FINANCIAL RISK MANAGEMENT PRACTICES INFLUENCING BUSINESS RESILIENCE IN SMALL AND MEDIUM ENTERPRISES IN KENYA: A SURVEY OF MATATU SACCOS IN NAIROBI COUNTY

BY
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UNITED STATES INTERNATIONAL UNIVERSITY

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A Project Report Submitted to the Chandaria School of Business in Partial Fulfillment of the Requirement for the Degree of Masters in Business Administration (MBA)

UNITED STATES INTERNATIONAL UNIVERSITY

SUMMER 2014
STUDENT’S DECLARATION

I, the undersigned declare that this is my original work and has not been submitted to any other college, institution or university other than the USIU in Nairobi for academic credit.

Signed: _______________________________  Date: ________________
Muburi Evelyn Njoki (629321)

This project has been presented for examination with my approval as the appointed Supervisor.

Signed: _______________________________  Date: ________________
Dr. Bernard Omboi

Signed: _______________________________  Date: ________________
Dean, Chandaria School of Business
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ABSTRACT

The objective of the study was to determine the financial management practices influencing the business resilience of Matatu SACCOs in Nairobi County. The specific objectives were: to determine how insurance influence business resilience of Matatu SACCOs in Nairobi county, to determine the influence of risk diversification on business resilience of Matatu SACCOs in Nairobi county and to establish the cash reserve management practices that influence business resilience of Matatu SACCOs in Nairobi County.

The research design adopted was descriptive survey research design. The target population was 500 registered Matatu SACCOs operating in Nairobi County. A sample of 50 SACCOs was used. The sampling unit was the finance manager in each of the 50 SACCOs. Systematic sampling technique was used to select respondents. A structured questionnaire was the data collection instrument. Data was analyzed using Spearman’s Rank Correlation Coefficient and multiple regression modeling techniques.

The findings showed that majority (62%) of the respondents agreed that it took a long while to restore the business to normal operations in case of disruptions. The adoption of automobile liability insurance possessed the highest explanatory power on the variability resilience of the SACCOs.

In terms of diversification practices, majority (80%) of the respondents disagreed that the SACCOs had diversified their business adequately as a risk management measure. There was no statistically significant correlation between business resilience and diversification.

In terms of cash reserve management practices, the relationship between business resilience and maintenance of emergency savings ($r=.158, p>.05$), short-term savings such as bonds ($r=-.180, p>.05$), and not keeping cash reserve ($r=.019, p>.05$) was not statistically significant.

The study concluded that the Matatu SACCOs only adopted automobile liability insurance as a risk management strategy which had a positive influence on the resilience of their business. The Matatu SACCOs did not practice any diversification strategies as a risk management measure for their businesses. This potentially affected their ability to
recover quickly from events that disrupts business. The Matatu SACCOs kept cash reserve as a matter of policy. However, they maintained cash reserve equivalent to only one month running expenses. Generally, the SACCOs neither practiced emergency savings not invested in short-term financial instruments such as bonds. This potentially affected the SACCOs’ ability to quickly restore business to normalcy in the event of a major disruption to business.

The study recommended that the Matatu SACCOs should leverage on their membership size to bargain for better insurance policies and packages for their businesses. They should also have a long term view of managing their risks through diversification. They should consolidate the strength inherent in their numbers to create a common pool of reserve fund strictly ear-marked for emergencies. Future studies should be undertaken using alternative conceptual models to unearth the factors that were outside the scope of this study.
ACKNOWLEDGEMENT

I dedicate this to God for seeing me through this journey and to my family for their support in my pursuit towards higher education.
TABLE OF CONTENT

STUDENT’S DECLARATION .......................................................................................................................... ii
COPYRIGHT .................................................................................................................................................. iii
ABSTRACT ...................................................................................................................................................... iv
ACKNOWLEDGEMENT ................................................................................................................................. vi
TABLE OF CONTENT ............................................................................................................................... vii
LIST OF TABLES ........................................................................................................................................... ix
LIST OF FIGURES ......................................................................................................................................... x
LIST OF ABREVIATIONS ............................................................................................................................ xi

CHAPTER ONE ................................................................................................................................................. 1
1.0 INTRODUCTION ......................................................................................................................................... 1
1.1 Background to the Study ............................................................................................................................. 1
1.2 Problem Statement ...................................................................................................................................... 4
1.3 General Objective of the Study ................................................................................................................... 5
1.4 Specific Objectives ....................................................................................................................................... 5
1.5 Importance of the Study .............................................................................................................................. 5
1.6 Scope of the Study ....................................................................................................................................... 6
1.7 Definition of Terms ...................................................................................................................................... 6
1.8 Chapter Summary ...................................................................................................................................... 7

CHAPTER TWO .................................................................................................................................................. 8
2.0 LITERATURE REVIEW .............................................................................................................................. 8
2.1 Introduction .................................................................................................................................................. 8
2.2 The Influence of Insurance on Business Resilience of SMEs ................................................................. 8
2.3 The Influence of Risk Diversification on Business Resilience of SMEs ................................................. 12
2.4 The Influence of Cash Reserve Management on Business Resilience of SMEs ................................ 17
2.5 Chapter Summary ....................................................................................................................................... 22

CHAPTER THREE ........................................................................................................................................... 23
3.0 RESEARCH METHODOLOGY .................................................................................................................. 23
3.1 Introduction ................................................................................................................................................ 23
### 3.2 Research Design

3.3 Population and Sampling Design

3.4 Data Collection Methods

3.5 Research Procedures

3.6 Data Analysis Methods

3.7 Chapter Summary

### 3.8 Chapter Summary

### CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

4.2 General Information

4.3 Insurance Practices Influencing Business Resilience

4.4 Diversification Practices Influencing Business Resilience of Matatu SACCOs

4.5 Cash Reserve Management Practices Influencing Business Resilience

4.6 Chapter Summary

### CHAPTER FIVE

5.0 DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

5.2 Summary

5.3 Discussion

5.4 Conclusion

5.5 Recommendation

### REFERENCES

### APPENDICES

Appendix I: Cover letter

Appendix II: Questionnaire
LIST OF TABLES

Table 4.1: The Number Years the SACCO has been Operating ........................................... 31
Table 4.2: Insurance Practices Influencing Business Resilience of Matatu SACCOs .......... 35
Table 4.3: Correlation between Insurance Practices and Business Resilience ................. 36
Table 4.4: Ease of Insurance Compensation ......................................................................... 37
Table 4.5: Diversification Practices by the Matatu SACCOs ................................................ 39
Table 4.6: Risk Diversification on Business Resilience of Matatu SACCOs ................. 40
Table 4.7: Cash Reserve Management Practices Influencing Business Resilience .......... 43
Table 4.8: Correlation between Cash Reserve Practices and Business Resilience .......... 44
Table 4.9: Model Summary ................................................................................................. 44
Table 4.10: ANOVA (b) ...................................................................................................... 45
Table 4.11: Coefficients (a) ................................................................................................. 45
LIST OF FIGURES

Figure 4.1: Distribution of the Respondents by Gender .............................................. 29
Figure 4.2: Respondent’s the Level of Education......................................................... 30
Figure 4.3: Years the Respondents had worked for the SACCO ................................ 30
Figure 4.4: Number of Registered Members per SACCO ........................................... 32
Figure 4.5: Fleet Type .................................................................................................... 33
Figure 4.6: It Takes a Long while to Restore Business in Case of Disruptions .......... 34
Figure 4.7: Suggestion for New Insurance Products .................................................... 38
Figure 4.8: Maintenance of Cash Reserve ..................................................................... 41
Figure 4.9: The Duration of the Policy ......................................................................... 41
### LIST OF ABREVIATIONS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMEs</td>
<td>Small and Medium enterprises</td>
</tr>
<tr>
<td>SACCO</td>
<td>Savings and Credit Co-operatives</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package and Social Sciences</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
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<td>USA</td>
<td>The United States of America</td>
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background to the Study

Risk management is an ongoing process that can help improve operations, prioritize resources, ensure regulatory compliance, achieve performance targets, improve financial stability and ultimately, prevent loss/damage to the entity (Panigrahi, 2011). Once organizational goals are defined, risk managers: anticipate and identify risks associated with these goals (that is; what, when and how risks arises); determine risk transfer (insurance or other financial products); rate risks according to the likelihood that they will occur (evaluation and analysis); and, determine risk response (risk management plan) (Scimia, 2010). Response techniques included risk avoidance, risk reduction, risk sharing, and risk acceptance (Oslo & Wu, 2008).

Hiles (2002) identified a raft of benefits of risk management to organizations. He noted that risk management: helps create the probability of business continuity no matter what adverse event occurs, reduce or even eliminate unproductive time spent in problem “fire-fighting”, avoid wasted time and money that comes from unsuccessful activity, ensuring a robust, resilient operation, reducing the cost of downtime and service outage, protect the assets of the organization including its staff, share value, market share, brand value, reputation, credit rating and intellectual assets as well as physical assets, avoid penalties from failures of compliance or statutory requirement, avoid adverse publicity from business or operational failure.

Financial risk manifest when a business is exposed to an event that can cause a shortfall in a targeted financial measure or value such as earnings per share, return on equity, or cash flows (Drake & Fabozzi, 2010). Financial risks comes in many forms such as: having insufficient money to meet the company’s commitments, which means becoming unprofitable or insolvent; doing deals which, if they fail, will capsize the business, or being vulnerable to swings in interest rates or raw materials (Sadgrove, 2005).
Financial risk management applies a systematic and logical approach to uncertainties in operations, reputation, credit, liquidity, portfolios and markets (Tarantino, 2010). Financial management is a process to deal with the uncertainties resulting from financial markets (Horcher, 2011). The first part of the process involves identifying and prioritizing the financial risks facing an organization and their relevance (Horcher, 2011). This involves assessing the financial risks facing an organization and developing management strategies consistent with internal priorities and policies (Horcher, 2011). It aims to minimize the risk of loss from unexpected changes in the price of currencies, interest rates, commodities and equities (Yusof, 2007).

Yusof (2007) sees risk as an undeniable reality of doing business today and characterizes a successful entrepreneur as one that does not fear risk, but strives to understand it, to manage it, even to take advantage of it. The author observes that the most successful business is usually managed by people who know when to push forward and when to pull back, when to buy and when to sell, when to stand firm and when to compromise. However, a study by Sullivan-Taylor and Branicki (2011) reported that small and medium enterprises have limited control and high vulnerability to knock-on effects from certain events, which affect organizations in their geographic or supply community. Howlin and Ezingeard (2008) warned that under-prepared SMEs expose a significant vulnerability in terms of their own survival, and the consequential impact on their employees, their customers and their suppliers. For example, these risks are responsible for high cost of doing business in terms of higher insurance premiums and expensive security operations (Sandler and Enders, 2013).

According to Horscher (2011), financial risk arises through countless transactions of a financial nature, including sales and purchases, investments and loans, and various other business activities. It can arise as a result of legal transactions, new projects, debt financing, the activities of management, stakeholders, competitors or the weather. Horscher identifies three main sources of financial risks. The first one is risk arising from an organization’s exposure to changes in market prices such as interest rates, exchange rates and commodity prices. The second one is risks arising from the action of, and transactions with, other organizations such as vendors and customers. The third one is
risk resulting from internal actions or failures of the organization, particularly people, processes and systems.

Jorion (2010) discussed several sources of financial risk. One of them is liquidity risk. Jorion argued that lack of liquidity can cause the failure of a business, even when it is technically solvent, that is, when the value of assets exceeds that of liabilities. He classified liquidity risk into asset liquidity risk and funding liquidity risk. He explained that asset liquidity risk is the risk that a position cannot easily be unwound or offset at short notice without significantly influencing the market price, because of inadequate depth or market disruption. Funding liquidity risk is the current or prospective risk arising from an institution’s inability to meet its liabilities and obligations as they come due without incurring unacceptable losses. Two other risk categories identified in literature are operational risk – the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events; and, business risk – that is, the potential for losses from residual resources of non-financial earnings volatility (Diebold et al. 2010).

This study focused on the Matatu industry. Matatus refer to the informal paratransit industry in Kenya that provide service to millions of people a day and are essentially the backbone of the transportation system in Nairobi (Graeff and Graeff, 2013). The term “Matatu” is derived from the Kikuyu word “Mangotore Matatu” which means “thirty cents” (Orero et al., 2012), the standard fare adopted at the inception of the industry (Graeff and Graeff, 2013). The business environment of the Matatu industry in Kenya is bombarded by all sorts of risks. It has been accompanied by increasing road traffic accidents (Chitere and Kibua, 2004), traffic congestion, leading to long queues of slow-moving vehicles and long waiting times particularly in Nairobi (Ministry of Transport, 2009).

Described as a chaotic paratransit sector (Orero et al., 2012), traffic conditions in Nairobi are characterized by unsafe roadways with unreliable performance (Gonzales et al., 2009). The Matatu industry has been affected by government policy directives, mostly recently requiring all public transport operators to come together in either Savings or
Credit Cooperatives (SACCOS) or companies and for small capacity vehicles to move to higher capacity as a condition for continued registration (Orero et al., 2012).

Given the foregoing business environment of the Matatu industry, only the most resilient operator in the sector remains in business. Hurley-Hanson (2006) considers resilience as an important concept to organizations in responding to a crisis. Samuels (2008) define resilience as a measure of an organization’s ability to restore the status quo in as short a time as possible. This involves having in place the tools necessary for a smooth resumption of normal business operations. According to Thoma (2011), the resilience concept provides a guideline for emergency management, disaster relief and damage control. This requires the adoption of appropriate risk management strategies by the business owners.

1.2 Problem Statement

A report by KPMG (2012) noted that Kenya’s business climate is risky. The report observed that there are significant disincentives in the business environment in Kenya which includes governmental overregulation and inefficiency, expensive and irregular electricity and water supplies, poor transport infrastructure and high costs associated with crime and general insecurity. This hostile business environment threatens the survival of enterprises and is often responsible for the closure of many businesses. However, unlike their corporate counterparts, Matatu business owners are uniquely disadvantaged in many ways due to their smallness. Given their unique challenges, only the adoption of appropriate risk management practices by the small Matatu business owners can ensure the resilience of their enterprises. While any business entity needs robust risk management systems, small matatu business owners need much more than that as they may not have the wherewithal to manage and control risks due to their very size and several limitations (Raghavan, 2005).

Research has found that small business owners suffer the most in times of crisis and are the least prepared of all organizations (Sullivan-Taylor and Branicki, 2011). Budget wise, small businesses are not as well equipped as large corporations to invest in all necessary risk packages or sustainable activities (Yiannaki, 2012). This resource scarcity has been
identified in small business literature as a key issue which, in relation to resilience, is a crucial consideration because best practice is typically identified in resource rich large enterprise contexts. Such best practices often encompass insurance, risk diversification and cash reserve management. However, it is not clear from existing literature how these practices influence business resilience of Small and Medium Enterprises. This study therefore sought to survey the influence of these financial risk management practices on the business resilience of Matatu SACCOs in Nairobi County.

1.3 General Objective of the Study

The main objective of the study was to determine the financial risk management practices influencing the business resilience of Matatu SACCOs in Nairobi County.

1.4 Specific Objectives

The study sought to achieve the following specific objectives:

1.4.1 To determine how insurance influence business resilience of Matatu SACCOs in Nairobi county.

1.4.2. To determine the influence of risk diversification on business resilience of Matatu SACCOs in Nairobi county.

1.4.3 To establish the cash reserve management practices that influence business resilience of Matatu SACCOs in Nairobi County.

1.5 Importance of the Study

As small businesses are among the most threatened businesses, this study has practical and theoretical relevance to a number of stakeholders.

1.5.1 SMEs

The findings of this study might reveal the financial risk management practices that SMEs in the Matatu industry have adopted and how this influences their ability to become
resilient against business risks. Recommendations that suggested would help SMEs adopt sustainable strategies for business resilience.

1.5.2 Financial Institutions

Financial institutions such as banks have a relationship with their SME clients by way of providing loans and deposit facilities. Therefore, this study could be useful in helping banks develop financial packages that are mutually beneficial to them and their SME customers.

1.5.3 Government

The government recognizes that SMEs play an important role in the economic growth of the country. Therefore, this study could be used as a basis for policy developments intended to address business sustainability of SMEs exposed to adverse business risks.

1.5.4 The Academia

The question of how SMEs prepare and respond to business disruptions occasioned by political adverse risks is still an understudied area in Kenya. Members of the academic community who wish to extend studies on the same could use this study as a reference point.

1.6 Scope of the Study

This study was conducted in Nairobi County. Data was collected from finance managers of Matatu SACCOs based in Nairobi using a structured questionnaire. The scope of the study was for the period 2010-2014. This encompasses the years prior to and after the 2013 general elections in Kenya.

1.7 Definition of Terms

1.7.1 Risks

Risk is the potential for unexpected negative event to occur (Bostrom, French & Gottlieb, 2008).
1.7.2 Risk management
Risk management is the use of various management practices to reduce the production and financial risk of the business (Samuels, 2008).

1.7.3 Political Risks
This can be defined as the exposure to a change in the value of an investment of cash position resultant upon government actions (Yusof, 2007).

1.7.5 Resilience
Resilience refers to a dynamic process of maintaining positive adaptation and effective coping strategies in the face of adversity (Resnick, Lisa and Roberto, 2011).

1.8 Chapter Summary
This chapter began by providing an understanding of the concept of risk, risk management and financial risk management as it relates to business resilience in SMEs. The chapter has further stated the problem and specified the study objectives. In addition, the scope and significance of the study have been described. The chapter has also defined the terms that were used in the study. The next chapter extensively reviews literature based on the study objectives.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

In this chapter, a review of relevant literature pertaining risk management and business resilience is made. The literature review is structured according to the specific objectives. The first section of the literature dwells on the influence of insurance on business resilience. The second section reviews the influence of risk diversification on business resilience. The third section looks at the cash reserve management practices on business resilience. A summary of the literature review is made at the end of the chapter.

2.2 The Influence of Insurance on Business Resilience of SMEs

Insurance is a form of risk transfer. According to Frost, Allen, Porter and Bloodworth (2000), many organizations today, especially if they are large multinationals, have the financial resources to cope with major physical disasters. A number of these organizations are now establishing captive insurance companies as a form of self-insurance. There is also a realization that some of the greatest risks faced by successful organizations are intangible—such as those that could damage their reputation in the marketplace. These risks are potentially more damaging because they directly affect business operations; if a business loses market share, the volume of sales may never recover. The nature of these risks means that they are harder to find insurance cover for. Increasing awareness of these types of risk has meant operational continuity is more critical. Finance and insurance are concerned with the transfers of risks between dates (credit and savings) and/ or situations (derivative assets, insurance contracts); with the mobilization of savings and with the resources allocation (Peaucelle, 2008). Loss prevention and optimal insurance policies have long been an important part of the insurer’s mission to provide effective protection against various types of risk (Mutenga and Staikouras, 2007). The various insurance options discussed include: general business liability insurance, automobile liability, worker compensation and comprehensive property insurance and terrorism insurance.
2.2.1 General Liability Insurance

Insurance companies offer a variety of covers, one of which - the most basic - being general or business liability (Scimia, 2010). This policy covers products and premises, that is, it covers property damage. In addition, the transferring of terrorism risks can be undertaken by the conventional method of insurance (Shaw, 2010). Within the transport sector, Cohen (2006) explains that liability insurance covers negligence - failing to exercise a degree of care that may be expected or required under your particular situation or circumstances. For example, the business is assumed to be responsible for any accident happening on the premises, even though the injured person's carelessness may contribute to this mishap. There is also liability as a result of an employee’s automobile accident while on the job. General liability coverage covers the following: (1) payment that are required due to bodily injury or damage to the property of others that you cause accidentally. (2) Medical services at the time of the incidence. (3) Cost of defending lawsuits that allege bodily injury or property damage including expenses in investigation and settlement including the cost of any court, bonds or other judgments during appeal.

2.2.2 Worker’s Compensation Insurance

Another is worker's compensation insurance. This protects the employer against liability in the event of an accident to the employee. By law, the business owner is required to provide employees with a safe place to work, hire only competent employees so they do not endanger one another, provide safe tools to work with and warn employees of existing dangers that may exist or develop while they are doing their jobs for the business. Under workers compensation insurance, an employee collects payment for doctors' bills and medications as well as hospital expenses and income payments for the time lost beyond a specified minimum period (Cohen, 2006).

2.2.3 Comprehensive Property Insurance

According to Cohen (2006), there is also comprehensive property insurance which is an all-risk policy that generally covers all perils except those that are specifically excluded and named in the policy. The advantage of this policy is that: the business avoid gaps in its coverage because it is covered for all perils not specifically excluded; the business is
less likely to duplicate coverage with additional policies; and it is easier to obtain settlement for lawsuits with an all-risk policy; and the total premium on all risk policy is generally less than the same coverage obtained by different policies. Sadgrove (2005) however comments that insurance is no longer the cheap option it once was. Insurance companies require their clients to actively manage their risks. Insurance pay-outs can also be slow. Companies can wait for over a year for pay-out. Many assets cannot be insured and insurance cannot pay for loss of goodwill and reputation. A report by the Economic Intelligence Unit (2007) however noted that by demonstrating that they have put in place well-planned measures to deal with any potential disruptions, companies may be able to expect to pay lower premiums. The report noted that 31% of respondents in the survey said that the influence wielded by insurance companies over business continuity was significant.

Crawford and Seidel (2013) observe that some companies use insurance as a means of transferring risks associated with extreme events. They caution that companies must balance the costs of insurance, which are likely to increase over time with more frequent extreme events, with the costs of taking action to reduce premiums and the potential for damages from such events. Lesourd and Schilizzi (2001) contend that removing a significant part of these risks and/or making them insurable will at least partially free up the firm from that hither to latent or hidden financial burden, making some capital resources available for profitable ends going towards the firm's objectives, such as investment in new products or new technologies, and generally, making a more efficient use of the firm's capital assets.

Wedawatta and Ingririge (2012) undertook an investigation of adaptation to the risk of flooding considering community-level measures, individual-level property protection, and business continuity and resilience measures. The problem underpinning their research was that the UK has experienced a number of flood events in recent years, and the intensity and frequency of such events are forecast to further increase in future due to changing climatic conditions. Accordingly, enhancing the resilience of small and medium-sized enterprises (SMEs) – which form an important segment in a society – to flood risk, has emerged as an important issue. However, SMEs often tend to underestimate the risk of flooding which tends to have a low priority in their business
agenda. A total of four short case studies were conducted among SMEs to identify their response to flood risk, and what measures have been undertaken to manage the risk of flooding. It was observed that SMEs have implemented different property-level protection measures and generic business continuity/risk management measures such as insurance, based on their requirements, to achieve a desired level of protection. While this study established that insurance was adopted as a risk management strategy, it was not discussed from a developing country context.

2.2.4 Terrorism Insurance

According to Enderwick (2006), financial risk management techniques such as insurance reduce the firm’s exposure to specific risks without changing the underlying strategy. However, although insurance is part of a risk management program, Pakroo (2010) observes that sometimes the protection of insurance may be either too expensive or simply unavailable for particular events. Milburn (2005) gives the example of terrorism where he notes that the events following 9/11 cost the insurance industry in the US over $32 billion, making it one of the most costly disasters in the history of insurance worldwide. The OECD (2005) noted that both insurers and reinsurers have had to reevaluate under which conditions they can provide coverage against this risk. Coaffee (2012) claim that the argument that supports this reevaluation is that the nature of terrorist attack defies most of the normal ‘laws of insurance’ as the industry cannot quantify the potential financial exposure of a terrorist bombing when they cannot predict where it is going to be located, its explosive force, or how business disruption would affect financial markets.

A study by Juma (2012) in Kenya revealed that the risk profile has risen sharply since the year 2011, pushing up terrorism and political risk premiums by up to 100 per cent and making it difficult for businesses to find cover. In the US and other western countries, Bullock et al. (2011) found that businesses attempt to manage the additional premium by improving their security measures as the insurance companies are taking into account the existence of preparedness programs as they calculate the premiums and business interruption insurance coverage for the businesses.
2.2.5 Automobile Liability Insurance

There is also automobile liability insurance - where one is generally required to maintain insurance on all automobiles or other vehicles operated as part of the business. Typical coverage for automobile liability insurance includes damages from collision, fire, theft, and other physical perils. A comprehensive policy generally excludes: losses from wear and tear; losses to tires unless owing to fire, malicious mischief, or vandalism arising from collision. How much to pay for automobile insurance or physical damage insurance can vary widely depending on the vehicle, including its age, type, the territory including the location and distance traveled, and the age of driver or drivers (Cohen, 2006)

2.3 The Influence of Risk Diversification on Business Resilience of SMEs

According to Kozami (2002), diversification may involve internal or external, related or unrelated, horizontal or vertical, and active or passive dimensions - either singly or collectively. Diversification strategies are adopted to minimize risk by spreading it over several businesses. Enderwick (2006) observes that diversification is a widely used strategy for increasing resilience whether of products, markets or sources of supply. Known as a basic rule in risk management, diversification is pursued by many organizations as a way to achieve organic growth, reduce volatility of income streams, and provide a degree of protection from market cycles (Talbot and Jakeman, 2011). With regard to the contemporary global threats such as terrorism, the key strategic responses are likely to occur in the areas of supply chain management, diversification and ensuring business continuity (Enderwick, 2006). Leivesley (2006) contends that spreading investments and resources in new ways may reduce the residual risk profile which ensures business continuity in the case of loss.

Banjerjee (2005) suggests that the principle of diversification requires an investor to invest in more than one project so that the losses in one may be offset by gains in another. In this way, a prudent investor may avoid too much risk and may hope that the actual returns from his/her portfolio are much the same as what he/she expected them to be. The relationship between the returns from different investments has to be considered to form a portfolio. This relationship can be of three types. The first one is positive correlation. When there is positive correlation between investments, if one investment does well (or
badly), it is very likely that the other will perform likewise. For example, if you invest in shares of two agro-based companies, whose fortune may depend upon the weather condition, you would expect both the companies to perform badly in dry weather.

In negative correlation, Banjerjee (2005) explains that if one investment does badly, the other will do very well and vice versa. For example, if you invest in the shares of an ice cream company and also in an umbrella-making company, the weather will affect the performance of these two companies differently. In the case of no correlation, the performance of one investment may be independent of how the other performs. For example if you hold shares in a steel company and also in a soap making company, it is likely that there would be no correlation between the profits and return from each.

In this section, the diversification strategies reviewed are: geographic diversification, service diversification and market diversification.

2.3.1 Geographic Diversification

Geographic diversification addresses the question of the geographic extent over which firms should engage themselves (Bausch & Burkhard, 2009). Rowland and Lawson (2012) recommend the option of geographic diversification, arguing that by having some of the business wealth in another geographic location; the business is protected against risk threats and incidences such as terrorism. This is premised on the assumption that negative impact in one region will be offset by better results in other regions (Delfman, 2005). There is protection in diversification as one facility continues to operate during a disruption to another facility (Kouvelis, Dong, Boyabatli and Li, 2011). The task for financial risk managers consists of conceptualizing the possible location of disruptions of business activities and its linkages that may be crucial to the company, and to create just enough flexibility of those points of potential weakness to ensure the proper operation of a given business network without excessive costs (Suder, 2004).

Sullivan-Taylor and Branicki (2011) study attempted to address a gap in the field of organizational resilience research by examining how small and medium enterprises (SME) manage the threat and actuality of extreme events. This research identified that large organizations have been the traditional focus of empirical work and theorizing in the area of organizational resilience yet the heterogeneous SME sector routinely operates
under conditions of uncertainty. In the research, the relationship between resilience capabilities such as flexibility and adaptation was interrogated in relation to organizational size. The study findings suggested that applying one-size-fits-all organization solution to creating resilience was limited due to the impact of organizational size upon the type of resilience capabilities that an organization might possess. This study is useful in that it discussed the resilience practices of SME managers towards extreme events. However, it did not show the relationship between financial risk management practices and business resilience which is a gap that this current study sought to close.

2.3.2 Market Diversification

According to the OECD (2013), market diversification entails the creation of opportunities to expand market for services including the diversification of customers, suppliers and financiers. According to Horcher (2011), diversification of customers, suppliers and financing sources reduces the possibility that an organization will have its business adversely affected by changes outside management’s control. Forbes (2009) recommends that business should spread portfolio among multiple investment vehicles such as cash, stocks, bonds, mutual funds and perhaps even some real estate. This is normally practiced by larger firms which tend to be more diversified, which means that they are likely to be less risky (Daskalakis and Psillaki, 2008).

Baldock et al. (2013) examined the way SMEs deal with external shocks of various kinds, including recent economic downturn, infrastructure failures, social unrest and extreme weather events. In their survey, they asked how business owners and managers prepare themselves for these inherently uncertain events and how they deal with immediate impact on the business when it is faced with an external crisis. Their findings showed that the most commonly identified changes that businesses were making in order to become more resilient were to diversify into new markets and/or business activities, make changes to the supply chain and/or form new business partnerships, and reducing the number of permanent staff employed. These findings apply to general risk management strategy. However, the report is silent concerning the nexus between financial risk management and business resilience.
A research by George (2007) examined the diversification-resilience relationship by explicitly analyzing the impact of ownership structure and business group-affiliation in influencing this relationship. The findings pointed to the importance of taking firm-specific organizational characteristics into account when examining the influence of firm diversification on business resilience. This research was limited in scope to listed firms. However, small unlisted firms among which Matatu SACOs in Nairobi falls were excluded. Therefore, this study examined the influence of diversification on business resilience from an SME perspective.

Hight (2010) proposed a diversification effect metric that isolates the effect of correlation coefficients on portfolio risk by controlling the effects of allocation and the risk imposed by individual asset returns. The study looked at the practical process of measuring diversification effect in individual portfolios to illustrate how allocation and the risk imposed by individual asset returns can confound the information value of correlation coefficients and the calculation of diversification effects using a process that isolates the effects of correlation while controlling the effects of allocation and the risk imposed by individual asset returns. The findings showed that diversification effect is a reduction in portfolio risk created by imperfect correlations between asset return pairs. However, their analysis was intended only for use by experienced financial planners who commit significant resources to constructing and maintaining investment portfolios. Thus, the findings of this study are of little use to a typical SME manager running a Matatu SACCO.

Using the Japanese context, Amann and Jaussaud (2012) tested the hypothesis that family businesses should recover better or more easily from an economic downturn and persist in their stronger performance. Their empirical investigation used a matched pair methodology, which allows for strong controls of size and industry variables. Their sample consisted of 98 carefully selected pairs of firms that were of the same size and from the same industry. Their finding showed that family businesses achieved stronger resilience both during and after an economic crisis compared with non-family businesses. They noted that family businesses resist the downturn better, recover faster and continue exhibiting higher performance and stronger financial structures over time. An interesting finding in their study was that family business owners were likely to avoid diversification
strategies even if it would confer some risk protection on the company. Since SACCOs, by definition, are not family-owned, this current study attempted to analyze small business resilience within the context of Matatu SACCOs.

2.3.3 Service Diversification

Service diversification may be defined as increase in the number of industries in which a service firm is active (Bausch & Pils, 2009). Varanasi (2005) surveyed the studies on diversification and firm performance, in particular those that have addressed themselves to the relationship between a firm’s degree of diversification and subsequent performance. Noting that diversification originated from the desire to reduce the risk of an existing line of business, this scholar stipulated that the problem in the area of corporate diversification is the need to evolve an appropriate approach to classify firms in various diversification groups and then examine the relationship between diversification and performance in general and financial performance in particular. He showed that the industry specific effects of diversification are lost in the analytical procedure of cross-sectional studies. This suggested the need to undertake a study on industry-specific risk diversification and its effects on business resilience.

Demmer et al. (2011) identified key antecedents of resilience in large enterprises to examine whether their resilience strategies were applicable for small and medium enterprises. They also identified additional drivers of resilience for SMEs and developed metrics for engendering resilience and tracking related progress. Their case study was motivated by the need to draw lessons learned to define a set of pro-active metrics for infusing resilience into the culture of an SME. Their findings revealed seven antecedents to resilience (which they defined as the ability to dynamically reinvent business models and strategies as circumstances change). These are: eliminate allegiance to the status quo, emphasize internal knowledge sharing, environmental scanning for new knowledge, aggressively identify new options and entrepreneurial opportunities, undertake mergers and alliances, generally support portfolio of strategic patterns and make renewal an equal partner to optimization. These antecedents are generally applicable to enterprise risk management from a strategic viewpoint. However, financial risk management strategies as potential antecedents to business resilience are not addressed.
2.4 The Influence of Cash Reserve Management on Business Resilience of SMEs

Cash reserve is the total amount of items which a business can easily convert into cash and hold in reserves for an emergency (Persaud, 2010). According to Bhat (2008), one of the prime responsibilities of the financial manager is that of managing cash to make balance between profitability and liquidity, in other words maintaining optimum cash balance. Management of liquidity risk often involves ensuring that there is a sufficient cash reserve to meet unexpected cash demands (Stone, 2012). In this case, the manager implicitly sets aside cash reserve in addition to the required margin in order to run the company at a prudent level, given the amount of capital there is. This means reducing the probability of bankruptcy, or of being forced out of positions immediately after loss (Malz, 2011). Cash reserve management practices reviewed in this section are: cash reserve account, cash flow management and investment in short-term bonds.

2.4.1 Cash Reserve Account

According to Engle (2011), management plans that result in adequate liquidity and solvency can help to reduce financial risk. Maintaining adequate levels of liquid reserves will reduce financial risk. Cash accounts that are maintained to provide cash during emergency situations are a way of providing insurance for the company from the company's own resources. Lesourd and Schilizzi (2001) established that reducing the environmental risks faced by firms may, lead to a more efficient use of the firm’s capital resources. They describe a scenario where one is to assume, for instance, that a firm’s environmental risks are not insurable and yet are still significant, both in the case of a major environmental catastrophe and in the case of more diffuse environmental damages. In such a scenario, they argue that the only way a firm might be able to cope with this risk might be to build up financial cash reserves or provisions that enable it to face financial liabilities occurring as a result of either a major accident or as a result of damages to third parties.

Some of the risk events have caused many organizations to increase their budgets for their compliance functions (Frigo and Anderson, 2009). In the certain risks such as terrorism, risk management asks how much resource to allocate to protect the business against the threat and hazards of terrorism and how to spread these across the board (D’Souza, 2011).
For instance, a survey conducted by Curtin, Hayman and Husein, (2004) of companies that were affected by a terrorist bombing in the heart of Manchester established that more than 40 percent of them went out of business for good, whereas those with larger cash reserves were able to survive. Julio and Yook (2012) also measured changes in cash holdings and found temporary increases in cash balances in the year prior to the election in the amount of 4.3% of the average cash to assets ratio, controlling for firm characteristics and economic conditions. The increase in cash holdings is similar in magnitude to the election-year decline in investment, suggesting that the funds that would have been used as investment are temporarily held as cash until the election uncertainty is resolved.

Mutenga and Staikouras (2007) however notice that extreme events make risk capital expensive when funded by shareholders’ capital. Nguyen and Ramachandran (2006) add that higher business risk increases the probability of financial distress. For example, there exists collection risk in the receivable portfolio of SME sectors for the reason that SMEs cannot dictate terms to their customers. As SME sector business entity is at the receiving end, this may put strain on the liquidity position of the business entity (Raghavan, 2005). For SMEs, maintaining cash reserve can be realized by better cashflow management.

Stim and Guerin (2008) propose three keys to managing cash-flow. The first one is to be prepared. The author argues that one can never completely avoid cash flow problems. But smart financial strategies like not relying on a single customer can not only prepare the SME business for economic downturns, it can provide an avenue for maintaining business resilience financially. The other strategy for the entrepreneur is to know the various funding options. This also requires due diligence strategies like maintaining a reliable book keeping system.

Burnard and Bhamra (2011) undertook a review of literature focusing on establishing a solid conceptual base for organizational resilience upon which future empirical studies could be based. The problem they identified was that the concept of organizational resilience is a largely underdeveloped area that yields an interesting stream of research. A major finding of their study was that the strength of SMEs lies in their ability to flexibly adapt to change but inadequacies in their organizational ability to positively adjust to major disruptions is limited. The inadequacies their study highlighted include insufficient
forward planning, issues with cash flow, inability to capture and manage innovation, lack of investment, lack of business experience and little external support. It is clear from their study however that their research did not encompass financial risk management practices and how they influence business resilience among SMEs.

Gunasekaran et al. (2011) developed a research framework with key factors/enablers that determine the resilience of SMEs. Their study involved a sample of 40 SMEs in the Southcoast of Massachusetts and provided further insights into the key characteristics associated with resilience of SMEs that are influenced by advances in operation strategies and globalization. The study established that SMEs need help in having access to the market through different platforms and financial resources. They recommended that SMEs should be provided resources on publicly available research and development facilities with the objective of supporting their resilience. While this study epitomizes the need for organizational resilience among SMEs, it leaves out the financial risk management aspects and its relationship with business resilience.

A study of cooperatives by Birchall and Ketilson (2009) sought to provide historical as well as empirical evidence that proves that the cooperative model of enterprise survives crisis and more importantly, that it is a sustainable form of enterprise able to withstand crisis. The problem that motivated their research was that cooperative enterprises around the world are showing resilience to financial and economic crisis that has had negative impacts on the majority of enterprises. They therefore sought to answer the question; why is this form of enterprise proving so resilient? The report showed that in response to crisis, there was an immediate refocusing of business, including selling off subsidiaries that were not part of the core business. Cooperatives increase their capital base to make them more risk-averse including through mergers and they make every effort to achieve cost reductions. This study therefore provided some pointers to the cash reserve management practices of cooperatives, and perhaps, offers first-hand account of risk management within the cooperatives sector. However, the study examined the resilience of cooperatives within the framework of the banking sector. Due to the context specific nature of risk management practices, it is not clear how their findings generalize to the Matatu SACCOs.
Danes et al. (2009) investigated the relative contributions of human, social and financial capital; natural disaster exposure and federal assistance to business-owning family resilience over time for male and female business owners. Their study was founded on Sustainable Family Business and Conservation Resources theories which they used to examine 311 small family firms in the USA. The findings showed that federal assistance explained a significant amount of variance in firm-owning resilience. A research gap in this study was that it did not look at data on the private insurance these businesses might be carrying that would help guard against the drain on resources the natural disaster might have caused.

2.4.2 Cash Flow Management

Sadgrove (2005) also offers a number of ways to reduce financial risk: the first one is maintaining a healthy margin. The author argues that all things being equal, a higher margin gives a company more room for maneuver, and more time to sort out problems. It allows the business to build up greater reserves, to invest, and to acquire other businesses. Margins are simply the difference between revenue and costs. Another way is having saleable assets. This includes profitable divisions which other businesses would want to acquire. Many companies survive a trauma by selling some of their subsidiaries. The author also states that having a clear oversight of the organization’s finances – having control measures in place and keeping costs low can help SMEs increase their liquidity and boost their cash reserves.

Bharma et al. (2011) undertook a review of resilience literature in its widest context and later its application at an organizational level context. They consequently reported the origin of the concept analyzed various fields of research. They established that the concept remained essentially constant regardless of its field of enquiry and has much to inform the fields of organization theory, strategy and operations management. They reported numerous empirical studies which showed that majority of SMEs did not have a plan to deal with business disruption and that only a minority had business continuity plans that demonstrated a proactive and intentional desire to organize restoration and recovery efforts in the event of a crisis. From this study, it is not clear whether insurance,
diversification and cash reserve management practices were antecedents to business resilience.

Paton et al. (2010) reviewed possible vulnerability and resilience factors and adopted a risk management framework to outline its potential for modeling the complex relationship between these variables and both growth and distress outcomes. Their study questioned the assumption of an automatic link between disaster exposure and loss outcomes. Their results showed a basis for operationalizing the resilience paradigm which focused attention on mitigating disaster stress risk and facilitating recovery and growth. However, the element of financial risk management was lacking in their study.

Fairchild (2012) presented a method of investment appraisal that takes account of total risk through financial distress cost. He tested the hypothesis that although risk management can reduce total risk, it may not affect the cost of capital or firm value. They developed a method of investment appraisal that takes account of total risk through expected financial distress costs. His method resulted in three possible decisions related to a new project: reject the project; invest in the project and risk-manage, or invest in the project but do not risk manage. Thus, his study looked at decision choices rather than the outcomes of those decision choices which are the measures of business resilience.

Li (2003) considered future trends and challenges of financial risk management. Li noted that businesses are not accustomed to accepting and managing financial risk as opposed to business risk. Drawing from extensive study of past empirical reports, he forecasted that financial risk management will evolve at a faster pace and new risk management products will continue to emerge as the financial risk management continues to improve. This study was not approached from a small business resilience context.

Zand’s (2009) case study on risk management explored why a giant failed by looking at how their case study company made problematic acquisitions and adopted questionable financial policies that became destructive when the firm experienced volatile earnings. His findings showed that both management and board needed to consider a system-wide view of risk management. They established that the case study company generated billions of dollars of financial slack consisting of surplus cash flow, large cash reserves,
unused bank credit and unused debt capacity during its heights of prosperity and this seemed to increase management’s complacency and inclination to take risk. The management believed that this slack would cushion it against financial risk, but it turned out, this strategy had disastrous consequences. The study implied that even large cash reserve as a risk management strategy was not fool proof.

2.3.3 Investment in Short Terms Bonds

Short term bonds are treasury bills which are simply promissory notes of short term maturity issued by the Government to meet its short term financial needs (Wilson, 2012). According to Wilson (2012), treasury bills play much the same role as paper money even though the government doesn’t print and distribute them. They are considered the same as cash (usually referred to by companies as cash equivalents in financial statements). The Central Bank of Kenya (2014) defines a treasury bill as a paperless short-term borrowing instrument issued by the Government through the Central Bank of Kenya (as a fiscal agent) to raise money on short term basis – for a period of up to 1 year. Treasury bills are issued in maturities of 91, 182 and 364 days. Treasury bills are sold at a discounted price to reflect investor’s return and redeemed at face (par) value.

According to Wilson (2012), treasury bills are among the safest investment in the financial markets because of several reasons. This is because the government has power to impose taxes on its individual and corporate citizens that it can use to pay its debts. No other borrower is in that position. Secondly, the government can create money through the central bank.

2.5 Chapter Summary

This chapter has presented a review of the literature pertinent to the study. It has discussed concepts and research related to insurance, cash reserve management and risk diversification as risk management practices that potentially affect business resilience. The next chapter describes the research methodology that was used to undertake the study.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction
This chapter describes the methodology which was adopted for the study. The chapter explains the research design, the population and sample, data collection methods, research procedures and the data analysis methods.

3.2 Research Design
For the purposes of this study, the research design adopted was descriptive survey research design. According to Kothari (2009), descriptive research studies are concerned with describing the characteristics of a particular individual, or a group. Saunders, Lewis and Thornhill (2009) maintain that the purpose of a descriptive research design is to produce an accurate representation of events or situation. Cant, et al.(2009) simplifies the purpose of this research design further by explaining that it is designed to provide answers to the who, what, when, where and how of a topic. In its most basic form, it seeks answers to questions regarding the size, form, distribution or existence of a variable.

A definition of the term “research design” is given by Cooper and Schindler (2005) as the blueprint for the collection and analysis of data. The same view is captured in Blaikie’s (2009) definition as follows: “A research design is a technical document that is developed by one or more researchers and is used by them as a guide or plan for carrying out a research project.” Kothari (2009) characterize the term as involving the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy and procedure. The dependent variable in this study was business resilience whereas the independent variables were: insurance, cash reserve management and risk diversification.
3.3 Population and Sampling Design

3.3.1 Population

A population, also called the universe, refers to the total collection of elements about which a researcher wishes to make some inferences (Cooper and Schindler, 2005). The population of interest in this study was all the Matatu SACCOs located in Nairobi County. According to Matatu Owners Association, there are an estimated 500 registered Matatu SACCOs operating in Nairobi County.

3.3.2 Sampling Design

3.3.2.1 Sampling Frame

Stewart, Shamdasani and Rook (2006) define sampling frame as “a list of people (households, organizations) that the researcher has reason to believe is representative of the larger population of interest”. For the purpose of this study, the researcher obtained a membership list from the Matatu Owners Association.

3.3.2.2 Sampling Technique

The researcher used systematic sampling technique to select respondents. Denscombe (2003) indicates that systematic sampling assumes the same principles of randomness as simple random sampling but introduces a system whereby samples are chosen based on every ‘nth’ case. According to Taylor (2005), this technique arranges individuals in the population in some logical order from which a list of random numbers may be used to select the samples needed. Rao and Richard (2006) argue that this method is simpler and much more convenient than random or stratified sampling since the need for preparing a frame for selection is avoided. The sample interval \( (k) \) was determined using the following formula given by Rao and Richard (2006).

\[
k = \frac{\text{Population size}}{\text{Sample size}}
\]

\[
k = \frac{500}{50} = 10
\]
3.3.2.3 Sample Size
Sample size may be defined as a subsection of the population, chosen in such a way that their characteristics reflect those of the group from which they are chosen (Cooper and Schindler, 2005; Henn et al., 2006). Mugenda and Mugenda (2003) suggest that 10% of the sample size is usually representative of the population of interest. Therefore, a sample size of 50 such SACCOs, equivalent to 10% of the target population was used. The sampling unit was finance manager in each of the 50 SACCOs.

3.4 Data Collection Methods
Blaikie (2009) suggests that the main data collection method used in most descriptive research studies is a questionnaire. Therefore, this study used a structured questionnaire as the data collection instrument. According to Saunders et al. (2009), a questionnaire is a general term that includes all data collection techniques in which each person is asked to answer the same set of questions in a predetermined order. The questionnaire was constructed in a manner to answer the research questions. The first section was composed of questions regarding insurance used by the SACCOs and the measures therewith. The second section sought to establish the cash management practices and the measures therewith whereas the final section comprised of questions concerning diversification practices of the SACCOs and the measures therewith.

3.5 Research Procedures
The research procedures followed entailed first obtaining permission from the SACCOs’ management to collect data. Buchanan and Bryman (2007) observe that permission has to be sought first from a senior management gatekeeper before organizational researchers approach respondents with requests to participate in their studies. The authors posit that these ‘gate keepers’ may often refer such requests to other senior colleagues and in some instances to a management committee or board. Even after that, the individual respondents can still refuse to collaborate despite that cascade of management concessions. This cascade of concessions has implications on the research. It can delay the commencement of data collection and permission may be subject to the topics to be investigated, the questions that can be asked and the timing and manner in which data collection is allowed to unfold. In consideration of these circumstances, the researcher
explained the purpose of research and provided a sample of the questionnaire that was to be administered to be approved by the SACCO’s management.

Once the permission was granted, the questionnaire was subjected to a pilot test on a small sample of 5 Matatu SACCO managers before the final questionnaires were administered to the rest of the respondents. According to Stangor (2010), pre-testing entails the process of trying out a questionnaire on a small group of individuals to get an idea of how they react to it before the final version is created. The results of the pilot test were used to identify areas that required further refinement. Once this was done, the actual data collection commenced through physical administration of data. This helped to ensure a high response rate as the researcher was able to persuade the respondents to cooperate as well as clarify on the questions which respondents found technical to answer. The process took two weeks.

3.6 Data Analysis Methods

Data analysis is the process of sifting through data and piecing together numerical evidence about the social world (Marsh and Elliott, 2009). Once the data was collected, the questionnaires were prepared by first coding and entering the data into the statistical package for the social sciences (SPSS). Spearman’s correlation and regression analysis techniques were used to analyze data. Healey (2011) explains Spearman’s rank correlation coefficient as a statistic which is used to measure the relationship of paired ranks assigned to individual scores on two variables. It is an index of the strength of association between the variable ranges from 0 (no association) to ± 1.00 (perfect association). A perfect positive association (r =+1.00) would exist if there were no disagreements in ranks between the two variables. A perfect negative relationship (r=-1.00) would exist if the ranks were in perfect disagreement. In this study, the insurance practices, diversification and cash reserve management practices was correlated with business resilience.

Multiple linear regression modeling technique was used to determine the strength of influence of independent on dependent variables. The study adopted the standard regression model offered by Ghauri and Gronhaug (2005) as follows:
\[ Y_i = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \ldots + \epsilon_i \]

Where:
- \( Y_i \) = dependent variable
- \( \beta_0 \) = Constant
- \( \beta_{1..n} \) = Independent variables
- \( x_{1..n} \) = Coefficients
- \( \epsilon_i \) = Standard error

Using the above formula, the following regression equations was used to establish the cause and effect relationship between financial risk management practices and business resilience of Matatu SACCOs:

\[
BR = \beta_0 + x_1GL + x_2AL + x_3WC + x_4CP + x_5GD + x_6MD + x_7SD + x_8CR + x_9ES + x_{10}ST
\]

Where:
- \( BR \) = Business Resilience
- \( GL \) = General Liability Insurance
- \( AL \) = Automobile Liability Insurance
- \( WC \) = Workers Compensation Insurance
- \( CP \) = Comprehensive Property Insurance
- \( GD \) = Geographic Diversification
- \( MD \) = Market Diversification
- \( SD \) = Service Diversification
- \( CR \) = Cash Reserve Policy
- \( ES \) = Emergency Savings
- \( ST \) = Short Term Investment

The findings were presented in figures and tables.

### 3.7 Chapter Summary

This chapter detailed the research design that guided the researcher in conducting the study. The chapter also discussed the study population, sampling frame, sampling technique and sample size. The findings was analyzed and interpreted in chapter four, whereas in chapter five, the results were discussed and conclusions drawn.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

The main objective of the study was to determine the financial risk management practices affecting the business resilience of Matatu SACCOS in Nairobi County. This chapter presents the analysis of the study findings. The chapter begins by presenting the analysis of the respondents' general information and then analyses the insurance practices which influence business resilience. The chapter then analyzes the influence of risk diversification on business resilience of Matatu SACCOS in Nairobi County. Lastly, the chapter analyses the cash reserve management practices that influence business resilience of Matatu SACCOS in Nairobi County. All the 50 questionnaires which were administered were successfully filled and returned. This means that the researcher realized 100% response rate.

4.2 General Information

The study sought to establish the demographic information about the respondents. The variables include gender, level of education and the number of years the respondent worked in the SACCOS. It also presents data on the number of years the Sacco had operated, the number of members the Sacco registered and the kind of fleet the SACCOS operated.

4.2.1 The Respondents’ Gender

The distribution of the gender is shown in Figure 4.1 below. The data figure that 78.0% of the total respondents were male while 22.0% of the respondents were female. Therefore, the majority of the respondents were male, suggesting that the matatu SACCO’s employees were dominated by male gender.
Figure 4.1: Distribution of the Respondents by Gender

4.2.2 Level of Education

The study sought to determine the level of education of the respondents. The results are shown in Figure 4.2. The figure shows that 73.5% of the respondents were middle college graduates, followed by secondary education graduates who accounted for 14.3% of the respondents. The rest, 12.2% of the respondents were university graduates. Therefore, the majority of the respondents therefore were middle level college graduates.
4.2.3 Respondents’ Tenure

The study sought to determine the number of years the respondents who worked in the matatu SACCO sector. Figure 4.3 shows that the mean number of years the respondents had worked was 3.82 years and the deviation from the mean was 2.33 years. The minimum number of years was 1 year and the maximum is 6 years.

![Bar chart showing the tenure of employees. The mean is 3.82 with a standard deviation of 2.327. The x-axis represents the tenure of employees in years, and the y-axis represents the frequency. The chart includes a normal distribution curve.](image)

Figure 4.3: Years the Respondents had worked for the SACCO

4.2.4 SACCOS’s Years in the Industry

The study sought to establish the number of years the SACCO has been operating. Table 4.1 shows that 60% of the SACCOS had been in existence for more than 5 years. The SACCOS which had been in existence for between 3-5 years were 30% while those which
had been in existence for less than three years were 10%. Therefore, majority of the SACCOs had been in existence for more than five years.

### Table 4.1: The Number Years the SACCO has been Operating

<table>
<thead>
<tr>
<th>Years</th>
<th>Distribution</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>Less than 3 years</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>3- years</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>3-5</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>More than 5 years</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

#### 4.2.5 SACCO Membership Size

The study sought to determine the number of registered members per matatu SACCO. Figure 4.4 shows that the average membership size was 87, with a variation of 86 (M=87.3; SD= 86.619). The figure suggests that majority of the SACCOs had 100 or less registered members.
4.2.6 Fleet Type
The study sought to establish the type of matatu that the SACCOs had. The results were captured in figure 4.5. The study established that 60% of the SACCOs owned by mini-buses while 38% owned Nissan matatus. The study also revealed that the number of SACCOs which were formed by bus owners were 2%. Therefore, the majority of SACCOs had a membership of mini-buses.

Figure 4.4: Number of Registered Members per SACCO
4.2.7 Resilience of the Matatu SACCOs

As a measure of Matatu SACCO business resilience, respondents were asked whether it took a long while to restore business back to normal whenever interruptions or crisis occurred. Figure 4.6 shows that 46% and 16% agreed and strongly agreed, respectively. Thirty two percent (32%) of the respondents were neutral whereas 4% disagreed and another 2% strongly disagreed. Therefore, on aggregate, majority (62%) of the respondents agreed that it took a long while to restore the business to normal operations in case of disruptions. This suggests that majority of SACCOs could not recover quickly from a disruption of business, implying that their level of resilience was low.
Figure 4.6: It Takes a Long while to Restore Business in Case of Disruptions

4.3 Insurance Practices Influencing Business Resilience

The insurance practices examined in this section include: General Liability Insurance, Automobile Liability Insurance, Workers Compensation Insurance and Comprehensive Property Insurance.

4.3.1 Insurance Practices

Respondents were asked whether they had taken general business liability insurance to cushion the SACCO from business risks. Table 4.2 shows that 10% of the respondents strongly disagreed and 54% disagreed respectively that all vehicles had general business liability insurance compared to 4% percent who agreed. The table also shows that 32% were neutral. Therefore, majority (64%) of the respondents disagreed that they had taken general business liability insurance to cushion the SACCO from business risks.

The study also sought to establish whether all fleets had automobile liability insurance from which members could successfully make claims. The result of the distribution is presented in table 4.2 below. The table shows that 6% of the respondents strongly disagreed and 8% disagreed respectively. Two percent (2%) of the respondents strongly agreed and 54% agreed. That table however shows that 30% of the respondents gave neutral response. Therefore, majority (56%) of the respondents agreed that all fleets had automobile liability insurance from which members could make genuine claims.
The study sought to establish whether as a policy permanent employees were covered by workers compensation insurance. The results shows that 30% of the respondents strongly disagreed and 44% disagreed respectively compared to 2% of the respondents who agreed. The rest of the respondents, 24% were neutral. Therefore, majority (74%) of the respondents indicated that their SACCOs did not take workers compensation insurance.

The study sought to find out whether SACCOs’ important assets were covered using comprehensive property insurance policy. The findings show that 18.8% of the respondents strongly disagreed and 45.8% of the respondents disagreed respectively. However, 2.1% of the respondents agreed and 33.3% of the respondents were neutral. Therefore, majority (64.3%) of the respondents disagreed that the SACCO’s important assets were protected using comprehensive property insurance policy.

Table 4.2: Insurance Practices Influencing Business Resilience of Matatu SACCOs

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have taken general business liability insurance to cushion the SACCO from business risks</td>
<td>0.0%</td>
<td>4.0%</td>
<td>32.0%</td>
<td>54.0%</td>
<td>10.0%</td>
</tr>
<tr>
<td>All our fleet have automobile liability insurance from which our members successfully make claims</td>
<td>2.05%</td>
<td>54.0%</td>
<td>30.0%</td>
<td>8.0</td>
<td>6.0%</td>
</tr>
<tr>
<td>As a policy, all our permanent employees are covered by workers compensation insurance</td>
<td>0.0%</td>
<td>2.0%</td>
<td>24%</td>
<td>44.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>We have protected the SACCO’s important assets using comprehensive property insurance policy</td>
<td>0.0%</td>
<td>2.1%</td>
<td>33.3%</td>
<td>45.8%</td>
<td>18.8%</td>
</tr>
</tbody>
</table>
4.3.2 Relationship between Insurance Practices Business Resilience

The relationship between insurance practices and business resilience was tested using Spearman’s Rank Correlation Coefficient. The results are shown in table 4.3. The table indicates that business resilience was significantly correlated to automobile liability insurance \((r=0.316, p<0.05)\). This means that the more the SACCOs insured their fleet using automobile liability insurance, the more they became resilient. However, the correlation between business resilience and general business liability insurance \((r=-0.019, p>0.05)\); workers compensation insurance \((r=-0.037, p>0.05)\) and comprehensive insurance \((r=-0.160, p>0.05)\) were not statistically significant. This suggests that general business liability, workers compensation nor comprehensive insurance did influence business resilience of the SACCOs.

**Table 4.3: Correlation between Insurance Practices and Business Resilience**

<table>
<thead>
<tr>
<th>Spearman’s Rho</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Business resilience</td>
<td>Correlation Coefficient 1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) .</td>
</tr>
<tr>
<td></td>
<td>N 50</td>
</tr>
<tr>
<td>2. General business liability insurance</td>
<td>Correlation Coefficient -.019</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) .893</td>
</tr>
<tr>
<td></td>
<td>N 50</td>
</tr>
<tr>
<td>3. Automobile liability insurance</td>
<td>Correlation Coefficient .316(*)</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) .025</td>
</tr>
<tr>
<td></td>
<td>N 50</td>
</tr>
<tr>
<td>4. Workers compensation insurance</td>
<td>Correlation Coefficient -.037</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) .799</td>
</tr>
<tr>
<td></td>
<td>N 50</td>
</tr>
<tr>
<td>5. Comprehensive insurance</td>
<td>Correlation Coefficient -.160</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) .277</td>
</tr>
<tr>
<td></td>
<td>N 48</td>
</tr>
</tbody>
</table>

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

4.3.3 Ease Insurance Compensation

The study sought to investigate how easy it was to get compensation from insurers when the case is genuine. The findings are tabulated in table 4.4 below. From the findings, 64% of the respondents admitted that it was very difficult to get compensation for genuine cases and 18% of the respondents admitted that it was somehow difficult to get
compensation for genuine cases. None of the respondents responded that it was easy or somehow easy to get compensated for genuine cases. Therefore, majority (64%) of the respondents believed that it was very difficult for insurance companies to compensate genuine cases.

Table 4.4: Ease of Insurance Compensation

<table>
<thead>
<tr>
<th></th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
</tr>
<tr>
<td>Very difficult</td>
<td>32</td>
</tr>
<tr>
<td>Somewhat difficult</td>
<td>18</td>
</tr>
<tr>
<td>Somewhat easy</td>
<td>0</td>
</tr>
<tr>
<td>Very Easy</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
</tr>
</tbody>
</table>

4.3.4 Insurance Policies Recommended by the SACCOs

The respondents were asked to give their suggestions on the kind of products which they would want to be added to the insurance portfolio. As shown in figure 4.7, majority (22%) of the respondents wanted better insurance policies, followed by those who wanted affordable insurance (18%) and accident and anti-riot policies (18%). Respondents also recommended faster compensation (14%) and assets insurance policies (14%). From the views expressed, the need for faster compensation and affordable insurance products were geared toward the need for insurance companies to continue offering existing services but deliver the products more efficiently. The views for better insurance policies implied that the respondents would like the insurance companies to innovate new products which would address their needs better. Those who expressed the need for assets insurance were probably not aware that such products exist in most insurance companies and therefore there is need for insurance companies to create awareness and educate the SACCO employees on the availability of asset insurance policies. Accident and anti-riot policy is a new a new policy which insurance companies would need to consider introducing.
4.4 Diversification Practices Influencing Business Resilience of Matatu SACCOs

The diversification variables analyzed include geographic diversification, service diversification and market diversification.

4.4.1 Diversification Practices by the Matatu SACCOs

The study sought to determine whether the SACCOs had diversified their business adequately as a risk management measure. The findings are shown in table 4.5. From the findings, 36% of the respondents strongly disagreed and 44% of the respondents disagreed respectively. Nevertheless, 10% of the respondents agreed while 2% strongly agreed that the SACCOs had diversified adequately as a risk management measure. The study also revealed that 8% of the respondents were neutral. Therefore, majority (80%) of the respondents disagreed that the SACCOs had diversified their business adequately as a risk management measure.

The study also sought to establish whether the SACCOs had opened many branches in other geographical regions outside Nairobi. Table 4.5 shows that 24% of the respondents strongly disagreed and 36% disagreed. However, 26% of the respondents agreed and 6% strongly agreed that the SACCOs had opened branches outside Nairobi as a risk management measure. Some 8% of the respondents were neutral. Therefore, majority
(60%) of the respondents disagreed that their SACCOs had opened other branches outside Nairobi.

Respondents were asked whether the SACCOs had diversified into offering other services to the market besides commuter services. The results showed that 24% of the respondents strongly disagreed and 50% disagreed, respectively. On the other hand, 12% of the respondents agreed and 2% strongly agreed. However, 12% of the respondents were neutral. Therefore, majority (74%) of respondents disagreed that SACCOs had diversified into offering other services to the market besides commuter services.

Respondents were further asked whether the Matatu SACCOs had invested into other sectors besides the transport sector. Table 4.5 shows that 30% of the respondents strongly disagreed while 60% disagreed with the statement respectively. On the contrary, 10% of the respondents strongly agreed that the SACCOs had diversified into other sectors of the economy besides the transport sector. Therefore, majority (90%) of the respondents disagreed that the SACCOs had invested into other sectors of the economy besides the transport sector as a risk mitigation measure.

**Table 4.5 Diversification Practices by the Matatu SACCOs**

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>As a SACCO, we have diversified our business adequately as a risk management measure</td>
<td>2.0%</td>
<td>10.0%</td>
<td>8.0%</td>
<td>44.0%</td>
<td>36.0%</td>
</tr>
<tr>
<td>We have established many branches in other geographical regions outside Nairobi</td>
<td>6.0%</td>
<td>26.0%</td>
<td>8.0%</td>
<td>36.0%</td>
<td>24.0%</td>
</tr>
<tr>
<td>We offer other services to the market besides commuter services</td>
<td>2.0%</td>
<td>12.0%</td>
<td>12.0%</td>
<td>50.0%</td>
<td>24.0%</td>
</tr>
<tr>
<td>As a SACCO, we have invested into other sectors besides the transport sector</td>
<td>10.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>60.0%</td>
<td>30.0%</td>
</tr>
</tbody>
</table>
4.4.2 Relationship between Diversification Practices and Business Resilience

The study sought to test whether there was a significant relationship between the diversification practices of Matatu SACCOS and business resilience. Table 4.6 shows that there was no statistically significant correlation between business resilience and the three aspects of diversification. These are: geographic diversification \( (r= -.051, p>.05) \); service diversification \( (r= -.051, p>.05) \), offering of different services to the market apart from commuter services \( (r= -.247, p>.05) \) and market diversification \( (r= -.018, p>.05) \). This suggests that the inverse relationship depicted in the coefficients occurred out of chance.

### Table 4.6: Risk Diversification on Business Resilience of Matatu SACCOS

<table>
<thead>
<tr>
<th>Spearman’s Rho</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Business Resilience</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
</tr>
<tr>
<td>2 Geographical diversification</td>
<td>Correlation Coefficient</td>
<td>-.051</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.726</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
</tr>
<tr>
<td>3 Service diversification</td>
<td>Correlation Coefficient</td>
<td>-.247</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.084</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
</tr>
<tr>
<td>4 Market diversification</td>
<td>Correlation Coefficient</td>
<td>-.018</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.901</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
</tr>
</tbody>
</table>

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

4.5 Cash Reserve Management Practices Influencing Business Resilience

The study sought to determine whether the SACCOS maintained any cash reserve. The factors which were studied in this section include whether the SACCOS had kept emergency savings, investments in short-term instruments and keeping emergency cash reserve.

#### 4.5.1 Maintenance of Cash Reserve

The study sought to establish whether the SACCOS kept any cash reserve. Figure 4.8 shows that 70% of the respondents agreed that the SACCOS kept cash reserve as a matter of policy whereas 30% of the respondents indicated that their SACCOS did not do so.
4.5.2 The Duration of the Savings

The study sought to establish the duration of the savings policy. The result is shown in figure 4.9. The figure shows that majority (68%) of the respondents said their SACCOs maintained cash reserve equivalent to one month running expenses. This was followed by 26% of the respondents who claimed that their SACCOs maintained cash reserve that fan settle one year’s running expenses. Three percent (3%) of the respondents said the SACCOs maintained cash reserve equivalent to 3 months running expenses and another 3% said their SACCOs maintained cash reserve for 4-6 months running expenses.

Figure 4.8: Maintenance of Cash Reserve

Figure 4.9: The Duration of the Policy
4.5.3 Cash Reserve Practices by the SACCOs

The respondents were asked to give their view on whether the SACCOs maintained emergency savings account where they could deposit a fixed predetermined minimum amount of money every month and 12% of the respondents strongly disagreed while 44% disagreed. On the other hand, 12% of the respondents agreed and 2% strongly agreed. The remaining 30% of the respondents were neutral. Therefore, majority (56%) of the respondents disagreed that the SACCOs maintained emergency cash account where they could keep depositing a minimum amount every month.

The study sought to determine whether short-term investments were used by SACCOs as a means of improving business resilience. Table 4.7 shows that 36% of the respondents strongly disagreed and 42% of the respondents disagreed. However, 2% of the respondents agreed with the statement. Therefore it can be inferred that majority (78%) disagreed that the SACCOs invested in short-term investments as a way of reducing business risk.

The study sought to establish whether the SACCOs usually made short-term investments such as bonds to provide a buffer for their cash reserve. The findings showed that 2% of the respondents agreed while 20% of the respondents were neutral. However, 36% of the respondents strongly disagreed and another 42% disagreed. Therefore, majority (78) of the respondents disagreed that the SACCOs usually made short-term investments such as bonds to provide a buffer for their cash reserve.

The opinion of the respondents was sought as to whether keeping cash reserve for emergency was a difficult discipline. The findings showed 12% of the respondents strongly agreed and another 56% agreed. However, 32% of the respondents were neutral while there was no respondent who disagreed. Therefore, majority (68%) of the respondents agreed that keeping cash reserve was a difficult discipline.

Respondents were further asked whether there was often no cash to keep in reserve for SACCO. Table 4.7 shows that 2% of the respondents strongly disagreed and 24.5% disagreed respectively. On the other hand, 42.9% agreed and 4.1% strongly agreed. The
Table also shows that 26.5% of the respondents were neutral. Therefore, majority (47%) of the respondents believed that there was often no cash to keep in reserve for SACCOs.

**Table 4.7 Cash Reserve Management Practices Influencing Business Resilience**

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have maintained emergency savings account for depositing a minimum amount money monthly</td>
<td>2.0%</td>
<td>12.0%</td>
<td>30.0%</td>
<td>44.0%</td>
<td>12.0%</td>
</tr>
<tr>
<td>We usually make short-term investments such as bonds to provide a buffer for our cash reserve</td>
<td>0.0%</td>
<td>2.0%</td>
<td>20.0%</td>
<td>42.0%</td>
<td>36.0%</td>
</tr>
<tr>
<td>Keeping cash reserve for emergency is a difficult discipline</td>
<td>12%</td>
<td>56%</td>
<td>32%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>There is often no cash to keep in reserve for SACCO</td>
<td>4.1%</td>
<td>42.9%</td>
<td>26.5%</td>
<td>24.5%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

**4.5.4 Relationship between Cash Reserve Practices and Business Resilience**

The relationship between cash reserve management practices and business resilience was tested sing Spearman’s rank correlation coefficient as shown in table 4.8. The table shows the relationship between business resilience and maintenance of emergency savings ($r=.158, p=.05$), short-term savings such as bonds ($r=-.180, p>.05$), and not keeping cash reserve ($r=.019, p>.05$) was not statistically significant.
Table 4.8: Correlation between Cash Reserve Practices and Business Resilience

<table>
<thead>
<tr>
<th>Spearman’s Rho</th>
<th>Correlation Coefficient</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Business resilience</td>
<td>1.000</td>
<td>.</td>
<td>50</td>
</tr>
<tr>
<td>2 Short term bonds</td>
<td>.104</td>
<td>.470</td>
<td>50</td>
</tr>
<tr>
<td>3 Emergency cash reserve</td>
<td>-.114</td>
<td>.430</td>
<td>50</td>
</tr>
<tr>
<td>4 Short term investments</td>
<td>-.208</td>
<td>.152</td>
<td>49</td>
</tr>
</tbody>
</table>

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

A regression analysis between the dependent and independent variables yielded the following regression equation:

\[
BR = 3.806 -.058GL + .400AL -.130WC -.232CP -.031GD -.175MD + .117SD + .075CR -.103ES -.068ST
\]

The model summary (Table 4.9) shows R² = .226. This means that 22.6% of the variance in the business resilience of the SACCOs is explained by the regression model.

Table 4.9: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.475(a)</td>
<td>.226</td>
<td>.017</td>
<td>.867</td>
</tr>
</tbody>
</table>

a  Predictors: (Constant), GL, AL, WC, CP, GD, MD, SD, CR, ES, ST

The analysis of variance shown in Table 4.10 below reveals that the regression model is not statistically significant (p=.401) indicating that the model has little explanatory power and therefore, the null hypothesis (the model does not improve prediction) can be accepted.
Table 4.10: ANOVA (b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>8.118</td>
<td>10</td>
<td>.812</td>
<td>1.080</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>27.799</td>
<td>37</td>
<td>.751</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>35.917</td>
<td>47</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a  Predictors: (Constant), GL, AL, WC, CP, GD, MD, SD, CR, ES, ST
b  Dependent Variable: BR

Table 4.10 below shows the estimated regression coefficients, standard errors of the estimates, t-values and significant levels. Inspection of the standard regression coefficients shows that the adoption of automobile liability insurance possessed the highest explanatory power on the level of business resilience of the matatu SACCOs (Beta=.400).

Table 4.11: Coefficients (a)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>3.806</td>
<td>1.462</td>
<td>2.604</td>
</tr>
<tr>
<td></td>
<td>GL</td>
<td>-.058</td>
<td>.198</td>
<td>-.046</td>
</tr>
<tr>
<td></td>
<td>AL</td>
<td>.400</td>
<td>.156</td>
<td>.408</td>
</tr>
<tr>
<td></td>
<td>WC</td>
<td>-.130</td>
<td>.187</td>
<td>-.118</td>
</tr>
<tr>
<td></td>
<td>CP</td>
<td>-.232</td>
<td>.185</td>
<td>-.203</td>
</tr>
<tr>
<td></td>
<td>GD</td>
<td>-.031</td>
<td>.121</td>
<td>-.046</td>
</tr>
<tr>
<td></td>
<td>MD</td>
<td>-.175</td>
<td>.145</td>
<td>-.203</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.117</td>
<td>.162</td>
<td>.151</td>
</tr>
<tr>
<td></td>
<td>CR</td>
<td>.075</td>
<td>.158</td>
<td>.081</td>
</tr>
<tr>
<td></td>
<td>ST</td>
<td>-.068</td>
<td>.211</td>
<td>-.062</td>
</tr>
<tr>
<td></td>
<td>ES</td>
<td>-.103</td>
<td>.224</td>
<td>-.077</td>
</tr>
</tbody>
</table>

a  Dependent Variable: GL, AL, WC, CP, GD, MD, SD, CR, ES, ST

4.6 Chapter Summary

The findings showed that majority of the respondents agreed that it took a long while to restore the business to normal operations in case of disruptions. The adoption of automobile liability insurance possessed the highest explanatory power on the variability resilience of the SACCOs.
In terms of diversification practices, majority of the respondents disagreed that the SACCOs had diversified their business adequately as a risk management measure. There was no statistically significant correlation between business resilience and diversification.

In terms of cash reserve management practices, the relationship between business resilience and maintenance of emergency savings, short-term savings such as bonds, and not keeping cash reserve was not statistically significant.

The next chapter discusses the findings, draws conclusions and makes recommendations.
CHAPTER FIVE

5.0 DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONDS

5.1 Introduction
This chapter provides a discussion of the findings, draws conclusion based on the discussions and make recommendations. This chapter begins with a summary of the research. The discussions then proceed based on the study objectives. Afterwards, the conclusions are drawn in view of the discussions. The chapter ends by making recommendations for improvements and suggestions for further research.

5.2 Summary
The main objective of the study was to determine the financial management practices influencing the business resilience of Matatu SACCOs in Nairobi County. The specific objectives were: to determine how insurance influence business resilience of Matatu SACCOs in Nairobi county; to determine the influence of risk diversification on business resilience of Matatu SACCOs in Nairobi county and, to establish the cash reserve management practices that influence business resilience of Matatu SACCOs in Nairobi County.

The research design adopted was descriptive survey research design. The target population was 500 registered Matatu SACCOs operating in Nairobi County. A sample of 50 SACCOs was used. The sampling unit was one senior level finance manager in each of the 50 SACCOs. Systematic sampling technique was used to select respondents. A structured questionnaire was as the data collection instrument. A response rate of 100% was realized. Data was analyzed Spearman’s Rank Correlation Coefficient and multiple regression modeling techniques.

Major findings of the study shows that majority (62%) of the respondents agreed that it took a long while to restore the business to normal operations in case of disruptions. Regression results showed that the risk management practices by the Matatu SACCOs accounted for 22.6% of the variance in the business resilience, with the adoption of automobile liability insurance possessing the highest explanatory power. The correlation
between business resilience and general business liability insurance \((r=-.019, p>.05)\); workers compensation insurance \((r=-.037, p>.05)\) and comprehensive insurance \((r=-.160, p>.05)\) were not statistically significant.

In terms of diversification strategies, majority (80%) of the respondents disagreed that the SACCOs had diversified their business adequately as a risk management measure. There was no statistically significant correlation between business resilience and the three aspects of diversification. These are: geographic diversification \((r=-.051, p>.05)\); service diversification \((r=-.051, p>.05)\), offering of different services to the market apart from commuter services \((r=-.247, p>.05)\) and market diversification \((r=-.018, p>.05)\).

In terms of cash reserve management practices, majority (70%) of the respondents agreed that the SACCOs kept cash reserve as a matter of policy. Majority (68%) of the respondents said their SACCOs maintained cash reserve equivalent to one month running expenses. The relationship between business resilience and maintenance of emergency savings \((r=.158, p>.05)\), short-term savings such as bonds \((r=-.180, p>.05)\), and not keeping cash reserve \((r=.019, p>.05)\) was not statistically significant.

5.3 Discussion

5.3.1 Insurance Practices Influencing Business Resilience

The study established that adoption of automobile liability insurance possessed the highest explanatory power on the level of business resilience of the Matatu SACCOs \((\text{Beta}=.400)\), suggesting that automobile liability insurance positively influence the ability of the SACCOs to recover quickly in case of business disruptions. This is consistent with Portfolio Management Theory as explained by Ryals (2009) which associate insurance as one of the financial risk management strategies influencing business resilience. In the case of Matatu SACCOs, the automobile liability insurance, as noted by Cohen (2006) typically includes damages from collision, fire, theft, and other physical perils.

The positive correlation between automobile liability and business resilience in the Matatu SACCOs may partly be explained by the fact that majority (64%) of the respondents agreed that all fleets had automobile liability insurance from which members
could make genuine claims. The finding agrees with Ryals (2009) who suggested that insurance in itself is a risk transfer tool common in portfolio management. However, the practice may also stem from previous observation by Chitere and Kibua (2004) that the business environment of the Matatu industry in Kenya has been accompanied by increasing road traffic accidents. Thus, it made business sense for the Matatu SACCOs to take automobile liability policy.

It should also be noted that in the Matatu sector, it is a government requirement that all vehicles in Kenyan roads be insured. This follows government policy directives requiring all public transport operators to come together in either Savings or Credit Cooperatives or companies and for small capacity vehicles to move to higher capacity as a condition for continued registration (Orero et al., 2012). Thus, the practice by the Matatu SACCOs to insure their vehicles using this policy may be more of a regulatory compliance strategy than it is a strategy to ensure business resilience. This is consistent with the role identified by Raghavan (2005) which considers risk management as a way of ensuring regulatory compliance.

Related to the foregoing discussion is the finding which showed that majority (64%) of the respondents believed that it was very difficult for insurance companies to compensate genuine cases. This agrees with previous observations by Sadgrove (2005) that insurance pay-outs can be slow such that companies can wait for over a year for pay-out. This may explain the low uptake of other forms of insurance as a risk management practice by the Matatu SACCOs. For example, the findings revealed that majority of the SACCOs (64%) had not taken general business liability insurance to cushion the SACCOs from business risks. Similarly, majority (74%) of the respondents indicated that their SACCOs did not take workers compensation insurance. In addition, majority (64.3%) of the respondents disagreed that the SACCO’s important assets were protected using comprehensive property insurance policy.

Since affordable insurance was one of the recommendations made by a significant number (18%) of the respondents, it may be deduced that the SACCOs also found insurance policies as generally expensive. This agrees with the argument in literature that insurance is no longer the cheap option it once was as insurance companies require their
clients to actively manage their risks (Sagrove, 2005). The results are consistent with Pakroo’s (2010) observation that although insurance is part of a risk management program sometimes the protection of insurance may be either too expensive or simply unavailable for particular events.

5.3.2 Diversification Practices Influencing Business Resilience of Matatu SACCOS

The findings showed that majority (80%) of the respondents disagreed that the SACCOS had diversified their business adequately as a risk management measure. This is consistent with the findings of a study undertaken in Japan by Amann and Jaussaud (2012) which suggested that small business owners were likely to avoid diversification strategies even if it would confer some risk protection on the company. This is a curious finding, which contradicts the argument by Talbot and Jakeman (2011) that diversification is a basic in risk management which helps in reducing volatility of income streams and provide a degree of protection from market cycles.

The foregoing findings are however in agreement with numerous empirical studies (Bharma et al., 2011) which have showed that majority of SMEs do not have a plan to deal with business disruption and that only a minority have business continuity plans that demonstrate a proactive and intentional desire to organize restoration and recovery efforts in the event of a crisis. For example, this study has established that majority (60%) of the respondents disagreed that their SACCOS had opened other branches outside Nairobi, implying that the SACCOS did not practice geographic diversification. This is despite the fact that the average membership of the SACCOS, at 87, arguably depicts that most of the SACCOS were not necessarily small in size as measured by number of registered members. The results therefore suggest that the SACCOS did not have a strategic orientation in their risk management practices to ensure the resilience of their businesses. While individual members of the SACCOS who are the Matatu owners may be small in size, their collective strength in numbers can make them overcome several limitations associated with smallness as discussed by Raghavan (2005). However, from the findings of the study, the SACCOS clearly did not leverage on this.
Further findings also showed that majority (74%) of respondents disagreed that the SACCOs had diversified into offering other services to the market besides commuter services. This suggests that the Matatu SACCOs did not practice service diversification, contrary to the findings of a study by Baldock et al. (2013) which identified the most common changes that SME businesses were making in order to become more resilient, among others, were to diversify into new markets and/or business activities. This potentially suggests that the SACCOs were vulnerable to financial risks associated with poor market turnouts. Thus, the negative, albeit insignificant correlation between the Matatu SACCO business resilience and service diversification \( (r = -0.051, p > 0.05) \) can be explained by the fact that the SACCOs did not practice this risk management strategy to begin with.

The findings also revealed that majority (90%) of the respondents disagreed that the SACCOs had invested into other sectors of the economy besides the transport sector as a risk mitigation measure. This potentially explains why majority (62%) of the respondents agreed that it took a long while to restore the business to normal operations in case of disruptions. These results are in agreement with studies reported by Sullivan-Taylor and Branicki (2011) which found that small business owners suffer the most in times of crisis and are the least prepared of all organizations. The results echo the warning by Spedding and Rose (2008) that under-prepared SMEs expose a significant vulnerability in terms of their own survival.

5.3.3 Cash Reserve Management Practices Influencing Business Resilience

The study established that majority (70%) of the respondents agreed that the SACCOs kept cash reserve as a matter of policy. This finding resonate the argument in literature which point out that cash accounts that are maintained to provide cash during emergency situations are a way of providing insurance for the company from the company's own resources (Engle, 2011). Therefore, the weak positive but insignificant relationship between business resilience of the Matatu SACCOs and maintenance of emergency savings \( (r = 0.158, p > 0.05) \) is indicative of some direct association between the practice of maintenance of cash reserve account and business resilience. The lack of statistical significance in the correlation \( (p > 0.05) \) can be explained by subsequent findings which showed that majority (68%) of the respondents said their SACCOs maintained cash
reserve equivalent to one month running expenses. This suggests that the SACCOs only had the potential to address low impact disruptions in business, which means that in case of major business disruptions, the Matatu SACCOs remained exposed to financial distress.

The above point is further reflected in the finding which showed that majority (56%) of the respondents disagreed that the SACCOs maintained emergency cash account where they could keep depositing a minimum amount every month. Unsurprisingly therefore, the study showed that majority (68%) of the respondents agreed that keeping cash reserve was a difficult discipline. Seen together with the results which showed that majority (47%) of the respondents believed that there was often no cash to keep in reserve for SACCOs, the implication of the finding is that the SACCOs had a poor cash reserve management practice, which potentially negatively influenced their ability to restore business to normalcy in case of disruptions. The findings underscore the point put forward by Sadgrove (2005) that having a clear oversight of the organization’s finances through control measures in place to help SMEs increase their liquidity and boost their cash reserves can help cushion their business from financial risks.

The study also established that majority (78%) disagreed that the SACCOs invested in short-term investments as a way of reducing business risk. In view of the fact that the SACCO membership are comprised of small Matatu business operators, the results are by proxy, consistent with the argument by Yiannaki (2012) that, budget wise, small businesses are not as well equipped as large corporations to invest in all necessary risk packages or sustainable activities. The results seems to confirm the study assumption that this resource scarcity is indeed a key issue which, in relation to resilience, is a crucial consideration in contrast to resource rich large enterprises. This is depicted, for instance, in the finding which showed that majority (78) of the respondents disagreed that the SACCOs usually made short-term investments such as bonds to provide a buffer for their cash reserve.

Interestingly, the overall results showed that only 22.6% of the variance in the business resilience of the SACCOs could be explained by their financial risk management practices or lack thereof. This suggests that the industry could be subject to certain risk
exposures that, as small Matatu business owners, the business resilience of SACCOs remained under threat irrespective of practicing financial risk management as theorized in financial management literature. The findings are consistent with Raghavan (2005) who suggested that while any business entity needs robust risk management systems, small Matatu business owners need much more than that as they may not have the wherewithal to manage and control risks due to their very size and several limitations.

5.4 Conclusion

5.4.1 Insurance Practices Influencing Business Resilience of Matatu SACCOs

The Matatu SACCOs adopted automobile liability insurance as a risk management strategy that in part, ensured their legal compliance. This practice had a positive influence on the resilience of their business. However, the SACCOs did not adopt other insurance policies such as general business liability insurance, workers compensation policy or comprehensive insurance policy. This potentially negatively affected the ability of the SACCOs to restore normal business operations in case of disruptions.

5.4.2 Diversification Practices Influencing Business Resilience of Matatu SACCOs

The Matatu SACCOs did not practice any diversification strategies as a risk management measure for their businesses. For instance, they did not establish other branches in other geographical regions outside Nairobi. They also did not offer other services to the market besides commuter services. And neither did they invest in other sectors besides the transport sector. This lack of diversification by the SACCOs is an indicator of lack of preparedness against risks which potentially affected their ability to recover quickly from events that disrupts business.

5.4.3 Cash Reserve Management Practices Influencing Business Resilience

The Matatu SACCOs kept cash reserve as a matter of policy. However, they maintained cash reserve equivalent to only one month running expenses. Generally, the SACCOs neither practiced emergency savings not invested in short-term financial instruments such as bonds. This potentially affected the SACCOs’ ability to quickly restore business to normalcy in the event of a major disruption to business.
5.5 Recommendation

5.5.1 Recommendation for Improvement

5.5.1.1 Insurance Practices Influencing Business Resilience
The Matatu SACCOs should leverage on their membership size to bargain for better insurance policies and packages for their businesses. This can be achieved by getting more organized and paying for insurance through the SACCO rather than as individual Matatu Owners. Approaching risk management holistically this way can help the SACCOs take up other insurance policies that lower the overall insurance premium they pay to insurance companies.

5.5.1.2 Diversification Practices Influencing Business Resilience
Matatu SACCOs should have a long term view of managing their risks through diversification. This recommendation require the SACCOs to go beyond their compliance with the government’s directive to form SACCOs or companies and explore ways through which they can consolidate the gains often associated with the cooperative model of business. The recommendation also requires investment in visionary management personnel capable of anticipating, evaluating and responding to risks by avoiding, reducing, or accepting risk.

5.5.1.3 Cash Reserve Management Practices Influencing Business Resilience
The SACCOs should consolidate the strength inherent in their numbers to create a common pool of reserve fund strictly ear-marked in case of emergencies. This, they can achieve by making monthly contributions as conventional to the cooperative model. This reserve fund can be used to bail out members affected by emergencies occasioned by catastrophic events such as terrorism or major traffic accident.

5.5.2 Recommendation for Future Research
The results of this study indicated that there were other factors that were exogenous to the business resilience of Matatu SACCOs. Therefore, future studies should be undertaken using alternative conceptual models to unearth the factors that were outside the scope of this study. Secondly, this study was based on a small sample of Matatu SACCOs. While
considered representative, another study using a larger sample could increase the reliability of statistical estimates.
REFERENCES


Appendix I: Cover letter

Evlyn Muburi Njoki  
United States International University  
P.O. Box 14634-00800  
Nairobi  

Dear Respondent,  

RE: ACADEMIC RESEARCH ON FINANCIAL RISK MANAGEMENT  

I am carrying out a research titled “Financial Risk Management Practices Influencing Business Resilience in Small and Medium Enterprises in Kenya: A Survey of Matatu SACCOs in Nairobi County”. This is in partial fulfillment of the requirement of the Masters of Business Administration (MBA) degree program at the United States International University. This is an academic research and confidentiality is strictly emphasized. Kindly spare some time to complete the questionnaire attached.

Thank you in advance,  
Yours sincerely,  

Evelyn Muburi  
(0721 685 435)
Appendix II: Questionnaire

Dear Respondent,

This questionnaire is made up of four short sections that should take only a few minutes of your time. Kindly fill in your responses by ticking in the appropriate box or writing your answers on the spaces provided.

Thank you.

SECTION A: DEMOGRAPHIC INFORMATION

1. Gender: Male □
   Female □

2. Level of education:
   Secondary education □
   Middle level college □
   University □

3. How many years have you worked with this SACCO? ________ years

4. How many years has this Matatu SACCO been operational?
   Less than 3 years □
   3 – 5 years □
   More than 5 years □

5. How many members are registered with this SACCO? ________

6. What is the make of fleet for the SACCO?
   Nissan Matatu □
   Mini-bus □
   Bus □
SECTION B: INSURANCE PRACTICES INFLUENCING BUSINESS RESILIENCE

Please indicate whether you agree or disagree with the following statements by placing a tick ( ✓ ) in the box which best reflects your opinion:

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.</td>
<td>The SACCO always recover quickly from all events that disrupts business</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>It takes us a long while to restore business back to normal whenever interruptions or crisis occur</td>
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<tr>
<td>9.</td>
<td>We have taken general business liability insurance to cushion the SACCO from business risks</td>
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<tr>
<td>10.</td>
<td>All our fleet have automobile liability insurance from which our members successfully make claims</td>
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</tr>
<tr>
<td>11.</td>
<td>As a policy, all our permanent employees are covered by workers compensation insurance</td>
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</tr>
<tr>
<td>12.</td>
<td>We have protected the SACCO’s important assets using comprehensive property insurance policy</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

13. How easy is it to get compensation from your insurers when the case is genuine?
   - Very easy ☐
   - Somewhat easy ☐
   - Somewhat difficult ☐
   - Very difficult ☐

14. What insurance products would you wish to be introduced to give you better protection against your business risks? _________________________________
    _________________________________

65
SECTION C: THE EFFECT OF DIVERSIFICATION ON BUSINESS RESILIENCE

Please indicate whether you agree or disagree with the following statements by placing a tick (✓) in the box which best reflects your opinion:

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. As a SACCO, we have diversified our business adequately as a risk management measure</td>
<td></td>
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<td>16. We have established many branches in other geographical regions outside Nairobi</td>
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<tr>
<td>17. We offer other services to the market besides commuter services</td>
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<tr>
<td>18. As a SACCO, we have invested into other sectors besides the transport sector</td>
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</tbody>
</table>

19. If your answer to Q15 is “agree” or “strongly agree”, please list these other services.

_________________________________________________________________
_________________________________________________________________

SECTION D: THE EFFECT OF CASH RESERVE MANAGEMENT PRACTICES ON BUSINESS RESILIENCE

20. Does your SACCO maintain any cash reserve as a matter of policy?
    Yes ☐
    No ☐

21. If yes to Q20 above, please indicate the duration for the policy?
    One month of our running expenses ☐
    Two month of our running expenses ☐
    Three month of our running expenses ☐
    4 - 6 month of our running expenses ☐
Please indicate whether you agree or disagree with the following statements by placing a tick (√) in the box which best reflects your opinion:

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. As a SACCO, we have maintained an emergency savings account where we deposit a fixed predetermined minimum amount of money every month</td>
<td></td>
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</tr>
<tr>
<td>23. We usually make short-term investments such as bonds to provide a buffer for our cash reserve</td>
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</tr>
<tr>
<td>24. Keeping cash reserve for emergency is a difficult discipline</td>
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</tr>
<tr>
<td>25. There is often no cash to keep in reserve for SACCO</td>
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<td></td>
</tr>
</tbody>
</table>

26. If you could change the way financial risks are managed in your SACCO, what would it be? ____________________________________________________________

THANK YOU FOR YOUR COOPERATION AND TIME