your organization? (1= very little extent, 2= less extent, 3= moderate extent, 4= large extent and 5= very great extent.)

Major ERM Practices Roles	1	2	3	4	5
a) Enhancing financial strength					
b) Implement and ensure security					
c) Ensure employees protection					
d) Management risk transfer programs					
e) Establish business continuity programs					

10. To what extent do the following factors influence your organization's attitude towards ERM practices? (1= very little extent, 2= less extent, 3= moderate extent, 4= large extent and 5= very great extent.)

Factors	1	2	3	4	5
a) Board of Directors influence					
b) Regulatory requirements					
c) Industry Competition					
d) Competition in the entire economy					
e) Desire for achievement of high returns					

11. On a scale of 1 -5 where 1= very little extent, 2= less extent, 3= moderate extent, 4= large extent and 5= very great extent, rate the extent to which your organization focuses on the types of risks in the risk identification process.

Type of Risk	1	2	3	4	5
a) Operational Risks					
b) Strategic Risks					
c) Financial Risks					
d) Governance Risks					

12. Please tick appropriately (Key 5 = Very Great Extent; 4 = Great Extent; 3 = Moderate extent; 2 = Least Extent; 1 = Not At All)

	Operational Risk Management Practices	5	4	3	2	1
1.	Adequacy of internal processes					
2.	Presence of Policy Manuals					
3.	Internal Controls embedded in the processes					
4.	Operating procedures					
	Strategic Risk Management Practices					
1.	Achievement of strategic objectives					
2.	Budget implementation					
3.	Assessment of the well-being of the business's financial resources to					
4.	Identification of areas of underutilized capacity					
5.	Multifaceted analysis of the organization's financial health					
	Financial Risk Management Practices					
1	Credit risk management					
2	Market risk management					
3	Liquidity risks management					
	Governance risk management practices					
1.	Maintaining the appropriate size of the board					
2.	Promoting board independence					
3.	Succession planning					
4.	Advocating for duality in board structure					

THANK YOU FOR YOUR COOPERATION

Appendix III: List of Commercial State Corporations in Kenya

1. Agro-Chemical and Food Company
2. Chemilil Sugar Company Ltd
3. Consolidated Bank of Kenya
4. Development Bank of Kenya Ltd
5. Geothermal Development Company (GDC)
6. Golf Hotel Kakamega
7. Jomo Kenyatta Foundation
8. Jomo Kenyatta University Enterprises Ltd
9. Kabarnet Hotel Limited
10. Kenya Airports Authority (KAA)
11. Kenya Animal Genetics Resource Centre
12. Kenya Broadcasting Corporation
13. Kenya Development Bank
14. Kenya Electricity Generating Company (KENGEN)
15. Kenya Electricity Transmission Company (KETRACO)
16. Kenya Exim Bank
17. Kenya Literature Bureau (KLB)
18. Kenya Meat Commission
19. Kenya National Assurance Co. (2001) Ltd
20. Kenya National Shipping Line
21. Kenya National Trading Corporation (KNTC)
22. Kenya Pipeline Company (KPC)
23. Kenya Ports Authority (KPA)
24. Kenya Post Office Savings Bank
25. Kenya Power and Lighting Company (KPLC)
26. Kenya Railways Corporation (KRC)
27. Kenya Reinsurance Corporation Ltd
28. Kenya Safari Lodges and Hotels Ltd
29. Kenya Seed Company (KSC)
30. Kenya Veterinary Vaccine Production Institute
31. Kenya Wine Agencies Ltd (KWAL)
32. Kenyatta International Convention Centre
33. KWA Holdings
34. Mt Elgon Lodge
35. Muhoroni Sugar Company Ltd
36. National Cereals & Produce Board (NCPB)
37. National Housing Corporation
38. National Oil Corporation of Kenya

39. National Water Conservation and Pipeline Corporation
40. New Kenya Co-operative Creameries
41. Numerical Machining Complex
42. Nyayo Tea Zones Development Corporation
43. Nzoia Sugar Company Ltd
44. Postal Corporation of Kenya
45. Research Development Unit Company Ltd
46. Rivatex (East Africa) Ltd
47. School Equipment Production Unit
48. Simlaw Seeds Kenya
49. Simlaw Seeds Tanzania
50. Simlaw Seeds Uganda
51. South Nyanza Sugar Company Limited
52. Sunset Hotel Kisumu
53. University of Nairobi Enterprises and Services (UNES) Ltd
54. University of Nairobi Press (UONP)
55. Yatta Vineyards Ltd

Source: Report of the Presidential Taskforce on Parastatal Reforms (2013)