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Effects of Financial Risk Management on Financial Performance of Government Corporations in Kenya

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Abstract:

Risk management is considered by researchers as a yard stick for determining failure or success of government corporations. It has not been given much attention in recent times. This research work seeks to bring to light the need for government corporations to pay attention to the management of risk. It is obvious that the aim of every business is to maximize shareholder's wealth and acquire substantial profit either for expansion or to undertake new product development. Across the public sector, the most prominent area that erodes the mass of their profit is risk management (credit, market and operational). The problem of this study is to cram the causes of risk and how this can be anticipated and managed to improve performance of the government corporations. The general objective of this study is to examine the effects of financial risk management on financial performance of government corporations in Kenya. The specific objectives are credit risk, liquidity risk, foreign exchange risk and monetary factors affecting performance of government corporations. The target population is 139 officers of the government corporations. The sample size was 44. Enterprise Risk management theory, capital asset pricing theory and arbitrage pricing theory have been used to explain the theoretical framework. A pilot study was carried out to refine the instrument. The quality and consistency of the survey will further be assessed using Cronbach's alpha. Data analysis was performed on a computer using Statistical Package for Social Science (SPSS Version 22) for Windows. Analysis was done using frequency counts, percentages, means and standard deviation, regression, correlation and the information generated was presented in form of graphs, charts and tables. The study results showed that there was an excellent response rate. Majority of the respondents have skills and knowledge and a better understanding of financial risk management. The study results revealed that credit risk inherent in the portfolio affected financial performance of government corporations in Kenya and further the study revealed that credit risk management in Government Corporation helped the same to remain viable and thus reduced leakages in the public finances. The study revealed that there was a positive correlation between the independent variables and dependent variables. The study results revealed that price risks in commodity prices, interest rates and currency exchange rates affected cash flows of government corporations as well as causing risk exposure to government entities. The study further established that adequate management of government corporations in Kenya helped to reduce risks and maximizes on returns. The study revealed that Government Corporation were faced by unsystematic risks challenges and that management of market risks helped in stabilizing market effects. The study results revealed that liquidity risk arose when a given asset could not be traded quickly enough or sold at a required price to cover for financial shortfall the government corporations was facing. The R² was about 52%. The study concluded that there was a relationship between financial risk management and performance of government corporations. The study recommended that government corporations should keep assets that are near liquid and that the government should employ hedging strategies to mitigate on risk.

1. Introduction

1.1. Background of the Study

Risk was inherent in every business, but organizations that embed the right risk management strategies into business planning and performance management were more likely to achieve their strategic and operational objectives. Taking risk were core to Government Corporations, and risks were an inevitable consequence of being in business. The Government Corporations aim was therefore to achieve an appropriate balance between risk and returns and minimize potential adverse effects on its performance. (Pyle, 2012), explained that financial risk management among banks was inadequate and stressed the importance for a uniform procedure to monitor and regulate risks. Financial risk management was an issue that needed to be stressed and investigated, especially in the Government Corporations where there was a need for a good financial risk management structure. Dynamic business practices and demanding regulatory requirements meant that organizations required a broader and clearer perspective on enterprise-wide risk than had ever before.

Financial risk management is the quality control of finance. It is a broad term that was used for different senses or different businesses applications. But basically it involved identification, analysing, and taking measures to reduce or eliminate the exposures to loss by an organization or individual. Various authors including (Stulz, 2014), (Smith & Stulz, 2013) and (Froot, Scharfstein, & Stein, 2013) offered reasons why managers should concern themselves with the active management of risks in their organizations. The main aim of management of Government Corporations were to maximize expected profits taking into account of its variability/volatility (financial risk). Financial risk management was pursued because Government Corporations wanted to avoid low profits which forced them to seek external investment opportunities. When this happened, it resulted into suboptimal investments and hence lower shareholders' value since the cost of such external finance was higher than the internal funds due to capital market imperfections.

There are five main types of financial risks that were classified into the following categories.

Credit Risk was the analysis of the financial soundness of borrowers which has been at the core of government corporation activity since its inception. The analysis referred to what nowadays is known as *credit risk* that was, the risk that counterparty failed to perform an obligation owed to its creditor. It was still a major concern for Government Corporations, but the scope of credit risk was immensely enlarged with the growth of derivative markets. Another definition considered credit risk as the cost of replacing cash flow when the counterpart defaults. (Greuning & Bratanovic, 2009) defined credit risk as the chance that a debtor or issuer of a financial instrument whether an individual, a company, or a country would not repay principal and other investment-related cash flows according to the terms specified in a credit agreement. Inherent to banking, credit risk would mean that payments were delayed or not made at all, which caused cash flow problems and affect a bank's liquidity.

Interest rate risks were found on variations on interest rates and were perceived in different forms. The first method referred to variation in interest rates, in joining with variable loans and short-term financing. An increase in the interest rate led to higher interest payments for the variable rate loan and more expensive follow-up funding. That decreased the company's earnings and in worst cases led to financial distress. Second, the vice versa case referred to cash positions of the company with a variable interest rate. A fall in that rate led to a loss in earnings. It could be summarized that the more corporate debt and especially short-term and variable rate debt a company had, the more vulnerable it changed in the interest rate, (Dhanini, 2007).

Exchange risk occurred when a company is involved in international business and the cash in or outflows were in a foreign exchange rate, as that rate was not fixed and could not be fully anticipated a possible change in a foreign exchange rate led to the risk of changes in the amount of a payable / receivable and by that a change in the amount of money the company had to pay or receive. This risk was measured by the concept of transaction exposure (Ali & Glaum, 2013).

Capital Management Risk is of great importance during capital requirement under the Basel Accords who set the guidelines for all financial institutions. It was internationally acceptable that financial institutions had capital that covered the difference between expected losses over some time horizon and worst case losses over the same time horizon. Here the worst case loss was loss that would not be expected to exceed with some high degree of confidence. This higher degree of confidence would be 99% or 99.9%. The reason behind that idea was, expected losses were normally covered by the way a financial institution prices its products. For instance, the interest charged by a bank was designed to recover expected loan losses. The firm would want to be flexible and at the same time lower the costs for financing. The period of loans would be significant in joining with the assets, which were funded with the loan. Here, often a disparity between the durations was obviously detected.

Long-term assets were then funded with short-term and regulating rate loans, leading to a shortfall in cash flows in times of rising interest rates. This element again led to an inferior ranking of the company and inferior conditions to get future problems regarding follow-up financing over the rest of the lifetime of the asset would occur. Vice versa long-term financing of short-term assets led to access financing when the asset was no longer existing. This caused needless interest payments for the company (Vickery, 2006).

According to (Greuning & Bratanovic, 2009), a government corporation faced liquidity risk when it did not have the ability to efficiently accommodate the redemption of deposits and other liabilities to cover funding increases in the loan and investment portfolio. Those authors went further to propose that a bank would have adequate liquidity potential when it could obtain needed funds (by increasing liabilities, securitizing, or selling assets) promptly and at a reasonable cost.

1.1.1. Profile of Government owned Corporations

Government owned corporations was a creation of the government owned entities Act 2014. Government corporations are run as commercial entities and operate for profit, were self-financing and were self-sustaining be accountable to all stakeholders and the public through parliament. Government corporations were run by board of directors charged with a responsibility of overseeing the activities of a government owned entity. In addition to commercial functions, government corporations perform strategic functions. State corporations that perform a strategic function shall operate on a commercial basis and would be publicly funded for the purpose of financing investments for the achievement of public policy objectives. Risk would be inherent in any business venture be it government or private.

Therefore, government corporations had financial risk management skills to mitigate some of those risk to reduce winding up. The operation of government corporations which operate on commercial basis would be undertaken in accordance with the Act and any other relevant written law and in the instrument of corporations.

Some of the major government corporations included, Agricultural development corporation, Athi water services board, Capital market Authority, Coast water service board, Egerton university, Jomo Kenyatta University of Agriculture, Kenya Broadcasting Corporation, Kenya Maritime Authority, Kenya Ports Authority, Kenya Bureau of Standards, Kenya Accreditation Service, Export Processing Zones Authority, East African Portland Cement Company and Anti-Counterfeiting Agency to mention but a few.

1.2. Statement of the Problem

Risk management was considered by researchers as a yard stick for determining failure or success of government corporations. It has not been given much attention in recent times. This research work sought to bring to light the need for government corporations to pay attention to the management of risk. It was obvious that the aim of every business was to maximize shareholder's wealth and acquire substantial profit either for expansion or to undertake new product development. Across the public sector, the most prominent area that eroded the mass of their profit were risk management (credit, market and operational). The problem of this study was to cram the causes of risk and how that was anticipated and managed to improve performance of the government corporations.

Following the financial crisis of the 2007-2009, stringent regulatory measures, such as higher capital requirements became more prominent as a move towards having stable and more competitive government corporations (Financial Service Authority, 2009). Government corporations played a critical role in the allocation of society's limited savings amongst the most productive investments, and they facilitated the efficient allocation of the risks of those investments. Diamond and Dybvig, (2012). However, the financial crisis showed that a breakdown in that process would disrupt economies around the world. The crises would further reveal the importance of government corporations to hedge against high risks attributed to imbalances in its balance sheet.

The recent global financial crisis revealed the importance of government corporations to hedge against high risks attributed to imbalances in its balance sheet. (Stulz, 2008) argued that there were five ways in which financial risk management systems would break down, all exemplified in the global crisis and other recent ones, those included, failure to use appropriate risk metrics, mis-measurement of known risks, failure to take known risks into account, failure in communicating risks to top management; failure in monitoring and managing risks. Central Bank Supervision Report, 2008 indicated that many banks that collapsed in Kenya in the late 1990's were as a result of the poor management of credit risks which portrayed by the high levels of nonperforming loans. It was important therefore to study how banks managed the broader financial risk.

Related studies done in the past focused on the various aspects of risk management in Kenyan commercial banks. For instance, (Rajan, 2014) noted that expanding lending in the short-term boosts earnings, thus the banks had an incentive to ease their credit standards in times of rapid credit growth, and likewise to tighten standards when credit growth was slow. (Obiero, 2002) researched on adequacy of the banking sector regulatory framework in reducing bank failures. The (Basel committee, 2000) and (Hennie, 2000) pointed out that the major causes of banking problems and failures were directly related to lax credit standards for borrowers and counterpart.

This study aimed to analyse and research on the question: Did financial risk management had any effect on the financial performance of government corporations in Kenya?

1.3. Objectives

This study was guided by both general and specific objectives.

1.3.1. General Objective

The general objective of this study was to evaluate the effects of financial risk management on financial performance of government corporations in Kenya.

1.3.2. Specific Objectives

1. To determine the effect of credit risk on financial performance of government corporations in Kenya.
2. To analyse how price risk affected financial performance of government corporations in Kenya.
3. To find out how liquidity risk affected financial performance of government corporations in Kenya.
4. To establish the effect of market risk on financial performance of government corporations in Kenya.

1.4. Research Questions

1. How did credit risk affect financial performance of government corporations in Kenya?
2. How did price risk affect financial performance of government corporations in Kenya?
3. How did liquidity risk affect financial performance of government corporations in Kenya?
4. How did market risk affect financial performance of government corporations in Kenya?

1.5. Significance of the Study

The research study was significant because it dealt with issues that Kenyan government corporations faced and would continue to confront in the future. It helped to assess the financial risks and how they managed them by taking appropriate action. Therefore, for one to understand the asset liability management process and various strategies that were helpful for the government corporations to manage its financial risks, this topic was ideal. It was beneficial for the researcher to develop some knowledge regarding the asset liability management process, functions and its effects on the financial performance of government corporations.

1.6. Scope of the Study

Owing to limited resources viz time and finances, the study was confined to some but not all of the government corporations in Kenya. It would require a longer time to study the whole Country and this also could have had a big financial implication thus Narrowing the scope of the study was a major practical consideration.

2. Literature Review

2.1. Introduction

Reviewing the existing literature around the topic of research interest was vitally important because it helped us in understanding not only the body of knowledge that related to the research topic but also in developing an argument about the relevance of the research (Bryman & Bell, 2015). This chapter systematically reviewed the related literature to guide the reader in understanding what had already been done by other researchers as far as effects of Financial Risk Management on financial performance of Government Corporations in Kenya were concerned and the underlying concepts and theories that were relevant in that area of research.

2.2. Theoretical Review

Theories were formulated to explain, predict, and describe phenomena and, in many cases to challenge and extend existing knowledge within the limits of the critical bounding assumptions. The theoretical framework introduced and described the theory which explained why the research problem under the study actually existed. A theoretical framework consisted of concepts, together with their definitions, and existing theory/theories that were used for the particular study (Sekaran, 2011).

2.2.1. Enterprise Risk Management Theory

A corporation that chose to manage risks could do so in two fundamentally different ways: it could manage one risk at a time, or it could manage all of its risks holistically. The latter approach was often called enterprise risk management (ERM). According to Tseng Tseng, (2013), Enterprise Risk Management (ERM) is a framework that focused on adopting a systematic and consistent approach to managing all of the risks confronting an organization. Gordon, *et al.*, (2013) on the other hand defined ERM as the overall process of managing an organization's exposure to uncertainty with particular emphasis on identifying and managing the events that could potentially prevent the organization from achieving its objective. ERM was an organizational concept that applies to all levels of the organization.

According to Committee of Sponsoring Organizations (COSO) (2004), Enterprise risk management was 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 might affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.

In conducting ERM, the following were listed as some of the areas or aspects of the organization that a risk manager needed to look into namely: the people, intellectual assets, brand values, business expertise and skills, principle source of profit stream and the regulatory environment Searle, (2012). That helped an organization to balance the two most significant business pressures; the responsibility to deliver success to stakeholders and the risks associated with and generated by the business itself in a commercially achievable way. By doing so, the risk manager was constantly aware of the risks it faced and therefore constantly monitored its exposure and positioned to change strategy or direction to ensure the level of risks it took was acceptable.

Enterprise risk management (ERM) was a new approach for companies – a new way of thinking that allowed a company to identify and manage its risk. In fact, the goal of ERM was to create, protect and enhance shareholder value Barton, *et al.*, (2014). ERM theoretically was easy to discuss and write about. However, the implementation part was the most challenging. For it to succeed the people component had to be brought on board from the Board of Directors, senior executives to the junior staffers, contract employees and casuals. It was philosophized to create awareness, adoption and change transition. They had to understand how it created value and be motivated to see it through to its success.

Here the theory of risk management was put into practice. That was the point where actualization took place through training and communication with risk owners and risk management activities like risk assessments, risk workshops and internal control mechanisms, decisional and business levels factor in their programs risk (AIRMIC, Alarm, IRM: 2010). Success in ERM implementation affected the likelihood and consequences of risk occurring and could ensure benefits like making of informed strategic decisions, improved organization perception, increased operational efficiency, accurate financial reporting, enhanced community and political goodwill and rapid change management.

2.2.2. Capital Asset Pricing Theory

Sharpe, (2014) published the capital asset pricing theory (CAPM). Parallel work was also performed by Treynor, (2014) and Linter, (2014). CAPM extended Harry Markowitz's portfolio theory to introduce the notions of systematic and specific risk. CAPM decomposes a portfolio's risk into systematic and specific risk. Systematic risk is the risk of holding the market portfolio. As the market moved, each individual asset was more or less affected. To the extent that any asset participated in such general market moved, that asset entailed systematic risk.

Specific risk was the risk which was unique to an individual asset. It represented the component of an asset's return which was uncorrelated with general market moves. Linter, (2014). "No matter how much we diversified our investments, it's impossible to get rid of all the risk. As investors, we deserved a rate of return that compensated us for taking on risk. The capital asset pricing model (CAPM) helped us to calculate investment risk and what return on investment we should expect."

It took nearly a decade after the introduction of CAPM for investment professionals to begin to view it as an important tool in helping investors understands risk. The key element of the model was that it separated the risk affecting an asset's return into two categories. The first type was called unsystematic, or companies-specific, risk. The long-term average returns for that kind of risk should be zero. The second kind of risk, called systematic risk, was due to general economic uncertainty. CAPM stated that the return on assets

should, on average, equal the yield on a risk-free bond held over that time plus a premium proportional to the amount of systematic risk the stock possessed Markowitz, (2014). The treatment of risk in the CAPM refined the notions of systematic and unsystematic risk developed by Harry M. Markowitz. Unsystematic risk was the risk to an asset's value caused by factors that are specific to an organization, such as changes in senior management or product lines. For example, specific senior employees may make good or bad decisions or the same type of manufacturing equipment utilized might have different reliabilities at two different sites. In general, unsystematic risk was present due to the fact that every company was endowed with a unique collection of assets, ideas and personnel whose aggregate productivity may vary (Markowitz, 2014).

2.2.3. Arbitrage Pricing Theory

The Arbitrage Pricing Theory (APT) was described in investopedia as an asset pricing model based on the idea that an asset's returns could be predicted using the relationship between that same asset and many common risk factors. It was created in 1976 by Stephen Ross; this theory predicts a relationship between the returns of a portfolio and the returns of a single asset through a linear combination of many independent macro-economic variables. It was a one-period model in which every investor believed that the stochastic properties of returns of capital assets were consistent with a factor structure. It was often viewed as an alternative to the capital asset pricing model (CAPM), since the APT had more flexible assumption requirements. Whereas the CAPM formula required the market's expected return.

APT used the risky asset's expected return and the risk premium of a number of macro-economic factors. The theory described the price where a mispriced asset was expected to be. Arbitrageurs used the APT model to profit by taking advantage of mispriced securities. A mispriced security had a price that differed from the theoretical price predicted by the model. By going short an overpriced security, while concurrently going long the portfolio the APT calculations were based on, the fact that arbitrageur was in a position to make a theoretically risk-free profit (Ross, 2013).

The basis of arbitrage pricing theory was the idea that the price of a security was driven by a number of factors. These were divided into two groups: macro factors, and companies' specific factors. Ross' formal proof showed that the linear pricing relation was a necessary condition for equilibrium in a market where agents maximized certain types of utility. The subsequent work, which was surveyed below, derived either from the assumption of the preclusion of arbitrage or the equilibrium of utility-maximization. A linear relation between the expected returns and the betas was paramount to an identification of the stochastic discount factor. The APT was a substitute for the Capital Asset Pricing Model (CAPM) in that both assert a linear relation between assets' expected returns and their covariance with other random variables (Ross, 2013)

Arbitrage pricing theory did not rely on measuring the performance of the market. Instead, APT directly related the price of the security to the fundamental factors driving it. The problem with that was that the theory in itself provided no indication of what those factors were, so they needed to be empirically determined. Obvious factors included economic growth and interest rates. For companies in some sectors other factors were obviously relevant as well - such as consumer spending for retailers. The potentially large number of factors meant more betas to be calculated. There was also no guarantee that all the relevant factors had been identified. That added complexity was the reason arbitrage pricing theory was far less widely used than CAPM (Sharpe, 2014)

2.3. Conceptual Framework

(Mugenda & Mugenda, 2006), defined conceptual framework as a concise description of phenomenon under study accompanied by a graphical or visual depiction of the major variables of the study. According to (Young, 2009), conceptual framework was a diagrammatical representation that showed the relationship between dependent variable and independent variables. In that study, the dependent variable was financial performance while the independent variables were credit risk, price risk, liquidity risk and market risk as shown in figure. 1.

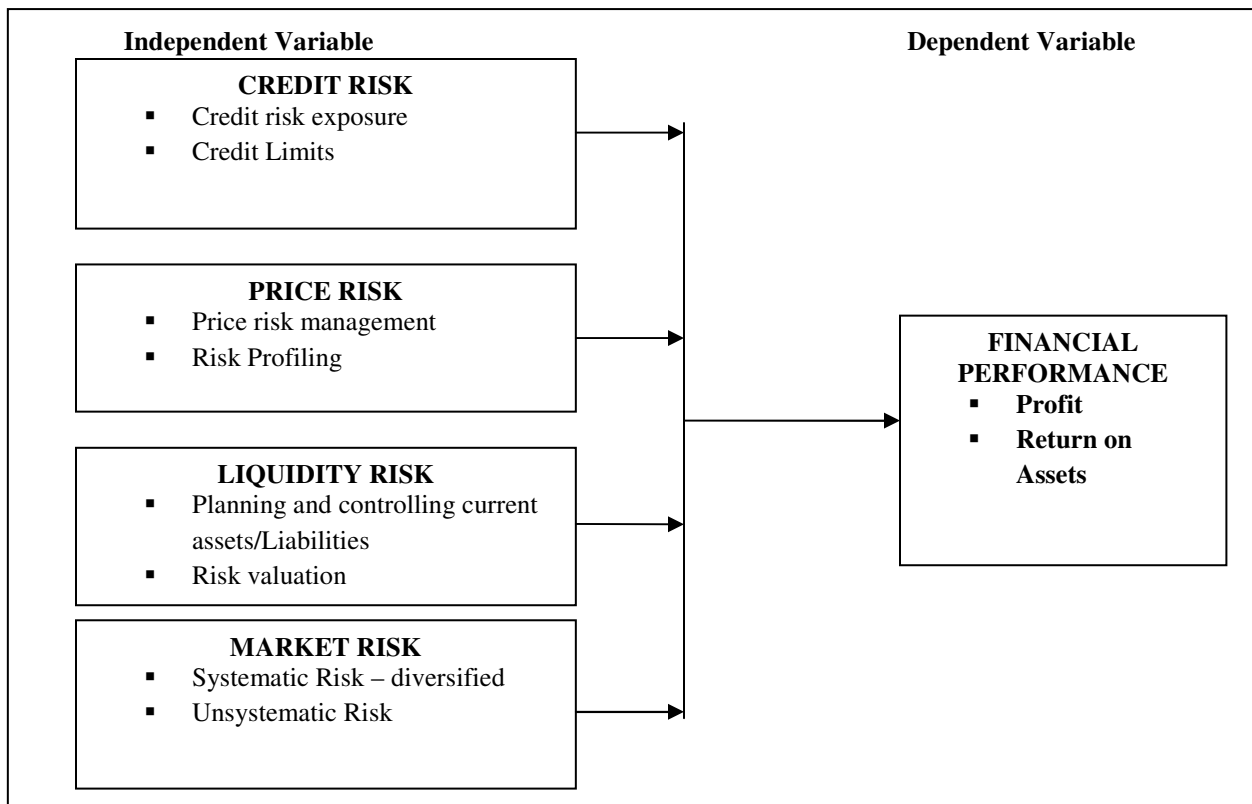


Figure 1: Conceptual Framework

2.3.1. Credit Risk

Credit risk was the risk that a financial institution incurred losses because the financial position of a borrower had deteriorated to the point that the value of an asset (including off-balance-sheet assets) was reduced or extinguished. Credit risk would most simply be defined as the potential that a borrower or counterparty failed to meet its obligations in accordance with agreed terms. The goal of credit risk management was to maximize an organization's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters (Kealhofer, 2008). Organizations needed to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions. The organizations also considered the relationships between credit risk and other risks. The effective management of credit risk was a critical component of a comprehensive approach to risk management and essential to the long-term success of any organization (Bofondi & Gobbi, 2011).

The importance of credit risk management was increasing with time because of some reasons like economic crises and stagnation, company insolvencies, infraction of rules in company accounting and audits, growth of off-balance sheet derivatives, declining and volatile values of collateral, borrowing more easily of small firms, and financial globalization.

According to (Fuser & Gleiner, 2009), institutions used various credit risk management methods such as credit limits, taking collateral, diversification, loan selling, syndicated loans, credit insurance, and securitization and credit derivatives. It was important for staff of various institutions to understand the aspect of risk in their operations and the risks that were inherent and exposed in their business operations. Better understanding of risk management were also be necessary especially in the financial intermediation activities where managing risk was one its important activities. The management of CR in government corporations follows the process of risk identification, measurement, assessment, monitoring and control. It involved identification of potential risk factors, estimate their consequences, monitor activities exposed to the identified risk factors and put in place control measures to prevent or reduce the undesirable effects. That process was applied within the strategic and operational framework of the organization.

2.3.2. Price Risk

Price risk was caused by changes in commodity prices, interest rates and currency exchange rates that affect the cash flows and market value of a company and therefore its financial health and competitive position in product and labour markets. The extent to which a company's cash flow and market value were affected by commodity price, interest rate and exchange rate variability was called its risk exposure and often described as its risk profile. Prices fluctuated in response to the global economic outlook, industrial production growth, international politics, market balances, exchange and interest rates. Thus, no one could know exactly what happened to commodity markets and prices in the future even though analysts made outlook and price forecasts based on current economic, political and market conditions. If the market price went down, it brought unexpected loss to commodities producers; in contrast, if the market price rose, consumers face increased costs. Of course, this "non-resistant" or unprotected condition against price changed seriously impact future revenues of both commodity buyers and sellers.

How price risk management implemented and what were the final gain from it? Market participants bought or sold their physical metals in the physical market through their regular channels(Blake, 2013). Alongside, they insured against their physical trading risks, using futures or options and other derivatives in the futures or over the counter (OTC) markets. Those futures/forward and options contracts were issued by exchange brokers as Ring Dealing Members in the LME or Floor Brokers in NYMEX and COMEX (Blake, 2013). Futures contracts were used for managing price risk and were liquidated by buying and selling them back before the (prompt) maturity date. Consequently, futures contract results could eliminate or reduce the price risk of physical trade, which was made by the cash settlement (spot) price.

Price risk management had the following benefits: It could maximize profits and minimize losses (reduce price risk) of hedgers because of protection against strong market price volatility; It gave an opportunity to plan future profits by stabilizing the net price of metals; It could help to predict and plan taxable income from metal industry to the state budgets(Enders, 2013).However, risk management (hedging) was not always profitable because there could be a possible risk and costs occur if the price of the underlying commodity changed against a risk manager's expectation or if a risk manager chose an inappropriate risk management tool (derivative). For example, a copper consumer who had a long forward position might have lost if the price of copper significantly decreased in the future (Chance, 2010). A copper producer who had a short forward position might have lost if the price of copper significantly increased in the future. Therefore, implementing price risk management could be an important part of the trading of metals and using a correct derivative at an appropriate time was very important to risk managers.

2.3.3. Liquidity Risk

The liquidity of an asset meant how quickly the assets could be transformed into cash. In corporate context, liquidity meant, the ability of a company to meet its current liabilities when they felt due (Puneet & Parmil, 2012). (Tirole, 2009)distinguished two types of liquidity risk: asset side of balance and liability side of balance liquidity risk. Liability side liquidity risk arose when financial institutions liability holders seek cash in their financial claims immediately. If Government Corporations had less cash than their liability holders wished to withdraw, it had to liquidate their assets to cover the difference (Saunders, 2003). Asset side liquidity risk arose when a given security or asset could not be traded quickly enough or at a wanted price in the market to prevent a loss or made the required profit. Most of the assets could be turned into cash eventually, but if some assets had to be liquidated immediately, there was a chance that, that might have been done either at very high cost or at much lower price than financial institution would be able to get in some near future(Allen & Carletti, 2008). Efficiency in liquidity mitigation involved planning and controlling current assets/liabilities in such a manner that eliminated the risk of the inability to meet due short-term obligations, on one hand, and avoided excessive investment in those assets, on the other (Tirole, 2009).

According to (Jenkinson, 2008), liquidity risk mitigation could influence both the financial institution's capital and earnings. If the risk was over valued, the firm could not invest its funds in more profitable illiquid assets, so earnings would suffer. If risk was under-evaluated, the firm might have to handle fire-sales and not surely to reasonable price, so it could damage the capital. That was why it became the top priority for management to ensure the availability of sufficient funds to meet future demands of providers and borrowers, at reasonable costs. Moreover, the institution's position towards liquidity risk affected not just its performance but also the firm's reputation (Jenkinson, 2008). If the financial institution was late by providing funds for depositors, it would look not trustful and unsafe; it might lose confidence and at the same time clients (Arif & Nauman, 2012). Liquidity risk mitigation had become a serious concern for the financial sector because of high competition for consumer deposits and new wide assortment of funding products in wholesale and capital markets with technological advancements. The funding and risk management structure had completely been changed (Akhtar, 2012).

An institution which had good asset quality, strong earnings and sufficient capital might have failed if it was not maintaining adequate liquidity. That was why management of liquidity risk had become one of major success factors. In order to capture the benefits that well organized financial system could bring, institutions had to be able to control their stability and manage risks (Crowe, 2009). In the public sector, liquidity risk management was an essential component of the overall risk management framework (Majid, 2011). As government institutions, government corporations should manage the demand and supply of liquidity in an appropriate manner in order to safely run their business, maintain good relations with the stakeholders and avoid liquidity problem. Well-managed government corporations should have a well-defined mechanism for the identification, measurement, monitoring and mitigation of liquidity risk. A well-established system helped the government corporations in timely recognition of the sources of liquidity risk to avoid losses in both cases – undervalued liquidity risk and overvalued liquidity risk (Ismal, 2010).

2.3.4. Market Risk

Market risk was defined as the risk of loss (or gain) that arose from unexpected changes in market prices (e.g., such as security prices) or market rates (e.g., such as interest or exchange rates). Market risk was further be divided into equity risk, interest rate risk, currency risk and commodity risk. Those subdivisions were further broken down and so on. Fundamentally, there were two basic ways to look at market risk: if one considered risk in currency terms, one was concerned with absolute market risk whereas, if one considered risk in terms of distance from a benchmark (as many investment funds did), one was concerned with relative market risk Joroin (2010). One should further note that the various types of market risk all occurred in one of two shapes either as directional risk or as non-directional risk. Directional risk referred to linear exposures to changes of market prices or rates. Non-directional risk referred to non-linear exposures, exposures to volatility risk (i.e., unexpected changes in volatility) and exposures to basis risk (i.e. unexpected changes in the price relationship between a financial variable and its intended hedge Crouhy, Galai, and Mark(2012). According to

Joroin(2010), market risk was controlled limits on notional, exposures, valuation at risk measures, and independent supervision by risk managers(Dowd, 2011).

Market risk was a possibility for an investor to experience losses due to factors that affected overall performance of the financial markets. Market risk was known as systematic risk, it would not be eliminated through diversification, though it would be hedged against. The risk that a major natural disaster would cause a decline in the market as a whole was an example of market risk. Other sources of market risk included recessions, political turmoil, changes in interest rates and terrorist attacks. Systematic risk while it was may be triggered by other risks such as credit risk or liquidity risk was different from such risks (Tucker, 2014).It was identified not by its source but by its effects. It was dynamic and evolving. It involved multiple parts of the financial system and occurrences seldom or never took the same form of systematic risk had a variety of origins and manifestations. Whether or not an event proved to be systematic depended on the overall market circumstances in which it arose. It required a strong framework that built resilience throughout the financial system in order to avoid creating areas of strength alongside areas of weakness (Tucker, 2014).

2.4. Financial Performance

Financial Performance Company's ability to generate new resources, from day-to-day operations, over a given period of time and performance was gauged by net income and cash from operations. According to Toutou and Xiaodong (2011), financial performance was a general measure of how good Government Corporation generated revenues from its capital. It also showed a Government Corporations overall financial health over a period of time, and it helped to compare different banks across the banking industry at the same time. The government's corporation financial performance generally was recognized by its stability and profitability. The stability referred to its risk factors and profitability referred to its financial return. The Return on Asset and the Return on Equity were used by various scholars to measure the financial returns of an organization. The return on Assets (ROA) was described as the ratio that measured company earnings before interest & taxes (EBIT) against its total net assets.

Financial risk management also ensured the desire to shoulder lower tax burden to seek for reduced volatility of profits. With progressive tax schedules, the expected tax burden was reduced when income smoothened therefore activities which reduced the volatility of reported taxable income were pursued as they helped enhance shareholders' value. Perhaps the most compelling reason why managers engaged in risk management with the aim of reducing the variability of profits was the cost of possible financial distress. Significant loss of earnings led to stakeholders' loss of confidence in the firm's operations, loss of strategic position in the industry, withdrawal of license or charter and even bankruptcy. The costs associated with those caused managers to avoid them by embarking on activities that helped avoid low realizations. Finally, risk management helped firms to avoid low profits which forced them to seek external investment opportunities. When that happened, it resulted in suboptimal investments and hence lowered shareholders' value since the cost of such external finance was higher than the internal funds due to capital market imperfections.

(Fatemi & Fooladi, 2009) noted that effective financial risk management led to more balanced trade-off between risk and reward, to realize a better position in the future. Shafiq and Nasr (2010) noted that the public sector recognized that an institution needed not do business in a manner that unnecessarily imposed risk upon it; nor would it absorb risk that was efficiently transferred to other participants. Rather, it was to only manage risks at the firm level that were more efficiently managed there than by the market itself or by their owners in their own portfolios. In short, it was to accept only those risks that were uniquely a part of the public array of services.

2.5. Empirical Review

There was debate and controversies on the impact of risk management and state corporation's financial performance. Scholars had carried out extensive studies on that topic and produced mixed results; while some found that risk management impact positively on state corporations financial performance, some found negative relationship and others suggested that other factors apart from risk management impacted on state corporations performance.(Githinji, 2010), did a study on Credit Risk Management and Profitability of Commercial Banks in Kenya to assess the degree to which the credit risk management in practice had significantly contributed to high profits in commercial banks of Kenya. Data on the amount of credit, level of non-performing loans and profits were collected for the period 2004 to 2008.The results of the study showed that, there was no relationship between profits, amount of credit and the level of nonperforming loans. The findings reveal that the bulk of the profits of commercial banks were not influenced by the amount of credit and nonperforming loans suggesting that other variables other than credit and nonperforming loans impact on profits. Commercial banks were keen on making high profits and concentrated on other factors other than focusing more on amount of credit and nonperforming loans. A regression model was used to elaborate the results which showed that there was no significance relationship between the banks profit and credit risk management proxy by level of Non-Performing Loans and Loans and Advances/Total assets.

(Khouri, 2011)studied the Risk Performance of the GCC Banking and assessed the impact of bank's specific risk characteristics, and the overall banking environment on the performance of 43 commercial banks operating in 6 of the Gulf Cooperation Council (GCC) countries over the period 1998-2008. Using fixed effect regression analysis, results showed that credit risk, liquidity risk and capital risk were the major factors that affect bank performance when profitability was measured by return on assets while the only risk that affects profitability when measured by return on equity is liquidity risk. (Boahene, Dasah, & Agyei, 2012)used regression analysis to determine whether there was a significant relationship between credit risk and profitability of Ghanaian Banks They followed the line of Hosna et al., (2009) by using Return of Equity as a measure of bank's performance and a ratio of non-performing loans to total asset as proxy for credit risk management.

They found empirically that there was an effect of credit risk management on profitability level of Ghanaian banks. The study also suggested that higher capital requirement contributed positively to banks profitability. (Kolapo, 2012) on his study on Credit Risk and Commercial Banks Performance in Nigeria carried out an empirical investigation into the quantitative effect of credit risk on the performance of commercial banks in Nigeria over the period of 11 years (2000 -2010). Five Commercial banking firms were selected on a cross sectional basis for eleven years. The traditional profit theory was employed to 24 formulate profit, measured by Return on Asset (ROA), as a function of the ratio of Non - performing loan to loan & Advances (NPL/LA), ratio of Total loan & Advances to Total deposit (LA/TD) and the ratio of loan loss provision to classified loans (LLP/CL) as measures of credit risk.

(Wiiliam, 2012), studied the influence of financial risk management on the financial performance of commercial banks in Kenya. A descriptive survey of the credit and management staff of the forty-two commercial banks and one mortgage company formed the target population with a sample size of one hundred and seven staff randomly chosen for the study. Primary data for the period 2008-2012 through close ended questions was collected in that study on the financial risk management practices employed and their influence on the financial performance of the commercial banks. Data was analyzed using correlation analysis and regression models with the strength of the model being tested using Cronbach's Co-Efficient Alpha. The study found that most commercial banks had highly adopted financial risk management practices to manage financial and credit risk and as a result the financial risk management practices mentioned herein had a positive correlation to the financial performance of commercial banks of Kenya. The study recommended that commercial banks seek and obtain information consistently so that it would have permitted them to detect potential problems at an early stage and identified trends not only for particular institution, but also for the banking system as a whole, while it also ensured transparency of banking activities and the risks inherent in those activities, including credit risk.

Ogilo (2012) provided a comparative study of Credit Risk Management on Financial Performance of Commercial Banks in Kenya. A causal research design was undertaken in that study and that was facilitated by the use of secondary data which was obtained from the Central Bank of Kenya publications on banking sector survey. The study used multiple regression analysis in the analysis of data and the findings were presented in the form of tables and regression equations. The study found out that there was a strong impact between the CAMEL components on the financial performance of commercial banks. The study also established that capital adequacy, asset quality, management efficiency and liquidity (CAMEL) had weak relationship with financial performance (ROE) whereas earnings had a strong relationship with financial performance. The study concluded that CAMEL model could be used as a proxy for credit risk management.

Wanjohi (2013) assessed the effect of financial risk management on the financial performance of commercial banks in Kenya. In achieving that objective, the study assessed the current risk management practices of the commercial banks and linked them with the banks' financial performance. Return on Assets (ROA) was averaged for five years (2008-2012) to proxy the banks' financial performance. To assess the financial risk management practices, a self-administered survey questionnaire was used across the banks. The study used multiple regression analysis in the analysis of data and the findings were presented in the form of tables and regression equations. The study found out that majority of the Kenyan banks were practicing good financial risk management and as a result the financial risk management practices mentioned herein had a positive correlation to the financial performance of commercial banks in Kenya. Although there was a general understanding about risk and its management among government institutions, the study recommended that government institutions and corporations were to devise modern risk measurement techniques such as value at risk, simulation techniques and risk-adjusted return on capital. The study also recommended use of derivatives to mitigate financial risk as well as develop training courses tailored to the needs of government corporation personnel in risk management.

2.6. Critique of Existing Literature

Hansen (2009) conducted a study on the strategic foreign exchange risk management practice by Danish medium-sized non-financial, not-listed companies that were involved in international activities. The study showed that interaction between financial and operational hedges existed in the management of operating exposure and that operational and financial strategies were seen as complements to each other. The size of the company exhibited significance in explaining the importance and application of the financial hedging means. Dam (2010) investigated the credit risk management framework and the effectiveness of the credit risk management practices at both the government corporation and a transaction office's level. The research used both qualitative and quantitative research methods. Dam concluded that the government corporations tried to adopt a close-to-standard credit risk management framework with numerous published documents governing the day-to-day credit activities. The study had a research gap since it did not address the relationship between financial risk management and financial performance of government corporations. The study was relevant to the current study since it covered other aspects of financial risks other than foreign exchange risk which was a component of market risk.

2.7. Research Gap

In a study that was carried out by Barton, *et. al*, (2014), he found out that corporate financial risk management seek to manage a companies' exposure to currencies, interest rates, energy, commodities and other factors driven by the financial market. It was viewed as an ongoing process that continually evolved the companies as it encountered new and unforeseen risks. However, in reality, many companies that had identified various risks in their businesses did not have formal risk policies or strategies in place to manage those risks within a corporate approved process Boahene, *et. al*, (2012). Many companies regarded financial risk management as a series of unrelated transactions tied to a specific event or process. With that transactional approach to managing risk, one begun with a blank sheet of paper each time a new issue or problem arose, and then developed an independent solution for each desperate problem. While the dangers of that kind of approach seemed obvious, it was surprising how many companies rely on transactional approach. Clearly, companies benefited from a process that was woven into their overall business strategies and management process.

(Bofondi & Gobbi, 2011) presented two common alternative structures for risk management. The first one involved an Audit Committee, established as a Committee of the Board, ideally with non-executive membership and chaired by a non-executive, which was charged with supporting the Accounting Officer in their responsibilities for issues of risk, control and governance and associated assurance. Financial risk management practices fell into three major categories; credit risk practices, liquidity risk management practice and market risks Kithinji, (2014). These financial risk management practices influenced the financial performance of oil firms. In a study on risk management policies and practices in a Vietnamese Joint-Stock Commercial Bank's Transaction Office, Dam (2010) investigated the credit risk management framework and the effectiveness of the credit risk management practices at both the firm's and a transaction office's level. The study had a research gap since it did not address the effect of credit risk management practices on the financial performance of those firms.

Research gaps also existed as the research provided more literature for examining the theories reviewed. In addition, the majority of the studies were done in developed economies hence leaving scarce literature in developing economies. The study sought to fill the existing research gap by answering the following research question, did there exist a relationship between financial risk management and financial performance of government Corporations in Kenya?

2.8. Summary

The literature reviewed the effects of financial risk management on financial performance of government corporations in Kenya. This included credit risk, price risk, liquidity risk and market risk. Theories used to strengthen the conceptual framework were enterprise risk management theory, capital asset pricing theory and arbitrage pricing theory. To show the relationship between independent variables and the dependent variable the researcher used a diagram to reflect the relationship.

3. Research Methodology

3.1. Introduction

The chapter outlined the research design and methodology that was used to carry out the study. The chapter also dealt with the target population, type of data collected, sampling frame, sample and sampling technique, the sample size, data collection procedures, pilot test, validity and reliability of the instrument as well as the data analysis techniques and how eventually data was presented.

3.2. Research Design

The researcher used descriptive research design. Descriptive study was concerned with finding out who, what, where and how much of a phenomenon, which was the concern of the study. (Sekaran, 2011)observed that the goal of descriptive research was to offer the researcher a profile or describe relevant aspects of the phenomena of interest from the individual, organization, industry or other perspective. In addition, the design best fit in the ascertainment and description of characteristics of variable in that research study and allowed for use of questionnaires, interviews and descriptive statistics such as frequencies and percentages. In addition, a descriptive design was appropriate since it enabled the researcher to collect enough information necessary for generalization.

3.3. Target Population

The study targeted139 selected government corporations currently operating in Kenya operating in Manufacturing, service and regulation sectors as was shown in table1 below. From each government corporation, the study targeted one senior officer namely the chief finance officer. Therefore, the target population was139 officers of government corporations in Kenya.

Category	Number	30%	Sample Size
Agricultural Services	25	30%	8
Regulatory Services	52	30%	16
Construction Services	10	30%	3
Education Services	10	30%	3
Energy Services	10	30%	3
Hospitality Services	5	30%	2
Medical Services	10	30%	3
Security Services	5	30%	2
Sports Services	2	30%	1
Transport & Maritime	10	30%	3
TOTAL	139		44

Table 1: Target Population
(Government Press, 2014)

3.4. Sample Size

Bryman and Bell (2015) asserted that sampling was that part of the statistical practice concerned with the selection of individual or observations intended to yield some knowledge about a population of concern, especially for the purpose of statistical inferences.

They advised that a researcher would use 30% of the total target population as a sample for it to be accepted as a good representative sample. Therefore, the sample size was 44 as shown in table1 above

3.5. Sampling and Sampling Technique

Stratified random sampling method was used to select relevant respondents from various sections of the various sections of government corporations. (Mugenda & Mugenda, 2006) argued that stratified random sampling was where a given number of cases were randomly selected from each population sub-group. It thus ensured inclusion in the sample of subgroup which otherwise would be omitted entirely by other sampling methods. In that case stratification was based on the section from which employees came from. Stratified sampling enables the population to be divided into three segments (relevant sections of government corporations) called strata. These sections are senior management represented by finance department and operations department and corporate services division section. Simple random sample is then drawn from each stratum, and then those sub-samples joined to form complete stratified samples. In addition, proportional allocation is done, where each stratum contributed to the sample a number that is proportional to its size in the population.

3.6. Data Collection Instruments

The researcher used structured questionnaires to collect data from government corporation's respondents. A questionnaire with high reliability received similar answers if it was done again and again or by other researchers ((Bryman & Bell, 2015). In addition, the questionnaires were convenient for the task in that they were easily and conveniently administered with the study sample. The use of questionnaire was cost effective, less time consuming as compared to the use of interview. Data collected through the use of well-structured questionnaire was easy to analyze. The researcher used Likert type of questionnaire because it required respondents to respond to a series of statements by indicating whether he or she agreed to a great extent or no extent. Likert scale was used because it was easy to understand and responses were easily quantifiable and subjective to computation of mathematical analysis.

3.7. Data Collection Procedure

The researcher used both primary and secondary data in data collection procedures.

3.7.1. Primary Data Collection

Primary data was original data that was collected specially for the purpose in mind. That type of data was generally afresh and collected for the first time. It was useful for current studies as well as for future studies. The study used intensively self-administered questionnaires as the main instrument for primary data collection. The questionnaires were preferred because: questionnaires acted as a source of reference hence was used at a later time to prove that the research was carried out, a large number of sampled population was realized within a short time and it was cheaper way of conducting a research and anonymity of the respondents.

3.7.2 Secondary Data Collection

Secondary data was data gathered and recorded by someone else prior to and for a purpose other than the current project. Secondary data involved less cost, time and effort. Secondary data was obtained from related materials in the internet, procurement journals, white papers, periodicals and books relevant to the study.

3.8. Pilot Testing

The questionnaires were pilot tested before the actual data collection. That involved a few respondents from Government Corporation to ascertain its effectiveness. The researcher was interested in testing the reliability of the research instruments, which is the questionnaire hence validity of data collected. Validity was described as the accuracy and meaningfulness of inferences which were based on the research results ((Mugenda & Mugenda, 2006) asserted that reliability was done using Cronbach's Alpha Model on SPSS. (Mugenda & Mugenda, 2006) asserted that reliability was the measure of the degree to which research instrument yielded consistent results or data after repeated trials. The researcher did a pilot test with 10 % of respondents before distributing the questionnaire. The researcher used 8 respondents for the pilot process. The purpose was to ensure that those items in the questionnaire were clearly stated and had the same meaning to all respondents. At the same time, it helped to determine how much time was required to administer the questionnaire. Respondents for pre-testing did not form part of the sample.

3.9. Data Processing, Analysis and Presentation

(Kothari, 2012) argued that data collected had to be processed, analyzed and presented in accordance with the outlined laid down for the purpose at the time of developing the research plan. Data analysis involved the transformation of data into meaningful information for decision making. It involved editing, error correction, rectification of omission and finally putting together or consolidating information gathered. The collected data was analyzed quantitatively and qualitatively. Descriptive and inferential statistics was done using SPSS version 22 and specifically multiple regression model was applied. Set of data was described using percentage, mean standard deviation and coefficient of variation and presented using tables, charts and graphs. (Fraenkel & Wallen, 2011) argued that regression was the working out of a statistical relationship between one or more variables. The researcher used a multiple regression analysis to show the effect and influence of the independent variables on the dependent variables.

The relationship was as follows;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Y = Represents the dependent variable, effects of financial risk management on financial performance of government corporations

α = Constant

$\beta_1, \beta_2, \beta_3, \beta_4$ = Partial regression coefficient

X_1 = Credit risk

X_2 = Price fluctuations

X_3 = Liquidity risk

X_4 = Market risk

ϵ = error term or stochastic term

4. Data Analysis, Results and Discussion

4.1. Introduction

The chapter presented the analysis of the data on the effects of financial risk management on financial performance of government corporations in Kenya. The chapter also provided the major findings and results of the study and discusses those findings and results against the literature reviewed and study objectives. The data was mainly presented in frequency tables, means and standard deviation.

4.2. Response Rate

The study targeted 44 government corporations in Kenya. From the study, 35 out of the 44 sample respondents filled-in and returned the questionnaires making a response rate of 79.5% as per Table 2. below.

	Frequency	Percentage
Respondent	35	79.5
Non-respondent	9	20.5
Total	44	100

Table 2: Questionnaire Return Rate

According to (Mugenda & Mugenda, 2008) a response rate of 50% was adequate for analysis and reporting; a rate of 60% was good and a response rate of 70% and over was excellent; therefore, that response rate was adequate for analysis and reporting.

4.2.1. Data Validity

The researcher asked experts, three academicians, to assess the scales' content validity. Accordingly, the researcher made changes on the first draft in terms of eliminating, adding or rewording some of the items included in that draft.

4.2.2 Reliability Analysis
Prior to the actual study, the researcher carried out a pilot study to pre-test the validity and reliability of data collected using the questionnaire. The pilot study allowed for pre-testing of the research instrument. The results on reliability of the research instruments are presented in Table 3 below.

Scale	Cronbach's Alpha	Number of Items
Credit Risk	0.794	4
Market Risk	0.773	4
Liquidity Risk	0.799	4
Financial Performance	0.894	4

Table 3: Reliability Coefficients

The overall Cronbach's alpha for the four categories which is 0.752. The findings of the pilot study showed that all the four scales were reliable as their reliability values exceeded the prescribed threshold of 0.7 (Mugenda & Mugenda, 2008).

4.3. Background Information

The background information was gathered based on the work experience, level of education, and position held.

4.3.1. Work Experience

The study sought to establish the working experience of respondents. The study results revealed that 20% of the respondents had a working experience of between 0-3 years, 34.3% between 3-6 years, 28.6% between 6-9 years and 17.1% over 9 years. That showed that majority of the respondents that participated in the study were those with experience of between 3-6 years as shown in Figure 1 below. The research findings indicated further that majority of the respondents had relevant working experience in financial risk management that was necessary for applying the required mechanisms to reduce risks in government corporations

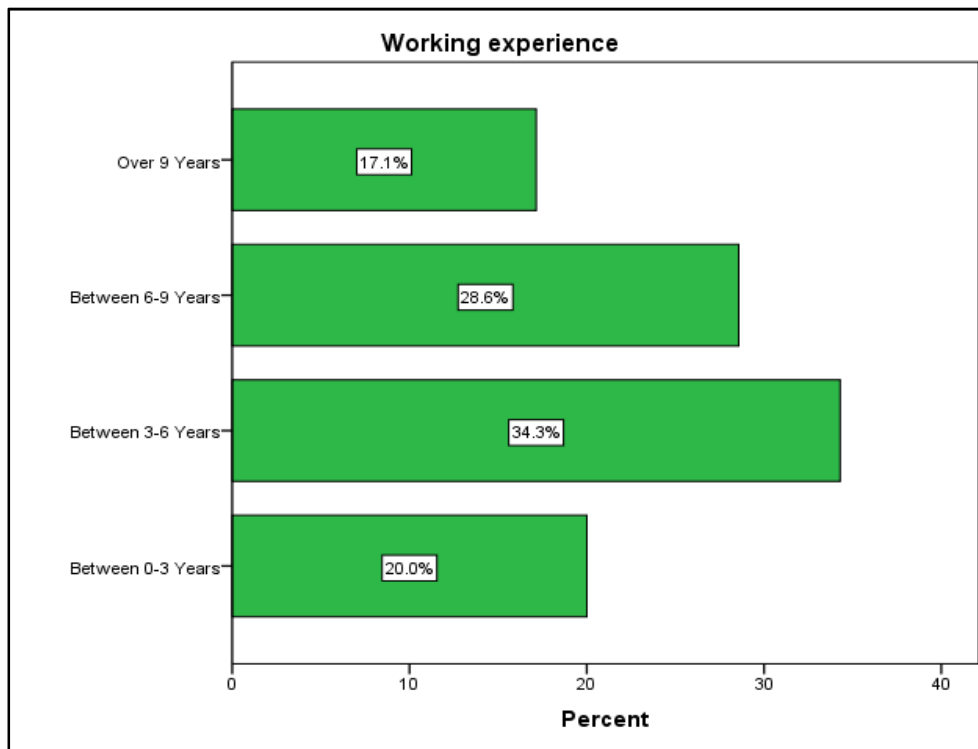


Figure 2: Working Experience

4.3.2. Level of Education

The study sought to establish the level of education of respondents. The study results revealed that 8.6% hold certificates and diplomas respectively, 48.6% hold bachelor’s degrees, 22.9% hold master’s degree and 11.4% hold other forms of degrees and professional courses with a mean score of 3.20 and a standard deviation of 1.052. The findings showed that majority of respondents held bachelor’s degree as shown in Figure 3 below. Further those results showed that government corporations had qualified persons who had the skills and the wherewithal to carry out functions of financial risk management. This further indicated that the respondents had the required academic qualifications and training to handle financial risk management in government corporations in Kenya.

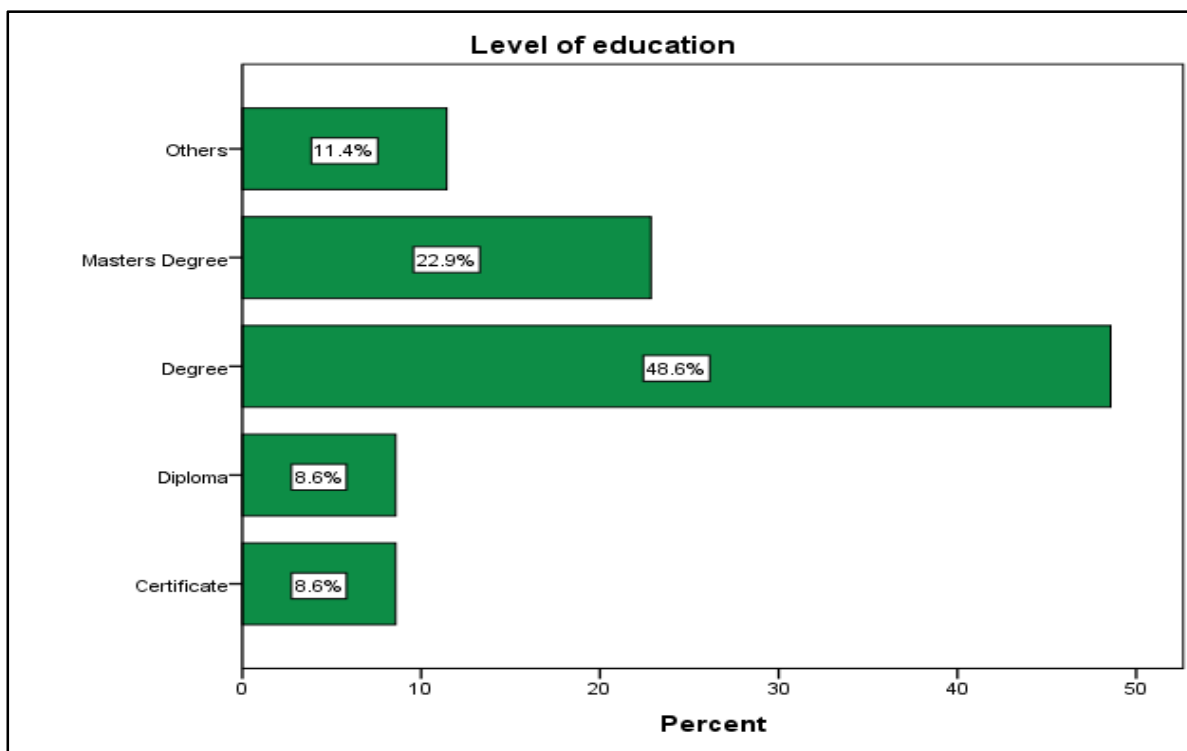


Figure 3: Level of Education

4.3.3. Position Held in Government Corporation

The study sought to establish the positions held by respondents. The study results showed that 20% of the respondents were officers, 17.1% were senior officers, 37.1% were heads of departments and 25.7% were senior managers with a mean score of 2.69 and a standard deviation of 1.078. That showed that majority of respondents were heads of departments as shown in Figure 4 below. From that particular analysis, majority of respondents were heads of departments and were persons charged with the responsibility of decision making as far as financial risk management on financial performance of government corporations in Kenya were concerned.

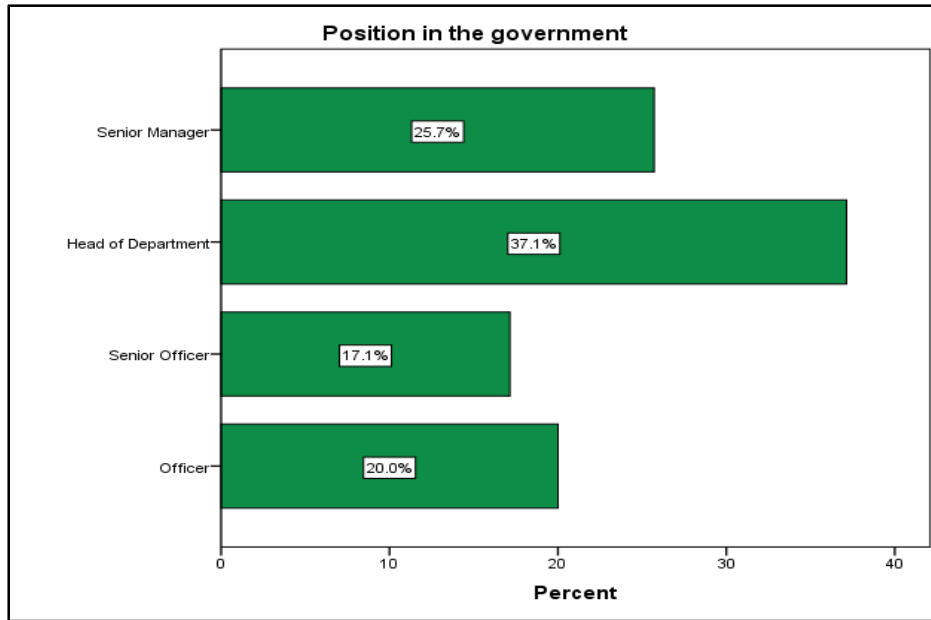


Figure 4: Position held in government corporations

4.4. Analysis of Objectives

In the research analysis the researcher used a tool rating scale of 5 to 1; where 5 was the highest and 1 the lowest. Opinions given by the respondents were rated as follows, 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree and 1= Strongly Disagree. The analysis for mean, standard deviation and coefficient of variation were based on this rating scale.

4.4.1. Credit Risk

Descriptive Statistics			
	N	Mean	Std. Deviation
The level of credit risk held by government corporation in Kenya affected its performance	35	3.91	1.067
Credit risk management in government corporations helped government corporations in Kenya to remain profitable	35	4.14	1.089
Absence of credit risk policy in government corporations in Kenya affected its financial performance	35	3.34	1.056
Credit risk inherent in the portfolio affects financial performance of government corporations in Kenya	35	4.29	.987
Valid N (listwise)	35		

Table 4: Credit Risk

The first objective of the study was to examine the effect of credit risk on the financial performance of government corporations in Kenya. Respondents were required to respond to set questions related to credit risk and give their response. The opinion in agreement that credit risk inherent in the portfolio affects financial performance of government corporations in Kenya had a mean score of 4.29 and a standard deviation of 0.987. That was in agreement with Kolapo, (2012) that credit risk inherent in a portfolio affected the performance of a government corporations in Kenya. The Findings from respondents that the level of credit risk held by government corporation in Kenya affected its performance had a mean score of 3.91 and a standard deviation of 1.067. The Findings from respondents that credit risk management in government corporation in Kenya helped the government entities to remain profitable had a mean score of 4.14 and a standard deviation of 1.089. That was in agreement with Kealhofer, (2008) that management of credit risk in any entity helped the entity to remain in the green. The research findings that absence of credit risk policy in government corporations in Kenya affected its financial performance had a mean score of 3.34 and a standard deviation of 1.056. Managing credit risks in government corporations helps in development of credit terms that do not expose them to much losses (Boahene, et. al, 2012)

4.4.2. Price Risk

Descriptive Statistics			
	N	Mean	Std. Deviation
Price risk in commodity prices, interest rates and currency exchange rates affected cash flows of government corporations in Kenya	35	3.91	1.067
Price risk in commodity prices, interest rates and currency exchange rates caused risk exposure to government corporations in Kenya	35	3.26	1.358
Management of price risk in government corporations in Kenya helped in maximization of profits and reduced risks	35	4.11	1.022
Price risks responded to the global economic outlook, industrial production growth, international politics, market balances, exchange and interest rates	35	2.74	1.804
Valid N (listwise)	35		

Table 5: Price Risk

The second objective of the study was to examine the effect of price risk on the financial performance of government corporations in Kenya. Respondents were required to affirm to some set of questions related to price risk and gave their response. The research findings that, management of price risk in government corporations in Kenya helped in maximization of profits and reduced risk had a mean score of 4.11 and a standard deviation of 1.022. That result was in agreement with Enders, (2013) that when prices were controlled in the economy then firm's were most likely to turn to profitability because the prices were known and were not changed any time sooner. The statement in agreement that price risk in commodity prices, interest rates and currency exchange rates affected cash flows of government corporations had a mean score of 3.91 and a standard deviation of 1.067. That statement was in agreement with (Puneet & Parmil, 2012) that when interest rates and currency exchange rates were high the purchasing power of residents in the country was low thus causing deminished cash flows for government corporations. The research findings that, price risk in commodity prices, interest rate and currency exchange rates caused risk exposure to government corporations had a mean score of 3.26 and a standard deviation of 1.358. The respondents that were in disagreement that price risk response to the global economic outlook, industrial production growth, international politicks, market balances, exchange and interest rates had a mean score of 2.74 and a standard deviation of 1.804. Those results implied that price risk had an effect on financial performance of government corporations in Kenya. The management of price risk helped government corporations to diversify the portfolios they invested in and also reduced or minimized the risks that were associated with price risks(Blake, 2013).

4.4.3. Market Risk

Descriptive Statistics			
	N	Mean	Std. Deviation
Government corporations in Kenya management of market driven risks helped in stabilizing the market effects	35	4.60	.775
Government corporations in Kenya had sound strategies in place to mitigate market driven risks such as hedging	35	3.57	1.037
Market risks affected government corporations in Kenya financial performance.	35	3.86	1.517
Unsystematic risks challenges facing government corporations in Kenya could be diversified to enhance revenue incomes	35	3.89	1.278
Valid N (listwise)	35		

Table 6: Market Risk

The third objective of the study was to examine the effect of market risk on the financial performance of government corporations in Kenya. Respondents were required to give their input to some set of questions related to market risk. The respondents in agreement that government corporations in Kenya management of market driven risk helped in stabilizing the market effects, had a mean score of 4.60 and a standard deviation of 0.775. That was in agreement with Stulz, (2014)that government activities helped in stabilizing market prices. The findings from some respondents,that government corporations in Kenya had sound strategies in place to mitigate market driven risks such as hedging had a mean score of 3.57 and a standard deviation of 1.037. The findings again agreed with Stulz, (2014). The research findings that, market risk affected government corporations financial performance had a mean score of 3.86 and a standard deviation of 1.517. The statement that unsystematic risk challenges facing government corporations could be diversified to enhance revenue incomes had a mean score of 3.89 and a standard deviation of 1.278. Management of market risk in government corpaotions helped in the development of hedging strategies since market risks were undiversifiable (Chance, 2010).

4.4.4. Liquidity Risk

Descriptive Statistics			
	N	Mean	Std. Deviation
Poor financial management in government corporations in Kenya affected financial performance	35	4.63	.490
An institution which had good asset quality, strong earnings and sufficient capital might fail if it was not maintaining adequate liquidity	35	3.71	1.319
Liquidity risk arose when a given security or asset could not be traded quickly enough of at wanted price in the market to prevent a loss or make the required profit	35	4.09	.981
Efficiency in liquidity mitigation involved planning and controlling current assets/liabilities in such a manner that eliminated the risk of the inability to meet due short-term obligations, on one, avoided excessive investment in those assets	35	4.34	.968
Valid N (listwise)	35		

Table 7: Liquidity Risk

The fourth objective of the study was to examine the effect of liquidity risk on the financial performance of government corporations. Respondents were required to respond to a set of questions related to liquidity risk and gave their response. The research findings that were in agreement that poor financial management in Government Corporations' in Kenya affected financial performance had a mean score of 4.63 and a standard deviation of 0.490. The findings that an institution having a good asset quality, strong earnings and sufficient capital might fail if it was not maintaining adequate liquidity had a mean score of 3.71 and a standard deviation of 1.319. That was in agreement with Crowe, (2009) that government corporations should maintain assets that were near cash to minimize on time spent in converting an asset to cash. The respondents in agreement that, liquidity risk arose when given security or asset could not be traded quickly enough at the required price in the market to prevent a loss or make the require profit had a mean score of 4.09 and a standard deviation of 0.981. The research findings that efficiency in liquidity mitigation involved planning and controlling current assets/liabilities in such a manner that eliminated the risk of the inability to meet due short-term obligation, on one, avoid excessive investment in those assets had a mean score of 4.34 and a standard deviation of 0.968.(Crowe, 2009). Management of liquidity risk in government corporations helped in maintaining near cash assets so as to meet their financial obligations as and when it felt due (Crowe, 2009).

4.4.5. Financial Performance

Descriptive Statistics			
	N	Mean	Std. Deviation
Government corporations in Kenya financial performance had improved as a result of implementing sound credit risk policies	35	4.40	.881
Government corporations in Kenya financial performance was affected by global financial crisis	35	4.11	.900
Effective financial risk management led to more balanced trade-off between risk and reward	35	4.17	.664
The aim of financial risk management in government corporations in Kenya, was reduction of variability in profits and possibilities of financial distress in government corporations	35	4.14	.912
Valid N (listwise)	35		

Table 8: Financial Performance

The response rate that Government Corporations' in Kenya financial performance had improved as a result of implementing sound credit risk policies had a mean score of 4.40 and a standard deviation of 0.881. The response rate that Government Corporations' in Kenya financial performance was affected by global financial crisis had a mean score of 4.11 and a standard deviation of 0.900. That was in agreement with Froot,*et. al*, (2013) that global financial contagion affected locally marekts. The research findings in agreement that effective financial risk management led to more balanced trade-off between risk and reward had a mean score of 4.17 and a standard deviation of 0.664. The response rate in agreement that the aim of financial risk management in Government Corporations' in Kenya was reduction of variability in profits and possibilities of financial distress in government corporations had a mean score of 4.14 and a standard deviation of 0.912With the management of credit, price, market and liquidity risks government corporations could manage financial risks thus ensuring that the necessary mechanisms are put into practice such as credit terms and hedging techniques that could cushion government corporations in Kenya..

4.5. Correlation Analysis

To establish the relationship between the independent variables and the dependent variable the study conducted correlation analysis which involved coefficient of correlation and coefficient of determination.

4.5.1. Coefficient of Correlation

In trying to show the relationship between the study variables and their findings, the study used the Karl Pearson's coefficient of correlation (r). That was shown in Table 9 below. According to the findings, it was clear that there was a positive correlation between the independent variables credit risk, price risk, market risk and liquidity risk the dependent variable financial performance. The analysis indicated that the coefficient of correlation, r equal to 0.696, 0.418, 0.411 and 0.397 for credit risk, price risk, market risk and liquidity risk respectively. That indicated positive relationship between the independent variable namely credit risk, price risk, market risk and liquidity risk and the dependent variable financial performance.

Correlations					
	Financial Performance	Credit Risk	Price Risk	Market Risk	Liquidity Risk
Financial Performance	1				
	35				
Credit Risk	.696**	1			
Price Risk	.418*	.534**	1		
Market Risk	.411*	.513**	.743**	1	
Liquidity Risk	.397*	.323	.357*	.439**	1
**. Correlation was significant at the 0.01 level (2-tailed).					
*. Correlation was significant at the 0.05 level (2-tailed).					

Table 9: Pearson Correlation

4.5.2. Coefficient of Determination

Table 10 showed that the coefficient of determination was 0.518. Coefficient of determination explained the extent to which changes in the dependent variable could be explained by the change in the independent variables or the percentage of variation in the dependent variable (Financial Performance) that was explained by all independent variables. From the findings that meant that 51.8% of project implementation was attributed to combination of the four independent factors investigated in this study.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.720 ^a	.518	.454	1.46127
a. Predictors: (Constant), Liquidity Risk, Credit Risk, Price Risk, Market Risk				

Table 10: Coefficient of Determination (R^2)

That meant that 51.8% of the relationship was explained by the identified four factors namely credit risk, price risk, market risk and liquidity risk. The rest 48.2% was explained by other factors in the economy not studied in that research. In summary the four factors studied namely, credit risk, price risk, market risk and liquidity risk explained or determined 51.8% of the relationship while the rest 48.2% was explained or determined by other factors.

4.6. Regression Analysis

4.6.1. Analysis of Variance

The study used ANOVA to establish the significance of the regression model. In testing the significance level, the statistical significance was considered significant if the p-value was less or equal to 0.05. The significance of the regression model was as per Table 11 below with P-value of 0.00 which was less than 0.05. That indicated that the regression model was statistically significant in predicting effects of financial risk management on financial performance of government corporations' in Kenya.

Basing the confidence level at 95% the analysis indicated high reliability of the results obtained. The overall Anova results indicated that the model was significant at $F = 8.068$, $p = 0.000$.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	68.912	4	17.228	8.068	.000 ^b
	Residual	64.059	30	2.135		
	Total	132.971	34			
a. Dependent Variable: Financial Performance						
b. Predictors: (Constant), Liquidity Risk, Credit Risk, Price Risk, Market Risk						

Table 11: Analysis of Variance (ANOVA)

4.6.2. Multiple Regression Analysis

The researcher conducted a multiple regression analysis as shown in Table 12 so as to determine the relationship between financial performance and the four variables investigated in the study.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.923	2.895		.664	.011
	Credit Risk	.761	.187	.629	4.077	.000
	Price Risk	.018	.147	.024	.121	.001
	Market Risk	.008	.125	-.014	-.068	.001
	Liquidity Risk	.213	.158	.192	1.349	.003
a. Dependent Variable: Financial Performance						

Table 12: Multiple Regression Analysis

The regression equation was:

$$Y = 1.923 + 0.761X_1 + 0.018X_2 + 0.008X_3 + 0.213X_4$$

Where;

Y = the dependent variable (Financial Performance)

X₁ = Credit Risk

X₂ = Price Risk

X₃ = Market Risk

X₄ = Liquidity Risk

The regression equation above had established that taking all factors into account (Financial Performance as a result of credit risk, price risk, market risk and liquidity risk) constant at zero financial performance among government corporations in Kenya was 1.923. The findings presented also showed that taking all other independent variables at zero, a unit increased in credit risk led to a 0.761 increase in the scores of financial performance among government corporations; a unit increased in price risk led to a 0.018 increase in financial performance among government corporations; a unit increased in market risk led to 0.008 increase in the scores of financial performance among government corporations and a unit increased in liquidity risk led to a 0.213 increase in financial performance of government corporations in Kenya. That therefore implied that all the three variables had a positive relationship with financial performance, with credit risk contributing most to the dependent variable.

5. Summary of the Findings, Conclusion and Recommendation

5.1. Introduction

The chapter provided the summary of the findings from chapter four, and it also gave the conclusions and recommendations of the study based on the objectives of the study. The chapter finally presented the limitations of the study and suggested for further studies and research.

5.2. Summary of the Findings

The objective of this study was to examine the effects of financial risk management on performance of government corporations in Kenya. The study was conducted on 35 government corporations' employees out of 44 government corporations that constituted the sample size. To collect data, the researcher used a structured questionnaire that was personally administered to the respondents. The questionnaire constituted 20 items. The respondents were the employees of government corporations in Kenya. In that study, data was analysed using frequencies, mean scores, standard deviations, percentage, Correlation and Regression analysis.

From the findings, majority of the respondents had a working experience of between 3-6 years. On education level, majority of respondents held at least a bachelor's degree. On position held, majority of respondents were heads of departments.

5.2.1. Credit Risk

The study results revealed that credit risk inherent in the portfolio affected financial performance of government corporations in Kenya. Further the study revealed that credit risk management in Government Corporation helped the same to remain viable and thus reduced leakages in the public finances.

5.2.2. Price Risk

The study results revealed that price risks in commodity prices, interest rates and currency exchange rates affected cash flows of government corporations as well as causing risk exposure to government entities. The study further established that adequate management of government corporations in Kenya helped to reduce risks and maximizes on returns.

5.2.3. Market Risk

The study revealed that Government Corporation were faced by unsystematic risks challenges and that management of market risks helped in stabilizing market effects.

5.2.4. Liquidity Risk

The study results revealed that liquidity risk arose when a given asset could not be traded quickly enough or sold at a required price to cover for financial shortfall the government corporations was facing.

The study results showed that there was a strong positive correlation between independent and dependent variables and that the coefficient of determination was 51.8%

5.3. Conclusion

From the research findings, the study concluded all the independent variables studied had significant effect on financial performance of government corporations in Kenya as indicated by the strong coefficient of correlation and a p-value which was less than 0.05. The overall effect of the analyzed factors was very high as indicated by the coefficient of determination. The overall P-value of 0.00 which was less than 0.05 (5%) was an indication of relevance of the studied variables, significant at the calculated 95% level of significance. That implied that the studied independent variables namely credit risk; price risk, market risk and liquidity risk had significant effect on financial performance of government corporations in Kenya.

5.4. Recommendation

The study recommended the following:

1. Corporations in Kenya should keep assets that could be converted at the quickest time, to cash to reduce cash related risks.
2. That government corporation in Kenya should diversify their activities so as to remain competitive in the market.
3. That government corporations in Kenya should have in place risk policies that helped in guiding them on matters of risk
4. That government corporations in Kenya should employ hedging techniques in order to reduce risks

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