Journal of
Business and Strategic Management
(JBSM)

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

Dr. James Rurigi Njuguna, Prof. Roselyn Gakure, Dr. Anthony Gichuhi Waititu and Dr. Paul Katuse

CARI Journals

Journal of Business and Strategic Management
ISSN 2520-0402(Online)
Vol. 2, Issue 2, pp 42 - 71, 2017

CARI Journals
www.carijournals.org

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

[1*] Dr. James Rurigi Njuguna
[1*]Post Graduate Student: Jomo Kenyatta University of Agriculture and Technology
*Corresponding Author's E-mail: drjnjuguna@gmail.com

[2]Prof. Roselyn Gakure
Lecturer, Jomo Kenyatta University of Agriculture and Technology

[3]Dr. Anthony Gichuhi Waititu
Lecturer, Jomo Kenyatta University of Agriculture and Technology

[4]Dr Paul Katuse
Lecturer, United States International University, Kenya

Abstract

Purpose: The purpose of this study was to establish how operational 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: Findings revealed that the MFI had adequate policies and procedures to manage its operational risks and the MFI had an operations manual. The findings also indicated that the MFIs have adhered to written policies and procedures to manage operational risks in the financial operations area, procurement area, treasury area, and financial management area. Results further indicated that the MFI had effective internal control systems for detecting fraud or other significant operational risks. Finally the study findings indicated that MFI's internal audit functions ensured effective use of resources, accurate financial reporting, and ample random spot checks of MFI branches, clients, and staff. The regression results indicated that there was a positive relationship between operational risk management strategies and MFI growth.

Unique contribution to theory, practice and policy: The study recommends that the MFIs to continue practicing effective operational risk management practices such as internal control

framework comprising of policies and procedures. MFIs need to uphold the existence and accessibility of operational manuals. It is suggested that adherence to written policies and procedures is positive strategy and it should be emphasized. The internal audit functions for effective use of resources and accurate financial reporting needs to be emphasized as it had a positive effect on growth. The MFIs should also benchmark their technology with that of banks to reduce human error, to produce timely and relevant data. It is recommended that implementation of know your client (KYC) requirements should be enhanced as it has an effect on growth.

Key words: *operational risk management practices, policies and procedures, internal control systems, fraud, 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.

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 et al. (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).

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).

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 operational 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 operational risk management strategies on the growth of MFI sector.

1.2 Research Objective

i. To establish how operational risk management strategies lead to growth of MFI sector in Kenya

2.0 LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Agency Theory

According to Jensen and Meckling (1976), agency theory holds that managers will not act to maximize the returns to shareholders unless appropriate governance structures are in place and implemented to safeguard the interest of shareholders. In the agency theory terms, the shareholders are the principals and managers are agents. Agency theory extends the analysis of the firm to include separation of ownership and control, and managerial motivation. In the field of corporate risk management, agency issues have been shown to influence managerial attitudes towards risk taking and hedging (Smith & Stulz, 1985). The theory also explains a possible mismatch of interest between shareholders, management and debt holders due to asymmetries in earning distribution, which can result in the firm taking too much risk or not engaging in positive net value projects (Mayers & Smith, 1987).

Agency theory is relevant in explaining the inherent operational risk that may exist in MFIs. These risks arise out of the relationship between the strategic partners and out sourcing firms that the MFI deals with. Such partners include the lawyers that are engaged by MFIs in suing defaulters, IT consulting firms, valuers of collateral, insurers of collateral, and credit reference bureaus. If any of these partners do not act in the best interest of an MFI, then the MFI suffers from a large exposure to operational risk.

2.1.2 Stakeholder Theory

Stakeholder theory, developed originally by Freeman (1984) as a managerial instrument, has since evolved into a theory of the firm with high explanatory potential. Stakeholder theory focuses explicitly on equilibrium of stakeholder interests as the main determinant of corporate policy. The most promising contribution to risk management is the extension of implicit contracts theory from employment to other contracts, including sales and financing (Cornell & Shapiro, 1987). In certain industries, particularly high-technology services, consumers trust in the company being able to continue offering its services in the future and can substantially contribute to company value. However, the value of these implicit claims is highly sensitive to expected costs of financial distress and bankruptcy. Since corporate risk management practices lead to a decrease in these expected costs, company value rises (Klimczak, 2005). Therefore stakeholder theory provides a new insight into possible rationale for risk management with a particular focus on operational risks. Some of stakeholders who are a source of risk include; customers, suppliers, employees, management, government and civil society. If contracts are made between the firm and any of these stakeholders, the breach of contract by either party may constitute to operational risk to the firm.

2.1.3 Systems Theory

Systems theory springs from biology and its content free and applicable to many fields of study. It is not actually a theory but a rather high level abstraction. Systems Theory can be defined as a working hypothesis, the main function of which is to provide a theoretical model for explaining, predicting, and controlling phenomenon (Bertalanffy, 1962). This is a popular theory which applies in all planning activities. According to Mugenda, and Mugenda (2003), the systems theory argues that a system consists of various components or sub-systems which must function together for the whole system/ plan to work. This implies that if one sub-system fails, the whole system is put in jeopardy. For instance this means that for a microfinance institution to operate effectively it should have the prerequisite full capacity to operate and develop strategies to deal with all risks.

System theory is crucial in explaining operational risks. If an organization structure of a MFI does not facilitate good communication, then departmental conflict may arise. The consequences of poor communication may be reflected in the performance of the overall organization. It is therefore important to formulate an organization culture that will facilitate proper communication between employees, management, suppliers and customers. A management information system is an important tool to facilitate effective communication. For instance, MFI may use a management information system to store and prepare information for managerial decision making. This theory is more appealing to the study compared to others.

2.1.4 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.

2.1.5 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 Operational Risk Management Strategies

Effective operational risk management strategies are expected to improve MFI growth. The Basel Committee (2004) defines operational risk as the risk of loss resulting from inadequate or

failed internal processes, people and systems or from external events. The committee indicates that this definition includes legal risk but excludes systemic risk and reputational risk. The Business Dictionary (2011) defines operational risk as probability of loss occurring from the internal inadequacies of a firm or a breakdown in its controls, operations, or procedures. Operational risk definitions have been broadly divided into those that say it is "everything except market and credit risk" and those that claim it is "losses due to failures in the operational process". Managing these risks requires a combination of an effective internal control framework, appropriate information technology systems, employee integrity, and streamlined operating processes (CBK, 2010).

2.4 Empirical Review

Fraser and Henry (2007) investigated the ways by which companies in UK identify risks and embed risk management and control procedures and also report on interactions between internal audit and audit committees and their contributions to risk management. The study used a survey research design and carried interviews with officers in UK PLCs and external auditors. The study concluded that while the parent boards have ultimate responsible, the ownership of risks must reside with management at lower levels. The study also found out that internal auditors were believed to have a role to play in risk management but concerns were expressed about their expertise and independence if and when they assume the role in risk management. The study recommended a split of internal audit and risk management functions to preserve internal audit independence and clarify internal audit roles. The study departs from the current study in several aspects. First, the scope of the current study is to demonstrate the value of ERM while Fraser and Henry (2007) investigated the ways by which companies in UK identify risks and embed risk management and control procedures also report on interactions between internal audit and audit committees and their contributions to risk management. The above study was done in UK (developed economy) while the current study will be done in Kenya (a developing economy). Finally, the above study was on Public Limited Companies (PLCs) while the current study will focus on Micro finance institutions (MFIs).

Ekka Chaudhary and Sinha (2011) further asserts 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 operational risk management. These include;- implementation of Know your client (KYC) requirements through the collection and use of client profile information; Manage human resources and staff perceptions ; emphasizing the role of internal audit. According to Pandey (2007), audit and internal control in MFI should cover:- financial transactions; operations, and ; adherence to mission. Financial controls and transactions are reviewed to ensure their accuracy, completeness and compliance to statutory norms. At the operational level adherence to organizational policies and procedures are the main areas of review. For MFIs with poverty alleviation as a key objective, verification of mission adherence may also be made through the audit process. The presence of an effective internal and external tool may be an important contributor to the growth of organizations in general and MFIs in particular.

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 author recommended the following operational risk

managements strategies to mitigate risk;- internal control framework comprising of policies and procedures; technology to reduce human error; Management Information system for accurate , timely and relevant data; separate lines of information flow; reconciliation of portfolio management information and cash accounting.

Tseng (2007) also used a sample of 114 ERM firms to investigate whether implementation of ERM had an impact on firm performance for the period 2005. The basic approach to answer this question used a contingency perspective, since all risks arise from the firm's internal and external environment. The basic contingency variables used were environment uncertainty, industry, competition, firm size, firm complexity, and monitoring by the firm's board of directors. An ERM index (ERMI) is constructed based on the Committee of Sponsoring Organizations (COSO) ERM's (2004) definition of four objectives: strategy, operation, reporting, and compliance. The contingency view was supported by the empirical evidence, since the deviation from the proposed proper match was found to be negatively related to firm performance. The above study bears resemblance to the current study on the following ways. It addresses the role of internal controls in managing risk and hence facilitating good performance. It also addresses the role of ERM on firm performance. However, the study departs significantly from the current study as it uses performance as the dependent variable instead of growth. The study also differs as far as the sample size is concerned. Its sample size is 708 firms while the current study has a sample size of 17 firms.

Tseng (2007) investigated whether better implementation of sound internal controls (as proposed by the Sarbanes-Oxley Act of 2002 (SOX) 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. Tseng (2007) also used a sample of 114 ERM firms to investigate whether implementation of ERM had an impact on firm performance for the period 2005. The basic approach to answer this question used a contingency perspective, since all risks arise from the firm's internal and external environment. The basic contingency variables used were environment uncertainty, industry, competition, firm size, firm complexity, and monitoring by the firm's board of directors. An ERM index (ERMI) is constructed based on the Committee of Sponsoring Organizations (COSO) ERM's (2004) definition of four objectives: strategy, operation, reporting, and compliance. The contingency view was supported by the empirical evidence, since the deviation from the proposed proper match was found to be negatively related to firm performance. The above study bears resemblance to the current study on the following ways. It addresses the role of internal controls in managing risk and hence facilitating good performance. It also addresses the role of ERM on firm performance. However, the study departs significantly from the current study as it uses performance as the dependent variable instead of growth. The study also differs as far as the sample size is concerned. Its sample size is 708 firms while the current study uses a census of the entire target population comprising of 57 MFIs.

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 operational 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 Operational Risk Management Strategy

The study sought to establish whether operational risk management strategies lead to growth of MFI sector in Kenya. The study concluded that there is a positive effect on growth. Specifically, the study concentrated on the following elements of operational risk management strategies:- policies and procedures to manage MFI operational risks, existence of operations manual, wide accessibility of operations manual contents to MFI staff, adherence to written policies and procedures to manage operational risks in the Financial operations area, adherence to written policies and procedures to manage operational risks in the Procurement area, adherence to written policies and procedures to manage operational risks in the Treasury area, adherence to

written policies and procedures to manage operational risks in the Financial management area, Internal control systems are effective at detecting fraud, Existence of MFI's internal audit functions, internal audit functions ensures effective use of resources, accurate financial reporting, and ample random spot checks of MFI branches, clients, and staff.

4.2.1 Policies and Procedures to Manage MFI Operational Risks

The study sought to establish whether the MFI has adequate policies and procedures to manage its operational risks. Results in table 3 reveal that 42.5% of the respondents strongly agreed while another 37.5% agreed bringing to a total of 80% of those who agreed with the statement that the MFI has adequate policies and procedures to manage its operational risks. Meanwhile, 12.5% respondents neither agreed nor disagreed with the statement 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 MFI has adequate policies and procedures to manage its operational risks was posed to non-managerial staff. Table 4.11 revealed that 28.57% agreed while another 57.14% 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 The Basel Committee (2004) and Chorafas (2001) which recommends that financial institutions may put in place policies and procedure to manage their operational risks. The findings also concurred with those in Tseng (2007) and Federal Reserve Bank of Chicago (2001) which advocated for sound policies and procedures to manage the operational risks of financial institutions. The findings implied that the MFIs under study have adequate policies and procedures to manage its operational risks. The existence of sound policies and procedures to manage operational risk may have influenced the growth of MFIs. It was also likely that those MFIs with effective policies and procedure to manage the operational risks may have experienced more growth than those that do not.

4.2.2 Existence of Operations Manual

The study sought to establish whether the MFI have an operations manual. Findings in table 3 indicated that 45% of the respondents strongly agreed while another 30% agreed bringing to a total of 75% of those who agreed with the statement that the MFI have an operations manual. Meanwhile, 17.5% of the respondents neither agreed nor disagreed with the statement while 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 MFI have an operations manual was posed to non-managerial staff. Table 4 revealed that 42.86% agreed while another 42.86% strongly agreed, bringing to a total of 85.71% of those respondents who agreed with the statement. However, 14.29% of respondents disagreed with the statement.

The findings concurred with those in Ekka Chaudhary and Sinha (2011) and CBK (2010) which asserted that financial organizations should document the operational procedures in the form of an operational manual. The findings also concurred with those in Pandey (2007) who asserted that an operation manuals covering financial transactions, operations and adherence to mission and other operation of a financial institution should be documented in form of an operational to serve as evidence that operational policies and procedures exist. The findings implied that the MFIs under study had operational manuals. The MFIs have operational policies and procedures. The documentation of procedures and policies in the form of a procedures manual is part of an

overall operational risk management strategy. The existence of effective operational risk management strategies may have influenced the growth of MFIs.

4.2.3 Wide Accessibility of Operations Manual

The study sought to establish whether the MFIs operations manual contents are appropriate and widely accessible to MFI staff. Table 3 reveals that 42.5% strongly agreed while another 35% agreed bringing to a total of 72.5% of those who agreed with the statement that the MFIs operations manual contents are appropriate and widely accessible to MFI staff. Meanwhile, 15% of the respondents neither agreed nor disagreed with the statement while 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 MFIs operations manual contents are appropriate and widely accessible to MFI staff was posed to non-managerial staff. Table 4 revealed that 28.57% agreed while another 28.57% 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 mind about the statement while a further 21.43% disagreed with the statement.

The findings concurred with those in CBK (2010) and Ndulu (2010) which asserted that financial institutions should ensure that the operational manual contents are widely accessible to staff members so that they can be consistently applied. King (2001) and Hussain (2000) also observed that the operational manual contents should be available to all staff to guide them on the operations. For instance, they argue that the credit department, the finance department, the trade finance department, the clearing department should have an up to date operational manual indicating when it was last updated, by whom and whether the copy is controlled or uncontrolled. The findings implied that the MFIs under study had ensured that the contents of the operational manuals are widely accessed by departmental staff to guide them in the day to day activities. The wide distribution of documented procedures and policies in the form of a procedures manual to all staff is part of an overall operational risk management strategy. The existence of effective operational risk management strategies may have influenced the growth of MFIs.

4.2.4 Adherence to Written Policies and Procedures to Manage Operational Risks in Key Financial Operations Areas

The study sought to establish whether the MFIs have adhered to written policies and procedures to manage operational risks in the financial operations area: credit (application and approvals, disbursements and collections, refinancing and repeat loans), savings (approvals for opening and closing. The findings in table 3 indicated that 47.5 % respondents agreed while another 37.5% strongly agreed bringing to a total of 85% of those who agreed with the statement that the MFIs have adhered to written policies and procedures to manage operational risks in the financial operations area: credit (application and approvals, disbursements and collections, refinancing and repeat loans), savings (approvals for opening and closing). Meanwhile, 10% of the respondents neither agreed nor disagreed with the statement and another 5% disagreed with the statement.

The findings concurred with those in Pandey (2007) which asserted that operational risk management mechanisms should be instituted in financial operations such as credit and saving areas. The findings also concurred with those in King (2001), The Basel Committee (2004) and GTZ (2000) which stressed the need to adhere to written operational policies and procedures in

financial operations area. Specifically, operational staff should adhere to credit application and approvals, disbursements and collections, refinancing and repeat loans procedures. In addition, operational staff should adhere to savings procedures such as approvals for opening and closing of savings accounts.

The findings implied that the MFIs under study adhere to written policies and procedures to manage operational risks in the financial operations area. Specifically, operational staffs have adhered to procedures in credit application and approvals, disbursements and collections, refinancing and repeat loans. In addition, operational staffs have adhered to savings procedures such as approvals for opening and closing of savings accounts. The adherence to procedures in the financial operations area is part of an overall operational risk management strategy. The adherence to operational procedures in the financial operations area may have influenced the growth of MFIs.

4.2.5 Adherence to Written Policies and Procedures to Manage Operational Risks in the Procurement Area

The study sought to establish whether the MFI has adhered to written policies and procedures to manage operational risks in the Procurement area: purchases (requisitions through payments), payroll (hiring, remuneration, personnel file documentation), and fixed assets. As illustrated in table 3, 55% of the respondents agreed while another 25% strongly agreed bringing to a total of 80% of those who agreed with the statement that the MFI has adhered to written policies and procedures to manage operational risks in the Procurement area: purchases (requisitions through payments), payroll (hiring, remuneration, personnel file documentation), and fixed assets. Meanwhile, 15% of the respondents neither agreed nor disagreed with the statement while another 5% disagreed with the statement.

The findings concurred with those in GTZ (2000) and Chorafas (2001) which argued that financial institutions should ensure adherence to written policies and procedures which have been put in place to manage operational risks in the Procurement area. The findings also concurred with those in The Basel Committee (2004) and Tseng (2007) which recommends that financial institutions may put in place policies and procedure to manage their operational risks in purchasing, payroll hiring and remuneration and fixed assets acquisition. The results implied that MFIs have adhered to written policies and procedures to manage operational risks in the procurement area. The procurement is an important area as far as operational risk management is concerned. The adherence to operational procedure and guidelines in the procurement area may have led to reduced risk exposures and by extension promoted the growth of MFIs.

4.2.6 Adherence to Written Policies and Procedures to Manage Operational Risks in the Treasury Area

The study sought to establish whether the MFI has adhered to written policies and procedures to manage operational risks in the Treasury area: cash handling, banking (accounting, account opening and closing, deposits, transfers, withdrawals), investments, funding (donations, capital stock). Results in table 3 reveal that 45% of the respondents agreed while another 20% strongly agreed bringing to a total of 65% of those who agreed with the statement that the MFI has adhered to written policies and procedures to manage operational risks in the Treasury area: cash handling, banking (accounting, account opening and closing, deposits, transfers, withdrawals),

investments, funding (donations, capital stock). Meanwhile, 30% of the respondents neither agreed nor disagreed with the statement and another 5% disagreed with the statement.

The findings concur with those in Tseng (2007) which asserted that financial institutions need to ensure adherence to written policies and procedures which have been put in place to manage operational risks in the Treasury area. Kimball (2000), Morris (2000) and Basel Committee on Bank Supervision (2001) recommend that adherence to operational procedures in cash handling, banking procedures such as accounting, account opening and closing, deposits, transfers, withdrawals. In addition, they advocate for adherence to policies in investments and in funding procedures such as donations and capital stock management. The findings imply that the MFIs under study have adhered to written policies and procedures to manage operational risks in the treasury area. The adherence to treasury operations policies and procedures may have reduced the risk exposures of MFIs and consequently impacted positively on their growth.

4.2.7 Adherence to Written Policies and Procedures to Manage Operational Risks in the Financial Management Area

The study sought to establish whether the MFI has adhered to written policies and procedures to manage operational risks in the financial management area: budget controls, asset safeguarding, production of accurate financial statements, and fulfillment of statutory requirements. -As illustrated in table 3, 47.5% respondents agreed while another 25% strongly agreed bringing to a total of 71.5% of those who agreed with the statement that the MFI has adhered to written policies and procedures to manage operational risks in the financial management area: budget controls, asset safeguarding, production of accurate financial statements, and fulfillment of statutory requirements. Meanwhile 20% respondents neither agreed nor disagreed with the statement and another 7.5% disagreed with the statement.

The findings concur with those in GTZ (2000) which argued that financial institutions should ensure adherence to written policies and procedures which have been put in place to manage operational risks in the financial management area. The findings are in line with those in CBK (2010), Ekka Chaudhary and Sinha (2011), Mokoro et al (2010) and Diamantini (2010) which recommended that financial institutions should adhere to budget controls, asset safeguarding, production of accurate financial statements, and fulfillment of statutory requirements. Specifically, the Central Bank of Kenya has put in place reporting requirements for financial institutions, the frequency of reporting and the format in which to report. The findings imply that the MFIs under study have adhered to written policies and procedures to manage operational risks in the financial management area such as budget controls, asset safeguarding, and production of accurate financial statements and fulfillment of statutory requirements. The adherence to financial management operational procedures and policies may have reduced the operational risk exposures of MFIs and this may have impacted positively on the growth of MFIs.

4.2.8 Internal Control Systems are Effective at Detecting Fraud

The study sought to establish whether the MFI Internal control systems are effective at detecting fraud or other significant operational risks. As illustrated in table 3 indicate that 60% of the respondents agreed while another 22.5% strongly agreed bringing to a total of 82.5% of those who agreed with the statement that the MFI Internal control systems are effective at detecting

fraud or other significant operational risks. Meanwhile 10% respondents neither agreed nor disagreed with the statement 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 MFI systems are effective at detecting fraud or other significant operational risks was posed to non-managerial staff. Table 4 revealed that 71.43% agreed while another 21.43% strongly agreed, bringing to a total of 92.86% of those respondents who agreed with the statement. However, 7.14% of respondents could not make up their mind about the statement. The findings concur with those in Ekka Chaudhary and Sinha (2011) and Diamantini (2010) which demonstrated the need for MFIS to have internal control systems which are effective at detecting fraud. The findings also agree with those in Pandey (2007) who asserted that there is need for MFIs to have internal control systems which are effective at detecting fraud. The findings imply that the MFIs under study have internal control systems that are effective at detecting fraud or other significant operational risks. The existence and effectiveness of internal control systems may have reduced the operational risk exposure of MFIs and this may have impacted positively on the growth of MFIs.

4.2.9 Existence of MFI's Internal Audit Functions

The study sought to establish whether MFI's internal audit function exists. Table 3 reveals that 55% of the respondents agreed while another 17.5% strongly agreed bringing to a total of 72.5% of those who agreed with the statement that MFI's internal audit function exists. Meanwhile 22.5% of the respondents neither agreed nor disagreed with the statement while another 5% disagreed with the statement. The findings concur with those in GTZ (2000), Kimball (2000), Morris (2000) and Basel Committee on Bank Supervision (2001) and Tseng (2007) which assert that financial institutions should have in place fully functioning internal audit functions to design, and ensure the implementation of internal controls as well as monitor the emerging risks. The findings also concur with those in Ekka Chaudhary and Sinha (2011) which asserts that MFIs need to have a fully functioning internal audit function to assist in the management of operational risk. The findings imply that the MFIs under study have internal audit functions and the effectiveness of the Internal Audit Function may have reduced the operational risk exposure of MFIs. The reduction of operational risk may have impacted positively on the growth of MFIs.

4.2.10 Internal Audit Functions ensures Effective Use of Resources, Accurate Financial Reporting, and Ample Random Spot Checks of MFI Branches, Clients and Staff

The study sought to establish whether MFI's internal audit functions ensures effective use of resources, accurate financial reporting, and ample random spot checks of MFI branches, clients, and staff. Finally the study findings in table 3 reveals that 50% respondents agreed while another 25% strongly agreed bringing to a total of 75% of those who agreed with the statement that MFI's internal audit functions ensures effective use of resources, accurate financial reporting, and ample random spot checks of MFI branches, clients, and staff. Meanwhile 20% respondents neither agreed nor disagreed and another 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 MFI have adequate safeguards in its procedures, policies, and practices to prioritize risks, detect fraud, and maintain fair and transparent human resource management was posed to non-managerial staff. Table 4 revealed that 50% agreed while another 21.43% strongly agreed, bringing to a total of 71.43% of those

respondents who agreed with the statement. However, 21.43% of respondents could not make up their mind about the statement while a further 7.14% disagreed with the statement.

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

	Strongly Disagree (%)	Disagree (%)	Neither Agree nor Disagree (%)	Agree (%)	Strongly Agree (%)
The MFI have adequate policies and procedures to manage its operational risks	2.5	5	12.5	37.5	42.5
The MFI have an operations manual.	0.	7.5	17.5	30	45
The MFI operations manual contents are appropriate and widely accessible to MFI staff.	0	7.5	15	35	42.5
The MFI has adhered to written policies and procedures to manage operational risks in the Financial operations area: credit (applications and approvals, disbursements and collections, refinancing and repeat loans), savings (approvals for opening and closing	2.5	2.5	10	47.5	37.5
The MFI has adhered to written policies and procedures to manage operational risks in the Procurement area: purchases (requisitions through payments), payroll (hiring, remuneration, personnel file documentation), and fixed assets	2.5	2.5	15	55	25
The MFI has adhered to written policies and procedures to manage operational risks in the Treasury area: cash handling, banking (accounting, account opening and closing, deposits, transfers, withdrawals), investments, funding (donations, capital stock,	2.5	2.5	30	45	20
The MFI has adhered to written policies and procedures to manage operational risks in the Financial management area: budget controls, asset safeguarding, production of accurate financial statements, and fulfillment of statutory requirements	2.5	5	20	47.5	25
The MFI Internal control systems are effective at detecting fraud or other significant operational risks	0.0	7.5	10	60	22.5
MFI's internal audit functions exists	2.5	2.5	22.5	55	17.5
MFI's internal audit functions ensures effective use of resources, accurate financial reporting, and ample random spot checks of MFI branches, clients, and staff	2.5	2.5	20	50	25

The study findings are in line with those in CBK (2010), Basel Committee on Bank Supervision (2001), The Basel Committee (2004) and Ekka Chaudhary and Sinha (2011) which recommend that the existence of an audit function should be supplemented by the effectiveness of the audit function. An effective audit function effectively monitors the use of resources, reviews financial reporting for compliance with reporting standards, carries out random spot checks. The effectiveness of the internal audit function may have reduced the operational risk exposures of MFIs. This in turn may have impacted positively on the growth of MFIs.

Table 4: Operational Risk Management Strategy (Non-Managerial Staff)

	Strongly Disagree (%)	Disagree (%)	Neither Agree nor Disagree (%)	Agree (%)	Strongly Agree (%)	Total(n)
The management of MFIs has set up an effective risk management and compliance committee	0	0	7.69	46.15	46.15	13
The management of MFI have ensured that the MFI has adequate policies and procedures to manage its operational risks	0	0	14.29	28.57	57.14	14
The management of MFI have ensured that the MFI has an operations manual	0	14.29	0.00	42.86	42.86	14
The management of MFI has ensured that the contents of the operational manual are appropriate and widely accessible to MFI staff.	0.00	21.43	21.43	28.57	28.57	14
The MFI systems are effective at detecting fraud or other significant operational risks	0	0.00	7.14	71.43	21.43	14
The MFI have adequate safeguards in its procedures, policies, and practices to prioritize risks, detect fraud, and maintain fair and transparent human resource management	0	7.14	21.43	50	21.43	14

4.2.11 CEOs Responses on Operational Risk Management Strategies

The CEO interviews sought to determine whether the MFIs have policies and procedures operations manual to manage its operational risks. Qualitative response from CEOs were grouped into subthemes and presented in table 5. Results in table 5 revealed that 66.7% of the CEOs indicated that operational manuals existed and that the manuals had been made available to every staff during induction to ensure that staff knew what was expected of them. Meanwhile, 16.7% of CEOs indicated that a Management Information System (MIS) operational manual from the vendors existed, 16.7% indicated that the MFI has 12 complete manuals as required by Central Bank of Kenya (CBK). However, 16.7% of CEOs indicated that the MFIs did not have operational manuals yet.

The findings are in line with those in CBK, (2010) which asserted MFIs should put in place operational manuals and these manuals should be made available to all members of staff. The findings also agree with those in Basel Committee on Bank Supervision (2001), Chorafas (2001) and The Basel Committee (2004) which recommend the documentation of operational policies and procedures in the form of operational manuals. The study findings implied that there are operational manuals with policies and procedures that the MFIs have implemented to manage its operational risks. The findings further imply that MFIs have put in place effective operational risk management strategies. The existence of effective operational risk management strategies may have influenced the growth of MFIs.

Interviews administered to CEOs sought to establish whether the MFIs internal audit functions ensure use of resources, accurate financial reporting, and ample random spot checks of MFI branches, clients and staff. The responses were grouped into subthemes, analyzed quantitatively and presented in table 6. Results in table 6 indicated that 91.7% of CEOs indicated that the MFIs internal audit functions ensure use of resources, accurate financial reporting, and ample random spot checks of MFI branches, clients and staff. A further 8.3% indicated that the internal audit function was not effective since it was no yet active.

Table 5: MFIs Have Policies and Procedures Operations Manual

MFIs have policies and procedures operations manual	Count	%
Yes it does. These are made available to every staff during induction to ensure that they know what is expected of them	8	66.7%
Yes; there is an MIS operation manual from the vendors	2	16.7%
Yes - the MFI has 12 complete manuals as required by CBK	2	16.7%
Not yet	2	16.7%
Total	12	100.0%

Table 6: The MFIs Internal Audit Ensures Proper Use of Resources

The MFIs internal audit functions ensure proper use of resources	Count	%
Yes	11	91.7
No- since internal audit office is not active	1	8.3
Total	12	100

The study findings are in line with those in CBK (2010), Basel Committee on Bank Supervision (2001), The Basel Committee (2004) and Ekka Chaudhary and Sinha (2011) which recommend that the existence of an audit function should be supplemented by the effectiveness of the audit function. An effective audit function effectively monitors the use of resources, reviews financial reporting for compliance with reporting standards, carries out random spot checks. The finding implies that MFIs have an effective internal audit function. The effectiveness of the internal audit function may have reduced the operational risk exposures of MFIs. This in turn may have impacted positively on the growth of MFIs.

The CEOs of MFIs were interviewed with an aim of determining whether the MFI has engaged an external auditor. Subthemes were drawn from the qualitative responses and analyzed quantitatively. The findings were presented in table 7. Results in table 7 revealed that 100% of the CEOs indicated that the MFI has engaged an external auditor. The findings concur with those in Pandey (2007), Tseng (2007) and CBK (2010) which suggest that MFIs should engage external auditors with a view of monitoring the operational risk facing MFIs. They also note that for MFIs to gain understanding of an MFI's business, the external auditor should focus on management's key concerns about business objectives and strategies, the MFI's organizational structure and business processes, the MFI's operating results and ability to sustain itself, major transactions and other economic events that may affect financial statements, accounting issues and changes in accounting policies, and sources of financing.

The findings imply that MFIs have engaged external auditors with a view of improving the operational environment and to monitor and report on operational risk exposures. The engagement of an external auditor is part of an overall operational risk management strategy. The engagement of an external auditor may have influenced the growth of MFIs.

Table 7: The MFIs has Engaged an External Auditor

The MFIs has engaged an external auditor	**Count**	**%**
Yes	12	100
No	0	0.0
Total	**12**	**100**

The CEO interviews sought to determine the number of days a loan officer, branch manager and headquarters managers take to become aware of a missed payment. Table 8 indicated that 58.3% of the CEOs indicated that it took a day, 16.7% of CEOs indicated that it took two days to 7 days while 25% of CEOs indicated that it took more than a week but less than 30 days. The findings

agree with those in Ekka Chaudhary and Sinha (2011), Kimball (2000), Morris (2000) and Ndulu (2010) who recommend the implementation of an effective management Information System (MIS) which would provide timely information on crucial key performance indicators. They also advocate that MFI should have an MIS with a module for monitoring the servicing of loan obligations and the production of timely report on missed payments.

The findings imply that MFIs have put in place a management information system that can adequately report missed payments in timely manner. The existence of a management information system that produces timely information is part of an overall operation risk management strategy. The existence of a management information system that produces timely information may have influenced the growth of MFIs.

Table 8: Days Taken by a Loan Officer to Note a Missed Payment

Days taken by a loan officer to note a missed payment	Count	%
One day	7	58.3
Two days to a 7 days (a week)	2	16.7
More than a week but less than 30 days	3	25.0
Total	**12**	**100**

The CEO interviews sought to establish whether the MIS support the MFIs growth, or presented a bottleneck to growth. The responses were isolated into subthemes, analyzed using quantitative methods and presented in table 9. Results in table 9 revealed that 83.3 % of CEOs indicated that The Management Information System (MIS) in place had supported MFI Growth. A further 16.7% indicated that the Management information system in place had not supported growth and that a superior system was needed to manage rapid growth. The findings concur with those in Rao (2004), Diamantini (2010) and Mokoro et al (2010), who asserted that ICTs have three kinds of impact on the micro-finance sector: efficiency, effectiveness and innovation. ICTs can help make certain MFI activities faster, cheaper, in fewer steps, at lower costs, involving less people, and requiring less paperwork, ICTs can help make MFI services more interactive, with fewer errors, customized, personalized, achievable, searchable and transparent. And on the innovation front, ICTs can help MFIs derive new products, new services, new customer bases and new value propositions.

The findings imply that MFIs have put in place management information system that supports growth rather than being a bottle neck to growth. This further implies that a more efficient and effective MIS can facilitate the growth to reach more people in a more economical way. A robust and growth enhancing management information system is part of the overall operational risk management strategy.

Table 9: Existence of MIS to Support growth

Existence of MIS to Support growth	Count	%
Yes	10	83.3
No. Superior system is needed to manage rapid growth	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 10 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 10 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 10 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 10 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. Results in table 10 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.

Table 10: 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

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 11. Results in table 11 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 11: 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 Operational Risk Management Strategies and Growth

Regression analysis was conducted to empirically determine whether operational risk management strategies were a significant determinant of growth in MFIs. Regression results in table 12 indicated the goodness of fit for the regression between operational risk management strategies and growth is satisfactory. An R squared of 0.408 indicates that 40.8% of the variations in growth are explained by the operational risk management strategies.

The overall model significance is also presented in table 12. An F statistic of 26.165 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 (operational risk management strategy) does a better job in predicting MFI growth compared to predicting MFI growth through its mean.

The relationship between operational risk management strategies and growth is positive and significant (b1=0.278, p value, 0.000). The hypothesis was therefore accepted. This implies that an increase in the effectiveness of operational risk management strategies by 1 unit leads to an increase in growth by 0.278. The regression equation is as follows;

$$Growth = 3.541 + 0.278\ Operational\ Risk\ Management\ Strategy$$

Table 12: Operational Risk Management Strategy and Growth

Parameter estimate	Coefficient	P value
Constant	3.541	0.003
Operational Risk Management Strategy	0.278	0.00
R Squared	0.408	
F statistic (ANOVA)(df ; 1;38; 0.05)	26.165	0.00

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

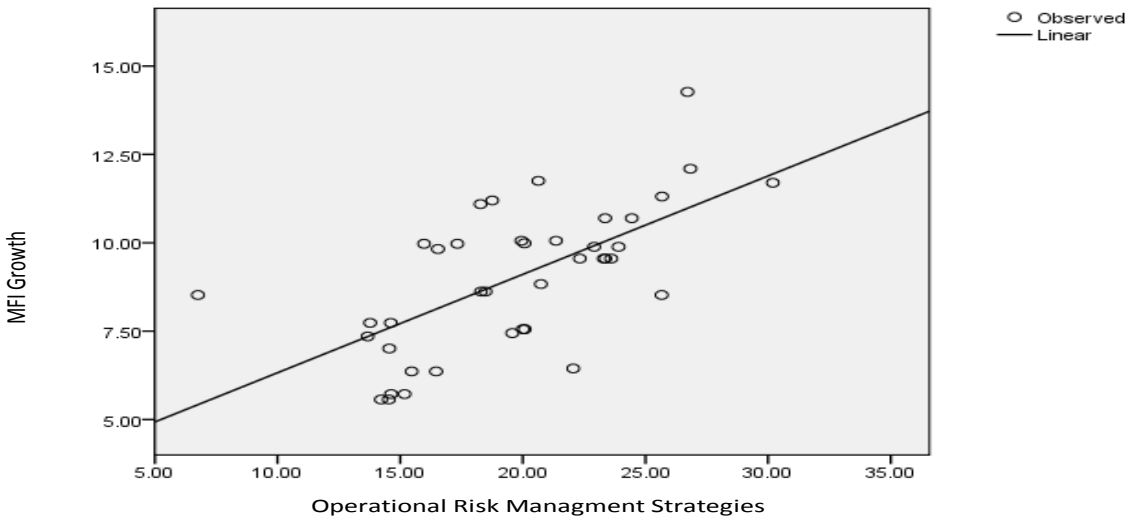

Figure 1: Operational Risk Management Strategies and Growth

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of Findings

The study attempted to establish whether operational risk management strategies had an influence on growth of MFIs in Kenya. Findings revealed that the MFI had adequate policies and procedures to manage its operational risks and the MFI had an operations manual. The findings also indicated that the MFIs have adhered to written policies and procedures to manage operational risks in the financial operations area, procurement area, treasury area, and financial

management area. Results further indicated that the MFI had effective internal control systems for detecting fraud or other significant operational risks. Finally the study findings indicated that MFI's internal audit functions ensured effective use of resources, accurate financial reporting, and ample random spot checks of MFI branches, clients, and staff. The regression results indicated that there was a positive relationship between operational risk management strategies and MFI growth.

Results from CEO interviews supported these findings. It was established that CEOs agreed with the statement that MFIs had put in place internal audit functions to ensure proper use of resources, accurate financial reporting, and ample random spot checks of MFI branches, clients and staff. CEOs also agreed that operational manuals existed and that the manuals had been made available to every staff during induction to ensure that staff knew what was expected of them. The finding implies that MFIs have an effective internal audit function and operational manuals were in existence. The effectiveness of the internal audit function may have reduced the operational risk exposures of MFIs. This in turn may have impacted positively on the growth of MFIs.

5.2 Conclusions

The study concluded that MFI have adequate policies and procedures to manage its operational risks. This conclusion was informed by the observation that MFIs under study had operation manuals. In addition, MFIs adhered to written policies and procedures to manage operational risks in all areas not excluding the financial operations area, procurement area, treasury area, and financial management area. It was concluded that MFI had effective internal control systems for detecting fraud or other significant operational risks. Finally, the overall conclusion was that operational risk management strategies had a positive effect on growth of MFIs.

5.3 Recommendations

It is recommended that the MFIs to continue practicing effective operational risk management practices such as internal control framework comprising of policies and procedures. MFIs need to uphold the existence and accessibility of operational manuals. It is suggested that adherence to written policies and procedures is positive strategy and it should be emphasized. The internal audit functions for effective use of resources and accurate financial reporting needs to be emphasized as it had a positive effect on growth. The MFIs should also benchmark their technology with that of banks to reduce human error, to produce timely and relevant data. It is recommended that implementation of know your client (KYC) requirements should be enhanced as it has an effect on growth.

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 operational risk management strategies? What is the potential impact of capital base on operational 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.

REFERENCES

Arkolakis C. (2011). *A unified theory of firm selection and growth.* Yale University, NBER & CESifo.

Asian Development Bank. (2003). Sharing information on microfinance. *.A quarterly newsletter of the focal point for microfinance*. December 2003.Vol.4 No. 4.

Babbie, E. R. (2004). *The practice of social research*. Belmont C.A. Wadsworth

Barkham, R., Gudgin, G. H., & Havey, E. (1996). *The determinants of small firm growth*. Jessica Kingsley Publishers.

Basel Committee on Banking Supervision. (2004). *International Convergence of Capital Measurement and Capital Standards – A Revised Framework.*" November 2005, Part 2, Section V-A. Available online at www.bis.org/publ/bcbs118.pdf.

Berenbach, S., & Guzman, D. (1994). The solidarity group experience worldwide," in *the New World of Microenterprise Finance*, edited by M. Oteroand E. Rhyne. Kumarian Press, West Hartford CT: 119-139.

Bertalanffy, L. (1962). *General systems theory*: A critical review.

Business Dictionary. (2010). http://dictionary.reference.com/browse/business. Accessed on 10th September 2011.

CBK. (2010). Risk management survey for the banking sector. *Year book, 7*(1-20), 17.

CGAP (2009). *Operational risk management for microfinance institutions*, www.cgap.org

Christen, R. P., Elisabeth, R., & Robert, V. (1995). *Maximizing the outreach of microenterprise finance: The emerging lessons of successful programs.* USAID Program and Operations Assessment Report No. 10.

Churchill, C. F. (1997). *Managing growth: The organizational architecture of microfinance institutions*. USAID's Microenterprise Best Practices Project. Bethesda, MD: Development Alternatives, Inc. Website: www.mip.org

Cornell, B., & Shapiro, A. C. (1987). Corporate stakeholders and corporate finance. *Financial Management, 16*, 5-14.

Cortright J. (2001). *New growth theory, technology and learning: A practitioners guide*, Portland, OR: Impresa, Inc.

Delmar, F. (1998). Taxonomy of high growth firms: Entrepreneurship and small business. *Research Institute (ESBRI).*Sweden

Desender, K. (2007). On the determinants of enterprise risk management implementation. Teaching cases collection, advancing the concepts & practices of information Resources Management in Modern Organizations.

Early, T. (1993). *Sustainable measures: Indicators of sustainability* (website accessed 15/08/2011) http://www.sustainablemeasures.com/Indicators/ChecklistItself.html

Ekka, P., Chaundry, S., & Sinha, R. (2011). *Risk management: Integrating SPM into microfinance capacity building*. Guidance Note. Accessed 12th September 2011).

Ellis, A., Cutura, J. N., Dione, I., Gillson, C., & Thongori, J. M. (2007). *Gender and economic growth in Kenya: Unleashing the power of women*, The International Bank for Reconstruction and Development/World Bank, Washington DC

Fraser. I., & Henry, W. (2007). Embedding risk management: Structures and approaches. *Managerial Auditing Journal.*22 (24): 392-409

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*, Prentice-Hall, Englewood Cliffs, NJ.

Gilbert C. (2007). *Enterprise risk management techniques and practices***.** Incisive Media Investments Limited.

Gonzalez, A. (2011). Defining responsible financial performance: How to think about growth. *Annual meeting of the Social Performance Task Force, June 19-24 in Den Bosch, Netherlands.*

Gonzalez-Vega, C., Mark, S., Richard, L. M., Jorge, R., & Navajas, S. (1997). BancoSol: The challenge of growth for microfinance organizations," in Hartmut Schneider (ed.), *Microfinance for the Poor?* Paris: Organization for Economic Cooperation and Development, pp. 129-170.

Jensen, M., & Meckling, W. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics, 3*(4), 305-360.

Jovanovic, B. (2000). *Growth theory.* Working paper. NBER series.

Klimczak, K. M. (2005). *Corporate risk management from stakeholders' perspective.* TRANS' 05, SGH, Warszawa, Poland, pp. 371-380.

Kombo, A., Wesonga, J., Murumba, N., & Makworo, E. (2011). An evaluation of the impact of risk management strategies on micro-finance institutions' financial sustainability: A case of selected micro finance institutions in Kisii Municipality, Kenya. *Educational Research* (ISSN: 2141-5161) Vol. 2(5) pp. 1149-1153 May 2011.Available online@ http://www.interesjournals.org/ER

Ledgerwood, J. (1999). *Microfinance handbook: An institutional and financial perspective*. Sustainable Banking with the Poor. Washington D.C.: World Bank.

Mayers, D., & Smith, C. W. (1987). Corporate Insurance and the Underinvestment Problem. *The Journal of Risk and Insurance, 54*(1), 45-54.

McKelvie, A., & Wiklund, J. (2010). Advancing firm growth research: a focus on growth mode instead of growth rate. *Entrepreneurship: Theory and Practice Journal.*

Mokoro, J. M., Nyaoga, R. B., Magutu, P. O., Khoya, O. M., & Onsongo, C. O. (2010). The transition from micro-financing into formal banking among the micro finance institutions in Kenya. *AIBUMA Publishing African Journal of Business & Management (AJBUMA)* http://www.aibuma.org/journal/index.htm. Vol. 1.

Mugenda, Olive M. and Mugenda, Abel G. (2003). *Research methods: Quantitative and qualitative approaches*, Acts Press, Nairobi-Kenya

Omino G. (2005). *Regulation and supervision of Microfinance Institutions in Kenya*. Central bank of Kenya.

Penrose, E. T. (1959). *The theory of the growth of the firm.* New York: Oxford University Press. Publishing Company.

Penrose, E. T. (1985). The theory of the growth of the firm: Twenty five years after. *Acta Universitatis Upsaliensis: Studia Oeconomicae Negotiorum* (Upsala Lectures in Business) 20: 1–16.

Rosenbaum F. (1993). *Sustainable measures: Indicators of sustainability* (website accessed 15/08/2011) http://www. Sustainable measures.com / Indicators / Check list Itself.html

Smith, C. W., & Stulz, R. M. (1985). The determinants of firm's hedging policies. *Journal of Finance and Quantitative Analysis, 20*(4), 391-405.

The Grameen Bank (2000a). *Models of micro finance.* http://www.grameen-info.org/annualreport/annualreport2000/index.html

Tseng, C. (2007). *Internal control, enterprise risk management, and firm performance*. (Unpublished PhD Dissertation, Department of Accounting and Information Assurance. Robert H. Smith School of Business).

Vieira, P. (1993). *Sustainable measures: Indicators of sustainability* (website accessed 15/08/2011) http://www.sustainablemeasures.com/Indicators/ChecklistItself.htm