EFFECT OF OWNERSHIP STRUCTURE ON THE RELATIONSHIP BETWEEN RISK MANAGEMENT PRACTICES AND FINANCIAL PERFORMANCE OF FINANCIAL INSTITUTIONS IN KENYA

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DECLARATION

Declaration by the Candidate

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DEDICATION

This thesis is dedicated to Almighty God the creator and giver of all things, to my wife, children, family, Colleagues and friends for their love, patience and moral support.

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ABSTRACT

Risk management is an important aspect of corporate practice, which has occupied an important place in the agenda of practitioners, academics and the business world.The impact of global financial crisis has highlighted the importance of risk management as the most challenging tasks that financial institutions face. Despite the extensive research on the subject little attention has been given on the possible interaction between ownership structure, risk management practices and its impact on firm performance. The general objective of this study was to establish the effect of ownership structure on the relationship between risk management practices and financial performance of financial institutions in Kenya. The specific objectives were to determine the effect of risk identification, risk analysis, risk evaluation and risk monitoring on firm performance and the moderating role of ownership structure on the relationship between risk identification, risk analysis, risk evaluation and risk monitoring on performance of financial institutions. The study was based on Agency theory and Enterprise risk management (ERM) theory. The study used explanatory research design. Stratified random sampling was used to select managers from commercial banks, Micro Finance institutions (MFIs) and SACCOs. A sample size of 239 respondents was obtained. Data was collected using questionnaires. Descriptive and inferential statistics such as Pearson product moment correlation and multiple regressions was used. The results of the study showed that risk evaluation (β=0.711), risk monitoring (β=0.091) and ownership structure (=0.232) had positive and significant effect on performance of financial institutions. The risk identification (β=0.026) and risk analysis (β=0.084), were not significant. The results on interaction effects showed that ownership structure moderated the relationship between risk analysis (β=0.155), evaluation (β=0.255) and performance of financial institutions ($p<0.05$). However, ownership structure does not significantly moderate the relationship between risk identification (β= -0.003), monitoring (β=-0.052) ($P>0.05$), and performance of financial institutions. The ownership identification is antagonistic on the relationship between risk identification, risk monitoring and financial performance. The ownership identity enhanced the relationship between risk analysis and risk evaluation on financial performance. The management of financial institutions should put in place risk management systems that will assist in identification and monitoring of risks with respect to their ownership identity. The study recommends to policy makers should use ownership identity to enhance the relationship between risk management practices and performance of financial institutions.

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LIST OF ABBREVIATIONS

AFI - Alliance for financial inclusions

AIRMIC - Association of Insurance and Risk Managers

CBK - Central bank of Kenya

CIMA - Chartered Institute of Management Accountants

DV - Dependent Variable

EBIT - Earning Before Interest and Taxes

ERM - Enterprise Risk Management

GOK - Government of Kenya

IRM - Institute of Risk Management

IV - Independent Variable

MFI - Micro Finance institutions

NPAs - Non-performing Assets

OECD - Organization for Economic Co-operation and Development

RM - Risk Management

ROA - Return on assets

ROI - Return on investment

ROS - Return on sales

SACCO - Savings and Credit Cooperative

SASRA - Sacco Societies Regulatory Authority

OPERATIONAL DEFINITIONS OF TERMS

Financial management: It is limited to a framework of five specific areas: accounting information system, financial reporting and analysis, working capital management, fixed asset management, and capital structure management.

Financial performance: Financial performance is the measurement of the result achieved or expected in the light of predetermined criteria to determine what can be measured (Al-Hannawi, 2009). The measure of financial performance used was Return on Assets (ROA).

Risk: can be broadly defined as, 'any issue that can impact the objectives of a business entity, be it financial service or commercial. Risk constitutes any event that may alter the expected outcome of operating the venture and it implies that there is uncertainty of (Raghavan, 2005).

Risk Management: Is defined as the 'process of understanding and managing risks that the entity is inevitably subject to in attempting to achieve its corporate objectives' (CIMA Official Terminology, 2005).

Risk Management Practices: Is a Systematic application of management policies, procedures and practices to the activities of communicating, consulting, establishing the context and identifying, analyzing, evaluating, monitoring and reviewing and prioritizing actions to control and reduce risks. (Wenk 2005)

Risk Identification: Process of finding, recognizing the potential causes and potential circumstances of risks (Royal society study group 2002).

Risk Analysis: Process to comprehend the nature of risk and to determine the level of risk and includes the basis of risk estimation (Wenk, 2005).

Risk Evaluation: Process of comparing the results of risk analysis with risk criteria to determine whether the risk and or its magnitude is acceptable or tolerable (Wenk, 2005).

Risk Monitoring: Continual checking, supervising, critically observing or determining the status in order to identify change from the performance level required or expected (Wenk, 2005).

Ownership Structure: Is the composition of owners in terms of shareholding, (Razali & Tahir, 2011). Ownership has two dimensions; first is identity and secondly concentration of ownership. This study adopted the definition of ownership structure on ownership identity by (Tahir and Razali, 2011)

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter presents the background of the study, statement of the problem, research objectives and hypotheses, significance and the scope of the study.

1.1 Background of the Study

Performance is one of the major indicators that explain the level of development of any society. Recently, the challenges of the global business environment have re-echoed the need for corporate organizations to have more concerns about the success of business firms. Firm performance has been viewed as one of the most important variables that attracted the attention of researchers in both finance and management literature (Gavrea, Ilies, & Stegerean, 2011). Firm performance is a concept that explains the extent to which an organization achieves objectives. It indicates how organizations have been peering overtime (Saeidi, Sofian, Zaleha, & Abdul, 2014).

Firm performance is an indicator that helps to evaluate and measure how an organization succeeds in realizing business objectives to all its stakeholders (Antony & Bhattacharyya, 2010). Firm performance refers to firms' ability to achieve its goal through the application of available resources in an efficient and effective manner (Asat, Maruhun, Haron, & Jaafar, 2015). Lebas and Euske (2002) define performance as doing today what will lead to measured value outcomes tomorrow. The performance of a firm is viewed from several different perspectives, and various aspects can jointly be considered in defining a firm performance. Studies have used different types of performance indicators to measure firm performance.

Financial performance is one of the most commonly used indicators of a firm's financial health over a given period. It can be defined and measured in various different ways; each of these different measures capturing a slightly different aspect of financial performance. For instance, measures such as return on investment, return on sale and return on equity are some of the commonly used parameters to measure performance (Saeidi *et al.,* 2014). Thus, for a more comprehensive assessment, organizations have resorted to the utilization of both financial and non-financial performance measures. Judge *et al.*, (2003) used both financial and non-financial indicators such as process improvements, customer satisfaction, capacity utilization and product service quality.

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The financial performance assessment is devoid of such a multitude of options and methodologies despite critical importance of financial sustainability. According to Dayson *et al.*, (2006), microfinance has been attractive to lending agencies because of demonstrated sustainability and low cost of operations. Results of these studies strongly suggest that bank profitability determinants vary across countries and also among regions of the world (Doliente, 2003). In accordance with the study of Grier

(2007), profitability ratios are often used in a high esteem as the indicators of analysis of financial performance in banks, since profitability is associated with the results of management performance. Bank performance indicates bank's capacity to generate sustainable profits. Financial institutions protect the profitability against unexpected losses, as it strengthens its capital position and improves future profitability through the investment of retained earnings.

A bank that persistently makes a loss will ultimately deplete its capital base, which in turn puts equity and debt holders at risk. The International Monetary Fund (IMF, 2014) survey on financial performance of Sub-Sahara Africa home grown institutions finds that risks were increasing and negatively affected the financial performance of firms in the region. The report further outlines various risks such as; declining prices for commodity goods, fiscal vulnerabilities, security, and growing capital flows were the dynamics for risk management.

In order to create shareholder value, bank's return on equity (ROE) needs to be greater than its cost of equity. Return on equity (ROE) and return on assets (ROA) are the most commonly used ratios, and the quality level of ROE is between 15% and 30%, for ROA is at least one percent. Wong *et al.,* (2008) indicated that the efficiency of banks can be measured by using the ROE which illustrates to what extent banks use reinvested income to generate future profits. According to Riksbank's Financial Stability Report (2002), the measurement of connecting profit to shareholder's equity is normally used to define the profitability in the banks. Jensen Investment Management (2008) mentioned that ROE provides a very useful gauge of profit generating efficiency because it measures how much earnings a company can get on the equity capital.

European Central Bank (2010) looks at financial performance of financial institutions from the perspective of analyzing the main drivers of profitability; earnings, efficiency, risk-taking and leverage. The report goes on to note that the performance however needs to incorporate the views of various stakeholders (e.g. depositors, debt or equity holders and managers). The Capital adequacy Asset quality Management efficient Earnings ability and Liquidity (CAMEL) model, a recent tool of financial analysis also provides a framework for measuring financial performance of banks.

According to the parameters bank financial performance is looked at in the perspective of the internal strength of the bank, loan portfolio quality, management efficiency, liquidity management and the banks sensitivity to risk. A study conducted by Hakkak and Ghodsi (2015) revealed that implementation of non-financial performance measures in organizations has a significant positive effect on firms' competitive advantage and sustainability. "The organization's ability to achieve long-term goals is based on its financial performance" (Wheelen and Hunger, 2000). Financial performance is the measurement of the result achieved or expected in the light of predetermined criteria to determine what can be measured (Al-Hannawi, 2009).

Several studies have also been done on determinants of banks' profitability locally and across the globe. Globally, a study by Athanasoglou and Delis (2005) evaluated impact of industry-specific, bank-specific and macro-economic determinants of commercial banks profitability and established that all bank-specific determinants, apart from size, influence banks profitability. In addition, Roman and Tomuleasa (2013) evaluated the effect of specific internal and external factors on profitability of the banks in the new European Union member states and established that both bank

specific factors like capital adequacy, NPL, income and external factors, like GDP growth rate and inflation affect commercial banks profitability. However, majority of the available international studies combine both the bank specific factors with the industry and other macro-economic factors.

In the recent decade both macro and micro finance institutions have emerged in the banking industry limiting chances of survival to non-performing institutions. Poor bank performance may lead to banking failure and crisis, which have negative consequence on the economic growth (Ongore and Kusa 2013). It has become critical for bank managers, academic researchers and other stakeholders to understand the current determinants of financial performance towards attaining high profitability and good performance which ensures survival in business.

Many studies examined the determinants of banks' financial performance in many countries around the world considering the bank specific factors derived from Capital adequacy Asset quality Management efficient Earnings ability Liquidity (CAMEL) Vogel, (2013) for SSA banks, (2012) for China banks, Sarita, (2012) for Indonesian banks Dietrich, (2009) for Switzerland banks, Sufian (2011) for Korean banks, Sufian (2009) for Bangladesh banks, Mohana and Tekeste (2012) for Ethiopian banks, Yadollahzadeh *et al.,* (2013) for Iran banks as the main regulations that enhances financial performance of financial institutions.

Adeusi, Akeke, Adebisi and Oladunjoye (2013) study focused on the effect of risk management practices on bank financial performance in Nigeria. Using a panel of secondary data for 10 banks and for four years reported an inverse relationship between financial performance of banks and doubtful loans, capital asset ratio was found to be positive and significant. Similarly, it suggests that the higher the managed

funds by banks, the higher the performance. The study concludes a significant relationship between banks performance and risk management. Hence, the need for banks to practice prudent risks management in order to protect the interests of investors.

Hakim and Neamie (2001) documented in Ariffin and Kassim (2013) credit risk and bank's performance in Egypt and Lebanon banks in the 1990s by using data for banks from the two countries over the period 1993-1999, the study estimates a fixed effects model of bank return with varying intercepts and coefficients. The findings show that credit variable is positively related to profitability, while liquidity variable is insignificant across all banks and had no impact on profitability. The study also finds a strong link between capital adequacy and commercial banks returns, with high capitalization being the hindrance to return. The study concludes that capital is a sunk cost with large banks realizing high profits in absolute but not in percentage terms.

The cause of increasing risks in Sub-Sahara Africa, and which were therefore eroding financial performance of firms in the region were the firm inherent risks. International Monetary Fund (2014) survey report indicated that risks such as; declining prices for commodity goods and growing capital flows were the key dynamics for risk management. In Ghana political instability and growing deficits in the national budget was affecting the local currencies against the major currencies and therefore putting pressure on locally produced goods. While in Zambia, general increase in wages was affecting firms' income by increasing cost of production, while in Ghana political instability and growing deficits in the national budget was affecting the local currencies against the major currencies and therefore putting pressure.

In South Sudan and Central Africa Republic, the main cause of slowdown in growth prospect was growing insecurity and which was affecting the firms in the region (IMF, 2014). Financial sector is highly dominated by banks in Kenya compared to other players like SACCOs and microfinances. However, despite good overall performance in financial perspective of most commercial banks, there are some banks recording losses (Ongore & Kusa, 2014).

For instance, the National Bank of Kenya reported a loss for the financial year 2014/2015 while the Cooperative bank of Kenya had reported a drop in their profits in 2014 resulting to restructuring. In spite of strong regulatory and legal framework enforced by the Central Bank, the Kenyan banking system has experienced banking problems since 1986, which has led to the collapse of more than 40 commercial banks (Gitonga, 2014) with the recent ones in 2015 and 2016 being Imperial and Chase banks respectively.

Further, based on the annual CBK Supervision Reports, the pace of growth of commercial banks in Kenya has been on a decline and as such, the growth in profitability has been also on the decline (Sawe, 2011). However, previous studies did not consider the effect of risk management practices on financial institutions performance. Thus, the aim of the study, sought to investigate the moderating effect of ownership structure on the relationship between risk management practices and financial performance of financial institutions in Kenya.

Risk is an inevitable phenomenon which has lived with mankind since time immemorial. In our domestic and especially in our business life, we find ourselves in situations where risk taking becomes the solution to our break through. Nevertheless,

one should find a way to minimize or manage this risk in order not to affect the expected result from a given investment. Risk may be defined as the inconsistency of returns associated with a particular asset (Gitman, 2008). Risk, thereof, is also defined as an amalgamation of the probability of the occurrence of an event and its consequence (ISO-IEC, 2002).

Head (2009) defines risk management as the process of planning, organizing, directing and controlling resources to achieve given objectives when good or bad events are possible. Vaughan and Vaughan (2001) on the other hand consider risk management as a scientific approach to dealing with pure risks by anticipating possible accidental losses, designing, and implementing procedures that minimize the occurrence of loss or the financial impact of the losses that do occur. Risk management is more of a structured approach in managing uncertainties. This approach usually involves assessment of risks, development of strategies and mitigation of the identified risks using available managerial resources.

Risk management practices consist of five constructs; understanding risk and risk management, risk identification, risk assessment and analysis, risk monitoring and credit risk analysis (Hassan, 2009, Peng, 2009, Rosman, 2009, Shafiq & Nasr, 2010). Risk Management is the process of identification, measuring, controlling and monitoring of potential risks that may negatively affect the returns of an organization. Risk Management Practices (RMP) is vital for an organization's strategic management (ISO-IEC, 2002). It is used by a firm's strategic management in order to make positive contribution to the goals, objectives and the portfolio of almost all its activities.

Risk Management is the identification, assessment and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and or impact of unfortunate events (Njogo, 2012). It is neither a concept for complete risk avoidance nor its elimination. The essential functions of risk management are to identify measure and more importantly monitor the profile of the bank. Financial sector in Kenya is exposed to various risks which originate from both the internal and external environment. Financial risk threatens their financial viability and long-term sustainability.

Risk is the potential that events, expected or unanticipated, may have an adverse impact on the institutions' capital and earnings. The role of risk management in financial institutions has evolved far beyond the simple insurance of identified risks, to a discipline that centers on complex econometric and financial models of uncertainty. The banking sector is very important in respect of the financial allocation in the world due to its intermediation functions of transferring funds from surplus units to deficit units (Eken *et al.*, 2012 & Ongore, 2013). In performing and sustaining these functions, good financial performance must be generated from which financial risk may not be avoided.

In Kenya, the topic of risk management has drawn much attention among various authors and scholars. In view of this, CBK carried out a risk management survey on the Kenyan banking sector in September 2004. The survey's objective was to determine the needs of the local banking sector with regard to risk management. The survey was necessitated by the drive to fully adopt Risk Based Supervision and to incorporate the international risk management best practices envisioned in the 25 Basel Core Principles for Effective Banking Supervision. The survey culminated in

the issuance of the Risk Management Guidelines (RMGs) in 2005 and the adoption of the Risk Based Supervision approach of supervising financial institutions in 2005. In response to this, commercial banks embarked upon an upgrading of their risk management and control systems (CBK, 2005). Similarly, there is no consensus on how firms could leverage on risk management to improve financial performance.

The statistics in Kenya on weak financial performance is attributed to; increasing risks, traditional risks were evolving and new risks emerging. The findings also indicated that risks were manifested in the increasing economic crime and fraud (PWC, 2011, Waweru & Kisaka, 2012, Deloitte & Touche, 2012, KPMG, 2011 and CBK, 2010). Despite the fact that there was growing clamour for ERM, statistics showed that firms' financial performance remains unchanged while in some instances there were cases of some financial institution's failures in Kenya. Therefore, this study sought to establish the relationship between risk management practices and financial performance in financial institutions in Kenya.

According to Jensen and Meckling (1976), ownership structure is described by the allocation of equity with respect to votes, capital and also by the equity owners' identity. This is referenced in their study on how the nature of agency costs relates with both debt and equity where they aimed at incorporating concepts into the beginnings of a theory of corporate ownership structure. In the recent years, there have been renewed interests on ownership structures due to the increased dynamics of corporate ownership portfolios.

The concept of ownership structure can be defined along two lines of thought: ownership concentration and ownership mix. The ownership concentration refers to proportion of shares held (largest shareholding) in the firm by few shareholders and the later defines the identity of the shareholders (Ongore, 2011). On the relationship between ownership and financial institutions performance different scholars came up with different results. For instance, studies find domestic banks' performance is higher as compared to their foreign counterparts in developed countries and the opposite is true in developing countries (Claessens *et al.,* 2000).

Ownership is one of the factors explaining the performances of financial institutions across the board; yet the level and direction of its effect remained unresolved. There are scholars who claimed that foreign firms perform better with high profit margins and low costs as compared to domestic owned banks. This is so because foreign owned firms are believed to have experienced management expertise in other countries over years. Moreover, foreign banks often customize and apply their operation systems found effective at their home countries (Ongore, 2011).

Evidence across many countries indicates that foreign banks are on average less efficient than domestic banks. A more recent cross border empirical analysis of France, Germany, Spain, the UK and the U.S. found that domestic banks have both higher cost efficiency and profit efficiency than foreign banks (Berger *et al.,* 2000). Claessens *et al.,* (2000) as cited by Kiruri, (2013) reported that in many developing countries (for example Egypt, Indonesia, Argentina and Venezuela), foreign banks in fact report significantly higher net interest margins than domestic banks.

In Asia and Latin America, foreign banks achieve significantly higher net profitability than domestic banks. There have been different lines of thought put forward for the low performance of foreign banks compared with domestic banks in developed countries. These include different markets, competitive and regulatory conditions between developed and developing countries. Domestic banks and within the U.S. which are foreign have been relatively less profitable because they valued growth above profitability. (De Young and Nolle 1996).

According to Ongore and Kusa (2013) argues that the risk-taking behaviour and investment orientation of shareholders have great influence on the decisions of managers in the day-to-day affairs of firms. Beck and Fuchs (2004) argued that foreign-owned banks are more profitable than their domestic counterparts in developing countries. Kenya Domestic banks are less profitable than domestic banks in industrial countries due to benefits derived from tax breaks, technological efficiencies and other preferential treatments. However domestic banks are likely to gain from information advantage they have about the local market compared to foreign banks.

The ownership structure of banks in Kenya has changed over the last few years. Kenya financial reforms have encouraged foreign banks to enter and expand banking operations in the country. As a result, 13 out of the 44 commercial banks are foreign owned and in terms of asset holding, foreign banks account for about 35% of the banking assets as of 2011 (CBK, 2011). This study classifies bank ownership structure on the basis of ownership identity into either foreign or domestic. The domestic vis-a-vis foreign classification is based on the nature of the existing major ownership identity in Kenya the researchers affirm (Mangunyi 2011).

Foreign banks are an important source of financial vulnerability. This is because they might start to withdraw funds in order to offset losses in the home country, increasing the chances of collapse of their domestic-based subsidiaries. On the other hand, cross-country comparisons show that foreign banks may have better capitalization, improved know-how and technical capacity, which then spill over to the rest of the banking system (Mwega, 2009).

The Kenyan banking sector comprising of forty-three banks registered total net assets of Ksh. 2.7 trillion as at 31st December 2013. There are twenty-six local private commercial banks with Ksh. 1.7 trillion net assets accounting for 61.4% of the total assets. There are fourteen commercial banks owned by foreigners with Ksh. 900 billion and accounted for 34% of the total net assets. The remaining three are local public commercial banks with Ksh. 100 billion which is 4.6% of the sector's total assets (CBK, 2013).

The financial reforms in the Kenyan Banking System have seen dynamic changes in the ownership structure. The sector has seen the government reducing its shareholding in once fully owned state-owned banks. The reforms have also encouraged foreign ownership in banks to enter and expand banking operations in the country (Mang'uyi, 2011) and also other institutions. However, due to the diverse types of ownership structure, there in increasing research into how these structures interact with risk management and firm performance, which is why the current study is relevant. This has been seen in its efforts in reduction of its ownership in some banks it fully controlled and opening up to potential investors. There are mixed reactions on how the several ownership structures affect firm performance hence making it inconclusive.

1.1.1 The Kenyan Financial Sector

The Kenyan financial sector has undergone tremendous changes in the last two decades (1990-2010). Misati, Njoroge, Kamau and Ouma (2010) for instance, document that financial products have increased, activities and organizational forms have also improved and the overall efficiency of the financial system has increased (CBK 2010). The area of focus is the financial institutions in Kenya which are regulated and licensed to do banking and deposit taking business. By 2016 the Kenyan banking sector comprised of 43 commercial banks, 1 mortgage finance company, 52 deposit taking microfinance institutions, 202 deposit taking SACCOS, 2 credit reference bureaus, and 124 foreign exchange bureaus (CBK, 2011).

Financial institutions are bestowed with an imperative responsibility to execute in the economy by acting as intermediaries between the surplus and deficit units, making their job as mediators of critical significance for efficient allocation of resources in the modern economy (El-Hawary *et al.,* 2007). Banking industry in Kenya is governed by the Companies Act, the Banking Act, the Central Bank of Kenya Act and other various prudential guidelines issued by the Central Bank of Kenya (CBK). All these policies and regulations administer the entire banking industry centers in lifting the controls towards the management and equitable services (Price waterhouse Coopers, 2008).

Commercial banks in Kenya are required by CBK to submit audited annual reports, which include their financial performance and in addition disclose various financial risks in the reports including liquidity risk, credit risk and so on, as well as management of credit risk. Effective management of credit risk practices involve reporting, reviewing to ensure credit risks well identified, assessed, controlled and

informed responses are well in place by commercial banks. When the loan is issued after being approved by the bank's officials, the loan is usually monitored on a continuous basis so as to keep track on all the compliance issues/terms of credit by the borrower (CBK, 2015).

In Kenya, the cooperative movement which led to formation of Savings and Credit Cooperatives (SACCOs) started in 1931. The SACCOs are registered and regulated in line with the stipulations of Co-operative Societies Act, Cap 490 of the Laws of Kenya. SACCOs have recorded remarkable growth with the current annual growth rate in terms of deposits and assets averaging at 25 per cent. Given the fact that SACCOs are the major lenders in the financial sector and have limited conditions required to be fulfilled by potential borrowers, it is needless to say, that they have ever since been facing huge bad debts.

Despite the good overall financial performance of banks in Kenya, there are a couple of banks declaring losses (Oloo, 2011). A number of research studies in Kenya have attempted to address the issues of financial risk which have been studied in piece meal manner. They have addressed the different components of financial risk individually. For instance, Fredrick (2012), Kargi (2011), and Kithinji (2010) researched on credit risk, while Abid and Mseddi (2004), Gatsi *et al.,* (2013) and Wachiaya (2011) studied on market risk. Akhtar (2011), Said (2014) and Ogol (2011) studied on liquidity risk. By tackling the risks individually these studies fail to acknowledge the effect of financial risk on the financial performance, thus the need to take a comprehensive view.

Kurui and Kalio (2014) assessed the influence of credit risk management practices on loan performance of MFIs in Baringo County, Kenya. The authors inferred that credit risk management practices indeed significantly affected loan performance of the aforesaid financial institutions. In that respect, it was recommended that there ought to be a more stringent policy on credit risk management practices in MFIS as a way of enhancing financial performance of MFIs. Waithaka and Ngugi (2013) studied the factors influencing acquisition of stressed assets and asset securitization into the financial market in Kenya and Muchiri (2006) assessed the viability of real estate securitization in Kenya. It is this mixed result that necessitate the need to carry out this study in order to get answers on: what are moderating effects of bank ownership structure on relationship between risk management practices and financial performance in financial institutions in Kenya.

1.2 Statement of the Problem

Financial performance refers to money that a firm can produce with the resources it has. The goal of most financial institution is profit maximization (Niresh & Velnampy, 2014). Effective risk management practices and profitability affects financial performance of firms in today's competitive environment, profitability has a significant effect on performance of financial institution and economic development as well Tariq *et al.,* (2014). A robust risk management system is mandatory to keep the financial institutions up and running (BNM, 2008 & Blunden, 2005). Risk management is an issue that needs to be stressed and investigated, especially in the financial sector, where the need for a good risk management structure is extremely important.

A good risk management framework helps the institution to protect from unfavorable consequences (downside risks) and permit the institution to take the benefit of any possible opportunities (up-side risks). Moreover, the nature of business for financial institutions are accepting and managing risks (Pauzuolis, & Cvilikas 2014). Lundquist (2014) identified the possibility that ownership structure tamper the magnitude of relationship between risk management and firm performance.

Ownership structure to banks is important because the basic motivation of owners of capital is to maximize their wealth by enhancing the value. Eduardus *et al.,* (2007) study on ownership structure of financial institutions finds ownership to some extent determines their risk management approaches. In order to establish whether ownership identity may affect financial performance, this study sought to fill this gap.

Currently, there are few local studies on risk management which include; Kimeu (2008) who studied credit risk management techniques of unsecured banks loans of commercial banks in Kenya, Ngare (2008) studied credit risk management practices by commercial banks, Simiyu (2008) studied techniques of credit risk management in microfinance institutions in Kenya, Mwirigi (2006) who studied credit risk management techniques adopted by micro finance institutions in Kenya.

Mwangi (2012) in his study finds that some risk management practices do have significant effect on financial performance more than others, the integration of risk management in setting of financial institutions objectives were considered to be the key risk management practices that had a direct effect on financial performance. The moderating effect of ownership structure on the relationship between risk management practices and financial performance in Kenya is hardly available.

The banking sector in Kenya is currently facing pressure from both the Government and the Public to lower the interest rates on loans as well as complying with the new Central Bank of Kenya directive on the treatment of non-performing loans. This has contributed to credit risk of bad debts forcing the banks to make provision for defaulters. This study takes departures from other studies regarding the effect of risk management practices on financial performance as moderated by ownership structure. Therefore, this study sought to analyse the moderating effect of ownership structure on the relationship between risk management practices and financial performance of financial institutions in Kenya.

1.3 Objectives of the Study

1.3.1 General Objectives

The general objective was to determine the moderating effect of ownership structure on the relationship between risk management practices and financial performance of financial institutions in Kenya.

1.3.2 Specific Objectives

The specific objectives of the study were to;

1. Determine the effect of risk identification on financial performance of financial institutions.
2. Establish the effect of risk analysis on financial performance of financial institutions.
3. Determine the effect of risk evaluation on financial performance of financial institutions.
4. Examine the effect of risk monitoring on financial performance of financial institutions.

5. (a) Determine the moderating effect of ownership structure on the relationship between risk identification and financial performance of financial institutions.

   (b) Establish the moderating effect of ownership structure on the relationship between risk analysis and financial performance of financial institutions.

   (c) Examine the moderating effect of ownership structure on the relationship between risk evaluation and financial performance of financial institutions.

   (d) Establish the moderating effect of ownership structure on the relationship between risk monitoring and financial performance of financial institutions.

1.4 Research Hypotheses

With the mixed results provided in prior researches, coupled with the dearth of literature in this area, the following hypotheses were tested:

H_{o1}: Risk identification has no significant effect on financial performance of financial institutions

H_{o2}: Risk analysis has no significant effect on financial performance of financial institutions

H_{o3}: Risk evaluation has no significant effect on financial performance of financial institutions

H_{o4}: Risk monitoring has no significant effect on financial performance of financial institutions

H_{o5a}: Ownership structure does not moderate the relationship between risk identification and financial performance of financial institutions.

H_{o5b}: Ownership structure does not moderate the relationship between risk analysis and financial performance of financial institutions.

H_{o5}c: Ownership structure does not moderate the relationship between risk evaluation and financial performance of financial institutions.

H_{o5}d: Ownership structure does not moderate the relationship between risk monitoring and financial performance of financial institutions.

1.5 Significance of the study

In every country, the strength of financial institutions plays an important role in the stability and growth of economy. The stability of financial institutions depends on the profitability and performance (Kolapo *et al.,* 2012). A comprehensive study of previous research relating to the profitability of financial institutions has identified lack of a connection between their ownership structure, risk management practices and performance.

Most of the researchers have paid attention on one or several countries and showed different results. However, as a follow up of Lundquist (2014) recommendation for further the study sought to establish whether ownership structure moderates the relationship between risk management practices and performance of financial institutions in Kenya in an endeavor to fill the research gap.

For academic contribution, this study filled the research gap on the influence of ownership structure on risk management practices and financial performance of financial institutions. Financial institutions are using broader horizons derivatives (futures, options, and swaps) to circumvent counterparty default risks. Therefore, this study provided more comprehensive knowledge to the scholars on moderating effect of ownership structure on the relationship between risk management practices and financial performance of financial institutions. This research provides information as a foundation for other researchers who wish to dig into further study of such area, for

example, is the geographic variable an influential factor related to the stability of the relationship between risk management practices on the performance in financial institutions.

From a practical perspective, the study will offer a guideline for financial institutions managers, investors and supervisors, depending on the outcome of the research. Financial institutions managers could pay more attention to improve financial institutions' performance by managing the risk faced by banks. Financial institutions thus can better arrange and allocate their resource regarding the position of risks. Besides, shareholders and stakeholders can understand how the performance of the financial institutions is affected by risks. By evaluating the risk management from the risk report that financial institutions provide, they may have more resources on decision making according to the findings of this study.

The findings will benefit government at policy and regulatory development that will immensely guide the growth of the financial institutions sector in Kenya. The findings of the study will also benefit the business communities in building beneficial and sustainable partnerships that form the basis of financial institutions. Of equal significance was the value of information content to the board of directors and corporate management of each financial institution interested in making policies, guidelines and procedures regarding risk management practices.

1.6 Scope of the Study

This study focused on the moderating effect of ownership structure on risk management practices and financial institutions performance in Kenya. This was achieved through determine the effect of risk identification, risk analysis, risk evaluation and risk monitoring on firm performance and the moderating role of

ownership structure on the relationship between risk identification, risk analysis, risk evaluation and risk monitoring on performance of financial institutions.

In doing so, the study provides an in-depth understanding of the effect of ownership structure on the relationship between risk management practices on financial institutions performance in Kenya. The research was limited to financial institutions regulated and licensed to operate banking and deposit taking business in Kenya in the year 2015. The study limits risk management practises to financial institutions performance aspect and employs Return on assets (ROA) as the instrument to manage financial institutions risk.

This study was conceptualized from financial institutions, firm ownership structure and risk management theories to explain the aspects of risk management practises of financial institutions' in Kenya. Agency theory and Enterprise risk management (ERM) theory were adopted to explain the gaps in moderating role of ownership structure in the relationship between the risk management practices on financial institutions performance in Kenya. The study respondents were managers from commercial banks, Micro Finance institutions (MFIs) and SACCOs. The study was carried out between September 2016 and July 2017.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

This section presents the relevant literature that was reviewed. The chapter gives a review of previous studies done in order to develop the hypotheses, identify and explain the variables of the study. This section gave an empirical literature of past studies in line with the identified variables in the conceptual model. Further it gives a description of the theories explaining ownership structure, risk management practices and firm performance. Finally, a conceptual framework was provided at the end of the chapter.

2.1 Financial Performance of Financial Institutions

Organizational performance can be measured by financial aims attainment or workers satisfaction. In the same manner, Ho (2011) pointed out that performance can be evaluated by efficiency and effectiveness of aim attainment. Further Venkatran *et al.,* (1986) cited that performance can be assessed by financial performance namely, return on investment, growth of sales, profit, organization effectiveness, and business performance.

Similarly, Delany *et al.,* (2006) assert that organization performance can be evaluated by quality service and products, satisfying customers, market performance, service innovations and employees and that organization performance can be appraised by the following dimensions of performance; return of investments, margin on sales, capacity utilization, customer satisfaction and product quality. In the same way Green

et al., (2007) identified that return on investment, sales and market growth, and profit are important factors that can be measured by organizational performance.

Moreover, researchers have opined that the current emphasis on traditional performance measures such as return on investment or net earnings diverts firm's attention from non-financial factors such as customer satisfaction, product quality, productivity and business efficiency (Hussain and Hoque, 2002). There is that perception that non-financial measures are better forecasters of a long run firm's performance, as well the business leaders to monitor and assess their company's efficiently (Hussain and Hoque, 2002 & Kaplan and Norton, 1996).

Even though non-financial performance metrics may have lower measurement accuracy, but they focus on components that directly relate to operations that are within the control of the management (Chow and Van Der Stede, 2006). Scandals have revealed situations where firms engage in unethical accounting strategies to omit relevant information about firms' financial data (Cohen *et al.,* 2012). These and several other issues have encouraged organizations to adopt one form of non-financial measures or the other.

Financial performance can be measured through evaluating a firm's profitability, solvency and liquidity. A firm's profitability indicates the extent to which a firm generates profit from its factors of production. Financial performance can be measured by monitoring the firm's profitability levels. Zenios *et al.,* (1999) state 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 business through the use of profitability ratios.

The return on equity (ROE) and the return on assets (ROA) are the common measures of profitability. By monitoring a firm's profitability levels, one can measure its financial performance. Solvency measures give an indication of a firm's ability to repay all its indebtedness by selling all of its assets. It also provides information about a firm's ability to continue operating after undergoing a major financial crisis. Quach (2005) states that solvency measures the amount of borrowed capital used by the business relative to the amount of owners' equity capital invested in the business as an indication of the safety of the creditor's interests in the company.

Liquidity indicates a firm's ability to meet its financial obligations as and when they mature without disrupting the normal operations of the business. According to Quach (2005), liquidity can be analyzed structurally and operationally. Further, operational liquidity refers to the cash flow measures while structural liquidity refers to the composition of the balance sheet. The incidence and relative magnitude of internal or external disruptions to business activities from risk events also vary considerably across firms depending on the nature of activities and the sophistication of internal risk measurement standards and control mechanisms.

While companies should generate enough expected revenues to support a net margin that absorbs expected risk losses from predictable internal failures, they also need to hold sufficient capital reserves to cover the unexpected losses or resort to insurance (Zsidison, 2003). This ensures that losses do not impact negatively on the firm's financial performance. A study on challenges facing SACCOs in Africa indicated that, on the continent there has been a challenge of growing these financial institutions as a strong tool to meet the financial needs of the populace (Ademba 2011). He notes that SACCOs just like any other business enterprises in Africa, are faced by

challenges in their strife towards survival and growth. It is noted that these challenges are both internal and external. Internal challenges include amongst others, deficiency in contemporary skills and inadequacy of financial resources.

On the other hand, external challenges include economic liberalization and regulation of business, price decontrol, competition for scarce resources, and indeed competition from commercial banks. In the same breadth, survival strategies have been suggested. The major ones are proper management of scarce financial resources and avoidance of corruption while simultaneously advocating for transparency and accountability. A study conducted on corporate government practices and performance at Elimu SACCO in Kenya (Wasike, 2012) notes that SACCOs in the country have registered a remarkable growth since 1970s.

Currently, they have achieved an average growth of 25% per year in terms of deposits and assets. In terms of membership, these financial institutions have grown at a high rate with close to 3.7 million members at the time of the study. The SACCOs have also diversified the financial services they offer to their members and customers which include Back office services and Front office services. Olando, Martin and Jagongo (2012) analyzed financial practice as a determinant of growth of SACCO's wealth. The authors found out that growth of wealth of SACCOs depended upon financial stewardship, capital structure and funds allocation strategy.

More so, Olando, Jagongo and Mbewa (2013) examined the contributions of financial stewardship to growth of SACCOs in Kenya notes that the growth of SACCOs' wealth depended on loans management, institutional strengths and innovativeness of SACCO products. In addition, a study on the role of SACCOs in growth of youth entrepreneurship in Kenya, it was noted that these firms contributed to the growth of

capital, entrepreneurship and business management skills among the Kenya youths (Mwangi & Wanjau, 2013).

2.2 Concept of Risk and Risk Management Practices

Risk is defined as the uncertainty associated with a future outcome or event (Banks, 2004). Rejda (2008) defines risk management as the process through which an organization identifies loss exposures facing it and selects the most appropriate techniques for treating such exposures. In risk management, a prioritization process must be followed whereby the risk with the greatest loss and greatest probability of occurrence is handled first and risks with lower loss are handled later (Kiochos, 1997, and Stulz, 2003). There is however, no specific model to determine the balance between risks with greatest probability and loss and those with lower loss, making risk management difficult.

Hornby (2005), defines risk as "The possibility of something bad happening at some time in the future; a situation that could be dangerous or have a bad result". While Abaffy (2007) defines risk management as the process of identifying, measuring, controlling and reduction of risks faced by the company or the institution. Briefly, risk management refers to the methods and processes used by organizations to manage risks (or seize opportunities) related to the achievement of their objectives.

Traditional Risk Management (TRM) does not consider the interaction of numerous risk classes (Ghazali and Manab, 2013). In fact, scholars have argued that TRM does not provide an opportunity for firms to view risk across the entire enterprise (Moeller, 2011). Hence, it is often referred to as a "silo-based approach". This deficiency has led to the emergence of Enterprise Risk Management (ERM) as a comprehensive risk management mechanism. Essentially, enterprise risk management (ERM) is a risk

management strategy that covers a portfolio of risk issues that can be managed holistically instead of through a fragmented approach. It is an approach that enables organizations to understand the interactions that exist between numerous types of risks (PWC, 2008).

Banks (2004) notes that the key focus of risk management is controlling, as opposed to eliminating, risk exposures so that all stakeholders are fully aware of how the firm might be impacted. According to Kiochos (1997), the risk management process involves four steps: identifying potential losses, evaluating potential losses, selecting appropriate risk management techniques for treating loss exposures and implementing and administering the risk management program. Kimball (2000) concurs that risk management is the human activity which integrates recognition of risk, risk assessment, developing strategies to manage it and mitigation of risk using managerial resources.

Generally, a proper risk management process enables a firm to reduce its risk exposure and prepare for survival after any unexpected crisis. Banks today are the largest financial institutions around the world, with branches and subsidiaries throughout most parts of the world. There are plenty of differentiations between types of banks. And much of this differentiation rests in the products and services that banks offer (Howells & Bain, 2008, p.34). For instance, commercial banks hold deposits, bundling them together as loans, operating payments mechanism, etc. Commercial banking in virtually all countries has been subject to a great deal of regulations (Hull, 2012, p.22).

One of the regulations is the minimum capital commercial banks must keep absorbing loss if unexpected things happen. This kind of capital requirement is, in particular,

conducted by Basel Committee which aims to enhance the key supervisory issue and improve the quality of banking supervision (Bis.org, 2014). In 1974, some disruptions took place in the international financial markets. West Germany's Federal Banking Supervisory Office withdrew Bankhaus Herstatt's banking license after finding that the bank's foreign exchange exposures amounted to three times its capital.

As a consequence, banks outside Germany took heavy losses on their unsettled trades with Herstatt. In the same year, the Franklin National Bank of New York also closed its door after racking up huge foreign exchange losses (Bis.org, 2014). All of these things contributed to the debacle of financial market which led to the Basel Committee on Banking Regulations and Supervisory Practices by central bank governors of the G10 countries. Therefore, this study sought to investigate the effects of ownership structure on the relationship between risk management practice and performance financial institutions in Kenya.

However, the findings have been mixed and inconsistent concerning the proposed benefits of ERM to firms' performance (Mikes and Kaplan, 2014 & Togok *et al.,* 2014). Acharyya (2008) argued that the empirical contribution of ERM has remained untested due to lack of suitable frameworks. In similar findings, studies have further stated that the inconsistencies in the relationship between ERM and firm performance were due to the inadequate specification of ERM frameworks (Lundqvist, 2014).

The risk management framework is one of the essential factors that signal the implementation of ERM in organizations (Dafikpaku, 2011 & Thornton, 2009). According to Shortreed *et al.,* (2000), ERM frameworks are guides designed to give support to a process that is systematic and efficient in achieving organizational

objectives. Essentially, the framework is a requirement for managing risk on an enterprise-wide basis (Dalgleis and Cooper, 2005). As such, Moeller (2007) asserted that ERM framework is a series of steps that enable organizations to review and analyze potential risk events. His view is that ERM framework is a strategy designed at the board level but implemented by top management to enable them grasps the implication of risk.

Soin (2005), Williamson (2004) and Collier *et al.*, (2004), found that risk management in an organization influence the organization performance by mitigating various business risks. Rashid *et al.*, (2011) found that risk analysis of financial statement was allegedly the largest contributor towards risk management while budgeting and strategic planning are indispensable players in managing risk and enhancing profitability of Commercial Banks. Risk management is a key factor which determines the level of progress of organizations. Thus, proper mechanism and system of risk control should be put in place to establish, prevent and mitigate the risks encountered in operations of the organizations, (Beckmann, 2007).

An efficient risk management in risks could greatly reduce the costs of maintaining operations in organizations. In a world that is constantly changing and with every change bringing about new ways of doing business with different outcomes, risk and how to manage it has become a critical issue. The recent global financial crisis served as a reminder that risk management and how the same is practiced is fundamental if performance objectives are to be consistently achieved, (Gitman, 2008). It has emerged that as business owners and managers strive to improve and sustain performance they are now also required to consider what risk management practices their organizations have adopted to avoid falling short of their strategic objectives,

(Sabato, 2009). This is even more so in the financial services sector which was the most affected during the recent financial crisis.

Kargi (2011) conducted a study on credit risk and the performance of Nigerian banks and used non-performing credit portfolios and these significantly contributed to financial distress in the banking sector. The author concluded that credit risk management has a significant impact on the profitability of Nigeria banks. Therefore, management need to be cautious in setting up a credit policy that might not negatively affects profitability and also they need to know how credit policy affects the operation of their banks to ensure judicious utilization of deposits.

Kithinji (2010) conducted a study on credit risk management and profitability of commercial banks in Kenya using the non-performing loan portfolio (the independent variable) as an indicator of the effectiveness of credit management practices. The intervening variable was the amount of credit as indicated by loans and advances normalized by the total assets. The dependent variable was the profitability measured by the return on total assets. The study by Kithinji (2010) differs from this study in several respects;- the author used secondary data only while this study will use primary data from questionnaires. The study also concentrated on credit risk only and failed to recognize the role of other financial risk such as market risk and liquidity risk.

The risks facing financial institutions are mainly classified into; strategic, operational, credit and market risks. In managing these risks, the risk management approach adopted by the owners and/or management was influenced by the organizational culture and support, whether or not risk management is integrated in the setting of organizational objectives, whether there is a documented risk management policy or

framework, how the risk identification process is conducted, the risk analysis process, evaluation and treatment of risk; risk monitoring and review; and last but not least ensuring that there is effective risk management, (Holland, 2010). Therefore this study sought to investigate the effects of ownership structure on the relationship between risk management practices and performance of financial institutions in Kenya

2.2.1 Risk Management Practices and Financial Performance

Firms with efficient risk management structures outperform their peers as they are well prepared for periods after the occurrence of the related risks. In a study of the sensitivity to risk of large domestic banks in the USA, Linbo (2004) found that profit efficiency is sensitive to credit risk but not to insolvency risk or to the mix of loan products. Hahm (2004) argues that it is necessary to improve banking supervision and banks' risk management to ensure successful financial liberalization. This is based on a study of interest rate and exchange rate exposure of Korean banks before the 1997 Asia Pacific economic crisis, which found that the performance of commercial banks was significantly associated with their pre-crisis risk exposure.

Fatemi and Fooladi (2006), investigated the current practices of credit risk management in the largest US-based financial institutions report found out that identifying counterparty default risk is the single most important purpose served by the credit risk models utilized. However, it should be noted that these results are based on a very low response rate, i.e. 21 responses to questionnaires sent to 100 banks. Al-Tamimi and Al-Mazrooei (2007) report that inspection by the bank risk manager, audits or physical inspections, financial statement analysis and risk survey are the main methods used. These results indicate that banks are becoming more

sophisticated in managing their risk. The authors also report that the locally incorporated banks are fairly efficient in managing risk, however, the variables such as RI, assessment and analysis have proved to be more influential in the risk management process.

Finally, their results indicate that there was a significant difference between the UAE national and foreign banks in understanding risk and risk management (URRM), practicing risk assessment and analysis (RAA), and in risk monitoring (RMON) and controlling, but not in RI, credit risk analysis (CRA) and risk management practices. On average, they report that foreign banks are better than locally incorporated banks in dealing with risk exposure. A difference in the quality of the staff is the primary reason offered by the authors to account for such significant differences. Additionally, one could add differences in regulatory requirements that banks are subject to as a possible reason for such results. Branches of foreign banks, such as Citibank, HSBC and Standard Chartered Bank, are required to comply with the regulatory requirements that their parent companies are subject to, which might be more rigorous than those applied by the Central Bank of the UAE.

Al-Tamimi (2008) studied the relationship between the readiness to implement the Basel II Accord and the resources needed to implement it in UAE banks. The results revealed that these banks are aware of the benefits, impact and challenges associated with the implementation of the Basel II Accord. No significant difference was found in the level of preparation for the Basel II Accord between the UAE national and foreign banks. It was concluded that there was a significant difference in the level of the UAE banks in relation to Basel II, based on employees' educational levels. The

results supported the importance of education for the implementation of the Basel II Accord.

Al-Tamimi (2002) conducted a study on the risk management practices of the UAE commercial banks. He used survey questionnaire technique to obtain data regarding different methods and techniques used for the management of important types of banking risks covering credit risk, market risk, liquidity risk and operational risk. He used descriptive statistics analysis and found that credit risk was the most critical type of risk for the selected banks. He identified that the most common methods used for risk identification were the inspection by branch managers and the financial statement analysis. He further observed that the UAE banks used many techniques including establishing standards, analysis of credit worthiness, risk rating, credit score and collateral for risk management. He found the adoption of a conservative credit policy as the most effective technique for the risk management in these banks.

Al-Tamimi and Al-Mazrooei (2007) carried out a comparative study to explore the risk management practices of the UAE national and foreign banks. They examined the extent to which the banks in UAE exercised risk management practices in coping with different kinds of risk. They obtained primary data by adopting a survey questionnaire method regarding different aspects of risk management in UAE banks including understanding risk; risk identification, risk assessment and analysis, risk monitoring, risk management practices and managing credit risk. Their study results indicated that the banking staff in UAE had a common understudying of risk management in banks. In addition, the findings of their research indicated a significant difference between both national and foreign banks in risk assessment and analysis and in risk monitoring and controlling.

Hassan (2011) conducted a comparative study of the risk management practices of Islamic and conventional banks across five countries of the Middle East. He used a questionnaire survey to collect data regarding different aspects of risk management practices. Their study results showed that the banking staff had a common understudying of risk management in the selected banks. They further identified that the targeted banks were good in risk identification, risk assessment and analysis and risk monitoring and managing different types of risks.

A multiple regression model was applied to examine various aspects of risk management practices. His study results highlighted positive significant relationships between the risk management practices and the understanding of risk, risk identification, risk assessment and analysis, risk monitoring and managing important risks in both the Islamic and conventional banks. The arguments of Greuning and Iqbal (2008) and highlighted that active framework of risk management was uniformly useful to conventional banks as well as Islamic banks.

Similarly, Abu Hussain and Al-Ajmi (2012) reported empirical evidence about the risk management practices of conventional and Islamic banks in Bahrain. A questionnaire survey approach was adopted to collect primary data from the managers of selected banks to examine the risk management practices and their association with understanding risk, risk management, risk identification, risk assessment analysis, risk monitoring and managing credit risk. Both descriptive as well as inferential statistics analysis techniques were applied. Their study results showed that the bank managers in Bahrain were well-aware of the significance of effective risk management in reducing costs. They revealed that credit, liquidity and operational risk were found to

be the most significant risks faced by both the conventional and Islamic banks. They also concluded that the Islamic banks were facing more risks than the conventional banks in Bahrain.

Khalid and Amjad (2012) studied the risk management practices of Pakistani Islamic banks. They collected primary data from the managers of risk management through questionnaire survey. Both descriptive and inferential statistics analyses were used. Their study results showed that the banking staff had a common understanding of risk management and the selected Islamic banks in Pakistan were good in risk identification; risk assessment and analysis and risk monitoring. Based on a multiple regression analysis they found risk understanding and risk monitoring as the important aspects of risk management practices.

Nazir, Daniel and Nawaz (2012) also conducted a comparative study of risk management practices of Pakistani conventional and Islamic banks. They also used survey questionnaire technique to collected data from the managers of credit risk management departments. They revealed that the banking staff had a common understanding of different risks and risk management in banks. Their study results highlighted that the targeted banks were well-organized in risk identification, risk assessment and analysis and risk monitoring. In order to assess the important aspects of risk management, they applied a multiple regression model by adopting ordinary least square (OLS) technique and concluded that risk understanding and risk monitoring were the important aspects of risk management practices of banks in Pakistan.

Ariffin, Archer and Karim (2009) examined the risk management techniques of Islamic banks of fourteen countries. Their study results showed that the Islamic banks had also similar types of risks to the conventional banks. They further identified that the levels of some important risks such as credit risk, operational risk, market risk and liquidity risk might vary between the conventional banks and Islamic banks.

Hassan (2009) investigated the extent to which the Brunei Islamic banks adopted risk management practices and techniques in coping with different kinds of risk. A questionnaire survey technique was used to obtained data about understanding risk, risk assessment and analysis, risk identification, risk monitoring and managing credit risk. His study also concluded that the introduction of the Basel Accord had provided an opportunity for sound risk management practices in the banking system and selected banks had responded to that challenge by making a significant up gradation in their risk management systems.

Sokolov (2007) studied the risk management practices of banks in Estonia with consideration in the field of e-banking. He conducted a survey study and distributed questionnaires to different local and foreign banks in Estonia. On the basis of the descriptive analysis, he found that the important risks connected with the field of e-banking were operational risk, legal risk, strategic risk and reputational risk. He concluded that the Estonian banks commonly complied with all Basel Committee guidelines in the e-banking risk management.

Rosman (2009) proposed a research framework on risk management practices and the different aspects of risk management processes. His study found four key aspects of

the risk management process such as understanding risk, risk identification, risk analysis and assessment and risk monitoring. He further explained the conceptual and empirical literatures in order to describe the relationship between risk management process and its different aspects.

Anderson (2010) examined the risk management system and its significance to the primary operations of UAE banks. He also considered the relevance of the Basel II agreement with the Global Financial Crisis 2007-08. His study was based on primary data and the questionnaire was designed to test 5 risk management techniques: (i) eliminating risks, (ii) using hedging to control risk, (iii) minimising the potential negative impact of any risks, (iv) transferring risks to partners or clients, (v) risk monitoring and (vi) diversifying operations to reduce the impact of any single risk. Consequently, these banks did not adopt a particularly diversified range of risk management procedures and practices. They identified that the risk management approach in the selected UAE banks mainly focussed on soft tools of risk controlling or mitigation than a more superior strategic approach.

Shafiq and Nasr (2010) studied the awareness of risk management in fifteen private and public banks in Pakistan. They found that credit risk, liquidity risk, interest rate risk, foreign exchange risk and operational risk were the most critical types of risks in Pakistani banks. Their study results indicated that there was a common understanding of risk among the staff working in the risk management department of selected commercial banks of Pakistan. Their study further revealed that the mostly daily operations of banks in Pakistan were risky by nature.

Alam and Maskujaman (2011) studied the risk management practices of commercial banks in Bangladesh. They collected primary data from the managers of selected banks through questionnaires and applied descriptive statistical techniques to analyse the data. Their study observed that the selected banks of Bangladesh were facing credit risk, market risk and operational risk. They also highlighted that the board of director of selected banks performed their responsibilities effectively. Furthermore, the executive committee also monitored the key risks actively and finally all the banking operations activities were overseen by the audit committee as per requirements. Their study revealed that the credit risk management also used the updated credit policies. Finally, they concluded that both internal rating system and risk adjusted rate of return were the most important techniques adopted by banks for risk management.

Bilal, Talib and Khan (2013) carried out a study to probe the risk management practices of banks in emerging economies. They investigated the risk-averse mechanism and the significance of the Basel-III framework to deal with the post global financial challenges in the selected banks of sub-continent and gulf countries. Furthermore, these banks were trying to advance their risk measurement frameworks in compliance with the latest regulatory obligations of Basel III. Their study results confirmed positive significant relationships between the risk management practices and the understanding of risk, risk identification, risk assessment and analysis, risk monitoring and managing credit risk in the selected banks.

Shafique, Hussain and Hassan (2013) conducted a comparative study to examine the differences between the risk management practices of Islamic financial institutions

and conventional financial institutions in Pakistan. Their research identified credit risk, liquidity risk, operational risk, equity investment risk, market risk and rate of return risk as the most important risk in the selected Pakistani financial institutions. They concluded that the overall risk management practices of both Islamic as well as conventional financial institutions were alike in Pakistan.

Wood and Kellman (2013) conducted a study on the risk management practices of six Barbadian banks. They highlighted that the bank managers in Barbados considered the adoption of risk management as an important and critical force for their banks` overall performance. They identified credit risk, operational risk, country risk, interest rate risk and market risks as the main types of risks in the selected Barbadian banks. They concluded that the risk management practices of the selected banks were efficient according to the changing business environment.

Empirically, Alrashidi and Baakeel (2012) undertook a study to measure the operational risk management effects on the financial development and growth in the Saudi Arabian SMEs companies. The result showed that operational risk management has a positive effect on the financial development and growth in the Saudi SMEs companies. Gisemba (2010) also returned that there was a positive relationship between risk management practices and the financial performance of SACCOs, depicting the relationship between risk management practices and financial performance in organizations. He asserts that SACCOs needs to manage risk effectively to prevent them from failing in their obligation and meeting their objective**,** and thus ensuring that the organization performs better in increasing the return on assets and in attaining maximum financial returns.

The risk management is valuable and relevant in order to increase the value of firm. Oluwafemi *et al.,* (2013) and Tandelilin *et al.,* (2007) argue that risk management is important to safeguard the bank's assets and for the protection of the shareholders' interests. They also point out that the bank which have better risk management might have certain advantages such as: (i) It is aligned with the compliance function toward the regularity requirements; (ii) It improves bank reputation and increases the opportunity to attract more customers which enhanced bank portfolio of fund resources and; (iii) It enhances the efficiency and profitability of the bank.

Fernando and Nimal (2014) have investigated the effect of risk management on the efficiency of banks in Sri Lanka for the period from 2005 to 2011. They point out that the technical efficiency of the large banks (having total assets more than 100 billion rupees) have increased from 83% to 93% whereas there is a reduction from 84% to 82% in the small banks (having total assets less than 100 billion rupees).They observe that the mean technical efficiency score of the Sri Lankan commercial banks was high as compared with the previous studies of different countries such as UK, India, USA and Taiwan during 2005 to 2011. They conclude that the adoption of risk management is favourable to improve the efficacy of Sri Lankan banks.

Ariffin and Kassim (2011) have analysed the relationship between risk management practices and the financial performance in the Islamic banks of Malaysia. Both primary (survey questionnaires) as well as secondary data (annual reports) have been used to assess the risk management practices and their relationships with the financial performance of Islamic banks. Their study results highlight a strong positive relationship between the performance of banks (Return on Assets) and risk

management practices. They further point out that the Islamic banks on average have better risk management practices in Malaysia.

Furthermore, the most frequently adopted techniques are credit ratings, duration analysis, gap analysis, and maturity matching. However, several more technical advanced risk measurement techniques including value at risk, stress testing, and simulation techniques are observed not to be adopted by Malaysian Islamic banks in general due to lack of sufficient resources. They suggest that the adoption of an effective risk management culture would ensure the competitiveness and survival of Islamic banks in the dynamic business environment (Ariffin and Kassim, 2011)

Kao *et al.,* (2011) have explored the performance of Taiwan financial holding companies from the perspective of risk management. They have measured the performance of fourteen Taiwanese financial holding companies during the period of 2001-2009 before and after the global financial crisis. Their findings show that the technical efficiency has been increased after financial crisis as compared to an earlier period. They also highlight that the capital adequacy ratio and bad debts ratio have played important roles particularly to control the credit risk after the financial crisis. They suggest that the Taiwan financial holding companies could enhance their efficiency by increasing liquidity and capital adequacy and by controlling as well as decreasing the bad debts ratios.

Tabari, Ahmadi and Emami (2013) have studied the impact of the liquidity risk management on the performance of fifteen commercial banks in Iran during the years 2003 to 2010. A multiple regression model having two types of macroeconomic

variables and bank-specific variables have been used to study the impact of the liquidity risk on the performance of banks. Their study results show that gross domestic product, inflation, bank's size and bank's asset have a positive effect on the performance of banks. However, they have identified that both the credit risk (non-performing loans ratio) as well as the liquidity risk (current ratio) have negative impact on the performance of banks. They have found almost similar results by applying two different regression models and replacing two independent variables (return on assets and return on equity) as the criterion of the bank's performance.

They conclude that the liquidity risk has declined the performance of selected banks in Iran. Oluwafemi *et al.,* (2013) have found a significant relationship between performance and risk management in selected Nigerian banks. Their study results show that the financial performance of selected Nigerian banks have an inverse relationship with the cost of bad and doubtful loans. However, a positive and significant relationship of the capital asset ratio has been found with the performance. The performance of banks has been measured with the help of two profitability indicator e.g. the return on equity and return on asset. They conclude that the improved risk management in shape of better management of funds, bringing reduction in the cost of bad and doubt loans has increased the bank performance.

Kolapo, Ayeni and Oke (2012) have investigated the quantitative impact of credit risk management on the performance of Nigerian commercial banks during 2000 to 2010. They have taken return on asset as a proxy variable for the performance of selected banks and three indicators, such as non-performing loan ratio, loan to deposit ratio and the loan loss provision ratio, used for credit risk management. They have found a

significant relationship between return on assets and different credit risk management variables. They conclude that there is a considerable relationship between performance and risk management in the selected banks of Nigeria.

Afriyie and Akotey (2013) have examined the risk management and profitability of the selected rural banks in Ghana limiting by limiting their focus on the credit risk. Their study has adopted return on equity and return on asset as profitability indicators while the non-performing loans ratio and capital adequacy ratio have been taken as credit risk management indicators. Based on their study results, they conclude that the selected banks have adopted poor risk management for credit risk and the ratio of non-performing loans has continued to rise during 2006-2010. The rural banks in Ghana need to implement a sound and effective credit risk management by using best risk management practices to reduce the ratio of bad loans.

Selma, Abdelghani and Rajhi (2013) explored the risk management practices and techniques adopted by banks in Tunisia. They developed a questionnaire and surveyed it in 16 selected Tunisian commercial banks. The results of their study indicated that the bankers were well aware of the significance and the role of active risk management in Tunisia. They also concluded that the selected banks had implemented a number of effective risk strategies and the risk management frameworks in Tunisia. Furthermore, they highlighted that the methods to measure the credit risk exposures had still not been used effectively by the selected banks. In order to mitigate the credit risk, both guarantees as well as collateral were the most common methods used by banks in Tunisia.

Richard *et al.,* (2008) carried out a study to examine the credit risk management system of commercial banks in Tanzania in comparison to developing countries. Their study found that there was a significant difference in between the credit risk management of commercial banks operating in the developed countries and the less developed countries. Their study results indicated that the economic environment in which commercial banks operate had significant impact on their credit risk management.

Musyoki and Kadubo (2012) have conducted a study to assess the different parameters relevant to credit risk management and their effects on the financial performance of banks in Kenya. The parameters for credit risk management are default rate, cost of debt collection and cost per loan asset. They have identified an inverse impact of all these parameters on the performance of banks. The findings of their study show that the credit risk management is a key predictor of Kenyan banks financial performances and the success of the selected banks performance significantly depends on risk management. They point out that the banks in Kenya need to put more emphasis on risk management to minimize the credit risk and to improve the performance of banks. They further suggest that the banks in Kenya require to spend more resources on the default rate management and to trim down the spending on the cost per loan asset.

Gisemba (2010) carried out a study on impact of credit risk management practices on financial performance among the SACCOs. He sampled 41 SACCOs and concluded that SACCOs need to manage credit risk effective to prevent them from failing in their obligation and meeting their objective**.** Credit risk management according to the

study, led to minimization of loan defaulters, cash losses and ensures the organization performs better by increasing the return on assets and helping the organization in attaining maximum financial returns. The study further concludes that there was a positive relationship between credit risk management practices and the financial performance of SACCOs, depicting the relationship between risk management practices (credit) and financial performance in organizations.

Kimari (2013) undertook a study on the effect of credit risk management on financial performance of deposit taking Savings and Credit Co-operative Societies in Kenya. The researcher adopted a cross sectional survey research design in his study employing a sample of 30. The findings revealed there was positive relationship between financial performance (ROE) and the constructs of credit risk management.

Weru (2008) conducted a study on an assessment of information systems risk management practices: A case of practical action (international). The purpose of the study was to establish the importance of information systems in regard to business continuity. The study findings revealed that IT risk management is on ad hoc basis. The senior management teams in each country has left the role of managing information systems risk to IT experts instead of integrating it within the general organisational risk management. There is great need for organisations to develop a comprehensive and all-inclusive policy on the use of information systems to reduce the risks arising from insiders (employees).

Njeri (2010) did a survey on strategic risk management practices by large commercial banks in Kenya. The research was a census survey on 13 large commercial banks in Kenya. The objectives of the study were to determine the strategic risk management practices adopted by large commercial banks and the challenges faced by these banks

in their strategic risk management practices. The researcher established that there is an appreciable level of strategic risk management practice among the large commercial banks as exhibited by the findings. The researcher recommends that banks invest more in automated strategic risk management tools which would enhance analysis and profiling of their strategic risk. It would also be appropriate to appoint senior managers as the strategic risk champions.

Thuku (2011) did a study on the relationship between risk management practices and organizational performance of Universities in Kenya, the study adopted a descriptive research design. The study found that use of highly qualified staff, competent personnel, training and holding of seminars on risks management and advancement of management systems greatly contributed to increased performance on student enrolment. The study recommended than Universities and other institutions invest on risk management practices to counter the effects of operational risks.

Korir (2012) conducted a study on the effects of credit risk management practices on financial Performance of deposit taking microfinance institutions in Kenya. The purpose of this study was to investigate the impact of credit risk management practices on the financial performance of Deposit Taking Microfinance institutions in Kenya. From the findings the study concludes that Deposit taking microfinance institutions in Kenya adopted credit risk management practices to counter credit risks they are exposed to and it also concluded that Deposit taking microfinance institutions adopt various approaches in screening and analysing risk before awarding credit to clients to minimize on loan loss. The study further concludes that there was a positive

relationship between credit risk management practices and the financial performance of Deposit taking microfinance institutions.

Muasya (2013) did a study on the relationship between credit risk management practices and loans losses. Descriptive research design was utilized in this study as it aimed to see if there is a relationship between credit risk management practices and loan portfolio losses in commercial banks in Kenya. The study utilized a standard questionnaire to collect primary data from the credit managers/officers through the drop and pick method form forty-two (42) commercial banks in Kenya. However, only thirty-six (36) of the respondent commercial banks completed the questionnaire. The data was then analysed and the findings presented using tables giving descriptive statistics including frequencies, mean and percentages.

The research findings indicated that a significant number of commercial banks in Kenya had not put in place credit risk management information systems to effectively measure, monitor, and control and identify risk, and that majority of management of commercial banks in Kenya recognized the need for information sharing among players within the industry in order to mitigate the risk. It was concluded that credit risk management practices are common among most of the commercial banks in Kenya and that management of these commercial banks appreciated government legislation relating to credit risk management through the introduction of the credit sharing information Act, and that there is a significant negative relationship between credit risk management practices and loans losses in commercial banks in Kenya.

2.3 Effect of Risk Identification and Performance of Financial Institutions

Al-Tamimi and Al-Mazrooei (2007) say that risk identification is the initial stage of risk management. For the implementation of risk management in an organization, the first step is to study risks and their impact on management practices. Tchankova (2002) concluded that risk identification is a very important step in risk management. Greene and Trieschmann (2004) indicate that risk identification is the first stage of risk management. The auditor begins the inherent risk evaluation process by generating expectations of accounts balances and further determines how those changes should interact with historic trends to produce an expected balance in the account and other. The auditor identifies changes that have occurred in the firm or its environment.

Auditors have a role to continuously identify the risks in the organization. Williams *et al.,* (2004) reveal that investigating the problem of risk identification calls for risk identification as a continuous process and continuous seeking of new risk. Risk identification is important as it ensures that the risk management function is established throughout the whole corporation and risk identification helps to sort risk according to their importance. The risk identification assists the management to develop risk management strategy to allocate resources efficiently. By risk identification the organization is able to study activities and places where its resources are exposed to risks.

In foreign exchange risks, the interest rate risks are the core function of the financial department. Therefore, it is vital that the risk management function is firmly entrenched throughout the whole corporation; i.e. the parent company while, the branches to have identify and analyze risks and monitor and control these risks as

well. There are various approaches for risk identification, for example, through visualization analysis or risk mapping.

An organization will be able to highlight the intensity of risks via risk mapping which could steer the organization away from high and low intensity risks. Risk-ranking is a method of risk identification process that includes components where these rankings are usually based on impact. Dan (2011) & Al-Tamimi (2002) discovered that the UAE financial institutions faced credit risks. The study also discovered that follow-up and inspections by branch managers and financial statement analysis were the main methods used in risk identification.

2.4 Effect of Risk Analysis on Financial Performance of Financial Institutions

The risk analysis is a comprehensive risk measurement and mitigation method used for various risks. Strutt (2003) reveals that risk analysis is a set of stages of systematic assessment which may involve a number of different analyses like establishing acceptable or tolerable levels of risk, evaluation of risks, determining whether the risks are as low as reasonably practicable and determining risk reduction measures where appropriate. Risk analysis and assessment comprises identification of the outcomes, probability of those outcomes and estimation the magnitude of the consequences. Accordingly, risk analysis now goes beyond evaluation to include some of the decision-making processes of risk management (Strutt, 2003).

Claessens, Fan and Wong (2003) analyzed the relationship between the independent director system and the operating performance of business in Taiwan. The authors attributed risky financing patterns and weak performance of business entities to poor corporate governance. It is from the same perspective that Donaldson (2003) pointed out that good corporate governance is crucial in enhancing investors' confidence and

market liquidity. In further support of the foregoing are Brown and Caylor (2004) who opine that indeed firms with weaker corporate governance perform poorly in contrast to entities whose corporate governance is stronger in terms of profitability, riskiness, stock returns, and payments of dividends.

In addition, Ellul and Yerramilli (2010) conducted an empirical study on risk controls in the U.S. bank holding companies. Their study involved collection of data from on 74 of the top 100 bank holding firms in the country in order to analyze the link between bank risk-taking and the structure of risk management in the organization. It was later acknowledged that the scholar's study was the only one that employed systematic data to analyze the role of risk management weaknesses in a crisis. Nonetheless, even their study was highly constrained since the firms under study limited their disclosures according to Anil (2010).

Further, Ellul and Yerramilli's (2010) opined that risk management index presents several other results. These include the ability to explain year to year changes in risk taking, illustrating that firms with better risk management had better operating performance during crisis times, and documenting that the aforementioned patterns are robust to controlling for a host of other influences. Al-Tamimi (2002) studied the degree to which the financial institutions utilized risk management techniques to deal with various types of risk. The result of study was that these financial institutions faced mainly credit risks. The research also discovered that the main means used to identify risk was via inspection conducted by branch managers and via financial statements. The methods used in risk management avoided the escalation credit risk, credit score, credit worthiness analysis, risk rating and collateral.

Moreover, Salas and Saurina (2002) investigated the existence of credit risk in Spanish financial institutions. The schedule of data was to compare the determinants of problematic loans of Spanish financial institutions during the period 1985-1997. The study revealed that the role of competition in the banking sector and ownership determines credit risk. It also raises important financial institution supervisory policy issues: the use of financial institution variables as early warning indicators and finally the advantages of financial institutions managing from different regions merging together.

Linbo (2004) offered two important practices of information on the efficiency of the financial institutions in terms of profit that were found to be related to risks. The results suggest that the profitability of a financial institution is sensitive to credit and solvency risk but it is not sensitive to liquidity risk or to the investment/mix of portfolios. Meanwhile, Rajagopal (1996) attempted to oversee financial institutions risk management and suggested a model for pricing the products based on credit risk assessment of the borrowers. It was concluded that good risk management results in good practice, which ultimately leads to the profitable survival of the institution. A proper approach to risk identification, measurement and control will safeguard the interests of financial institutions in the long run.

Richard *et al.,* (2008) conducted a study in Tanzania on understanding credit risk management system in financial institutions established in less developed countries. The result obtained indicated that there were differing elements of credit risk management in financial institutions that operated in a lesser developed economy compared to the developed economy. Therefore, it can be concluded that the

environment in which the financial institution operates is an important criterion for the success of credit risk management.

A similar empirical work was conducted by Hahm (2004) on interest rates and exchange rates in Korea. The Korean financial institutions were involved in both the interest rate and exchange rate risks. It was found that the efficiency of Korean financial institutions was closely linked to the degree of the interest rate and credit policy. The risk analysis is viewed from the same perspective as risk assessment.

Ademba (2011) reported on the challenges that SACCO regulations in Africa face. When citing the SACCO regulations model, Ademba noted that as SACCOs approach maturity stage, regulations concentrate on prudential standards which seek to establish a risk assessment process that focuses on liquidity, capital and governance among other vital issues. Magali (2013) further conducted a study on the influence or rural SACCOs' variables on loan default risks in Tanzania. The results of the study revealed that the large size loan had a higher risk of default than the small one. In that respect, the study recommended that SACCOs ought to offer large size loans to their members after conducting a deep analysis of credit risks mitigation techniques.

Mwirigi (2006) examined the credit risk management techniques adopted by microfinance institutions (MFIs) in Kenya. The author inferred that many MFIs have developed distinct credit risk management departments with the aim of credit appraisal. Lagat *et al.,* (2013) studied the effect of credit risk management practices on lending portfolio among SACCOs in Kenya. The study observed that, most of these financial institutions have adopted risk management practices as one way of managing their portfolio. In this case management processes address risk identification, evaluation, analysis, monitoring and mitigation.

2.5 Effect of Risk Evaluation on Financial Performance of Financial Institutions

Empirical studies on effect of risk assessment on financial performance are reviewed in this section. The studies are reviewed from the global, regional and local perspectives. Rostum and Eikebrokk (2008) conducted a study in Bergen, Norway on assessment of risk and came up with a report that provided a summary of the application and results of a Risk and Vulnerability Analysis (RVA). RVA was a as a response to the results from the internal and external evaluations. They followed a procedure of risk identification, risk estimation, and risk assessment; the latter creates an ample platform for risk management.

Consistent evaluation and rating of exposures of various types are essential to understand risks, and the extent to which these risks must be mitigated or absorbed. Outside audits, regulatory reports, and rating agency evaluations are essential for investors to gauge asset quality and firm level risk. Risk management has moved from the narrow view that focuses on evaluation of risk from a narrow perspective to a holistic, all-encompassing view (Pagach and Warr, 2011).

Enterprise risk management requires the operation of risk evaluation and mitigation. This can only be successful if there is strong leadership support and top management buy-in without which the ERM process is destined to fail. The board of directors and top management needs to be involved in setting the tone from the top and creating a risk culture across the financial institution. The board also secures the integration of ERM in all processes, making available adequate resources and sustained continuous improvement of the level of ERM practices (Manab and Kassim, 2012).

On one side, foreign ownership of financial institutions could give several benefits (Unite and Sullivan, 2003) such as transferring to local financial institutions the skills

and technology that enhance risk management; the allocation of credits to the private sector may be improved since it is expected that the evaluation and pricing of credit risks will be more sophisticated, and it is expected that foreign financial institutions will provide more stable sources of credit since they may refer to their parents for additional funding and they have easier access to international markets. Thus, domestic financial markets were less vulnerable to domestic shocks.

A company's accounting control practices such as risk-based auditing is widely believed to be crucial to the success of an enterprise as it acts as a powerful brake on the possible deviations from the predetermined objectives and policies. This means that an organization that puts in place an appropriate and adequate system of risk-based auditing is likely to perform better than those that do not. In other words, for there to be effective risk management in an organization, auditing must be risk-based. In the instances where there have been lack of or inadequate risk-based auditing, the firms concerned may be prone to fraud and other forms of financial misappropriation (Coram *et al.*, 2008).

According to McCord (2002), risk assessment of material misstatement at the financial statement level and also at the planning stage, clarifies the direction on performing a combined assessment of inherent and control risk, thus leaving the ability for the auditors to assess other risk factors in an audit. In their examination of the effects of the role of the board of directors in assisting in the formulation of corporate strategies on the auditors' planning judgments, they established that auditors respond to the role of the board when making judgments with respect to control risk assessments.

Keitany (2000), in his study on the internal audit control function and its implication on risk assessment by external auditors, established that the extent of dependence on internal controls were insensitive to the strength of internal audit departments. A study on the impact of risk-based audit on financial performance in Kenya's insurance companies conducted by Kasiva (2012) among 44 respondents that included finance officers, internal auditors, credit officers, relationship officers, and accountants. The study found out that risk-based auditing and risk management approaches should be enhanced to enable the organization concerned to detect risks on time.

Kasiva (2012) further argues that fraud risk assessment is one area that deserves significant reliance on internal audit work. In this light, it is reasoned that due to the fact that internal auditors are more privy with the operations of the firm they work for, then external auditors are particularly suited to carry out fraud risk assessment. In a survey of internal auditors' risk management practices in the Kenya's banking sector, Kibaara (2007) investigated bank internal auditors' risk assessment practices and established that, most banks in Kenya were in the process of drafting the ERM process and strategies in line with risk assessment.

While much empirical works has given diverse reasons for the poor financial performance, research evidence on the effects of risk-based auditing practices on the financial performance in the Kenyan context is scanty. Thus, inadequate risk-based audit could be negatively affecting the financial performance in Kenya. According to Hermanson and Rittenberg (2013) the existence of risk-based auditing is associated with superior organizational performance.

Although prior research studies (for example, (Simons, 2009 & Kiragu 2014) suggest a link between risk-based audit practices and financial performance, majority of these

studies have concentrated mostly in banks and other financial institutions and the available studies so far have dealt exclusively with large financial institutions in advanced countries. Little is known, at present, about the influences of risk based auditing practices on the financial performance nationally.

The organization identifies and evaluates the risks and decides on precautions. Organization record the findings on the risks identified and implement the measures. According to Royal Society Study Group (2002) risk estimation comprises identification of the outcomes and estimation of both the magnitude of the consequences and the probability of those outcomes. The addition of risk evaluation completes the process of risk assessment which is a vital stage in credit risk management. On the other hand, controls exist for approving decisions regarding financing alternatives and accounting principles, practices, and methods and also the management identifies and analyzes departmental risks relating to circumstances such as changes in the operating environment. Organizations carry out risk assessment to a great extent.

Risk evaluation must be an integral part of an institution's business plan. Decisions to join leave, or concentrate on an existing business activity require careful assessment of both risks and potential returns. Risk evaluation practices must be defined for each business activity that is pursued. Finally, business activities not part of the institution's focus must be eliminated so that avoidable risks are not assumed due to lack of management oversight. In addition, the specific risks of each business activity of an institution must be defined and the means to measure the risks must be developed. Similarly, databases must be developed to obtain proper and consistent risk measurement across the entire organization (Salomon Brothers, 1993).

Credit risk evaluation techniques, for example, should be the same in corporate lending, as in personal banking. Only then the aggregate credit quality reports have meaning to senior management. Several studies (Keitany, 2000, Rostum & Eikebrokk, 2008, Cohen and Sayag, 2010 & Kasiva, 2012) have been carried out relative to the current study variables (risk assessment, risk-based planning, risk management internal auditing standards, and financial performance). However, it appears that there are very scanty if any studies that have been carried out in relation to how risk assessment, risk-based planning, risk management and internal auditing standards influence organizational financial performance in Kenya's financial institutions. This necessitated the current study which sought to bridge the aforementioned research gap.

2.6 Effect of Risk Monitoring on financial Performance of Financial Institutions

To monitor and control risk some requirements are needed to ensure the implementation of the risk plans and the evaluation of their effectiveness in reducing risk, to keep track of identified risks, which includes the watch list and to update the organizational process. Monitoring is an important procedure to ensure that risk management is practiced by financial institutions effectively (Javid, 2009). Effective risk management also means the execution of a reporting and review structure to ensure that risks are identified and assessed, after which appropriate controls and responses are set in place.

Proper risk monitoring practices can be used to ensure that risk management practices are in line and that it also helps the financial institution's management to uncover mistakes at early stages (Al-Tamimi and Al-Mazrooei, 2007). Monitoring is the final step in the corporate risk management process (Pausenberger and Nassauer, 2002).

Control by the management board is insufficient to ensure the effective functioning of the risk monitoring system. This is because the management board members do not have sufficient time to exercise extensive control. Hence, the management board will put in place an independent unit to be responsible for internal supervision. The internal audit will normally be responsible for this task.

The supervisory board too is obligated to support the auditor control to the risk management process. Any defect by the auditor must be told to the supervisory board and the management board. The shareholders of financial institutions exercise the rights to insist on getting information in order to judge the efficiency of the risk management system. Here the director's report enabled the shareholders to assess and view the status of the corporation always.

2.7 Concept of Ownership Structure

The concept of ownership can be defined along two lines of thought: ownership concentration and ownership mix. The concentration refers to proportion of shares held (largest shareholding) in the firm by few shareholders and the later defines the identity of the shareholders Ongore (2011). On the relationship between ownership and financial institutions performance different scholars came up with different results. For instance, according to Claessens *et al.,* (2000) domestic banks' performance is higher as compared to their foreign counterparts in developed countries and the opposite is true in developing countries.

Ownership is one of the factors explaining the performances of financial institutions across the board; yet the level and direction of its effect remained unresolved. There are scholars who claimed that foreign firms perform better with high profit margins and low costs as compared to domestic owned banks. This is so because foreign

owned firms are believed to have experienced management expertise in other countries over years. Moreover, foreign banks often customize and apply their operation systems found effective at their home countries (Ongore, 2011).

Kamau (2009) used a sample of 40 banks in Kenya from1997-2006 and linear regression method to analyze factors that influences efficiency and Productivity of the banking sector in Kenya. The results showed that foreign-owned banks influence the performance of the local banking sector. The author claimed that foreign banks generally bring with them superior know-how and technical capacity. The ownership structure of banks in Kenya has changed over the last few years. Kenya financial reforms have encouraged foreign banks to enter and expand banking operations in the country. As resulted 13 out of the 44 commercial banks are foreign owned and in terms of asset holding, foreign banks account for about 35% of the banking assets as of 2011 (CBK, 2011).

Lee (2008) in a period from 2000-2006, examined the effect of equity ownership structure on firm financial performance in South Korea. He focused on two dimensions of ownership structure; Ownership concentration (the distribution of shares owned by majority shareholders) and identity of owners (especially, foreign investors and institutional investors). With secondary data sampled and obtained from Korea Information Service and Korea Stock Exchange using regression analysis and multivariate regression analysis on panel data. Contrary to previous empirical findings, he found the effects of foreign ownership and institutional ownership on firm performance to be insignificant.

Young and Kang (2008) used the new classification scheme on the ownership identity suggested by Delios *et al.,* (2006) by analyzing the data of public companies listed on the Shanghai Stock Exchange or the Shenzhen Stock Exchange during the period 1994-2002. Their objective was to investigate the performance implications of the ownership structures of listed companies in China. The study compared performances across three ownership identities: government shareholding marketized corporate shareholding, and private shareholding. It also examined how equity ownership by the controlling shareholder and the minority shareholders (from top 2 to top 10 shareholders) affected firm value, in order to explore the role of the controlling shareholder and minority shareholders in the ownership structure in China. Their findings were that the argument that the state deteriorates firm value by pursuing policy goals rather than profits.

Other findings are that marketized SOEs are not outperformed by private firms, higher equity ownership by the controlling shareholder leads to higher valuation of firms by intensifying incentives to monitor management or by reducing incentives to expropriate minor shareholders and also, they find evidence of higher valuation of firms which have minority shareholders with large shareholding. Fazlzadeh *et al.,* (2011) determined the role of ownership structure on firm performance by sampling 137 listed firms of Tehran stock exchange within the period 2001 to 2006.They used balanced panel data in the regression analysis with their design concentrating on three ownership variables; ownership concentration, institutional ownership, and institutional ownership concentration. Their findings were that ownership concentration doesn’t have any significant effect on firm performance with the

interpretation that since there are both advantages and disadvantages on ownership concentration, the integration of both positive and negative effects of ownership.

On the other hand, there was a positive effect of institutional ownership on firm performance because institutional investors are effective owners, since they have the resource and ability to properly monitor management's decisions and lead to better performance of the firm. However, Ownership concentration had a negative impact on performance because when an institutional investor owns a large block of share of a company, the management would be impressed by its power and instead of pursuing the benefits of all shareholders, management would only try to gratify specific institutional shareholder which owns the majority of share of company which would finally lead to failure in firm performance. The type Industry is viewed as a moderating variable which could describe the different results for the effect of ownership structure on firm performance (Falzadeh *et al.*, (2011).

Ongore *et al.*, (2011) used a census approach in their research design with an objective of determining the relationship between shareholder types and firm performance. Their findings indicate a significant negative relationship between state ownership of firms and financial performance. On the other hand, foreign, insider, diverse and institutional ownership gave significant positive relationships with financial performance. Their results however fail to establish the critical level of shareholding, beyond which there would be accelerated firm performance arising from commitment of managers.

A survey by (Simons, 2009 & Kiragu 2014) of partially privatized firms listed at the Nairobi Securities Exchange sought to assess the effect of government ownership/ control on financial performance of partially privatized listed companies. It sampled 16 firms, 7% of whom had government control. The others were considered government investments. With the aid of SPSS version 19, a descriptive, univariate and multivariate analysis of data was performed. The findings were that financial performance of firms listed on the NSE is not affected by government shareholding or control since financial performance of partially privatized but listed firms is indifferent to the government control.

Ongore (2011) investigated the relationship between ownership structure and performance of listed firms in Kenya. From the different segments of the listed firms at the NSE, he sampled two firms from the Agricultural sector, seven from Commercial Services, ten from Finance and Investment, fourteen from Industrial and Allied and seven from Alternative Investment Market. He analyzed the data using Pearson's Product Moment Correlation and Logistic Regression. On the other hand, managers who are not shareholders are more likely to engage in insider dealings as a way of enhancing their personal wealth and prestige. Government ownership was found to have a negative impact on firm performance.

In the ownership by corporations his findings suggested a positive relationship with firm performance since most of the holding companies are usually large corporations who translate their investment practices and risk-taking behaviour to those firms. He however found a positive relationship between diverse ownership and firm performance. Bouwens and Verriest (2014) have argued that managers who have

equity interest take less risk because they feel the consequences of poor decisions more than other shareholders. Hence, managers with equity holding may be meticulous when it comes to risk management issues. Ownership is one of the factors explaining the performances of financial institutions across the board; yet the level and direction of its effect remained unresolved.

Kiruri (2013) sought to determine the relationship between ownership structure and bank profitability in Kenya. Using a descriptive study design, data was drawn from all the 43 registered banks by the Central Bank of Kenya. The study used annual reports that are available from the websites of the banks and also in the Central bank of Kenya website. Primary data was also collected through questionnaires. He obtained data for a five-year period from 2007 to 2011. However, his study was a little bit contradictory after findings of both positive correlation between foreign ownership and domestic ownership with bank profitability. This study therefore sought to examine whether ownership structure significantly moderate the relationship between risk management practices and financial institutions performance in Kenya or not.

2.7.1 Effects of Ownership Structure on the Relationship between Risk Management practices and Financial Performance of Financial Institutions

The ownership structure has a significant effect on bank risk. Indeed, the type of ownership may increase or decrease depending on the objectives of shareholders and bank risk managers (Teresa and Dolores (2008). Moreover, the ownership structure influences the decisions of managers and their risk aversion. Indeed, public ownership reduces market risk because there is social goal rather than maximizing profit by the shareholders of bank. Also, public ownership reduces operational risk due to resource

implicit state guarantee. Increasing public ownership is related to inefficient financial system (Laporta and al., 2002 & Barth, Caprio, Levine 2001).

The relationship between company performance and ownership, if any, emanate from agency theory. This theory deals with shareholders who are owners of the firm and manager's relationship, which one way or the other refers to ownership and performance. Evidence across many countries indicates that foreign banks are on average less efficient than domestic banks. A more recent cross border empirical analysis of France, Germany, Spain, the UK and the U.S. found that domestic banks have both higher cost efficiency and profit efficiency than foreign banks (Berger *et al.*, 2000).

In the case of the financial crisis, there are increasing role played by the European government in the capital of banks (Ianotta *et al.,* (2013). On the other hand, private ownership gives incentives to increase transaction on capital markets, which increase the risk of exchange of securities. In the case of insolvency risk, private ownership encourages more respects commitments to depositors and creditors, which reduces the risk of default of the bank. Also, private ownership aims to maximize the profit, through the incentives for managers to work according to regulatory standards and accounting which reduces the operational risk of the bank.

Moreover, the presence of the privatized banks and reducing barriers to entry will increase competition in the market which can lead to changes in the risk taking of privatized banks and their rivals. In addition, public banks are more exposed to credit risk than private banks because they play an important role in facilitating the political credit and loans. They are less sensitive to macroeconomic shocks in comparison with the private banks (Micco and Panizza, 2004).

For market risk, private banks are more level than public banks. Moreover, private banks have a goal of maximization profit that encourages more transactions in the capital market and deposits. For operational risk, public banks have the protection of the state which their precedence over private banks. Indeed, the government part of capital, guarantee financial and legal protection in particular on the market and to protect banks against the risk of default (Megginson & Netter (2001).

Moreover, foreign ownership may influence the risk of local banks in several ways. Indeed, when foreign banks exercising more competition, domestic banks are trying to increase their credits (which increase the credit risk), but they are encouraged to increase the efficiency and new information technologies (which decreases the insolvency risk). Growth operations in the banking market increases the risk of local banks. In addition to the investments made by national's banks to act competition, additional training for enable managers reduces their operational risk.

Claessens *et al.,* (2000) argued that foreign banks perform better in developing countries as compared to when they are in developed countries. Thus, they conclude that domestic banks perform better in developed countries than when they are in developing countries. They further emphasized that an increase in the share of foreign banks leads to a lower profitability of domestic banks in developing countries. Thus, does ownership identity influence the performance of commercial banks? Studies have shown that bank performance can be affected by internal and external factors (Athanasoglou *et al.,* 2005 & Aburime, 2005).

Scholars such as Gordon *et al.,* (2009) and Hafizuddin-Syah *et al.,* (2014) suggested the inclusion of contingent variables to strengthen the relationship between ERM implementation and firm performance. Hence, in line with Baron and Kenny (1986),

the authors proposed board equity ownership as a moderating variable that could strengthen the relationship between ERM framework implementation and firm performance. Furthermore, DeLoach and Thomson (2014) contended that ERM framework could lead to high firm performance if efficiently designed and implemented.

Indeed, equity incentives serve as a risk management strategy in organizations (Bouwens and Verriest, 2014). Apparently, equity holdings may lead managers to take risk mitigating strategies to protect the operating efficiency of the firm. Ren *et al.,* (2012) investigated how the board of directors and managerial ownership influence the relationship between research and development and firm performance. The study revealed that firm performance is negatively related to board stock ownership, the frequency of board meeting and managerial stock ownership. Hence, board equity ownership strengthened or change the relationship between ERM implementation and firm performance.

Dadson (2012) did a study on concentrated share ownership and financial performance of listed companies in Ghana. Data on listed firms at the Ghana Stock Exchange over a period of ten years between 1999 and 2008 was used. The study used panel data regression analysis and performance was measured by using Tobin's Q and ROA. Significant statistical relationships were found in this research. The findings showed that share ownership on the Ghana Stock Exchange is heavily concentrated in the hands of Ghanaians and that ownership concentration, institutional and insider ownership precipitate higher firm financial performance. He recommended that there is the need to encourage concentrated ownership structure and those investments by

insider and institutional ownerships should be promoted in order to ensure proper monitoring, reduced agency costs and improve performance.

Mwathi (2009) studied on the relationship between commercial banks' financial performance and their ownership structure. She categorized them as be private banks, government banks, foreign banks, domestic banks. Using regression analysis, the study was centered on banks where the top 10 shareholders hold more than 50% of the shares for the period between 2004 and 2008 in Kenya. Using ROA as the performance measure, the study revealed that bank ownership structure had a fair positive influence on performance. The findings also showed that both private and state-owned banks had a negative correlation with performance. She underscored that both banks that are foreign owned and those owned domestically had a positive correlation with performance. The study hypothesized that commercial banks that are state owned perform dismally than the foreign or domestic commercial banks. The study concluded that widely held banks perform well than closely held ones.

Bwire (2012) did a correlation study to establish whether there are any differences between the profitability of foreign and local banks listed at the NSE by examining the determinants of their profitability. The sample involved 3 foreign commercial banks and 6 local commercial banks listed at the NSE. Data was scrutinized using correlation analysis, descriptive analysis, and regression analysis. The study showed that there were no significant differences between the performance of foreign and domestic listed banks. The regression findings also revealed that foreign ownership did not affect bank profitability. The study also found that none of the variables had a significant influence on ROA or ROE. The study hypothesized that listed foreign banks in Kenya do not outperform the domestic listed banks.

In addition, the magnitude of the effect can be influenced by the decision of the management. The management decision, in turn, is affected by the welfare of the owners which is determined by their investment preferences and risk appetites (Ongore, 2011). This implies the moderating role of ownership. Ownership is one of the factors explaining the performances of banks across the board; yet the level and direction of its effect remained unresolved. This study attempted to examine whether bank ownership significantly moderate the relationship between risk management practices and commercial banks' financial performance in Kenya.

Foreign banks tend to implement products that have been rolled out in other regions which do not automatically suite in the developing economies where they operate thereby resulting to poor performance according to the institutional theory. Nevertheless, there are some strategies that jell in well and turn out to be very successful. Bwire (2012) hypothesized that listed foreign banks in Kenya do not outperform the domestic listed banks

A position supported in the study done by Claessens *et al.,* (1998) which showed that foreign banks are more profitable than the domestic owned banks in developing countries. These two empirical studies reveal a gap since we have seen the opposite outcomes in the recent years in Kenya where domestic banks are performing better than foreign banks. This study attempted to examine whether ownership structure significantly moderate the relationship between risk management practices and financial performance of financial institutions in Kenya.

2.8 Effect of Financial Institution Size on Financial Performance

During the study size of the financial institution was the control variable. The Market-Power hypothesis explains that the effect of a growing size on firms' profitability is

significantly positive to a large extent. Athanasoglou *et al.,* (2008) argues that larger firms are more efficient and profitable than smaller firms as a result of their superior efficiency as explained by relative efficiency hypothesis. Clarke, (2009) on Expansion of firm size may further separate ownership from control if the size has reached a threshold. Hence, the relationship between firm size and profitability can become negative beyond the threshold firm size (Fama & French, 2005) captured much of the cross-section of average stock returns.

From the company's perspective, small firms apparently faced higher capital costs than larger firms. This is included to control for the possibility that large banks are likely to have greater product and loan diversification. The impact of bank size on profitability is uncertain a prior for the fact that on the one hand, increased diversification implies less risk and hence a lower required return, and on the other hand, bank size considers differences brought about by size such as economies of scale. For large firms their size permits them to bargain more effectively, administer prices and in the end realize significant higher prices for the particular product (Agu, 1992). In most finance literature, total assets of the banks are used as a proxy for bank size.

Yoon and Jang (2005) studied the relationship between return on equity (ROE), financial leverage and size of firms in US for the period 1998 to 2003 using ordinary least squares (OLS) regressions. Findings show that high leveraged firms were less risky in both market and accounting-based performance measures. The results also support for positive relationship between financial leverage and both measures of performance. Additionally, the results further indicate that firm size had a more

dominant effect on ROE than debt, and regardless of the level of leverage, smaller firms were relatively more risky than larger firms.

Said *et al.,* (2008) investigated the performance and financial ratios of commercial banks in Malaysia and China. They investigated the impact of bank-specific factors which include the liquidity, credit, capital, operating expenses and the size of commercial banks on their performance, which was measured by return on average assets (ROAA) and return on average equity (ROAE). The study used income statement and balance sheet of commercial banks of Malaysia and People's Republic of China using panel data for the period 2001 to 2007. The empirical analysis of the study was based on panel data fixed effect model that incorporates balanced annual data series. The size of the bank was measured by real assets and squared real assets in logarithms. One of the finding of their study was that liquidity and size of banks somehow do not have any influence on the performance of banks for both countries.

Awojobi *et al.,* (2011) empirically investigated the key determinants of bank risk management efficiency in Nigeria. Their study covers a period of seven financial years from 2003 to 2009, taking nine largest banks in terms of asset base which accounted for 78 percent of total assets in the Nigerian banking industry. They examined a long run equilibrium among financial ratios with uncertain coefficients, macroeconomic variables, and capital ratio which was the proxy for risk management efficiency. Panel regression methodology was employed to cover both bank-specific and macro-determinants. Empirical findings of their study showed that bank capital adequacy is positively associated with liquidity, bank size and market risk. Bank size from results was proven to be statistically insignificant.

Al Karim *et al.,* (2013) carried out a research to determine whether bank size, credit risk, asset management and operational efficiency have statistically significant impact on internal based performance (ROA) of Bangladeshi Private Sector commercial banks. Three indicators namely, Internal-based performance measured by Return on Assets, Market-based performance measured by Tobin's Q model (Price/Book ratio).

Generally, the relationship between bank size and bank performance is considered positive (Iannotta *et al.*, 2007 & Mercieca *et al.*, 2007), However there are several studies where it was suggested that the impact of size could be non-linear with profitability growing with size and falling for bureaucratic and other reasons (Athanasoglou *et al.*, 2008). Considering the above studies, Said *et al.*, (2008) findings differ from that of (Awojobi 2011 and Al Karim *et al.*, 2013).

2.9 Theoretical Framework

During the study theories explaining the effects of ownership structure and the relationship between risk management practices and financial performance of financial institutions in Kenya was sought. The theories covered are Agency theory, Risk management theory and Enterprise risk management (ERM) theory and framework.

2.9.1 Agency Theory

According to the agency theory of the firm espoused by Jensen and Mekling (1976), the modern corporation is subject to agency conflicts arising from the separation of the decision-making and risk-bearing functions of the firm. In this setting, Jensen and Mekling (1976) show that managers tend to engage in excessive perquisite consumption and other opportunistic behavior since they receive the full benefit of

such activity but bear less than their full share of the costs. Diffuse ownership (individual owners) also makes it difficult for owners to effectively coordinate their actions. Higher levels of monitoring could encourage managers to avoid strategic decisions that harm shareholder value.

In fact, research evidence shows that ownership concentration is associated with lower levels of firm product diversification. Thus, with high degree of ownership concentration, the probability is greater that managers' strategic decisions will be intended to maximize shareholder value. Much of this concentration has come from increasing equity ownership by institutional investors. Goergen and Renneboog (2001) argued that if there are insufficient monitoring mechanisms in a firm such as having a diffuse ownership structure (which is the opposite of the ownership concentration structure), it may lead to high managerial discretion which may increase the agency costs.

As has been argued in the literature, the level of monitoring is a function of such variables as institutional ownership, block ownership by outsiders, the technology in place to monitor the managers Bajaj, Chan and Dasgupta (1998) and forecasted profit gain derived from the monitoring (Demsetz & Villalonga, 2001). Lee (2008) conceptualized most shareholders as those who are interested in the future dividend stream rather than the future of the firm performance, and hence they would rather sell the shares rather than exercise their rights.

Most of them do not have knowledge to make informed decisions about their investments. Therefore, the agency problem is high in dispersed ownership since shareholders tend to free ride hence reducing their incentive to monitor. He also noted that foreign owners and institutions have the resource capability to properly monitor

compared to the other ownership identities. Douma *et al.,* (2006) also suggest that foreign financial institutions' investment decisions are made by fund managers hence lesser agency problems because they have better monitoring capabilities.

The agency theory holds that most businesses operate under conditions of incomplete information and uncertainty. Such conditions expose businesses to two agency problems namely adverse selection and moral hazard. Adverse selection occurs when a principal cannot ascertain whether an agent accurately represents his or her ability to do the work for which he or she is paid to do. On the other hand, moral hazard is a condition under which a principal cannot be sure if an agent has put forth maximal effort (Eisenhardt, 1989).

It has been pointed out that separation of control from ownership implies that professional managers manage a firm on behalf of the firm's owners. Conflicts arise when a firm's owners perceive the professional managers not to be managing the firm in the best interests of the owners. According to Eisenhardt (1989), the agency theory is concerned with analyzing and resolving problems that occur in the relationship between principals (owners or shareholders) and their agents or top management. The theory rests on the assumption that the role of organizations is to maximize the wealth of their owners or shareholders (Blair, 1995).

According to the agency theory, superior information available to professional managers allows them to gain advantage over owners of firms. The reasoning is that a firm's top managers may be more interested in their personal welfare than in the welfare of the firm's shareholders. Managers will not act to maximize returns to shareholders unless appropriate governance structures are implemented to safeguard the interests of shareholders. Therefore, the agency theory advocates that the purpose

of corporate governance is to minimize the potential for managers to act in a manner contrary to the interests of shareholders.

Proponents of the agency theory opine that a firm's top management becomes more powerful when the firm's stock is widely held and the board of directors is composed of people who know little of the firm. The theory suggests that a firm's top management should have a significant ownership of the firm in order to secure a positive relationship between corporate governance and the amount of stock owned by the top management (Mallin, 2004). Wheelen and Hunger (2002) argue that problems arise in corporations because agents (top management) are not willing to bear responsibility for their decisions unless they own a substantial amount of stock in the corporation.

The agency theory also advocates for the setting up of rules and incentives to align the behaviour of managers to the desires of owners. However, it is almost impossible to write a set of rules for every scenario encountered by employees. Carpenter and Westpal (2001) opine that the agency theory is mainly applied by boards of profit-making organizations to align the interests of management with those of shareholders, and that the demands of profit-making organizations are different from those of stakeholders such as shareholders, local communities, employees and customers. The conflicting demands can be used to justify actions that some may criticise as immoral or unethical depending on the stakeholder group.

This theory brings out an understanding to the relationship between ownership concentration, ownership identity (foreign and local ownership) and performance. Foreign ownership therefore, would lead to better performance. This theory is relevant to this study because the State ownership would be deemed inefficient due to

the lack of capital market monitoring which according to the Agency theory would tempt manager to pursue their own interest at the expense of the enterprise. Managers of private banks will have greater intensity of environmental pressure and capital market monitoring which punishes inefficiencies and makes private owned firms economically more efficient (Lang and So, 2002).

2.9.2 Risk Management Model

Wenk (2005), states that the Risk Management model consists of risk identification, risk assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events or to maximize the realization of opportunities. Risks can come from uncertainty in financial markets, project failures, legal liabilities, credit risk, accidents, natural causes and disasters as well as deliberate attack from an adversary, or events of uncertain or unpredictable root-cause.

Several risk management standards have been developed including the Project Management Institute, the National Institute of Science and Technology, actuarial societies, and ISO standards. Methods, definitions and goals vary widely according to whether the risk management method is in the context of project management, security, engineering, industrial processes, financial portfolios, actuarial assessments, or public health and safety (Simkins and Fraser, 2010).The strategies to manage risk typically include transferring the risk to another party, avoiding the risk, reducing the negative effect or probability of the risk, or even accepting some or all of the potential or actual consequences of a particular risk.

Effective risk management can bring far reaching benefits to all organizations, whether large or small, public or private sector (Ranong and Phuenngam, 2009). These benefits include, superior financial performance, better basis for strategy setting, improved service delivery, greater competitive advantage, less time spent fire fighting and fewer unwelcome surprises, increased likelihood of change initiative being achieved, closer internal focus on doing the right things properly, more efficient use of resources, reduced waste and fraud, and better value for money, improved innovation and better management of contingent and maintenance activities (Wenk, 2005).

Effective risk management structure supports better decision making through a good understanding of the risks and their likely impact. In practicing Risk Management (RM), if risks are left unmanaged, they can cause a negative impact on stake holder's value. It therefore means that good risk management enhances shareholders value. By creating a good discipline in risk management, it helps improve governance process and therefore improves effectiveness (Moore, 1983). According to Dorfman (2007), ensuring that an organization makes cost effective use of risk management first involves creating an approach built up of well-defined risk management and then embedding them.

According to standard economic theory, firm managers ought to maximize expected profits without regard to the variability of reported earnings. However, there is now a growing literature on the reasons for managerial concern over the volatility of financial performance, dating back at least to 1984. Stulz was the first to offer a viable economic reason why firm managers might concern themselves with both expected

profit and the variability around this value. These risk management include financial risks management, operational risk management, governance risk management, and strategic risk management. The Risk Management theory is applied in the study to determine the risk management practise, its effects on financial performance of financial institutions in Kenya.

2.9.3 Theory of Enterprise Risk Management (ERM)

According to Tseng (2007), Enterprise Risk Management (ERM) focuses on adopting a systematic and consistent approach to managing all of the risks confronting an organization. Gordon *et al.,* (2009) on the other hand define 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 is an organizational concept that applies to all levels of the organization".

Enterprise risk management (ERM) itself has different meanings, is described as an intensive process that measures all of a company's risks. This includes providing managers with an understanding of the full array of a company's risks including financial risks, investment-oriented risks operations-based risks, market risks, legal risks and regulatory risks for all of the locations in which a company operates or invests (Peterson 2006). Risk can also be as a result of political or social conditions in locations where a company has operations, suppliers or customers (Woodward 2005).

According to Committee of Sponsoring Organizations Treaty (COSO) (2004), "Enterprise risk management is a process, effected by an entity's board of directors, management and other personnel, applied in strategy setting and across the enterprise,

designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives". In conducting ERM, the following are listed as some of the areas or aspects of the organization that a risk manager need to look into namely: the people, intellectual assets, brand values, business expertise and skills, principle source of profit stream and the regulatory environment (Searle, 2008).

This will help 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 is constantly aware of the risks it faces and therefore constantly monitors its exposure and be positioned to change strategy or direction to ensure the level of risks it takes is acceptable. ERM is also an important aspect of risk to a company's reputation (Ruquet 2007).

Enterprise risk management is described as a risk management practice through which managers assure that resources are obtained and used effectively and efficiently in the accomplishment of the organization's objectives (Anthony 1965). ERM become a strategic management control system applied in strategy setting to provide assurance regarding the achievement of entity objectives, just as the advocates of value-based management, activity-based management, the balanced scorecard, and other management control practices have preached (COSO 2010).

Enterprise Risk Management is concerned about a holistic, company-wide approach in managing risks, and centralized the information according to the risk exposures.

They use the term ―Risk Universe, which is the risk that might impact on the future cash flow, profitability and continued existence of a company. In other words, risk universe is risk that could affect the entity of the company. If risk universe can be identified, the next step is to take an appropriate action such as risk mapping process, accessing the likelihood and impact and curb the risk based on the organizations' objective (Alviunessen and Jankensgard 2009).

Therefore, Enterprise Risk Management concept can be defined as a systematically integrated and discipline approach in managing risks within organizations to ensure firms achieves their objective which is to maximize and create value for their stakeholders. The main role of ERM itself, it integrates and coordinates all types of risks across the entire organization. It means that risks cannot be managed in silo approach. All risks occurred in the entity must be combined and managed in enterprise approach.

Practicing Enterprise Risk Management should be observed upon three perspectives: globalization; changes in the role of risk managers; and regulatory. From the globalization perspective, it created multiple risks perceptions, fast growing technologies and interdependency of risks. From the role of risk manager, risks should not be treated as a trouble, but also as an opportunity. Finally from the regulatory oversight factors perspective, appointing Chief Risk Officer (CRO) and the establishing Risk Management Committee (RMC), the adoption of ERM will become a reality (Lam 2000).

ERM is important in many perspectives; there are four main reasons why US companies exercise ERM (KPMG 2009). First, the organization desire to reduce potential financial losses (68 percent). Secondly, organization desire to improve business performance (64 percent). Thirdly, the regulatory compliance requirements (58 percent) and finally the organization desire to increase risk accountability (53 percent).

The common elements of ERM includes having top management lead risk management, creating a culture of risk management where it is part of all decisions, setting clear risk parameters and having them broadly adhered to, having the discipline to make risk management a priority in good times and bad and setting clear measurements for risk management and making managers accountable for these measures (Kaplan 2011). According to Kaplan it's the value in understanding risk management at the firm level. The firm level risk management focus is relevant for firms to understand and put in place good risk management processes and practices.

Corporate scandals and diminished confidence in financial reporting among investors and creditors have renewed Corporate Governance as a top-of-mind priority for Boards of Directors, Management, Auditors, and Stakeholders. At the same time, the number of companies trying to manage risk across the entire enterprise is rising sharply. Thus, there is need for companies to effectively integrate Enterprise Risk Management with Corporate Governance (Sobel and Reding, 2004). These capabilities inherent in enterprise risk management help management achieve the entity's performance and profitability targets and prevent loss of resources.

Enterprise Risk Management helps ensure effective reporting and compliance with laws and regulations, and helps avoid damage to the entity's reputation and associated consequences. It delivers a current, credible understanding of the risks unique to an organization across a broad spectrum that includes all types of risk (credit risk, operational risk, market risk, liquidity risk and trading risk), lines of business and other key dimensions (SAS, 2010). In sum, Enterprise Risk Management helps an entity get to where it wants to go and avoid pitfalls and surprises along the way (Nocco and Stulz, 2006).

For a long time it was believed that corporate risk management is irrelevant to the value of the firm and the arguments in favour of the irrelevance were based on the Capital Asset Pricing Model Lintner, (1965), Mossin, (1966) and the Modigliani-Miller theorem (Modigliani and Miller, 1958). Miller and Modigliani's proposition supports CAPM findings. However, proponents of the value adding effect of ERM define ERM as a body of knowledge - concepts, methods, and techniques - that enables a firm to understand, measure, and manage its overall risk so as to maximize the company's value to shareholders and other stakeholders (COSO, 2004).

It has been argued that, while traditional risk management is largely concerned with protecting the firm against adverse financial effects of risk, Enterprise Risk management makes risk management part of the company's overall strategy and enables companies to make better risk adjusted decisions that maximizes shareholder value (Lam and Kawamoto, 1997). International Business Machines (2005), Golshan and Rasid (2012) found out that risk management regulations contribute to the success of firms in the following ways; lead to better alignment of risk level with172 business strategies, optimize capital allocation, protect and enhance the firm's reputation and

boost efficiency of risk transfer as well as create value by rationalizing the interaction of risk across the enterprise and exploiting natural hedges.

The Central Bank of Kenya (Regulator of financial institutions) developed risk management guidelines in 2005 for commercial banks and financial institutions (CMA, 2010). The risk-based framework would enable the financial institutions to profile various risks affecting enterprises in Kenya and this was expected to improve accuracy in investment decisions (Kilonzo, 2011). It would also provide advance knowledge and information based on a ratings system, the firms that were perpetually risky in terms of operations, those facing financial distress with continuous losses and those which engaged in unethical practices would be put in the profile (Capital Market Authority, 2010).

The Deloitte and Touche report on enterprise risk management of 2012, found out that majority (85%) of the CEO interviewed felt that effective ERM has an impact on financial performance. The impact was manifested in the following; reduced volatility, better cash flow management, compliance and enhanced liquidity stability. In terms of corporate governance, as contained in the Capital Market Authority (CMA) legal Notice Number 3362 of 2002, one of the role of directors of listed firms was to develop risk policy plan and the same information be disclosed in the annual financial reports.

2.10 Conceptual Framework

In order to bring to light the effects of ownership structure on the relationship between risk management practices and performance of financial institutions, the study attempted to isolate the key variables underpinning the study as shown in Figure 2.1. The independent variables were the risks management practices (risk identification,

risk analysis, risk evaluation and risk monitoring). Risk management practices was explained by risk identification, risk analysis, risk evaluation and risk monitoring practices. The dependent variables were financial performance of financial institutions and its effect can be seen from the dimensions of financial performance of financial institutions indicators. In the conceptual framework it was assumed that various types of ownership structure have a direct influence on financial institutions' risk management practices. In linking the risk management practices and financial performance for financial institutions, risk management practices were correlated with the ROA.

The moderator was ownership structure comprise the type of ownership. Moderating variables in this study is variable that affects the strength of the relation between Risks management practices and financial performance of financial institutions. In this study, the size of foreign owned and locally owned financial institutions was the moderator. The control variable was the size of the financial institution.

Independent variables (Risk management practices) **Moderating Variable** **Dependent Variable (Financial firm performance)**

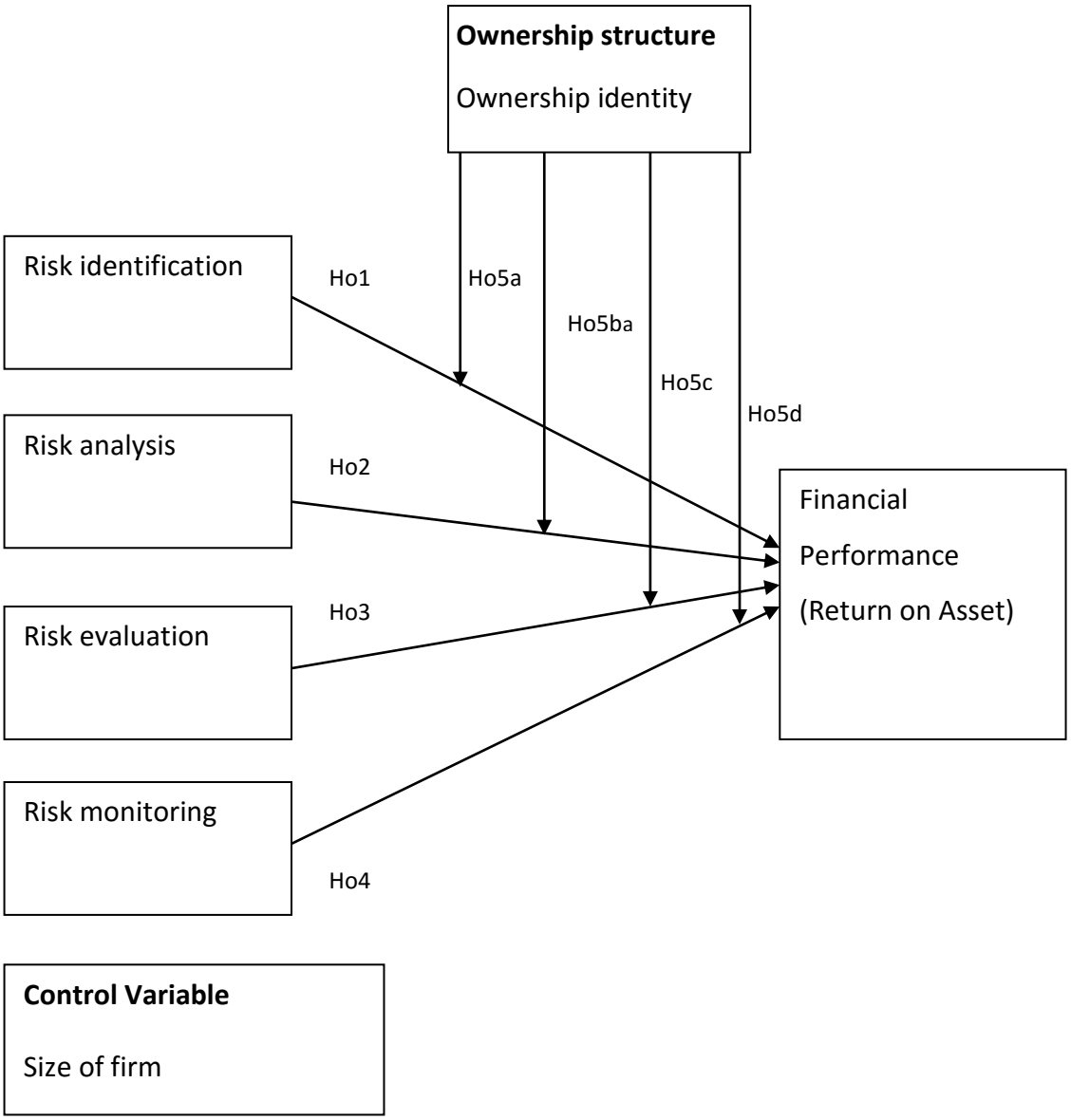

Figure 2:1 Conceptual framework
Source: Research 2016

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Overview

The chapter outlines the research design, study area, target population, sampling procedures and sample size, research instruments, viability and reliability of research instruments, data collection procedures, data analysis to be used.

3.1 Research Paradigm

This study based on pragmatic philosophical research paradigm whose approach applies pluralistic means of acquiring knowledge about a phenomenon (Morgan, 2007). Creswell (2013) supports this and argues that, pragmatism makes it possible to work within the positivist and interpretivist approach. This integrated point of view allows the usage of multiple ways to answer research questions at hand.

The study was conducted based on positivism paradigm. This perspective is characterized by a belief theory before research is statistically justified by testing hypothesis (Cooper & Schindler, 2011). The study is an empirical analysis of the effect of ownership structure on the relationship between risk management practices and financial performance of financial institutions in Kenya that was guided by theories, and models. The theories include agency theory, risk management and enterprise risk management framework. The theories used in the study were to explain what informed the choice of study variables.

The study was essentially envisaged to establish possible correlation between risk management practices and financial performance and further find out the moderating effect of ownership structure on the relationship between risk management practices

and financial performance if they existed. Explanatory research design used in this study strongly goes in line with pragmatic views of tackling issues with a view of acquiring in-depth information.

3.2 Research Design

The study adopted explanatory research design that is quantitative in nature and hypotheses tested by measuring the relationships between variables, while data is analyzed using statistical techniques. It also included quantitative research such as multiple regressions which attempted to identify the effects and interactions among the variables (Maxwell & Mittapalli 2008). The explanatory research design was suitable because the study is mainly concerned with quantifying a relationship or comparing groups purposely to identify a cause-effect relationship. The design was also adopted as it supports the use of quantitative data and promotes comparison and statistical analysis. It provided the opportunity for presenting a greater diversity of divergent views.

Quantitative research has typically been directed at theory verification, while qualitative research has typically concern with theory generation. Tashakkori & Teddlie (2010) supported mixed methods and argued that it helps in answering questions which cannot be answered by qualitative and quantitative approaches alone. A major advantage of using the mixed methods research in the study was that it enabled the researcher to simultaneously answer confirmatory questions regarding the moderating effect of ownership structure on the relationship between risk management practices and performance of financial institutions, through both open and closed ended questionnaires.

The study solicited for quantitative data which was analyzed descriptively and inferentially. This enhanced generalization of the study Cooper and Schindler (2011)

suggested that using descriptive research enable an in depth study of phenomena or characteristics associated with subject population such as who, what, when, where, and how of a topic; estimation of proportions of population that have these characteristics, determine bivariate or multivariate correlation between variables, cross tabulation of information, strength of relationship or magnitude of relationship and determine the correlation between different variables.

Compared with other designs explanatory design, gave the readers a suitable answer addressed to the research question. In other words, it is used for testing hypothesis (Hair *et al.*, 2011). Therefore, the ultimate goal of this study is to test if relationship exists between risk management practices and performance of financial institutions and the moderating effect of ownership structure. That is to say, the aim is to find causes and effects mentioned in Ghauri and Gronhaug (2005). Hence, the study employed explanatory research design.

3.3 Study Area

The study was conducted in Kenya, in order to look at the ownership structure, risk management practices and its effects on performance in the Kenyan financial sector, an explanatory research design was used where primary data was gathered from randomly selected commercial banks, Savings and Credit Cooperative (SACCO) and Micro Finance institutions (MFI) licensed and operating in Kenya. Financial institutions play a vital role in the economic resource allocation of countries. They channel funds from depositors to investors continuously. Kenya in December 2015 had 46 commercial banks and 52 Micro Finance institutions (MFI) and 200 licensed SACCOs.

3.4 Target population

The population refers to the group of people or study subjects who are similar in one or more ways and which form the subject of the study in a particular survey (Kerlinger, 2003). The research comprises of all the financial institutions in Kenya that are licensed according to the central Bank of Kenya (2015). There were 46 commercial banks and 52 Micro Finance institutions (MFI) (CBK, 2015) and 200 SACCOs as at 31st December 2015 (SASRA 2015) licensed financial institutions in Kenya to carry out deposit taking and banking business in Kenya. The unit of analysis was the unit managers from finance, risk and credit. The target population constituted three managers from each financial institutions category giving a total of 894 respondents as shown in the table 3.1 below.

Table 3.1 Target Population

Category of financial institutions	Financial institutions	Target population
Commercial banks	46	138
Micro Finance institutions (MFI)	52	156
SACCOs	200	600
TOTAL	**298**	**894**

Source: Research 2016

3.5 Sampling Procedures and Sample Size

Sampling is a procedure of selecting a part of population on which research can be conducted, which ensures that conclusions from the study can be generalized to the entire population. The sampling frame for this study was derived from the all 298 licensed financial institutions in Kenya registered and operational under the Banking Act as at the end of 2015. Sampling means selecting a given number of subjects from

a defined population as representative of that population. Polit and Hungler (2005) argue that it is difficult to give precise rules on what sample size is suitable. Given that the target population was financial institutions.

The researcher adopted stratified and random sampling to derive the sample size. This study used stratified random sampling techniques which ensure all the respondents are considered in their unique strata. The study first stratified the financial institutions into three categories on the basis of their operation as well as the managers (CBK, 2011). Stratified random sampling is the process of selecting a sample in such a way that identified subgroups in the population are represented in the sample in the same proportion as they exist in the population (Frankel, *et al.,* 2000). While a simple random sample is one in which each and every member of the population has an equal and independent chance of being selected as a respondent (Frankel *et al.,* 2000).

The major issue in sampling is to determine samples that best represent the population so as to allow for an accurate generalization of results. The study used Yamane's (1967) sample size for proportions, at 95% confidence level, P = 0.05, the sample size was computed as hereunder:

$$\mathbf{n} = \frac{N}{1 + N(e)^2}$$

Where; n = the sample size, N = the population size, ε= the acceptance sampling error

=894/1+894(0.0025)

=894/3.235

=276 respondents

From the target population of 894 respondents from 298 financial institutions, a sample size of 276 respondents comprising of finance managers, risk officers and credit officer was chosen from each of the strata as summarized in Table 3.2. This sample fairly represented the whole target population and was considered large enough to provide a general view of the entire population and serve as a good basis for valid and reliable conclusion.

Table 3.2 Sample Size of Respondents

Category of financial institutions	Target population	Finance manager	Risk officer	Credit officer	Sample Size
Commercial banks	138	14	14	14	**42**
Micro Finance institutions (MFI)	156	16	16	16	**48**
SACCOs	600	62	62	62	**186**
TOTAL	**894**	**92**	**92**	**92**	**276**

Source: Research 2016

The finance manager, risk officer and credit officer were sampled because they are more informed and have a similar characteristic such as education and experience in dealing with risk management practices. Therefore, more homogeneous than when they have different characteristics, to be included in the sample. This technique is appropriate for the study as it is cost effective and efficient in administration. The sampling technique gave each finance manager, risk officer and credit officer in the population an equal probability of getting into the sample.

3.6 Research Instruments

In order to understand the effects of ownership structure on the relationship between risk management practices and performance of financial institutions in Kenya, the

researcher used quantitative method. The study applied data from both primary and secondary sources. The researcher used questionnaires instruments to collect data. A total of 276 questionnaires were administered in this research. Questionnaires are set of questions which are answered by the research participants in a set of ways. According to Kombo and Tromp (2006), a questionnaire is a research instrument that gathers data over a large sample.

The questionnaires were designed to gather already structured data and includes a set of answers which the respondent can choose from, although some may include more open-ended questions which allow the respondent to answer the question in their own way. Others gave a provision where all the participants are asked the same questions in the same order and using the same wording and have the same set of answers to choose from (Matthews & Ross, 2010). The questionnaire has some advantages over other instruments. It is less expensive, particularly in terms of the time spent collecting the data. Questionnaire can be given to a large number of people simultaneously; they can also be sent by mail. Therefore, it is possible to cover a wide geographic area and to question large numbers of people relatively inexpensively.

A questionnaire was preferred in the study for collecting data because the questions, wordings and sequence identical to risk management departments. It has the advantage of obtaining standard responses to items, making it possible to compare between sets of data. It also allowed the participants to give their own opinion on the issue at stake (Matthews & Ross 2010). The questionnaire constituted background information of the respondents and the part that sought to answer the research objectives.

According to Best and Kahn (2008) closed ended questions yields quantitative data, while interviews, observations and open-ended questions yield qualitative data which describe changes. Rating scales used in questionnaires provided quantitative data which measure success. The questionnaire consisted of closed ended, open-ended and dichotomous questions and divided into four parts to capture information for each of the variable (firm performance, ownership identity, risk identification, risk analysis, risk evaluation and risk monitoring).

The closed ended (likert scale) and dichotomous questions had categorized and exhaustive response while the open-ended questions had unlimited response. The respondents were required to fill the questionnaires on their own and where they needed clarification they were assisted. Other studies that have preferred the use self-administered questionnaires include; Simiyu (2012), Kasiva, (2012), Ignore (2011) and (Cohen and Sayag, 2010).

For measuring variables of the current study, namely risk identification, analysis of risk, risk monitoring and risk evaluation measurement, the study used questionnaires to collect data from the managers of financial institutions. This was adopted from the current available literature (Al-Tamimi, 2002, Al-Tamimi and Al-Mazrooei, 2007, Abu Hussain and Al-Ajmi, 2012). The ownership structure was measured using an instrument developed using Moussa Aymen (2014) approach on the impact of ownership structure on bank risk. The financial performance adopted accounting based measures developed by Al-Matari, Al-Swidi and Bt Fadzil (2014) on the measurements of firm performance's dimensions.

A comprehensive questionnaire with structured questions was administered to the finance manager, risk officer and credit officer of respective financial institutions.

This tool was used to collect the primary data for the study. The questionnaire was administered through the “drop and pick later” method. The follow-up was done by emails, Short Message Service (SMS) and phone calls, on arrangements some questionnaires was personally administered to the respondents. All the questions in the questionnaire were related to the objectives of the study and the research questions of the study.

3.7 Pilot Test

A pilot test was done to check the construct validity and internal consistency, reliability of the questionnaire in gathering the data. A sample of three (3) financial institutions that had met the criteria (Licensed and operating commercial banks, Licensed and operating Microfinance institution and Licensed and operating deposit taking Sacco’s) were chosen. The sample chosen for pilot study was three financial institutions with similar characteristics and a total of 18 respondents obtained.

In order to lessen the danger of obtaining inaccurate answers to research questions emphasis on two particular research designs was considered: validity and reliability (Saunders *et al.*, 2007). Validity is the ability of a chosen instrument to measure what it is supposed to measure. Reliability is the extent to which research results would be stable or consistent if the same technique is repeatedly done. Moreover the way the measuring is conducted and how the information is processed affects the reliability (Fraenkel and Wallen, 2006).

3.7.1 Validity of Research Instruments

Validity is the ability of a chosen instrument to measure what it is supposed to measure (Carmines and Zeller, 1979). It is also regarded as the most important criterion of research by Bryman & Bell (2011). Validity has several types. Internal

validity focuses on the question of causality which essentially means the causal relationship between two or more variables (Bryman & Bell, 2011). Besides, validity relates to the capacity of results which can be generalized beyond the specific research context (Bryman & Bell, 2011).

In this study, the main concepts are ownership structure, risk management practices and performance of financial institutions. The study used risk identification, risk analysis, risk evaluation, risk monitoring to reflect the risk management practices and use and ROA to measure performance of financial institutions. However, Goddard, Molyneux & Wilson (2004) used ROA as profitability measure to study the determinants of financial institutions performance. Therefore, ROA is valid as financial institutions performance measures.

Besides, the causal relationship in this study is to find out whether the independent variables: risk identification, risk analysis, risk evaluation, risk monitoring, have any impact on the dependent variables, ROA. To ensure the relationship is authentic, the study performed the statistical tests to measure multicollinearity and heteroscedasticity. In order to establish the possibility of other factors which may affect the relationship and cause bias so that also included control variables i.e. size of foreign ownership, state ownership, locally ownership, individual ownership, and institutional ownership as moderating variable.

The researcher used expert opinion to assess the validity of the data collection tools. The researcher also sought assistance from the supervisors, colleagues and specialist in financial performance and risk management to improve validity of the instrument. To determine content validity of the instrument items, expert knowledge were obtained from risk experts and risk management financial analyst the study also sought supervisor’s assistance in ensuring that the instruments are in relation to the set

objectives and content area under study. The expert opinion in this case was the supervisors who assessed the data collection tool. According to Borg and Gall (2003) content validity of an instrument is improved through expert judgment.

The study established content and face validity to assess the accuracy, meaningfulness, appeal and appearance of the data collection instruments. For external validity, the purpose of the study was to investigate the effects of ownership structure on the relationship between risk management practices and financial performance of financial institutions in Kenya. The research considers 298 licensed financial institutions in Kenya. Therefore the study sample was the most representative group and has no problem with external validity.

3.7.2 Reliability of Research Instruments

Reliability is the extent to which research results would be stable or consistent if the same technique is repeatedly used. However, the way the measuring is conducted and how the information is processed affects the outcome of research (Fraenkel and Wallen, 2006). Bryman & Bell (2011) refer to reliability as the consistency of a measure of a concept. In this study, numerical and objective data was used. In addition, to maintain the accuracy of the data, the test was conducted in the consistent method using identical source of data. Another very similar criterion to test reliability was replication which emphasizes the capacity of replication to the research (Bryman & Bell, 2011).

The questionnaire for the study tested for reliability using Cronbach Coefficient Alpha to determine the internal consistency of the items in the questionnaire. The reliability was established through the pilot-test whereby some items may be added or dropped to enable amendment of the research instrument. The purpose of test-retest

method was to ascertain the reliability after correlation coefficient is established in the data. Consequently, this process provided good measures of reliability because holding other factors constant, the more similar the test content and conditions of administration are, the greater the internal consistency reliability Saunders *et al*, (2007).

In order to test the reliability of the instrument used in the study, the test-retest method was used. Cronbach's coefficient alpha was used to determine the reliability of the research instrument, where a reliability coefficient of 0.7 and above was assumed to reflect the internal reliability of the instruments (Fraenkel & Wallen, 2000). From the pilot results the Cronbach Coefficient Alpha computed from the 18 items representing the study variables gave an overall Cronbach Coefficient Alpha of 0.87. The item was found to be highly homogeneous and agreed with Saunders *et al*, (2007).

The study used the Cronbach Coefficient's alpha to test the reliability of the items on risk identification, risk analysis, risk evaluation, risk monitoring, ownership structure and financial institutions performance (ROA) at the pilot study. From the study all the variables had cronbach's alpha coefficients ranging from 0.788 and 0.948 and therefore all the items used in the instruments were retained for further study. The questionnaires were deemed reliable after many typographical errors and omissions detected were corrected in the instrument confirming that it was sufficient to be used in the main study.

3.8 Data Collection Procedures

Data collection refers to the gathering of information to serve or prove some facts (Cooper & Schindler, 2011). The researcher visited the study area before hand for

familiarization and acquaintance with financial institutions in Kenya. Prior to collection, research assistants who assisted in collection of data was trained and given letters of introduction. The data collection approach was to start from reporting to the office of the chief executive officer (CEOs) for formal introduction and to seek permission and explain the purpose of the study to be conducted in the institution.

The questionnaires were self-administered to the respondents (officers in charge of finance, audit and risk and credit management sections); however, provision for clarification on the instruments was done wherever it was necessary. Respondents were issued with questionnaires and were given one week to complete filling them. This study ensured that all information collected were categorized and measured according to the scale indicated. Similar responses for open ended questions were put together for analysis. The studies that have used likert scale measure method include; Deloitte (2012), Sindani (2012), Waweru and Kisaka (2009) and structured questionnaires in Kenya to collect data in their research

3.9 Data Analysis

After data collection, responses from all questionnaire's items were cross-checked to facilitate coding and analysis using Statistical Package for Social Sciences (Version 21.0) software. The research yielded quantitative data. Quantitative techniques such as descriptive statistics and inferential statistics were used to test relationships between different variables. The use of descriptive statistics for the variables under study was the preferred method to describe the demographic characteristics.

Factor analysis was employed in this regard to help in identifying the actual number of factors that actually measured each construct as perceived by the respondents. The validity of the instrument was measured through Bartlett's Test of Sphericity

(Muhammad, 2009). The component factor analysis with varimax rotation was conducted on all variables to extract factors from the scales of each construct. Based on the previous works of (Hair, Black, Anderson and Tatham, 2006) all items loading below 0.50 were deleted and those with more than 0.50 loading factor retained (Daud, 2004). All items were well loaded into their various underlying variable structure of dimensions. The principle component analysis and Varimax rotation were performed in all the items that had factor loadings lower than 0.50 were eliminated as postulated by Hair *et al.*, (2006).

According to Tabachnick and Fidell (2001), orthogonal rotation results in solutions that are easier to interpret and to report; however, they do require the researcher to assume that the underlying constructs are independent (not correlated). Oblique approaches allow for the factors to be correlated, but they are more difficult to interpret, describe and report (Tabachnick & Fidell, 2001). Within the two broad categories of rotational approaches there are a number of different rotational techniques provided by SPSS (orthogonal: Varimax, Quartimax, Equamax; oblique: Direct Oblimin, Promax).

The most commonly used orthogonal approach is the Varimax method, which attempts to minimise the number of variables that have high loadings on each factor. The most commonly used oblique technique is Direct Oblimin (Tabachnick and Fidell, 2001). To explain the interaction and relationship among the variables of the study, inferential statistics was used to estimate populations' parameters and testing of hypotheses. Pearson product moment correlation coefficient was used to test strength of the relationship between variables. It was appropriate to use the technique for interval and ratio-scaled variables.

This study used hierarchical regression models to investigate to establish the effect of ownership structure on the relationship between risk management practices on financial institutions performance variables. To establish the predictive power of each variable, hierarchical regression method was used to determine the expected relationship of each variable. Firstly, hierarchical regression analyses were conducted to test the relationship between control and performance of financial institutions. Secondly, involved the relation between risk management practices variables and ownership structure on performance of financial institutions. Third, fourth, fifth and sixth steps involved the the moderating effect of ownership structure on the relationship between risk management practices on performance of financial institutions was estimated using the following multiple regression equation.

In testing the six models, hierarchical moderated multiple regression, which is an extension of an ordinary multiple regression is used. The hierarchical moderated regression model allows the relationship between a dependent variable and an independent variable to depend on the level of another independent variable (i.e. the moderator) and is an appropriate method for detecting the effects of moderating variables (Bisbe & Otley, 2004). This method attempts to improve standard regression estimates by adding a third variable to an ordinary regression model.

This model is also used by other studies such as Bisbe and Otley (2004), Laeven and Levine (2009) and Barry, Lepetit and Tarazi (2010). The studies argue that, in order to run the hierarchical moderated multiple regression model, three steps or model are involved. This model adopted is similar to the one that had been used by researchers of the studies done in the area of ownership and financial performance (Ngumi, 2013, Ogilo, 2012, Ngigi, 2012, Chang, 2007, Waithaka and Ngugi, 2013, Agostino and Mazzuca, 2010). Hierarchical regression tests whether size of ownership structure

negatively, positively significantly moderates the relationship between risk management practices and performance of financial institutions.

3.9.1 Model Specification

This was predicted using the following models;

Control;

$Y= \alpha + \beta_0 Fsize+ \varepsilon$……..**Model 1**

On the direct effect;

$Y= \alpha + \beta_0 Fsize+ \beta_1 RI + \beta_2 RA + \beta_3 RE + \beta_4 RM + \beta_5 OS$ ……..**Model 2**

$Y= \alpha + \beta_0 Fsize+ \beta_1 RI + \beta_2 RA + \beta_3 RE + \beta_4 RM+ \beta_5 OS+ \beta_6 RI* OS$ …….**Model 3**

Moderated regression models;

$Y= \alpha + \beta_0 Fsize+ \beta_1 RI + \beta_2 RA + \beta_3 RE + \beta_4 RM+ \beta_5 OS+ \beta_6 RI* OS+ \beta_7 RA* OS$

……..**Model 4**

$Y= \alpha + \beta_0 Fsize+ \beta_1 RI + \beta_2 RA + \beta_3 RE + \beta_4 RM+ \beta_5 OS+ \beta_6 RI* OS+ \beta_7 RA* OS+ \beta_8 RE*$

OS…….…….**.....Model 5**

$Y= \alpha + \beta_0 Fsize+ \beta_1 RI + \beta_2 RA + \beta_3 RE + \beta_4 RM+ \beta_5 OS+ \beta_6 RI* OS+ \beta_7 RA* OS+ \beta_8 RE*$

$OS+ \beta_9 RM* OS$…….……....**Model 6**

Where;

Y = Dependent variables Return on Assets (ROA)

α = Constant (The intercept of the model)

Fsize =Firm Size

RI= Risk identification

RA= Risk analysis

RE= Risk evaluation

RM= Risk monitoring

OS= Size of ownership structure

RI* OS = Risk identification * ownership structure

RA* OS = Risk analysis ∗ ownership structure

RE* OS = Risk evaluation∗ ownership structure

RM* OS = Risk monitoring ∗ ownership structure

$\boldsymbol{\beta 1}$ … … . $\boldsymbol{\beta}$9 Coefficient of the variables

$\boldsymbol{\varepsilon}$ =is the error of prediction.

Moderated relationships were considered to exist when the dependent (Y) and independent (X) variables interacted with the moderator variable ownership structure. The relationships, varies depending on the value of a moderating variable (Z). This study examines a specific type of moderated relationship with a continuous dependent variable (Y), a continuous independent variable and an independent dichotomous categorical variable (Z). Given these variables, a moderated relationship exists if the relationship between X and Y is different for both levels of Z.

3.9.2 Multiple Regression Assumptions

Multiple Regression analysis was carried out using a model, which combines selected independent variables and dependent variables. There are four assumptions for Multiple Regression Analysis and it was important to test in order to test the assumptions for reliable results before drawing conclusions. The four assumptions of Multiple Regression that are not robust to violation and which can be dealt with if violated. These assumptions focus on normality, linearity, reliability of measurement and homoscedasticity (Appendix VIII)

i) Test for Normality

The first assumption is that variables were normally distributed. However non-normality distributed variables (highly skewed or Kurtotic variables or variables with

substantial outliers) can distort relationships and significant tests. In this study outliers were identified through visual inspection of histograms or frequency distributions. Bivariate/multivariate data cleaning can be important (Tabachnick and Fidell, 2001) in multi regression. Analysis by Osborne (2001) shows that removal of univariate and bivariate outliers may reduce the probabilities of type I and type II errors and improve the accuracy of estimate.

ii) Linear relationship between independent and dependent variable(s).

The second assumption was that there was a linear relationship between independent and dependent variables. Standard Multiple Regression may be only accurately estimate the relationship between dependent and independent variables if the relationships are linear in nature. In case of existence non-linear relationships (anxiety), it is essential to examine analysis for non-linearity. There is the relationship between IV and DV is not linear, the results of the regression analysis were under estimate the true relationship.

iii) Homoscedasticity

The third assumption was Homoscedasticity. Homoscedasticity means that the variable of errors is the same across all levels of the IV when the variance of errors differs at differed values of the IV, heteroscedasticity is marked, it can lead to serious distortion of finding and seriously weaken the analysis, thus increases the possibility of Type I error. This assumption was checked by visual examination of plot of the standardized residual (the errors) by the regression standardized predicted value. Generally, checking these assumptions carry significant benefit for the researcher. Making sure an analysis meets the curvilinearity and non-normality often boosts effect sizes, usually a desirable outcome (Field, 2009).

iv) Multicollinearity

Multicollinearity occurs when several independent variables correlate at high levels with one another, or when one independent variable is a near linear combination of other independent variables (Keith, 2006). The more variables overlap (correlate) the less able researchers separated the effects of variables. Statistical software packages include collinearity diagnostics that measure the degree to which each variable is independent of other independent variables. Tolerance and VIF statistics were used to carry out the diagnosis. The rule of thumb for a large VIF value is ten and tolerance should be greater than 0.2 (Keith, 2006 & Shieh, 2010). Small values for tolerance and large VIF values show the presence of multicollinearity (Keith, 2006).

3.10 Ethical Consideration

The researcher explained to the respondents the purpose of the study and all of them were assure of the confidentiality of the information they provided. The researcher assured them that the name of the financial institutions and all the respondents' names would not be revealed. The respondents were assured of feedback from the researcher if they needed it after the study. This was aimed at securing cooperation from them. The researcher established rapport with the respondents which facilitated the collection data.

The researcher ensured that an approval to do the research had been obtained from school of postgraduate studies, Moi University and National commission of science and technology innovation. Their informed consent was obtained before the commencement of the study. The participation of respondents was voluntary and no

benefits were attached. Questionnaires were carried out in an environment that allowed privacy of the information and the respondent's confidentiality.

3.11 Limitations of the Study

The study limits its scope to only the variables under the study and the basic objectives raised by the study. The study was carried out among selected commercial banks, Savings and Credit Cooperatives (SACCO) and Micro Finance institutions (MFI) regulated and licensed deposit taking by CBK and SASRA in the year 2015.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, INTERPRETATION AND DISCUSSION OF RESULTS

4.0 Introduction

This chapter presents the empirical findings of the study and their interpretation. This includes sample characteristics, descriptive statistics, regression analysis, test of assumptions of the regression analysis and the results of the regression model as well as their interpretations.

4.1 Response Rate

A total of 279 questionnaires were administered to the targeted respondents but only 236 were used in the analysis and this accounted for a response rate of 81.7% which was found to be very good. Total number of 18 questionnaires were incomplete and 25 questionnaires were not received back. The response rate for this study was considered to be sufficient for analysis. Babbie (1990) regards that a response rate of over 70% as very good. Although these are rules of thumb that ignore the compounding effect of sampling, measurement, and coverage errors.

4.1.1 Demographic Information of the Respondents

The demographic information sought from the respondents included; the gender, age, educational level, department worked, duration the firm has been in operation. All these were relevant in establishing the extent to which personal characteristics may influence risk management practices as summarized in Table 4.1. Majority of the respondents involved in the study were male. Of the 236 respondents included in the study, 58.5% (138) were male, while 41.5% (98) were female. This indicates that

there was gender disparity in the employees working in financial institutions in Kenya.

Regarding age, the results showed that 30.5% (72) of the respondents were in the age bracket of 35 and 44 years, 29.2% (62) were in the age bracket of 25 and 34 years and 26.3% (62) were in the age bracket of 45 and 54 years and 8.9% (21) were over the age of 54 years. The findings showed that dominant 64.8% (153) of the employees were in their active working age of below 44 years.

The academic levels of employees were varied and 61 (25.8%) had diploma qualification, 104 (44.1%) had degree, 64 (27.1%) having masters, 3% had PhD. The findings indicated that majority of the employees had at least a diploma as the highest level of Education and were in good position to perform well during the adoption of risk management practices. During the study 88 of the respondents (37.3%) held the position of credit officers, 49(20.8%) as risk and compliance, 43 (18.2%) from mortgage department and 56(23.7%) from debt recovery.

Regarding duration of operation of the financial institution, the results showed that 50.4% had been in operation for between 26 and 30 years', 16.5% between 16 and 20 years', with 11.9% between 11 and 15 years, while10.6% between 6 and 10 years and 7.2% being in operation between 21 and 25 years. The findings showed that most of the financial institutions had been in operation for more than 20 years.

Table 4.1: Respondents Demographic Characteristics

	Response	Frequency	Percent
Gender	Male	138	58.5
	Female	98	41.5
	Total	236	100.0
Age bracket	18-24 years	12	5.1
	25-34 years	69	29.2
	35-44 years	72	30.5
	45-54 years	62	26.3
	55– 64 years	21	8.9
	Total	**236**	**100.0**
Highest level of education	Diploma	61	25.8
	Bachelors	104	44.1
	Masters	64	27.1
	PhD	7	3.0
	Total	**236**	**100.0**
Type of department	Credit	88	37.3
	Risk and compliance	49	20.8
	Mortgage	43	18.2
	Debt recovery	56	23.7
	Total	**236**	**100.0**
Duration of operation of the institution	0-5 years	8	3.4
	6-10 years	25	10.6
	11-15 years	28	11.8
	16-20 years	39	16.5
	21-25 years	17	7.2
	26-30	119	50.4
	Total	**236**	**100.0**

Source; Research 2016

4.1.2 Financial Institution Background Information

The background Information of financial institution sought from the respondents included; duration the financial institution implemented risk management compliance, nature of activities and size of the firm. All these were relevant control variable in establishing the extent to which risk management practices maybe influenced by size of the firm as summarized in table 4.2.

Table 4.2 Financial institution Background Information

	Response	Frequency	Percent
Duration of risk compliance	0-1years	7	3.0
	2- 4 years	56	23.7
	5-7 years	39	16.5
	8-10 years	47	19.9
	11-15 years	37	15.7
	15 years and above	50	21.2
	Total	**236**	**100.0**
Nature of activities	Commercial Banking	109	46.2
	Investment banking	28	11.9
	offshore banking	17	7.2
	Foreign Banking	3	1.3
	Investment (including funds)	9	3.8
	Stock brokers	17	7.2
	Deposit Taking	53	22.5
	Total	**236**	**100.0**
Size of the Firm	Large (Over 40 Bn Assest)	40	16.9
	Medium (10-40 Bn)	56	23.8
	Small (below 10m)	140	59.3
	Total	**236**	**100.0**

Source; Research 2016

Regarding duration the financial institution has implemented risk management compliance, the results showed that 21.2% had implemented risk management compliance for more than 15 years', 19.9% between 8 and 10 years', with 16.5% between 5 and 7 years, while 15.7% between 11 and 15 years. The findings showed that most of the financial institutions had implemented risk management compliance for more than 5 years. This concurs with Hull, (2012) that commercial banking in virtually all countries has been subject to a great deal of regulations.

One of the regulations is the minimum capital commercial banks must keep absorbing loss if unexpected things happen. This kind of capital requirement is, in particular, conducted by Basel Committee which aims to enhance the key supervisory issue and improve the quality of banking supervision (Bis.org, 2014). On the nature of activities, the commercial bank 109 (46.2%) of the respondents identify the financial institutions engage in commercial banking activities, 22.5% deposit taking, with 11.8% in investment banking, 7.2% in offshore banking and stock brokers.

This indicated that most of the financial institutions engage in banking. On the size of the firm most of the financial institutions 140(59.3%) had a small asset base of below 10 million, with 23.8% being medium sized with 10 to 40 million asset base and 16.9% with large asset base of over 40 billion. This indicates that commercial banks hold deposits, bundling them together as loans and operating payments mechanism.

4.1.3 Nature of Financial Institution

The variable was assessed using the nature of institution, the ownership structure and descriptive statistics of 10 statements representing the respondents rating on their agreements. During the study 159 (67%) most of the respondents rated the nature of financial institution to be SACCOS, with 15% from bank and 18% from Micro-

finance as shown in Figure 4.1. This indicated that most of the financial institutions involved in the study were SACCOs.

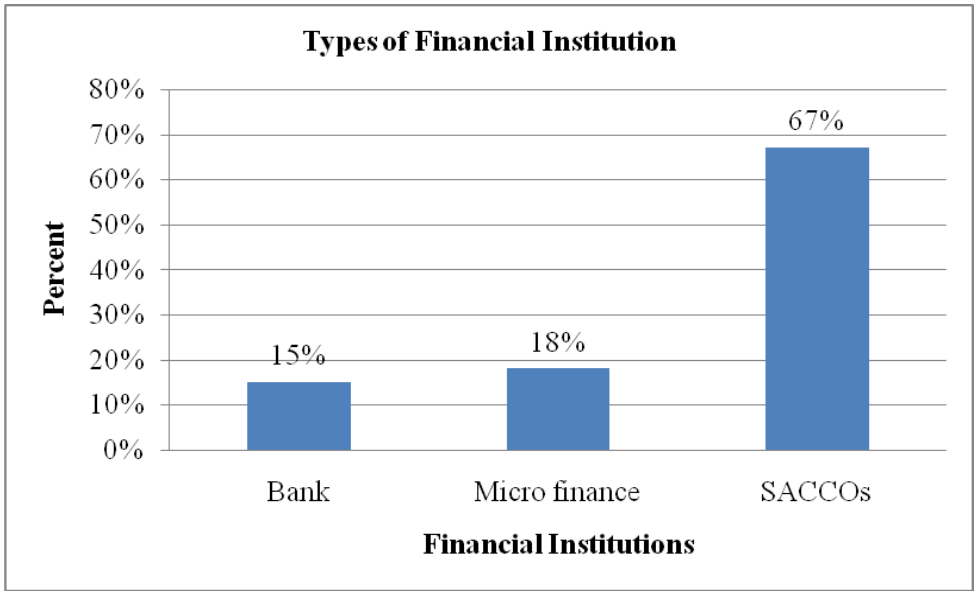

Figure 4.1 Types of Financial Institution

Source; Research 2016

This indicates that there are plenty of differentiations between types of financial institution and concurs with Howells & Bain, (2008) that much of this differentiation rests in the products and services that they offer.

4.1.4 Ownership Structure

Most of the respondents 215 (91%) indicated that the ownership structure of the financial institution was local, with 21 (9%) being foreign as shown in Figure 4.2. This indicated that most of the financial institutions were owned locally. The study indicates that a higher ownership was locally owned compared to foreign owned. This agrees with CBK, (2011) that 13 out of the 44 commercial banks are foreign owned and in terms of asset holding, foreign banks account for about 35% of the banking assets as of 2011.

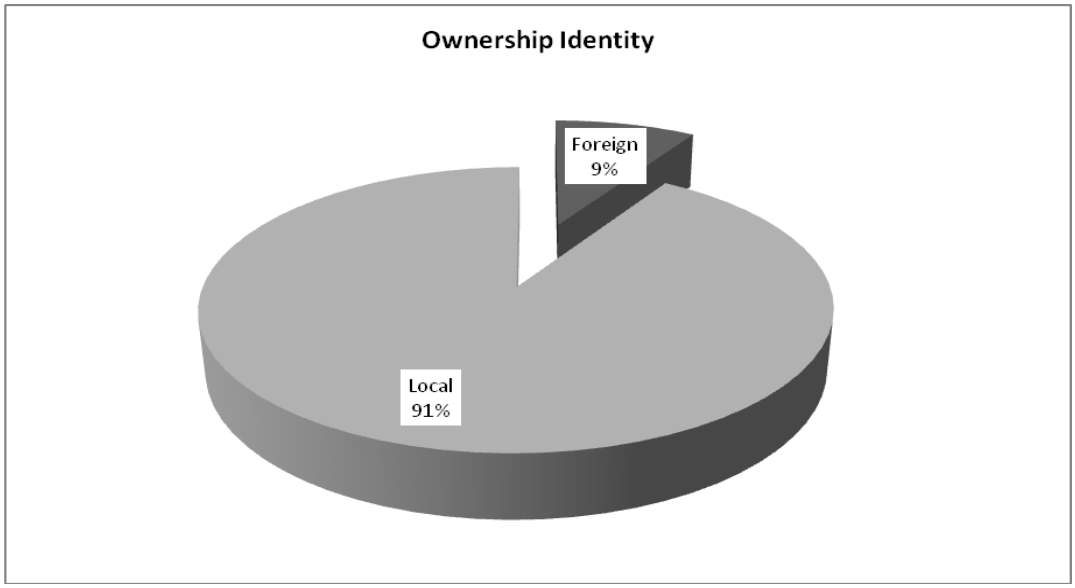

Figure 4.2 Ownership Identity

Source; Research 2016

4.2 Descriptive statistics

The descriptive statistics includes the use of frequency, mean, standard deviation kurtosis and skewness to explain the findings of the study. The mean gave a value showing the direction the average answer is, while the standard deviation gave an indication of the average distance from the mean. A low standard deviation would mean that most observations cluster around the mean. The kurtosis and Skewness was used to establish the measures of the shape of the distribution. Kurtosis is a measure of the "peakedness" or "flatness" of a distribution. The skewness is the extent to which a distribution of values deviates from symmetry around the mean.

4.2.1 Descriptive Statistics of Ownership Structure

From the study, the mean of each statement explaining ownership structure was computed from a five point likert scale. The respondent's views on the ownership structure were sought and their responses presented in table 4.3. The findings showed that all the statements representing ownership structure had a mean of above 3.8,

indicating that the respondents highly rated the ownership structure. The overall skewness was -2.94 and kurtosis was 11.30, indicating that the distribution of values deviates from the mean.

Table 4.3 Descriptive Statistics of Ownership Structure

	Mean	Std. Deviation	Skewness	Kurtosis
Foreign financial institutions don't enjoy a state guarantee in relation to local financial institutions liquidity risk	4.3686	1.09336	-1.955	3.039
Foreign financial institutions have a profit maximization goal that encourage more transactions in the capital market and deposits	3.9788	.95627	-1.489	2.457
Foreign ownership may influence the risk of local financial institutions	4.0339	1.04724	-.942	.324
Local financial institutions are less sensitive to macroeconomic shocks in comparison with the foreign financial institutions	4.1059	1.03626	-1.255	1.065
Local financial institutions have a lower risk of default, but have greater operational risk than foreign financial institutions	3.8178	1.12451	-1.048	.610
Local owned financial institutions have large number of creditors that increases their credit risks than foreign owned financial institutions	4.1949	1.02113	-1.391	1.486
Local owned financial institutions have large number of customers that increases their market risks than foreign owned financial institutions	3.8008	1.25077	-1.038	.100
Risk management is improved when the participation of foreign investors is more than local investors	4.0593	1.13956	-1.266	.801
The increase in foreign ownership is associated with higher risk and less profitability than local financial institutions	3.9661	1.11418	-1.143	.735
The ownership structure has a significant effect on bank risk.	3.8771	1.23674	-1.112	.330
Mean	**4.0428**	**.65945**	**-2.944**	**11.304**

Source; Research 2016

From the 10 statements used in explaining ownership structure characteristics had an overall mean score of 4.04 indicating that respondents agreed on its ownership structure. This implies that the ownership structure was highly rated among the respondents. This agrees with Ongore, (2011) that ownership is one of the factors explaining the performances of financial institutions across the board.

The foreign firms perform better with high profit margins and low costs as compared locally owned banks. In addition other studies opines that generally, lower costs of financial intermediation measured by the margins, overheads costs and low profitability is indicated with a greater presence of foreign banks. According to Claessens, Fan and Wong (2003) & Peria (2011), this is so because foreign owned firms are believed to have experienced management expertise in other countries over years.

4.2.2 Descriptive Statistics of Performance of financial institutions

The respondent's views on the financial performance of financial institutions were sought and their responses presented in table 4.4. The findings showed that all the statements representing performance of financial institutions had a mean score of above 3.9, indicating that the respondents highly rated the variable. The overall skewness was 3.10 and kurtosis was 24.18, indicating that the distribution of values deviates from the mean.

From the 10 statements used to explaining financial performance of financial institutions had an overall mean score of 4.30 indicating that respondents agreed on its performance of financial institutions. This implies that the performance of financial institutions was highly rated by the respondents. This agrees with Green *et al.*, (2007) that performance can be assessed by financial performance namely, return

on investment, operating profit growth, net income to total assets ratio, decrease in cost of capital, expenses to revenue ratio operating cash flow and increase in earnings per share.

Table 4.4 Descriptive Statistics of performance of financial institutions

	Mean	Std. Deviation	Skewness	Kurtosis
The financial institution uses return on assets to measure performance	4.3686	1.09336	-1.955	3.039
Financial institution focuses on increasing its return on investment	3.9788	.95627	-1.489	2.457
Our institution has grown significantly in terms of operating profit over the last one year	4.3178	1.20489	-1.884	2.413
Risk management has played a key role in growth operation profit	4.1102	.96566	-1.796	3.709
Risk management has led to increase in net income to total assets ratio of our institution	4.4322	1.03125	-2.258	4.725
The risk management practices has led to decrease in cost of capital	4.0339	.90325	-1.709	3.903
Risk management practices has led to increase in expenses to revenue ratio	4.3856	1.02710	-2.089	3.998
Risk management practices has improved our operating cash flow	4.0890	.88277	-1.560	3.613
Risk management practices has led to increase in capital employed	4.4788	.95627	-2.442	5.993
Risk management practices has led to increase in earnings per share	4.1695	.84355	-1.617	4.085
Mean	**4.3000**	**.79846**	**3.104**	**24.181**

Source; Research 2016

The findings concur with Olando, Martin and Jagongo (2012) that financial practice is a determinant of growth of SACCO's wealth. The growth of wealth of SACCOs is depended upon financial stewardship, capital structure and funds allocation strategy. Also it agreed with Olando, Jagongo and Mbewa (2013) that the contribution of financial stewardship to growth of SACCOs' wealth was depended on loans management, institutional strengths and innovativeness of SACCO products.

4.2.3 Descriptive Statistics of Risk Identification

The respondent's views on risk identification were sought and their responses presented in table 4.5. The findings showed that all the statements representing risk identification had a mean score of above 3.83, indicating that the respondents highly rated the variable. The overall skewness was 2.436 and kurtosis was 6.931, indicating that the distribution of values deviates from the mean.

Table 4.5 Descriptive Statistics of Risk Identification

	Mean	Std. Deviation	Skewness	Kurtosis
The financial institution carries out a comprehensive and systematic identification of its risks	4.3178	1.20489	-1.884	2.413
The financial institution finds it difficult to prioritize its main risks	4.1102	.96566	-1.796	3.709
Changes in risks are recognized and identified with the financial institution's roles and responsibilities	3.9068	1.17772	-1.126	.599
The financial institution is aware of the strengths and weaknesses of the risk management systems of other financial institutions	3.8305	1.0900	-1.010	.545
The financial institution developed and applied procedures for the systematic identification of opportunities	4.0466	1.10027	-1.233	.907
It is crucial for financial institution to apply the most sophisticated techniques for risk identification	4.0720	1.06347	-1.151	.905
Risk identification help in the mitigation of the risk through debt collection or credit sanctions	3.9831	1.17044	-1.380	1.201
Risk identification helps to sort risk according to their importance	3.7839	1.09928	-.880	.272
Risk identification assists the management to develop risk management strategy to allocate resources efficiently	3.7966	1.15268	-.890	-.017
Risk identification roles and responsibilities are clearly defined	4.0720	1.15183	-1.372	1.188
Mean	**4.0133**	**.79107**	**-2.436**	**6.931**

Source; Research 2016

From the 10 statements used to explaining risk identification had an overall mean score of 4.013 indicating that respondents agreed on its risk identification measure. This indicates that the understanding regarding the accountability for risk management is relatively diminishing as compared to understanding. This agrees with Greene and Trieschmann (2004) that risk identification is the first stage of risk management.

The auditor begins the inherent risk evaluation process by generating expectations of accounts balances. This concurs with Williams *et al.,* (2004) that investigating the problem of risk identification calls for risk identification as a continuous process and continuous seeking of new risk. These results for risk identification are quite similar to those reported by Al-Tamimi and Al-Mazrooei (2007), Hassan (2011), Abu Hussain and Al-Ajmi (2012), Hassan (2011) and Nazir, Daniel and Nawaz (2012). Moreover, the high mean score of all six items is greater than the midpoint and indicates that the staffs of selected financial institutions are good in risk identification. This result supports the higher risk understanding improves the risk identification in financial institutions.

4.2.4 Descriptive Statistics of Risk Analysis

The respondent's views on risk analysis were sought and their responses presented in table 4.6. The findings showed that all the statements representing risk identification had a mean score of above 3.78, indicating that the respondents highly rated the variable. The overall skewness was -2.67and kurtosis of 8.61, indicating that the distribution of values deviates from the mean. From the 7 statements used to explaining analysis had an overall mean score of 4.06 indicating that respondents agreed on its risk analysis measures.

The five-point Likert scale in this study is also less than the average mean score of eleven items and highlights that the selected Pakistani banks and generally good in risk assessment and analysis. These results for risk assessment and analysis are consistent with certain pertinent studies (Al-Tamimi and Al-Mazrooei, 2007, Hassan, 2009, Abu Hussain and Al-Ajmi, 2012).

Table 4.6 Descriptive Statistics of Risk analysis

	Mean	Std. Deviation	Skewness	Kurtosis
This financial institution assesses the likelihood of risks occurring	4.4322	1.03125	-2.258	4.725
This financial institution's risks are assessed by using quantitative analysis methods	4.0339	.90325	-1.709	3.903
This financial institution's risks are assessed by using qualitative analysis methods(e.g. high, moderate, low)	4.0636	.95438	-1.253	1.815
The financial institution analyses and evaluates opportunities it has to achieve objectives	4.0212	1.07366	-1.187	.743
The financial institution's response to analysed risks includes an assessment of the costs and benefits of addressing risks	4.0805	1.09052	-1.432	1.781
The financial institution's response to analysed risks includes prioritizing of risks and selecting those that need active management	3.9915	.98927	-1.472	2.115
Risk analysis and assessment comprises identification of the outcomes and estimation of the magnitude of the consequences	3.7797	1.33774	-1.085	.008
Mean	**4.0575**	**.72561**	**-2.668**	**8.605**

Source; Research 2016

4.2.5 Descriptive Statistics of Risk Evaluation

The respondent's views on the risk evaluation were sought and their responses presented in table 4.7. The findings showed that all the statements representing risk

evaluation had a mean score of above 3.78, indicating that the respondents highly rated the variable.

The overall skewness was 1.99 and kurtosis of 19.53, indicating that the distribution of values deviates from the mean. From the 10 statements used to explaining risk evaluation had an overall mean score of 4.04 indicating that respondents agreed on risk evaluation measures.

Table 4.7 Descriptive Statistics of Risk Evaluation

	Mean	Std. Deviation	Skewness	Kurtosis
There is a common understanding of risk management across the financial institution	4.3856	1.02710	-2.089	3.998
There is a proper system for understanding various risks implemented in the financial institution	4.0890	.88277	-1.560	3.613
Responsibility for risk management is clearly set out and understood throughout the financial institution	4.1229	.93499	-1.508	2.968
Accountability for risk management is clearly set out and understood throughout the financial institution	3.9449	1.02373	-1.233	1.471
Our financial institution records the findings on the risks identified and implement the measures	3.7839	1.24794	-.975	.029
Controls exist for approving decisions regarding financing and accounting principles, practices, and methods	3.7839	1.05987	-.943	.526
Our auditors understand companies' risk and have easy to assess risks	3.8178	1.18351	-1.164	.520
Risks are evaluated with consideration of uncertainties being clearly considered and presented.	3.8814	1.23198	-1.149	.320
Risk is evaluated in terms of both quantitative and qualitative value.	3.9492	1.16215	-1.344	1.147
Risks are subdivided into individual levels for further analysis	3.8729	1.10740	-.978	.371
Mean	**4.0353**	**1.01611**	**1.991**	**19.529**

Source; Research 2016

This agrees with Strutt (2003) that risk analysis is set of stages of systematic assessment which may involve a number of different analyses like establishing

acceptable or tolerable levels of risk, evaluation of risks, determine whether the risks are as low as reasonably practicable, and determine risk reduction measures where appropriate. Risk analysis and assessment comprises identification of the outcomes, probability of those outcomes and estimation the magnitude of the consequences.

This concurs with Royal Society Study Group (2002) that risk estimation comprises identification of the outcomes and estimation of both the magnitude of the consequences and the probability of those outcomes. The addition of risk evaluation completes the process of risk assessment which is a vital stage in credit risk management. The organizations carry out risk assessment to a great extent.

4.2.6 Descriptive Statistics of Risk Monitoring

The respondent's views on the risk monitoring were sought and their responses presented in table 4.8. The findings showed that all the statements representing risk monitoring had a mean score of above 3.80, indicating that the respondents highly rated the variable. The overall skewness was -3.32 and kurtosis was 14.06, indicating that the distribution of values deviates from the mean. From the 10 statements used to explaining risk monitoring had an overall mean score of 4.07 indicating that respondents agreed on risk monitoring measures.

The high mean reveals that the reporting and communication processes help to improve the effective risk management of selected banks, which is more than the midpoint on the five-point Likert scale and reports that the selected Pakistani banks are good in risk monitoring and controlling. This results for risk monitoring and controlling are quite similar to those reported by Al-Tamimi and Al-Mazrooei (2007), Hassan (2011) and Abu Hussain and Al-Ajmi (2012). This agrees with Javid, (2009) that monitoring is an important procedure to ensure that risk management is practiced

by financial institutions effectively. Effective risk management also means the execution of a reporting and review structure to ensure that risks are identified and assessed, after which appropriate controls and responses are set in place.

Table 4.8 Descriptive Statistics of Risk Monitoring

	Mean	Std. Deviation	Skewness	Kurtosis
Monitoring the effectiveness of risk management is an integral part of routine management reporting	4.4788	.95627	-2.442	5.993
The level of control by the financial institution is appropriate for the risks that it faces	4.1695	.84355	-1.617	4.085
The financial institution has adopted a standard reporting system about the risk management from bottom to top management	4.0381	.95127	-1.094	1.336
Reporting and communication processes within the financial institution support the effective management of risk	3.8390	.98474	-.993	.731
The financial institution's response to risk includes an evaluation of the effectiveness of the existing controls and risk management responses	3.9322	1.16494	-1.056	.322
The financial institution's response to risk includes action plans in implementation decisions about identified risk	4.0805	.97516	-1.412	2.245
The financial institution effectively monitors the credit limit of everyone counterparty	3.9534	1.05687	-1.172	1.186
The financial institution reviews the country ratings on a regular basis for its international financing and investment	4.0678	.97831	-1.264	1.625
The borrower's business performance is regularly observed by the financial institution following the extension of financing	4.0297	1.10471	-1.396	1.538
Risk monitoring enables the shareholders to assess the status of the corporation always	4.0890	1.10151	-1.256	.889
Mean	**4.0678**	**.63257**	**-3.319**	**14.063**

Source; Research 2016

4.3 Factor Analysis

Factor analysis was employed in this regard to help in identifying the actual number of factors that actually measured each construct as perceived by the respondents. The validity of the instrument was measured through Bartlett's Test of Sphericity (Muhammad, 2009). Within this study, the KMO for the statements were all above 0.6 as recommended by Chakraborty (2010), Trent *et al.,* (2009), Nuradli *et al.,* (2008) and Dahal (2004).

Before performing the analysis, the suitability of the data was assessed through two tests; Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) and Bartlett's Test of Sphericity. The KMO should be greater than 0.50 and Bartlett's Test of Sphericity be significant. After performing the factor analysis of each variable, the statement responses were summed to create a score and subjected to inferential analysis. When the responses of several Likert items were summed, they were treated as interval data measuring a latent variable.

4.3.1 Ownership Structure

The factor analysis results of ownership structure, indicated that the KMO was 0.774 and the Bartlett's Test of sphericity was significant ($p<.05$) (Table 4.19). The Varimax rotated principle component resulted in three factors loading on ownership structure variable that explained 58.72 % of variance with Eigen values larger than 1 (table 4.9). Only the that local financial institutions have a lower risk of default, but have greater operational risk than a foreign financial institution was deleted and the other 9 statements retained, computed and renamed as ownership variable construct for further analysis.

Table 4.9: Factor Analysis of Ownership Structure

	Component		
	1	**2**	**3**
Foreign financial institutions don't enjoy a state guarantee in relation to local financial institutions liquidity risk	.818		
Foreign financial institutions have a profit maximization goal that encourage more transactions in the capital market and deposits	.814		
Foreign ownership may influence the risk of local financial institutions	.698		
Local financial institutions are less sensitive to macroeconomic shocks in comparison with the foreign financial institutions	.565		
Local financial institutions have a lower risk of default, but have greater operational risk than foreign financial institutions			
Local owned financial institutions have large number of creditors that increases their credit risks than foreign owned financial institutions		.608	
Local owned financial institutions have large number of customers that increases their market risks than foreign owned financial institutions			.715
Risk management is improved when the participation of foreign investors is more than local investors		.817	
The increase in foreign ownership is associated with higher risk and less profitability than local financial institutions		.541	
The ownership structure has a significant effect on bank risk.			.749
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.774		
Bartlett's Test of Sphericity (df-45)	.000		
Total Variance Explained	58.718		

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.
Source; Research 2016

4.3.2 Financial Performance

The financial performance factor analysis results had KMO of 0.587 and a significant ($p<.05$) Bartlett's Test of Sphericity (Table 4.10). The varimax rotated principle component applied resulted in four factors loading that explained 70.15 % of the

variance. Since all the statements conform, they were computed and renamed financial variable construct for further analysis.

Table 4.10 Factor Analysis of Financial Performance Rotated Component Matrix[a]

	Component			
	1	2	3	4
The financial institution uses return on assets to measure performance	.706			
Financial institution focuses on increasing its return on investment	.680			
Our institution has grown significantly in terms of operating profit			.869	
Risk management has played a key role in growth operation profit			.863	
Risk management has led to increase in net income to total assets ratio of our institution		.864		
The risk management practices has led to decrease in cost of capital		.892		
Risk management practices has led to increase in expenses to revenue ratio				.862
Risk management practices has improved our operating cash flow				.564
Risk management practices has led to increase in capital employed	.716			
Risk management practices has led to increase in earnings per share	.783			
Kaiser-Meyer-Olkin	.587			
Bartlett's Test of Sphericity (df-45)	.000			
Total Variance Explained	70.115			

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 4 iterations.
Source; Research 2016

4.3.3 Risk Management Practices

The factor analysis results of risk management practices indicated that the KMO was 0.711 and the Bartlett's Test of sphericity was significant ($p<.05$) (Table 4.10). The Varimax rotated principle component resulted in three factor loading on risk management practices variable and explained 68.23 % of variance with Eigen values larger than 1. Two statements of risk identification were deleted; risk identification help in the mitigation of the risk through debt collection or credit sanctions and risk

identification helps to sort risk. However, all the other eight statements were retained computed and renamed identification variable construct for further analysis.

Table 4.11 Factor Analysis of Risk Management Practices Rotated Component Matrix[a]

	Component		
	1	**2**	**3**
Monitoring the effectiveness of risk management is an integral part of routine management	.697		
The level of control by the financial institution is appropriate for the risks that it faces	.564		
The financial institution has adopted a standard reporting system about the risk management	.518		
Reporting and communication processes support the effective management of risk			.803
The financial institution's response to risk evaluation of controls and risk management			.836
The financial institution's includes action plans in implementation decisions about risk	.735		
The financial institution effectively monitors the credit limit of everyone counterparty	.813		
The financial institution reviews the country ratings on a regular basis		.694	
The borrower's business performance is regularly observed by the financial institution		.763	
Risk monitoring enables the shareholders to assess the status of the corporation always		.735	
The financial institution carries out a compressive and systematic identification of risks	.757		
The financial institution finds it difficult to prioritize its main risks	.819		
Changes in risks are recognized and identified with the financial institution's roles	.752		
The financial institution is aware of the strengths and weaknesses of risk		.752	
The financial institution has developed procedures for systematic identification of risk	.580		
It is crucial for financial institution to apply sophisticated techniques for risk identification		.621	
Risk identification help in the mitigation of the risk			
Risk identification helps to sort risk according to their importance			
Risk identification assists the management to develop risk management strategy		.516	
Risk identification roles and responsibilities are clearly defined	.544		
This financial institution assesses the likelihood of occurring risks	.729		
This financial institution's risks are assessed by using quantitative analysis methods	.738		
This financial institution's risks are assessed by using qualitative analysis methods	.834		
The financial institution analyses and evaluates opportunities to achieve objectives	.625		
The financial institution's response to analysed risks assessment of costs and benefits	.755		
The financial institution's analysed and select those risks that need active management		.725	
Risk analysis and assessment comprises identification of the outcomes		.891	
There is a common understanding of risk management across the financial institution		.524	
There is a proper system for understanding various risks in the financial institution		.704	
Responsibility for risk management is understood throughout the financial institution		.758	
Accountability for risk management is understood throughout the financial institution		.627	
Our financial institution records the findings on the risks and implement the measures	.519		
Controls exist for approving decisions regarding financing, practices, and methods	.817		
Our auditors understand companies' risk and have easy to assess risks	.784		
Risks are evaluated with consideration of uncertainties considered and presented.	.712		
Risk is evaluated in terms of both quantitative and qualitative value.			
Risks are subdivided into individual levels for further analysis		.707	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.711		
Bartlett's Test of Sphericity (df= 666)	.000		
Total Variance Explained	68.23		

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.
Source; Research 2016

In risk analysis all the statements conform, they were computed and renamed risk analysis variable construct. The risk evaluation variables had only the statement risk was evaluated in terms of both quantitative and qualitative value deleted and the other statements retained, computed and renamed evaluation variable construct for further analysis. In the risk monitoring all the statements conform, they were computed and renamed monitoring variable construct for further analysis. Finally, the factor analysis indicated that the independent variable risk management practice had three statements deleted.

4.4 Assumptions of Multiple Regressions

Multiple regressions is a parametric statistic used since the data adheres to the following assumptions or parameters (Field, 2009): data must be on interval level, a linear relationship exists, the distributions is normal, outliers identified and omitted. The assumptions of multiple regressions was identified in the research include normality, linearity, homoscedasticity, and collinearity.

4.4.1 Normality

The assumption is based on the shape of normal distribution and gives the researcher knowledge about what values to expect (Keith, 2006). The researcher tested this assumption through several pieces of information: visual inspection of data plots, skew, kurtosis, and P-Plots (Osborne & Waters, 2002). Data cleaning was an important in checking this assumption through the identification of outliers. Statistical software has tools designed for testing this assumption. Normality was further checked through histogram of the standardized residuals (Stevens, 2009). Histograms

are bar graphs of the residuals with a superimposed normal curve were used as summarized in Figure 4.3.

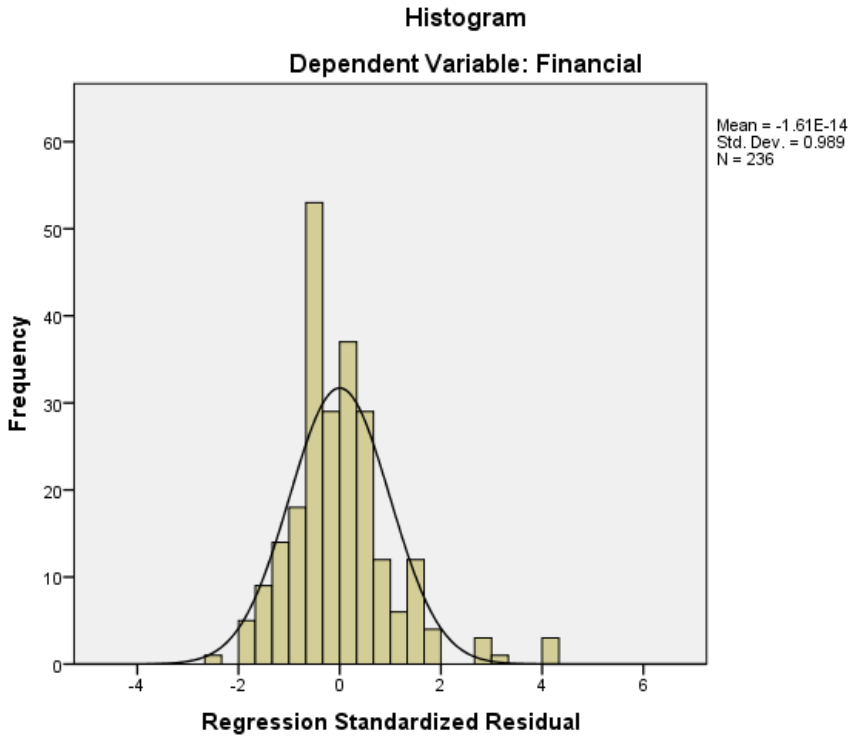

Figure 4.3: Normality

4.4.2 Linearity

Multiple regression can accurately estimate the relationship between dependent and independent variables when the relationship is linear in nature (Osborne & Waters, 2002). Violation of this assumption threatens the meaning of the parameters estimated in the analysis (Keith, 2006). More in-depth examination of the residual plots and scatter plots available in most statistical software packages indicated linear vs. curvilinear relationships (Keith, 2006, Osborne & Waters, 2002).

Residual plots showing the standardized residuals vs. the predicted values were useful in detecting violations in linearity (Stevens, 2009). Any systematic pattern or clustering of the residuals suggests violation (Stevens, 2009). Residual plots showing

the standardized residuals and the predicted values were used to establish linearity as shown in Figure 4.4.

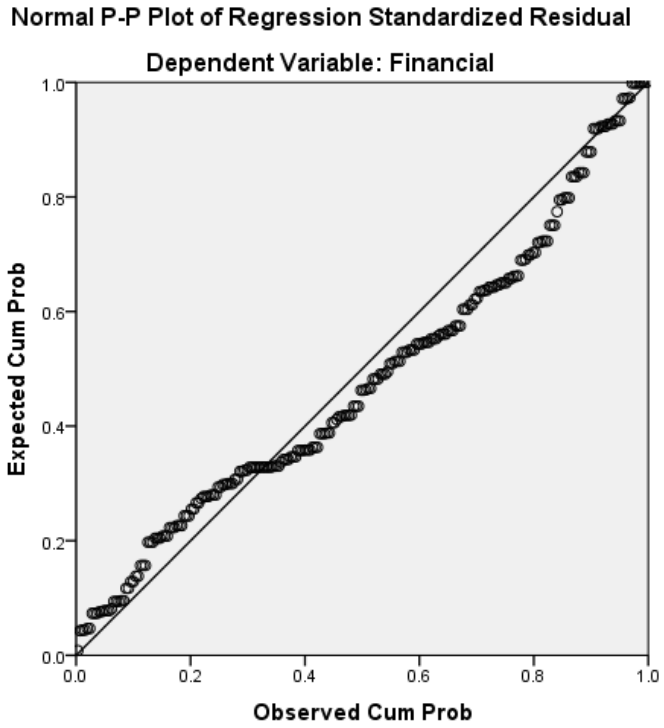

Figure 4.4: Linearity

4.4.3 Homoscedasticity

The assumption of homoscedasticity refers to equal variance of errors across all levels of the independent variables (Osborne & Waters, 2002). This means that the study assumed that errors are spread out consistently between the variables (Keith, 2006). Specifically, statistical software scatterplots of residuals with independent variables was used for examining this assumption (Keith, 2006). Heteroscedasticity was indicated when the scatter is not even, fan and butterfly shapes are common patterns of violations. Some examples of homoscedasticity and heteroscedasticity was seen in scatter plots. Homoscedasticity was checked using the standardized residual scatter plot (Figure 4.5).

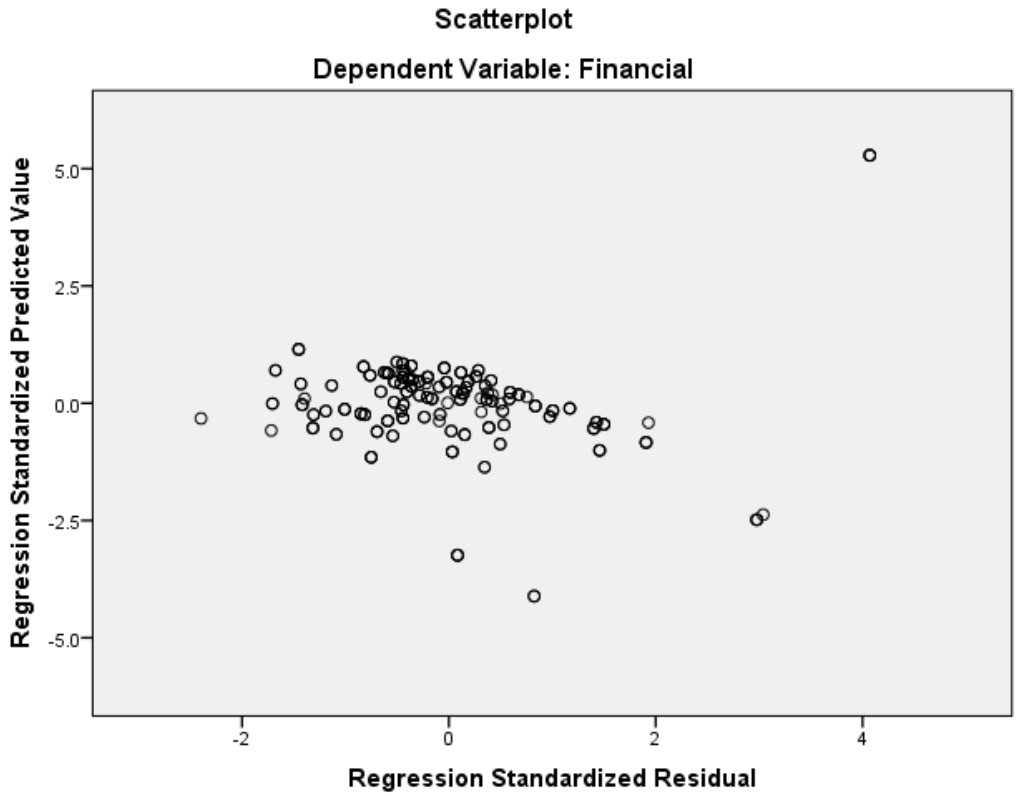

Figure 4.5 Homoscedasticity

The results showed whether standardized residuals concentrated in the centre (around 0) and whether their distribution was rectangular. This was an indication that the variance of the residuals about the dependent variable scores are the same, an indication that homoscedasticity is not a problem.

4.4.4 Multicollinearity

Multicollinearity occurs when several independent variables correlate at high levels with one another, or when one independent variable is a near linear combination of other independent variables (Keith, 2006). The more variables overlap (correlate) the less able researchers separated the effects of variables. Statistical software packages include collinearity diagnostics that measure the degree to which each variable is independent of other independent variables. Tolerance and VIF statistics were used to

carry out the diagnosis. The rule of thumb for a large VIF value is ten and tolerance should be greater than 0.2 (Keith, 2006, Shieh, 2010) as shown in Table 4.12. Small values for tolerance and large VIF values show the presence of multicollinearity (Keith, 2006).

Table 4.12 Multicolinearity

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Identification	.839	1.192
	Analysis	.793	1.261
	Evaluation	.848	1.179
	Monitoring	.970	1.031
	Ownership	.842	1.187

a. Dependent Variable: Financial

4.5 Correlations

Pearson moment correlation was used to describe the relationship between independent and dependent variables, depending on the level of measurement. The relationship between independent variable (risk management practices) and dependent variable (performance of financial institutions) were investigated using Pearson product-moment correlation coefficient as shown in Table 4.13.

There was a positive relationship between risk identification and performance of financial institutions [r = .306, *n* = 236, p<.01]. This indicated the more risk identification the higher the performance of financial institutions. This agrees with Al-Tamimi and Al-Mazrooei (2007) that risk identification is the initial stage of risk management. For the implementation of risk management in an organization, the first step is to study risks and their impact on management practices. Also agree with

Tchankova (2002) who concludes that risk identification was a very important step in risk management.

Table 4.13 Pearson moment correlation Results

	Financial performance	firm size of the firm	Identification	Analysis	Evaluation	Monitoring	Ownership
Financial performance	1						
Size of the firm	.091	1					
Identification	.306**	.052	1				
Analysis	.385**	-.076	.334**	1			
Evaluation	.813**	.018	.257**	.295**	1		
Monitoring	.206**	-.029	.011	.117	.144*	1	
Ownership	.468**	.055	.269**	.325**	.265**	.026	1

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
c. Listwise N=236
Source; Research 2016

A positive relationship exist between risk analysis and performance of financial institutions [r = .385, *n* = 236, p<.01]. This showed that an increase in risk analysis the higher the performance of financial institutions. This agrees with Lagat *et al.,* (2013) that, most of these financial institutions have adopted risk management practices as one way of managing their portfolio.

A positive influence of risk evaluation on performance of financial institutions [r = .813, n =236, p<.01] was obtained. This agrees with Pagach & Warr, (2011) that risk evaluation positively influenced the performance of financial institutions. Risk management has moved from the narrow view that focuses on evaluation of risk from a narrow perspective to a holistic, all-encompassing view.

Risk monitoring had a positive relationship on performance of financial institutions [r = .206, *n* = 236, p<.01]. This showed that the more there is risk monitoring the higher the performance of financial institutions. This agrees with Al-Tamimi and Al-

Mazrooei, (2007) that proper risk monitoring practices can be used to ensure that risk management practices are in line and that it also helps the financial institution's management to uncover mistakes at early stages.

The ownership structure had a positive relationship performance on financial institutions [r = .468, *n* = 236, p<.01]. This implies that an increase in ownership structure the, more the performance of financial institutions. This agrees with Kiruri, (2013) that higher foreign and domestic ownership lead to higher profitability in financial institutions.

The findings indicated that the risk management practices (identification, analysis, evaluation and monitoring) influence the performance of financial institutions. This agrees with Ali and Luft (2002) that a firm will only engage in risk management if it enhances shareholder value. This agrees with Kiochos (1997), the risk management process involves four steps: identifying potential losses, evaluating potential losses, selecting appropriate risk management techniques for treating loss exposures and implementing and administering the risk management program.

4.6 Hierarchical Multiple Regression Analysis

A hierarchical multiple regression analysis was applied in order to establish the moderating effect of ownership structure on the relationship between risk management practices and performance of financial institutions. The study followed the suggestions given by Aiken and West (1991) to standardize all the predictor variables to reduce multi-collinearity problem that arises when a moderator variable was computed as a product of predictor variables. To avoid multicolinearity risk created by generating a new variable through multiplying two existing variable, interacted variables were converted to Z scores with mean of zero and standard

deviation of one. The interaction variables were therefore created by multiplying the standardized variables together.

In a six-step hierarchical regression, step 1, multiple regressions was carried out starting with the introduction of the control variable which was the size of the financial institution. In step 2, the independent variables which was risk management practices as well ownership structure moderator was introduced. Step 3 interactions of ownership structure and the risk identification variables were introduced. Step 4 interactions of ownership structure and the risk analysis variables were introduced. Step 5 interactions of ownership structure and the risk evaluation variables were introduced. Step 6 interactions of ownership structure and the risk monitoring variables were introduced.

The first model represented the control variable which was the size of the financial institution and model 2 was the independent variables risk management practices as well ownership structure moderator. Model 3, 4, 5 and 6 represented the interaction effect between the risk management practices and ownership structure (Table 4.14). Results indicated by model 1, 2, 3, 4, 5 and 6 showed good model fit as illustrated by overall test of significance with p value 0.000 (< 0.05) as summarized in Table 4.14. In other words, the independent variables, moderator and the four interactions were statistically highly significant predictors of financial institutions performance. Thus, models 1 to 6 were valid and fit to predict performance of financial institutions using interaction of the four independent variables with ownership identity.

Table 4.14 Hierarchical Multiple regression

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Constant	-1.010E-013	1.006E-013	.001	.004	.004	.008
Size of Financial institution,	-.032	-.046	-.046	-.057	-.049	-.051
Identification		.026	.028	.115*	.195*	.196*
Analysis		.084	.083*	.047	.098*	.097*
Evaluation		.711*	.710*	.706*	.629*	.633*
Monitoring		.091*	.092*	.102*	.094*	.096*
Ownership		.232*	.231*	.270*	.264*	.269*
Identification* Ownership			-.003	-.202*	-.328*	-.327*
Analysis* Ownership				.155*	.053	.047
Evaluation* Ownership					.255*	.249*
Monitoring* Ownership						-.052
R Square	.001	.747	.747	.759	.772	.772
Adjusted R Square	-.003	.741	.740	.751	.762	.762
R Square Change	.001	.746	.000	.012	.012	.001
F Change	.244	135.295	.013	11.292	12.037	.736
F	.244	112.90	96.36	89.53	84.79	76.29
Sig.	.000	.000	.000	.000	.000	.000

*significant at 0.05
Source; Research 2016

To measure the validity of the model, F-statistics were used. F-statistics (F = .244, p-value < 0.001) show that there is a significant relationship between size of financial institutions and performance of financial institutions. When the independent variables the risk management practices as well ownership structure moderator was added into the analysis, the resulting model (Model 2) was statistically significant (F= 112.9, p< 0.001) suggesting that risk management practices and ownership structure was a significant predictor of performance of financial institutions.

When the interaction between ownership structure and the risk identification were introduced into the analysis (Model 3), the F-statistics (F = 96.59, p < 0.001), (Model 4), the ownership structure and the risk analysis F-statistics (F = 89.53, p< 0.001),

(Model 5), the interactions of ownership structure and the risk evaluation F-statistics ($F = 84.79$, $p < 0.001$) and interactions of ownership structure and the risk monitoring F-statistics ($F = 76.29$, $p < 0.001$). All the models was statistically significant suggesting that independent variables (risk identification, analysis, evaluation and monitoring), ownership structure and moderated variables were significant predictors of performance of financial institutions.

4.6.1 Model 1: Control

Model 1 showed the control variable size of the financial institution had an R squared of 0.001 and an adjusted R square of 0.003. The control variables could explain 0.3% of the variable of financial performance of financial institutions ($F=1.532$).

4.6.2 Model 2: Control and Direct Effect

Model 2, representing independent and moderator variable had an adjusted R square of 0.741. The risk management practices and ownership structure was significant $p<0.01$) and explain 74.1% performance of financial institutions. The risk evaluation ($\beta=0.711$) and risk monitoring ($\beta=0.091$) management practices had significant effects, together with ownership structure (=0.232). However risk identification ($\beta=0.026$), and risk analysis ($\beta=0.084$), were not significant. This explains the direct relationship that exists between risk evaluation, monitoring management practices and ownership structure influenced the performance of financial institutions.

The coefficients results ($\beta_1=0.026$, $P>0.05$) showed that the risk identification was not significant which implies that fail to reject the null hypothesis (**H_{O1}**) stating that there is no significant effect of risk identification on financial performance of financial institutions. The findings agree with Williams *et al.,* (2004) reveals that risk identification is a process that reveals and determines the possible organizational risks

as well as conditions, arising from risks. By risk identification the organization is able to study activities and places where its resources are exposed to risks.

These results reveal that risk identification is an important aspect of risk management in financial institutions. These findings are also consistent with the results of relevant studies (Al-Tamimi and Al-Mazrooei, 2007, Hassan, 2009, Abu Hussain and Al-Ajmi, 2012, Bilal, Talib and Khan, 2013). Furthermore, these findings support the homogeneity assumption of institutional theory (DiMaggio and Powell, 1983) which may be achieved through the coercive isomorphic mechanism whereby regulatory pressures are exerted on banks in terms of persuasion and direction (Collier and Woods, 2011, Hudin and Hamid, 2014).

All the financial institutions are needed to implement a comprehensive and rigorous structure of risk identification to cover all potential risks, irrespective of whether or not these risks are within the direct control of banks. Consequently, a positive significant relationship reflects the need of an active mechanism of risk identification to improve the effectiveness of the risk management practices of financial institutions.

The risk analysis variable was not significant; (β_2=0.084, P>0.05) which implies that we fail to reject the null hypothesis **(H_{O2})** stating that there is no significant effect of risk analysis on performance of financial institutions. Therefore, a direct significant relationship between risk analysis and performance of financial institutions indicates that an improvement in risk assessment and analysis mechanism increases the effectiveness of the risk management practices of financial institutions.

These findings are also compliable with the results of (Al-Tamimi and Al-Mazrooei, 2007, Hassan, 2009, Hassan, 2011, Abu Hussain and Al-Ajmi, 2012, Bilal, Talib and Khan, 2013) indicating a significant relationship between risk analysis of banks. The

uniformity assumption of institutional theory (DiMaggio and Powell, 1983) is also endorsed by these finding, according to which it is necessary for all the local banks to implement a system for risk assessment and analysis in order to fulfil the regulatory requirement of the central bank.

The findings agree with Ademba (2011) that the challenges that SACCO regulations in Africa face was the maturity stage. The regulations concentrate on prudential standards which seek to establish a risk assessment process that focuses on liquidity, capital and governance among other vital issues. Also it agrees with Magali (2013) that the large size loan had a higher risk of default than the small one.

The results showed that the risk evaluation (β_3=0.711, P<0.05) significantly influence performance of financial institutions**.** This implies that we reject the null hypothesis (**H_{O3}**) stating that there is no significant effect of risk evaluation on performance of financial institutions**.** The findings agree with Hermanson and Rittenberg (2013) that the existence of risk-based auditing is associated with superior organizational performance. This also concurs with (Mak, 2009, Simons, 2009, Kiragu 2014) that there was a link between risk based audit practices and financial performance in financial institutions.

From the findings showed that risk monitoring significantly influence the performance of financial institutions (β_4=0.091, P<0.05) which implies that we reject the null hypothesis **(H_{O4})** stating that there is no significant effect of risk monitoring on the performance of financial institutions. The findings agrees with Singh (2013) revealed that Effective risk management was critical to any financial institution for achieving financial soundness. The findings agree with Javid, (2009) that monitoring

is an important procedure to ensure that risk management is practiced by financial institutions effectively.

Considering the results of regression analysis, a significant direct impact of risk monitoring significantly influence the performance of financial institutions has been reported. These findings have also been supported by the Pearson correlation in which a positive association is reported. Based upon these empirical facts, these results indicate that risk monitoring is an important aspect of risk management in financial institutions in Kenya. Besides, the results are in line with findings of (Al-Tamimi and Al-Mazrooei, 2007, Hassan, 2009, Abu Hussain and Al-Ajmi, 2012, Khalid and Amjad, 2012, Nazir, Daniel and Nawaz, 2012, Bilal, Talib and Khan, 2013).

These finding also endorse the assumptions of institutional theory (DiMaggio and Powell, 1983) that postulate homogeneity in the formation of organizational policies and procedures in order to comply with rules and regulation of regulatory bodies (Collier and Woods, 2011, Hudin and Hamid, 2014). Considering the said assumption of institutional theory, the fundamental principles relating to risk management in financial institutions is framed by the central bank are applicable to every financial institution and all these institutions have been directed to apply these basic principles irrespective of their sizes and complexities.

According to these principles, all the financial institutions are required to implement a comprehensive and rigorous mechanism of risk monitoring and controlling in Pakistan. Considering a significant direct relationship of risk monitoring and the performance of financial institutions, an inference can be drawn that the management can improve the risk management practices of financial institutions by giving more importance and attention on risk monitoring and controlling.

The ownership structure significantly influence the performance of financial institutions (β=0.232, P<0.05). Effective risk management also means the execution of a reporting and review structure to ensure that risks are identified and assessed, after which appropriate controls and responses are set in place. The risk evaluation and monitoring management practices enhanced the performance of financial institutions positively, while risk analysis and identification does not influence the relationship. This agrees with Banks (2004), that it was important for each financial institution to retain and actively manage some level of risk if it was to increase its market value or if the probability of financial distress is to be lowered.

It concurs to Pagano (2001), that risk management is an important function of institutions in creating value for shareholders and customers. This concurs with Kimball (2000) that risk management is the human activity which integrates recognition of risk, risk assessment, developing strategies to manage it and mitigation of risk using managerial resources. Generally, a proper risk management process enables a firm to reduce its risk exposure and prepare for survival after any unexpected crisis.

The findings showed ownership structure moderates the relationship between the risk management practices and performance of financial institutions. The ownership structure has a significant effect on financial institutions risk. This concurs with Teresa and Dolores (2008) that the type of ownership may increase or decrease depending on the objectives of shareholders and bank risk managers.

4.6.3 Interactions (Model 3, 4, 5 and 6)

To test the hypothesis **$H0_5$,** the "moderating effect of ownership structure", all the independent variables (risk identification, analysis, evaluation and monitoring) were

multiplied with the ownership structure and the product used in the regression equation to establish the model 3, 4, 5 and 6 representing the interaction between moderator and each independent variable.

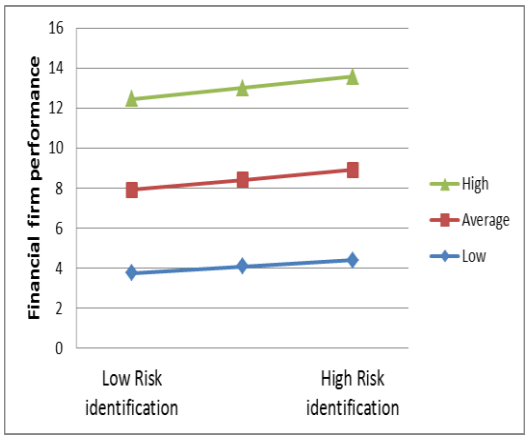

Figure 4.6 Risk identification

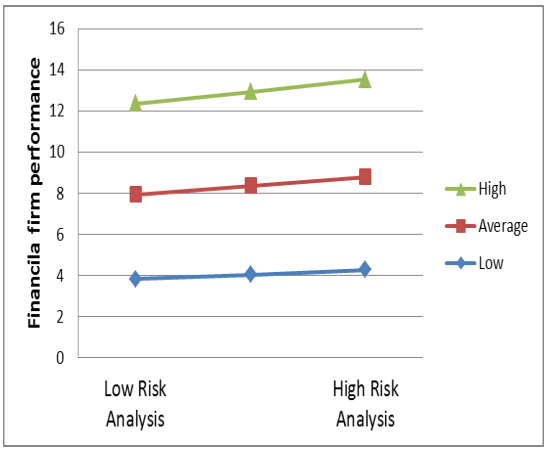

Figure 4.7 Risk Analysis

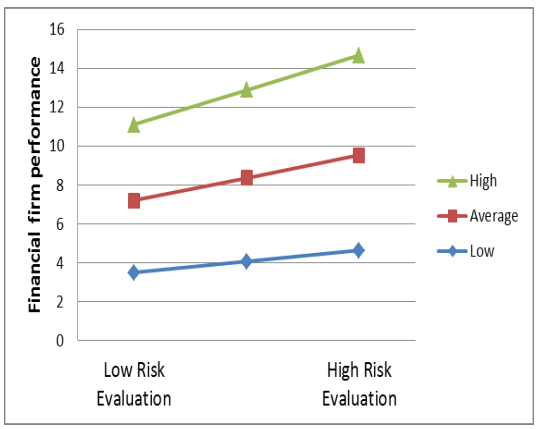

Figure 4.8 Risk Evaluation

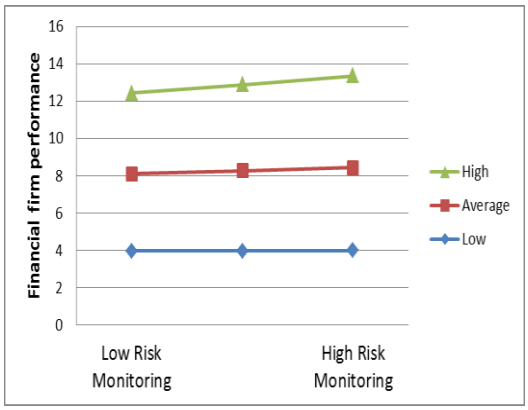

Figure 4.9 Risk monitoring

Model 3 showed that there was no significant effect of ownership structure as a moderator on the relationship between risk identification (β= -0.003) and performance of financial institutions (Figure 4.6). **Model 4** indicated that there was no significant effect of ownership structure as a moderator on the relationship between risk monitoring (β= -0.052) and performance of financial institutions (Figure 4.7). **Model**

5 results showed that there was significant effect of ownership structure as a moderator on the relationship between risk analysis (β=0.155) and performance of financial institutions (Figure 4.8).

Model 6 indicated that there was significant effect of ownership structure as a moderator on the relationship between risk evaluation (β=0.255) and performance of financial institutions (Figure 4.9). The ownership structure moderates the relationship between the risk analysis and risk evaluation management practices on performance of financial institutions.

The ownership structure does not moderate the relationship between the risk identification, risk monitoring and performance of financial institutions. This agrees with Strutt (2003) that risk analysis is set of stages of systematic assessment which may involve a number of different analyses like establishing acceptable or tolerable levels of risk, evaluation of risks, determine whether the risks are as low as reasonably practicable, and determine risk reduction measures where appropriate.

In this light, it is reasoned that due to the fact that internal auditors are more privy with the operations of the firm they work for than external auditors, are particularly suited to carry out fraud risk assessment. This agrees with Kasiva (2012) that fraud risk assessment is one area that deserves significant reliance on internal audit work.

Examination of the interaction plot between moderated ownership structure on relationship between risk management practices and financial firm performance as summarized in Figure 4.10. The results showed an enhancing effect as risk management practices increased, the ownership structure change making the financial firm performance increased.

The finding implies that ownership structure positively moderate the relationship between risk analysis and evaluation on performance of financial institutions. This agrees with Strutt (2003), that risk analysis now goes beyond evaluation to include some of the decision making processes of risk management. This agrees with Ren *et al.,* (2012) that firm performance is negatively related to board stock ownership, the frequency of board meeting and managerial stock ownership. Hence, board equity ownership will strengthen or change the relationship between ERM implementation and firm performance.

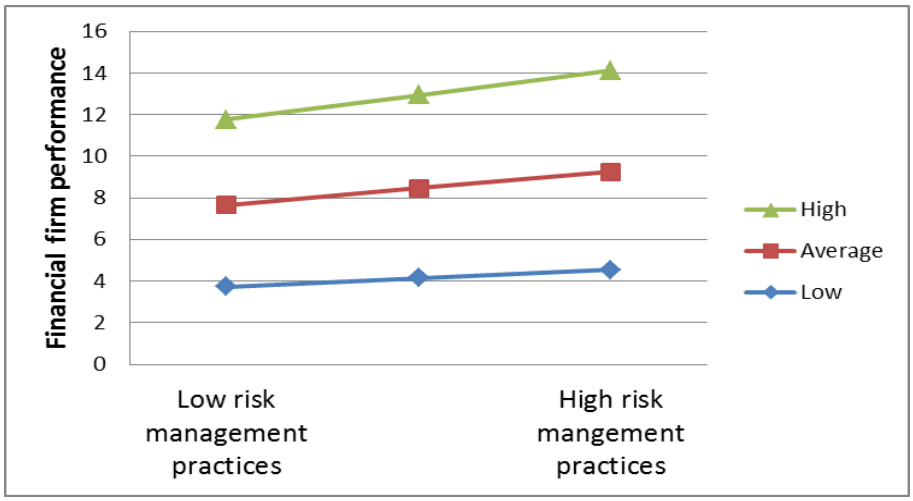

Figure 4.10 Interaction Effect on Risk management practices

The ownership structure does not moderate the relationship between risk identification and monitoring on performance of financial institutions. Monitoring is the final step in the corporate risk management process (Pausenberger and Nassauer, 2002). Control by the management board is insufficient to ensure the effective functioning of the risk monitoring system. This is because the management board members do not have sufficient time to exercise extensive control. The supervisory board too is obligated to control the risk management process and supported by the auditor.

The ownership structure influences the decisions of managers and their risk aversion. This agrees with (Athanasoglou *et al.,* 2005 and Aburime, 2005) that bank performance may be affected by internal and external factors. The magnitude of the effect can be influenced by the decision of the management. This agrees with Ongore (2011) that the management decision is affected by the welfare of the owners which is determined by their investment preferences and risk appetites.

4.7 Summary of the Chapter

This chapter presented detailed results of the data, results of the analyses, discussions and interpretation of the findings. Preliminary study results discussed descriptive statistics, factor analysis, correlation and regression analysis. Descriptive statistics of the study were analyzed, corroborated with the literature reviewed and the appropriate inferences drawn. Regression and correlation analysis, as well as analysis of variance were performed to enhance data interpretation and discussions. Regression models to predict the independent variable were also presented in the chapter.

In conclusion, this study endeavored to establish, and indeed established that risk management practices (risk identification, risk analysis, risk evaluation, risk monitoring) had a significant effect on financial performance of the financial institutions in Kenya. The results showed that financial institutions that had established risk management procedures of identification, analysis, evaluation and monitoring had improved financial performance. However the results indicated that ownership structure moderates the relationship between the risk analysis and risk evaluation management practices on financial performance of financial institutions, does not moderate the relationship between the risk identification, risk monitoring and financial performance of financial institutions.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presents the major summary of the findings, conclusion and recommendations and suggestions of the study for further and future research.

5.1 Summary of Findings

This study has added knowledge on the moderating effect of ownership structure on the relationship between risk management practices and financial performance of financial institutions in Kenya. The hypothesized relationship was tested empirically guided by the study objectives; The objectives of the study was to establish the effect of risk identification on financial performance of financial institutions in Kenya, to establish the effect of risk analysis on financial performance of financial institutions in Kenya, effect of risk evaluation on financial performance of financial institutions in Kenya, to establish the effect of risk monitoring on financial performance of financial institutions in Kenya and to establish the moderating effect of ownership structure which was analyzed based on two elements of ownership identity (foreign ownership and local ownership) on the relationship between risk management practices and financial performance of financial institutions in Kenya.

The hypothesized correlation between the risk management practices (risk identification, risk analysis, risk evaluation and risk monitoring) and financial performance and moderating effect of ownership structure on the relationship between risk identification, risk analysis, risk evaluation and risk monitoring on financial performance of financial institutions was presented in a conceptual framework that guided this study.

In so doing, the current study gives the summary of the findings with respect to study objectives. The first objective of the study was to establish the effect of risk identification on performance of financial institutions in Kenya. There was a positive effect of risk identification and financial performance of financial institutions [β = .026, p<.05]. From the model the risk identification had no significant relationship (P>0.05) with financial performance of financial institutions. The null hypothesis **(H_{O1})** that there is no significant effect of risk identification on performance of financial institutions was not rejected. Through risk identification the financial institution is able to study activities and places its resources where it's exposed to risks.

The second objective of the study was to establish the effect of risk analysis on performance of financial institutions in Kenya. Risk analysis had no significant effect on the financial performance of financial institutions [β =.084, p>.05]. Most of these financial institutions have not adopted risk analysis management practice to effectively manage their portfolio. From the model the risk analysis had no significant effect of financial performance (P>0.05). The null hypothesis **(H_{O2})** stating that there is no significant effect of risk analysis on financial performance of financial institutions was not rejected.

The third objective of the study was to establish the effect of risk evaluation on performance of financial institutions in Kenya. There was a positive effect of risk evaluation [β = .711, p<.05] on the performance of financial institutions was obtained. The risk evaluation positively affected the performance of financial institutions. The risk evaluation had positive effect with performance of financial institutions (P<0.05). The null hypothesis **H_{O3}** stating that there is no significant effect of risk evaluation on performance of financial institutions was rejected**.** This

indicates that for each increase in the risk evaluation**,** there was an increase in performance of financial institutions.

The fourth objective of the study was to establish the effect of risk monitoring on performance of financial institutions in Kenya. Risk monitoring [β = .091, p<.05] had a positive effect on performance of financial institutions. The more there was risk monitoring the higher the performance of financial institutions. A proper risk monitoring practices was used to ensure that risks are in line with financial institution's management goals in order to uncover mistakes at early stages. The risk monitoring had positive effect on performance of financial institutions (P<0.05). The null hypothesis **(H_{O4})** stating that there is no significant effect of risk monitoring on the financial performance of financial institutions was rejected.

The fifth objective was to establish the moderating effect of ownership structure on the relationship between risk management practices and performance of financial institutions in Kenya. The risk management practices and ownership structure explained 74.1% of performance of financial institutions and significant (p<0.01). This indicated that risk management was an important task of institutions in creating value for shareholders and customers. The presence of a proper risk management process enables a firm to reduce its risk exposure. The ownership structure moderates the relationship between the risk management practices and performance of financial institutions. The ownership structure had a significant effect on the financial institutions risk.

There was significant moderating effect of ownership structure on the relationship between risk analysis (β=0.155), evaluation (β=0.255) and performance of financial institutions. However, risk identification (β= -0.003) and monitoring (β= -0.052) was

not significant. The finding implies that ownership structure positively moderates the relationship between risk analysis and evaluation on performance of financial institutions. The risk analysis goes beyond evaluation to include some of the decision-making processes of risk management. Control by the management board was insufficient to ensure effective functioning of the risk monitoring system. This is because the management board members do not have sufficient time to exercise extensive control.

5.2 Conclusions of the Study

Based on the analysis and empirical evidence from this study, following conclusions can be made.

5.2.1 Effect of Risk Identification on Financial Performance of Financial Institutions

The risk identification management practice had a positive relationship between risk identification and performance of financial institutions. This means that in the model risk identification therefore was sufficient in predicting financial performance and was not sufficient in explaining the variations. This indicated the more risk identification the higher the financial performance of financial institutions. This suggests that risk identification is vital for effective risk management practices of financial institutions. The board of directors and top management of financial institutions need to have adequate risk identification policy framework further financial institutions should also have effective mechanisms to identify risks in all risk spots of the organizations.

5.2.2 Effect of Risk Analysis on Financial Performance of Financial Institutions

The findings from the study shows that risk analysis had positive relationship with the

financial performance of financial institutions. This suggests that improvement on risk analysis practices have a positive effect on financial performance of financial institutions. This implies that improved financial performance is attributed to effective risk analysis system in place.

5.2.3 Effect of Risk Evaluation on Financial Performance of Financial Institutions

The results from the study found out that risk evaluation had a positive relationship with financial performance of financial institutions. This suggests that improvement on risk evaluation statistically have a positive effect on financial performance of the financial institutions in Kenya.

5.2.4 Effect of Risk Monitoring on Financial Performance of Financial Institutions

The risk management practices (monitoring) had positive relationship with the performance of financial institutions. The risk monitoring management practices highly predicted the performance of financial institutions.

5.2.5 Moderating effect of Ownership structure on the relationship between risk management practices and Financial Performance of Financial Institutions

The ownership structure moderates the relationship between the risk management practices and performance of financial institutions. The ownership structure moderates the relationship between the risk analysis and evaluation management practices on performance of financial institutions. The ownership structure does not moderate the relationship between the risk identification, risk monitoring and performance of financial institutions. This indicated that risk management was an important task of institutions in creating value for shareholders and customers. The ownership structure moderates the relationship between the risk management

practices and performance of financial institutions. The ownership structure had a significant effect on the financial institutions risk.

There was significant moderating effect of ownership structure on the relationship between risk analysis, evaluation and performance of financial institutions hence an enhancing effect. However, risk identification and monitoring were not significant thus antagonistic effect. The finding implies that ownership structure positively moderates the relationship between risk analysis and evaluation on performance of financial institutions.

5.3 Recommendation of the Study

A significant relationship was identified between the risk management practices and financial performance. These results reveal that an improvement in the risk evaluation increases the effectiveness of the risk management practices of financial institutions in Kenya. Considering this fact, the financial institutions should improve their risk management practices by giving more attention on risk identification, analysis and monitoring.

The ownership structure does not moderate the relationship between the risk identification, risk monitoring and performance of financial institutions. The management of financial institutions should put in place systems that will assist in identification and monitoring risk management practices with respect to their ownership identity.

In order to minimize system failures and to reduce the risk in financial institutions, the risk management divisions should invest in advanced technology projects, develops contingency plans, provide training to their managers and improve the supervision and monitoring. Similarly, the risk management departments should use different

techniques that deal with the risks in their operations. Policies and procedures for managing different kinds of risks should be aligned with the financial institutions risk management regulatory guidelines.

The risk identification should be enhanced so as to enhance the performance of financial institutions. Through risk identification the financial institution is able to study activities and places where its resources are exposed to risks. The presence of a proper risk management process enables a firm to reduce its risk exposure. These may be achieved through establishing regulatory mechanism that can be adopted to enhance effective risk identification.

5.3.1 Management Implications

The study established the importance of ownership structure in moderating the relationship between risk management practices and performance of financial institutions. The utilization of various risk management practices; identification, analysis, evaluation and monitoring should be enhanced so as to bring efficiency in the performance of financial institutions. These may be achieved through establishment and implementation of risk identification, analysis, evaluation and monitoring policy framework which will significantly influence performance of financial institutions and enhance shareholder capabilities to identify, analyze, evaluate and monitor all risks that can hinder the financial institutions from achieving their set objectives.

5.3.2 Policy Implications

The study largely shows ownership structure moderates the relationship between the risk management practices and performance of financial institutions. The findings expands our understanding of the link between ownership structure, risk management

practices and performance and further points on the ownership identity types foreign or local as usually common with financial institutions in Kenyan economy.

The ownership structure moderates the relationship between the risk analysis and evaluation management practices on performance of financial institutions. The ownership structure does not moderate the relationship between the risk identification, risk monitoring and performance of financial institutions. These further reiterate the fact that corporate governance significantly influences risk management practices and performance of financial institutions in Kenya which should further be accompanied by appropriate regulations to ensure efficient and healthy financial sector contributing to the economy and welfare of the society.

The Central Bank of Kenya and Sacco's Regulatory Authorities as regulators should make considerations due to the complexity of the financial sector nowadays makes it necessary before any policy analysis should rely upon different indicators and mainly upon those that reflect the whole reality of the industry performance and explicitly consider and carefully impose some regulations that consider different characteristics of ownership structure of financial institutions and the level of risk tolerance. The policy implications might be different across different types of financial institutions. Consider establish effective and efficient risk analysis mechanisms that will assist financial institutions ascertain their risk earlier.

5.3.3 Implication to Theory

This study contributed to the available literature in financial sector by providing the empirical verification of the ownership structure (Who) on relationship between risk management practices and financial performance of financial institutions in Kenya. The study also contributes towards the role of Agency theory (Jensen & Meckiling

1976) in financial institutions sector by examining the policy implications of ownership identity effects on risk management guidelines in the Kenyan context.

The relationship between risk management practices and financial performance varies with ownership identity. Insufficient monitoring mechanisms may lead to high managerial discretion (Goergen and Renneboog 2001). Thus modern corporations are subject to agency conflicts arising from separation of decision making and risk bearing functions of the firm.

The study supports the theory of Enterprise Risk Management (ERM) that is concerned with holistic, company-wide approach in managing risks (Alviunessen and Jankensgard 2009). These results support the policy implications of the risk management that all the financial institutions need to implement a comprehensive and rigorous structure of risk management which encompasses all the activities that affect their risk profiles and comprises of identification, analysis, evaluation and monitoring key risks. ERM framework focuses on adopting systematic and consistent approach to manage all of the risks confronting an organization. Overall process of managing an organizations risks exposures, emphasis on identifying and managing risky events.

5.4 Recommendation for Further Studies

This study only focused on the moderating effect of ownership structure on the relationship between risk management practices and performance of financial institutions in Kenya. The study while establishing the relationship between ownership structure, risk management and performance of financial institutions in Kenya leave direction for further research. Further studies should establish the mediating effect of ownership structure on the relationship between risk management practices and performance of financial institutions in Kenya.

Future studies should also be concerned with the causes of performance differences that are not related to ownership per se. Investigations on the effect of other variables such as credit reference bureau and information sharing, mobile banking and internet banking on the relationship between risk management practices and performance of financial institutions in Kenya.

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APPENDICES

APPENDIX I: INTRODUCTION LETTER

Dear Sir/Madam,

I am a PhD student Business Administration Student at Moi University carrying out a study on “effects of ownership structure on the relationship between risk management practices and performance of financial institutions in Kenya”. I kindly request you to answer the questions below. All responses will be handled confidentially and will be used only for this study. This questionnaire therefore is to help me collect information from you for purely academic purpose.

You are therefore kindly requested to participate and respond as best as you can to items in the questionnaire. The information provided will be treated with utmost confidentiality and will be used only for the purpose of this study. Let me take this opportunity to thank you in advance for taking part in this study.

Yours sincerely,

FREDRICK K. LAGAT

SBE/D.PHIL/BM/023/13

APPENDIX II: QUESTIONNAIRE FOR MANAGERS

Dear Respondents,

I am a PhD student Business Management Student at Moi University carrying out a study on **"Effect of ownership structure on the relationship between risk management practices and performance of financial institutions in Kenya".** I kindly request you to answer the questions below. All responses will be handled confidentially and will be used only for this study. This questionnaire therefore is to help me collect information from you for purely academic purpose. You are therefore kindly requested to participate and respond as best as you can to items in the questionnaire. The information provided will be treated with utmost confidentiality and will be used only for the purpose of this study. Please kindly participate and respond appropriately to the questions given below. Your contributions are highly appreciated.

Thank you very much in advance.

Section A: Ownership of Financial Institutions

1. The following are ownership structure of financial institutions. (Tick appropriately)

Nature	Ownership		Branches	Annual turnover	Total Assets
	Local	Foreign			
MFI					
Bank					
SACCO					

2. Do shareholders of your financial institution have a role in risk management processes? Yes [ ] No [ ]

3. The following are statements on ownership of financial institutions. Please rate them according to your agreement using the five-point Likert scale: 5=Strongly Agree (SA), 4=Agree (A), 3= Undecided, 2= Disagree (D) and 1=Strongly Disagree

	STATEMENT	**5**	**4**	**3**	**2**	**1**
1.	Foreign financial institutions don't enjoy a state guarantee in relation to local financial institutions liquidity risk					
2.	Foreign financial institutions have a profit maximization goal that encourage more transactions in the capital market and deposits					
3.	Foreign ownership may influence the risk of local financial institutions					
4.	Local financial institutions are less sensitive to macroeconomic shocks in comparison with the foreign financial institutions					
5.	Local financial institutions have a lower risk of default, but have greater operational risk than foreign financial institutions					
6.	Local owned financial institutions have large number of creditors that increases their credit risks than foreign owned financial institutions					
7.	Local owned financial institutions have large number of customers that increases their market risks than foreign owned financial institutions					
8.	Risk management is improved when the participation of foreign investors is more than local investors					
9.	The increase in foreign ownership is associated with higher risk and less profitability than local financial institutions					
10.	The ownership structure has a significant effect on bank risk.					

Section B: Financial performance

4. Please indicate the Balance Sheet Figures with respect to your institution

	Total Assets	Total Liabilities	Equity (Capital)
2013			
2014			
2015			

Financial Performance

5. The following are statements on financial performance. Please rate them according to your agreement using the five-point Likert scale: 5=Strongly Agree (SA), 4=Agree (A), 3= Undecided, 2= Disagree (D) and 1=Strongly Disagree

NO	STATEMENT	5	4	3	2	1
1.	The financial institution uses return on assets to measure performance					
2.	Financial institution focuses on increasing its return on investment					
3.	Our institution has grown significantly in terms of operating profit over the last one year					
4.	Risk management has played a key role in growth operation profit					
5.	Risk management has led to increase in net income to total assets ratio of our institution					
6.	The risk management practices has led to decrease in cost of capital					
7.	Risk management practices has led to increase in expenses to revenue ratio					
8.	Risk management practices has improved our operating cash flow					
9.	Risk management practices has led to increase in capital employed					
10.	Risk management practices has led to increase in earnings per share					

Section C: Risk Management practices in financial institutions

6. Are there risks affecting your financial institution? Yes [ ] No [ ]

7. Indicate the impact of key risks affecting your financial institution. Please rate them according to your agreement using the five-point Likert scale: 5=Greatest impact, 4=Moderate impact (A), 3= Least impact, 2= No impact (D) and 1=Lowest impact

STATEMENT	5	4	3	2	1
Banking risks					
Credit risks					
Market risks					
Operational risks					

8. Indicate the most preferred risk management practices adopted by your financial institution. Please rate them according to your agreement using the five-point Likert scale: 5= Most preferred, 4=Moderate preferred (A), 3= Least preferred, 2= lowest preferred and 1=Not preferred at all

STATEMENT	5	4	3	2	1
Identifying risks					
Analysis of risk					
Evaluating risk					
Monitoring risk					
Reporting back risks					

Risk Identification practice in financial institution

9. The following are statements on risk identification. Please rate them according to your agreement using the five-point Likert scale: 5=Strongly Agree (SA), 4=Agree (A), 3= Undecided, 2= Disagree (D) and 1=Strongly Disagree

	STATEMENT	5	4	3	2	1
1.	The financial institution carries out a compressive and systematic identification of its risks relating to each of its declared aims and objectives					
2.	The financial institution finds it difficult to prioritize its main risks					
3.	Changes in risks are recognized and identified with the financial institution's roles and responsibilities					
4.	The financial institution is aware of the strengths and weaknesses of the risk management systems of other financial institutions					
5.	The financial institution has developed and applied procedures for the systematic identification of opportunities					
6.	It is crucial for financial institution to apply the most sophisticated techniques for risk identification					
7.	Risk identification help them in the mitigation of the risk through debt collection or credit sanctions					
8.	Risk identification helps to sort risk according to their importance					
9.	Risk identification assists the management to develop risk management strategy to allocate resources efficiently					
10.	Risk identification roles and responsibilities are clearly defined					

Risk Analysis practice in financial institution

10. The following are statements on risk analysis. Please rate them according to your agreement using the five-point Likert scale: 5=Strongly Agree (SA), 4=Agree (A), 3= Undecided, 2= Disagree (D) and 1=Strongly Disagree

NO	**STATEMENT**	**5**	**4**	**3**	**2**	**1**
1	This financial institution assesses the likelihood of risks occurring					
2	This financial institution's risks are assessed by using quantitative analysis methods					
3	This financial institution's risks are assessed by using qualitative analysis methods(e.g. high, moderate, low)					
4	The financial institution analyses and evaluates opportunities it has to achieve objectives					
5	The financial institution's response to analysed risks includes an assessment of the costs and benefits of addressing risks					
6	The financial institution's response to analysed risks includes prioritizing of risks and selecting those that need active management					
7	Risk analysis and assessment comprises identification of the outcomes and estimation the magnitude of the consequences					

Risk Evaluation practice in financial institution

11. The following are statements on risk evaluation. Please rate them according to your agreement using the five-point Likert scale: 5=Strongly Agree (SA), 4=Agree (A), 3= Undecided, 2= Disagree (D) and 1=Strongly Disagree

NO	**STATEMENT**	**5**	**4**	**3**	**2**	**1**
1.	There is a common understanding of risk management across the financial institution					
2.	There is a proper system for understanding various risks implemented in the financial institution					
3.	Responsibility for risk management is clearly set out and understood throughout the financial institution					
4.	Accountability for risk management is clearly set out and understood throughout the financial institution					
5.	Our financial institution records the findings on the risks identified and implement the measures					
6.	Controls exist for approving decisions regarding					

	financing and accounting principles, practices, and methods					
7.	Our auditors understand companies' risk and have easy to assess risks					
8.	Risks are evaluated with consideration of uncertainties being clearly considered and presented.					
9.	Risk is evaluated in terms of both quantitative and qualitative value.					
10.	Risks are subdivided into individual levels for further analysis					

Risk Monitoring practice in financial institution

12. The following are statements on risk monitoring. Please rate them according to your agreement using the five-point Likert scale: 5=Strongly Agree (SA), 4=Agree (A), 3= Undecided, 2= Disagree (D) and 1=Strongly Disagree

NO	STATEMENT	5	4	3	2	1
1.	Monitoring the effectiveness of risk management is an integral part of routine management reporting					
2.	The level of control by the financial institution is appropriate for the risks that it faces					
3.	The financial institution has adopted a standard reporting system about the risk management from bottom to top management					
4.	Reporting and communication processes within the financial institution support the effective management of risk					
5.	The financial institution's response to risk includes an evaluation of the effectiveness of the existing controls and risk management responses					
6.	The financial institution's response to risk includes action plans in implementation decisions about identified risk					
7.	The financial institution effectively monitors the credit limit of everyone counterparty					
8.	The financial institution reviews the country ratings on a regular basis for its international financing and investment					
9.	The borrower's business performance is regularly observed by the financial institution following the extension of financing					
10.	Risk monitoring enables the shareholders to assess the status of the corporation always					

Section D: Demographic Information (Please tick the appropriate options)

1. Gender : Male [ ] Female [ ]
2. Age: 18 – 24[ ] 25 – 34 [ ] 35– 44 [ ] 45 – 54 [ ] 55– 64 [ ] 65 and Above [ ]
3. Education level: Diploma [ ] Bachelors [ ] Masters [ ] PHD/Doctorate [ ]

   Other (please specify) _____

4. How long has the financial institution been in operation (In Years)?

   0-1 [ ] 2- 4 [ ] 5 - 7 [ ] 8 -10 [ ] 10 - 15 [ ] 15 + years [ ]

5. What is the department are you working on?

   Credit [ ] Risk and compliance [ ] Mortgage [ ] Debt recovery [ ]

6. Nature of Activities of the financial institutions: (Please mark the appropriate boxes with)

Commercial Banking □ Investment Banking □ Offshore banking□

Foreign Exchange dealers' □ Investment (including funds) □

Stock Brokers □ Deposit taking □ others (please specify) □

7. What is the size of your firm……

Large banks (over Kes.40 bn Asset [ ]
Medium bank (10 – 40 bn Asset) [ ]
Small banks (below 10bn Asset) [ ]

8. How many years have your firm in operation?

   0-5 [ ] 6-10 [ ] 11 - 15 [ ] 16 -20 [ ] 21 - 25 [ ] 26-30 [ ]

APPENDIX III: LIST OF FINANCIAL INSTITUTIONS IN KENYA

i). Foreign owned not locally incorporated

1. Bank of India
2. Citibank N.A. Kenya
3. Habib Bank A.G. Zurich
4. Habib Bank Ltd.

ii). Foreign owned but locally Incorporated Banking Institutions (Partly owned by locals)

1. Bank of Baroda (K) Ltd.
2. Barclays Bank of Kenya Ltd.
3. Diamond Trust Bank Kenya Ltd.
4. K-Rep Bank Ltd.
5. Standard Chartered Bank (K) Ltd.
6. Eco bank Ltd
7. Gulf Africa Bank (K) Ltd
8. First Community Bank

iii). Foreign owned but locally incorporated Banking institutions

1. Bank of Africa (K) Ltd.
2. UBA Kenya Bank Limited

b). Banking Institutions with Government participation

1. Consolidated Bank of Kenya Ltd.
2. Development Bank of Kenya Ltd.
3. Housing Finance Ltd.
4. Kenya Commercial Bank Ltd.
5. National Bank of Kenya Ltd.
6. CFC Stanbic Bank Ltd.

c). Banking Institutions locally privately Owned

1. African Banking Corporation Ltd.
2. Jamii Bora Bank Ltd.
3. Commercial Bank of Africa Ltd.
4. Co-operative Bank of Kenya Ltd.
5. Credit Bank Ltd.
6. Charterhouse Bank Ltd.
7. Chase Bank (K) Ltd.
8. Dubai Bank Kenya Ltd
9. Equatorial Commercial Bank Ltd.
10. Equity Bank Ltd.
11. Family Bank Ltd.
12. Fidelity Commercial Bank Ltd.
13. Fina Bank Ltd.

14. Giro Commercial Bank Ltd.
15. Guardian Bank Ltd.
16. Imperial Bank Ltd.
17. Investment & Mortgages Bank Ltd.
18. Middle East Bank (K) Ltd.
19. NIC Bank Ltd.
20. Oriental Commercial Bank Ltd.
21. Paramount Universal Bank Ltd.
22. Prime Bank Ltd.
23. Trans-National Bank Ltd.
24. Victoria Commercial Bank Ltd.

II. Banking Institutions listed on the NSE

1. Barclays Bank of Kenya Ltd.
2. CFC Stanbic Bank Ltd.
3. Equity Bank Ltd.
4. Housing Finance Ltd.
5. Kenya Commercial Bank Ltd.
6. NIC Bank Ltd.
7. Standard Chartered Bank (K) Ltd.
8. Diamond Trust Bank Kenya Ltd
9. National Bank of Kenya
10. Co-operative Bank of Kenya Ltd

Source: CBK 2016

APPENDIX IV: LIST OF MFI IN KENYA

1. Choice Microfinance Bank Limited
2. Faulu Microfinance Bank Ltd
3. Kenya Women Finance Trust Ltd
4. SMEP Microfinance Bank Ltd
5. Remu Microfinance Bank Ltd
6. Rafiki Microfinance Bank Ltd
7. Uwezo Microfinance Bank Ltd
8. Century Microfinance Bank Ltd
9. Sumac Microfinance Bank Ltd
10. Sisdo limited
11. U&I Microfinance Bank Ltd
12. Daraja Microfinance Bank Ltd
13. Caritas Microfinance Bank Ltd
14. Ecobank Ltd
15. Jitegemee Trust
16. AAR Credit Services Ltd
17. Adok Timo Ltd
18. BCF Kenya Limited
19. Ace Capital & Credit Ltd
20. Africa Credit Ltd
21. Africashare Partnership
22. Oiko Credit Ltd
23. One Africa capital ltd
24. Bidii Development Programme
25. Bimas Ltd
26. Business Capital Access Ltd
27. Blue Limited
28. Canyon Rural Credit Ltd
29. Capital Credit Ltd
30. Eclof Kenya Limited
31. Kadet Ltd
32. Micro Africa Limited
33. Micro Enterprise support programme trust (MESPT)
34. Fountain Credit Services Ltd.

35. Stromme Microfinance East Africa Ltd.
36. Summac Credit Ltd
37. Opportunity Kenya Ltd.
38. Yehu microfinance Ltd.
39. Fusion Capital Ltd
40. Pamoja Women Development Programme
41. Musomi Ltd.
42. Molyn Credit Ltd.
43. Rupia Ltd
44. Taifa options Ltd
45. Select Management Services Ltd.
46. Green land Fedha Ltd
47. Youth Initiatives Kenya Ltd. (YIKE)
48. Platinum Kenya Ltd.
49. Ngao Credit Ltd.
50. Indo Africa Finance Ltd
51. Women Enterprise Solutions Ltd
52. Focus capital Ltd.

Source: CBK 2016

APPENDIX V: LIST OF SACCOs IN KENYA

1.Afya Sacco Society Ltd
2.Agro-Chem Sacco Society Ltd
3. All Churches Sacco Society Ltd
4. Ainabkoi Sacco Society Ltd
5. Airports Sacco Society Ltd
6.Ardhi Sacco Society Ltd
7.Asili Sacco Society Ltd
8.Banana Hill Matatu Sacco Society Ltd
9.Bandari Sacco Society Ltd
10.Baraka Sacco Society Ltd
11.Baraton University Sacco Society Ltd
12.Biashara Sacco Society Ltd
13.Bingwa Sacco Society Ltd
14.Boresha Sacco Society Ltd
15.Capital Sacco Society Ltd
16.Centenary Sacco Society Ltd
17.Chai Sacco Society Ltd
18.Chuna Sacco Society Ltd
19.Comoco Sacco Society Ltd
20.Cosmopolitan Sacco Society Ltd
21.County Sacco Society Ltd
22.Daima Sacco Society Ltd.
23.Dhabiti Sacco Society Ltd
24. Dimkes Sacco Society Ltd
25.Dumisha Sacco Society Ltd
26.Eco Pillar Sacco Society Ltd
27.Egerton Sacco Society Ltd
28.Elgon Teachers Sacco Society Ltd
29.Enea Sacco Society Ltd
30.Faridi Sacco Society Ltd
31.Fariji Sacco Society Ltd
32.Fortune Sacco Society Ltd
33.Gestameco Sacco Society Ltd
34.Githunguri Sacco Society Ltd
35.Good Faith Sacco Society Ltd
36.Goodway Sacco Society Ltd
37 Gusii Mwalimu Sacco Society Ltd
38 Green Hill Sacco Society Ltd
39 Harambee Sacco Society Ltd
40 Hazina Sacco Society Ltd
41 IIikisonko Sacco Society Ltd
42 Imarisha Sacco Society Ltd
43 Imenti Sacco Society Ltd
44 Jacaranda Sacco Society Ltd
45 Jamii Sacco Society Ltd
46 Jitegemee Sacco Society Ltd
47 Jacaranda Sacco Society Ltd
48 Jamii Sacco Society Ltd
49 Jumuika Sacco Society Ltd
50 Kaimosi Sacco society Ltd
51 Kakamega Teachers Sacco Society Ltd
52 Kathera Rural Sacco Society Ltd
53 Keiyo Sacco Society Ltd
54 Kenpipe Sacco Society Ltd
55 Kenversity Sacco Society Ltd
56 Kenya Archivers Sacco Society Ltd
57 Kenya Bankers Sacco Society Ltd
58 Kenya Canners Sacco Society Ltd
59 Kenya Highlands Sacco Society Ltd
60 Kenya Midland Sacco Society Ltd
61 Kenya Police Sacco Society Ltd
62 Kiambaa Dairy Rural Sacco Soc Ltd

63 Kimbilio Daima Sacco Soc. Ltd 64.Kingdom Sacco Society Ltd

65.Kipsigis Edis Sacco Society Ltd 66 Kite Sacco Society Ltd.

67.Kitui Teachers Sacco Society Ltd 68 Kmfri Sacco Society Ltd

69 Kolenge Sacco Society Ltd 70 Konoin Sacco Society Ltd

71 Koru Sacco Society Ltd 72 Kwale Sacco Society Ltd

73 Kwetu Sacco Society Ltd 74 K-Unity Sacco Society Ltd

75 Lamu Teachers Sacco Society Ltd 76 Lainisha Sacco Society Ltd

77 Lengo Sacco Society Ltd 78 Mafaniko Sacco Society Ltd

79 Magadi Sacco Society Ltd 80 Magereza Sacco Society Ltd

81 Maisha Sacco Society Ltd 82 Marsabit Sacco Society Ltd

83 Mentor Sacco Society Ltd 84 Metropolitan Sacco Societies Ltd

85 Mmh Sacco Society Ltd 86 Mombasa Port Sacco Society Ltd

87.Mudete Tea Growers Sacco Soc. Ltd 88 Muhigia Sacco Society Ltd

89 Murata Sacco Society Ltd 90 Mwalimu National Sacco Society Ltd

91 Mwietheri Sacco Society Ltd 92 Mwingi Mwalimu Sacco Society Ltd

93 Muki Sacco Society Ltd 94 Mwito Sacco Society Ltd

95 2NK Sacco Society Ltd 96 Nacico Sacco Society Ltd

97 Nafaka Sacco Society Ltd 98 Naku Sacco Society Ltd

99 Nandi Farmers Sacco Society Ltd 100. Nanyuki Equator Sacco Soc. Ltd

101.Narok Teachers Sacco Soc Ltd 102.Nassefu Sacco Society Ltd

103.Nation sacco Society Ltd 104.Nawiri Sacco Society Ltd

105.Ndege Chai Sacco Society Ltd 106 Nest Sacco Society Ltd

107. Ndosha Sacco Society Ltd 108.Ngarisha Sacco Society Ltd

109. Nitunze Sacco Society Ltd 110.Nrs Sacco Society Ltd

112.Nufaika Sacco society Ltd. 113.Nyahururu Umoja Sacco Society Ltd

114.Nyala Vision Sacco Society Ltd 115.Nyambene Arimi Sacco Society Ltd

116.Nyeri Teachers Sacco society Ltd. 117.Orient Sacco Society Ltd.

118.Patnas Sacco Society Ltd 119.Puan Sacco Society Ltd

120.Qwetu Sacco Society Ltd 121.Rachuonyo Teachers Sacco Soc. Ltd

122.Safaricom Sacco Society Ltd. 123.Sheria Sacco Society Ltd.

124.Shirika Sacco Society Ltd 125.Simba Chai Sacco Society Ltd.

126.Siraji Sacco Society Ltd 127.Skyline Sacco Society Ltd.

128.Smart Champions Sacco Soc. Ltd 129.Smart Life Sacco Society Ltd

130.Solution Sacco Society Ltd. 131.Sotico Sacco Society Ltd.

132.Sourthern Star Sacco Society Ltd. 133.Stake Kenya Sacco Society Ltd

134.Stegro Sacco Society Ltd. 135.Stima Sacco Society Ltd.

136.Sukari Sacco Society Ltd 137.Suba Teachers Sacco Society Ltd

138.Supa Sacco Society Ltd 139. Tai Sacco Society Ltd

140.Taifa Sacco Society Ltd. 141.Taraji Sacco Society Ltd.

142.Telepost Sacco Society Ltd 143.Tembo Sacco Society Ltd

144.Tenhos Sacco Society Ltd. 145. Thamani Sacco Society Ltd

146.Transcounties Sacco Society Ltd. 147 Trans Nation Sacco Society Ltd

148.Times U Sacco Society Ltd. 149.Tower Sacco Society Ltd.

150.Transcom Sacco Society Ltd. 151.Trans Elite County Sacco Society Ltd

152.Trans- National Times Sacco Soc Ltd. 153.Ufanisi Sacco Society Ltd

154.Uchongaji Sacco Society Ltd. 155.Ufundi Sacco Society Ltd.

156.Ukristo na Ufanisi wa Anglicana Sacco society Ltd.

157.Ukulima Sacco Society Ltd. 158.Unaitas Sacco Society Ltd.

159.Uni- County Sacco Society Ltd. 160.United Nations Sacco Society Ltd.

161. Unison Sacco Society Ltd. 162.Universal Traders Sacco Society Ltd.

163. Vihiga County Sacco Society Ltd. 164.Vision Point Sacco Society Ltd.

165. Vision Africa Sacco society Ltd. 166. Wakenya Pamoja Sacco Society Ltd

167. Wakulima Commercial Sacco Soc Ltd. 168. Wanaanga Sacco Society Ltd.

169. Wananchi Sacco Society Ltd. 170. Wanandege Sacco Society Ltd.

171. Wareng Sacco Society Ltd. 172.Washa Sacco Society Ltd

173. Waumini Sacco Society Ltd. 174. Wevarsity Sacco Society Ltd.

175. Winas Sacco Society Ltd. 176.Yetu Sacco Society Ltd.

177. Miliki Sacco Society Ltd. 178.Nyamira Sacco Society Ltd.

179. Moi University Sacco Society Ltd. 180.Maona Sacco Society Ltd.

181. Nandi Hekima Sacco Society Ltd. 183.Elimu Sacco Society Ltd.

184.Fundilima Sacco Society Ltd 185.Imarika Sacco Society Ltd

Source: SASRA 2016

APPENDIX VI: RESEARCH PERMIT

THIS IS TO CERTIFY THAT:

MR. FREDRICK KIPROP LAGAT
of MOI UNIVERSITY, 3900-30100
Eldoret, has been permitted to conduct Research in Kenya

on the topic: Effect of ownership structure on the relationship between risk management practices and financial performance of financial institutions in Kenya,

for the period ending:
19th July,2017

Permit No : NACOSTI/P/17/79014/17922
Date Of Issue :19th July,2017
Fee Recieved :Ksh 2000

Applicant's Signature

Director General
National Commission for Science, Technology & Innovation

CONDITIONS

1. **The License is valid for the proposed research, research site specified period.**
2. **Both the Licence and any rights thereunder are non-transferable.**
3. **Upon request of the Commission, the Licensee shall submit a progress report.**
4. **The Licensee shall report to the County Director of Education and County Governor in the area of research before commencement of the research.**
5. **Excavation, filming and collection of specimens are subject to further permissions from relevant Government agencies.**
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7. **The Licensee shall submit two (2) hard copies and upload a soft copy of their final report.**
8. **The Commission reserves the right to modify the conditions of this Licence including its cancellation without prior notice.**

REPUBLIC OF KENYA

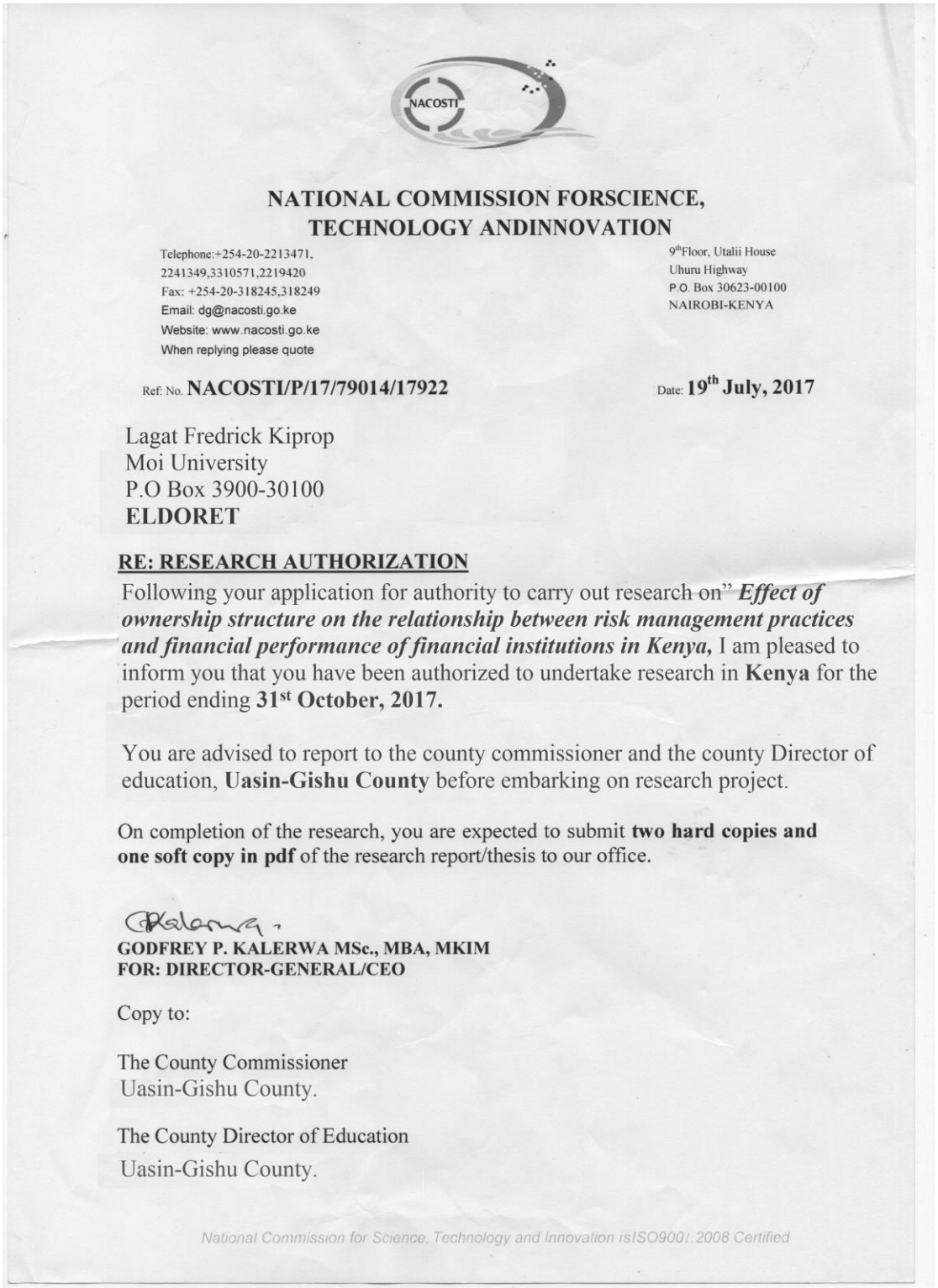
National Commission for Science, Technology and Innovation

RESEARCH CLEARANCE PERMIT

Serial No.A 4 4764

CONDITIONS: see back page

APPENDIX VII: RESEARCH AUTHORIZATION (NACOSTI)



NACOSTI

NATIONAL COMMISSION FORSCIENCE, TECHNOLOGY ANDINNOVATION

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Email: dg@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/17/79014/17922**

Date: **19th July, 2017**

Lagat Fredrick Kiprop
Moi University
P.O Box 3900-30100
ELDORET

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on" ***Effect of ownership structure on the relationship between risk management practices and financial performance of financial institutions in Kenya,*** I am pleased to inform you that you have been authorized to undertake research in **Kenya** for the period ending **31st October, 2017.**

You are advised to report to the county commissioner and the county Director of education, **Uasin-Gishu County** before embarking on research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Uasin-Gishu County.

The County Director of Education
Uasin-Gishu County.

APPENDIX VIII: RESEARCH AUTHORIZATION (MOI)

MOI UNIVERSITY
SCHOOL OF BUSINESS AND ECONOMICS

Tel: (053) 43287
Fax No: (053) 43360
Telex No. 35047 MOIVARSITY

Box 3900
Eldoret
KENYA

REF: SBE/DPHIL/BM/023/13

Date: 30TH NOVEMBER, 2015

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: FREDRICK KIPROP LAGAT - SBE/DPHIL/BM/023/13

The above named is a bonafide student of Moi University, School of Business and Economics pursuing Doctor of Philosophy Degree in Business Management, Specializing in Finance.

He has completed course work, defended his proposal and is proceeding to the field to collect data for his research titled; *Effects of Ownership on the Relationship Between Risk Management Practices and Financial Performance of Commercial Banks in Kenya".*

Please accord him the necessary assistance and support.

Yours faithfully,

DEAN
School Of Business and Economics
MOI UNIVERSITY

PROF. THOMAS CHERUIYOT
DEAN SCHOOL OF BUSINESS AND ECONOMICS

APPENDIX IX: HIERARCHICAL REGRESSION

[DataSet1] C:\Users\Alfred\Desktop\SEPT 2016\OWNERSHIP\PhD BA data final 2.sav

Model Summary[g]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.032[a]	.001	-.003	1.00161183	.001	.244	1	234	.622	
2	.864[b]	.747	.741	.5091775 0	.746	135.295	5	229	.000	
3	.865[c]	.747	.740	.5102782 4	.000	.013	1	228	.909	
4	.871[d]	.759	.751	.4991370 5	.012	11.292	1	227	.001	
5	.878[e]	.772	.762	.4874284 4	.012	12.037	1	226	.001	
6	.879[f]	.772	.762	.4877131 2	.001	.736	1	225	.392	.728

a. Predictors: (Constant), Zscore: size of the firm
b. Predictors: (Constant), Zscore: size of the firm, Zscore(Monitoring), Zscore(Identification), Zscore(Evaluation), Zscore(Ownership), Zscore(Analysis)
c. Predictors: (Constant), Zscore: size of the firm, Zscore(Monitoring), Zscore(Identification), Zscore(Evaluation), Zscore(Ownership), Zscore(Analysis), IdeOwn
d. Predictors: (Constant), Zscore: size of the firm, Zscore(Monitoring), Zscore(Identification), Zscore(Evaluation), Zscore(Ownership), Zscore(Analysis), IdeOwn, AnaOwn
e. Predictors: (Constant), Zscore: size of the firm, Zscore(Monitoring), Zscore(Identification), Zscore(Evaluation), Zscore(Ownership), Zscore(Analysis), IdeOwn, AnaOwn, EvaOwn
f. Predictors: (Constant), Zscore: size of the firm, Zscore(Monitoring), Zscore(Identification), Zscore(Evaluation), Zscore(Ownership), Zscore(Analysis), IdeOwn, AnaOwn, EvaOwn, MonOwn
g. Dependent Variable: Zscore(Financial)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.245	1	.245	.244	.622[b]
	Residual	234.755	234	1.003		
	Total	235.000	235			
2	Regression	175.629	6	29.272	112.903	.000[c]
	Residual	59.371	229	.259		
	Total	235.000	235			
3	Regression	175.632	7	25.090	96.359	.000[d]
	Residual	59.368	228	.260		
	Total	235.000	235			
4	Regression	178.446	8	22.306	89.532	.000[e]
	Residual	56.554	227	.249		
	Total	235.000	235			
5	Regression	181.305	9	20.145	84.790	.000[f]
	Residual	53.695	226	.238		
	Total	235.000	235			
6	Regression	181.481	10	18.148	76.296	.000[g]
	Residual	53.519	225	.238		
	Total	235.000	235			

a. Dependent Variable: Zscore(Financial)

b. Predictors: (Constant), Zscore: size of the firm
c. Predictors: (Constant), Zscore: size of the firm, Zscore(Monitoring), Zscore(Identification), Zscore(Evaluation), Zscore(Ownership), Zscore(Analysis)
d. Predictors: (Constant), Zscore: size of the firm, Zscore(Monitoring), Zscore(Identification), Zscore(Evaluation), Zscore(Ownership), Zscore(Analysis), IdeOwn
e. Predictors: (Constant), Zscore: size of the firm, Zscore(Monitoring), Zscore(Identification), Zscore(Evaluation), Zscore(Ownership), Zscore(Analysis), IdeOwn, AnaOwn
f. Predictors: (Constant), Zscore: size of the firm, Zscore(Monitoring), Zscore(Identification), Zscore(Evaluation), Zscore(Ownership), Zscore(Analysis), IdeOwn, AnaOwn, EvaOwn
g. Predictors: (Constant), Zscore: size of the firm, Zscore(Monitoring), Zscore(Identification), Zscore(Evaluation), Zscore(Ownership), Zscore(Analysis), IdeOwn, AnaOwn, EvaOwn, MonOwn

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	-1.010E-013	.065		.000	1.000			
	Zscore: size of the firm	-.032	.065	-.032	-.494	.622	-.032	-.032	-.032
2	(Constant)	1.006E-013	.033		.000	1.000			
	Zscore: size of the firm	-.046	.035	-.046	-1.305	.193	-.032	-.086	-.043
	Zscore(Identification)	.026	.037	.026	.723	.470	.306	.048	.024
	Zscore(Analysis)	.084	.038	.084	2.222	.027	.385	.145	.074
	Zscore(Evaluation)	.711	.036	.711	19.553	.000	.813	.791	.649
	Zscore(Monitoring)	.091	.034	.091	2.700	.007	.206	.176	.090
	Zscore(Ownership)	.232	.038	.232	6.177	.000	.468	.378	.205
3	(Constant)	.001	.034		.027	.979			
	Zscore: size of the firm	-.046	.035	-.046	-1.301	.195	-.032	-.086	-.043
	Zscore(Identification)	.028	.039	.028	.720	.472	.306	.048	.024
	Zscore(Analysis)	.083	.040	.083	2.097	.037	.385	.138	.070
	Zscore(Evaluation)	.710	.038	.710	18.733	.000	.813	.779	.624
	Zscore(Monitoring)	.092	.035	.092	2.647	.009	.206	.173	.088
	Zscore(Ownership)	.231	.039	.231	5.903	.000	.468	.364	.197
	IdeOwn	-.003	.030	-.005	-.114	.909	-.308	-.008	-.004
4	(Constant)	.004	.033		.121	.904			
	Zscore: size of the firm	-.057	.035	-.057	-1.653	.100	-.032	-.109	-.054
	Zscore(Identification)	.115	.046	.115	2.509	.013	.306	.164	.082
	Zscore(Analysis)	.047	.040	.047	1.161	.247	.385	.077	.038
	Zscore(Evaluation)	.706	.037	.706	19.040	.000	.813	.784	.620
	Zscore(Monitoring)	.102	.034	.102	2.994	.003	.206	.195	.097
	Zscore(Ownership)	.270	.040	.270	6.749	.000	.468	.409	.220
	IdeOwn	-.202	.066	-.270	-3.065	.002	-.308	-.199	-.100
	AnaOwn	.155	.046	.297	3.360	.001	-.337	.218	.109
5	(Constant)	.004	.033		.111	.912			
	Zscore: size of the firm	-.049	.034	-.049	-1.438	.152	-.032	-.095	-.046
	Zscore(Identification)	.195	.050	.195	3.866	.000	.306	.249	.123
	Zscore(Analysis)	.098	.042	.098	2.332	.021	.385	.153	.074
	Zscore(Evaluation)	.629	.042	.629	14.837	.000	.813	.702	.472

	Zscore(Monitoring)	.094	.033	.094	2.815	.005	.206	.184	.090
	Zscore(Ownership)	.264	.039	.264	6.773	.000	.468	.411	.215
	IdeOwn	-.328	.074	-.439	-4.437	.000	-.308	-.283	-.141
	AnaOwn	.053	.054	.102	.991	.323	-.337	.066	.032
	EvaOwn	.255	.073	.380	3.469	.001	-.218	.225	.110
	(Constant)	.008	.033		.239	.811			
	Zscore: size of the firm	-.051	.034	-.051	-1.487	.138	-.032	-.099	-.047
	Zscore(Identification)	.196	.050	.196	3.891	.000	.306	.251	.124
	Zscore(Analysis)	.097	.042	.097	2.327	.021	.385	.153	.074
6	Zscore(Evaluation)	.633	.043	.633	14.833	.000	.813	.703	.472
	Zscore(Monitoring)	.096	.034	.096	2.864	.005	.206	.188	.091
	Zscore(Ownership)	.269	.039	.269	6.823	.000	.468	.414	.217
	IdeOwn	-.327	.074	-.436	-4.407	.000	-.308	-.282	-.140
	AnaOwn	.047	.054	.090	.864	.389	-.337	.057	.027
	EvaOwn	.249	.074	.372	3.383	.001	-.218	.220	.108
	MonOwn	-.052	.060	-.035	-.858	.392	.298	-.057	-.027

a. Dependent Variable: Zscore(Financial)

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-3.3508506	4.8098583	.0000000	.87878199	236
Residual	-1.00150251	1.82795286	.00000000	.47722344	236
Std. Predicted Value	-3.813	5.473	.000	1.000	236
Std. Residual	-2.053	3.748	.000	.978	236

a. Dependent Variable: Zscore(Financial)

APPENDIX X: PROCESS PROCEDURE

PROCESS Procedure for SPSS Release 2.13.2

Run MATRIX procedure:

**********PROCESS Procedure for SPSS Release 2.13.2 **********

Written by Andrew F. Hayes, Ph.D. www.afhayes.com
Documentation available in Hayes (2013). www.guilford.com/p/hayes3

****
Model = 1
Y = Fin
X = Risk
M = Own

Sample size
236

****
Outcome: Fin

Model Summary

R	R-sq	MSE	F	df1	df2	p
.65	.42	.37	54.56	3.00	232.00	.00

Model

	coeff	se	t	p	LLCI	ULCI
constant	4.31	.04	120.19	.00	4.24	4.38
Own	.26	.03	9.06	.00	.20	.31
Risk	.81	.12	6.56	.00	.56	1.05
int_1	-.07	.08	-.83	.41	-.24	.10

Interactions:

int_1 Risk X Own

****

Conditional effect of X on Y at values of the moderator(s):

Own	Effect	se	t	p	LLCI	ULCI
-.66	.85	.10	8.36	.00	.65	1.05
.00	.81	.12	6.56	.00	.56	1.05
.66	.76	.16	4.71	.00	.44	1.08

Values for quantitative moderators are the mean and plus/minus one SD from mean.
Values for dichotomous moderators are the two values of the moderator.

****

Data for visualizing conditional effect of X on Y
Paste text below into a SPSS syntax window and execute to produce plot.

```
DATA LIST FREE/Risk Own Fin.
BEGIN DATA.

   -.48    -.66    3.73
```

```
     .00    -.66    4.14
     .48    -.66    4.55
    -.48     .00    3.92
     .00     .00    4.31
     .48     .00    4.70
    -.48     .66    4.11
     .00     .66    4.48
     .48     .66    4.85

END DATA.
GRAPH/SCATTERPLOT=Risk WITH Fin BY Own.

********************* ANALYSIS NOTES AND WARNINGS ********************

Level of confidence for all confidence intervals in output:
   95.00

NOTE: The following variables were mean centered prior to analysis:
 Risk     Own

NOTE: All standard errors for continuous outcome models are based on the HC3 estimator

------ END MATRIX -----
```