

**RELATIONSHIP BETWEEN QUALITY COMPLIANCE  
AND FINANCIAL STABILITY OF MICRO FINANCE  
INSTITUTIONS IN RWANDA**

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**Relationship between Quality Compliance and Financial Stability of  
Micro Finance Institutions in Rwanda**

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## DECLARATION

This Thesis is my original work and has not been presented for a degree in any other university.

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## **DEDICATION**

This work is dedicated to my father Mr. Late Peter Rubwebwe, mother Mary Mukarukwaya, wife Justine Tusingwire, Children: Akaliza Ritah, Akarire Lyna , Cyusa Ian and Akamanzi Gwiza lionah. My parent's efforts and sacrifices molded me into the person I am.

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## TABLE OF CONTENT

<b>DECLARATION</b> .....	<b>ii</b>
<b>DEDICATION</b> .....	<b>iii</b>
<b>ACKNOWLEDGEMENT</b> .....	<b>iv</b>
<b>TABLE OF CONTENT</b> .....	<b>v</b>
<b>LIST OF TABLES</b> .....	<b>xi</b>
<b>LIST OF FIGURE</b> .....	<b>xiii</b>
<b>LIST OF APPENDICES</b> .....	<b>xiv</b>
<b>ABBREVIATIONS AND ACRONYMS</b> .....	<b>xv</b>
<b>DEFINITION OF TERMS</b> .....	<b>xvi</b>
<b>ABSTRACT</b> .....	<b>xvii</b>
<b>CHAPTER ONE</b> .....	<b>1</b>
<b>INTRODUCTION</b> .....	<b>1</b>
1.1. Background of the Study.....	1
1.1.1 Global Perspective on Quality Compliance and Financial Stability of Micro Finance Institutions .....	1
1.1.2. Regional Perspective on Quality Compliance and Financial Stability of Micro Finance Institutions. ....	3
1.1.3. National Perspective on Quality Compliance and Financial Stability of Micro Finance Institutions .....	5
1.2. Statement of the Problem.....	6
1.3. Objectives of the Study .....	8
1.3.1. General Objective.....	8
1.3.2. Specific Objectives.....	8

1.4. Research Hypotheses.....	8
1.5. Significance of the Study .....	8
1.6. Scope of the Study.....	9
1.7. Study Limitations .....	10
<b>LITERATURE RIVIEW .....</b>	<b>11</b>
2.1. Introduction .....	11
2.2. Theoretical Framework .....	11
2.2.1. The Policeman Theory .....	11
2.2.2 Stakeholder Theory .....	12
2.2.3. Risk Management Theory .....	15
2.2.4. The Agency Theory.....	16
2.3. Conceptual Framework .....	17
2.3.1. Audit Process.....	18
2.3.2. Governance.....	22
2.3.3. Risk Management.....	25
2.3.4. Financial Controls .....	34
2.3.5. Financial Stability of MFI.....	41
2.4. Empirical Review .....	46
2.5. Critical Review of Literature.....	50
2.6. Summary .....	52
2.7. Research Gaps .....	52
<b>CHAPTER THREE .....</b>	<b>54</b>
<b>RESEARCH METHODOLOGY.....</b>	<b>54</b>
3.1 Introduction .....	54

3.2. Research Philosophy .....	54
3.3. Research Design.....	55
3.4 Target Population .....	55
3.5. Census Survey .....	56
3.7 Data Collection Methods .....	56
3.7.1. Primary data .....	56
3.8 Data Collection Procedure .....	57
3.9 Pilot Study.....	57
3.9.1 Reliability of the Instrument .....	58
3.9.2 Validity.....	59
3.10. Data Processing Analysis and Presentation .....	59
3.11 Diagnostics Tests .....	61
3.12. Assumptions of Regression Model .....	61
3.12.1. Linearity .....	61
3.12.2. Instrument Validity .....	61
3.12.3. Reliability Test.....	63
3.12.4 Testing for Normality.....	63
3.12.5. An outlier .....	63
3.12.6. Heteroscedasticity .....	63
3.12.7. Multicollinearity.....	63
3.12.8. Autocorrelation .....	64
3.13. Measurement of Variables .....	64
3.14. Measurement of Independent Variables.....	64
3.15. Measurement of dependent variables.....	65

3.16. Hypothesis Testing .....	65
<b>CHAPTER FOUR.....</b>	<b>67</b>
<b>RESULTS AND DISCUSSIONS .....</b>	<b>67</b>
4.1. Introduction .....	67
4.2. Descriptive Statistics .....	67
4.2.1. Audit Process.....	67
4.2.2 Governance.....	77
4.2.3. Risk Management.....	83
4.2.4. Financial Controls .....	87
4.2.5. Financial Stability of Micro Finance Institution .....	95
4.3. Test of Assumption of Regression Model.....	98
4.3.1 Testing for Normality.....	98
4.3.3. Multivariate Testing of Outliers for the Study Variables.....	100
4.3.4. Outliers .....	100
4.3.5. Homoscedasticity .....	100
4.3.6. Multicollinearity.....	101
4.4 Inferential Analysis and Hypothesis Testing .....	102
4.4.1. Effect of Audit Process on Financial Stability of Micro Finance Institutions. .....	102
4.4.2. Effect of Governance on Financial Stability of Micro Finance Institution..	105
4.4.3. Effect of Risk Management on Financial Stability of Micro Finance Institution.....	109
4.4.4 Effect of Financial Control on Financial Stability .....	111
4.5 Multiple Regression Analysis .....	115
4.5.1. ANOVA for Overall Model .....	116

4.5.2. Coefficients for Overall Model .....	117
5.5.3. Regression model .....	117
4.6. Summary of Hypothesis Testing .....	118
4.7. Correlation Results .....	120
<b>CHAPTER FIVE.....</b>	<b>123</b>
<b>SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>123</b>
5.1. Introduction .....	123
5.2. Summary .....	123
5.2.2. To examine the effect of Governance on Financial Stability of Micro Finance Institutions in Rwanda.....	124
5.2.3. To assess the effect of Risk Management on Financial Stability of Micro Finance Institutions in Rwanda. ....	124
5.2.4. To evaluate the effect of Financial Controls on Financial Stability of Micro Finance Institutions in Rwanda. ....	125
5.3. Conclusions .....	125
5.3.1. To find the effect of Audit Process on Financial Stability of Micro Finance Institutions in Rwanda. ....	125
5.3.2. To examine the effect of Governance on Financial Stability of Micro Finance Institutions in Rwanda. ....	125
5.3.3. To assess the effect of Risk Management on Financial Stability of Micro Finance Institutions in Rwanda .....	126
5.3.4. To evaluate the effect of Financial Controls on Financial Stability of Micro Finance Institutions in Rwanda. ....	126
5.4 Recommendation.....	126
5.4.1 Audit Process on Financial Stability .....	126
5.4.2 Governance on Financial Stability .....	127

5.4.3. Risk Management on Financial Stability .....	128
5.4.4 Financial Controls on Financial Stability.....	128
5.5. Suggested Areas for Further Research.....	129
<b>REFERENCES .....</b>	<b>130</b>
<b>APPENDICES .....</b>	<b>159</b>

## LIST OF TABLES

<b>Table 4.1:</b> The Chief audit executive’s relationships with the audit committee and senior management .....	68
<b>Table 4.2:</b> Internal Audit Functions .....	70
<b>Table 4.3:</b> Boards, Audit Committees and Senior Management.....	71
<b>Table 4.4:</b> The organization’s structure.....	73
<b>Table 4.5:</b> Factor Analysis of Audit Process.....	76
<b>Table 4.6:</b> The governing body approves the mission and values and assess all proposed activities .....	77
<b>Table 4.7:</b> Data output controls .....	78
<b>Table 4.8:</b> Short-Term and long-term Plans.....	80
<b>Table 4.9:</b> Factor analysis of Governance (G) .....	82
<b>Table 4.10:</b> Assessment of Fraud Risk.....	83
<b>Table 4.11:</b> Analyze Risk.....	84
<b>Table 4.12:</b> The evaluate Risk.....	85
<b>Table 4.13:</b> Factor analysis of Risk Management .....	87
<b>Table 4.14:</b> Comparison between budgeted and actual amounts spent.....	88
<b>Table 4.15:</b> Periodic Reconciliations .....	89
<b>Table 4.16:</b> Organization maintain an adequate and up-to-date cashbook .....	90
<b>Table 4.17:</b> Assessment of the Sustainability of Current Funding levels. ....	91
<b>Table 4.18:</b> Importance of Capital Adequacy Requirement to Banks.....	93
<b>Table 4.19:</b> Factor analysis of Financial Controls .....	94
<b>Table 4.22:</b> Factor Analysis of Financial Stability.....	98
<b>Table 4.23:</b> Normality Test .....	99
<b>Table 4.24:</b> Breusch-Pagan and Koenker Test for Heteroscedasticity.....	101

**Table 4.25:** Multicollinearity Test for the Study Variables.....102

**Table 4.26:** Pearson Correlation Coefficient for Audit Process on Financial Stability 103

**Table 4.27:** Model Summary .....104

**Table 4.28:** ANOVA<sup>a</sup> .....104

**Table 4.29:** Coefficients of Audit Process .....105

**Table 4.30:** Pearson Correlation Coefficient for Governance onFinancial Stability ....106

**Table 4.31:** Model Summary .....107

**Table 4.32:** ANOVA<sup>a</sup> .....107

**Table 4.33:** Governance Regression Coefficients .....108

**Table 4.34:** Correlations .....109

**Table 4.35:** Model Summary .....110

**Table 4.36:** ANOVAa.....110

**Table 4.39:** Coefficients<sup>a</sup> .....111

**Table 4.40:** Correlations .....112

**Table 4.41:** Model Summary .....113

**Table 4.42:** ANOVA .....114

**Table 4.43:** Coefficients<sup>a</sup> .....114

**Table 4.44:** Model Summary .....116

**Table 4.45:** ANOVA a.....116

**Table 4.46:** Coefficients .....117

**Table 4.47:** Summary of Hypothesis Testing.....119

**Table 4.48:** Pearson Correlation Matrix for Independent and Dependent Variables ....122

## LIST OF FIGURE

<b>Figure 2.1:</b> Conceptual framework .....	18
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## LIST OF APPENDICES

<b>Appendix I:</b> Letter of Introduction by Researcher .....	159
<b>Appendix II:</b> Questionnaire .....	160
<b>Appendix III:</b> List of Licensed Microfinance Institutions (Limited Companies) as of 31 March 2017 .....	169

## **ABBREVIATIONS AND ACRONYMS**

<b>ANOVA</b>	The analysis of variance
<b>AP</b>	Audit Process
<b>BNR</b>	National Bank of Rwanda
<b>CAE</b>	Chief Audit Executive
<b>CAR</b>	Capital Adequacy Ratio
<b>CEO</b>	Chief Executive Office
<b>DEA</b>	Data Envelopment Analysis
<b>FC</b>	Financial Control
<b>GAAP</b>	Generally Accepted Accounting Principles
<b>GDP</b>	Gross domestic product
<b>GR</b>	Government of Rwanda
<b>IFAD</b>	Fund for Agricultural Development
<b>IFRS</b>	International Financial Reporting Standards
<b>IMF</b>	International Monetary Fund
<b>MFI</b>	Micro Finance Institutions
<b>NBFs</b>	Non-Bank Financial Institutions
<b>NGO</b>	Non-governmental organizations
<b>NISR</b>	National Institute of Statistics Rwanda
<b>RM</b>	Risk Management
<b>RMA</b>	Risk Management Association
<b>ROE</b>	Return on Equity
<b>SPSS</b>	Statistical Packages for Social Sciences
<b>UK</b>	United Kingdom

## DEFINITION OF TERMS

- Audit process:** The process by which an auditor reviews activities to identify inefficiencies, reduces costs, and otherwise achieves organizational objectives (McDonald, & Wilson, 2016).
- Financial controls:** Policies and procedures put into place by a business or organization to track, manage and report its financial resources and transactions (Reporting, 2011).
- Financial Stability:** One in which financial institutions, markets and market infrastructures facilitate the smooth flow of funds between savers and investors (Johnson, 2012).
- Financial system controls:** A system that allows the exchange of funds between lenders, investors, and borrowers (Sengupta, Mukherjee, & Gupta,
- Governance:** Establishment of policies, and continuous monitoring of their proper implementation, by the members of the governing body of an organization (Tricker, & Tricker, 2015).
- Internal controls:** Process for assuring achievement of an organization's objectives in operational effectiveness and efficiency, reliable financial reporting, and compliance with laws, regulations and policies (Basic, Ribic, Jahic & Bajraktarevic, 2015).
- Risk Management:** Process of identifying, assessing and controlling threats to an organization's capital and earnings (Ardeshir, Safaei, & Abtahi, 2016).

## **ABSTRACT**

The purpose of this research is to determine the relationship between quality compliance and financial stability of Micro Finance Institutions (MFI) in Rwanda. In Rwandan perspective, financial system is still relatively shallow and thus potential impact on financial stability. The study was guided by research objectives which include: to evaluate the effect of Audit process, Governance, Risk Management, Financial Controls on Financial Stability of Micro Finance Institutions in Rwanda. The research design used in this study was mixed design employing both the qualitative and quantitative design. Primary data was acquired through administering questionnaires and interviews to a purposive sample of Risk Manager, Chief Financial Officer or Internal Auditor of MFI in Rwanda. Census survey and a target population of fifty four were extracted from the MFI Rwanda data base. A pre-test on a different sample gave a cronbach's alpha greater than 0.7 for all the variables. Data analysis was by descriptive statistics and inferential statistics using Statistical Packages for Social Sciences (SPSS) version 24. Analysis of variance (ANOVA) was used to establish if there is a statistical significance between the observed and expected values with the Pearson chi square giving the degree significance of the relations, hence establishing the hypothesis. The results indicate that four of the variables, audit process, governance, risk management and financial controls. Accessibility of financial information has a weak negative correlation with Financial Stability on the MFI. The study gives recommendations which include the adoption of proper financial risk management systems and improving the efficiency of prudential regulation and supervision procedures in order to improve Quality compliance.



## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1. Background of the Study**

Regulation being enacted for Microfinance seeks not only to protect the financial system and depositors, but also to promote poor people's access to formal finance. To begin with, regulation can be promotional simply by enabling or facilitating basic micro lending. Regulation can also be promotional by adjusting norms so that existing institutions can reach new customers or expand the range of services offered. Following the financial crisis of the 2007-2009, stringent regulatory measures, such as higher capital requirements have become more prominent as a move towards having stable and more competitive banking sector

Riley and Kulathunga, (2017) urged that the primary reasons for prudential regulation of depository institutions are to protect the country's financial system by preventing the failure of one institution from leading to the failure of others, and to protect small depositors who are not well-positioned to monitor the institution's financial soundness themselves. If prudential regulation does not focus closely enough on these two objectives, scarce supervisory resources can be wasted, institutions can be saddled with unnecessary compliance burdens, and development of the financial sector can be constrained. As such, deepening can confer important benefits for macro-stability and sustained growth. Thus policies to encourage increased access for the previously unbanked must, however, take into consideration the objectives of financial stability, especially in light of the current economic and financial crisis. It is important that all players and financial service providers are properly and proportionately regulated to ensure consumer protection, financial system stability and integrity (Cherotich, 2013).

#### **1.1.1 Global Perspective on Quality Compliance and Financial Stability of Micro Finance Institutions**

Patro, and Sun (2013) argue that, one important factor that reduced the exposure of Japanese financial institutions to the risks realized in the global financial crisis was

Japan's (micro) prudential regulation regime that had been significantly improved following Japan's own financial crisis in the 1990s. The Japanese regulators had finally forced the banks to recognize and deal with non-performing loans, created the framework to deal with troubled but systemically important banks, recapitalized the banks using public funds when necessary and established the system of supervision that stresses safety and soundness. Japan's financial regulatory responses to the global financial crisis and recession show two seemingly opposing directions.

On the one hand, Japan eagerly cooperated with the regulators of other major countries to strengthen the financial regulation, trying to avoid another global financial meltdown. The Government of Malaysia has also established several Development Financial Institutions which are specialized financial institutions with specific mandates to develop and promote key sectors that are considered of strategic importance to the overall socio-economic development objectives of the country. These strategic sectors include agriculture, small and medium enterprises, infrastructure, maritime, export-oriented sectors as well as capital-intensive and high-technology industries (Martinez-Fernandez, & Choi, 2013). The Central Bank of Malaysia has been proactive in the development of strong domestic and regional framework to enhance the Malaysian financial sector and this has been accompanied by appropriate prudential safeguards to ensure that the nation's best interest and financial stability are preserved. The Indian banking system remained largely stable during the global financial crisis. Since then, the government of India and Reserve Bank of India has taken additional measures to enhance the soundness and resilience of the banking system, such as the establishment of a Financial Stability and Development Council, the implementation of a countercyclical provisioning regime, and the development of a roadmap for the introduction of a holding company structure (Dikau & Ryan-Collins, 2017).

The financial sector in Pakistan comprises of Commercial Banks, Development Finance Institutions, Microfinance Banks, Non-banking Finance Companies (leasing companies, Investment Banks, Discount Houses, Housing Finance Companies, Venture Capital Companies, Mutual Funds), Modarabas, Exchange and Insurance Companies. Under the prevalent legislative structure the supervisory responsibilities in case of Banks, Development Finance Institutions and Microfinance Banks falls within legal ambit of State Bank of Pakistan while the rest of the financial institutions are monitored by other authorities such as Securities and Exchange Commission and Controller of Insurance (Arun & Kamath, 2015). In European Central Bank, the Financial Stability Review provides an overview of the possible sources of risk and vulnerability to financial stability in the euro area. Its aim is to promote awareness of issues that are relevant for safeguarding the stability of the euro area financial system, both within the financial industry and among the public. The Quality Assurance/Compliance certificate program familiarizes professionals with the key regulatory and quality requirements pertaining to their specialty area and prepares them to ensure that the products and processes they oversee comply with these requirements (Fleckenstein & Fellows, 2018). Regulatory and quality compliance needs to be reported to view achieved results in Programme development. The structure of the financial system plays a role because the size and breadth of the financial system and the role of cross-border financing determine the ability of the financial system to withstand systemic shocks. The risks to financial stability always need to be taken into account in the financing of investments in order to achieve the new sustainable development goals (Haggard & Noland, 2017).

### **1.1.2. Regional Perspective on Quality Compliance and Financial Stability of Micro Finance Institutions.**

Bakilana and Carpio (2017) urged that the potential tradeoff between regulation and stability in Kenya, a small open economy which is highly vulnerable to domestic and external shocks, but with a lightly regulated financial system and a fairly open capital account. Financial sector reforms have undoubtedly strengthened Kenya's banking sector in the last decade or so, in terms of product offerings and service quality, stability

and profitability. The risk-based approach to financial regulation that seem to be adopted by the Bank of Ghana shows that while there may be no major variances in the structure of MFS assets, they are differentiated by the structure of their liabilities (how assets and operations are funded) and the adequacy of qualifying capital in leveraging additional resources to fund operations (Agyekum, 2017). Bank of Ghana observed that one of the major causes of MFIs failure is liquidity problems that run into liquidity crises. In pursuant of this the Bank of Ghana came out with key prudential requirements that will strengthen MFIs and also protect the interest of depositors.

For an emerging economy, such as Nigeria, the challenge arising from these developments centered on the need to strike a delicate balance between conventional and unconventional measures in the choice of policy tools and strategies for responding to the situation (Cáceres, 2013.).The goal of financial system regulators remains the enhancement of the stability of the financial system and its resilience to withstand unanticipated adverse shocks while contributing to the growth of the real economy. A stable financial system should facilitate economic growth and development necessary for improved standard of living. Arora, Saasa, Stone, Carpio, Williams and Grossman(2012).Microfinance service providers in Malawi can either exist as commercial banks falling under the Banking Act and supervised by the Reserve Bank of Malawi or as semi-formal MFIs under several legal forms and ownership structures ranging from non-governmental organizations to cooperatives, private and public companies, and parastatals. The Assessment Team found the formal financial sector regulatory framework does not pose. While measures in favor of consumer protection are fairly consensual and have already led to a number of very constructive initiatives in the microfinance sector measures to Control interest rates remain controversial. Indeed, whereas regulators believe that capping Interest rates are an appropriate way to avoid abusive rates and promote transparency, most Microfinance professionals are against such practices in the era of liberalization.

### **1.1.3. National Perspective on Quality Compliance and Financial Stability of Micro Finance Institutions**

After the 1994 Genocide, Rwanda started rebuilding its economy, peace and political stability, reestablished sound macroeconomic and structural policies backed by substantial donor assistance, As a result, the impressive macroeconomic stability has led to per capita gross domestic product (GDP) nearly double from \$336 in 2006 to \$625 in 2011. Currently, Rwanda's financial system is dominated by the banking sector. Generally, it has witnessed significant transformation. Changes have occurred with respect to the number of institutions, ownership structure and regulatory landscape. Protection (GR, 2013), the developments was supported by the Central Bank of Rwanda within the framework of systemic stability as supervision and regulation with efforts to ensure that only fit and proper institutions were granted banking license.

The foregoing developments and the global financial and economic crunch have resulted in increased attention to improve and enforce financial reporting disclosures worldwide in order to reform the global economy. Financial Stability provides an international forum for rigorous theoretical and empirical macro and micro economic and financial analysis of the causes, management, resolution and preventions of financial crises, including banking, MFI, securities market, payments and currency crises. The development of a financial stability framework for the analysis of FSIs and related data is still at a relatively early stage, and, indeed, dissemination of data would support further empirical research (Haggard, & Noland, 2017).

Rwandan financial system continued to be sustained and resilient to different shocks due to the strong regulatory framework followed by prudential policies and regular supervision. The prudential indicators and stress testing results suggest that the Rwandan financial system is sound and stable. Nevertheless, the National Bank of Rwanda is committed to continue monitoring potential systemic risks which may rise and to foster competition, efficiency and growth of the financial system (Worrall, Vrolijk, Mason & Balchin, 2015). The National Bank of Rwanda is mandated to regulate and supervise Microfinance institutions. Microfinance institutions include Savings and Credit

Cooperatives (SACCOs) and some limited companies that operate microfinance activities. The supervision is conducted through three main activities: licensing of MFIs, off-site surveillance and on-site inspection of MFIs thus licensed.

## **1.2. Statement of the Problem**

Financial stability risks stemming from foreign currency lending are to some extent mitigated in the case of housing loans. On the one hand, the relevance for financial stability originates also from the maturity mismatch, as a large share of (foreign currency) deposits consists of sight deposits, while housing loans in foreign currency have a longer maturity. Further, the presence of collateral may reduce credit risk, provided that residential property prices do not decline excessively and thus impact the loan to-value ratio. The rapid growth of Microfinance has brought increasing calls for regulation. However, complying with quality regulations and the associated supervision can be costly for Microfinance Institutions creating doubt on their ability to comply with these regulations (Khavul, Chavez & Bruton, 2013).

Mulatu, (2016). urged that MFI deepens financial markets by raising institutional capital through pension funds, expanding bond and equity markets, and tapping international sources of capital and Safeguard financial system stability as an integral part of preserving monetary and macroeconomic stability in an economy. Clients in the region of Eastern Europe and Central Asia (ECA) have higher repayment difficulties than in other regions due to the fact that unemployment is on the rise, remittances are down and there are unprecedented job losses while also the Micro-entrepreneurs' profits are down and there are increasing problems to access liquidity. Topo, Moretta, Glorioso, Pansini, per le Nuove Tecnologie (2015), MFIs borrowing in foreign currency are facing both interest rate hikes and currency depreciation, but thus far few have been unable to service debt as a consequence. When establishing regulations for MFIs, authorities must consider the impact of their policies on firm-level profitability, as it will determine long-term sustainability. To date, much of the research has been limited to case studies of successful MFIs in Asia, Africa and Latin America. Kahuthu (2016), stated that increase in unsafe lending and risky investments led to financial turmoil in the world and was

particularly severe in the US and European Union countries in 2007 and 2008, views shared by Knell and Stix (2009) and Guiso (2010). To avoid similar experiences in Kenya, credit management had to be addressed. Most MFIs in the Rwanda fail to carry out risk management, ending up bankruptcy and leading to loss of savings among customers. Microfinance Institutions (MFIs) also play an important role in increasing access to credit as they have mobilized. However, a number of MFIs in Rwanda are financially weak, lack adequate management and are, by necessity, not as well supervised as banks. According to National Bank of Rwanda (BNR), bad loans in the sector dropped by 4.3 percentage points in the third quarter of 2017 to 8 per cent. About Rwf1.2billion has been lost in unpaid loans borrowed by clients from various microfinance institutions across the country and the Central bank will have to pay. Because of this big amount of money lost, microfinance institutions are advised to think twice before granting credit to any client – Unpaid debts affect the country's economy.

The Micro Finance institutions in Rwanda maintain minimum low levels of compliance and financial stability to develop and implement contingency liquidity plans so as to effectively serve the members (Habaguhirwa, 2017). This has led to situation deposit taking savings (DTSS) borrow expensively from commercial banks to bridge temporary illiquidity and this has evidently threatened financial stability of the DTSSs, and hence safety of member deposits. The spiral effect is the undermining of the government's policy goal of promoting the financial stability and hence efficiency and access to financial services through MFI. Mold and Bagiza (2016), there has been very little research into the regulation and supervision of MFIs and the impact of regulation and supervision on the development of the sector.

### **1.3. Objectives of the Study**

The study was guided by the following objectives;

#### **1.3.1. General Objective**

The general objective was to determine the relationship between quality Compliance and Financial Stability of Micro Finance Institutions in Rwanda.

#### **1.3.2. Specific Objectives**

1. To find the effect of Audit Process on Financial Stability of Micro Finance Institutions in Rwanda.
2. To examine the effect of Governance on Financial Stability of Micro Finance Institutions in Rwanda.
3. To assess the effect of Risk Management on Financial Stability of Micro Finance Institutions in Rwanda.
4. To evaluate the effect of Financial Controls on Financial Stability of Micro Finance Institutions in Rwanda.

### **1.4. Research Hypotheses**

**H<sub>01</sub>:** There is no significant relationship between Audit Process and Financial Stability of Micro Finance Institutions in Rwanda.

**H<sub>02</sub>:** There is no significant relationship between Governance and Financial Stability of Micro Finance Institutions in Rwanda.

**H<sub>03</sub>:** There is no significant relationship between Risk Management and Financial Stability of Micro Finance Institutions in Rwanda.

**H<sub>04</sub>:** There is no significant relationship between Financial Controls and Financial Stability of Micro Finance Institutions in Rwanda.

### **1.5. Significance of the Study**

This study is of great importance to compliance and financial stability that are experiencing difficulties in meeting their financial commitments because of insufficient

operating revenues and capital financing. There are a number of beneficiaries to this research. First beneficiaries are the government of using the research findings to implement government strategist in the sense of regulation adherence, member fund protection and ensuring the institution contributes towards the development of the economy towards achievement of institutional goals and visions.

Second beneficiaries are the managers of MFIs themselves in terms of using the research findings to implement the liquidity management strategies established towards improved financial performance in the financial competitive market. The third beneficiaries are policy makers on policy implications and recommendations which can be used by government policymakers in structuring policies to create an enabling environment to MFI operations in the country adherence to accepted financial indicators hence it will put control measures to ensure findings are applied by the affected institutions and finally is the institution of high learning in extension of the academic knowledge on the growth and expansion of institution for the benefit of all the academicians.

Fourth beneficiaries are MFI members in the sense of the increased revenues. The study findings would also increase members' confidence and loyalty to the MFI subsector due to the safety of their funds by establishing the adequate institutional capital levels. This study shall have policy implications and recommendations which can be used by government policymakers in structuring policies to create an enabling environment to MFI operations in the country. Scholars and researchers shall find this study quite of interest due to the gaps for further research that shall be produced at the end of this study. Excerpts of this study will be published in renowned journals and will also be available within the University repository systems for access to researchers.

## **1.6. Scope of the Study**

The study was investigated the relationship between quality Compliance and Financial Stability of Micro Finance Institutions in Rwanda. In this study, internal financial controls were based on Audit process, Governance, Risk Management and Financial Controls. The researcher was focused on the population of Micro finance with the Census Survey. In line with the research objectives enumerated in section 1.3, Micro

Finance Institutions are particularly interesting as they differ from public corporations because they are immune from mechanisms such as takeovers as is the case with corporate entities. Financial performance on the other hand was focused on net profit, return on equity and earning per share. The period for conducting the research was from 2012 to 2016. The study did not cover all MFI due to economic and logistical resource constrain. The study targeted responses from Risk Manager, Financial Manager and chief Internal Auditor, primary data was used to collect data.

### **1.7. Study Limitations**

The highly encountered limitation was obtaining information from the selected sample as most investors were not willing to disclose some information which they found confidential. The study overcame this limitation by having an introduction letter from the University to assure them that information provided was to be used for academic purpose only. This study was faced with the challenge of the busy schedule of most MFI managers.

Quite often data collection was delayed due to some managers attending to customer's issues. Some meetings had to be rescheduled. This meant that there was limited empirical literature on the specific area locally. This limitation was mitigated by the study diving deeper to find similar studies done in other sectors while maintaining focus on the primary variables of the study. A lot of patience was deployed and despite this, the study was a success. Some respondents thought that the information collected was very sensitive and that it may be used for personal gain. This was overcome by explaining to them that the study was for academic purposes only.

## **CHAPTER TWO**

### **LITERATURE RIVIEW**

#### **2.1. Introduction**

This chapter reviews the existing literature on the study variables such as Compliance and Financial Stability of Micro Finance Institutions of Rwanda and how they are related. This chapter covers: Theoretical Frame work, Conceptual Framework, Empirical, Critical Review of Literature, Research gaps and Summary.

#### **2.2. Theoretical Framework**

The theoretical underpinning of this study is enriched by the under mentioned theories. These theories informed the study variables that formed the conceptual framework. The theory includes: The Policeman Theory, Stakeholder Theory, Risk Management Theory and The Agency Theory.

##### **2.2.1. The Policeman Theory**

The policeman theory claims that the audit and assurance process is responsible for searching, discovering and preventing fraud. This was the case in the early 20th century. However, more recently the main focus of this process has been to provide reasonable assurance and verify the truth and fairness of the financial statements. The detection of fraud is, however, still a hot topic in the debate on the auditor's responsibilities, and typically after events where financial statement frauds have been revealed, the pressure increases on increasing the responsibilities of auditors in detecting fraud and manipulation of financial information. This was the most widely held theory on auditing until the 1940s (Chaumont, 2013). Up until the 1940s, it was widely held that an auditor's job was to focus on arithmetical accuracy and on prevention and detection of fraud. However, from the 1940s until the turn of the century there was a shift of auditing to mean verification of truth and fairness of the financial statements. Recent financial statement frauds such as those at Society General, Satyam, Ahold, Enron have resulted in careful reconsideration of this theory. There now is an ongoing public debate on the auditor's responsibility for detection and disclosure of fraud returning us to the basic

public perceptions on which this theory derives. According to this theory, the audit committees should put in place mechanisms to detect fraud before it happens just like a policeman tries to prevent crime from happening. In terms of quality of financial reporting, audit committee is viewed to perform the duty synonymous to that performed by the policemen such as to check and detect any instances of frauds in the organizations. Therefore, audit committee that is independent, diversified, and financially competent and has quality meetings is perceived to exercise their mandate more effectively. For instance, Elder et al. (2009) stated that the most common way for users to obtain reliable information (reducing the information risk) is to have an independent audit committee. Similarly, DeZoort et al. (2002) asserted that an effective audit committee could protect stakeholders' interests by ensuring reliable financial reporting, effective internal control, and high quality risk management. Turley and Zaman (2004) also pointed out that understanding the impact of audit committees as policemen could assist in formulating appropriate expectations about the audit committee function, based on which the effectiveness of audit committees could then be assessed. Salehi, Rostami and Mogadam (2010) also adopted policeman theory in explaining the usefulness of accounting information system in emerging economy. This study will adopt the policemen theory in assessing the relationship between quality compliance and financial stability of MFI in Rwanda. As mentioned earlier policeman theory claims that the audit and assurance process is responsible for searching, discovering and preventing fraud, therefore auditors acting as organization policeman go a long way in ensuring quality financial reporting.

### **2.2.2 Stakeholder Theory**

The emergence of stakeholder theory according to Kahn, Mastroianni and Sugarman, (2018) was prompted by the growing recognition by boards of the need to take account of the wider interest of the society. He lists the essential premises upon which the stakeholder theory rests, citing Jones and Wicks (1999) as being: that the corporation has relationships with many constituent groups (stakeholders) that affect, and are affected by its decisions; that the theory is concerned with the nature of these

relationships in terms of both processes and outcomes and focuses on managerial decision making ; that the interest of all legitimate stakeholders have intrinsic value and no set of intrinsic value is assumed to dominate the other. This theory maintains that the objectives and therefore results of the firm should be derived by balancing the conflicting aims of the various stakeholders in the firm: managers, workers, stockholders, suppliers, vendors. It implies that a board will be mainly interested in performance of the company in terms of meeting the expectations of stakeholders and ensuring that the reported results are beneficial to the shareholders. Such a board should be made up of directors with the right background and experience for effectiveness of their service function. Solomon (2007) contended that a basis for stakeholder theory is that companies are so large, and their impact on the society is so pervasive, that they should discharge accountability to many more sectors of the society than solely their shareholders; they should include employees, suppliers, customers, creditors, communities in the vicinity of the company's operations, and the general public. Creditors have an interest in getting their loans repaid on schedule; suppliers have an interest in securing fair prices and dependable buyers; customers have a stake in getting value for money. Basically, this theory is used to help understand the groups and individuals that can affect, and are affected by, the achievement of an organization's purpose, and those effects may be economic, regulatory, technological, social, political and managerial. In support of stakeholder theory, Donaldson and Preston (1995) pointed out that managers are responsible to deploy their wise decisions and best efforts in obtaining benefits for all stakeholders. Similarly, Wang and Dudley (1992) noted that the board cannot ignore its responsibilities in safeguarding stakeholder's interests. Corporate governance ensures the conformance of corporations with the interests of investors and society by creating fairness, transparency and accountability in business activities among employees, management and the board (Isaac, 2014). Therefore, it is clear that a growing body of literature and empirical evidence argues that by taking account of all stakeholders, instead of shareholders alone, the company is more likely to achieve the long term profit maximization which is also conducive for sustainable wealth maximization. Olick, (2015). found that the inclusion of stakeholders on the

board merely improves their relation and performance. According to this theory, a well-functioning audit committee ensures better corporate governance practice in a firm, which ultimately leads to the overall welfare of many stakeholders. Kontogeorga, (2015), Conclusion is notable in this respect, he mentioned that an organization's performance and stakeholder's value is positively affected by various governance mechanisms, including audit committee. DeZoort, Hermanson, Archambeault, and Reed (2002) emphasized stakeholder interests in the definition of effective audit committee by stating that the ultimate goal of the committee is to protect all stakeholders' interests and welfare. This is because if the financial 34 statements are of the highest attainable quality, then all stakeholders' interests will have been safeguarded. Van Beest, Braam and Boelens (2009) used stakeholder theory in the analysis of quality of financial reporting using qualitative characteristics. The author highlighted that providing high quality financial reporting information is important because it will positively influence capital providers and other stakeholders in making investment, credit, and similar resource allocation decisions enhancing overall market efficiency. Braam and van Beest (2013) also adopted stakeholders' theory in conceptually-based financial reporting quality assessment in an empirical analysis on quality differences between UK annual reports and US 10-K reports. Similarly, Chan and Kent (2003) applied stakeholder theory to the quantity and quality of Australian voluntary corporate environmental disclosures. The basic proposition forwarded by stakeholder theory is that the success of a firm is not dependent solely upon the successful management of the firm's relationship with its shareholders. The analysis of theoretical foundation reveals that there is a need to address the theoretical gaps by adopting the stakeholders' theories in explaining the relationship between quality compliance and financial stability. This theory is relevant to the study since it argues that a well-functioning that quality compliance ensures better financial stability practices which will be reflected even in financial reports. This will ultimately lead to the overall confidence by the stakeholders and ensure sustained growth of the organization.

### **2.2.3. Risk Management Theory**

Duffie and Singleton, (2012). Developed this theory aiming to study why risk management was required, and outlines theoretical underpinning under contemporary bank risk management; its emphasis is on market and credit risks. The theory indicates that market and credit risks would have either direct or indirect effect on banks survival. One would expect the credit risk indicators to influence banks profitability if there is no effective and efficient credit risk management (Ngugi, 2001). This theory identifies major source of value loss as Market risk being a change in net value of asset due to change in interest rate, exchange rate, equity and commodity prices (Wu & Olson, 2010).

Regulators are concerned with overall risk and have minimum concern with individual risk of portfolio components as managers are capable of window dressing the bank position. The need for total risk show that measurement of risk cannot be centralized as risk of a portfolio is not just a sum of component as per Markowitz theory. This implies that portfolio risk must be driven by portfolio return which is invariant to changes in portfolio composition (Beverly, 2015).

Regulatory requirements and alternative choices require managers to consider risk return trade off, Measurement of risk is costly thus bank managers compromise between precision and cost (Sovan, 2009). Trade off will have profound effects on any method adopted by the bank. They have one risk measurement goal knowing to a high degree with precision and the maximum loss that the bank will likely experience (Muhammad & Bilal, 2014). Regulators may set capital requirements to be greater than estimated maximum loss to ensure non-failure. Risk management theory has two principle approaches to measurement of risk, scenario analysis and value at risk (Sovan, 2009). Scenario analysis approach does not require distribution assumption of the risk calculation and it's very subjective and assumes that future results will resemble those of the past (Meyer & Hutchinson, 2016)

Value at risk (VAR) uses asset return distribution to estimate the potential losses. Monte-Carlo simulation and analytical VAR method are two principle method of

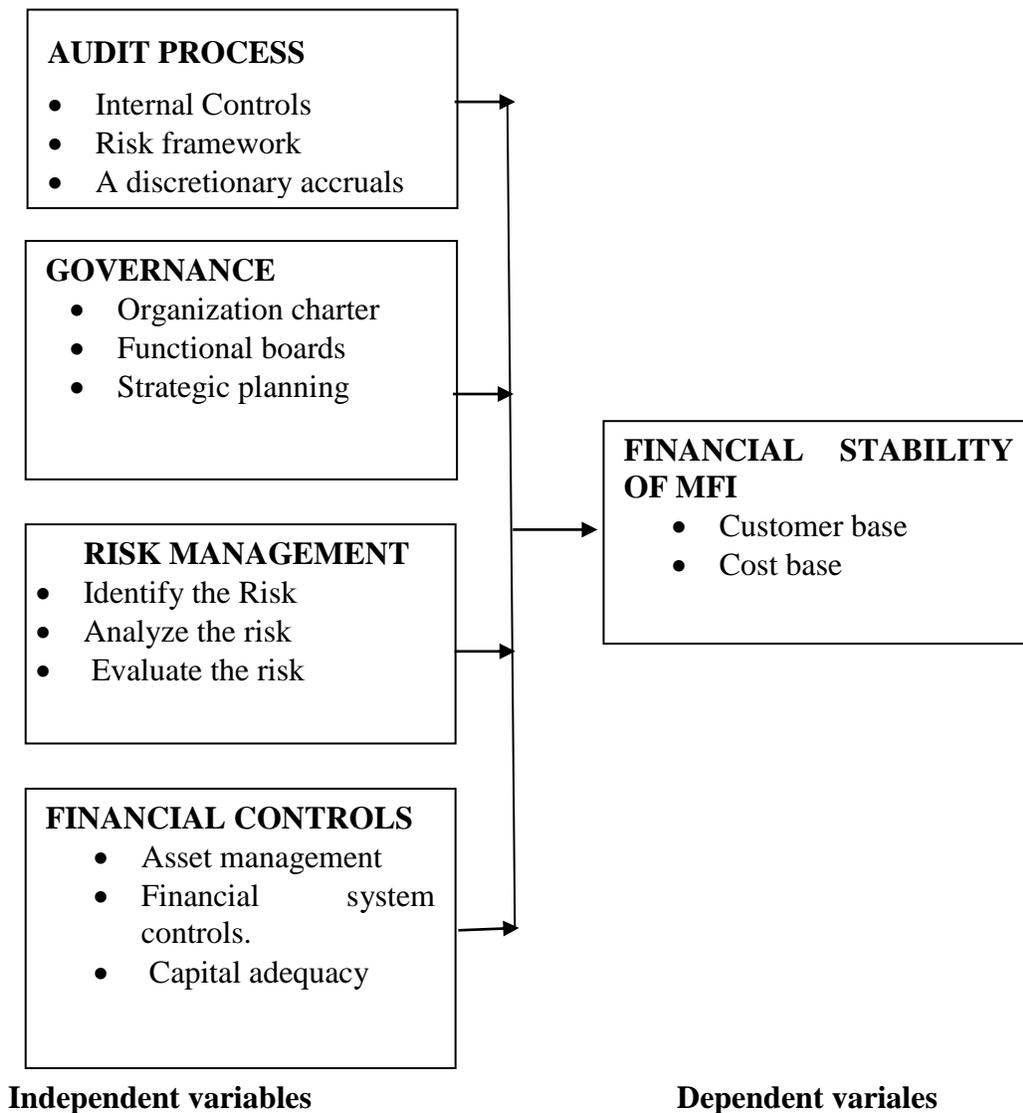
estimating VAR and they enable managers to estimate forecast. They have advantage of computational efficiency and tractability though they may show non-normal distribution experiencing fat tails reflecting inconstancy of return volatility. This method incorporates sound economic theory that incorporates market structure (Maniagi, 2018). Where there is non-normal distribution student is appropriate, it's useful for fat tails distribution since it's aimed at describing the behaviour of portfolio returns. Analytical value at risk uses standard portfolio theory; the return distribution is described in terms of variance and covariance representing risk attributes to a portfolio over horizon (Sovan, 2009). In this research market risk measurement utilised value at risk (VAR).

#### **2.2.4. The Agency Theory**

Agency Theory was developed in the economics literature in the 1960s and 1970s (Namazi, 2013). The theory later extended to finance and managerial accounting realms to determine the optimal amount of risk-sharing, optimal-incentive contracting and establishing accounting control mechanisms to monitor behaviours and actions. The Agency Theory primarily relates to situations in which one person (the agent) is engaged by another person (the principal) to act on his/her behalf. In this case, the state officers charged with the responsibility of budget execution take managerial decisions and actions on behalf of the governments which serve the needs of the public. Both the agents and the principal are utility maximizers motivated by pecuniary and non-pecuniary items that cause incentive problems under conditions of uncertainty and information asymmetry. When the principal is well informed about the actions of the agent, then it becomes more possible to curb agent opportunism and thus the agent is bound to act and behave in the interests of the principal. The agency model explains the central problems in hierarchical interactions between budget participants in policy implementation and policy-making concerns hence the role of city county governments in service delivery to the public. It also concerns problems that arise when the city county budget participant's conflict and when both the agents and the principal have different attitudes and preferences towards risk

### **2.3. Conceptual Framework**

In line with the compliance used in previous studies on financial stability, this study proposes a conceptual framework in Figure 2.1 to link the relationship between compliance and financial stability of Micro Finance Institutions in Rwanda (which are the independent variables of the study) to financial stability (which is the dependent variable) in order to show the existing relationship. The independent variables are Audit process, Governance, Risk Management, and Financial Controls. The measurements for the individual constructs are also captured in the Conceptual framework.



**Figure 2.1 Conceptual framework**

**2.3.1. Audit Process**

Audit helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes (Asare, 2009). The internal audit process begins with the Risk Based Audit Plan, which is updated annually and approved by the Audit Committee of the Board of Governors (Chambers & Odar, 2015).

Peltier (2016) urges that internal controls are methods put in place by a company to ensure the integrity of financial and accounting information, meet operational and profitability targets, and transmit management policies throughout the organization. Internal controls work best when they are applied to multiple divisions and deal with the interactions between the various business departments. Aldrich, (2014). Assert that the audit process has four phases, each one requiring the involvement of our audit clients. During planning we work with you to understand and learn about your area so that we can evaluate the processes and controls currently in place. Fieldwork consists of specific testing scenarios or steps to identify areas for improvement. Every successful audit is based on sound planning and an atmosphere of constructive involvement and communication between the client and the auditor. Lawson, et al. (2013) states that Internal control, as defined in accounting and auditing, is a process for assuring achievement of an organization's objectives in operational effectiveness and efficiency, reliable financial reporting, and compliance with laws, regulations and policies. Habaguhirwa, (2017), An internal control is a business practice, policy or procedure that is established within an organization to create value or minimize risk. Internal Controls in Financial Reporting and Safeguarding Plan Assets, Effective controls reduce the risk of asset loss and help ensure that plan information is complete and accurate, financial statements are reliable, and that the plan complies with laws and regulations Internal controls help safeguard funds, provide efficient and effective management of assets, and permit accurate financial accounting.

Internal controls are methods put in place by a company to ensure the integrity of financial and accounting information, meet operational and profitability targets, and transmit management policies throughout the organization (Peltier, 2016). An internal control is a business practice, policy or procedure that is established within an organization to create value or minimize risk. Lacity and Willcocks, (2014) pointed out that Internal Controls are to be an integral part of any organization's financial and business policies and procedures. Internal controls consist of all the measures. Internal control - an accounting procedure or system designed to promote efficiency or assure the implementation of a policy or safeguard assets or avoid (Simons, 2013). Sound risk

management is the responsibility of banks' management and cannot be divorced from the overall quality of corporate governance. An effective risk management system requires identifying, measuring and limiting risk. Risk management is important in an organization because without it, a firm cannot possibly define its objectives for the future.

All companies face risk; without risk there is no reward. The flip side of this is that too much risk can lead to business failure (Chakravarthy, Wiegand, Chen, Nasser, & Surridge, 2015). Internal controls cannot eliminate all errors, policies and procedures on internal controls Organized data can increase productivity and better prepare your business if you need to produce documents for litigation or if you need to grab information for compliance reviews Controls are very important in a company because they provide direction and ensure people do not misbehave themselves and actually do what they are supposed to do. Companies need controls most of all when their employees are not mature (Ross, 2017). The importance of risk management cannot be overstated. This is a fundamental part of doing business that must be addressed appropriately for the company to be.

Risk management allows a balance to be struck between taking risks and reducing them. Risk measurement provides information on the quantum of either a specific risk exposure or an aggregate risk exposure, and the probability of a loss occurring due to those exposures. Bouteille and Coogan-Pushner, (2012), when measuring specific risk exposure, it is important to consider the effect of that risk on the overall risk profile of the organization. The selection and specification of security controls for a system is accomplished as part of an organization-wide information security program that involves the management of organizational risk (Kohnke, & Shoemaker, 2015). Risk management is to identify potential problems before they occur so that risk-handling activities may be planned and invoked as needed across the life of the product or project to mitigate adverse impacts on achieving objectives. The Risk Management Framework provides a process that integrates security and risk management activities into the system development life cycle. The risk-based approach to security control selection and

specification considers effectiveness, efficiency, and constraints due to applicable laws, directives, Executive Orders, policies, standards, or regulations (Jansen, & Grance, 2011). The Framework provides guidance to boards and management to manage risks from strategy setting through execution.

The component of the accrual that is imposed by the accounting regulator in adjusting a firm's cash flows is the non-discretionary accruals. The management of organizational risk is a key element in the organization's information security program and provides an effective framework for selecting the appropriate security controls for a system, the security controls necessary to protect individuals and the operations and assets of the organization. The accruals component managers can choose within the flexibility of accounting regulations in adjusting a firm's cash flows is the discretionary accruals (Pacheco Paredes & Wheatley, (2017). Abnormal accruals have been the focus of much empirical research in accounting. Almost more than one hundred papers used “abnormal” accruals generated from an accruals model as a measure of earnings quality (Düsing & Ivarsson, 2017). The normal accruals are preordained to capture adjustments that reflect fundamental performance, whereas abnormal accruals are inevitable to apprehend distortions induced by application of accounting rules or earnings management. Regulation is an important determinant of earnings management. Both voluntary and mandatory regulations increase disclosures to shareholders, reduce information asymmetry, and managerial discretionary power to manage earnings. Disclosure of information reduces the cost of capital and provides higher earnings quality (Kolsi 2012). Effective risk management strategies allow you to identify your project's strengths, weaknesses, opportunities and threats. By planning for unexpected events, you can be ready to respond if they arise. To ensure project's success, define how to handle potential risks can identify, mitigate or avoid problems. Herskowitz, (2017) urged that discretionary accruals are associated with several performance measures, and concludes that managers' accrual choices increase the informativeness of accounting earnings. Discretionary accruals which can be explained by the legal space that the accounting principles leave for interpretation, can detect an extreme case of earnings presented as the accounting fraud. Discretionary accruals are positively

associated with future operating cash flows. More importantly, discretionary accruals become even more important to predict future cash flows.

### **2.3.2. Governance**

Good governance is an indeterminate term used in international development literature to describe various normative accounts of how public institutions ought to conduct public affairs and manage public resources (Alvarez, 2016). Establishment of policies, and continuous monitoring of their proper implementation, by the members of the governing body of an organization. It includes the mechanisms required to balance the powers of the members (with the associated accountability). Akpan and Effiong, (2012) assert that the Government of Rwanda (GoR) defines good governance as: "the exercise of political, economic and administrative authority to manage the nation's affairs and the complex mechanisms, processes, relationships and institutions as well as leadership behavior through which citizens' groups articulate their interests. Bryson, (2011) pointed out that a charter member of an organization is an original member; that is, one who became a member when the organization received its charter. An organizational chart is a diagram that shows the structure of an organization and the relationships and relative ranks of its parts and positions/jobs. When forming a nonprofit organization as a corporation, two documents the state requires is a charter and the bylaws. A charter explains the purpose for the nonprofit's existence and is also known as the articles of incorporation. Platform, (2016), a good organizational chart or organogram is important to make planning easier and defining the organizational structure, culture and style while showing clearly the line of authority and of responsibility of each individual in the organization.

Shira and Devonshire-Ellis, (2012) states that a board of directors (B of D) is a group of individuals that are elected as, or elected to act as, representatives of the stockholders to establish corporate management related policies and to make decisions on major company issues. The board of directors, including the general manager or CEO (chief executive officer), has very defined roles and responsibilities within the business organization. Essentially it is the role of the board of directors to hire the CEO or general

manager of the business and assess the overall direction and strategy of the business. Organizational structure is important for any growing company to provide guidance and clarity on specific human resource issues, such as managerial authority. The Board of directors, including the general manager or CEO (chief executive officer), has very defined roles and responsibilities within the business organization. He and Fang (2016), a cooperative is an organization formed and owned by its members to serve a specific purpose. Cooperatives in business are usually strategic partnerships consisting of businesses and influential individuals in a single industry coming together to achieve a common goal. Most effective boards get their work done through committees that report to the full board. Setting up a small group of directors chosen for their relevant expertise has proven to be an effective way to examine complex issues (Burstein, Esses, Lacassagne & Nadeau, 2012).

Audit, compensation, and nominating committees in order of their recent rise to prominence—overshadow the older executive committee whose function tended to become that of the entire board. Corporate governance is important in all but the smallest organizations (Leblanc & Gillies, 2010). Limited companies have a primary duty to their shareholders, but also to other stakeholders as described above. Public sector organizations have a duty to serve the State but must act in a manner that treats stakeholders fairly (Collier 2008). Basic issues faced by organizations are those relating to structure, relationships, and interdependence. Organizations are open systems which transform inputs into outcomes and are continually dependent on and influenced by their environments. Basic issues faced by organizations are those relating to structure, relationships, and interdependence (Al-Maamary, Kazem & Chaichan, 2016). Concerning the structural perspective of demographics, lack of high quality data cannot be the overriding excuse since the possibility of “black-boxing” the board’s processes and focusing on the structural conditions are available as alternative research strategy. Most countries adopt a principles-based approach to corporate governance. This involves establishing a comprehensive set of best practices to which listed companies should adhere. If it is considered to be in the best interests of the company not to follow one or more of these standards, the company should disclose this to its shareholders, along with

the reasons for not doing so. This does not necessarily mean that a principles-based approach is a soft option, however, as it may be a condition of membership of the stock exchange that companies strictly follow this 'comply or explain' requirement.

The board of directors is appointed to act on behalf of the shareholders to run the day to day affairs of the business (Cheng, Green, Conradie, Konishi & Romi, 2014). The board are directly accountable to the shareholders and each year the company will hold an annual general meeting (AGM) at which the directors must provide a report to shareholders on the performance of the company, what its future plans and strategies are and also submit themselves for re-election to the board (Adegbite 2012). A clear framework, agreed among the key stakeholders at the end of the planning stage, is essential in order to carry out monitoring and evaluation systematically. This framework serves as a plan for monitoring and evaluation (Meyers, Durlak & Wandersman, 2012). Organizational structures as comprising all the tangible and regularly occurring features which help to shape the behavior of its members. Organizations are open systems which transform inputs into outcomes and are continually dependent on and influenced by their environments. Strategic planning determines where an organization is going over the next year or more, how it's going to get there and how it'll know if it got there or not. The focus of a strategic plan is usually on the entire organization, while the focus of a business plan is usually on a particular product, service or program (Romiszowski 2016). The strategic decision-making process is designed to create organizational stability, as well as solidifying a future direction. There is little difference among groups' small or large, single or multi-specialty in adopting this planning method. One of the most important aspects of strategic planning is not that you have made several decisions but that you have created the proper framework for developing goals, creating action items centered on those goals, creating a method for recording, measuring and evaluating the goals, and developing a process for continually monitoring those initiatives and making them part of your operating and business plans (Knight, 2013). Monitoring is considered to be the supervision of the performance of the corporation and of the managers' actions on behalf of the principal. Principal

engagement will de-emphasize monitoring since the principal directs the managers through a certain number of interventions, thereby influencing performance.

Sardana and Zhu (2017). The understanding of the board of a corporation and its behavior is limited, despite the board's societal importance. E Corporate Governance and Sustainability Committee is primarily responsible for helping the board nominate board of director candidates and recommends potential independent directors for Fubon subsidiaries.

### **2.3.3. Risk Management**

Brozus, (2016). Risk management is formally defined as the process by which an organization assesses and addresses its risks. Historically, the role of risk management has been associated with insurance-buying, occupational safety and health, and legal liability management. In recent years' managers and physicians alike have begun to recognize that organizational risks are pervasive, that these risks are extraordinarily diverse and complex, and that these risks are not just confined to "insurable" or accident-related situations.

Kochetova-Kozloski, Kozloski and Messier (2013) Performing a business process analysis leads to higher assessments of the risk of material misstatement at the process level. With respect to the linkages between risk-related judgments, we find that auditors link their assessments of misstatement risk at the process level to similar assessments at the entity level, while taking into account significant process-level risks. Strategic planning describes the process executives use to identify set goals and objectives for their organization and create a blueprint for the future. Effective strategic planning aligns with the specific needs and behaviors of universities and has the potential to turn what is often rhetoric into reality (Nyaga, 2017). Disaster Management is the coordination and integration of all activities necessary to build, sustain and improve the capability to prepare for, protect against, respond to and recover from threatening or actual natural or human-induced disasters. A risk analyst starts by identifying what could go wrong. The negative events that could occur are then weighed against a probability metric to measure the likelihood of the event occurring.

Brozus, (2016) internal audit helps the organization to achieve its objectives by evaluating, through a systematic and methodical approach, its risk management processes, control and governance by formulating proposals for enhancing its effectiveness. Higher living standards and more extravagant life styles in the more prosperous nations also result in very high economic losses when disasters strike.

McDonald (2014) considers risk assessment as the process of identifying and analysing of relevant risks to the achievement of the entity's objectives and determining the appropriate response. It includes risk identification from external and internal factors, at the entity and the activity levels, risk evaluation, assessment of risk appetite of the organization and the developing responses of all the risks in the organization. There are four types of responses to risk which must be considered; transfer, tolerance, treatment, or termination. The appropriate controls can be either preventive or detective. Haufler (2013), Organization stakeholders have clearly raised expectations for ethical organizational behaviour. Meanwhile, regulators worldwide have increased criminal penalties that can be levied against organizations and individuals Fraud risk management programs, also known as anti-fraud programs, can take many forms, to those who participate in committing fraud. Effective governance processes are the foundation of fraud risk management (Giles, 2012). Organizational structure is a way or method by which organizational activities are divided, organized and coordinated. Randa (2018). The organizations created the structures to coordinate the activities of work factors and control the member performance. Organizations are open systems which transform inputs into outcomes and are continually dependent on and influenced by their environments. Basic issues faced by organizations are those relating to structure, relationships, and a strategic plan provides a roadmap for accomplishing specified goals.

Cooper, Kingyens and Paradi (2014) Financial advisors assess financial risk tolerance mostly contain stereotypes of people, have seemingly unscientific scoring approaches and often treat risk as a one-dimensional concept. In this work, a mathematical tool was developed to assess relative risk tolerance using Data Envelopment Analysis (DEA).Suggests that at the highest levels, goals and objectives should be presented in a

strategic plan that includes a mission statement and broadly defined strategic initiatives. Vona (2012). Organizations' focus on risk assessment usually tends to be more on general operational risks, regulatory risks and financial reporting risks, rather than fraud risks. This can make it difficult to view fraud in isolation and consider industry specific risks and potential fraud schemes as part of the fraud risk assessment. This process of the execution of a strategic plan is what we call strategic management; the day-to-day implementation of the strategic plan. Top management must be clear about, united and committed to their strategy. This commitment is one of the crucial factors in the implementation of strategy. Strategic planning as "the process by which the guiding members of an organization envision its future and develop the necessary procedures and operations to achieve that future .The strategic planning process does not just plan for the future; it also "helps an organization to create its future" (Snyder, Crooks, Johnston, Cerón & Labonte, 2016). Envisioning the future is more than just anticipating it and preparing accordingly.

Risk management is an important field of construction industry and has gained more importance internationally due to the latest researches carried out on a large scale. However, this relatively new field requires more attention to bring some benefit. Construction projects are facing a number of risks which have negative effects on project objects such as time, cost and quality (Gaudenzi & Christopher, 2016). Young suggest that Risk management is formally defined as the process by which an organization assesses and addresses its risks. Historically, the role of risk management has been associated with insurance-buying, occupational safety and health, and legal liability management. The primary responsibility for the prevention and detection of fraud rests with both those charged with governance of the entity and management. It is important that management, with the oversight of those charged with governance, places a strong emphasis on fraud prevention, which may reduce opportunities for fraud to take place, and fraud deterrence, which could persuade individuals not to commit fraud because of the likelihood of detection and punishment.

Gupta (2011), pointed out that Risk Management deals with risks and opportunities affecting value creation or preservation, defined as “a process, affected by an entity’s board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity and manage risks to be within its risk appetite. Regulatory pressure to increase both audit committee financial expertise and board independence has resulted in lower status for audit committees relative to management. This status differential is relevant because expertise and relative status are important determinants of each party’s ability to influence outcomes, particularly when parties face conflicting goals. In order to be useful in the internal decision making process, as well as for the other users, the information provided by the financial and fiscal declarations have to be relevant, comparable and credible. The knowledge, understanding and application of the accounting and fiscal norms, policies and procedures have a distinctive importance in insuring a loyal image of the financial position and performance or for conforming to the basis of real imposing of the fiscal obligations. Risk management capabilities can lead to competitive advantage for a company (Nwogugu, 2015).

There is much evidence that suggests that the current very high level of volatilities in the business world is going to get worse in the years and decades to come. This trend of increasing uncertainties and the resulting risks for businesses, demands a strategic-level attention to risk management. This strategic-level attention is warranted by the fact that proper risk management capabilities can lead to competitive advantage (Elahi, 2013). Most companies trace the origins of a formal planning system to the annual budgeting process where everything is reduced to a financial problem. Emergency planning can be defined as the process of preparing systematically for future contingencies, including major incidents and disasters. The plan is usually a document, shared between participants and stakeholders that specify tasks and responsibilities adopted in the multi-agency response to the emergency.

Risk is part of all our live, as a society, we need to take risks to grow and develop. From energy to infrastructure, supply chains to airport security, hospitals to housing,

effectively managed risks help societies achieve. In our fast paced world, the risks we have to manage evolve quickly (Fuchs, 2011). We need to make sure we manage risks so that we minimize their threats and maximize their potential. In the financial world, risk management is the process of identification, analysis and acceptance or mitigation of uncertainty in investment decisions. Liquidity risk is the risk that a company or bank may be unable to meet short term financial demands. This usually occurs due to the inability to convert a security or hard asset to cash without a loss of capital and/or income in the process (Merna & Al-Thani, 2011). Some organizations go through the motions of developing a plan simply because common sense says every good organization must have a plan. Risk identification is the process of determining risks that could potentially prevent the program, enterprise, or investment from achieving its objectives. It includes documenting and communicating the concern.

Liquidity risk occurs when an individual investor, business or financial institution cannot meet short-term debt obligations. The investor or entity may be unable to convert an asset into cash without giving up capital and/or income due to a lack of buyers or an inefficient market (Mounira & Anas 2009). Liquidity risk is the risk that a company or bank may be unable to meet short term financial demands. This usually occurs due to the inability to convert a security or hard asset to cash without a loss of capital and/or income in the process. A high liquidity value may be key, it is not always important for a company to have a high liquidity ratio (Johnston, 2015). Risk evaluation allows you to determine the significance of risks to the school and then to decide whether to accept a specific risk or take action to prevent or minimize it.

The basic function of the liquidity ratio is to measure a company's capability to settle all current debt with all current available assets. Liquidity is the term used to describe how easy it is to convert assets to cash. The most liquid asset, and what everything else is compared to, is cash. This is because it can always be used easily and immediately (Bragg, 2012). Liquidity risk is financial risks that for a certain period of time a given financial asset, security or is little standardization in how such analyses are implemented. Regulators are primarily concerned about systemic implications of

liquidity risk (Acharya & Ryan, 2016). Liquidity risk is the risk that a company or bank may be unable to meet short term financial demands. This usually occurs due to the inability to convert a security or hard asset to cash without a loss of capital and/or income in the process (Kulikauskas, 2016).

Webb (2016) urges that Credit risk refers to the risk that a borrower may not repay a loan and that the lender may lose the principal of the loan or the interest associated with it. Credit risk arises because borrowers expect to use future cash flows to pay current debts; it's almost never possible to ensure that borrowers will definitely have the funds to repay their debts. Interest payments from the borrower or issuer of a debt obligation are a lender's or investor's reward for assuming credit risk. McNeil, Frey and Embrechts (2015) urge that a credit risk is the risk of default on a debt that may arise from a borrower failing to make required payments. In the first resort, the risk is that of the lender and includes lost principal and interest, disruption to cash flows, and increased collection costs. The loss may be complete or partial. In an efficient market, higher levels of credit risk will be associated with higher borrowing costs. Because of this, measures of borrowing costs such as yield spreads can be used to infer credit risk levels based on assessments by market participants (Kulikauskas, 2016). Credit risk management is the practice of mitigating losses by understanding the adequacy of a bank's capital and loan loss reserves at any given time. Guide to the fundamentals of credit risk analysis and the various types of credit, market, liquidity, and counterparty and settlement risks prevalent in the financial. Liquidity risk is the potential that an entity will be unable to acquire the cash required to meet short or intermediate term obligations. In many cases, capital is locked up in assets that are difficult to convert to cash when it is required to pay current bills. Financial crisis has shown that liquidity risk for Islamic and conventional financial institutions has become more important and has been noticed in most of the current banking literature. The liquidity risk premium is the compensation that a lender receives for investing funds in something that is difficult to sell. A liquidity risk premium is an additional return on bonds that are not actively traded. Illiquid bonds cannot be easily bought and sold at fair market value (Klinger,

2016). Credit risk management is important to financial institutions which provide loans to businesses and individuals

Credit risk management allows predicting and forecasting and also measuring the potential risk factor in any transaction. The banks management can also make use of certain credit models which can act as a valuable tool which can be used to determine the level of lending measuring the risk (Hurley & Adebayo 2017). Credit risk is the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms. Generally, the credit risk is associated with traditional lending activities of banks and it is simply described as risk a loan not being repaid in part or in full (Rinkus, 2015) urges that the study is motivated by the damaging effect of classified assets on bank capitalization and would be of utmost relevance as it addresses how credit risk affects banks' profitability using a robust sample and the findings would serve as the basis to provide policy measures to the various stakeholders.

Credit risk is by far the most significant risk faced by banks and the success of their business depends on accurate measurement and efficient management of this risk to a greater extent than any other risk. Credit risk as losses from the refusal or inability of credit customers to pay what is owed in full and on time (Szambelańczyk & Marcinkowska, 2016). Credit risk presents a substantial threat to business organizations. As such, risk managers understand the importance of identifying and quantifying the various sources of credit risk. It arises mainly from direct lending and certain off-balance sheet products such as guarantees, letters of credits, foreign exchange, forward contracts & derivatives and also from the bank's holding of assets in the form of debt securities. It may take the form of delivery or settlement risk. It is critical to bank survival or failure because banks traditionally earn their huge profits from interest on their risk exposures. Rojas (2016), The management of credit risk is a critical component of a comprehensive approach to risk management and is essential to the long-term success of a commercial bank examined the relationship of poor credit risk management and bank failures in Nigeria using survey research design. A key component of this analysis consists of building a full picture of your customers. Credit risk analysis of your

customers and prospects helps mitigate the risk of default and nonpayment. Schafer (2015) states that the results from the Chi-square statistics revealed that weak corporate governance accelerates bank failures and the credit risk management function is to the greatest extent the most diverse and complex activity in banking business. The author concludes that poor credit risk management influences bank failures. Credit risk is most simply defined as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms. Credit risk refers to the probability of loss due to a borrower's failure to make payments on any type of debt. Okay (2017), Credit risk management is the practice of mitigating losses by understanding the adequacy of a bank's capital and loan loss reserves at any given time – a process that has long been a challenge for financial institutions. Akan, (2017). Lending has been and still is the mainstay of financial institutions and this is more true to emerging economies of developing countries where capital markets are not yet well developed. To most of the transition economies, lending activities has been a controversial and difficult matter.

Operational risk is "the risk of a change in value caused by the fact that actual losses, incurred for inadequate or failed internal processes, people and systems, or from external events (including legal risk), differ from the expected losses"(Al-Tamimi, Hussein, Miniaoui & Elkelish, 2015). The Risk Management Association (RMA) has been at the forefront of the development of the operational risk discipline in financial institutions since 2003. Operational risk is: the risk of loss resulting from inadequate or failed internal processes, people, and systems, or from external events, but is better. Banks and financial institutions are undergoing a sea change and today face an environment marked by growing consolidation, rising customer expectations, increasing regulatory requirements, proliferating financial engineering, uprising technological innovation and mounting competition (Alamad, 2017). Financial Innovation and Engineering in Islamic Finance. This has increased the probability of failure or mistakes from the operations point of view – resulting in increased focus on managing operational risks. Operational risk is the risk not inherent in financial, systematic or market-wide risk. It is the risk remaining after determining financing and systematic risk, and includes risks resulting from breakdowns in internal procedures, people and systems. Operational risk is

the risk not inherent in financial, systematic or market-wide risk. It is the risk remaining after determining financing and systematic risk, and includes risks resulting from breakdowns in internal procedures, people and systems (Pérez, 2015). The risk that a firm's internal practices, policies and systems are not adequate to prevent a loss being incurred, either because of market conditions or operational difficulties. Risk evaluation is used to make decisions about the significance of the risks to the organization and whether each specific risk should be accepted or treated (Remolina, 2016). The need to measure operational risk comes from the recommendations of the Basel committee, which require banks to allocate an adequate amount of capital to cover their operational risk. Information systems occupy a central position in today's markets, and therefore are at the heart of concerns whenever operational risk control is being implemented. The risk that a firm's internal practices, policies and systems are not adequate to prevent a loss being incurred, either because of market conditions or operational difficulties. Asset management is the direction of a client's cash and securities by a financial services company, usually an investment bank. The institution offers investment services along with a wide range of traditional and alternative product offerings that might not be available to the average investor (Olson & Wu, 2015). The asset management market faces new challenges every day, including fee compression, product complexity and market expansion. Asset Management is a team within a financial firm that is dedicated to managing the assets (cash, investments etc.) of clients. The Asset Management service is usually offered to high net-worth individuals, sovereign wealth funds, pensions and corporations. The firm will typically charge a management fee (a fixed percentage of total funds managed) and sometimes take a percentage of the profits although this blurs the line between an asset management fund and a hedge fund (Murray, 2015).

The first step in preparing a risk management plan is to identify potential risks to your business. Understanding the scope of possible risks will help you develop realistic, cost-effective strategies for dealing with them (Richards, 2017). Risk identification is the first step in the proactive risk management process. It provides the opportunities, indicators, and information that allows an organization to raise major risks before they adversely

affect operations and hence the business. Risk identification is to minimize the negative impact of project hiccups and threats, and to maximize the positive impact of project opportunities ( Honzírková, 2017)

Risk Analysis is a process that helps you identify and manage potential problems that could undermine key business initiatives or projects. Risk analysis is the process of identifying and analyzing potential issues that could negatively impact key business initiatives or critical projects in order to help organizations avoid or mitigate those risks. Risk analysis is the review of the risks associated with a particular event or action. It is applied to projects, information technology, security issues and any action ( Bisschops & Beunen, 2018).

Once you have established the level of risk, you then need to create a rating table for evaluating the risk. Evaluating a risk means making a decision about its severity and ways to manage it. Risk evaluation allows you to determine the significance of risks to the school and then to decide whether to accept a specific risk or take action to prevent or minimize it. Having analyzed the risks, evaluating and prioritizing these risks is undertaken. The evaluation will generate a list of risk levels (ie, low, medium and high). The levels will then inform a risk action priority ranking. These measures can be completed on the Risk Register (Negev, Paz, Clermont, Shalom, Yeger & Green, 2015).

#### **2.3.4. Financial Controls**

Financial controls are the means by which an organization's resources are directed, monitored, and measured. Financial controls play an important role in ensuring the accuracy of reporting, eliminating fraud and protecting the organization's resources, both physical and intangible (Musau, 2017). A control procedure may be performed by either an individual or as part of an automated process within a financial system. A control procedure is effective only if there is adequate separation of duties between

individuals performing the different control responsibilities in the process. Financial controls are the means by which an organization's resources are directed, monitored, and measured. Financial controls play an important role in ensuring the accuracy of reporting, eliminating fraud and protecting the organization's resources, both physical and intangible (Abdul, 2014). Growing your business will require establishing a solid foundation of internal controls including accounting, auditing, purchasing and damage control planning Internal Controls in Financial Reporting and Safeguarding Plan Assets (Arnett, 2016). Effective controls reduce the risk of asset loss and help ensure that plan information is complete and accurate, financial statements are reliable, and that the plan complies with laws and regulations. Financial control allows the company to evaluate, in a continually objective and systematic manner, the variances that are generated on previously established strategic and operational lines (Alhawatmeh, 2016). Effective internal controls are required to support achievement of an institution's objectives. The complexity and range of an institution's business processes and systems means that there is a need to ensure that internal controls are designed effectively, are proportionate, and are operationally effective.

Strong financial controls help internal auditing and the operations teams have confidence in the numbers being reported to management and help protect the organization's assets. A control procedure may be performed by either an individual or as part of an automated process within a financial system. Effective controls reduce the risk of asset loss and help ensure that plan information is complete and accurate, financial statements are reliable, and that the plan complies with laws and regulations (Papa, Peters & Schacht, 2016). Any financial performance process becomes meaningless if a strategy to control it is not defined and implemented based on objectives consistent with the current state of the company and its upcoming projects. Growing your business will require establishing a solid foundation of internal controls including accounting, auditing, purchasing and damage control planning (De Waal, 2013).

Ross, (2015). The procedures for recording your business expenses such as rent, electricity, telephone, insurance and motor vehicle expenses are essentially the same as

those for recording purchases. A control procedure is effective only if there is adequate separation of duties between individuals performing the different control responsibilities in the process. The importance of financial control multiplies concerning the investment chapter, which allows you to: Evaluate policies related to investment decisions (Gasser, 2018).

When assessing the current state of an organization's financial controls, begin by determining which financial processes pose the most risk. One way internal auditors can assess financial controls is by looking at all of the functions and processes in accounting and finance and asking if a process were "broken" and activities were not getting done correctly, how much trouble would that cause the organization (Landheer, 2013). Differentiate between investments in immediate and short-term assets and mid- to long-term ones. Manage debt related to such investments. Once auditors have performed their risk assessment and have identified the areas that they feel are at risk within their organization, they need to assess the controls currently in place. Review the policies and procedures for each of those areas, interviewing staff at all levels within the particular areas and observing them performing the various functions (Franzel, 2014). After documenting the current state, auditors should determine whether the controls are adequate to mitigate or protect the organization from the risks, or if there are weaknesses or gaps that need to be addressed and corrected.

The Importance of Internal Controls in Financial Reporting and Safeguarding Plan Assets. Effective controls reduce the risk of asset loss and help ensure that plan information is complete and accurate, financial statements are reliable, and that the plan complies with laws and regulations. Most importantly, due to sound financial system, financial institutions play a significant role in economic development in the country. The development of any country depends on the economic growth the country achieves over a period of time. Economic growth deals about investment and production and also the extent of Gross Domestic Product in a country financial system enables the state and central governments to raise both short-term and long-term funds through the issue of bills and bonds which carry attractive rates of interest along with tax concessions (Randa, 2018). The presence of financial system generates more employment opportunities in the

country. The economic development of a country will be rapid when more ventures are promoted which require modern technology and venture capital. Venture capital cannot be provided by individual companies as it involves more risks.

Ottinger and Bowie (2015) urge that Strong financial controls will allow for reliable financial reporting throughout the organization, which will allow for more solid financial management of the operation. Strong controls also provide greater peace of mind that the accounting data is correct and the money is better protected from potential frauds. Van Helden, Jan and Ron Hodges (2015.) argued that the accrual basis of accounting provides a better picture of a company's profits during an accounting period. Kaynak, Mockler and Dologite (2014) states asset management is a systematic process of deploying, operating, maintaining, upgrading, and disposing of assets cost-effectively or ineffectively. The term is most commonly used in the financial world to describe people and companies that manage investments on behalf of others. Strong financial controls help internal auditing and the operations team has confidence in the numbers being reported to management and help protect the organization's assets. Many people believe that internal auditors should be involved in systems development projects in order to ensure that newly developed systems are auditable and have effective controls (Richards, 2017). Internal control principles should also ensure that the company is complying with laws and regulations. The development of internal control principles should depend on the needs, size and business operations of the company. The goal of internal control system is to “ensure that the Group’s operations are efficient and profitable, that its business risk management (Reuvid, 2010) is adequate and appropriate, and that the information created is reliable (Okay, 2017). Internal audit provides the most comprehensive assurance about controls, risk management and governance based on the highest level of objectivity and independence. Internal audit and internal control may seem similar at the first look. Both departments work towards improvements of processes and fulfilling the organization’s goals and objectives.

Asset management is the direction of a client's cash and securities by a financial services company, usually an investment bank. The institution offers investment services

along with a wide range of traditional and alternative product offerings that might not be available to the average investor. Liaw (2011) urged that keeping track of the assets of the company is an important task that can save companies money and time. Asset management is the process of maximizing the assets of the company to provide the best returns to stakeholders. Asset management is the process of making best use of an organization's assets in order to maximize shareholder value and to provide the best possible returns to other stakeholders in the organization. Davenport (2013), asset management is a systematic process of deploying, operating, maintaining, upgrading, and disposing of assets cost-effectively.

The term is most commonly used in the financial world to describe people and companies that manage investments on behalf of others. Lehtoviita (2016), the purpose of the Asset Management Function is to provide resources and expertise to support the acquisition, in-service support and disposal of the physical assets required by the organization. Financial systems are developed and implemented with due regard to generally accepted financial control standards, and are consistent with government business and systems strategic direction.

Schmidt, Zikmund, Babin and Griffin (2013), states that financial systems requires a deep understanding of all aspects of the Finance function and of the business itself. Deloitte's Financial System Implementation Solution Set Helps Finance leaders mitigate risk while improving the effectiveness and efficiency of financial statements and internal controls. Omojiade (2014), financial control system of well-defined processes is not only about control or compliance; it is also about consistently striving to do a little better. Financial systems help inform your organization's planning and action plans. Financial systems also help you track and manage the resources required to successfully complete your work. A financial system (within the scope of finance) is a system that allows the exchange of funds between lenders, investors, and borrowers. Bengtzen (2017), financial systems operate at national, global, and firm-specific levels. Financial systems, i.e. financial intermediaries and financial markets, channel funds from those who have savings to those who have more productive uses for them. They perform two

main types of financial service that reduce the costs of moving funds between borrowers and lenders, leading to a more efficient allocation of resources and faster economic growth.

Rao (2015), pointed out that financial systems facilitate risk-sharing by reducing information and transactions costs. If there are costs associated with the channeling of funds between borrowers and lenders, financial systems can reduce the costs of holding a diversified portfolio of assets. Intermediaries perform this role by taking advantage of economies of scale, markets do so by facilitating the broad offer and trade of assets comprising investors' portfolios. Financial systems can reduce information and transaction costs that arise from an information asymmetry between borrowers and lenders. A financial sustainability plan will also include other types of resources you might obtain, such as in-kind support, volunteer staff, or shared resources from other organizations. It may even include convincing another organization to take on a project you started (Johnson, Adams Becker, Estrada &Freeman, 2015).

Financial control is concerned with the policies and procedures framed by an organization for managing, documenting, evaluating and reporting financial transactions of an organization. In other words, financial control indicates those tools and techniques adopted by a concern to control its various financial matters (Makori, 2015). Finance is important for any organization and financial management is the science that deals with managing of finance; however, the objectives of financial management cannot be achieved without the proper controlling of finance.

Haliah (2015) revealed out that Effective accountability requires a statement of goals, transparent decision-making and relationships, and honest reporting of resource use and achievements, which can emphasize the honesty and efficiency with which resources are used or the impact and effectiveness of the work. Solomon (2015), pointed out that Transparency is an indispensable aspect of accountability, effective accountability requires a statement of goals, transparent decision-making and relationships, and honest reporting of resource use and achievements, which can emphasize the honesty and efficiency with which resources are used or the impact and effectiveness of the work.

Capital adequacy is a ratio that can indicate a bank's ability to maintain equity capital sufficient to pay depositors whenever they demand their money and still have enough funds to increase the bank's assets through additional lending. Regulators try to ensure that banks and other financial institutions have sufficient capital to keep them out of difficulty (Kim, 2015). This not only protects depositors, but also the wider economy, because the failure of a big bank has extensive knock-on effects. The major cost of capital adequacy regulations is the constraint on banks' flexibility in choosing financing arrangements that maximize profit. If banks must maintain a capital-asset ratio, then they cannot take on too much debt, and must issue equity instead (Busch & Rijn, 2016). Capital adequacy ratios are a measure of the amount of a bank's capital expressed as a percentage of its risk weighted credit exposures. Capital adequacy ratios serve to promote the stability and efficiency of the financial system by reducing the likelihood of banks becoming insolvent. When a bank becomes insolvent this may lead to a loss of confidence in the financial system, causing financial problems for other banks and perhaps threatening the smooth functioning of financial markets (Wachter, 2016). Regulators endeavor to ensure that financial institutions, banks and investment firms have enough capital to ensure their businesses remain stable. Capital adequacy ratio as may be used to determine the threshold at which the regulator intervenes in the management of the bank failing. Capital adequacy influences the bank performances which enhances its profitability. Capital adequacy is the amount of capital a bank or other financial institution has to hold as required by its financial regulator (Vlad, 2016). This is usually expressed as a capital adequacy ratio of equity that must be held as a percentage of risk-weighted assets. Profitability is measured with an "income statement. This is essentially a listing of income and expenses during a period of time (usually a year) for the entire business. A company's growth measured by growth rates that are designed to indicate the firm's ability to maintain its market share when the economy and industry are in a period of expansion. Most representative indicators that reflect a company's growth would be, in the authors' view the following: turnover, net profit, earnings per share and dividend yield (Lowry & Makos, 2018). The financial performance (profitability) of commercial banks in Saudi Arabia. The authors employed

a regression model to test the effect of business risk, concentration and market size on the profitability of the bank measured in terms of return on assets (ROA) and return on equity (ROE), and earnings per share (EPS). Determinants of bank profitability can be split between those that are internal and those that are external.

### **2.3.5. Financial Stability of MFI**

The ability of Micro Finance Institutions to secure external funding beyond deposits and financial stability of MFI equity is a key variable determining the size of the successful. Thus, our results suggest that microfinance is subject to similar financial stability challenges that have been observed in the traditional banking sector the issue of financial stability, such as the Financial Stability Oversight Council in the United States or the European Systemic Risk Board (ESRB) in the European Union. Financial stability now depends on how well financial institutions adapt to this new era, according to the IMF (Cour-Thimann & Winkler 2012). Since the crisis, enhanced regulation and oversight have strengthened banks' capital and liquidity buffers, making them safer. "Financial instability" encapsulates several different kinds of such instability, ranging from banking crises to stock market crashes. Hence, different forms of instability affect different parts of the financial system and may also differ in their consequences (Nachane, 2014). A financial system is in a range of stability whenever it is capable of facilitating (rather than impeding) the performance of an economy and of dissipating financial imbalances that arise endogenously or as a result of significant adverse and unanticipated events". Financial stability would not obtain if for any reason, the financial system is unable to perform its functions (Kivuvo & Olweny, 2014). Indeed, stability of the system requires that the system develops and retains the ability and resilience to absorb shocks. We should note here that shocks could be either positive or negative. Internal determinants of bank profitability can be defined as those factors that are influenced by the bank's management decisions and policy objectives. External determinants of bank profitability are concerned with those factors which are not influenced by specific bank's decisions and policies, but by events outside the influence of the bank. The effects of inflation can be substantial and undermines the

stability of the financial system and the ability of the regulator to control the solvency of financial intermediaries. Higher capital-to-assets ratio may also cause higher profitability if the higher capital reduces risk-related barriers to entry or expansion into some profitable product lines (Rashid, Yousaf & Khaleequzzaman, 2017).

Bragg (2012) urges that Profitability ratios are a class of financial metrics that are used to assess a business's ability to generate earnings compared to its expenses and other relevant costs incurred during a specific period of time. For most of these ratios, having a higher value relative to a competitor's ratio or relative to the same ratio from a previous period indicates that the company is doing well. Profit is an absolute number determined by the amount of income or revenue above and beyond the costs or expenses a company incurs. It is calculated as total revenue minus total expenses and appears on a company's income statement. No matter the size or scope of the business or the industry in which it operates, a company's objective is always to make a profit. Profitability is closely related to profit, but it is the metric used to determine the scope of a company's profit in relation to the size of the business. Profitability is a measurement of efficiency – and ultimately its success or failure (Davis, (2016). It is expressed as a relative, not an absolute, amount.

Profitability is the primary goal of all business ventures. Without profitability the business will not survive in the long run. So measuring current and past profitability and projecting future profitability is very important. Whether you are recording profitability for the past period or projecting profitability for the coming period, measuring profitability is the most important measure of the success of the business (Fields, 2016). A business that is not profitable cannot survive. Conversely, a business that is highly profitable has the ability to reward its owners with a large return on their investment. Although the pride of ownership and career satisfaction are healthy goals, the most likely reason you started your business was to generate profits. This guide introduces you to several methods for analyzing your company's operations and calculating the profitability of your business (Grant, 2016).

Profitability ratios compare income statement accounts and categories to show a company's ability to generate profits from its operations. Profitability ratios focus on a company's return on investment in inventory and other assets. These ratios basically show how well companies can achieve profits from their operations. Profitability is, of course, critical to a company's long-term survivability. A company's net profit is the revenue after all the expenses related to the manufacture, production and selling of products are deducted, and Profit is “money in the bank (Grant, 2016) every firm is most concerned with its profitability. One of the most frequently used tools of financial ratio analysis is profitability ratios, which are used to determine the company's bottom line and its return to its investors. Profitability measures are important to company managers and owners alike. An assessment of the true worth of a business's performance as measured by its profits would also take account of the general state of the economy: are businesses in general prospering or is it a time of recession. They would also take into account any unusual circumstances such as, for instance, the business being subject to the emergence of a new competitor (Doyle, 2013).

Net worth is the amount by which assets exceed liabilities. Net worth is a concept applicable to individuals and businesses as a key measure of how much an entity is worth. Net worth is an important determinant of the value of a company, considering it is composed primarily of all the money that has been invested since its inception, as well as the retained earnings for the duration of its operation. Net worth can be used to determine creditworthiness because it gives a snapshot of the company's investment history (Brun, Chai, Elgg, Esteban, van Gastel, Körting & Solera 2013). Net worth of one million dollars and was able to obtain a loan twice that amount for a new house. As long as his other debts remain low, he will be able to make the payments. Net worth or wealth refers to an individual's net economic position; the value of the individual's assets minus liabilities. Net worth is the amount by which assets exceed liabilities. Net worth is a concept applicable to individuals and businesses as a key measure of how much an entity is worth (Malokofsky, 2012). A consistent increase in net worth indicates good financial health; conversely, net worth may be depleted by annual operating losses or a substantial decrease in asset values relative to liabilities. Your net worth is the amount

by which your assets exceed your liabilities. In simple terms, net worth is the difference between what you own and what you owe (Beltratti, Spear & Szabo, 2013). If your assets exceed your liabilities, you have a positive net worth. Conversely, if your liabilities are greater than your assets, you have a negative net worth. Your assets are anything of value that you own that can be converted into cash. Examples include cash, real estate and personal property (Gitman, Joehnk & Billingsley, 2015). A consistent increase in net worth indicates good financial health; conversely, net worth may be depleted by annual operating losses or a substantial decrease in asset values relative to liabilities.

Your liabilities, on the other hand, represent your debts, such as loans, mortgages, credit card debt, medical bills, utilities and student loans. Net worth is probably the single most important measure of personal wealth, which is why knowing your net worth is so important. This is particularly true if your plan is to increase your wealth in order to achieve financial independence and reach retirement. A business reports assets, liabilities and equity on its balance sheet (Plagnol, 2011). Net worth is a calculation of the assets remaining after accounting for all liabilities. However, net worth is not synonymous with market value because all items reported on the balance sheet are reported at historical cost as opposed to market value. Net worth is often used by banks when companies seek financing, as net worth provides an indication of the value retained by the company from owner investments (Fridson, Martin & Fernando Alvarez, 2011). Net worth for a business, this is the total amount of all assets minus all liabilities, as stated in the balance sheet. The information in the balance sheet may be stated at the original price of the asset or liability, which may differ from the amount at which it could potentially be disposed of. A “net worth” statement or “balance sheet” is designed to provide you with a picture of the financial soundness of your business at a specific point in time (de-Ramon, Iscenko, Osborne, Straughan & Andrews, 2012). Net worth statements are often prepared at the beginning and ending of the accounting period (i.e. January 1), but can be done at any time. The statement records the assets of the business and their value, and the liabilities or financial claims against the business (i.e. debts). The amount by which the value of the assets exceeds the liabilities is the net worth

(equity) of the business. The net worth reflects the amount of ownership of the business by the owners (Needles, Powers & Crosson, 2013). A dynamic system is either stable or unstable. In contrast, in a non-linear setup, a system can be globally stable while simultaneously being locally unstable. It is this latter characteristic that has the potential to be relevant in macroeconomics given that in the long run the economy appears rather stable, while in the short run it exhibits substantial volatility (Nguyen, 2016). When you see financial trends in black and white on your net worth statements, you are forced to confront the realities of where you stand financially. Reviewing your net worth statements over time can help you determine 1) where you are, and 2) how to get where you want to be. This can give you encouragement when you are heading in not on track. The right direction (i.e. reducing debt while increasing assets) and provide a wake-up call.

Regardless of your financial situation, knowing your net worth can help you evaluate your current financial health and plan for your financial future. By knowing where you stand financially, you will be more mindful of your financial activities, better prepared to make sound financial decisions and more likely to achieve your short-term and long-term financial goals.

Kleftouri (2014) asserted that a combination of responsibilities for monetary policy payment and settlement systems, and prudential supervision makes a central bank particularly well-equipped for its role as a ‘guardian of financial stability Hatting (2015), very wealthy people and highly profitable institutions that have the means to engage in this kind of investment as it is considerably riskier than other type of investing. A working knowledge of Excel is vital for most office based professionals today, and stronger Excel skills can open the door to promotion and leadership opportunities.

Kilponen, Laakkonen and Vilmunen (2012) Return on assets (ROA) is a financial ratio that shows the percentage of profit a company earns in relation to its overall resources. It is commonly defined as net income divided by total assets. Net income is derived from the income statement of the company and is the profit after taxes. Return on assets

measures a company's net earnings in relation to all of the resources it had at its disposal; the shareholders' capital plus short and long-term borrowed funds. Thus, return on assets is the most stringent and excessive test of return to shareholders (Prasad, 2016). The return on assets ratio, often called the return on total assets, is a profitability ratio that measures the net income produced by total assets during a period by comparing net income to the average total assets.

## **2.4. Empirical Review**

This section covers empirical evidence or literature on the relationship between compliance and financial stability of Micro Finance Institutions in Rwanda. Measures of performance in this study include: Audit Process, Governance, Risk Management and Financial Controls. The empirical literature then will cover the impact of the above mentioned indicators of performance. In Rwanda, the introduction of UMURENGE SACCOs, in conjunction with the expansion of bank and MFI branches, the introduction of agent banking and the modernization of financial services such as mobile banking, ATMs and mobile money, have all helped to drive financial inclusion in Rwanda (AFI 2014).

After the 1994 Genocide in Rwanda, the microfinance sector has known a dramatic progress through the support of relevant international and non-government organizations especially for humanitarians. These NGOs helped people by support of daily use of equipment, foods but had also the microcredit teaching program (Harelimana, 2017). For the microfinance institutions which want the sustainability resists to deal with the poor because their income is not only low but also irregular and are therefore more vulnerable to external shocks and uncertainties of their cash flows (FATF 2011). Thus it has impact on financial performance of MFIs in Rwanda.

Kioko (2014) studied the effect of corporate governance on the financial performance of companies listed at the Nairobi Securities Exchange using descriptive research design and the study findings concluded that on the overall corporate governance had a positive impact on financial performance of these firms and that the mechanisms individually, had mixed outcomes on their impact on financial performance. Moenga (2015), looked

at the various governance mechanisms and their impact on firm's financial performance of Tea factories in Kenya using descriptive research design ascertained that there is a positive relationship between corporate governance and firm's financial performance. The findings also suggested that power separation has a significantly positive impact on performance while board composition and board size had a significantly negative impact on performance. Mwangi,(2014) and Ngugi, (2014) Study on the effects of financial innovation on the growth of Micro Finance Institutions (MFIs) in Kenya, sought answers to the two research questions namely; which financial innovations were adopted by Micro Finance Institutions in Kenya, and how these affected the growth of MFIs in Kenya. The research findings showed that most MFIs have innovated new services like mobile banking, business accounts, SME loans, school fee loans, financial trainings and partnerships. Other MFIs have networked their offices, opened new branches and innovated new products in a bid to grow their firms. Besides, there was strong positive correlation between financial growth and reason like addressing clients' needs, clients' retention and reducing transaction time. Mphaka (2017), specified panel data model using the welfarists' and institutionalists' approach separately on 47 MFIs and 4 panel periods in East Africa and found: the welfarist's approach specification revealed trade-off between profitability and outreach while financial viability and outreach showed no tradeoff. The specification based on institutionalists' approach supported no tradeoff between depth and viability. The current paper differs from Kipsha and Zhang's in the specific countries covered, specific panel model used, variable selection, and length of panel period.

Aborbie, (2015), examined the impact of firm-specific characteristics and corporate governance mechanisms on narrative risk disclosures. Findings, the empirical analysis shows that large firms are more likely to disclose more risk information in the narrative sections of interim reports. In addition, the analysis shows that industry activity type is positively associated with levels of narrative risk disclosure in interim reports. Finally, the analysis shows statistically insignificant impact of other firm-specific characteristics (liquidity, gearing, profitability, and cross-listing) and corporate governance mechanisms on narrative risk disclosure. Serdar (2017), puts out that model a firm's

demand for liquidity to develop a new test of the effect of financial constraints on corporate policies. The effect of financial constraints is captured by the firm's propensity to save cash out of cash flows (the cash flow sensitivity of cash). We hypothesize that constrained firms should have a positive cash flow sensitivity of cash, while unconstrained firms' cash savings should not be systematically related to cash flows.

A considerable number of empirical studies (Costello, 2011) investigated the impact of internal controls (in the areas of financial controls and reporting) on NBFs/Banks. However, this exercise would contribute a lot in gaining a better understanding of the factors that affect the effectiveness of internal control and the quality of the financial reporting. Financial control activities refer to all policies and procedures adopted by the management of an entity to aid in achieving management objectives. According to Walter Reckless (1961)'s control theory, both inner and outer controls work against deviant tendencies. People may want at least some of the time to act in deviant ways, but most do not. They have various restraints: internal controls, such as conscience, values, integrity, morality, and the desire to be a “good person”; and outer controls, such as police, family, friends, and religious authorities.

Hastings, Madrian, and Skimmyhorn (2013) reviewed on financial literacy, financial education, and consumer financial outcomes. Consider how financial literacy is measured in the current literature, and examine how well the existing literature addresses whether financial education improves financial literacy or personal financial outcomes. Discussed the extent to which a competitive market provides incentives for firms to educate consumers or offer products that facilitate informed choice.

Byard, Li and Yu (2011) examined the effect of the mandatory adoption of International Financial Reporting Standards (IFRS) by the European Union on financial analysts' information environment. To control for the effect of confounding concurrent events, we use a control sample of firms that had already voluntarily adopted IFRS at least two years prior to the mandatory adoption date. Analysts' absolute forecast errors and forecast dispersion decrease relative to this control sample only for those mandatory IFRS adopters domiciled in countries with both strong enforcement regimes and

domestic accounting standards that differ significantly from IFRS, Tahir and Alifiah (2015) Research on corporate liquidity management practices has mainly focused on the trade-off between the potential costs and benefits of holding cash. However, in order to improve the firm financial performance, much remained to be understood, particularly, the cash holding behaviour of firms. Furthermore, this study reveals that contemporary literature in the area of cash management may overlook the industry and institutional context of firms at sector level. In addition, sectors are important to study due to their unique characteristics and heterogeneity in the financial environment.

Cohen, Cornett, Marcus and Tehranian (2014) put forward that earnings management in bank financial statements has little bearing on downside risk during quiet periods, but seems to have a big impact during a financial crisis. Banks demonstrating more aggressive earnings management prior to 2007 exhibit substantially higher stock market risk once the financial crisis begins as measured by the incidence of large weekly stock price “crashes” as well as by the pattern of full-year returns. Bonaimé, Hankins and Harford (2014) suggest that both risk management and payout decisions affect a firm’s financial flexibility the ability to avoid costly financial distress as well as underinvestment. A more flexible distribution, favouring repurchases over dividends, is negatively related to financial hedging within a firm, consistent with financial flexibility in pay-out decisions and hedging being substitutes.

Garcia, (2013) recommends that recent empirical evidence based on surveys and experimental activities within the fields of behavioural finance and financial education has offered economists new empirically based insights into how individuals use information in making financial decisions. Specifically, the importance of information in financial decisions may be reduced or eliminated by psychological aspects of the individual, such as a state of overconfidence that is individual or shared with a group, or by the individual's limited ability to process complex and abundant information Beatty, and Liao, (2014), after providing a brief background of the theoretical models and accounting and regulatory institutions underlying the bank accounting literature, we review three streams of empirical research. Specifically, we review studies associating

bank financial reporting with the valuation and risk assessments, associating bank financial reporting discretion with regulatory capital and earnings management, and examining banks' economic decisions under differing accounting regimes. The adoption of the International Financial Reporting Standards (IFRSs) in the UK and concentrates in the switch from the UK GAAP to IFRSs. The study seeks to determine whether IFRS adoption leads to higher quality accounting numbers. By examining company accounting measures reported under the UK GAAP and IFRSs, the study investigates the earnings management potential under IFRSs. The study indicates that the implementation of IFRSs generally reinforces accounting quality. The findings show that the implementation of IFRSs reduces the scope for earnings management, is related to more timely loss recognition and leads to more value relevant accounting measures. Beaver, Correia, and McNichols, (2012). financial reporting attributes is associated with financial ratios that are less informative in predicting bankruptcy. Furthermore, time-series tests reveal a decline in the predictive ability of financial ratios for bankruptcy and document that this decline is associated with our measures of financial reporting attributes.

Homber and Bui, (2013). a considerable amount of research has investigated the linkage between top management team (TMT) characteristics and firm financial performance. While these data are reliable and accessible, findings across studies are not consistent. Meta-analysis of several TMT indicators and firm financial performance provides modest support for direct relationships but indicates moderating influences. Further meta-analysis and a confirmatory factor analysis enrich these findings by examining potential moderating and intervening factors.

## **2.5. Critical Review of Literature**

Financial control is achieved by designing systems and procedures to suit the specific needs of an organization. The interface between management control and information technology is an underdeveloped research area with a knowledge gap concerning its implications for financial performance (Fallahi, Kazemi & Maleki, 2014). Effectiveness of internal control system helps external auditors to rely on the work of internal auditors

and thereby improve their effectiveness (Cohen & Sayag, 2010). Therefore, internal control systems are integral component of the management processes of a public sector which should be established in order to provide reasonable assurance that the operations are carried out efficiently and effectively.

The author describes clearly the area of study, provides the study population of eighteen MFI and states the usage of longitudinal research design with 2012 as the baseline. The researcher stated usage of primary and the way it was presented. The researcher failed to state the sampling technique, computation of the sample size and analysis of primary data. Usage of inferential statistics was not clearly stated and there is lack of econometric model to show the relationship between variables and establish the predictive nature of the information. The Importance of Internal Control in Financial Reporting and Safeguarding Plan Assets, Internal controls may change or fail to be performed, or the processes and procedures for which controls were created may change, rendering them less effective or ineffective (undy & Owen, 2013). Effective monitoring helps to ensure your system of internal control continues to provide the protections you envisioned. A failure to maintain effective internal control over financial reporting could result in a material misstatement of our financial statements or otherwise cause us to fail to meet our financial reporting obligations.

This, in turn, could result in a loss of investor confidence in the accuracy and completeness of our financial reports, which could have an adverse effect on our business, financial condition, operating results and our stock price, and we could be subject to further stockholder litigation and the costs associated. The concepts and model highlighted the controls regarding the performance of Public Micro Finance Institutions. Finally, the researcher indicates the gap analysis and conceptual frame work of the study. However, the study indicates poor internal controls that lead poor misappropriations, corruption, organizational fraud and fraudulent financial statement.

## **2.6. Summary**

This chapter specially looked at the literature on performance of Micro Finance Institutions. The researcher indicated the effect of The Policeman Theory on Financial Stability of Micro Finance Institutions in Rwanda, the effect of stakeholder on financial stability of Micro Finance Institutions in Rwanda, the effect of Risk Management on Financial Stability of Micro Finance Institutions in Rwanda and the effect of Financial Controls on Financial Stability of Micro Finance Institutions in Rwanda. The above chapter reviewed the various theories that explain the independent and dependent variables. The reviewed theories are then critiqued for relevance to specific variables. Specifically, the reviewed theories include police man theory, stakeholder theory, corporate risk management theory and theory of financial control. The policeman theory is to add credibility to the financial statements, stakeholder is to gain a better understanding of the evolution of governance systems in organizations and to appreciate the importance of ethics in decision making and management, corporate risk management Theory it influences on the company's value and financial control theory is to differentiate its functions within the system of the financial control and governance. The chapter also explores the conceptualization of the independent and the dependent variables by analyzing the relationships between the two set of variables. Specifically, the conceptual framework is constructed in line (Cilliers, 2017). In addition; an empirical review was conducted where past studies both global and local are reviewed in line with the following criteria, title, scope, methodology resulting into a critique. It is from these critiques that the research gap was identified.

## **2.7. Research Gaps**

This study investigated the relationship between quality Compliance and Financial Stability of Micro Finance Institutions in Rwanda, specifically the study sought to examine, the effect of Audit Process on Financial Stability, Governance on Financial Stability, Risk Management on Financial Stability and Financial Controls on Financial Stability of Micro Finance Institutions in Rwanda. If the business model is not solid or is fraught with problems, the business is inherently at risk (Prasad, 2018). A bad business

model can ruin a good company. Businesses need to thoroughly understand what their customers want, and how to efficiently produce and deliver their products or services. The key to avoiding a bad business model is to invest the time and money in solid research and planning. Some entrepreneurs go into business because they are passionate about the product or service they want to offer. While having a passion is extremely important to making a business successful, unfortunately, passion alone isn't enough (Koteles, Casanovas & Vernis 2013). A critical review of past literature showed that several conceptual and contextual research gaps existed in the discourse of factors causing financial distress in MFI. For instance, the studies by Reed (2004), Cooper, Kingyens and Parade (2014), Vona (2012), Bonaimé, Hankins, and Harford (2014), McNeil, Frey and Embrechts (2015). However, all the above studies were carried out in developed and emerging countries such as USA, Italy and Israel. It is therefore possible to argue that the socio economic conditions of developed and emerging economies are somewhat different from those of a developing economy like Rwanda. Further, the reviewed literature indicates that few studies on causes of financial distress in MFI in developing economies in general and Rwanda in particular have been done. Previous studies by (Epure & Lafuente, 2015; Riungu, 2014) show the research gap on the relationship between quality compliance and financial stability of Micro Finance Institutions in MFI in Rwanda. The reviewed Local studies by (Moenga, 2015, Schoeman, 2011, Laux 2012, FATF 2011) did not critically address Financial Controls on the Financial Stability in MFI in Rwanda which currently research examines.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter outlines in detail how the research was conducted. The chapter presents the Research design, population, census survey, data collection instruments, data collection procedure, pilot test, reliability of the instrument, validity and data analysis and presentation. The specific objectives are to find the effect of Audit Process on Financial Stability of Micro Finance Institutions in Rwanda; to examine the effect of governance on financial stability of Micro Finance Institutions in Rwanda; to assess the effect of risk management on financial stability of micro finance institutions in Rwanda and to evaluate the effect of financial controls on financial stability of Micro Finance Institutions in Rwanda.

#### **3.2. Research Philosophy**

The study was anchored on the positivist research paradigm. The positivist position is derived from natural science and is characterized by the testing of hypothesis developed from existing theory (hence deductive or theory testing) through measurement of observable social realities (Klenke, 2016). It assumes that reality is fixed, directly measurable, and knowable and that there is just one truth, one external reality and thus provides an objective reality against which researchers can compare their claims and ascertain the truth (Gray, 2013) Positivism presumes the social world exists objectively and externally, that knowledge is valid only if it is based on observations of this external reality and that universal or general laws exist or that theoretical models can be developed that are generalisable, can explain cause and effect relationships, and which lend themselves to predicting outcomes (Sarantakos, 2012). This stance is appropriate for this study since we seek to determine the relationship between firm characteristics and financial intermediation efficiency which is a quantitative study thus eliminating subjectivity

### **3.3. Research Design**

This study adopted descriptive cross sectional design. Bryman, (2016). describes research design as the arrangement of condition from collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. Research design is the blue print for the collection, measurement and analysis of data. It is a plan and structure of investment conceived so as to obtain answers to research questions (Fowler, 2013). This study adopted a descriptive cross sectional design to answer the research questions. Descriptive survey is a method of collecting data by interviewing or administering a questionnaire to a sample of individuals which can be used when collecting information about peoples' attitudes, opinions, habits or any other social issues. Descriptive research is descriptions of the state of affairs as it exists (Sekaran & Bougie, 2011) assert that descriptive study is undertaken in order to ascertain and be able to describe the characteristics of the variables of interest in a situation. Descriptive study has several advantages such as; helps in understanding the characteristics of a group in a given situation, assists in systematic thinking about aspects in a given situation. It also offers idea for further probe and research and helps in making certain simple decisions. Zikmund, Babin, Carr and Griffin (2010) say that descriptive research is to describe characteristics of objects, people, groups, organizations, or environments. In other words, descriptive research tries to "paint a picture" of a given situation by addressing who, what, when, where, and how questions. Descriptive research design is appropriate for this study as it helped in understanding the relationship between quality Compliance and Financial Stability of Micro Finance Institutions in Rwanda and therefore answer the "what" question of the study. The researcher was use of longitudinal survey design since the nature of research relied on primary data.

### **3.4 Target Population**

According to Mugenda and Mugenda (2003), a population refers to an entire group of individuals, events or objects having a common observable characteristic. In other words, population is the aggregate of all that conforms to a given specification. Sekaran

and Bougie (2011) refers to a population as the entire group of people, events or things of interest that the researcher wishes to investigate. The target population of this study was for senior managements of MFI according to National bank of Rwanda (March 2017). In Rwanda, there are 18 Micro Finance Institutions in Rwanda. Financial Performance (Rao, 2017) For the sake of this research; the study targeted the Risk manager, Chief Finance Manager and Internal Auditor who had professional information on quality compliance in MFI

**Table 3.1: Population**

Population	Interviewed Managers	No. of MFIs	Population
Risk Manager	1	18	18
Chief Finance Manager	1	18	18
Chief Internal Auditor	1	18	18
Total Population			54

### 3.5. Census Survey

Researcher used Census survey during the study on the small size of the population. According to Wellman, (2018), a census is the procedure of systematically acquiring and recording information about the members of a given population. The studied population of 54 represented the whole population of the 18 MFI in Rwanda as Microfinance supervision department March 2017.

### 3.7 Data Collection Methods

The research study used triangulation methodology in data collection. Questionnaires, document analysis and researcher's own observation was used.

#### 3.7.1. Primary data

Primary quantitative data was collected by use of self-administered structured questionnaires. A questionnaire was adequate for this study since questionnaires are commonly used to collect important information about a population (Orodho, 2003) and each parameter in the questionnaire was developed to address a specific objective (Mugenda & Mugenda, 2003). The questionnaire was divided into several sections: Audit Process, Governance, Risk Management, Financial Controls and Financial Stability of Micro Finance Institutions in Rwanda. Perceptual responses were captured in a five or three– point Likert scale.

### **3.8 Data Collection Procedure**

The research questionnaires were sent to all individual MFI comprising of the 54 was used to collect the financial performance of MFI. The intention was to obtain response from knowledgeable staffs who were either the risk manager or other accounting professionals comprising of Chief Finance Manger or Internal Auditor. The study maintained care and control to ensure all questionnaires issued to the respondents were returned. To achieve the goal, the study maintained a register on questionnaires issued and questionnaires received. One research assistant maintained the register. The information gathered and analyzed from these documents were aided the researcher in making pertinent analysis in relation to variables under study.

### **3.9 Pilot Study**

Piloting is done to ascertain the reliability and validity of the instrument to be used for collecting data (Mugenda & Mugenda, 2003). This is essential as it reveals the weakness that may be in the questionnaire, for instance unclear directions, ambiguous questions and general layout. Piloting reveals if the analytical techniques are appropriate and reliable. In particular, pilot testing helps to detect weakness in design and instrumentation and provides proxy data for selection of a sample. Other benefits of pilot testing are that it helps in: assessing the feasibility of the study; designing a research protocol and assessing whether it is realistic and doable; establishing whether the sampling frame and technique are effective; identifying logistical problems which might occur with the proposed methodology; determining resources needed for the planned

study and assessing the proposed data analysis techniques to uncover potential problems. The pilot testing exercise was conducted in a manner that mirrored the actual study. Observations were made during the pilot test were helped to improve the nature of questions contained in the questionnaire. The pilot sample was conveniently selected to fast track the process and minimized time wastage in the collection of the pilot data as well as analysis. After the study, certain items that seemed unclear (Mugenda & Mugenda, 2003) were altered or eliminated. Cronbach`s coefficient alphas was computed using the formula  $\alpha = Np / [1+p (N-1)]$ ; where N equals the number of items and p equals the mean interterm correlation to determine the internal consistency of the questionnaire. The alpha value was accepted if they exceed the 0.7threshold as recommended by (Panayides, 2013).

### 3.9.1 Reliability of the Instrument

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. It is concerned with precision and accuracy. Reliability is a synonym for consistency and reliability over time, over instruments and over groups of respondents McClusky, (2017), a reliability coefficient was computed using the Spearman`s coefficient of the correlation formula.

#### 4.3.1. Reliability Test

The Cronbach`s alpha ( $\alpha$ ) for the validity and reliability of the questionnaire has been computed to ensure whether we are measuring what we are supposed to measure (the concept understudy) and to assure that we may get the same results if we repeat the measurement.

**Table 3.2: Reliability Test of Study Variables**

<b>Variables</b>	<b>Reliability Cronbach`s alpha</b>	<b>Comment</b>
Financial Controls	0.753	Acceptable
Governance	0.711	Acceptable
Audit process	0.761	Acceptable
Risk management	0.738	Acceptable
Financial Stability	0.855	Good

### 3.9.2 Validity

Validity is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study (Mugenda & Mugenda, 2003). It is concerned with establishing whether the questionnaire content is measuring what it is supposed to measure. It is concerned with how accurately the data obtained in the study represents the variables of the study. It also addresses the criterion and constructs validity. The content validity of the instrument was determined by the experts' and peers' advice whereas face validity was determined by administering the questionnaires to two (2) departments in the neighboring Countries.

It is a quality control feature aimed at ensuring that researchers are actually researching what they think and what they report, they are researching. It is about talking the same language, putting people at the same wavelength and avoiding confusion resulting from misunderstanding, misinterpretation and vagueness. Content validity is a measure of the degree to which data collected using a particular instrument represents a specific domain of indicators or content of a particular concept (Mugenda & Mugenda, 2003). In this study, results from the pilot study were used to judge the nature of performance of MFI to establish its content validity.

### 3.10. Data Processing Analysis and Presentation

The study utilized correlation and multiple regression analysis to determine relationship between quality Compliance and Financial Stability of Micro Finance Institutions in Rwanda. Multivariate analysis which is the distributional properties of a variable was carried out first for each variable to describe that variable and as a preparation for multivariate analysis. The study used F-Statistics to test dependence of Financial Stability of Micro Finance Institutions on Audit process, Governance, Risk Management and Financial Controls. Thus, the study employed multiple linear regressions in its multivariate analysis as summarized below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon \dots \dots \dots \text{equation (3.1)}$$

Where:

$\beta_0$ =constant

Whereas,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ ,  $\beta_5$  and  $\beta_6$  are coefficients;

$X_1$ =Audit process;

$X_2$ = Governance;

$X_3$ = Risk management;

$X_4$ = Financial controls and

$Y$ = Financial Stability indicator

$\varepsilon$ = Stochastic Error term.

Qualitative data was analyzed using descriptive statistics tools such as mean, median, mode and median to address the qualitative information obtained from the MFIs through a questionnaire. As one of today's most extensively employed analytical tools, content analysis has been used fruitfully in a wide variety of research applications (Neuendorf, 2016). Similar to other fields, content analysis has been primarily as a quantitative research method until recent decades.

Analysis of data using regression model has been used previously by Aduda (2011) in a study which investigated the relationship between executive compensation and firm performance in the Kenyan banking sector. Also Ngugi (2001) used a regression analysis in a study on the empirical analysis of interest rates spread in Kenya while Khawaja and Mulesh (2007) used regression analysis to identify the determinants of interest rates spread in Pakistan. Using SPSS version 21.0, the regression model was tested on how well it fits the data. The significance of each independent variable was also tested. Fischer distribution test called F-test was applied. It refers to the ratio between the model mean square divided by the error mean square. F-test was used to test the significance of the overall model at a 5 percent confidence level. The p-value for the F-statistic was applied in determining the robustness of the model.

The conclusion was based on the basis of p-value where if the null hypothesis is of the beta is rejected then the overall model was significant and if null hypothesis accepted the

overall model was insignificant. In other words, if the p-value is less than 0.05 then it was concluded that the model is significant and has good predictors of the dependent variable and that the results are not based on chance. If the p-value is greater than 0.05 then the model was not being significant and cannot be used to explain the variations in the dependent variable. Similarly, the t-test statistic was used to test the significance of each individual predictor or independent variable and hypothesis. The p-value for each t-test was used to make conclusions on whether to fail to accept or fail to reject the null hypotheses. The benchmark for this study for failure to reject or failure to accept the null hypothesis is a level of significance of 5 percent. If the p-value is less than five percent, the null hypothesis failed to be accepted and the alternate hypothesis failed to be rejected. Also if the p-value is greater than 5percent the null hypothesis failed to be rejected and the alternate hypothesis failed to be accepted.

### **3.11 Diagnostics Tests**

Since the research will utilize multiple regression equations, the data will first be checked for violations of assumptions and help to form requisite analysis and include autocorrelation, normality test, multicollinearity and heteroscedasticity.

### **3.12. Assumptions of Regression Model**

#### **3.12.1. Linearity**

Linearity means that the amount of change or rate of change between scores on two sets of variables is constant for the entire range of scores for the variables (Bai & Perron, 2008). It is therefore the consistent slope of change that represents the relationship between an independent variable and a dependent variable (Granger & Tera, 2007). Problem of linearity was fixed by removing outliers (Bai & Perron, 2008). The study assumed linearity of the variables because outliers had been dropped.

#### **3.12.2. Instrument Validity**

Validity is the extent to which an instrument measures what it is supposed to measure (Lakshmi & Mohideen, 2013). It is rare, if nearly impossible, that an instrument was 100% valid, as a result, validity is generally measured in degrees. As a process,

validation involves collecting and analyzing data to assess the accuracy of an instrument. Numerous statistical tests and measures are used to assess the validity of quantitative instruments, which generally involves pilot testing. Content and criterion validity was used to measure validity. Content validity refers to the appropriateness of the content of an instrument. This tests whether the measures (questions and observation logs, etc.) accurately assess what the instrument intends to test by evaluating them against the desired outcomes. This was achieved through use of professional specialist opinion.

The researcher ensured instrument validity by having objective questions included in the questionnaire to ensure that the content of the questionnaire addresses the intended responses and that ambiguity is avoided. The input from the supervisors was also sought to validate the questionnaire. Criterion validity refers to the extent to which the estimator or predictor variable estimates or predicts the values of the criterion variable. As such, the criterion validity of this study was ascertained through application of correlation using the SPSS software.

### **3.12.3. Reliability Test**

The Cronbach's alpha ( $\alpha$ ) for the validity and reliability of the questionnaire has been computed to ensure whether we are measuring what we are supposed to measure (the concept understudy) and to assure that we may get the same results if we repeat the measurement.

### **3.12.4 Testing for Normality**

The normality of data distribution was assessed by examining its skewness and kurtosis (Kline, 2005). A variable with an absolute skew-index value greater than 3.0 is extremely skewed while a kurtosis index greater than 8.0 is an extreme kurtosis (Kline, 2005).

### **3.12.5. An outlier**

An outlier is a case that is significantly different from the main trend of the data and can thus cause bias in the data. Mahalanobis d-squared was used for multivariate testing on the independent variable where all the constructs are approximately symmetrical and with no outliers identified. Constructs are approximately symmetrical and with no outliers identified.

### **3.12.6. Heteroscedasticity**

In a study usually happens when the variance of the errors varies across observation, long and Ervin (2000), used to test the null hypothesis that the error variances are all equal versus the alternative that the error variances are a multiplicative function of one or more variables

### **3.12.7. Multicollinearity**

Is the case of multiple regressions in which the predictor variables are themselves highly correlated. The standard issue in multicollinearity is that, the standard errors and thus the variances of the estimated coefficients are inflated when multicollinearity exists (Simon, 2004). According to Besley, Kuh and Roy (1980) and Green (2000), identification of multicollinearity in a model is important and is tested by examining the tolerance and the variance inflation factor (VIF) diagnostic factors. The variance inflation factor (VIF)

measures the impact of multicollinearity among the variables in a regression model. Green (2000) concluded that even though there is no formal criterion for determining the bottom line of the tolerance value or VIF, tolerance values that are less than 0.1 and VIF greater than 10 roughly indicates significant multicollinearity; a conclusion supported by Tavakol and Dennick (2011) and Gujarat (2009). This study carried out multicollinearity test among the variables of the study and the results obtained have been interpreted and discussed in chapter four.

### **3.12.8. Autocorrelation**

Gujarat (2009) and Cameron (2005), both cited in Keraro (2014) defined autocorrelation as the correlation between members of a series of observations ordered in time or space. A Durbin-Watson test was used to detect the presence of autocorrelation between the variables and this produced a value of 1.348. According to Gujarat (2009), the Durbin Watson statistic ranges in value between 0 to 4. A value near 2 indicates non autocorrelation; a value closer to 0 indicates positive correlation while a value closer to 4 indicates negative correlation. This study carried out auto-correlation test among the variables of the study and the findings obtained have been interpreted and discussed in chapter four.

### **3.13. Measurement of Variables**

Various indicators were used in measuring of study variables. Measurement of variables was done for independent, and dependent variable.

### **3.14. Measurement of Independent Variables**

The study used four independent variables that are Audit process, governance, risk management and financial controls. Audit Process was measured by evaluating respondent's opinions on financial stability, every successful audit is based on sound planning and an atmosphere of constructive involvement and communication between the client and the auditor. These indicators are vital for the recovery of full cost (Yimam, 2017). Perceived risks were measured by identifying the types of risk(s) that mainly influences investors operations since every business decision is connected to risk

(Henschel & Durst, 2016). The indicators used include Internal Controls, Risk framework, and a discretionary accrual.

Governance was measured by determining the effect of organization charter, Functional boards and Strategic planning on financial stability of MFI in Rwanda. One of the most important aspects of strategic planning is not that you have made several decisions but that you have created the proper framework for developing goals, creating action items centered on those goals, creating a method for recording, measuring and evaluating the goals, and developing a process for continually monitoring those initiatives and making them part of your operating and business plans (Knight, 2013).

Risk management was measured by assessing the effect of liquidity risks, credit risks, and operational risk on financial stability of MFI in Rwanda. The loss may be complete or partial. In an efficient market, higher levels of credit risk will be associated with higher borrowing costs. Because of this, measures of borrowing costs such as yield spreads can be used to infer credit risk levels based on assessments by market participants (Kulikauskas, 2016). Financial controls were measured by evaluating the effect of Asset management, financial system controls and Capital adequacy on Financial Stability of Micro Finance Institutions in Rwanda. Financial controls play an important role in ensuring the accuracy of reporting, eliminating fraud and protecting the organization's resources, both physical and intangible (Hunker & Probst, 2011).

### **3.15. Measurement of dependent variables**

The dependent variable for the study was measured by determining the increase of customer base and cost base. These indicators were paramount in determining performance of financial stability of MFI. The indicators were analyzed in order to determine the effect of independent variable on the dependent variable (Limo, 2014).

### **3.16. Hypothesis Testing**

A hypothesis is a statement or assumption concerning a population. The procedure which, on the basis of sample results, enable us to decide whether a hypothesis is to be accepted or rejected is called Hypothesis testing or Test of Significance (Pivetti &

Melotti, 2013)). A hypothesis has to be verified then accepted or rejected for decision making. In hypothesis testing we make some inference about population parameters like the mean, the proportion etc. An assumption is made that the sample data come from a normal population. However, if the population is not normal or normality assumption is not proper, then parametric tests cannot be done Mugenda and Mugenda (2002). Hypotheses were tested using Analysis of variance (ANOVA) which separates the variance ascribable to one group from variance ascribable to other groups. By using this method, the study was able to test whether the difference between the mean of three or more populations are significant or not. The ANOVA technique was also used to test the linearity of the regression line fitted to the data and hence its preference. The regression output using SPSS gives a one-way classification table at 1% degree of freedom. The parameters given in the ANOVA table are the sum of squares, mean square, degree of freedom, F statistics and significance level. The F statistics and significance level were used to test and decide whether to reject or fail the hypothesis

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSIONS**

#### **4.1. Introduction**

This chapter deals with organization, analysis and presentation of data collected from a sample using questionnaires which were designed to measure the hypothesis of the study. It presents the research findings and results of the study. The purpose of this study was to determine the relationship between Compliance and Financial Stability of Micro Finance Institutions in Rwanda. The study used Audit Process, Governance, Risk Management and Financial Controls as independent variables and Financial Stability as dependent variable. It gives the empirical findings and results following the application of the variables using the techniques indicated in the third chapter. The implications are then discussed. Most of the questions were Likert-type, scale ranging from 1 to 5 indicating the extent to which the respondents agreed or disagreed with each statement used to capture the different variables.

#### **4.2. Descriptive Statistics**

The study was guided by Audit Process, Governance, Risk Management and Financial Controls as Independent Variables.

##### **4.2.1. Audit Process**

During the planning portion of the audit, the auditor notifies the client of the audit, discusses the scope and objectives of the examination in a formal meeting with organization management, gathers information on important processes, evaluates existing controls, and plans the remaining audit steps (Tschider, 2017).

**(a): Chief Audit Executive’s relationships**

The study examined the effect of Audit Process on Financial Stability of Micro Finance Institutions in Rwanda. Table 4.1 shows the chief audit executive’s relationships with the audit committee and senior management.

**Table 4.1: The Chief audit executive’s relationships with the audit committee and senior management**

<b>Audit process</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>	<b>Std. Deviation</b>
AP 1	0	1	27	55	17	3.88	0.682
AP 2	0	1	18	61	20	4	0.644
AP 3	0	1	17	59	23	4.04	0.672

As reflected from the above Table, Majority (72%) of respondents agreed and strongly agreed while 27% were not sure and 1% disagreed with the statement. This implies that the chief audit executive’s relationships with the audit committee and senior management are critical to the success of the internal audit function. The results are in line with a study by Doorley and Garcia (2011). They asserted that the chief audit executive must also consider the organizational aspects of internal audit. He or she will base the audit department’s structure on the organization as a whole. For a publicly traded company, the CAE will need to foster coordination between the external auditor and the department he or she leads. Delegating management responsibility within the department applies to this area as well.

The study from above was conducted to establish on whether there are many operational aspects of the audit committee’s relationship with the internal audit function in MFI in Rwanda, majority of respondents (81%) agreed and strongly agreed, while 18% were not sure and 1% disagreed with the statement. This implies that it is important for the effective oversight of the internal control framework and culture. The results concur with Burton, Starliper, summers and Wood (2014) who urged that internal auditing provides a variety of services to the organization. These services may range from

conducting financial, performance, compliance, system security, and due diligence audits, to participating on committees to select new accounting software, to revising the organization's code of conduct, to teaching training courses in internal control to new managers.

From Table 4.1, Majority of respondents (82%) agreed and strongly agreed that the chief audit executive reports functionally to the audit committee while 17% were not sure and 1% disagreed whether they are on the planning, execution and results of audit activities. This implies that reporting mechanism is being applied and there is no doubt for the performance of the MFI. This is in line with the results of the findings by Nzamu, (2015) on whose study was the Audit Committee without delay of any issue of risk, control or management practice that may be of significance. He urged that the Chief Audit Executive (CAE) reports the most critical issues to the audit committee quarterly, along with management's progress towards resolving them. Critical issues typically have a reasonable likelihood of causing substantial financial or reputational damage to the MFI. Whether you are an auditor assessing internal control at your client, a preparer signing off on controls, a board member assessing organizational exposure, or a small business owner concerned with minimizing fraud (Akpom, 2016).

#### **(b). Internal Audit Functions**

The study sought to determine internal audit functions, need an adequate complement of staff with the appropriate experience and qualifications.

**Table 4.2: Internal Audit Functions**

<b>Audit process</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>	<b>Std. Deviation</b>
AP 4	0	2	18	55	25	4.04	0.706
AP 5	0	0	18	59	23	4.04	0.652
AP 6	0	9	22	43	26	3.85	0.925

Table 4.2, shows that majority of respondents (80%) agreed and strongly agreed that Internal audit functions need an adequate complement of staff with the appropriate experience and qualifications for the risks and businesses they audit, while 18% were not sure and 2% disagreed with the statement. This implies that majority of respondents have appropriate experience and qualifications and consequently performance of the MFI is likely to be high. The study by Team, Perrault, Team, Perrault, Kilo and Hettinger, (2013). urged that the audit committee is responsible for ensuring that management has implemented an effective system of internal control to manage the risks facing the organization. In larger and more complex organizations an internal audit function can provide cost-effective and independent assurance that internal control is effective, provided that it has an appropriate role and mandate.

From the Table above, shows that most of respondents (82%) agreed and strongly agreed urged that the organization may assign responsibility for audit activities to a corporate internal audit department or include some audit activities in the responsibilities of line functions while 18% were not sure and 1% disagreed based on respondent's views. This implies that MFI in Rwanda assign responsibility for audit activities to a corporate internal audit department. The study concur with findings by (Bhasin, 2016) who pointed out that as organizations work towards reducing the losses due to fraud, their anti-fraud programmes are increasingly looking towards the internal audit function for support in light of the fact that over time as internal auditors review systems in the organization, they develop an overall knowledge of the organization's processes, risks,

control systems and personnel which can contribute to an effective fraud risk management (Bhasin, 2016).

An annual internal audit plan from Table above (69%) agreed and strongly agreed, while 22% are not sure and 9 % disagreed with the statement that there is a key to matching the work of internal audit to the needs of expectations of the audit committee, external auditors and senior management. This implies that, needs and expectations were adhered to. This is in line with the findings by Geeraert, (2015). who asserted that internal audit departments can be major contributors to the effectiveness of governance, risk management, and internal control processes, but they need to focus on the areas of highest risk, perform their services effectively, and clearly communicate the results of their work. A good Risk frame work organizes and presents information in a way that both technical and non-technical personnel can understand. It has three important components: a shared vocabulary, consistent assessment methods and a reporting system (Salvi, Montalva Colomer, Arredondo, Prazak-Aram & Mayer, 2015).

**(c). Boards, Audit Committees and Senior Management**

The study sought to examine whether Boards, audit committees and senior management rely on internal audit reports to take decision

**Table 4.3: Boards, Audit Committees and Senior Management**

<b>Audit Process</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>
Audit Process (AP 7)	0	8	20	50	22	3.84
Audit Process (AP 8)	0	6	24	47	23	3.86
Audit Process (AP 9)	0	7	20	57	16	3.82
Audit Process (AP10)	0	6	22	40	32	3.97

The researcher was interested to know whether Boards, audit committees and senior management of MFI in Rwanda rely on internal audit reports. The results showed that majority of respondents (72%) agreed and strongly agreed with the statements, 20% were not sure and 8% disagreed that board rely on internal audit reports to confirm the quality of the system of control. It indicates that audit reports are reliable and accurate for Boards, audit committees and senior management to base on while taking genuine decision. This is in agreement with results by Williams and Wilder, (2016). on whose study asserted that, the company of the board's various committees, including the audit committee, is established through such a resolution. Such resolution is an example of corporate governance setting the rules by which a corporation operates. This type of resolution is documented in the records of the board and not generally revised unless some circumstances require a change.

On the above Table whether internal audit reports are only of value when managers address the problems and deficiencies identified by the audits or make informed decisions to accept the risks. Most of respondents (70%) agreed and strongly agreed, while, 24% were not sure and 6 % disagreed with the statements. This implies that audit reports are essential for managers to address deficiencies of the company.

The result collaborates the findings by Soh and Martinov-Bennie (2011), whose study urges that internal auditors are expected to maximize the assurance provided to the Board, the Audit Committee and Management, contribute to the continuous improvement strategies of the organization without impairing its objectivity and independence. Internal auditor's role involves providing guidance and expertise in areas including, but not limited to, corporate governance, fraud policies and prevention, and information technology systems.

Response in in Table above, indicated that substandard credits are adequately protected since the majority (73%) of respondents agreed and strongly agreed, while 20% were not sure and 7% disagreed with the statement that Substandard credits are adequately protected by the current sound worth in service delivery and paying, in regard to the responses above, one is enough to conclude that the MFI in Rwanda are healthy. The

results contradict with the findings by Chikomba, Dube and Tsekea (2013). On whose study is well-managed credit risk rating systems that promote bank safety and soundness by facilitating informed decision making. Rating systems measure credit risk and differentiate individual credits and groups of credits by the risk they pose. This allows bank management and examiners to monitor changes and trends in risk levels. The process also allows bank management to manage risk to optimize returns.

The response in Table above, majority (72%) of respondents agreed and strongly agreed that that the prevention, deterrence and detection of fraud are the responsibility of management of MFI in Rwanda while 22% were not sure and 6% disagreed. This implies that there is a sound system that detects and prevents fraud. Findings supported by Antonikova (2015), urged that an audit committee should take an active role in the prevention and deterrence of fraud, as well as an effective ethics and compliance program. The audit committee should constantly challenge management and the auditors to ensure that the organization has appropriate antifraud programs and controls in place to identify potential fraud and ensure that investigations are undertaken if fraud is detected.

**(d). The organization’s structure**

Organizational structure is important for any growing company to provide guidance and clarity on specific human resources issues, such as managerial authority

**Table 4.4: The organization’s structure**

<b>Audit Process</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>	<b>Std. Deviation</b>
AP 11	0	8	28	42	22	3.78	0.883
AP 12	0	7	20	46	27	3.93	0.861
AP 13	0	6	24	51	19	3.82	0.799
AP 14	0	6	27	43	24	3.85	0.86

On being asked, whether the organization’s structure and tone at the top help to establish and enforce individual accountability for performance of internal control

responsibilities. From Table 4.4, most of respondents (64%) agreed and strongly agreed, while, 28% were not sure and 8% disagreed with the statement. Based on the results indicated above, it implies that there is proper individual accountability and thus high performance. The results are in agreement with, Shawyun (2012) who revealed that an effective system of internal control can give managers the means to provide accountability for their programs, as well as the means to obtain reasonable assurance that the programs they direct meet established goals and objectives.

Majority of respondents (73%) agreed and strongly agreed that the employees of the organisation are satisfied with the way investment goals are being accomplished while 20% were not sure and 7% disagreed with the statement. Basing on majority's view in MFI in Rwanda, investment goals are achieved satisfactory. The findings collaborate with the results by Mootee, (2013). immersed in an accelerated journey of personal and professional growth, you will build the cross-functional and analytical skills to identify, frame, and solve complex business problems that advance your path to leadership and your company's long-term performance.

From Table 4.4, majority of respondents (70%) agreed and strongly agreed that the bank reconciliation is being done regularly. This implies that public funds are managed effectively and effectively. The findings collaborate with the results by Bakilana and Carpio (2017), who urged that bank reconciliation is the process of matching the balances in an entity's accounting records for a cash account to the corresponding information on a bank statement.

Majority of respondents (67%) noted that all accounting entries are supported by documentation that gives rise to the transaction. According to respondent's view, there is proper documentation that gives true and view of financial statements. None the less these concur with the Findings by Casellas, Vallbé and Bruce (2011), who urged that all recording in books of accounts is done on the basis of accounting vouchers. A Voucher is documentary evidence in support of a transaction. It is a document to record the accounting transaction. A transaction with one debit and one credit is a simple transaction and voucher prepared for such transaction is known.

**(e). Factor Analysis of Audit Process.**

Factor analysis was carried out before analysis of the results to describe variability among the observed and checked for any correlated variables with the aim of reducing data that was found redundant. Factor analysis carried out on the audit process on Table 4.2. Statements scoring more than 0.300 which is the minimum requirement for inclusion of variables into the final model (Hair, Black & Babin, 2010; Kothari, 2004)

**Table 4.5: Factor Analysis of Audit Process**

<b>Audit Process.</b>	<b>Components</b>
(AP1). Relationship between chief audit executive with the audit committee and senior management	0.853
(AP 2,). Relationship between the audit committees with the internal audit function	0.541
(AP 3,). The chief audit executive reports functionally to the audit committee	0.761
(AP 4,). Internal audit functions need an adequate complement of staff with the appropriate experience and qualifications	0.799
(AP 5,). Responsibility for audit activities to a corporate internal audit department	0.661
(AP 6). An annual internal audit plan matches with the work of internal audit expectations	0.519
(AP,7,) .Boards, audit committees and senior management rely on internal audit reports	0.849
(AP 8 ). Internal audit reports and managers address the problems and deficiencies identified by the audits	0.679
(AP 9,).Substandard credits are inadequately protected by the current sound worth and paying	0.897
(AP 10,). The prevention, deterrence and detection of fraud are the responsibility of management.	0.721
(AP 11,) .The organization's structure and tone at the top help to establish and enforce individual accountability for performance of internal control responsibilities.	0.533
(AP 12,).The employees of the organization are satisfied with the way investment goals are being accomplished	0.746
(AP 13,).Organization is reconciling bank statements to the accounting records.	0.734
(AP 14,).Accounting system is adequately identify receipts and expenditures for each grant or contract	0.728
(AP 15,). All accounting entries are supported by documentation	

#### 4.2.2 Governance

The study examined the effect of Governance on Financial Stability of Micro Finance Institutions in Rwanda. Governance was measured using eight items. Each item was rated on a five points Likert scale with 1 being “strongly agree and 5 being “strongly disagree”.

**a). The governing body approves the mission and values and assess all proposed activities against them.**

A strong mission is vital to effectiveness as the organization might otherwise lack identity, cohesion, a clear sense of its unique value and a sharp focus for its activities. It could, for example, try to work on too broad a front and become overstretched

**Table 4.6: The governing body approves the mission and values and assess all proposed activities**

<b>Governance</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>	<b>Std. Deviation</b>
G 1	2	2	36	45	15	3.71	.792
G 2	0	3	21	49	27	3.99	.775
G 3	0	1	20	49	30	4.08	.725
G 4	0	4	21	47	28	3.98	.821

From table above majority of respondents (60%) revealed that the governing body approves the mission and values and assess all proposed activities for MFI in Rwanda, while 36% were not sure and 4% disagreed with the statement. However this is in agreement with ( Akapan & Effiong 2012).

From the above Table, 76% of the respondents agree that the governing body reviews short-, medium- and long term goals to monitor agreed strategies while 24% disagreed with the statement. It is noted that clearly communicating strategic business objectives is the first step to creating alignment.

From the Table above, majority of respondents agree and strongly (79%) that the governing body members receive the advice and information that they need to make good decisions while 20% are not sure and 1% disagreed with the statement. Based on the above statements, management of MFI in Rwanda receives information on time and thus takes right decision.

From the Table 4.6 above, most of respondents (75%) agreed that Board and management assess the organization’s current corporate governance environment, while 21% are not sure and 4% disagree with the statement.

**(b). Data output controls**

The study sought to examine whether data output controls relies on the accuracy of another system to process data or complete transactional processing

**Table 4.7: Data output controls**

<b>Governance</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>	<b>Std. Deviation</b>
G 5	1	1	13	53	32	3.81	.782
G 6	7	17	0	51	25	3.79	.785
G 7	0	1	20	49	30	4.08	.725
G 8	1	20	20	30	29	3.98	.821

The findings also show that 85% of the respondents agreed and strongly agreed (53% and 32% respectively) that Data output controls are used to ensure the integrity of output, and the correct and timely distribution of output produced, while 13% are not sure and 1% disagreed with the idea. This implies that there are effective controls on data output for MFI in Rwanda. Consistently, Meester, and Pinciroli (2012) argue that someone should be assigned responsibilities for seeing that all outputs are produced and distributed in accordance with the requirements and design of the application system. In larger organizations with mainframe computer environments, this responsibility is typically assigned as part of the responsibilities of a data control group, which falls within the information systems department.

The results show that majority of respondents (76%) agreed and strongly agreed (51% and 25%) pointed out that Information and communication is the component of internal control that ensures that pertinent information is identified, captured, and communicated in a form and timeframe that enables people to carry out their job responsibilities, while 17% disagreed and 7% strongly disagreed with the issue. However, this implies that information and communication controls in MFI enable people to perform their duties genuinely. This is in line with the study by Hall (2012), who revealed out that internal Controls begins with ensuring the accuracy, relevance and reliability of accounting information. Basic processing of accounting data is achieved through computer systems ranging from individual personal computers to large-scale enterprise servers. The result in Table above shows that 79% agreed and strongly agreed that Board has full and common understanding of the roles and responsibilities of a board of directors, while 20% are not sure and 1% disagree with the statement. This implies that there is common understanding on roles and responsibilities for Board of Directors. The study occurs by Moeller (2013), urged that Board members are the fiduciaries who steer the organization towards a sustainable future by adopting sound, ethical, and legal governance and financial management policies, as well as by making sure the nonprofit has adequate resources to advance its mission.

Result from Table above, revealed out that most of respondents (59%) agreed and strongly agreed while 20% were not sure and 21% disagreed that Board regularly monitors and evaluates progress on important organizational matters. Based on responses indicated above, Board always evaluates the progress of the organization. This is in agreement by (Meyers, Durlak & Wandersman, 2012). Who urged that the planning stage is essential in order to carry out monitoring and evaluation systematically.

**(c). Short-Term and long-term Plans**

The study examines whether your short-term goals should somehow lead to your long-term goals.

**Table 4.8: Short-Term and long-term Plans**

<b>Governance</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>	<b>Std. Deviation</b>
G 9	1	1	13	53	32	3.81	.782
G 10	7	7	10	51	25	3.79	.785
G 11	0	1	20	49	30	4.08	.725

From Table 4.8, most of respondents agree (85%) that short-term and long-term plans match with desires of institutional commitments. This indicates that there is no doubt for the achievement of institutional goals. This is in line with Gaunt (2016) who noted that carefully tracking your progress will help you to determine whether the short and long-term goals you have set for yourself are realistic or whether you need to make adjustments. Aside from this, having a clear overview of everything you've accomplished and what areas you have already improved in can be very motivating.

Majority of respondents (76%) agree that strategic initiatives are part of operating and business plans. This entails that strategic planning is essential in day to day management and future plans of the MFI in Rwanda. This is in agreement with Powley (2014). A strategic plan is a roadmap to grow your business. To help you succeed, use this proven strategic plan template. Growing a business means taking many decisions

about the way you want to expand your operations. Creating a strategic plan is a key component of planning for growth. It will help you prepare a realistic vision for the future of your business and in doing so can maximize your business' potential for growth.

Most of respondents (79%) agree that staff and key stakeholders understand strategic initiatives of the institution. Based on respondent's view, it implies that strategic initiatives are understandable by every staff and stake holder. This is in agreement with World Health Organization (2012). It was pointed out that administrative Support Effective strategic planning and flexible processes in setting priorities according to the institution's mission and resources allocation to all key stakeholders.

#### **(d). Factor Analysis for Governance**

Factor analysis was carried out before analysis of the results to describe variability among the observed and check for any correlated variables with the aim of reducing data that was found redundant. Factor analysis carried out on the Governance on Table 4.9. Statements scoring more than 0.300 which is the minimum requirement for inclusion of variables into the final model (Hair, Black & Babine, 2010; Kothari, 2004) were included. Governance is more important in the financial sector than in any other sectors. Carey regards financial institutions as the main point of risk-taking in an uncertain environment (Gorton, & Metrick, 2010).

**Table 4.9: Factor analysis of Governance (G)**

<b>Governance</b>	<b>Component</b>
G1, The governing body approves the mission and values	.802
G2, The governing body reviews short-, medium- and long term goals strategies.	.805
G3, The governing body members receive the advice and information.	.748
G4, Board and management in assessing the organization's current corporate governance environment	.793
G5, Data output controls are used to ensure the integrity of output, and the correct and timely distribution of output produced.	.734
G6, Information and communication is the component of internal control	.836
G7, Board has full and common understanding of the roles and responsibilities of a board of directors.	.745
G8, Board regularly monitors and evaluates progress on important organizational matters.	.845
G9, short-term and long-term plans matches with institutional commitments	.785
G10, strategic initiatives are part of operating and business plans	.712
G11, Staff and key stakeholders understand strategic initiatives.	.753

### 4.2.3. Risk Management

Risk management involves identifying the types of risk exposure within the company, measuring those potential risks, proposing means to hedge insure or mitigate some of the risks and estimating the impact of various risks on the future earnings of the company (Tsoumada, Pai & Agrawal, 2014).

#### (a). Identify the risk

**Risk identification is the process of determining risks that could potentially prevent the program, enterprise, or investment from achieving its objectives.**

**Table 4.10: Assessment of Fraud Risk**

<b>Risk management</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>	<b>Std. Deviation</b>
RM 1	0	20	16	41	23	3.68	1.041
RM 2	0	0	19	44	37	4.17	.740
RM 3	0	4	18	54	24	3.97	.775
RM 4	0	3	15	50	32	4.11	.762

The respondents, depict the disaster management regulation in the organization require to use risk maps to support the risk assessment. The study indicated that majority (64%) of respondents agreed and strongly agreed, while 16% were not sure and 20% disagreed with the statement. This is an indication that there are sound controls on disaster management regulation. The results are in conformity with the finding by Brody, World Health Organization. (2016), whose study focused on disaster management regulation.

The respondents in Table above indicated that majority (81%) agreed and strongly agreed, while 19% were not sure whether the Company's resource allocation process establish and sustain competitive advantage or maximize returns.

This implies that company establishes and sustains competitive advantage or maximizes returns. This is in agreement with Nderitu (2015), whose study on a strategy for sustaining competitive advantage.

The study findings show that majority (78%) agreed and strongly agreed, while 18% were not sure and 4% disagreed that there are harmonized standards regarding the development and the visualization of risk maps in the organization. This is in line with the study by Mourtzis and Doukas, (2014) and their findings indicate that there are harmonized standards.

The results show that, majority (82%) agreed and strongly agreed, while 15% were not sure and 3% disagreed whether the major disaster threatens the company's ability to sustain safe operations, provide essential services, and recover operating costs.

Based on participant’s responses, it implies that MFI in Rwanda has ability to sustain safe operations. This concurs with the study of Manners-Bell (2017) on whose findings indicated that accompany potential to recover operating costs.

**(b).Analyze risk**

The study sought to examine to analyze risks in Microfinance Institutions as shown in Table 4.11 below

**Table 4.11: Analyze Risk**

<b>Risk management</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>	<b>Std. Deviation</b>
RM 5	0	0	20	54	26	4.05	.687
RM 6	0	3	16	49	32	4.12	.755
RM 7	0	1	16	62	21	4.04	.623
RM 8	1	11	27	41	20	3.69	.935

The study indicated that majority (80%) agreed and strongly agreed, while 20% were not sure on Risk Management. However, this shows that there is strong Interruption to the

availability and/or quality of external data. This corroborates with the study Akinso, (2018). The research findings revealed that majority (81%) of respondents agreed and strongly agreed that it is significantly impairs the functionality or value of the company provided services while 16% were not sure and 3% disagreed with the statement.

From Table above the study indicated that majority (83%) of respondents revealed that Incomplete and/or inaccurate information (financial or non-financial) contributes to inappropriate business decisions, while those who were not sure were 16%, disagreed was 1%. This implies that there are sound controls. The results agree with the findings by Masood, (2016). Whose study reveals that accurate information contributes business development and vice versa.

Majority (61%) of respondents agreed and strongly agreed on an ineffective strategic planning process, while 27% were not sure and 12% disagreed. From respondents' views it implies that there are may result in irrelevant information that threatens the company's capacity to formulate viable business strategies. Findings are supported Pullinger, Lovell and Webb (2014).

**(c). Evaluate risk**

Results in Table 4.12 indicate **evaluate risk**

**Table 4.12: The evaluate Risk**

<b>Risk Management</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>	<b>Std. Deviation</b>
RM (9)	0	20	16	41	23	3.68	1.041
RM (10)	0	0	19	44	37	4.17	.740
RM(11)	0	4	18	54	24	3.97	.775

Most of respondents (64%) agree and strongly agree that the Nonconformance with current laws and regulations exposes the company to sanctions, fines, and penalties, while 16% are not sure while 20% disagree with the statement. This indicates that the organization has strong system to manage risks. These concur with Do (2018), urged that there are laws that threatens the company's reputation, business opportunities, and

expansion potential and specify the arrangements appropriately in a manner befitting the scale and nature of the financial institution's business.

From Table above, most of respondents (81%) agree that the Company's access controls are effective in preventing inappropriate access to data or systems, while 19% are neutral. Based on the respondents above, it implies that MFI'S in Rwanda have proper controls on in preventing inappropriate data. This is in agreement with Khatoun and Zeadally (2017). Majority of respondents agree (78%) that the Board of Directors or equivalent organization provide a system to fully disseminate the relevant internal rules and operational procedures while 18% are neutral and 4% disagree with the statement this is in line with Agumba, (2012) who revealed that the Company has selected the Company with Audit and Supervisory Committee system described in the Companies Act of Japan for its organizational structure.

#### **(d). Factor Analysis of Risk Management**

Factor analysis was carried out before analysis of the results to describe variability among the observed and check for any correlated variables with the aim of reducing data that was found redundant. Factor analysis carried out on the Risk Management on Table 4.13. Statements scoring more than 0.300 which is the minimum requirement for inclusion of variables into the final model (Hair, Black & Babin, 2010; Kothari, 2004) were included. Accessibility of Risk Management constitutes of different categories (Hernandez et al., 2010); first information on key executives or insiders which gives information on the transactions category for instance stock sales or buys. There is also information on the relationship of the company to other companies for instance competitors, and institutional holdings.

**Table 4.13 Factor analysis of Risk Management**

<b>Risk Management</b>	<b>Component</b>
Risk Management (RM 1). The disaster regulation in the organization	<b>.875</b>
Risk Management (RM 2)). The company's resource allocation process.	<b>.708</b>
Risk Management (RM 3). There are harmonized standards in the organization.	<b>.612</b>
Risk Management (RM 4). A major disaster threatens the company's ability to sustain safe operations.	<b>.814</b>
Risk Management (RM 5). Interruption to the availability and/or quality of external data significantly impairs the functionality.	<b>.790</b>
Risk Management (RM 6). The assessment of fraud risk considers opportunities for unauthorized acquisition, use, or disposal of assets company's access controls are not effective in preventing inappropriate access to data or systems.	<b>.771</b>
Risk Management (RM 7). An ineffective strategic planning process	<b>.685</b>
Risk Management (RM 8). Nonconformance with current laws and regulations exposes the company to sanctions, fines, and penalties.	<b>.681</b>
Risk Management ( RM 9). The company's access controls are effective in preventing inappropriate access to data or systems.	<b>.699</b>
Risk Management (RM 10). Incomplete and/or inaccurate information contributes to inappropriate business decisions.	<b>.711</b>
Risk Management( RM 11).The Board of Directors or equivalent organization to the Board of Directors provide a system	<b>.729</b>

#### **4.2.4. Financial Controls**

The financial reports utilized by a company to monitor, measure, and manage its financial resources. The primary financial controls a company uses are its balance sheet, its profit/loss or income statement, and its cash flow statement. By comparing actual business results against financial forecasts, management can assess the effectiveness of its business strategy (Broadbent & Cullen, 2012).

**(a). Entity management periodically review accounting summaries**

The result in Table 4.14 shows that the entity management periodically reviews accounting summaries to compare budgeted and actual amounts spent.

**Table 4.14: Comparison between budgeted and actual amounts spent**

<b>Financial controls</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>
Financial controls(FC 1)	0	7	20	51	22	3.88
Financial controls (FC 2)	0	1	20	50	29	4.06
Financial controls (FC 3)	1	4	11	56	28	4.05

The findings in Financial Controls, indicated that, majority (73%) agreed and strongly agreed that the entity management periodically review accounting summaries to compare budgeted and actual amounts spent while 20% were not sure and 7% disagreed. Most of respondents confirm that the entity management periodically reviews accounting summaries. This study concurs with that of Klabbers (2015.) Whose study revealed out that externally auditing the financial statements of the World Meteorological Organization (WMO) is traditionally exercised by members of the supreme public financial auditing body of the country chosen.

Respondents in Financial Controls in the above Table were asked to address whether the accounting system provide for accumulating and recording expenditures by activity/project and cost category shown in the annual budget. Majority (79%), agree while, 20% were not sure and 1% disagreed with the statement. Based on results obtained above, accounting systems provides appropriate records and this is in line with the study by North (2013).

Results indicated that majority (84%) of respondents agreed and strongly agreed that the organization consider both internal and external sources when identifying relevant data to use in the operation of internal control, while 11% were not sure, 4% disagreed and 1% strongly disagreed the issue. Also study by Bass and Dalal-Clayton (2012) Urged that Internal controls ensure effective, systematic and coordinated implementation of the internal control framework, a Steering Committee has been established.

**(b). Periodic Reconciliations**

Accounting procedures require periodic reconciliations of accounts receivable and accounts payable with control accounts as indicated in Table 4.15 below

**Table 4.15: Periodic Reconciliations**

<b>Financial communication.</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>	<b>Std. Deviation</b>
FC4.	1	6	16	53	24	3.94	.852
FC 5	0	2	14	52	32	4.14	.740
FC 6	0	2	17	52	29	4.07	.747

Respondents were asked, whether the accounting procedures require periodic reconciliations of accounts receivable and accounts payable with control accounts. Results from Table above shows that, majority (77%) agreed and strongly agreed, while 16% were not sure and 6% disagreed and 1% strongly disagreed. This entails that reconciliations are done regularly. This concurs with the study by Camilleri (2012) who asserted that the design of internal controls to fit an organization’s needs begins with a risk assessment process.

Findings revealed that majority (84%) of respondents agreed and strongly agreed, whether accounting supervisors frequently prepare reports or reconciliations to verify the accuracy of financial transactions processed, while 14% were not sure and 2% disagreed with the statement. This is in line with the study by Vallabhaneni, (2017) who cited in that Supervises the accounts receivable and accounts payable functions, including such activities as the timely payment of all vendor invoices and expense

vouchers, receiving and posting cash receipts, reconciling outstanding account balances, and the maintenance of accurate records and control reports.

Findings indicated that majority (81%) agreed and strongly agreed that the organization has transparency and accountability, it display performance results to all stakeholders, while 17% were not sure and 2% disagreed with the statement. This suggests that there are sound controls in place. This is in agreement with the study by Haliah (2015), whose study revealed out that Effective accountability requires a statement of goals, transparent decision-making.

**(c). An adequate up-to date cash book recording receipts and payments.**

Results in Table 4.16 indicate that the organization maintains an adequate up-to date cash book recording receipts and payments.

**Table 4.16: Organization maintain an adequate and up-to-date cashbook**

<b>Financial controls</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>
Financial Controls (FC 7)	1	3	15	46	35	4.13
Financial Controls (FC 8)	1	3	16	50	30	4.03
Financial Controls (FC 9)	1	5	14	55	25	3.98

The results in Table above indicated that majority (81%) of respondents agreed and strongly agreed that organization maintain an adequate and up-to-date cashbook recording receipts and payments, while 15% were not sure and 4% disagreed and strongly disagreed with the statement. Therefore, cashbook recording receipts and payments are done properly as per the above statements. This concurs with the study by Ross (2015). The procedures for recording your business expenses such as rent, electricity, telephone, insurance and motor vehicle expenses are essentially the same as those for recording purchases.

As shown, majority (80%) of respondents agreed and strongly agreed that the accounting system provide for accrual of income and expenditures, while 16% were not sure and 3% disagreed and 1% strongly disagreed with the statement. This shows that accounting

system provide for accrual of income and expenditures. The results also agree with the findings of Van Helden, Jan and Ron Hodges (2015.) who argued that the accrual basis of accounting provides a better picture of a company's profits during an accounting period.

Respondents were asked to address whether department assets (property, equipment, supplies, etc.) that you believe are not adequately protected against theft or misuse. Results indicated that majority (80%), agreed and strongly agreed, while 14% were not sure and 5% disagreed and 1% strongly disagreed with the statement. By and large, department assets are properly safeguarded. The result supports the findings by the study of Lu, Chang, Fan, and Zhu (2012). Data loss prevention (DLP) is the practice of detecting and preventing confidential data from being “leaked” out of an organization’s boundaries for unauthorized use.

**(d). Assessment of the Sustainability of Current Funding levels.**

The study in Table 4.17 sought to establish that Funding sources are evaluated annually to assess the sustainability of current funding levels.

**Table 4.17: Assessment of the Sustainability of Current Funding levels.**

<b>Financial controls.</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>
Financial Controls (FC 10)	0	7	25	44	24	3.84
Financial Controls (FC 11)	1	7	19	52	22	3.90
Financial Controls (FC 12)	0	10	15	53	22	3.86
Financial Controls (FC 13)	0	8	17	59	16	3.84

Research findings indicated that majority (68%) of respondents agreed and strongly agreed with whether Funding sources were evaluated annually, while 25% were not sure, 7% disagreed with the statement. As indicated above, Funding sources were evaluated annually. The study concurs with the study by Johnson, Adams Becker, Estrada and Freeman (2015), whose study focused on a financial sustainability plan.

Results in Table above, indicated that majority (74%) of respondents agreed and strongly agreed that Financial statements and reports are prepared for implementing unit,

while 19% were not sure and 7% disagreed. This implies that financial statements and reports are prepared for implementing unit, as result management will take genuine decision. This concur with the study by Chan (2015) who pointed out that Stock-taking or "inventory checking" is the physical verification of the quantities and condition of items held in an inventory or warehouse. This may be done to provide an audit of existing stock.

Respondents were asked to indicate whether the organization has transparency and accountability and it display performance results to all stakeholders. Findings show that majority (75%) of respondents agreed and strongly agreed that, 15% were not sure while 10 % disagreed with the statements. The results show that participant's organization has transparency and accountability. This is in line with the study by Solomon (2015), that Transparency is an indispensable aspect of accountability, effective accountability requires a statement of goals, transparent decision-making and relationships, and honest reporting of resource use and achievements, which can emphasize the honesty and efficiency with which resources are used or the impact and effectiveness of the work.

From Table above, indicated that majority (75%) of respondents agreed and strongly agreed that Controls in place concerning the preparation and approval of transactions, ensuring that all transactions are correctly made and adequately explained, while 17% disagreed, 8% disagreed with the statement. Responses from participants show that there are sound controls in preparation and approval.

#### **(e). Capital Adequacy Requirement to Banks**

The capital adequacy ratio measures a bank's capital in relation to its risk-weighted assets. The capital-to-risk-weighted-assets ratio promotes financial stability and efficiency in economic systems throughout the world.

**Table 4.18: Importance of Capital Adequacy Requirement to Banks**

<b>Financial Control</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>	<b>Std. Deviation</b>
FC13	0	3	16	49	32	4.12	.755
FC14	0	1	16	62	21	4.04	.623
FC15	1	11	27	41	20	3.69	.935

From Table above, majority of respondents agreed and strongly agreed (81%) that Capital Adequacy Requirement is Important to Banks while 16% of them were neutral and 3% disagreed with the statement. This implies that Capital Adequacy is important to daily operations of the bank. This is in agreement with Almazari (2014), revealed that Capital ratio indicates a bank's ability to withstand risks. Primarily, capital ratio helps a bank to withstand credit risk, liquidity risk, and operational risk. Generally, banks with high capital ratio are considered strong

Majority of respondents (83%) agreed and strongly agreed that there is Challenges Faced the Implementation of Capital Adequacy Requirement, while 16% were neutral and 1% disagreed with statement. This concur with Černohorský, Šobotníková and Teplý (2012) Risk management, capital adequacy, implementation may affect profitability. A higher level of capital adequacy is needed to manage the higher level of risks identified in the banking activities.

Most of respondents (61%) agreed and strongly agreed that there are Measures taken to Ensure Compliance with Capital Adequacy Requirement, while 27% were neutral and 12% disagreed with the statement. Nwogugu (2015) urged that various measures to ensure compliance with capital adequacy requirement such as cutting back on lending, market rights should be taken. This results to higher return on assets and equity revealing the need for capital regulation to the performance of banks and financial stability

#### **(f). Factor Analysis of Financial Controls**

Factor analysis was carried out before analysis of the results to describe variability among the observed and check for any correlated variables with the aim of reducing data

that was found redundant. Factor analysis carried out on the financial controls on Table 4.19. Statements scoring more than 0.300 which is the minimum requirement for inclusion of variables into the final model (Hair, Black & Babin, 2010; Kothari, 2004) were included. Factor analysis in controls research has consistently increased. Unfortunately, many of the factor analytic studies reported have been so seriously flawed that it is no exaggeration to state that the field would be far better off the studies had never been reported (Pollitt & Bouckaert, 2017) Factor analysis is one method of examining a correlation (or covariance) matrix. In effect, the procedure searches for groups of variables that are substantially correlated with each other, while not maintaining high correlations with other variables or groups of variables.

**Table 4.19: Factor analysis of Financial Controls**

<b>Financial Controls</b>	<b>Component</b>
Financial Controls (FC 1). The entity management periodically review accounting summaries	.837
Financial Controls (FC 2). The accounting system provides for accumulating and recording expenditures	.732
Financial controls (FC.3). The organization considers both internal and external sources.	.857
Financial Controls (FC.4). The accounting procedures require periodic reconciliations of accounts receivable and accounts payable	.829
Financial Controls (FC.5). Accounting supervisors frequently prepare reports or reconciliations	.647
Financial Controls (FC.6). The organization has transparency and accountability.	.585
Financial Controls (FC.8). Department assets (property, equipment, supplies, etc.) that are not adequately protected against theft or misuse.	.871
Financials (FC 9). Funding sources are evaluated annually	
Financial controls (FC.10). Financial statements and reports are prepared	.818
Financial controls (FC.11). The audit of the entity conducted in accordance with the International Standards on Auditing,	.693
Financial controls (FC.12). Controls in place concerning the preparation and approval of transactions	.605
Financial controls (FC.13). The accounting system provide for accrual of income and expenditures.	.796
Financial controls (FC14). Challenges Faced the Implementation of Capital Adequacy Requirement	.850
Financial controls (FC15). There are Measures taken to Ensure Compliance with Capital Adequacy Requirement	.789

#### 4.2.5. Financial Stability of Micro Finance Institution

A stable financial system is capable of efficiently allocating resources, assessing and managing financial risks, maintaining employment levels close to the economy’s natural rate, and eliminating relative price movements of real or financial assets that will affect monetary stability or employment levels (Colander, Follmer, Haas, Goldberg, Juselius, Kirman & Sloth, 2014).

##### (a). Customer base

The study sought to the customer base as the group of customers who repeatedly purchase the goods or services of a business

**Table 4.20: Customer base.**

<b>Financial stability</b>	<b>Strongly disagree (%)</b>	<b>Disagree (%)</b>	<b>Not sure (%)</b>	<b>Agree (%)</b>	<b>Strongly agree (%)</b>	<b>Mean</b>	<b>Std. Deviation</b>
FS 1	2	4	17	45	32	4.04	.863
FS 2	1	2	19	57	22	3.97	.740
FS 3	1	3	16	51	30	4.06	.795

From Table, 4.20, findings indicated that majority (77%) of respondents agreed and strongly agreed that the customer base is a relatively broad number of customers, with a smaller section of the base being comprised of repeat customers, while, 17% were not sure, 4% disagreed and 2% strongly disagreed with the statement. However, based on the results shown, there is a customer base. This negates by Oshri, Kotlarsky and Willcocks, (2015), Findings indicated that majority (79%) of respondents agreed and strongly agreed that MFI has witnessed an increase in number of active customers, while 19% were not sure, 2% disagreed with the statement. From respondents ‘views MFI have number of active customers. This is an agreement with Mwenda, (2015). MFIs

improve their product lines to meet clients' demands; prices become lower; the quality of services provided improves; and overall, MFIs become more client-driven

From the Table above, 81% agreed and strongly agreed that MFI incur low customer acquisition costs while 16% were neutral 4% disagreed with the statement. This concur with Croll, Yoskovitz, (2013) who urged that Customer acquisition cost (CAC) is a metric that has been growing in use, along with the emergence of Internet companies and web-based advertising campaigns that can be tracked

**(b). Cost base**

The study sought to study on cost base on finance stability of MFI.

**Table 4.21: Cost base**

Financial stability (FS)	Strongly disagree (%)	Disagree (%)	Not sure (%)	Agree (%)	Strongly agree (%)	Mean	Std. Deviation
FP 4	2	2	36	45	15	3.71	.792
FP 5	0	3	21	49	27	3.99	.775
FP 6	0	1	20	49	30	4.08	.725

From Table 4.21, most of respondents (60%) agreed and strongly agreed that MFI has a strategy to minimize costs while 36% where not sure and 4% disagreed with the statement and this is in corroboration with Chhinzer and Currie (2014) who pinpointed that Transaction costs aid MFIs in increasing profits and achieving sustainability. Area specific collection approaches help them improve their business outreach and reduce transaction costs.

Majority of respondents (76%) agreed and strongly agreed that there are would be delay or bring forward an investment decision in order to reduce costs, while 21% were neutral and 3% disagreed with the statement. Majority of respondents (79%) agreed and strongly agreed that the existing measurement cost portfolio and benchmark returns

conducted using a robust and meaningful methodology, while 20% were neutral and 1% disagreed with the statement. This is in line with Richards, (2017) who revealed that Investors have become increasingly focused on how to harvest returns in an efficient way. A big part of that process involves understanding the sources of risk and reward in their portfolios.

**(f). Factor Analysis of Financial Stability**

Factor analysis was carried out before analysis of the results to describe variability among the observed and check for any correlated variables with the aim of reducing data that was found redundant. Factor analysis carried out on the financial stability on table 4.22. Statements scoring more than 0.300 which is the minimum requirement for inclusion of variables into the final model (Hair, Black & Babin, 2010; Kothari, 2004) were included. On analysis four factors emerged highlighting the importance after establishment of goodness of measure of the data using factor analysis, the hypothesis on the effect of resources on success of tour businesses owned by indigenous.

**Table 4.22: Factor Analysis of Financial Stability**

Financial Stability	Component
(FS 1) MFI understand the buying habits of our customers	.765
(FS 2). MFI has witnessed an increase in number of active customers	.692
(FS 3) MFI incur low customer acquisition costs	.811
(FS 4). (FS 5). MFI has a strategy to minimize costs	.756
(FS 5). Would you delay or bring forward an investment decision in order to reduce costs.	.767
(FS 6). The existing measurement cost portfolio and benchmark returns conducted using a robust and meaningful methodology	7.678

### **4.3. Test of Assumption of Regression Model**

When the assumptions of the linear regression model are correct, ordinary least square (OLS) provides efficient and unbiased estimates of the parameters (Long & Ervin 2000). To keep on with the assumptions, this study tested for outliers, linearity, homoscedasticity and multicollinearity

#### **4.3.1 Testing for Normality**

The normality of data distribution was assessed by examining its skewness and kurtosis (Kline, 2005). A variable with an absolute skew-index value greater than 3.0 is extremely skewed while a kurtosis index greater than 8.0 is an extreme kurtosis (Kline, 2005). Cunningham (2008) stated that an index smaller than an absolute value of 2.0 for skewness and an absolute value of 7.0 is the least violation of the assumption of normality. The results of the normality test of the dependent variable indicated skewness and kurtosis in the range of -1 and +1 as shown in Table 4.26. This implies that the assumption of normality was satisfied.

**Table 4.23: Normality Test**

<b>Variables</b>	<b>Statistics</b>	<b>Statistic</b>	<b>Std. Error</b>
Financial Controls	Mean	0.0588	0.06458
	Range	4.19	
	Skewness	-0.059	0.168
	Kurtosis	-0.238	0.335
	Mean	0.0184	0.06627
Governance	Median	-0.0799	
	Std. Deviation	0.95807	
	Range	4.38	
	Skewness	-0.356	0.168
	Kurtosis	-0.032	0.335
Audit Process	Mean	0.1161	0.05693
	Median	0.1513	
	Std. Deviation	0.82301	
	Range	4.08	
	Skewness	-0.567	0.168
Risk Management	Kurtosis	0.08	0.335
	Mean	0.0732	0.06157
	Median	0.1392	
	Std. Deviation	0.89015	
	Range	4.09	
Financial stability	Skewness	-0.077	0.168
	Kurtosis	0.003	0.335
	Mean	0.088	0.05632
	Median	-0.0467	
	Std. Deviation	0.81417	
	Range	3.24	
	Skewness	-0.184	0.168
	Kurtosis	-0.208	.335

### **4.3.3. Multivariate Testing of Outliers for the Study Variables**

Multivariate analysis of variance is used to determine whether there are any differences between independent groups on more than one continuous dependent variable. This latter variable is required to test whether there are any multivariate outliers.

### **4.3.4. Outliers**

The responses of the questionnaire were measured on a likert scale of 1-5 and therefore were not expected to have any strange entries.

An outlier is a case that is significantly different from the main trend of the data and can thus cause bias in the data. Mahalanobis d-squared was used for multivariate testing on the independent variable where they produced reasonable where all the constructs are approximately symmetrical and with no outliers identified. Constructs are approximately symmetrical and with no outliers identified.

### **4.3.5. Homoscedasticity**

Heteroscedasticity in a study usually happens when the variance of the errors varies across observation, Long and Ervin (2000). Breusch-Pagan and Koenker was used to test the null hypothesis that the error variances are all equal versus the alternative that the error variances are a multiplicative function of one or more variables. Breusch-Pagan and Koenkertest the null hypothesis that heteroskedasticity not present (homoskedasticity) if sig-value is less than 0.05, reject the null hypothesis. A large chi-square value greater than 9.22 would indicate the presence of heteroscedasticity (Sazali, Hashida, Jegak & Raduan, 2009). In this study, the chi-square value was 2.935 indicating that heteroscedasticity was not a concern.

Ho: Constant variance (Homoscedasticity)

Variables: Financial Control (FC), Governance (G), Risk Management (RM) and Audit Process (AP).

**Table 4.24: Breusch-Pagan and Koenker Test for Heteroscedasticity**

<b>Ho</b>	<b>Variables</b>	<b>Chi2(1)</b>	<b>Prob&gt; Chi2</b>
<b>Constant Variance</b>	FC ,G, RM and AP	2.935	0.569

#### **4.3.6. Multicollinearity**

Multicollinearity is the case of multiple regression in which the predictor variables are themselves highly correlated. The standard issue in multicollinearity is that, the standard errors and thus the variances of the estimated coefficients are inflated when multicollinearity exists (Simon, 2004). Test for multicollinearity among study variables was conducted using Tolerance and Variance Inflation Factor (VIF). Variance Inflation Factor was checked for evidence of multicollinearity where their numerical values were all well below the cut-off value of 10 suggested by Neter, Kutner, Wasserman and Nachtsheim (1996). Porter and Gujarat (2010), view that as a rule of the thumb if VIF of independent variables exceeds 10, that variable is collinear. Based on this rule of the thumb, there was no collinearity among the independent variables.

From the results, inspection of the Variance Inflation Factors (VIFs) showed that multicollinearity was not a concern. No variable was observed to have VIF value above 10 and no tolerance statistic was below 0.100 as suggested by Hamilton (2006). This hence led to a conclusion that no predictor had a strong linear relationship with any of the predictor(s).

**Table 4.25: Multicollinearity Test for the Study Variables**

Variables	Collinearity Statistics	
	Tolerance	VIF
Audit Process	.761	1.314
Governance	.633	1.581
Risk Management	.657	1.522
Financial Control	.945	1.058

#### **4.4 Inferential Analysis and Hypothesis Testing**

Inferential statistics always involves the probability distribution for a statistic. It is easier to examine this distribution using a specific statistic than it is to treat it in general terms. Hence, we start with the mean.

##### **4.4.1. Effect of Audit Process on Financial Stability of Micro Finance Institutions.**

The study responded to the objective which sought to evaluate role of audit process in organization on financial stability in the Micro Finance Institutions in Rwanda.

(a). Correlation for Audit Process and Financial Stability of Micro Finance Institutions

Table 4.39 shows the Pearson correlation coefficients between the independent variable audit process and the dependent variable financial stability. The findings indicate a positive significant correlation of 0.585 since the level of significant is less than the set 0.05. This implies that the Audit Process increase by one unit, Financial Stability of Micro Finance Institution will increase by 0.585.

**Table 4.26: Pearson Correlation Coefficient for Audit Process on Financial Stability**

Variable Type	Coefficient	Financial Stability	Audit Process
Financial stability	Pearson Correlation	1	.585**
	Sig. (2-tailed)		.000
	N	209	209
Audit Process	Pearson Correlation	.585**	1
	Sig. (2-tailed)	.000	
	N	209	209

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**(b). Regression for Audit Process on Financial Stability**

Regression analysis was carried out in order to determine whether Audit Process as independent variable can be relied on in explaining the dependent Variable-Financial Stability. Table 4.26 shows the coefficient of determination (R Square) of 0.342 which indicates that Audit Process can explain 34.2% of the variations or changes in the dependent variable- Financial Stability in the Micro Finance Institutions in Rwanda. In other words, Audit Process can explain 34.2% of changes in Financial Stability in the Micro Finance Institutions in Rwanda.

Table 4.26 shows a positive significant regression coefficient of 0.585 (p-value<0.05). This means that a unit change in Audit Process brings about a 0.585 change in Financial Stability in the Micro Finance Institutions in Rwanda.

**Table 4.27: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.585 <sup>a</sup>	.342	.339	.66179

a. Predictors: (Constant), Audit Process.

Table 4.27 shows the results of ANOVA test which reveal that Audit Process has significant effect on financial stability of Micro Finance Institutions in Rwanda since the P value is actual 0.000 which is less than 5% level of significance. The study thus rejects the null hypothesis and concludes that there is significant relationship between Audit Process and Financial Stability in the Micro Finance Institutions in Rwanda. Correlation and regression analysis were carried out to establish relationships and explanatory power respectively. There was a significant positive relationship between Audit Process and Financial Stability. Decentralization scholars argue that it is motivated by the desire to improve the quality of public services (Lee, Walter-Drop & Wiesel, 2014).

### (c). Analysis of Variance

Analysis of variance (ANOVA) is a collection of statistical models and their associated procedures (such as "variation" among and between groups) used to analyze the differences among group means

**Table 4.28: ANOVA<sup>a</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	47.219	1	47.219	107.815	.000 <sup>b</sup>
1Residual	90.659	207	.438		
Total	137.878	208			

a. Dependent Variable: Financial Stability

b. Predictors: (Constant), Audit Process

**(d). Audit Process Regression Coefficients**

Coefficients Table 4.28 shows that all the internal factors contribute positively to Performance of the MFI in Rwanda. Moreover, all their contributions are statistically significant as none has a p-value greater than .05.

**Table 4.29: Coefficients of Audit Process**

Model Unstandardized Coefficients			Standardized Coefficients	t	Sig.
B	Std. Error	Beta			
1 (Constant)	.121	.046		2.614	.010
Audit Process	.579	.056	.585	10.38	.000

**a. Dependent Variable: Financial Stability**

**4.4.2. Effect of Governance on Financial Stability of Micro Finance Institution**

The study responded to the objective which sought to examine the effect of Governance on Financial Stability of Micro Finance Institutions in Rwanda.

**(a). Correlation for Governance and Financial Stability.**

The study examined the Pearson correlation coefficients between the independent variable Governance and the dependent variable financial stability.

**Table 4.30: Pearson Correlation Coefficient for Governance on Financial Stability**

Variable	Category type	Financial stability	Governance
<b>Financial stability</b>	Pearson Correlation	1	.591**
	Sig. (2-tailed)		.000
	N	209	209
<b>Governance</b>	Pearson Correlation	.591**	1
	Sig. (2-tailed)	.000	
	N	209	209

**\*\*.** Correlation is significant at the 0.01 level (2-tailed).

Table 4.30 shows the Pearson correlation coefficients between the independent variable Governance and the dependent variable financial stability. The findings indicate a positive significant correlation of 0.591 since the level of significant is less than the set 0.05.

The relationship between corporate governance and financial stability has received little attention in the context of emerging markets. Using new firm-level indices of governance in emerging markets, this column shows that both firm-level governance and governance frameworks have generally improved at the country level over recent years (Claessens & Yurtoglu, 2013)

#### **(b). Regression for Governance on Financial Stability**

Regression analysis was carried out in order to determine whether Governance as independent variable can be relied on in explaining the dependent variable-financial stability.

**Table 4.31: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.591 <sup>a</sup>	.349	.346	.65837

**a. Predictors: (Constant), Governance**

Table 4.31 shows the coefficient of determination (R Square) of 0.349 which indicates that Governance can explain 34.9% of the variations or changes in the dependent variable- Financial Stability in the Micro Finance institutions in Rwanda. In other words, Governance, can explain 34.9% of changes in financial stability in the Micro Finance Institutions in Rwanda.

**(c). Analysis of Variance (ANOVA)**

ANOVA was carried out to determine whether Governance as independent variable can be relied on to explain dependent variable as Financial Stability as shown in Table 4.35.

**Table 4.32: ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48.153	1	48.153	111.092	.000 <sup>b</sup>
	Residual	89.725	207	.433		
	Total	137.878	208			

**a. Dependent Variable: Financial Stability****b. Predictors: (Constant), Governance**

Table 4.32 shows the results of ANOVA test which reveal that Governance has significant effect on financial stability in the Micro Finance Institutions in Rwanda since the P value is actual 0.000 which is less than 5% level of significance. The study thus rejects the null hypothesis and concludes that there is significant relationship between Governance and financial stability in the Micro Finance Institutions in Rwanda.

Corporate Governance is basically concerned with ways in which all parties interested in the well-being of the firm (the stakeholders) attempt to ensure that managers and other insiders are always taking appropriate measures or adopt mechanisms that safeguard the interests of the stakeholder (Wanjiru, 2013).

**(d). Governance Regression Coefficients**

The Table 4.33 below shows Coefficients of Corporate Governance as independent variable can be relied on explaining financial stability as dependent variable.

**Table 4.33: Governance Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
<b>1</b> (Constant)	.148	.046		3.204	.002
Governance	.541	.051	.591	10.540	.000

**a. Dependent Variable: Financial Stability**

Table 4.34 shows a positive significant regression coefficient of 0.541 (p-value<0.05). This means that a unit change in Governance brings about a 0.541 change in financial stability in the Micro Finance institutions in Rwanda.

#### 4.4.3. Effect of Risk Management on Financial Stability of Micro Finance Institution.

The study responded to the objective which sought to determine the significant relationship between Risk Management and Financial Stability in the Micro Finance Institution in Rwanda.

##### (a). Correlation for Risk Management and Financial Stability

**Table 4.35: Correlations**

Variable	Category type	Financial stability	Financial management	Risk
<b>Financial stability</b>	Pearson Correlation	1	.597**	
	Sig. (2-tailed)		.000	
	N	209	209	
<b>Risk Management</b>	Pearson Correlation	.597**	1	
	Sig. (2-tailed)	.000		
	N	209	209	

**\*\*.** Correlation is significant at the 0.01 level (2-tailed).

Table 4.35 shows the Pearson correlation coefficients between the independent variable Risk Management and the dependent variable Financial Stability. The findings indicate a positive significant correlation of 0.597 since the level of significant is less than the set 0.05.

Abu (2013) urged that Financial Statements are prepared in accordance with International Public Sector Accounting Standards (IPSASs) and include an independent auditor's report. Notable in the 2013 Financial Statements is a substantial surplus. This surplus is mainly due to new member organization dues; a relentless focus on cost avoidance, recovery, and saving; unplanned staff vacancies, which had a positive effect on travel, meeting, and other project-related costs; and greater diversification in funding for the Public Interest Oversight Board (PIOB).

**(b). Regression for Risk Management on Financial Stability**

Regression analysis was carried out in order to determine whether Risk Management as independent variable can be relied on in explaining the dependent Variable-Financial Stability.

**Table 4.36: Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
<b>1</b>	.597a	.357	.354	.65449

a. Predictors: (Constant), Risk Management

Table 4.36 shows the coefficient of determination (R Square) of 0.357 which indicates that Risk Management can explain 35.7% of the variations or changes in the dependent variable- Financial Stability in the Micro Finance Institutions in Rwanda. In other words, Risk Management can explain 35.7 % of changes in Financial Stability in the Micro Finance Institutions in Rwanda.

**(c). Risk Management on Financial Stability**

The study shows how Risk Management can be relied on to explain Financial Stability as shown in Table 4.39.

**Table 4.37: ANOVAa**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>1</b>	<b>Regression</b>	<b>49.208</b>	<b>1</b>	<b>49.208</b>	<b>114.874</b>	<b>.000<sup>b</sup></b>
	Residual	88.671	207	.428		
	Total	137.878	208			

a. Dependent Variable: Financial Stability

b. Predictors: (Constant), Risk Management

Table 4.37 shows the results of ANOVA test which reveal that Risk Management has significant effect on Financial Stability in the Micro Finance Institutions in Rwanda Since the P-value is actual 0.000 which is less than 5% level of significance.

#### (d). Coefficients

The coefficients of the study determine whether Risk Management as independent variable can be relied on in explaining the dependent Variable-Financial Stability as shown in Table below.

**Table 4.38: Coefficients<sup>a</sup>**

Model	Unstandardized		Standardized	t	Sig.
	B	Std. Error	Coefficients		
1 (Constant)			Beta	3.967	.000
Risk	.179	.045		10.718	.000
management	.508	.047	.597		

#### a. Dependent Variable: Financial Stability

Table 4.38 shows a positive significant regression coefficient of 0.508 (p-value<0.05). This means that a unit change in Risk Management brings about a 0.508 change in Financial Stability in the Micro Finance Institutions in Rwanda. The study thus rejects the null hypothesis and concludes that there is significant relationship between Risk Management and Financial Stability in the Micro Finance Institutions in Rwanda. Arora, Saasa, Stone, Carpio, Williams and Grossman (2012). Effective Credit Risk Management enhances financial performance of Microfinance banks. A sound Microfinance banking subsector is vital for economic development as the sector supports low end entrepreneurs operating SME. Microfinance banks are part of the financial sector in an economy performing valuable activities on both sides of the balance sheet and providing the financial support to other segments.

#### 4.4.4 Effect of Financial Control on Financial Stability

The study responded to the objective which sought to evaluate the effect of Financial Controls on Financial Stability of Micro Finance Institutions in Rwanda.

**Table 4.39: Correlations**

Variable	Category type	Financial stability	Financial Controls
<b>Financial stability</b>	Pearson Correlation	1	.226**
	Sig. (2-tailed)		.001
	N	209	209
<b>Financial Controls</b>	Pearson Correlation	.226**	1
	Sig. (2-tailed)	.001	
	N	209	209

**\*\*.** Correlation is significant at the 0.01 level (2-tailed).

**(a) Correlation for Financial Controls and Financial Stability**

The study determines whether Correlation for Financial Controls as independent variable can be able to explain Financial Stability.

Table 4.40 shows the Pearson correlation coefficients between the independent variable Financial Controls and the dependent variable Financial Stability. The findings indicate a positive significant correlation of 0.226 since the level of significant is less than the set 0.05.

Kalemli-Ozcan, Papaioannou and Peydró (2013). Financial globalization can lead to large benefits, particularly to the development of the financial system. But financial globalization can also come with crises and contagion. The net effect of financial globalization is likely positive in the long run, with risks being more prevalent right after countries liberalize. Financial sector provides critical services to the real economy without any discontinuity. Absence of financial instability: ‘containment of the likelihood of failure of individual financial firms or any systemic stress and thereby limiting the associated costs to the economy

**(b). Regression for Financial Controls on Financial Stability**

Correlations analysis was carried out in order to determine whether Financial Controls as independent variable can be relied on in explaining the dependent Variable-Financial Stability as shown in Table below.

**Table 4.40: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.226 <sup>a</sup>	.051	.047	.79500

**a. Predictors: (Constant), Financial Controls**

Table 4.40 shows the coefficient of determination (R Square) of 0.051 which indicates that Financial Controls can explain 5.1% of the variations or changes in the dependent variable- Financial Stability in Micro Finance Institutions in Rwanda. In other words, Financial Controls can explain 5.1% of changes in Financial Stability in the Micro Finance Institutions in Rwanda.

**(c) Regression for Financial Controls on Financial Stability**

Regression for Financial Controls was conducted to determine whether Financial Controls has significant effect on financial stability as shown in table below:

Table 4.40 shows the results of ANOVA test which reveal that Financial Controls, Risk Management, Audit Process and Governance have significant effect on Financial Stability in the Micro Finance Institutions in Rwanda since the P value is actual 0.000 which is less than 5% level of significance.

**Table 4.41: ANOVA**

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>1</b>	Regression	7.051	1	7.051	11.156	.001 <sup>b</sup>
	Residual	130.828	207	.632		
	Total	137.878	208			

a. Dependent Variable: Financial Stability

b. Predictors: (Constant), Financial Controls

Table 4.41 shows the results of ANOVA test which reveal that Financial Controls has significant effect on Financial Stability in the Microfinance Institutions in Rwanda since the P value is actual 0.000 which is less than 5% level of significance.

**(d). Regression Coefficient for Financial Controls on Financial Stability**

The study for Regression coefficient determines whether Financial Controls has change on Financial Stability

**Table 4.42: Coefficients<sup>a</sup>**

<b>Model</b>	<b>Unstandardize</b>		<b>Standardized</b>	
	<b>d Coefficients</b>		<b>Coefficients</b>	
<b>1 (Constant)</b>	B	Std. Error	Beta	
<b>Financi</b>	.129	.055	.226	
<b>al Controls</b>	.197	.059		

a. Dependent Variable: Financial Stability

Table 4.42 shows a positive significant regression coefficient of 0.197 (p-value<0.05). This means that a unit change in Financial Controls brings about a 0.197change in Financial Stability in the Micro Finance Institutions in Rwanda. The study thus rejects the null hypothesis conclude that there is significant relationship between Financial Controls and Financial Stability in the Micro Finance Institutions in Rwanda.

According to Marshall and Rossman (2006), Regression Analysis is a statistical process of estimating the relationship between variables. Regression analysis helps in generating equation that describes the statistics relationship between variables. The regression analysis results were presented using regression model summary Tables, Analysis of Variance (ANOVA) Table and beta coefficients Tables. The general objective of this study was role of Financial Controls in Financial Stability in Micro Finance Institutions in Rwanda. Accordingly, the researcher chose to perform regression analysis to establish the relationship between the Financial Controls (independent variables) and Financial Stability (dependent variable)

#### **4.5 Multiple Regression Analysis**

Regression analysis was carried out in order to determine whether independent variables (Audit Process, governance, Risk Management and Financial Controls,) can be relied on in explaining the dependent Variable-Financial Stability. Table 4.45 shows the coefficient of determination (R Square) of 0.562 which indicates that Financial Controls, Risk Management, Audit Process and Governance can explain 56.2 % of the variations or changes in the dependent variable- Financial Stability in the Micro Finance Institutions in Rwanda. In other words, Financial Controls, Risk Management, Audit Process and Governance, can explain 56.2 % of changes in Financial Stability in the Micro Finance Institutions in Rwanda.

**Table 4.43: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.750a	.562	.554	.54392

a. Predictors: (Constant), Financial Controls, Risk management, Audit process, Governance

#### 4.5.1. ANOVA for Overall Model

ANOVA results were presented in Table 4.51. The results indicated that the overall model was significant ( $F = 65.512$ ;  $P = 0.000$ ). This implies that is, the independent variables were good joint explanatory variables

**Table 4.44: ANOVA a**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	77.526	4	19.381	65.512	.000 <sup>b</sup>
Residual	60.353	204	.296		
Total	137.878	208			

a. Dependent Variable: Financial stability

b. Predictors: (Constant), Financial Controls, Risk Management , Audit Process, Governance

#### 4.5.2. Coefficients for Overall Model

The study was carried to determine whether independent variables can be relied on in explaining the dependent variable Table 4.45 shows that Audit process has a positive significant regression coefficient of 0.322 (p-value<0.05). This means that a unit change in Audit Process brings about a 0.322 change in Financial Stability in the Micro Finance Institutions in Rwanda.

It is also shown that Governance has a positive significant regression coefficient of 0.230 (p-value<0.05). This means that a unit change in Governance brings about a 0.230 change in Financial Stability in the Micro Finance Institutions in Rwanda.

The same Table shows that Risk Management has a positive significant regression coefficient of 0.279 (p-value<0.05). This means that a unit change in Risk Management brings about a 0.279 change in Financial Stability in the Micro Finance Institutions in Rwanda.

The Table shows that Financial Controls has a positive significant regression coefficient of 0.105 (p-value<0.05). This means that a unit change in Financial Controls brings about a 0.105 change in Financial Stability in the Micro Finance Institutions in Rwanda

**Table 4.45: Coefficients**

	B	Std. Error	Beta		
Constant)	.135	.038		3.542	.000
Audit Process	.322	.053	.325	6.125	.000
Governance	.230	.053	.251	4.318	.000
Risk management	.279	.049	.328	5.745	.000
Financial Controls	.105	.042	.120	2.528	.012

a. Dependent Variable: Financial Stability

b Predictors: (Constant), Financial Controls, Risk management, Audit process, Governance

#### 5.5.3. Regression model

$Y = 0.135 + 0.322X_1 + 0.23X_2 + 0.279X_3 + 0.105X_4$ . Table 4.45, shows that when Audit Process is increased by one unit, Financial Stability of MFI in Rwanda will increase by

0.3332 or 32.2%. This implies that Auditing Process is an indicator of Financial Stability of MFI. Also Table 4.45 shows that when Governance is increased by one unit, Financial Stability of MFI in Rwanda will increase by 0.230 or 23%. This implies that Governance is an indicator of Financial Stability of MFI. Further, above Table shows that when Risk Management is increased by one unit, Financial Stability of MFI in Rwanda will increase by 0.279 or 27.9%. This implies that Risk Management is an indicator of Financial Stability of MFI. Table 4.475, shows that when Financial Controls is increased by one unit, Financial Stability of MFI in Rwanda will increase by 0.105 or 10.5%. This implies that Financial Control is an indicator of Financial Stability of MFI.

#### **4.6. Summary of Hypothesis Testing**

The study sought to test the null hypothesis that timely rendition of information does not significantly affect compliance and financial stability of MFI in Rwanda. A level of significance less than 0.05 leads to the null hypothesis being rejected while a significance level above 0.05 leads to the null hypothesis not being rejected.

**Table 4.46: Summary of Hypothesis Testing**

<b>Hypothesis</b>	<b>Regression weight</b>	<b>Tvalue (Pvalue)</b>	<b>Conclusion</b>
H01. There is no significant relationship between Audit Processes on Financial Stability in the Micro Finance Institutions in Rwanda.	.322	6.125 (0.000)	<b>Reject H<sub>01</sub></b>
H02. There is no significant relationship between Governance on Financial Stability in the Micro Finance Institutions in Rwanda.	.230	4.318 (0.000)	<b>Reject H<sub>02</sub></b>
H03. There is no significant relationship between Risk Management on Financial Stability in the Micro Finance Institutions in Rwanda.	.279	5.745 (0.000)	<b>Reject H<sub>03</sub></b>
H04. There is no significant relationship between Financial Controls on Financial Stability in the Micro Finance Institutions in Rwanda.	.105	.528 (.012)	<b>Reject H<sub>04</sub></b>

a. Dependent Variable: Financial Stability

#### **4.7. Correlation Results**

The study conducted correlation analysis to test the strength of association/relationship between the research variables. Correlation is the measure of the relationship or association between two continuous numeric variables (Kothari, 2004). Correlation indicates both direction and degree to which research variables co-vary with one another from case to case without implying that one is causing the other. Correlation analysis results give a correlation coefficient which measures the linear association between two variables (Crossman, 2013). The value of correlation coefficient ranges between -1 and +1. A correlation coefficient of +1 indicates that two variables are perfectly related in a positive linear. A correlation of -1 indicates that two variables are negatively linearly related and a correlation coefficient of 0 indicates that there is no linear relationship between two variables.

The Findings of the study are presented in Table 4.46. The results of the correlation analysis presented in the table show that Audit process was positively related to the Financial Stability with a Pearson's Correlation Coefficient of  $r = 0.585$  and was statistically significant as the p-value ( $p=0.000$ ) was less than 0.05. This relationship was strong. The results show that Governance was positively correlated to Financial stability a Pearson's Correlation Coefficient of  $r = 0.591$  and statistically significant as the p-value ( $p=0.000$ ) was less than 0.05. The relationship was strong. The Findings of the study further show that there was a positive relationship between Risk management and Financial stability with a Pearson's Correlation Coefficient of  $r = 0.597$  and was statistically significant as the p-value ( $p=0.000$ ) was less than 0.05. This relationship was relatively strong. The Findings of the study show that there was a positive correlation between Financial Controls and Financial stability with a Pearson's Correlation Coefficient of  $r = 0.226$  and was statistically significant as the p-value ( $p=0.001$ ) was less than 0.05. This was a relatively weak correlation.

Additionally, The Findings of the study further show that there was a positive relationship between Audit Process and Governance with a Pearson's Correlation Coefficient of  $r = 0.429$  and was statistically significant as the p-value ( $p=0.000$ ) was less than 0.05. This relationship was relatively strong. Findings also indicate that there was a positive correlation between Audit Process and Risk Management with a Pearson's Correlation Coefficient of  $r = 0.396$  and was statistically significant as the p-value ( $p=0.000$ ) was less than 0.05. This relationship was relatively strong. The Findings of the study further show that there was a positive relationship between Audit Process and Financial Controls with a Pearson's Correlation Coefficient of  $r = 0.184$  and was statistically significant as the p-value ( $p=0.008$ ) was less than 0.05. This relationship was relatively weak.

The Findings of the study further show that there was a positive relationship between Governance and Risk Management with a Pearson's Correlation Coefficient of  $r = 0.450$  and was statistically significant as the p-value ( $p=0.000$ ) was less than 0.05. This relationship was relatively strong. The Findings of the study further show that there was a positive relationship between Governance and Financial Controls with a Pearson's Correlation Coefficient of  $r = 0.160$  and was statistically significant as the p-value ( $p=0.021$ ) was less than 0.05. This shows a relatively weak correlation. The Findings of the study further show that there was a positive relationship between Risk Management and Financial Controls with a Pearson's Correlation Coefficient of  $r = 0.018$  and was statistically significant as the p-value ( $p=0.018$ ) was less than 0.05. This shows a relatively weak correlation.

**Table 4.46: Pearson Correlation Matrix for Independent and Dependent Variables**

		Financial stability	Audit process	Governance	Risk management	Financial Controls
Financial stability	Pearson Correlation	1	.585*	.591**	.597**	.226**
	Sig.		.000	.000	.000	.001
	N	209	209	209	209	209
Audit process	Pearson Correlation	.585**	1	.429**	.396**	.184**
	Sig.	.000		.000	.000	.008
	N	209	209	209	209	209
Governance	Pearson Correlation	.591**	.429*	1	.450**	.160*
	Sig.	.000	.000		.000	.021
	N	209	209	209	209	209
Risk management	Pearson Correlation	.597**	.396*	.450**	1	.018
	Sig.	.000	.000	.000		.800
	N	209	209	209	209	209
Financial Controls	Pearson Correlation	.226**	.184*	.160*	.018	1
	Sig.	.001	.008	.021	.800	
	N	209	209	209	209	209

\*\* . Correlation is significant at the 0.01 level (2-tailed).

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

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1. Introduction

This chapter comprises the summary of major findings, the conclusion, recommendations and suggestions. It deals with entire study including the data presented in chapter four with specific attention given to the objectives and research hypothesis of the study which were used as units of analysis. Theoretical and empirical literature was used to compare the results of the study with previous studies. The conclusions were drawn from the results and implications of the results drawn and used to give the recommendations

#### 5.2. Summary

This section presents the summary of the study on the relationship between quality compliance and Financial Stability of Micro Finance Institutions in Rwanda based on specific objectives

##### **5.2.1. To find the effect of Audit Process on Financial Stability of Micro Finance Institutions in Rwanda.**

The first objective of the study was to find the effect of Audit Process on Financial Stability of Micro Finance Institutions in Rwanda. Various methods were used to arrive at the findings. These methods included descriptive statistics and regression analysis. The results of ANOVA test which reveal that Audit Process has significant effect on financial stability of Micro Finance Institutions in Rwanda. The study thus rejects the null hypothesis and concludes that there is significant relationship between Audit Process and Financial Stability in the Micro Finance Institutions in Rwanda. The results therefore concluded that audit process positively affects effectiveness of performance of Micro Finance Institutions in Rwanda. The study had a hypothesis that audit process affects financial performance of Micro Finance Institutions in Rwanda. The results revealed that audit process was statistically significant in explaining Financial Performance of of Micro Finance Institutions in Rwanda. This implied that the null

hypothesis that audit process does not influence financial performance of Micro Finance Institutions in Rwanda failed to be accepted and the alternative hypothesis failed to be rejected.

### **5.2.2. To examine the effect of Governance on Financial Stability of Micro Finance Institutions in Rwanda.**

The second research objective was to examine the effect of Governance on Financial Stability of Micro Finance Institutions in Rwanda. Various methods analytical methods were used to arrive at the findings. These methods included descriptive statistics, correlation analysis and regression analysis. The findings indicated that there was mechanism established on governance and contributed high on financial performance of Micro Finance Institutions in Rwanda. The study had a hypothesis that Organization governance on financial performance of Micro Finance Institutions in Rwanda. The results revealed that governance was statistically significant in explaining Financial Performance of Micro Finance Institutions in Rwanda. The results of ANOVA test reveal that Governance has significant effect on financial stability in the Micro Finance Institutions in Rwanda. The study thus rejects the null hypothesis and concludes that there is significant relationship between Governance and financial stability in the Micro finance institutions in Rwanda. This implied that the effectiveness and efficiency are fulfilled with a greater mean which is a tangible proof of their existence

### **5.2.3. To assess the effect of Risk Management on Financial Stability of Micro Finance Institutions in Rwanda.**

The third objective of the study was to determine the effect of risk management of financial stability of MFI in Rwanda. To meet this objective, descriptive statistics, regression analysis and ANOVA was conducted. The results of ANOVA test reveal that Risk Management has significant effect on Financial Stability in the Micro Finance Institutions in Rwanda. This indicated that risk management met the threshold since the precision. The study thus rejects the null hypothesis and concludes that there is significant relationship between Risk Management and Financial Stability in the Micro Finance Institutions in Rwanda.

#### **5.2.4. To evaluate the effect of Financial Controls on Financial Stability of Micro Finance Institutions in Rwanda.**

The fourth objectives of the study were to evaluate the effect of Financial Controls on Financial Stability of Micro Finance Institutions in Rwanda. To meet this objective, descriptive statistics, regression analysis and ANOVA was conducted. The study shows a positive significant regression coefficient. This means that a unit change in Financial Controls brings about change in Financial Stability in the Micro Finance Institutions in Rwanda. The study thus rejects the null hypothesis conclude that there is significant relationship between Financial Controls and Financial Stability in the Micro Finance Institutions in Rwanda.

### **5.3. Conclusions**

#### **5.3.1. To find the effect of Audit Process on Financial Stability of Micro Finance Institutions in Rwanda.**

The study revealed that Audit Process has significant effect on Financial Stability, it can be concluded from this study that there exists a positive significant relationship between Audit Processes, Financial Stability, the study thus rejects the null hypothesis and concludes that there is significant relationship between Audit Process and Financial Stability in the Micro Finance Institutions of Rwanda.

#### **5.3.2. To examine the effect of Governance on Financial Stability of Micro Finance Institutions in Rwanda.**

Findings indicated that prudential regulation and supervision provide the foundation for a stable financial system. The stability of individual institutions within the financial system rests on high standards of corporate governance. Results of ANOVA test revealed that governance has significant effect on Financial Stability in the Micro Finance Institutions of Rwanda and thus the study rejects that the null hypothesis concluded that there is significant relationship between Governance and Financial Stability in the Micro Finance Institutions of Rwanda.

### **5.3.3. To assess the effect of Risk Management on Financial Stability of Micro Finance Institutions in Rwanda**

The results of ANOVA test which reveal that Risk Management has significant effect on Financial Stability in the Micro Financial Institutions of Rwanda. The study thus rejects the null hypothesis and concluded that there is significant relationship between Risk Management and Financial Stability in the Micro Financial Institutions of Rwanda.

### **5.3.4. To evaluate the effect of Financial Controls on Financial Stability of Micro Finance Institutions in Rwanda.**

The specific objective four was to assess the role of financial controls on the management of the Micro Finance Institutions in Rwanda and the study found that considering the regression coefficients, Financial Controls influences less the Financial Stability (Financial Controls:). The study concludes that Financial Controls have a positive significant regression coefficient. This means that a unit change in Financial Controls brings about change in Financial Stability in the Financial Institutions of Rwanda.

## **5.4 Recommendation**

The recommendations were made regarding the influence of the independent variables: audit process, governance, risk management and financial controls on financial stability of MFI in Rwanda.

### **5.4.1 Audit Process on Financial Stability**

It is also recommended that the management should establish a system of quality control designed to provide reasonable assurance that an organization management and its personnel comply with regulatory and legal requirements, code of ethics and standards on quality of control and auditing is a crucial to the office.

The study recommends a policy on internal controls to be established to keep on implementing effective human resource policies and procedures that enhance an organization's control environment. It is also recommended that the management should establish a system of quality control designed to provide reasonable assurance that an

organization management and its personnel comply with regulatory and legal requirements, code of ethics and standards on quality of control and auditing is a crucial to the office. It is further recommended that Government should come up with a policy on training the MFI owners on how to prepare financial statements and other documents which are required by MFI. The government should also come with a policy of having a legal body to register and regulate MFI in Rwanda; this will give confidence to the banks as they deal with the MFIs.

The management recommends the effectiveness of audit regulation, particularly for external audits of financial institutions, to improve audit quality encourages the continued efforts of the International Audit and Assurance Standards Board (IAASB), internationally, and other audit standard setters in their national contexts to improve the standards on information that external audits provide to investors and other financial report users.

The management of Micro Finance Institutions should keep organizing seminars and workshops whereby members would be trained frequently by experts either internally or externally. MFI staff members must have sufficient proficiency and training to carry out the tasks assigned to them. These must be carefully directed, supervised and reviewed. The amount of supervision required corresponds to the experience and skill of the staff members.

#### **5.4.2 Governance on Financial Stability**

The study recommends a policy to promote high quality accounting and auditing standards, including effective enforcement of disclosure requirements, with an emphasis on holding directors to account for the truth and fairness of disclosures issued by their Micro Finance Institutions. Further, management should have a continuous process of reviewing the departmental implementation of the policy on Internal Controls to support the effectiveness of internal controls for financial reporting across government. Effective Corporate Governance and Risk Management practices are essential for the promotion of Financial Stability. Effective supervisory techniques should encourage the adoption and maintenance of sound corporate governance and risk management practices.

The study also recommends that the government of Rwandans should timely review the timelines set for completing their full risk-based assessment of the effectiveness of their financial reporting controls and for addressing identified gaps and weaknesses, to ensure that they are timely reported. These organizations should also implement programs for continuous monitoring of these controls to confirm their ongoing effectiveness.

#### **5.4.3. Risk Management on Financial Stability**

The study recommended that there must be a policy for the MFI to try to stick to one bank in order to create a good relationship with the bank. Standard setting bodies should review their principles for governance, taking into consideration the sound risk governance practices set out in the report. At the same time, Government recommends to strengthen risk management practices as one of the main lessons from the financial crisis, for both financial and non-financial companies. The study recommended that government authorities need to better assess the effectiveness of a firm's risk governance framework, and more specifically its risk culture, to help ensure the sound management of risk through the economic cycle. Supervisors need to strengthen their assessment of risk governance frameworks to encompass an integrated view across all aspects of the framework.

#### **5.4.4 Financial Controls on Financial Stability**

The study sought to establish the effect of financial controls on financial performance of Micro Finance Institutions in Rwanda. The study recommends prudent policy measures on Financial Controls Especially Asset management, financial system controls and Capital adequacy. Also the study recommends of policy development on member fund protection in relation to efficient market hypothesis and creation of robust financial market economy. Management recommends that quarterly reports are produced on time and ensure that external investors are able to monitor liquidity management and detect liquidity and credit risks exposed to their investments early enough. Government recommends that since all financial services players under MFI adhere to frequent reporting for better increase of financial management and efficient investment decisions.

### **5.5. Suggested Areas for Further Research**

This highlights the importance of having efficient and effective internal financial controls in Micro Finance Institutions in Rwanda by focusing on Audit Process, Governance, Financial Risk Management, and Financial Controls on Financial Stability. A system of financial internal controls is fundamental to the safe and sound management of institutions. Effective financial internal controls help an institution protect and enhance shareholders' value and reduce the possibility of unexpected losses or damage to its reputation. However, it is recommended to establish an overarching statutory framework for the financial system by enacting financial stability framework legislation (a Systemic Stability Act) to enhance and preserve the stability of an efficient and effective financial system for Micro Financial Institutions.

This means that if the four key determinants of Financial Stability are fixed in Micro Finance Institutions there will be less corruption and financial scandals which will lead to enhanced financial performance. Subsequent studies should consider replicating this study in the MFI in order to establish the role of internal audit. Secondly, future research may attempt to replicate the study in different economies to confirm the role of internal control systems and corporate governance on financial performance of MFI. Future studies could also focus on a comparative study among various sectors. Future studies should apply different research instruments like focus group discussions and primary data only to involve respondents in discussions in order to generate detailed information which would help improve financial performance of MFI.

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## **APPENDICES**

### **Appendix I: Letter of Introduction by Researcher**

**Dear Respondent,**

This questionnaire is aimed at collecting data for academic research purposes on “the ‘Relationship between Compliance and Financial Stability of Micro Finance Institutions in Rwanda.’” The study is in partial fulfillment of the requirements for the award of a PhD degree in Business Administration of Jomo Kenyatta University of Agriculture and Technology (JKUAT).

Please be assured that any information collected through this questionnaire will be treated with utmost confidence and will be used for research purposes only. Thank you in advance for your time and cooperation.

Yours faithfully,

Wilson BASHAIJA

Student, PhD, Business Administration

Registration Number HD433-C010-4371/2013

## **Appendix II: Questionnaire**

### **A. GENERAL INFORMATION**

#### **Section A:**

1. How long have you worked in this institution?

2. What is your current level of management in institution?

- Lower management
- Middle management
- Top management

8. Please tick according to the code provided below for the variables below:

Strongly Agree 5.....Agree 4.....Not sure 3.....Disagree 2.....Strongly Disagree 1.....

**SECTION B**

**AUDIT PROCESS**

AUDIT PROCESS STATEMENT	1	2	3	4	5
The chief audit executive's relationships with the audit committee and senior management are critical to the success of the internal audit function					
There are many operational aspects of the audit committee's relationship with the internal audit function that are important for the effective oversight of the internal control framework and culture					
The chief audit executive reports functionally to the audit committee on the planning, execution and results of audit activities					
Internal audit functions need an adequate complement of staff with the appropriate experience and qualifications for the risks and businesses they audit.					
The organization may assign responsibility for audit activities to a corporate internal audit department or include some audit activities in the responsibilities of line functions.					
An annual internal audit plan is the key to matching the work of internal audit to the needs of and expectations of the audit committee, external auditors and senior management					

Boards, audit committees and senior management rely on internal audit reports to confirm the quality of the system of control.					
Internal audit reports are only of value when managers address the problems and deficiencies identified by the audits or make informed decisions to accept the risks.					
Substandard credits are inadequately protected by the current sound worth and paying					
The prevention, deterrence and detection of fraud are the responsibility of management.					
The organization's structure and tone at the top help to establish and enforce individual accountability for performance of internal control responsibilities.					
The employees of the organization are satisfied with the way investment goals are being accomplished					
Your organization Reconciling bank statements to the accounting records					
The accounting system adequately identify receipts and expenditures for each grant or contract					
All accounting entries supported by documentation that give rise to the transaction					

**SECTION C : GOVERNANCE**

The governing body approves the mission and values and assesses all proposed activities against them.					
The governing body reviews short-, medium- and long term goals to monitor agreed strategies.					
The governing body members receive the advice and information that they need to make good decisions.					
Board and management in assessing the organization's current corporate governance environment					
Data output controls are used to ensure the integrity of output, and the correct and timely distribution of output produced.					
Information and communication is the component of internal control that ensures that pertinent information is identified, captured, and communicated in a form and timeframe that enables people to carry out their job responsibilities					
Board has full and common understanding of the roles and responsibilities of a board of directors.					
Board regularly monitors and evaluates progress on important organizational matters.					
You carefully mapped out your short-term and long-term plans matching your desires with your institutional commitments					

Your strategic initiatives part of your operating and business plans					
Your staff and all of your key stakeholders understand your strategic initiatives?					
<b>SECTION D: RISK MANAGEMENT</b>					
The disaster management regulation in the organization require to use risk maps to support the risk assessment					
The company's resource allocation processes establishes and sustains competitive advantage or maximize returns.					
There are harmonized standards regarding the development and the visualization of risk maps in the organization.					
A major disaster threatens the company's ability to sustain safe operations, provide essential services, and recover operating costs.					
Interruption to the availability and/or quality of external data significantly impairs the functionality or value of the company provided services.					
The assessment of fraud risk considers opportunities for					

unauthorized acquisition, use, or disposal of assets					
An ineffective strategic planning process may result in irrelevant information that threatens the company's capacity to formulate viable business strategies.					
Nonconformance with current laws and regulations exposes the company to sanctions, fines, and penalties and threatens the company's reputation, business opportunities, and expansion potential.					
The company's access controls are effective in preventing inappropriate access to data or systems.					
Incomplete and/or inaccurate information (financial or non-financial) contributes to inappropriate business decisions.					
The Board of Directors or equivalent organization to the Board of Directors provide a system					
<b>SECTION : E FINANCIAL CONTROLS</b>					
The entity management periodically review accounting summaries to compare budgeted and actual					

amounts spent					
The accounting system provide for accumulating and recording expenditures by activity/project and cost category shown in the annual budget					
The organization considers both internal and external sources when identifying relevant data to use in the operation of internal control.					
The accounting procedures require periodic reconciliations of accounts receivable and accounts payable with control accounts.					
Accounting supervisors frequently prepare reports or reconciliations to verify the accuracy of financial transactions processed.					
The organization has transparency and accountability, it display performance results to all stakeholders.					
The organization maintains an adequate and up-to-date cashbook recording receipts and payments.					
The accounting system provide for accrual of income and expenditures					
Department assets (property, equipment, supplies, etc.) that you believe are not adequately protected against theft or misuse?					
Funding sources are evaluated annually to assess the sustainability of					

current funding levels					
Financial statements and reports are prepared for implementing unit					
The audit of the entity conducted in accordance with the International Standards on Auditing, or the International Standards for Supreme Audit Institutions, or national auditing standards					
Controls in place concerning the preparation and approval of transactions, ensuring that all transactions are correctly made and adequately explained					
Capital Adequacy Requirement is Important to Banks					
There are Challenges Faced the Implementation of Capital Adequacy Requirement					
There are Measures taken to Ensure Compliance with Capital Adequacy Requirement					
<b>SECTION F : FINANCIAL STABILITY</b>					
MFI understand the buying habits of our customers					
MFI has witnessed an increase in number of active customers					
MFI incur low customer acquisition costs					
MFI has a strategy to minimize costs					

Would you delay or bring forward an investment decision in order to reduce costs					
The existing measurement cost portfolio and benchmark returns conducted using a robust and meaningful methodology					

**Appendix III: List of Licensed Microfinance Institutions (Limited Companies) as of 31 March 2017**

sn	Names	Location	Tel	Email	Managing director / CEO
1	RESEAU INTERDIOCESAIN DE MICROFINANCE (RIM) Ltd	Nyarugenge Kigali	-0788306178	rimkigali@rim.rw	Mr. GATERA NSANZIMFURA Damien
2	LETSHEGO RWANDA Ltd	Kigali,	0788304077	rw@letshego.com	Mr. Benjamin Muketha
3	VISION FINANCE COMPANY Ltd	Muhima- Kigali	0788381600	info@visionfundrwa.nda.org	Mr. Ross Nathan
4	DUTERIMBERE IMF Ltd	Kimironko- Kigali City	0781802160	info@duterimbereimf.co.rw	Mr. KAYUMBA Charles Hussein
5	INKINGI MICROFINANCE Ltd	Muhima- Kigali city	0788301663	mfinkingi@yahoo.fr	Ms. MUKAMISHA Bernadette
6	SAGA GANZA Ltd	Kigali City Nyarugenge- Gitega	0788301663	sagerganza@yahoo.com	Mr. MAFUTALA Julien
7	AMASERANO COMMUNITY BANKING Ltd	Kicukiro Kigali	-0788380723	fmunyankiko@yahoo.fr	Mr. MUNYANKIKO Flouard

8	CAISSE DES AFFAIRES(CAF) ISONGA Ltd	Muhanga Nyamabuye	-		isonga@yahoo.fr	
9	SOCIETE MUTUELLE DE GARANTIE ET DE FINANCEMENT (SMGF) LTD	Kimugurura Kigali	-	078831456 6	smgfltd@yahoo.fr	Mr. Gilles BARCHMAN
10	GOSHEN FINANCE Ltd	Kigali City Nyarugenge		078830131 3	goshenfinance@yah oo.com	Mr. MUSANGAMFUR A Ignace
11	COPEDU Ltd	Kigali City Kicukiro		078830745 6	info@copedultd.rw	Mr. GASIGWA Festus
12	ATLANTIS MICROFINANC E Ltd	Kigali City Nyarugenge		078830823 3	admin@atlantismicr ofinance.co.rw	Mr. KARAMBIZI Patrick
13	FINANCIAL SAFETY COMPANY Ltd	Rubavu Gisenyi		078850710 0	financialsafety@yma il.com	Mr. NIBAMUREKE Thaddee
14	PREFERRED MICROFINANC E Ltd	Kigali City Nyarugenge Nyamirambo		073869539 9	baziclement1@gmail .	Mr. Munyembabazi Clement
15	MICROFINANC E (RWANDA) Ltd	Gasabo Gisozi		073967187 9	international.com rwanda@asa- international.com	Mr. Mohammad Jamilur Rahman Chowdhury
16	CLECAM EJO HEZA Ltd	Muhanga Nyamabuye		078853199 5	unilecam@gmail.co m	Mr. DUSABUMUREM YI Merchias 0
17	UMUTANGUHA FINANCE COMPANY "UFC,	Kigali City Nyarugenge Nyamirambo		078847806 2	ufinance.co.rw ucurw@yahoo.fr	Mr. NDAHAYO Jules Théoneste
18	AXON TUNGA MICROFINANC E Ltd	Nyarugenge Nyamirambo			axon.tunga@gmail.c om	

Source: National bank of Rwanda financial stability directorate microfinance supervision department, March 2017