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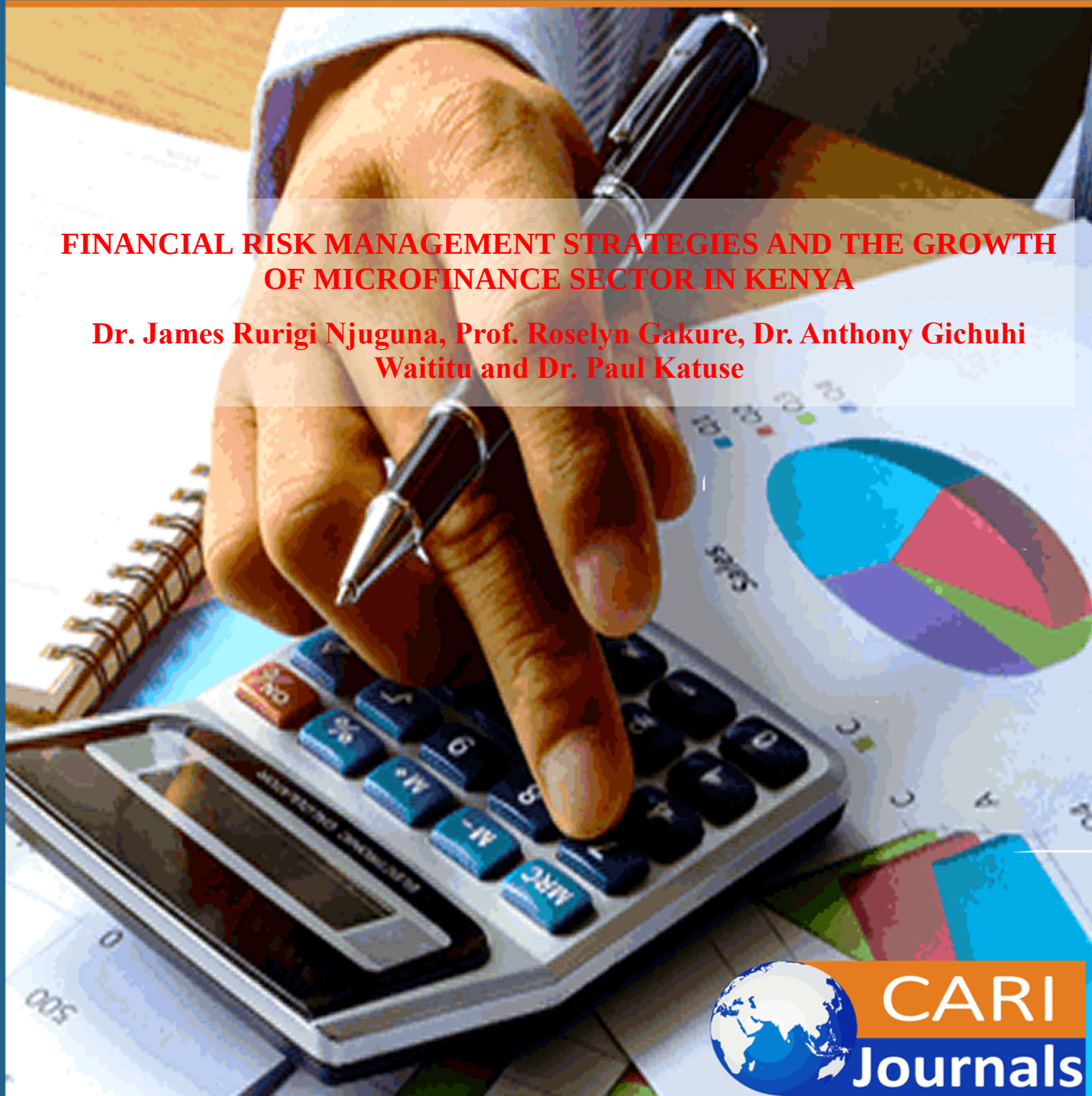

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FINANCIAL RISK MANAGEMENT STRATEGIES AND THE GROWTH OF MICROFINANCE SECTOR IN KENYA

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Abstract

Purpose: The purpose of this study was to investigate how financial risk management strategies lead to growth of MFI sector in Kenya.

Methodology: The study adopted a correlation survey research design. The population of this study was fifty seven (57) MFIs. The sampling frame was the list of MFIs provided in the AMFI website www.amfikenya.com. A sample of thirteen (17) MFIs was selected using the random sampling approach. A questionnaire and an interview schedule were the main data collection tools. Qualitative data was analyzed using content analysis whereas the quantitative data was analysed using Statistical Package for Social Sciences (SPSS) where descriptive and regression analysis were conducted to determine the relationship between enterprise risk management strategies and growth of MFIs.

Findings: The findings indicated that MFIs had effective financial risk management strategies such as effective credit risk management practices, liquidity risk management practices, interest risk management practices and price risk management practices. In particular, MFIs took into consideration the conditions, characters, capacity, collateral and capital of borrowers. Strict debt collection practices were widely adopted by MFIs. In addition, the concept of Know Your Customer (KYC) policy, seem to have been adopted by MFIs. The relationship between financial risk management strategies and growth was positive and significant. It also shown that sources of funds for MFIs include external sources and internal sources and the most frequently used source of funds are bank loans. The use of banks loans may present various risk exposures to MFIs, the most significant being interest rate risk. However, the ability of MFIs to source funds from various sources indicates that MFIs can apply the pecking order by first exploiting internal sources of funds since they present a lower financial risks and then move on to external sources.

However, despite the financial risk exposure accompanied by leverage from external sources, MFIs may also benefit as they may experience higher growth driven by the leverage. It was also found that MFIs had put in place a number of good practices that had emerged to promote responsible and inclusive lending. These include loan size limits, standardized (simple) loan terms, zero tolerance on delinquency, group-based lending. This finding implies that MFIs have put in place effective credit risk management policies which are part of an overall financial risk management strategy. The existence of effective financial risk management practices may have influenced the growth of MFIs

Unique contribution to theory, practice and policy: The study recommends that the MFIs to continue practicing effective financial management practices as this would improve the growth of MFIs.

Key words: *financial risk management practices, growth, MFIs*

1.0 INTRODUCTION

The role of MFIs in developing countries cannot be overemphasized. Microfinance Institutions provide financial services to the low-income households and Small and Micro Enterprises (SMEs) who are considered unbanked as they lack the prerequisite collateral for loans (Omino, 2005). As a result of their simplicity in funds access, the MFIs have become very popular with the low income groups and they have played a key role in poverty alleviation. The MFIs have emerged as an effective and proven model for alleviating poverty worldwide (Asian Development Bank, 2003). Micro finance institutions exist in various models. The Grameen Bank (2000a) has identified fourteen (14) models. These models are: Associations, Bank Guarantees, Community Banking, Co-operatives, Credit Unions, Grameen Bank solidarity Group, Individual, Intermediaries, NGOs, Peer Pressure, Rotating Savings and Credit Associations, Small Business and Village Banking. The Grameen Bank solidarity Group lending model is based on group peer pressure whereby loans are made to individuals in groups of four to seven (Berenbach & Guzman, 1994). The Grameen Bank Solidarity Group lending model was developed in Bangladesh to assist rural, landless women to finance income generating activities (Ledgerwood, 1999).

Research and experiences have shown importance of savings and credit facilities for the poor and the SMEs (Omino, 2005). This puts emphasis on sound development of microfinance institutions as vital ingredients for investments, employment and to spur the economic growth. As a result of their flexibility and the way they operate, they are exposed to various risks which include financial risks, operational risks and strategic risks. And as competition increases and the sector mature, MFIs are faced with numerous risks as highlighted above and the sector must mitigate the risks in order to sustain the business and remain relevant in the long run (Omino, 2005). Kombo, Wesonga, Murumba and Mwakoro (2011) identified several risk management strategies, which include risk avoidance, transferring of risk and mitigating risks. The authors further assert that mitigation of risks is regarded as the most effective risk management strategy. Specifically, reconciliation of loan accounts and loan data were considered as the most effective risk management strategy in determining financial sustainability of the MFIs.

Ekka Chaudhary and Sinha (2011) indicated that the MFIs apply the following conventional risk management strategies: Loan size limits to mitigate an MFI's exposure, especially to new clients who do not have collateral; standardized (simple) loan terms so as to make it easier (for staff and clients) to monitor repayments; zero tolerance on delinquency which defines a culture of repayment; group-based lending so as to reduce delinquency. Ekka, Chaudhary, and Sinha (2011) further asserted that a number of good practices have emerged that promote responsible and inclusive lending. They relate to several aspects of institutional management and governance, which MFIs need to implement as part of effective risk management. These include: Implementing the Client Protection Principles; implementation of know your client (KYC) requirements through the collection and use of client profile information; Client education; The systematic collection and use of client feedback; Tracking and analyzing exit rates; Manage human resources and staff perceptions; Assessing whether clients' enterprises have negative environmental or social effects; Communication and transparency; Governance in form of effective board systems; emphasizing the role of internal audit.

Enterprise Risk Management (ERM) is a new strategic imperative that is gaining momentum. In USA for instance, Organizations are starting to see the value of, and asking for, strategic solutions like integrated ERM software (Gilbert, 2007). Desender (2007) observed that the Enron failure, together with other high profile corporate collapses, has led to a debate concerning the efficiency and the role of corporate governance. These corporate governance failures culminated in the passage of the Sarbanes Oxley Act (SOX) on July 30, 2002, which have emphasized the importance of control and risk management in preventing fraudulent reporting. While strong theoretical arguments exist as to why a firm should employ enterprise risk management, the main drivers for the implementation have been new corporate governance codes. The author argues that since the corporate scandals and the creation of new corporate governance codes, enterprise risk management has been considered as a valuable element of the corporate governance structure.

ERM, as an increasingly popular concept in the developing countries, is indeed a relatively new term that is catching much today as it is viewed as the ultimate approach to effective Risk Management. Tseng (2007) investigated two research questions arising from the regulation of internal controls required by Sarbanes-Oxley Act of 2002 (SOX).The first research question was on whether better internal controls can enhance firm performance. To address this question, the relation between market-value and internal control was estimated by a residual income model. The empirical results, based on a sample of 708 firms with the disclosures of material weaknesses, showed that firms with weak internal controls have lower market-value.

Central Bank of Kenya (CBK) has also emphasized the importance of ERM. As the banking sector continues to embrace innovations, the intensity and variety of risks that the players are exposed also continue to increase in tandem. To ensure that the growth in the banking sector does not jeopardize its stability, risk management is crucial. In view of this, the CBK carried out a risk management survey on the Kenyan banking sector in the year 2004 (CBK, 2010). 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 (CBK, 2010).

Kombo, Wesonga, Murumba and Mwakoro (2011) asserted that credit risk and liquidity risk were the most frequent risks; whereas reputation and subsidy dependence risks occur at a very low incidence. The authors argued that to tone down these risks, to tone down risks, the MFIs employ various management strategies, which include risk avoidance, transferring of risk and mitigating risks. Mitigation of risks was regarded as the most effective risk management strategy. Specifically, reconciliation of loan accounts and loan data were considered as the most effective risk management in determining financial sustainability of the MFIs. The author's recommendations are that institutions' management should test the impact of the risk management strategies through internal audit, monitoring and analyzing trends and ratios to check the key indicators in the results. Also, the authors observed that the institutions should have sound financial practices.

Gonzalez (2011) uses the term growth of MFI to mean the increase or decrease in the number of MFI borrowers. CGAP (2009) uses the same measure (the number of clients served) as a measure of MFI performance. In this aspect, the term growth and performance seem to be synonymous. However, the term performance seems to be more popular in literature focusing on MFIs. For instance, CGAP (2009) uses the term performance to describe the following key indicators: outreach, client poverty level, collection performance, financial sustainability and efficiency. Despite the popularity of performance as a concept, the current study will restrict itself to the growth concept.

1.1 Statement of the Problem

Given the ever dynamic and challenging business environment, a Micro Finance Institutions (MFI) is bound to be exposed to various risks. The problem is that Micro Finance Institutions that do not adapt and/or institutionalize ERM strategies are likely to witness poor growth patterns compared with those that adapt ERM. The poor growth or failure of the MFIs may lead to serious negative consequences as far as the achievement of Vision 2030 is concerned owing to the important role MFIs are expected to play in supporting employment creation through their clients (the SME sector).

The threat that MFIs may experience stunted growth or collapse as a result of poor risk management is not without any basis. The threat is so real such that some well- known Micro Finance Institutions (MFIs) have collapsed in the past. In 2005, for example, government regulators in Kenya closed Akiba Micro Finance on the grounds that it had unlawfully taken customers' deposits and reneged on the repayments (Ellie et al., 2007). The report by the Task force on Pyramid Schemes (2008) was formed to investigate the collapse of pyramid schemes in Kenya (pyramids are a form of microfinance). The taskforce found that Kenyans lost more than Sh34 billion to schemes such as Developing Enterprise Community Initiative (DECI).

The closest research to the current study is from Kombo et al. (2010) who asserted that credit risk and liquidity risk are the most frequent risks among Micro Finance Institutions (MFIs) located in Kisii area. The authors argued that to tone down these risks, the Micro Finance Institutions (MFIs) employ various management strategies, which include risk avoidance, transferring of risk and mitigating risks and also regard mitigation of risks as the most effective

risk management strategy. Mokoro, Nyaonga, Magutu, Khoya and Onsongo, (2010) in an investigation of the various challenges facing the transition of informal MFIs into formal MFIs recognize the existence of risks emanating from both the external and internal stakeholders of the MFI.

The current study noted that the reviewed studies, Mokoro et al. (2010), CBK (2010) have gaps in terms of generalized conclusions due to a tendency to research on all factors that affect the growth of MFIs and the absolute disregard of the role of risk management strategies on the growth of MFIs. On the other hand, those studies that focus on risk management in MFIs are purely descriptive for instance, Kombo et al. (2010) and lack the statistical rigor that is supposed to accompany such studies. The current study differed significantly from the above reviewed studies as it built a case for adopting financial risk management strategies as part of ERM and the effect such adoption would have on the growth of MFI sector. The current research hoped to bridge all these research gaps by analyzing the effect of financial risk management strategies on the growth of MFI sector.

1.2 Research Objective

i. To investigate how financial risk management strategies lead to growth of MFI sector in Kenya.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Finance Theory

The concept of finance theory involves studying the various ways by which businesses and individuals raise money, as well as how money is allocated to projects while considering the risk factors associated with them (Fama & Miller, 1971). There are a number of finance theories that offer separate approaches to the finance hypotheses. Some of the major popular finance theories of the world are: Arbitrage Pricing Theory, Rational Choice Theory, Prospect Theory, Cumulative Prospect Theory, Monte Carlo Option Model, Binomial Options Pricing Model, Gordon Model, International Fisher Effect, Black Model, Legal Origins Theory and Modern Portfolio Theory. However, despite the fact that these theories are applicable to enterprise risk managements (specifically, financial risks management), a deeper analysis of these theories is beyond the scope of the current study.

The financial theory is crucial in understanding finance risk management strategies. For instance, MFIs need to put into consideration the risks arising when raising money in form of leverage or equity. Debt capital is risky in terms of ensuring that the covenants between lender and borrower are observed. Equity capital is also risky in terms of the volatility of earnings. The allocation of finance to projects such as loan portfolio has the inherent credit risk (borrowers may default). Furthermore, investments in physical assets have associated risks such as the risk of wear and tear. It is therefore important for the management of a MFI to put in place financial risk management strategies in order to minimize the risk inherent in the activity of financing the business objectives. Investment in stock market shares, options and futures require the risk manager in a MFI to consider the effect of volatility in their cash flow and market value. In order to safeguard against the probable risk on assets due to volatility in cash flow or market value, it

may be wise to consider hedging as a risk management tool. In a nutshell, finance theory offers a wide approach of looking at risk and the financial risk management strategies to be adopted.

2.1.2 Finance Distress Theory

According to Baldwin and Scott (1983, p. 505), ``when a firm's business deteriorates to the point where it cannot meet its financial obligations, the firm is said to have entered the state of financial distress. The first signals of distress are usually violations of debt covenants coupled with the omission or reduction of dividends". Whitaker (1999) defines entry into financial distress as the first year in which cash flows are less than current maturities' long-term debt. As long as cash flow exceeds current debt obligations, the firm has enough funds to pay its creditors. The key factor in identifying firms in financial distress is their inability to meet contractual debt obligations.

However, financial distress symptoms are not limited to firms that default on their debt obligations. Substantial financial distress effects are incurred well prior to default. Wruck (1990) argues that firms enter financial distress as the result of economic distress, declines in their performance and poor management. Boritz (1991) depicts a process of a financial distress that begins with an incubation period characterized by a set of bad economic conditions and poor management who commit costly mistakes.

The relevance of the finance distress theory emanates from the liquidity and credit risk facing a firm. As long as cash flow does not exceed current debt obligations, the firm does not have enough funds to pay its creditors. In the case of a MFI, the inability to provide cash to depositors and disbursements borrowers as and when they demand may constitute a liquidity crisis. Other creditors who rank second to depositors also need to be taken into account when firms are putting in place risk management measures. Credit risk in MFIs also needs to be addressed since it may lead to financial distress. This is because the management of the loan portfolio is an important determinant of the liquidity of the firm.

2.1.3 Growth Theory

According to Jovanovich (2000), growth theory offers two explanations for growth. One stresses the supply of productive ideas and says that the growth of living standards depends on the growth of science. The other explanation invokes incentives: growth could begin only when hard work and business enterprise were free of interference by authority i.e. free from taxation, social stigma and other interference by government. Cortright (2001) emphasizes that economic growth results from the increasing returns associated with new knowledge. Knowledge has different properties than other economic goods (being non-rival and partly excludable). The ability to grow the economy by increasing knowledge rather than labor or capital creates opportunities for nearly boundless growth.

Firm growth can be studied as a dynamic process of management interacting with resources. The dynamic process is best expressed in the extract from Penrose (1985): “As management tries to make the best use of resources available, a truly dynamic interacting process occurs which encourages continuous growth but limits the rate of growth” (Penrose, 1959:24). Arkolakis (2011) asserts that a firm-level growth is the result of idiosyncratic productivity improvements while there is continuous arrival of new potential producers.

2.1.4 Sustainability Theory

Sustainability means a capacity to maintain some entity, outcome or process over time. Financial investment might be deemed sustainable which means that activities do not exhaust the material resources on which it depends. Sustainability in general refers to the property of being sustainable. The widely accepted definition of sustainability or sustainable development was given by World Commission on Environment and Development in 1987. It defined sustainable development as "forms of progress that meet the needs of the present without compromising the ability of future generations to meet their needs." Practically, sustainability refers to three broad themes, economic, social and environmental, that must all be coordinated and addressed to ensure the long term viability of our community and the planet.

These well-established definitions set an ideal premise, but do not clarify specific human and environmental parameters for modeling and measuring sustainable developments. The following definitions are more specific: Sustainable means using methods, systems and materials that will not deplete resources or harm natural cycles (Rosenbaum, 1993); Sustainability identifies a concept and attitude in development that looks at a site's natural land, water, and energy resources as integral aspects of the development (Vieira, 1993); Sustainability integrates natural systems with human patterns and celebrates continuity, uniqueness and place making (Early, 1993).

2.2 Growth

The current study attempted to define growth in the context of microfinance institutions. According to Barkham (1996) there is no general agreement on how firm growth should be measured and therefore there is a wide variation on the growth variables used by researchers. A firm growth (size) may be measured according to its revenue or profits or by the amount of human and physical capital it employs. Delmar (1998) considers sales and employment as growth indicators for the reasons that the use of sales and employment measures are the most widely used in empirical growth research. Sales are a relatively good indicator of size and therefore growth. Sales may be considered a precise indicator of how a firm is competing within a market, and indeed firms themselves tend to use it as a measure of their own performance. An analysis of firm growth should at least in part be based on changes in turnover. McKelvie and Wiklund (2010) have a more comprehensive definition of firm growth. They argue that firm growth may be defined as an outcome or process. The term growth when used as an outcome is a dependent variable and is usually explained by a set of independent variables. For the most part, this approach uses growth as the dependent variable and essentially has as its primary goal to explain varying growth rates and/or increments of growth. On the other hand, when the term growth is used as a process, then growth is neither as an independent variable, nor as a dependent variable.

Gonzalez-Vega, Claudio, Schreiner, Meyer, Rodriguez-Meza, and Navaja (1997) describe two types of MFI growth: intensive and extensive. Intensive growth, or adding depth, results from increased productivity of existing capacity. This may be possible through technological innovations; improvement in the utilization of capacity, such as increasing loan officer productivity; or introduction of new products. Extensive growth, in contrast, adds breadth by increasing capacity, such as hiring new staff and opening new offices. According to Churchill (1997), one key factor determining the growth strategy of an MFI is its stage in development.

Christen, Robert, Elisabeth, and Robert (1995) outline three stages of institutional development, as shown in Table 1.

Table 1: Stages of Development for Microfinance Institutions

Stage of development	Observed Pattern of growth
Level I **Start-up Programs and MFIs that Are Heavily Subsidy Dependent.** They require frequent injections of funds. If these injections are not forthcoming, the program will quickly consume its capital in financing routine operations.	These programs should rely on **intensive growth** by finding ways to increase the productivity of its existing capacity
Level II Programs that Have Achieved Operational Efficiency but Not Full Self-Sufficiency. The range of MFIs at this level includes those that rely extensively on soft money to those on the verge of unsubsidized profitability.	Their market-penetration strategy requires they have their staff training, management information, and other operational systems in place to initiate an **Extensive growth strategy** that replicates a successful branch model in new geographic areas.
Level III **MFIs that Have Achieved Full Self-Sufficiency.** They generate enough revenues to cover both nonfinancial and financial costs, calculated on a commercial basis. Subsidies in the form of concessional funds are no longer needed, and investors can expect a return on equity equivalent to returns available elsewhere in the private sector.	**Extensive growth.** It is important for institutions at this stage to reduce their concentration risk by diversifying their products or markets

Source: Churchill (1997)

2.3 Financial Risk Management Strategies

Effective financial risk management strategies are expected to improve MFI growth. Financial risk is often defined as the unexpected variability or volatility of returns (Finance dictionary, 2009). Financial risk includes credit risks, liquidity risks and market risks. Credit risk is the risk that a borrower will be unable to make payment of interest or principal in a timely manner (Scott, 2003). The Farlex finance dictionary (2009) defined liquidity risks as the risk that an individual or firm will have difficulty selling an asset without incurring a loss. The Dictionary of Financial Terms (2008) defines market risk (systematic risk) as risk that results from the characteristic behavior of an entire market or asset class. Market risks are environmental in nature and encompass risks that might arise from financial losses due to changes in market interest rates

(interest risk), or due to inadequate protection from fluctuations in currencies (foreign exchange risk), or due to long term asset and liability management (investment portfolio risk).

2.4 Empirical Review

A report by Kirckpatrick (2009) analyzed the impact of failures and weaknesses in corporate governance on the financial crisis, including risk management systems and executive salaries for Organization for Economic Developing Countries (OECD) for the year 2007/2008. The study which was a literature review based desk study concluded that the financial crisis can be to an important extent attributed to failures and weaknesses in corporate governance arrangements which did not serve their purpose to safeguard against excessive risk taking in a number of financial services companies. Other sources of risk identified by this report included accounting standards and regulatory requirements, and remuneration systems. The report by Kirckpatrick (2009) differs from the current study since it addresses the role of corporate governance on the financial crisis while the current study investigates the role of ERM on firm's growth. Clearly, the independent variables are different and one may argue that even though corporate governance is an aspect of ERM (specifically, corporate governance is a subset of operational risk), the report narrowly addresses the role of ERM and the current study is appropriate as it addresses the role of ERM more comprehensively. The methodology of the two studies is also different. The current study intends to use a field work base study approach while the report by Kirckpatrick (2009) was a literature review based desk study.

Hoyt and Liepenberg (2010) investigated the value of enterprise risk management. The objective of this study was to assess the value implications of ERM programs. The study focused on U.S. insurers in order to control for differences that might arise from regulatory and market differences across industries. In their ERM-choice equation, they found ERM usage to be positively related to factors such as firm size and institutional ownership, and negatively related to reinsurance use, leverage, and asset opacity. By focusing on a sample of 117 insurance firms (publicly-traded insurers) Hoyt and Liepenberg (2010) were able to estimate the effect of ERM on Tobin's Q, a standard proxy for firm value. They found a positive relation between firm value and the use of ERM. The above study bears resemblance to the current one as they both attempt to demonstrate a business case for ERM. In addition, Hoyt and Liepenberg (2010) estimated the effect of ERM on Tobin's Q, a standard proxy for firm value whereas the current study will estimate the role of ERM strategies on growth of MFIs.

Ekka, Chaudhary and Sinha (2011) indicated that the MFIs apply the following conventional risk management strategies to mitigate credit risks; Loan size limits which mitigate an MFI's exposure, especially to new clients who do not have collateral; standardized (simple) loan terms; zero tolerance on delinquency and group-based lending. Diamantini (2010) asserts that MFIs are particularly vulnerable to foreign exchange rate risk, since they operate in developing countries where the risk of currency depreciation is high. Furthermore, extreme currency depreciation tends to be highly correlated with a general deterioration of local economic conditions, which can cause higher loan delinquencies and a reduction in profitability of financial activities. The author further asserts that hedging can contribute greatly to an MFI's success and stability. Through an appropriate hedging policy, the MFI can reduce or even eliminate the uncertainty of mismatches between local currency receivables and foreign currency repayments. The MFI could

also make a choice on the kind of tools it wants to use for hedging, for example, forwards and options.

GTZ (2000) carried a study on the formulation of a risk management framework for micro finance institutions. The author's main objective was to help senior managers and directors of MFIs to design a comprehensive and systematic approach to identify, anticipate and respond to the major risks that threaten MFIs. The authors recommended that for MFIs to grow, they need to put in place liquidity risk management strategies. These liquidity policies include;- maintain detailed estimates of projected cash flows for the next weeks or months so that net cash requirements can be identified ; using branch procedures to limit an unexpected increases in cash needs ; maintaining investment accounts that can be easily liquated into cash or lines of credit with local banks to meet unexpected needs; anticipating the potential cash requirements of new products or seasonal variations in deposits or withdrawals.

3.0 RESEARCH METHODOLOGY

The study used correlational survey design. The target population of this study was at two levels. The first level comprised of all micro finance institutions in Kenya who are members of AMFI. The total number of the firms that were registered members of AMFI are fifty seven (57) as at 23 August 2011 as shown in Appendix. The main reason for this choice was that these firms are likely to exhibit an elaborate relationship between the study variables while at the same time they were very vulnerable to risk. The second level of target population was the employees of the MFIs. As at the study date, there were over 10,000 employees of MFIs. Stratified sampling technique was used. The population comprised of two types of categories or strata of MFIs. The first stratum included all MFIs which are licensed by CBK. Census was used to identify the number of licensed MFIs. The number of licensed MFIs was 6. The second stratum comprised of MFIs that were not licensed by CBK. Both quantitative and qualitative data were collected, hence calling for primary and secondary data sources. Primary data was collected by using the questionnaire as the main research instrument. In this study, a semi-structured interview schedule was also used. Qualitative data was analyzed using content analysis whereas the quantitative data was analysed using Statistical Package for Social Sciences (SPSS) where descriptive and regression analysis were conducted to determine the relationship between financial risk management strategies and growth of MFIs.

4.0 RESULTS AND DISCUSSIONS

4.1 Response Rate

The number of questionnaires that were administered was 51 which were derived from three (3) respondents each representing the three level of management from each of the 17 MFIs. A total of 40 questionnaires were properly filled and returned. This represented an overall successful response rate of 78%. According to Mugenda and Mugenda (2003), a response rate of more than 50% is adequate for analysis. Babbie (2004) also asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good.

Table 2: Response Rate

Category	Returned (%)	Unreturned (%)	Total(n)
CEO/Senior Managers	71	29	17
Middle Level Management	82	18	17
Non Managerial	82	18	17
Total	**78**	**22**	**51**

4.2 Financial Risk Management Strategies

The study sought to establish the effect of financial risks management strategies on the growth of MFIs. The study specifically investigated the following elements of financial risk management strategies; collateral consideration, capital of the borrower considerations, conditions of the loan, provision of basic entrepreneurship training to potential borrowers, character of the borrower, capacity of the borrower, stress testing, stringent debt collection practices, average collection rate, liquidity ratios, ability to pay operational cost such as salaries, protection from market interest rates (interest risk), protection from fluctuations in currencies (foreign exchange risk), protection from fluctuations on long term asset and liability management (investment portfolio risk).

4.2.1 Collateral Consideration

The study sought to determine whether the MFIs considers collateral. The study findings in table 3 indicate 50% of the respondents strongly agreed while another 30% agreed bringing to a total of 80% of those who agreed with the statement that the credit appraisal procedure considers whether the borrower has adequate collateral. Meanwhile, 15% of the respondents neither agreed nor disagreed and another 5% respondents disagreed with the statement. These results were corroborated by results from non-managerial staff presented in table 4. To achieve corroboration, the statement on whether the credit appraisal considers the collateral of the borrower was posed to non-managerial staff. Results in Table 4 revealed that 42.86% agreed while a similar proportion of 42.86% strongly agreed, bringing to a total of 85.71% of those respondents who agreed with the statement. However, 14.29% of respondents could not make up their minds on the statement. The findings concurred with those in Ekka, Chaudhary and Sinha (2011) and CBK (2010), which indicated that MFIS should consider collateral of the borrower in order to reduce the financial risks associated with MFIS. The findings also concurred with those in GTZ (2000) which asserted that MFIs should consider collateral of the borrower in order to identify, anticipate and respond to the major risks that threaten MFIs.

The findings implied that the MFIs under study have credit procedures which help in collateral consideration for the borrowers. This further indicated that the MFIs in Kenya have put in place effective financial risk management strategies. The effectiveness of the financial risk management strategies may have an implication on the growth of the MFIs.

4.2.2 Capital of the Borrower Considerations

The study sought to investigate whether the credit appraisal considers the capital of the borrower. Results in table 3 revealed that 35% of the respondents strongly agreed while another 32.5% agreed bringing to a total of 67.5% of those who agreed with the statement that the credit appraisal considers the capital of the borrower. Meanwhile, 20% of the respondents neither agreed nor disagreed and another 12.5% respondents disagreed with the statement. These results were corroborated by results from non-managerial staff presented in table 4. To achieve corroboration, the statement on whether the credit appraisal considers the capital of the borrower was posed to non-managerial staff. Table 3 revealed that 50.0% agreed while another 35.71% strongly agreed, bringing to a total of 85.71% of those respondents who agreed with the statement. However, 14.29% of respondents could not make up their minds on the statement.

The findings concurred with those in Diamantini (2010) and CGAP (2009) which asserted that MFIs should consider the capital of the borrower as a way to reduce the financial risk of MFIs. The findings are also in line with those in Ekka, Chaudhary and Sinha (2011) who asserted that a number of good practices have emerged that not only promote responsible and inclusive lending but are also crucial in managing strategic risk. The findings implied that the MFIs under study have put in place sound financial risk management strategies. The consideration of capital may be a welcome move as it may reduce the agency problem. Specifically, the MFI may reduce the incidence of adverse selection and moral hazard brought about by borrowers who intend to default on loans. The need for Capital contribution implies that the borrower too can lose in the event the project or business he/she is currently undertaking fails. The borrower will therefore act in the best interest of the lender as doing so would also be beneficial to him/her.

4.2.3 Character of the Borrower

The study sought to investigate whether the credit appraisal procedure considers character of the borrower. As illustrated in table 3, 50% of the respondents agreed while another 20% strongly agreed bringing to a total of 70% of those who agreed with the statement that the credit appraisal procedure considers character of the borrower. Meanwhile, 22.5% of the respondents neither agreed nor disagreed and another 7.5% disagreed with the statement.

These results were corroborated by results from non-managerial staff presented in table 4. To achieve corroboration, the statement on whether the credit appraisal considers the character of the borrower was posed to non-managerial staff. Table 4 revealed that 33.33% agreed while another 50.00% strongly agreed, bringing to a total of 83.33% of those respondents who agreed with the statement. However, 16.67% of respondents disagreed with the statement. The findings concurred with those in Hoyt and Liepenberg (2010) and Asian Development Bank (2003) who asserted that financial organizations need to consider the character of the borrower as a way of mitigating against the financial risk exposure. The findings also agree with those in Kirckpatrick (2009) which indicated that MFIs need to consider the character of the borrower as a way of safeguarding against financial risks. The character of the borrower consists of the integrity of the borrower as far as meeting obligations is concerned. The study findings therefore implied that MFIs do consider how many times a borrower has bounced cheques, whether the borrower is listed as a defaulter and whether he has questionable character. The findings implied that MFIs had put in place effective credit management policies which were a part of an overall financial risk management strategy. This may have a further implication on the growth of the MFIs.

4.2.4 Conditions of the Loan

The study sought to investigate whether the credit appraisal procedure considers conditions of the loan. Results in table 3 revealed that 45% of the respondents agreed while another 45% strongly agreed bringing to a total of 90% of those who agreed with the statement that the credit appraisal procedure considers conditions of the loan. Meanwhile 10% of the respondents neither agreed nor disagreed with the statement. These results were corroborated by results from non-managerial staff presented in table 4. To achieve corroboration, the statement on whether the credit appraisal considers the conditions of the borrower was posed to non-managerial staff. Table 3 revealed that 38.46% agreed while another 38.46% strongly agreed, bringing to a total of 76.92% of those respondents who agreed with the statement. However, 23.08% of respondents could not make up their minds on the statement. The findings concurred with those in GTZ (2000) and CGAP (2010) which asserted that MFIs need to consider conditions of the loan as a way of safeguarding against financial risks. The findings also agreed with those in Mayers and Smith (1987) which asserted that MFIs need to consider the conditions of the loan as a way to avoid taking too much financial risk.

The findings implied that the MFIs under study consider the conditions of the loan as a credit appraisal policy. Such conditions could include conditions on loan repayment periods, the condition that a business must have been in existence for a period of not less than 3 or 6 months. This implied that MFIs have put in place financial risk management strategies to safeguard against credit risk, a category of financial risk. The existence of financial risk management strategies may have influenced the growth of MFIs.

4.2.5 Provision of Basic Entrepreneurship Training to Potential Borrowers

The study sought to investigate whether the MFI provides basic entrepreneurship training to potential borrowers. The study findings in table 3 also indicated that 32.5% respondents strongly agreed while another 32.5% agreed bringing to a total of 65% of those who agreed with the statement that the MFI provides basic entrepreneurship training to potential borrowers. Meanwhile 15% of the respondents neither agreed nor disagreed and another 20% disagreed with the statement. These results were corroborated by results from non-managerial staff presented in table 4. To achieve corroboration, the statement on whether the MFI provided basic entrepreneurship training to potential borrowers was posed to non-managerial staff. Table 4 revealed that 35.71% agreed while another 21.43% strongly agreed, bringing to a total of 57.14% of those respondents who agreed with the statement. However, 21.43% of respondents could not make up their minds on the statement while another 21.43% disagreed with the statement.

The findings concurred with those in Tseng (2007) and CFSI (2011), Christen, Elisabeth and Robert (1995) which assert that MFIs need to provide basic entrepreneurship skills training to borrowers to ensure that the business of borrowers become sustainable. This would also reduce the default risk. The findings implied that the MFIs have put in place effective credit risk management mechanisms. The training offered to borrowers may have improved the financial management of the borrowers as well as the chances of profitability. This may have indirectly reduced the risk of loan default. The existence of basic training to borrowers is an effective financial risk management strategy which may have affected the growth of MFI

4.2.6 Capacity of the Borrower

The study sought to investigate whether the credit appraisal procedure consider capacity of the borrower. Table 3 reveals 40% of the respondents agreed while another 30% strongly agreed bringing to a total of 70% of those who agreed with the statement that stated the credit appraisal procedure consider capacity of the borrower. Meanwhile, 22.5% of the respondents neither agreed nor disagreed and another 7.5% disagreed with the statement. These results were corroborated by results from non-managerial staff presented in table 4. To achieve corroboration, the statement on whether the credit appraisal considers the capacity of the borrower was posed to non-managerial staff. Table 4 revealed that 35.71% agreed while another 42.86% strongly agreed, bringing to a total of 78.57% of those respondents who agreed with the statement. However, 7.14% of respondents could not make up their minds on the statement while a further 14.29% disagreed with the statement.

The findings concurred with those in Kombo et al (2011) which argued that MFIs should consider capacity of the borrower as a way of mitigating against financial risks. The findings are also in line with those in Fraser and Henry (2007) and CGAP (2010) who asserted that financial institutions should consider the capacity of the borrower as a way of safeguarding against financial risks. The findings implied that the MFIs under study requests borrowers to give proof of their ability to service the principal and the interest on loans advanced to them. This further implied that MFIs had put in place effective credit management practices which are part of an overall financial risk management strategy. This may have influenced the growth of MFIs.

4.2.7 Stress Testing

The study sought to investigate whether the credit appraisal procedure apply stress testing. Results in table 3 indicate 47.5% of the respondents agreed while another 12.5% strongly agreed bringing to a total of 60% of those who agreed with the statement that the credit appraisal procedure apply stress testing. Meanwhile, 17.5% of the respondents neither agreed nor disagreed and another 22.5% disagreed with the statement. These results were corroborated by results from non-managerial staff presented in table 4. To achieve corroboration, the statement on whether the credit appraisal considers the stress testing was posed to non-managerial staff. Table 4 revealed that 28.57% agreed while another 7.14% strongly agreed, bringing to a total of 35.71% of those respondents who agreed with the statement. However, 42.86% of respondents could not make up their minds on the statement and a further 21.43% disagreed with the statement.

The findings concurred with those in Mokoro et al. (2010) which asserted that MFIs should conduct stress testing as a way of reducing credit risk and the overall financial risk. The findings also agreed with those in Bertalanffy (1962) and Fraser and Henry (2007) which indicated that financial institutions should conduct stress testing as a way of reducing credit risk and financial risk. Stress testing is mostly applied by financial institutions to check the sensitivity of borrower's ability to pay and the odds of defaulting in the wake of unfavorable economic changes such as high interest rates and recessions. The existence of stress testing implied that MFIs have put in place effective credit risk policies which are a part of an overall financial risk management strategy. This may have influenced the growth of the MFIs.

4.2.8 Stringent Debt Collection Practices

The study sought to investigate whether the credit department applies stringent debt collection practices. As illustrated in table 3, 70% of the respondents agreed while another 12.5% strongly agreed bringing to a total of 82.5% of those who agreed with the statement that the credit department applies stringent debt collection practices. Meanwhile, 12.5% of the respondents neither agreed nor disagreed and another 5% respondents disagreed with the statement. These results were corroborated by results from non-managerial staff presented in table 4. To achieve corroboration, the statement on whether the credit department applies stringent debt collection practices was posed to non-managerial staff. Table 4 revealed that 20.00% agreed while another 40.00% strongly agreed, bringing to a total of 60.00% of those respondents who agreed with the statement. However, 20.00% of respondents could not make up their minds on the statement and a further 20% disagreed with the statement.

The findings concurred with those in Kombo et al. (2011) which assert that MFIs need to employ stringent debt collection practices as a measure of safeguarding against financial risk. The findings also agreed with those in CFSI (2011) and Christen, Elisabeth and Robert (1995) who asserts that for microfinance institutions to operate effectively it should have the prerequisite full capacity to operate and develop strategies to deal with all risks. The findings implied that the MFIs have put in place stringent debt collection, a practice which may have reduced the risk of default and improved the overall financial risk management. The existence of financial risk management strategies may have influenced the growth of the MFIs.

4.2.9 Average Collection Rate

The study sought to investigate the average collection rate. Results in table 3 reveal 27.5% strongly agreed while another 25% agreed bringing to a total of 52.5% of respondents who generally agree with the statement that the average collection rate was current. Meanwhile 40% of the respondents neither agreed nor disagreed with the statement while a further 7.5% disagreed with the statement. The findings compared well with those in GTZ (2000) and CGAP (2010) and Mayers and Smith (1987) which noted that an average collection rate which is current is an indicator of effective credit policies. An average collection rate which is current implies that none of the borrowers have defaulted. These can be contrasted with an average collection rate of 30 days, which indicates that borrower's loan repayments have been outstanding for almost a month from the due date. The implication of this finding was that MFIs have put in place effective credit risk management policies and this may have resulted in the average collection rate being current. The credit risk management policies are part and parcel of the overall financial risk management strategy. The effectiveness of the overall financial risk management strategy may have influenced the growth of MFIs.

4.2.10 Liquidity Ratios

The study sought to investigate whether the liquidity ratios (current ratio) of the MFI is around the recommended benchmark ratio of 1:1. Table 3 reveals 55% of the respondents agreed while another 27.5% strongly agreed bringing to a total of 82.5% of those who agreed with the statement that the liquidity ratio of the MFI is around the recommended benchmark ratio of 1:1. Meanwhile, 10% neither agreed nor disagreed with the statement and another 7.5% disagreed with the statement. The findings concurred with those in Kombo et al. (2011), Mokoro et al

(2010) and CBK (2010) which noted that financial institutions are required to put in place liquidity risk management thresholds as part of the overall risk management framework. Specifically, CBK (2010) recommends that MFIs should ensure that they have adequate liquidity in order to meet the liquidity need of their borrowers. The results implied that MFIs have put in place effective liquidity risk management practices which form part of the overall financial risks management strategy. The effectiveness of the financial risk management practices may have influenced the growth of MFIs.

4.2.11 Ability to pay its Operational Cost such as Salaries

The study sought to investigate if the MFI is always able to pay its operational cost such as salaries. As illustrated in table 3 reveals 50% respondents agreed while another 25% strongly agreed bringing to a total of 75% of those who agreed with the statement that the MFI is always able to pay its operational cost such as salaries. Meanwhile, 15% of the respondents neither agreed nor disagreed with the statement while another 10% disagreed with the statement. The findings concurred with those in Mokoro et al (2010) and CBK (2010) which asserted that the ability to meet the operational costs is an indicator of low financial risk. The findings further concurred with those in Cornell and Shapiro (1987) who asserted that financial institutions which have the ability to meet up their operational costs indicate that they have low financial risks. The findings implied that the MFIs under study have the ability to pay their operational cost such as salaries. The ability to pay operational costs such as salaries indicates that MFIs had put in place effective liquidity risk management practices. The liquidity management practices are part of the overall financial management strategies and this may have influenced the growth of MFIs.

4.2.12 Protection from Interest Rates (Interest Risk)

The study sought to investigate whether the MFI experiences adequate protection from market interest rates (interest risk). The findings in table 4 revealed that 35% of the respondents strongly agreed while another 30% agreed bringing to a total of 65% of those who agreed with the statement that the MFI experiences adequate protection from market interest rates (interest risk). Meanwhile 25% of the respondents neither agreed nor disagreed with the statement while another 10% disagreed with the statement. The findings concurred with those in GTZ (2000), Ekka, Chaudhary and Sinha (2011) which asserted that MFIS should ensure that they hedge against market interest rates. The findings further concurred with those in Pandey (2007) which asserted that MFIs should put into place financial management strategies which would protect them from fluctuating market interest rates. The findings implied that the MFIs experience adequate protection from market interest rates (interest risk). Interest risk management is important as it may influence the profitability and growth of an MFI. MFIs with adequate protection from interest rate risk may experience higher growth than those that do not have adequate protection.

4.2.13 Protection from Foreign Exchange Fluctuations

The study sought to investigate whether the MFI experiences adequate protection from fluctuations in currencies (foreign exchange risk). Findings in table 3 reveal that 55% of the respondents agreed while another 7.5% strongly agreed bringing to a total of 62.5% of those who agreed with the statement that the MFI experiences adequate protection from fluctuations in currencies (foreign exchange risk). Meanwhile, 27.5% of the respondents neither agreed nor

disagreed with the statement and another 10% disagreed with the statement. The findings concurred with those in Diamantini (2010), Ndulu (2010), CFSI (2011) and ACCA (2012) who asserted that financial organizations may hedge against foreign exchange rate fluctuations as a way of minimizing the financial risks. In addition, they noted that MFIs with significant sources of funds from international organizations are best positioned to hedge against forex risk. The findings implied that the MFIs under study have put in place foreign exchange risk management practices which are part of the overall financial risk management strategy. The ability to hedge against foreign exchange risk may have influenced the growth of the MFIs.

4.2.14 Protection from Fluctuations on Long Term Asset and Liability Management (Investment Risk/ Price Risk)

The study sought to investigate if the MFI experiences adequate protection from fluctuations on long term asset and liability management (investment portfolio risk). Furthermore, results in table 3 reveal 45% of the respondents agreed while another 12.5% strongly agreed bringing to a total of 57.5% of those who agreed with the statement that the MFI experiences adequate protection from fluctuations on long term asset and liability management (investment portfolio risk). Meanwhile, 30% of the respondents neither agreed nor disagreed with the statement while another 12.5% disagreed with the statement. The findings concurred with those in Mokoro et al. (2010) which assert that MFIs and other financial organizations should safeguard themselves against price risk. This way they can mitigate the financial risks facing the MFIs. The findings further concurred with those in Delmar (1998) who asserted that financial organizations should safeguard themselves against price risks. Ndulu (2010), CFSI (2011) also noted that since MFIs invest in stocks (local and international), it may be prudent to put measures such as options and futures to safeguard against price risk. The findings implied that the MFIs experiences adequate protection from fluctuations on long term asset and liability management (investment portfolio risk) and this being part of an overall financial risk management strategy may have influenced the growth of MFIs.

Table 3: Financial Risk Management Strategy (Middle Level Management)

	Strongly Disagree (%)	Disagree (%)	Neither Agree nor Disagree (%)	Agree (%)	Strongly Agree (%)
The credit appraisal procedure considers whether the borrower has adequate collateral	2.5	2.5	15	30	50
The credit appraisal procedure considers the capital of the borrower	5	7.5	20	32.5	35
The credit appraisal procedure considers conditions of the loan	0	0	10	45	45
The MFI provides basic entrepreneurship training to potential borrowers	7.5	12.5	15	32.5	32.5
The credit appraisal procedure considers character of the borrower	0	7.5	22.5	50	20
The credit appraisal procedure considers capacity of the borrower	5	2.5	22.5	40	30
The credit appraisal procedure applies stress testing	5	17.5	17.5	47.5	12.5
The credit department applies stringent debt collection practices	0	5	12.5	70	12.5
The average collection rate is current	0	7.5	40	25	27.5
The liquidity ratio of the MFI is around the recommended benchmark ratio of 1:1	0	7.5	10	55	27.5
The MFI is always able to pay its operational cost such as salaries	0	10	15	50	25
The MFI experiences adequate protection from market interest rates	0	10	25	30	35
The MFI experiences adequate protection from fluctuations in currencies (foreign exchange risk)	2.5	7.5	28	55	7.5
The MFI experiences adequate protection from fluctuations on long term asset and liability management (investment portfolio risk).	10	2.5	30	45	12.5

Table 4: Financial Risk Management Strategy (Non Managerial Staff)

	Strongly Disagree (%)	Disagree (%)	Neither Agree nor Disagree (%)	Agree (%)	Strongly Agree (%)	Total (n)
The credit appraisal procedure considers collateral	0	0	14.29	42.86	42.6	14
The credit appraisal procedure considers capital	0	0	14.29	50	35.71	14
The credit appraisal procedure considers conditions	0	0	23.08	38.46	38.46	13
The MFI provides basic entrepreneurship training to potential borrowers	7.14	14.29	21.43	35.71	21.43	14
The credit appraisal procedure considers character of the borrower	0	16.67	0	33.33	50	12
The credit appraisal procedure considers capacity of the borrower	7.14	7.14	7.14	35.71	42.86	14
The credit appraisal procedure applies stress testing	7.14	14.29	42.86	28.57	7.14	14
The credit department applies stringent debt collection practices	10	10	20	20	40	10

4.2.15 CEOs Response on Financial Risk Management Strategies

The study also sought to establish the sources of the funds for MFI through interviewing the CEOs of MFIs. The response were categorized into subthemes and presented in table 5. Results revealed that 33.3% of MFIs source their funds from banks, 25% of MFI use shareholders capital as a source of funds, 25% of MFI use client saving and deposits as a source of funds and 16.7% use donor funds as a source of funds. The findings concur with those in Microfinance Hub (2011), CFSI (2011) and GTZ (2000) which asserted that the MFIs get their funds from banks, internals sources and external sources such as savings deposits, commercial debt capital, soft loans and grants, Equity capital and individual philanthropic sources**.** The findings imply that the sources of funds for MFIs include external sources and internal sources and the most frequently used source of funds are bank loans.

The use of banks loans may present various risk exposures to MFIs, the most significant being interest rate risk. However, the ability of MFIs to source funds from various sources indicates that MFIs can first exploit internal sources of funds since they present a lower financial risks and then move on to external sources. However, despite the financial risk exposure accompanied by leverage from external sources, MFIs may also benefit as they may experience higher growth driven by the leverage.

Table 5: Sources of MFI funds

Sources of funds	Count	%
Banks Loans	4	33.3
Donor funds	2	16.7
Share holder capital	3	25.0
Client savings and deposits	3	25.0
Total	**12**	**100**

The interview administered to CEOs sought to determine the default rating against total disbursement in the MFIs. The following response ratings were obtained from the CEOs. Table 5 indicates that 50% of MFIs have a default rating against total disbursement of 1 to 5 percent. 33.3% of MFIs have default rating of 6 to 10 percent while 16.7% of MFs have a default rating of less than 1 percent. The findings agree with those in Christen et al (1995), GTZ (2000) and CBK (2010) which assert that MFIs should ensure that they have minimal default rates. Specifically, the default rate should not exceed 5% of the total disbursement. In order to achieve a low default rate, CBK (2010) has recommended risk management guidelines that would ensure proper credit management practices. The study findings imply that the default rate cases are minimal and this may be a reflection of the quality of credit management practices that have been put in place. The minimal default rates may be an indication of the quality and effectiveness of the overall financial risk management strategy.

Table 6: Default Rating Against Total Disbursement

Default rating against total disbursement	Count	%
less than 1 %	2	16.7
1 to 5 %	6	50.0
6 to 10 %	4	33.3
Total	**12**	**100**

An interview of CEOs was conducted to establish the measures put in place by MFIs to mitigate loan defaults. The qualitative response were categorized into subthemes and presented in tabular format. The study findings in table 6 imply that there are various measures that have been put into place to mitigate loan defaults. These measures include application of stringent debt collection polices (16.7%), Strict credit appraisal procedures (33.3%), Know your customer (KYC) policy (25.0%), Monitoring the collaterals pledged against the loan (16.7%), Encouraging clients to make prepayment when business is good without any penalties (8.3%) and through Training (16.7%). The findings agree with those in Mokoro et al (2010), Diamantini (2010) and Ekka, Chaudhary and Sinha (2011) who noted that effective credit risk management policies should consist of strict credit appraisal procedures, Application of stringent debt collection,

Application of Know Your Customer (KYC) policy, collateral monitoring and encouraging borrowers to prepay without penalties, and through effective training of both debt management officers as well as the borrowers in financial management matters.

The findings imply that a number of good practices have emerged that promote responsible and inclusive lending. These include Loan size limits, Standardized (simple) loan terms, Zero tolerance on delinquency, Group-based lending. This finding implies that MFIs have put in place effective credit risk management policies which are part of an overall financial risk management strategy. The existence of effective financial risk management practices may have influenced the growth of MFIs.

Table 7: CEOs Response on Measures to Mitigate Loan Defaults

Measures to mitigate loan defaults	Count	%
Application of stringent debt collection	2	16.7
Strict credit appraisal procedures	4	33.3
Know your customer (KYC) policy	3	25.0
Monitoring the collaterals pledged against the loan	2	16.7
Encouraging clients to make prepayment when business is good without penalties	1	8.3
Through Training	2	16.7
Total	12	100

4.3 MFI Growth Indicators

The study sought to determine the growth of MFI sector in Kenya. The specific elements of growth that were investigated included the following; increase in capital base, increase in the loan portfolio/Turnover, increase in the number of employees, increase in branch network, and attainment of registration with CBK as a DTM.

4.3.1 Increase in Capital Base

The study sought to determine whether the MFI has experienced increase in capital base. Results in table 8 reveal that that 45% of the respondents agreed while 37.5% strongly agreed, bringing to a total of 82.5% indicated that the MFI has experienced a significant increase in capital base. Results also reveal that 17.5% of the respondents could not make up their minds on the statement. The findings concur with those in Mckelvie and Wiklund (2010) which asserted that firm's growth may be defined as an outcome or process. The findings also concur with CBK (2010) and Ndulu (2010) which note that MFIs in Kenya have experienced an increase in capital base. The findings imply that the MFIs under study have grown by increasing in capital base. The growth in capital base could have been as a result of attempting to comply with regulatory requirements on capital adequacy. The growth could also be attributed to the enterprise risk management strategies employed by MFIs.

4.3.2 Increase in the Loan Portfolio/Turnover

The study sought to determine whether the MFI has experienced increase in the loan portfolio or turnover. Results in table 8 revealed that 60% agreed while 25% strongly agreed bringing to a total of 85% of the respondents who agreed with the statement that the MFI has experienced a significant increase in the loan portfolio or turnover. Results further reveal that 15% of respondents could not make up their mind on the statement. The findings concur with those in Delmar (1998) who asserted that growth of micro finance may be measured through the growth of individual micro finance institutions and changes in the loan portfolio. The findings agree with those in Financial Sector Deepening (FSD) (2012), CBK (2010) and in Association of Microfinance Institutions of Kenya (2011) which noted that MFIs have increased their loan portfolios. According to AMFI (2011), MFIs serves over 6.5 million clients with an outstanding loan portfolio of over US $ 310 million. The finding imply that MFIs have grown in terms of loan portfolio and this could be attributed to expansionary policies pursued by the government, the improved macroeconomic environment, the desire by the government to improve financial inclusion and deepening and the enterprise risk management strategies employed by MFIs.

4.3.3 Increase in the Number of Employees

The study sought to determine whether the MFI has experienced increase in number of employees. The study findings in table 8 revealed that 40% of the respondents strongly agreed while a further 35% agreed bringing to a total of 75% of those respondents who agreed with the statement that the MFI has experienced a significant increase in number of employees. Results also reveal that 20% could not make up their mind while 5% disagreed with the statement. The findings agree with those in Barkham (1996) who asserted that growth of micro finance can be measured through the growth or changes of workforce. The findings also agree with those in Omino (2005) and CFSI (2011) which noted that MFIs have grown through the increase in number of employees. The findings imply that the MFIs under study have experienced a significant increase in number of employees. The growth of MFIs as shown by number of employees could have been attributed to the enterprise risk management strategies employed by MFIs.

4.3.4 Increase in Branch Network

The study sought to find out whether the MFI has experienced an increase in branch network. The findings in table 8 reveal that 47.5% of the respondents agreed while another 32.5% agreed bringing to a total of 80% of those respondents that agreed with the statement that the MFI has experienced a significant increase in branch network. Results also reveal that 12.5% of respondents could not make up their mind while 7.5% of respondents disagreed with the statement. The findings agree with those in McKelvie and Wiklund (2010) who asserts that growth of microfinance sector will be measured through the growth of individual micro finance institutions and changes in branch network. The finding also agree with those in Ndungu (2010) and Ngigi (2010) which note that MFIs have increased their branch network in order to effectively meet the financial demands of borrowers. The findings imply that the MFIs under study have experienced a significant increase in branch network. The growth in branch network could be attributed to the enterprise risk management strategies employed by MFIs.

4.3.5 Attainment of Registration with CBK as a DTM

The study sought to determine whether the MFI has attained registration with CBK as a DTM deposit taking microfinance institution.

Table 8: MFI Growth Indicators

	Strongly Disagree (%)	Disagree (%)	Neither Agree nor Disagree (%)	Agree (%)	Strongly Agree (%)
The MFI has experienced a significant increase in capital base	0	0	17.5	45	37.5
The MFI has experienced a significant increase in the loan portfolio/Turnover	0	0	15	60	25
The MFI has experienced a significant increase the number of employees	0	5	20	35	40
The MFI has experienced a significant increase in branch network	2.5	5	12.5	47.5	32.5
The MFI has attained registration with CBK as a DTM	5	7.5	22.5	42.5	22.5

Results in table 8 revealed that 42.5% of the respondents agreed while a further 22.5% strongly agreed with the statement that the MFI has attained registration with CBK as a deposit taking microfinance institution (DTM). Results also reveal that 22.5% could not make up their mind on the statement while 12.5% disagreed with the statement. The study findings are in line with those of CBK (2010), Omino (2005) and Financial Sector Deepening (FSD) (2012) who asserts that MFIs sector has grown and this has been demonstrated by the registration of deposit taking MFIs and the conversion of non DTMs to fully fledged DTMs. The findings imply that MFI sector has grown as witnessed by the increase in number of registered DTMs and the conversion of non DTMs to fully fledged DTMs. This growth may have been as result of the enterprise risk management strategies that MFIs have put in place.

4.3.6 CEOs Response on Growth of MFIs

The CEO interviews sought to establish how the MFIs have handled growth and their preparedness to manage (often rapid) growth, in terms of staffing, products, and funding. The qualitative responses were organized into subthemes, analyzed quantitatively and presented in table 9. Results in table 9 reveal that 41.7% of respondents indicated that they were very much prepared for growth. 8.3% of respondents indicated that this was their third year and they were still developing systems as they moved along. Another 8.3% indicated that they were experiencing gradual growth through referrals from both shareholders and customers. Meanwhile, 16.7% indicated that they have handled growth through acquisition of additional capital and opening more branches, 8.3% indicated that they handled growth through emphasis

on quality management on product and services, and 16% indicated that had experienced organic growth and were always prepared to adapt quickly to change.

The finding agree with those in Financial Sector Deepening (FSD) (2012) , Ndungu (2010), Ngigi (2010) and Association of Microfinance Institutions of Kenya (2011) which noted that MFIs are prepared to manage growth and are always prepared to adapt quickly to change. In addition, they note that MFIs have managed growth by growing their customer base, quality product management and developing systems. The findings imply that MFIs have managed growth effectively by put in place effective systems, additional capital and opening more branches, developing and managing quality products and services. This further implies that MFIs have put in place effective enterprise risk management strategies to manage growth.

Table 9: CEO Response on how the MFIs have handled growth

CEO Response on how the MFIs have handled growth and their preparedness to manage (often rapid) growth	count	%
Yes. We are very much prepared to manage growth	5	41.7
This is our third year and we are still developing systems as we move along	1	8.3
Gradual growth through referrals from both shareholders and customers	1	8.3
Through acquisition of additional capital and opening more branches.	2	16.7
Emphasis on quality management on product and services	1	8.3
We have had an organic growth and we are always prepared to adapt quickly to change	2	16.7
Total	12	100

4.4 Relationship between Financial Risk Management Strategies and Growth

Regression analysis was conducted to empirically determine whether financial risk management strategies were a significant determinant of growth in MFIs. Regression results in table 10 indicated the goodness of fit for the regression between financial risk management strategies and growth is satisfactory. An R squared of 0.276 indicates that 27.6% of the variations in growth are explained by the financial risk management strategies. The overall model significance is also presented in table 10. An F statistic of 14.496 is larger than the tabulated statistic of 4.08 (df1; 1, df2; 38, p value; 0.05). This is also supported by a probability value of 0.00. Since $F_{calculated} > f_{critical}$ and the reported probability of 0.00 is less than the conventional probability of 0.05 ($p\ value_{calculated} < p\ value_{critical}$), the overall model was significant. In other words, the independent variable (financial risk management strategy) does a better job in predicting MFI growth compared to predicting MFI growth through its mean. The relationship between financial risk management strategies and growth is positive and significant (b_1=0.188, p value, 0.00). The hypothesis was therefore accepted. This implies that an increase in the effectiveness of financial

risk management strategies by 1 unit leads to an increase in growth by 0.188 units. The regression equation is as follows;

$$Growth = 4.404 + 0.188\ Financial\ Risk\ Management\ Strategy$$

Table 10: Financial Risk Management Strategy and Growth

Parameter estimate	Coefficient	P value
Constant	4.404	0.01
Financial Risk Management Strategy	0.188	0.00
R Squared	0.276	
F statistic (ANOVA)(df ; 1;38; 0.05)	14.496	0.00

Figure 1 is a diagrammatic representation of the relationship between financial risk management strategies and MFI growth. The figure indicates that a positive relationship exists. Therefore, an increase in the effectiveness of financial risk management strategies positively affects MFI growth. The findings agree with those in Mokoro et al (2010), Diamantini (2010) and Ekka, Chaudhary and Sinha (2011), GTZ (2000) and CBK (2010) which noted that effective financial risk management strategies lead to positive growth of financial institutions.

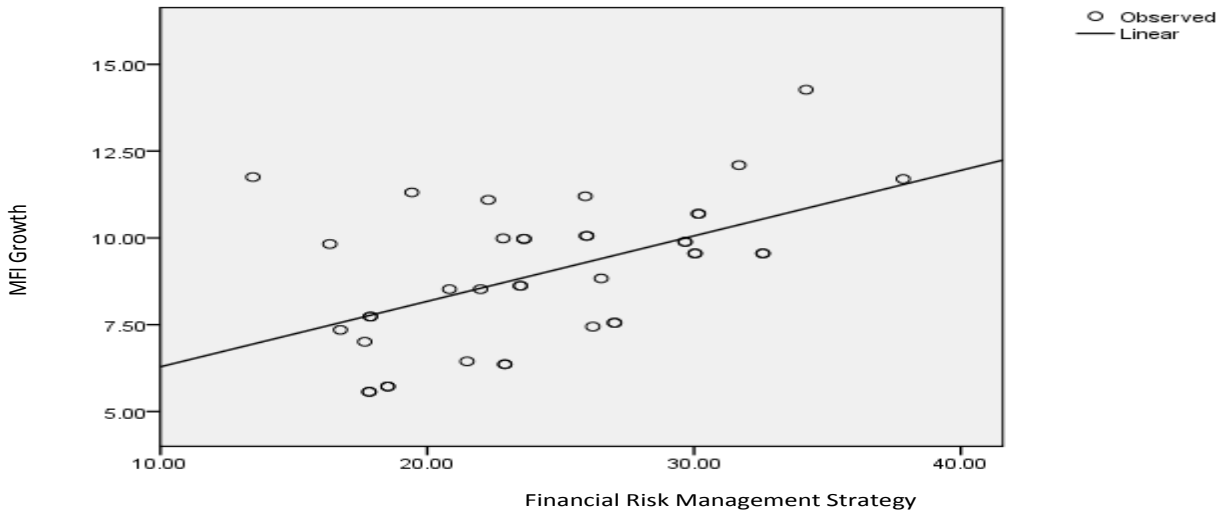

Figure 1: Financial Risk Management Strategy and Growth

5.0 SUMMARY, CONCLUSIONS AND DISCUSSIONS

5.1 Summary of Findings

The objective of the study was to investigate whether financial risk management strategies lead to growth of Micro Finance Institutions (MFIs) in Kenya. Various methods were used to arrive at

the findings. These methods included descriptive statistics and regression analysis. The findings indicated that MFIs had effective financial risk management strategies. This finding was informed by results which indicated that MFIs had put in place effective credit risk management practices, liquidity risk management practices, interest risk management practices and price risk management practices. In particular, MFIs took into consideration the conditions, characters, capacity, collateral and capital of borrowers. Strict debt collection practices were widely adopted by MFIs. In addition, the concept of Know Your Customer (KYC) policy, seem to have been adopted by MFIs. The relationship between financial risk management strategies and growth was positive and significant. This indicated that adopting effective financial risk management had a positive influence of MFI growth.

Results from Chief Executive Officer (CEO) interview were in agreement as they indicated that the sources of funds for MFIs include external sources and internal sources and the most frequently used source of funds are bank loans. The use of banks loans may present various risk exposures to MFIs, the most significant being interest rate risk. However, the ability of MFIs to source funds from various sources indicates that MFIs can apply the pecking order by first exploiting internal sources of funds since they present a lower financial risks and then move on to external sources. However, despite the financial risk exposure accompanied by leverage from external sources, MFIs may also benefit as they may experience higher growth driven by the leverage. Results from CEO interviews indicated that MFIs have put in place a number of good practices that have emerged that promote responsible and inclusive lending. These include loan size limits, standardized (simple) loan terms, zero tolerance on delinquency, group-based lending. This finding implies that MFIs have put in place effective credit risk management policies which are part of an overall financial risk management strategy. The existence of effective financial risk management practices may have influenced the growth of MFIs.

5.2 Conclusions

The study concluded that MFIs had effective financial risk management strategies. This conclusion was arrived from the observation that MFIs had put in place effective credit risk management practices. MFIs had also put in place effective liquidity risk management practices. It was inferred that MFIs had put in place effective Interest risk management practices. Results also led to the conclusion that MFIs had put in place effective price risk management practices. The study therefore concluded that financial risk management strategies were a significant determinant of growth in MFIs.

5.3 Recommendations of the Study

Following the study results, it was recommended that the MFIs should continue practicing effective financial management practices such as stress testing, stringent debt collection, protection against interest risk and foreign exchange risk. In addition they should adopt financial risk protection methods such hedging (options and forwards). Furthermore, loan size limits, standardized (simple) loan terms, zero tolerance on delinquency, group-based lending are necessary to enhance MFI growth. Recommended liquidity management strategies such as maintain detailed estimates of projected cash flows for the next weeks or months so that net cash requirements can be identified for the unexpected increases in cash needs is necessary for growth of MFI. Furthermore, maintaining investment accounts that can be easily liquidated into cash or

lines of credit with local banks to meet unexpected needs is a liquidity risk management practice that needs to be adopted by MFIs.

5.4 Suggested Areas for Further Study

Further studies can be done on the area of environmental factors that influence the performance and growth of the MFIs. The models that would be used in such studies include PESTEL, Porters Five Framework. In addition further studies are recommended in the area of competitive strategies and strategic responses adopted by MFIs in an effort to counter environmental challenges. In addition, further studies may investigate the influence of demographic factors on the enterprise risk management strategies. For instance, are MFIs with a high male gender composition more likely to put in place effective financial risk management strategies? What is the potential impact of capital base on financial risk management strategies? Are DTMS more likely to grow faster than non DTMs? What is the impact of gender composition, experience, age of MFI employees on MFI growth? Studies may be carried out to find answers to these questions.

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