

**A framework to Enterprise Risk Management and
Sustainability in micro-lending companies in
Botswana**

RP Machera
[Orcid.org/0000-0002-3678-9192](https://orcid.org/0000-0002-3678-9192)

Thesis accepted in fulfilment of the requirements for the degree
Doctor of Philosophy in Economic and Management Sciences
with Business Administration
at the North-West University

Promoter: Prof SW Musvoto

Graduation ceremony: April 2020
Student number: 29858380

Preface and Acknowledgements

It is well with my soul and I thank God Almighty for giving me the wisdom, strength and energy to complete this journey.

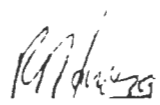
The research presented herein was conducted on Enterprise Risk Management and Sustainability in micro-lending companies in Botswana from **January 2017** to **May 2019**. I would like to express my gratitude to my promotor Professor Saratiel Wedzerai Musvoto for his invaluable support, guidance, motivation and time; without him I would not have completed my doctoral study.

I appreciate the effort of Dr Energy Sonono in assisting me with the analysis of quantitative data on SPSS software. I extend my gratitude to the editor of this thesis Dr Muchativugwa Liberty Hove. A special appreciation goes to my mother (Enety) and late father whose inspiring nickname, "*Mr Education - Pencil & Paper*" (Davison), encouraged me to study up to this level. I honour and thank my wife, Precious Charakupa, my first daughter, Nyasha, and her sibling, Rumbidzai, for their continuous support and understanding during the long days and nights when I burned the candle and oil on my PhD thesis.

I thank specifically the NWU School of Business and Governance staff members for their support during my doctoral study. Lastly, I thank my Pro Vice Chancellor, Dr Ivy Anish, and Deputy Pro Vice Chancellor, Professor Peter Mbatl, for giving me the opportunity and support to complete my research whilst working at Botho University in Botswana as their **Dean of the Faculty of Business and Accounting**.

DECLARATION

This thesis, A Framework for Enterprise Risk Management and Sustainability in Micro-lending Companies in Botswana, is submitted for the degree of Doctor of Philosophy in Economic Management Sciences with Business Administration at the North-West University, School of Business and Governance. To the best of my knowledge, I Pfumbudzayi Robert Machera, declare that the entirety of this thesis is my own original work, and that I am the sole author, except where guidance was sought from my promoter, acknowledged and referenced material made by previous scholars and other practitioners. I further declare that this thesis or part thereof, has not been presented or submitted for any academic qualification elsewhere.



.....

Signature

Date: 13 May 2019

Abstract

The purpose of this study is to develop an enterprise risk management (ERM) and sustainability framework that addresses problems of going concern in the micro-lending sector in Botswana. Over the past decades the implementation of financial initiatives to fund SMMEs including micro-lending businesses in Botswana has not yielded the expected growth in the SMMEs and micro-lending sector. In Botswana, SMMEs are touted as the engine that drives the economy of the country as they assist in improving the poverty datum line. There have been several Government initiatives and interventions used to resolve challenges faced in the SMMEs, but they have not achieved any meaningful results. Several pronouncements by the Committee of Sponsoring Organisations of the Treadway Commission (COSO) have reinforced that adoption of ERM process assists organisations to achieve their intended business objectives through improved performance. In Botswana, the main thrust is on diversification of the economy through promoting and supporting small businesses that fuel economic development and culminate in job creation. In addition, there have been several Government initiatives in place that promote micro-lending businesses which did not yield any meaningful results due to contextual problems.

The study was prompted by a huge decrease in numbers of micro-lending companies in Botswana, from a total of 993 to 243 during the period 2009 to 2013. As micro-lending business is critical to economic growth, it is imperative to ensure the survival of this sector. An adoption of ERM and sustainability framework in the micro-lending sector could assist in addressing business failure problems that are prevalent in this sector. A sharp decrease in the numbers of micro-lending businesses in Botswana therefore prompted this investigation.

This study employed a sequential explanatory design within the broad mixed methods approach. The study initially collected quantitative data and later qualitative data in order to verify and authenticate the quantitative data. Data was collected from 223 micro-lending companies in Botswana. Proprietors and employees were requested to complete questionnaires. A thematic analysis was adopted for qualitative data analysis and seven common themes emerged.

The findings revealed that there is lack of training and development in the sector as the majority of the respondents are professional certificate and diploma holders. In addition, the findings of the study further revealed that there is lack of awareness of sources of risks and, as a result, the sector fails to manage and mitigate risk. The results indicate that senior management in the sector is a major source of risk contributing to the closure of an enterprise. Such an end is explained through autocratic leadership styles, computer illiteracy and low levels of education which ultimately negatively affect productivity and morale.

The study recommends the implementation of Capital Adequacy Ratio (CAR), which could be used in the sector to constantly monitor performance through supervision by the regulator Non-Bank Financial Institutions Regulatory Authority (NBFIRA) via *cloud software*. A constant and consistent monitoring of this sector might assist in achieving a positive cash flow management which ultimately minimizes the firm's failure rate. The study further recommends human resources management policies which support and encourage training and development in this sector. Implementation of training and development strategies in the sector could assist in understanding risk management processes, foster productivity and enhance morale. Finally, all the recommendations derived from the study could assist in addressing the incessant problems in this sector. Adopting these would ultimately result in improving operational objectives of micro-lending businesses.



Key words: Micro-lending; enterprise risk management; performance; growth; competitiveness; going concern and cloud software.

Table of Contents

PREFACE and ACKNOWLEDGEMENTS.....ii

Declaration..... iii

Abstractiv

Tables xvi

Figures.....xx

LIST OF ABBREVIATIONS xxi

CHAPTER 1: INTRODUCTION AND BACKGROUND TO THE STUDY 1

1.1 Introduction 1

1.2 Background to the study 2

1.3 The definition and nature of risk management process 4

1.4 The state of micro-lending business in Botswana..... 6

1.5 Research problem..... 14

1.6 Research aim and objectives 16

1.6.1 Research aim..... 16

1.6.2 Research objectives 16

1.7 Research questions 16

1.8 Justification of the study 17

1.9 The scope of the study 18

1.10 Outline of the study 18

1.11 Chapter summary..... 19

CHAPTER 2: AN OVERVIEW OF RISK MANAGEMENT IN A MICRO-LENDING ENVIRONMENT20

2 Introduction 20

2.1 Enterprise Risk Management (ERM)..... 21

2.2 Frameworks underpinning risk management..... 23

2.2.1 Risk Management 24

2.2.2 Communication and consultation 25

2.2.3 Establishing the context in which risks occur..... 27

2.2.4 Risk assessment..... 28

2.2.5 Risk identification 28

2.2.6 Risk analysis 29

2.2.7 Risk evaluation..... 30

2.2.8 Risk treatment..... 32

2.2.9 Monitoring and review 36

2.3 Operational risk modelling..... 38

2.3.1 Impact models..... 38

2.3.2 Likelihood models 39

2.4 Sources of risk 40

2.4.1 Political risk 41

2.4.2 Legal risk 42

2.4.3 Regulatory risk 42

2.4.4 Compliance risk 42

2.4.5 Strategic risk 42

2.4.6 Product risk 43

2.4.7 Commodity price risk..... 43

2.4.8 Product reputation risk 43

2.4.9 Operational risk..... 43

2.4.10 Economic risk..... 43

2.4.11 Credit risk..... 44

2.4.12 Currency risk..... 44

2.4.13 Interest rate risk 44

2.4.14 Gearing risk..... 44

2.4.15 Environmental risk..... 45

2.4.16 Fraud risk..... 45

2.4.17 Corporate reputation risk..... 45

2.4.18 Culture risk..... 45

2.5 Entrepreneurship 46

2.6 Theories for entrepreneurship	46
2.6.1 Innovation theory	46
2.6.2 Need for achievement theory	48
2.6.3 Risk bearing theory	49
2.7 Stakeholder assumptions	49
2.7.1 The shareholder value approach.....	49
2.7.2 The stakeholder approach.....	50
2.7.3 The stakeholder inclusive approach	50
2.8 Micro-lending	51
2.8.1 Requirements for micro-lending business in Botswana	52
2.8.2 Challenges and constraints for micro-lending businesses	54
2.9 Accounting as a decision-making tool in risk management process	54
2.9.1 Financial accounting and reporting as decision-making tools in risk management process ..	55
2.9.2 Management accounting	61
2.10 Corporate governance	72
2.11 Internal control and auditing enhance risk management process	75
2.11.1 Internal controls in listed firms and small family businesses	76
2.11.2 Auditing	82
2.12 Environmental accounting and sustainability	84
2.13 Chapter summary.....	84

CHAPTER 3: FACTORS INFLUENCING DEVELOPMENT OF SMMEs AND CHALLENGES FACED BY MICRO-LENDING COMPANIES	85
3 Introduction	85
3.1 The economy of Botswana	85
3.2 Government initiatives towards SMMEs development.....	89
3.2.1 Financial Assistance Policy (FAP).....	89
3.2.2 Citizen Entrepreneurial Development Agency (CEDA)	92
3.2.3 Local Enterprise Authority (LEA)	93
3.2.4 National Development Plan 10 (NDP10)	94

3.3 Challenges faced by SMMEs in Botswana 95

3.4 An analysis and evaluation of licensing requirements for micro-lending businesses in Botswana.....96

3.5 Adoption of ERM systems and risk management models in Botswana..... 103

3.6 Sources of risk 104

3.7 Compliance with the regulator (NBFIRA)..... 104

3.8 Issues related to internal controls and governance 105

3.9 Chapter summary 106

CHAPTER 4: RESEARCH METHODOLOGY 107

4 Introduction 107

4.1 Research philosophy..... 107

4.1.1 Positivism..... 108

4.1.2 Interpretivism 108

4.2 Research approach..... 109

4.3 Research strategy 109

4.3.1 Justification of explanatory case study 110

4.3.2 Justification of number of case studies..... 110

4.4 Research methods..... 111

4.4.1 Mixed methods research design..... 111

4.4.2 Mixed methods research: Rationale and strengths..... 112

4.4.3 Sequential explanatory mixed methods design 113

4.5 Quantitative data collection phase 1..... 115

4.5.1 Analysis of sample size used for this study 116

4.5.2 Sampling technique for phase 1 (quantitative research)..... 116

4.5.3 Research instrument..... 117

4.5.4 Reliability tests 117

4.5.5 Quantitative data analysis 118

4.6 Qualitative data collection phase 2..... 119

4.6.1 Sampling techniques for phase 2 (qualitative research) 120

4.6.2 Interview schedules.....	120
4.6.3 Qualitative interviews	121
4.6.4 Qualitative data analysis	123
4.6.5 Qualitative data validation	124
4.7 Integration of results.....	125
4.8 Ethical considerations	125
4.9 Chapter summary	126

CHAPTER 5: PRESENTATION OF QUANTITATIVE DATA ANALYSIS AND DISCUSSION OF FINDINGS.....	127
5.1 Introduction	127
5.2 Descriptive statistics.....	129
5.2.1 Demographic profile of survey respondents	129
5.2.1.1 Gender	130
5.2.1.2 Age group	131
5.2.1.3 Nationality	132
5.2.1.4 Employment status.....	132
5.2.1.5 Highest qualification	133
5.2.1.6 Job position.....	134
5.2.1.7 Number of years worked	134
5.2.1.8 Micro-lending companies registered with NBFIRA.....	135
5.2.1.9 Trained to work in a micro-lending company	135
5.2.1.10 Involvement in ERM adoption.....	136
5.3 Exploratory factor analysis	136
5.3.1 Factor analysis.....	136
5.3.1.1 Challenges and constraints	140
5.3.1.2 Marketing challenges	141
5.3.1.3 Sources of business.....	142
5.3.1.4 Adoption.....	143
5.3.1.5 Control measures for ERM	144

5.3.1.6 Employee exposure 144

5.3.1.7 External exposure 145

5.3.1.8 Identify risk types 146

5.3.1.9 Important elements 147

5.3.1.10 Primary factors 147

5.3.1.11 Primary risks 148

5.3.1.12 Process exposure 149

5.3.1.13 Qualitative methods used to measure ERM 150

5.3.1.14 Quantitative methods used to measure ERM 150

5.3.1.15 Risk financing techniques..... 151

5.3.1.16 Systems exposure..... 152

5.3.1.17 Corporate governance..... 153

5.3.1.18 Profitability and liquidity ratios 154

5.3.1.19 Stakeholder management 155

5.3.1.20 Managerial innovation 156

5.3.1.21 Motivation..... 157

5.3.1.22 Perceptions 158

5.3.1.23 Risk oversight..... 159

5.3.1.24 Taking opportunity..... 159

5.4 Inferential analysis 160

5.4.1 T-tests..... 160

5.4.1.1 Employment status..... 161

5.4.1.2 Have you been trained to work in micro-lending company? Yes or No (employee perspective) 176

5.4.1.3 Have you been involved in ERM adoption in your organisation? 184

5.4.1.4 Respondent group: Compliant and non-compliant..... 194

5.4.1.5 Is your organisation registered with NBFIRA? Yes or No (employee perspective)..... 197

5.4.1.6 Gender: Female and Male (proprietor perspective) 198

5.4.1.7 Is your organisation registered with NBFIRA? Yes or No (proprietor perspective) 200

5.4.1.8 Have you been trained to work for a micro-lending company? Yes or No (proprietor perspective)	201
5.4.2 Analysis of variance (ANOVA).....	202
5.4.2.1 Influence of demographic and other variables (employee perspective)	202
5.4.3 Correlations between key variables.....	264
5.4.3.1 Correlations between key variables (employee perspective)	264
5.4.3.2 Relationships between variables (proprietor perspective).....	315
5.5 Chapter summary	318

CHAPTER 6: QUALITATIVE DATA ANALYSIS, PRESENTATION AND DISCUSSION OF RESULTS

6 Introduction	319
6.1 Participants	319
6.2 Data gathering	320
6.3 Qualitative data analysis	322
6.4 Inductive approach.....	323
6.5 Thematic data analysis	325
6.6 Discussion of the qualitative review from the open-coding findings	333
6.6.1 Demographic related problems	334
6.6.1.1 Demographics factors such as age, gender, educational level and years of experience that affect performance	334
6.6.1.2 Demographics factors such as age, gender, educational level and years of experience influencing adoption of ERM and sustainability framework.....	336
6.6.2 Sources of risk that affect sustainability of micro-lending business	337
6.6.2.1 Sources of risk	337
6.6.3 Challenges and constraints that contribute to the closure of micro-lending entities	338
6.6.3.1 Factors that contribute to closure of micro-lending entities	339
6.6.3.2 Reasons for starting micro-lending company.....	339
6.6.3.3 Lack of preference of sources of business (priorities)	340
6.6.3.4 Lack of ranking strategies (external control mechanisms).....	341
6.6.4 Enterprise Risk Management (ERM)	341

6.6.4.1 Primary factors for enterprise risk management 341

6.6.4.2 Employee exposure 342

6.6.4.3 Process exposure 343

6.6.4.4 Systems exposure..... 344

6.6.4.5 External exposure 344

6.6.4.6 Elements of enterprise risk management 345

6.6.4.7 Appropriate methods of identification of various risk types 346

6.6.4.8 Qualitative methods for measurement of ERM 347

6.6.4.9 Quantitative methods for measurement of ERM 348

6.6.4.10 Control measures 349

6.6.4.11 Risk financing techniques..... 349

6.6.4.12 Alignment of ERM to business strategies 350

6.6.4.13 Profitability and liquidity ratios 351

6.6.4.14 Corporate governance cultures (best practices) 352

6.6.4.15 Critical success factors for stakeholder management..... 353

6.6.5 Critical success factors for development of micro-lending company (proprietor perceptions, beliefs, opinions and attitudes towards research for start-up business)..... 354

6.6.5.1 Entrepreneurial motives (intentions) 354

6.6.5.2 Managerial innovation and initiative..... 355

6.6.5.3 Taking opportunities 356

6.6.5.4 Self-sufficiency 357

6.6.5.5 Perceptions towards Risk Manager 358

6.6.5.6 Other risk oversight 359

6.6.6 Leadership styles and principles of management..... 359

6.6.6.1 Types of leadership..... 359

6.6.6.2 Application of Henri Fayol's 14 principles of management..... 360

6.6.7 Ensuring the success of micro-lending entities..... 361

6.6.7.1 Factors that influence growth, performance and competitiveness 361

6.7 Chapter summary. 362

CHAPTER 7: A FRAMEWORK FOR ENTERPRISE RISK MANAGEMENT AND SUSTAINABILITY IN MICRO-LENDING COMPANIES IN BOTSWANA.	363
7.1 Introduction	363
7.2 Related literature on ERM process and its integration to the ERM and Sustainability Framework	363
7.3 Contribution of participants to the framework for ERM and Sustainability in micro-lending companies in Botswana	364
7.3.1 CEO / Board	366
7.3.2 ERM structure	367
7.3.3 Human resources management policies	369
7.3.4 Financial reporting and financial management	370
7.3.5 Operations management	370
7.3.6 Integration of ERM process	370
7.3.7 Monitoring and review	370
7.4 NBFIRA	371
7.4.1 Ranking strategies of micro-lending companies (licensing)	371
7.4.2 Daily control of Capital Adequacy Ratio (CAR)	371
7.4.3 External audit (NBFIRA)	371
7.4.4 Sustainability, competitiveness, growth and performance (achieved in micro-lending companies)	371
7.5 Chapter summary	371
CHAPTER 8: KEY FINDINGS, CONCLUSIONS AND RECOMMENDATIONS	373
8.1 Introduction	373
8.2 Conclusions from empirical findings	373
8.3 Conclusions from qualitative results	379
8.4 Major contributions to the body of knowledge	385
8.4.1 Developing an integrated perspective of corporate governance culture and leadership in micro-lending companies	385
8.4.2 Providing an integrated framework for enterprise risk management and sustainability	386

8.4.3 Defining and delineating the role of accounting, reporting and internal controls for micro-lending companies. 387

8.4.4 Empirical validation of theoretical propositions. 387

8.4.5 Guidelines to policy at institutional level promoting growth, competitiveness, sustainability and business continuity. 387

8.4.6 Principles of management and Generally Accepted Accounting Principles (GAAP) applicable to micro-lending companies. 388

8.4.7 Contributing to improved standard of living..... 388

8.4.8 Contribution to future research. 388

8.5 Limitations of the study. 389

8.6 Recommendations for future work..... 389

8.7 Implications for future study. 391

8.8 Chapter summary. 391

References... 393

Annexure A: Data collection tool - questionnaire (proprietor) 399

Annexure A1: Data collection tool - questionnaire (employee) 415

Annexure B: Research interview guide (proprietor) 428

Annexure B1: Research interview guide (employee)..... 430

Annexure C: Ethical clearance letter from NBFIRA 432

Annexure D: Informed consent 433

Annexure E: North-West University: Human Resource Research Ethics Committee (HRREC) - clearance letter 436

Annexure F: Risk register 437

Annexure G: Confirmation Certificate from the Editor..... 438

Annexure H: Plagiarism turn-it - in report. 439

List of tables

Table 1.1: Number of active NBFIs by reporting period	8
Table 1.2: Decrease in growth in micro-lending companies in Botswana	9
Table 1.3: Geographical spread of NBFIRA registered micro-lenders as at 31 December 2013....	10
Table 1.4: NBFIs submitting regulatory reports	11
Table 1.5: Financial performance (Total Assets) in NBFIs for the period 31 December 2013.....	12
Table 1.6: Financial performance (Gross Income and Profit / Loss before tax) for NBFIs for the year ended 31 December 2013.....	13
Table 2.1: Causes and consequences influencing adoption of ERM programs	22
Table 2.2: Steps to consider during the design of a risk management program	27
Table 2.3: Severity and impact matrix	31
Table 2.4: Common insurance covers.....	32
Table 2.5: Risk action table.....	36
Table 2.6: Benefits accruing from an effective ERM system.....	38
Table 2.7: A person's three needs	48
Table 2.8: Four main elements of risk bearing theory.....	49
Table 2.9: Stakeholder groups and possible power sources	51
Table 2.10: Licensing requirements for micro-lending business in Botswana	53
Table 2.11: Challenges and constraints for micro-lending businesses in Botswana	54
Table 2.12: Fundamental principles of professional ethics	55
Table 2.13: GAAP applicable to SMMEs in Botswana.....	60
Table 2.14: Brief guidelines on how to prepare each type of budget	62
Table 2.15: Accounting ratios.....	63
Table 2.16: Techniques for analysing capital expenditure for projects.....	68
Table 2.17: Extract of 17 principles of corporate governance	73
Table 2.18: Control environment.....	76
Table 2.19: Henri Fayol's 14 principles of management.....	79
Table 2.20: Assertions used by the auditor during the audit of financial statements.....	83
Table 3.1 Decrease in growth in micro-lending companies in Botswana	87

Table 3.2: Sectors benefited from FAP	90
Table 3.3: The objectives for the SMMES Policy.....	91
Table 3.4: Number of operating establishments by employment size	91
Table 3.5: Challenges learnt during the NDP10	94
Table 3.6: Challenges faced by SMMES in Botswana	95
Table 3.7: Licensing requirements for micro-lending business in Botswana	96
Table 4.1: Four levels for developing a research study	107
Table 4.2: Reasons and strengths for mixing both quantitative and qualitative methods in a single study.....	112
Table 4.3: Key for codes	115
Table 4.4: Sample size according to strata, segment or group.....	116
Table 4.5: Reconciliation between sample size (n) and questionnaires received	118
Table 4.6: Demographics for participants interviewed	121
Table 4.7: Coding system for interviewees (participants)	122
Table 4.8: Techniques to ensure the trustworthiness of qualitative research.....	124
Table 5.1: Respondents' demographic profile	129
Table 5.2: Descriptive statistics for enterprise risk management and sustainability	139
Table 5.3: Likert scale: Challenges and constraints	140
Table 5.4: Likert scale: Marketing challenges.....	141
Table 5.5: Likert scale: Sources of business	142
Table 5.6: Likert scale: Adoption.....	143
Table 5.7: Likert scale: Control measures for ERM	144
Table 5.8: Likert scale: Employee exposures.....	144
Table 5.9: Likert scale: External exposures.....	145
Table 5.10: Likert scale: Identify risk types.....	146
Table 5.11: Likert scale: Important elements.....	147
Table 5.12: Likert scale: Primary factors	147
Table 5.13: Likert scale: Primary risks.....	148
Table 5.14: Likert scale: Process exposure.....	149

Table 5.15: Likert scale: Qualitative methods used to measure ERM.....	150
Table 5.16: Likert scale: Quantitative methods used to measure ERM.....	150
Table 5.17: Likert scale: Risk financing techniques	151
Table 5.18: Likert scale: Systems exposures	152
Table 5.19: Likert scale: Corporate governance.....	153
Table 5.20: Likert scale: Profitability and liquidity ratios	154
Table 5.21: Likert scale: Stakeholder management	155
Table 5.22: Likert scale: Managerial innovation	156
Table 5.23: Likert scale: Motivation.....	157
Table 5.24: Likert scale: Perceptions	158
Table 5.25: Likert scale: Risk oversight.....	159
Table 5.26: Likert scale: Taking opportunity	159
Table 5.27: Independent samples t-test for employment status: Full-time and Part-time.....	175
Table 5.28: Independent samples t-test for have you been trained to work in a micro-lending company? Yes or No	183
Table 5.29: Independent samples t-test for have you been involved in ERM adoption in your organisation? Yes or No	194
Table 5.30: Group statistics for respondent group	195
Table 5.31: Independent t-test for respondent group: Compliant and non - compliant.....	196
Table 5.32: Is your organisation registered with NBFIRA? Yes or No (employee perspective)	197
Table 5.33: Independent samples t-test for gender: female and male	200
Table 5.34: Independent samples t-test for: is your organisation registered with NBFIRA?	201
Table 5.35: Independent samples t-test for: have you been trained to work in micro-lending company?	202
Table 5.36: ANOVA influence of age, education and occupation (employee perspective).....	203
Table 5.37: ANOVA influence of nationality on service of work (employee perspective).....	241
Table 5.38: ANOVA influence of age and education (proprietor perspective)	259
Table 5.39: ANOVA influence of nationality on service of work (proprietor perspective).....	260
Table 5.40: Correlations (employee perspective)	314
Table 5.41: Correlations (proprietor perspective)	318

Table 6.1: Demographics for participants interviewed 320

Table 6.2: Research objectives (matrix) 327

Table 6.3: Thematic analysis obtained from open-coding themes 328

List of figures

Figure 2.1: Risk Management Process 24

Figure 2.2: Enterprise Risk Management Structure..... 26

Figure 2.3: Grid of likelihood and impact 30

Figure 2.4: Matrix showing inherent risk..... 33

Figure 2.5: Modified Bow Tie Analysis with Risk Scoring 35

Figure 2.6: Example of sequence of methodologies used in a risk assessment 37

Figure 2.7: Aggregated loss distribution 39

Figure 2.8: The risk landscape 41

Figure 2.9: Innovation theory of entrepreneurship..... 47

Figure 2.10: A typical sample of income statement 56

Figure 2.11: A typical sample of statement of financial position..... 57

Figure 2.12: A typical sample of statement of changes in equity 58

Figure 2.13: A typical sample of statement of cash flows 59

Figure 2.14: The decision-making, planning and control process 51

Figure 2.15: Advantages of budgets and budgetary control 62

Figure 2.16: Organisational structure 81

Figure 2.17: Benefits of an audit 82

Figure 3.1: GDP per Capita for Botswana and Sub-Saharan Africa 86

Figure 3.2: A sharp decrease in micro-lending companies in Botswana..... 88

Figure 4.1: Typical sequential explanatory design..... 114

Figure 4.2: Steps in thematic analysis..... 123

Figure 5.1: Quantitative analysis flow diagram 128

Figure 6.1: Steps in thematic analysis..... 325

Figure 6.2: Data analysis strategies 326

Figure 7.1: A framework for ERM and Sustainability in micro-lending companies in Botswana ... 366

Figure 7.2: Non-exhaustive view on the main aspects forming a cloud system 368

Figure 8.1: Mendelow Stakeholder Mapping: power / interest matrix 381

Figure 8.2: Lewin's three stage model..... 384

LIST OF ABBREVIATIONS

Abbreviation	Meaning
ACC	Accountant
ACCA	Association of Chartered Certified Accountants
AIDS	Acquired Immunodeficiency Syndrome
AML	Anti - Money Laundering
AMP	Austrian Market Process
ANOVA	Analysis of Variance
ARR	Accounting Rate of Return
BICA	Botswana Institute of Chartered Accountants
BM	Board Member
BP	British Petroleum
BQA	Botswana Qualifications Authority
BSE	Botswana Stock Exchange
BURS	Botswana Unified Revenue Services
CAR	Capital Adequacy Ratio
CEDA	Citizen Entrepreneurial Development Agency
CEO	Chief Executive Officer
CFT	Combating the Financing of Terrorism
CIMA	Chartered Institute of Management Accountants
COSO	The Committee of Sponsoring Organisations Treadway
CPUs	Central Processing Units
DRP	Disaster Recovery Planning
ERM	Enterprise Risk Management
ETSSP	Educational and Training Sector Strategic Plan
EVT	Extreme Value Theory
FAP	Financial Assistance Policy
FLO	Front Line Officer
GAAP	Generally Accepted Accounting Principles
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
HRDC	Human Resource Development Council
HRM	Human Resources Manager
HRREC	Human Resource Research Ethics Committee
IaaS	Infrastructure as a Service
IAS	International Accounting Standards
ICAEW	Institute of Chartered Accountants England and Wales

IFRS	International Financial Reporting Standards
IRR	Internal Rate of Return
LEA	Local Enterprise Authority
LO	Loans Officer
MLRO	Money Laundering Reporting Officer
N – Ach	High Achievement
n – Ach	Low Achievement
NBFIRA	Non - Bank Financial Institutions Regulatory Authority
NBFIs	Non - Bank Financial Institutions
NDP9	National Development Plan 9
NDP10	National Development Plan 10
NDP11	National Development Plan 11
NPV	Net Present Value
NWU	North West University
NYSE	New York Stock Exchange
OECD	Organisation for Economic Co - operation Development
OM	Operations Manager
P/E	Price Earnings
PaaS	Platform as a Service
PAYE	Pay As You Earn
Qual	Qualitative
Quan	Quantitative
RM	Risk Manager
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment
SaaS	Software as a Service
SMMEs	Small Medium and Micro - Sized Enterprises
SOX	Sarbanes Oxley Act
SPSS	Statistical Package for Social Sciences
TARA	Transfer, Acceptance, Reduction and Avoidance
VAT	Value Added Tax

CHAPTER 1: INTRODUCTION AND BACKGORUND TO THE STUDY

1.1 Introduction

The purpose of this study is to develop an integrated framework for ERM that could be used to address recurrent problems in the micro-lending sector in Botswana. This study was prompted by the fact that implementation of ERM processes help boards of directors and executive management to incorporate risk management into the organisational strategy in order to achieve intended objectives (Beasley, Pagach, & Warr, 2008:312). The micro-lending sector in Botswana has not achieved intended organisational objectives due to challenges which are prevalent in this sector. In Botswana, there have been several Government collaborations and financial initiatives implemented to promote SMMEs including micro-lenders and these efforts have not achieved meaningful results due to business failure, which has remained very high, estimated to be over 80% (Temtime & Pansiri, 2004:18). There has been a general trend for micro-lending companies closing operations in Botswana because of contextual, administrative and financial management problems. According to several pronouncements (COSO, 1992; COSO, 2013), in its Committee of Sponsoring Organisations of the Treadway Commission, knowledge and understanding of risk management assists organisations to achieve their intended objectives through improved monitoring and evaluation.



Beasley, Branson, & Hancock (2010:4) argue that small businesses normally communicate information about key risks on an ad hoc basis, especially during times of economic hardships and when an entity is about to close its operations. Therefore, in this turbulent and volatile environment, organisations are encouraged to manage and mitigate risk as an underlying principle of best practice in order to remain in business. Considering that there has been great emphasis on the promotion of risk management processes, this study therefore advocates for an adoption of an integrated ERM framework which could assist micro-lenders to remain in business for the foreseeable future. According to Kont (2013:226), going concern refers to a concept whereby a business is believed to continue for the foreseeable future even after the death of its founder.

The Botswana economy is government-led hence the need to diversify the economy through supporting and protecting emerging small businesses, including micro-lenders (Okurut, Olalekan, & Mangadi, 2011:63). In Botswana micro-lending business is categorised under the Non-Bank Financial Institutions Sector (NBFIs) which is regulated by a body known as Non-Bank Financial Institutions Regulatory Authority (NBFIRA). The annual statistical data reported by NBFIRA during the period 2009 to 2013 reflects a huge decrease in the numbers of micro-lenders (See Table 1.3). This drastic decrease in micro-lenders is a barrier to Government strategies and policies which encourage sustainable growth and development in the sector. A decrease in the numbers of micro-lenders by 76% shows that many companies in this sector closed operations as a result of going concern problems. Considering that there has been great emphasis in Botswana on the

development and promotion of SMMEs, it would be proactive and appropriate to address these tremendous challenges that threaten business survival and going concern through implementation of effective ERM systems. The effectiveness of the latter is achieved based on the critical link between ERM, quality of financial reporting processes and commitment of members charged with corporate governance within an enterprise (Cohen, Krishnamoorthy, & Wright, 2014:1178).

However, for the implementation of ERM systems to be successful, success depends on how committed the senior leadership is and the quality of risk management processes. Otherwise, ERM systems are believed to be merely symbolic in nature and often implemented to mimic other organisations (Powell, 1991:1303). This implies that organisations may implement ERM practices merely to attract external connections without achieving any substantial meaning or improvement (Powell, 1991:1303). In actual fact, several entities may claim to be adopting ERM systems and best practices, but in reality, there is nothing tangible (Powell, 1991:1303). In some instances, it has been proved that during auditing of financial statements and ERM system, most of these entities do not take into practice ERM policies and procedures seriously, as they are working towards achieving a concept referred to as *"ticking the box practice"* which is intrinsically mimetic isomorphism (Powell, 1991:1303).

In light of the above discussion, this study develops an ERM framework that could be used to enhance going concern in the micro-lending sector in Botswana. The study commences with the introduction in section 1.1 and followed by the background to the study in section 1.2. This is followed by definition and nature of risk management process in section 1.3. Section 1.4 discusses the state of micro-lending business in Botswana. Section 1.5 specifies the research problem upon which the research is based. This is followed by research questions in section 1.6 and research aim, and objectives which are outlined in section 1.7. The justification of the study is provided in section 1.8. This is followed by the scope of the study in section 1.9 and the outline of the organisation of the study is provided in section 1.10.

1.2 Background to the study

Botswana has made remarkable achievement since its independence in 1966, through promotional and developmental initiatives towards SMMEs (Temtime & Pansiri, 2004:18). The Botswana Government believes that SMMEs are the engine that drives its economy as they create jobs, generate income and alleviate poverty (Temtime & Pansiri, 2004:18). The significance of SMMEs to the economy of Botswana has prompted policy makers and non-profit organisations to put effort towards development of SMMEs as initiatives to diversify the economy from one that is heavily dependent on mineral wealth (Temtime & Pansiri, 2004:18).

SMMEs are critical and contribute to the Gross Domestic Product (GDP) of Botswana, hence the Government has initiated interventions that address business continuity problems which are prevalent in the sector (Temtime & Pansiri, 2004:18). Some of interventions and initiatives which the Government of Botswana implemented include: Financial Assistance Policy (FAP), Citizen Entrepreneurial Development Agency (CEDA) and Local Enterprise Authority (LEA), (See Chapter 3, Section 3.2). Despite all these Government and Not-For-Profit interventions and initiatives, there have been several challenges in the SMMEs sector including a high failure rate, which is estimated to be over 80% (Temtime & Pansiri, 2004:18). The major challenges faced by SMMEs are failure to mitigate and manage risk which result in problems related to business continuity. Micro-lenders in Botswana are classified as SMMEs hence the need to advocate for a working ERM and sustainability framework which could guide the micro-lending operational activities. As matters stand, there is a gap in the literature about business continuity of micro-lending companies in Botswana, hence the need to carry out the current investigation into the design and modalities for such. In addition, after data collection, this could lead to a more informed formulation of a working ERM and sustainability framework through deductive and inductive approaches. To concretise the argument, a direct discussion on selected and representative micro-lenders could be shared through generalised observations about the risk management in the area of micro-lending.

Masood, Weston, & Rahimifard (2013:803) argue that entrepreneurship is a tremendously positive force that impacts on economies and societies at large. Three reasons have been identified explicating why entrepreneurial behaviour has a strong impact on an economy's strength and stability (Masood *et al.*, 2013:805). These reasons include innovation, job creation and globalization. *Innovation* is the process of creating something new, which will either solve a problem or satisfy a need in a new cost-effective manner (Masood *et al.*, 2013:806). Several innovations help individuals and businesses work more smoothly and efficiently and this might boost performance and business returns (Shin, Park, & Lim, 2013:72). According to (Shin *et al.*, 2013:72) new products and services improve the standard of living as well as enhance economic growth. The establishment of new business enterprises through entrepreneurship fuels economic prosperity and leads to job creation that combats unemployment in Botswana. In Botswana, SMMEs are the engine of the economy as they foster economic growth hence contribute to the total Gross Domestic Product (GDP) (Mutoko, 2014:29). The major challenges that are faced with SMMEs in Botswana are failure to mitigate and manage risk which have cumulatively contributed to going concern problems.

In Botswana the micro-lending sector plays a critical role in terms of economic development (NBFIRA, 2014:3). Therefore, sustainable growth and development of this sector is of paramount importance in the long-term interest of the country. In addition, micro-lenders in Botswana are classified as SMMEs and they are part of Government initiatives which influence economic growth

hence the need to promote and develop this sector. The National Development Plan 10 (NDP10) report has shown that there is a decrease in demand for the diamond in the mining sector due to the possibilities of more expensive underground mining and overall decline in diamond production, informed the strategic thrust of NDP10. However, the identification of causes of negative net exports of diamond assisted in the formulation of National Development Plan 11 (NDP11) strategies for economic growth which promote the development of SMMEs in the country.

Micro-lending business is one of the Government interventions which are used as a vehicle to create employment and eradicate poverty. In 2009, the Government of Botswana, through NBFIRA, promoted the registration and regulation of micro-lending businesses in the country. The statistics from NBFIRA show a record of total of 993 registered micro lending companies in Botswana. A total of 993 micro-lenders is considered to be significant in Botswana, based on the population size of the country. In Botswana, the micro-lending companies are spread throughout the country and this provides individuals with employment opportunities to venture into small businesses both in the urban and rural areas. Micro-lenders operate in a regulated environment and hence they are exposed to challenges such as: non-submission of financial statements, late submission of financial statements, non-submission of annual returns to Botswana Unified Revenue Services (BURS) and late submission of annual returns to the regulator (NBFIRA). The micro-lenders who fail to comply with the regulator are charged heavy penalties which ultimately result in bankruptcy and liquidation.

The micro-lending sector is facing problems which are related to going concern as shown in the statistics provided by NBFIRA, a decrease from 993 to 243 (750) during the period 2009 to 2013. This sharp decrease in the numbers of micro-lenders threaten economic growth of the country hence the need to protect the sector. In addition, if these challenges and problems in the micro-lending sector are left unattended, this could result in an increase in unemployment and poverty levels in the economy. Furthermore, failure to grow the sector may threaten the strategic goals set in the NDP11 of promoting and development of SMMEs in the country. Considering the number of micro-lenders who closed operations, it is important to safeguard this sector, through implementation of strategies which promote risk management processes. Therefore, it is imperative to develop a framework for enterprise risk management that could be used to address the going concern problems in the micro-lending sector in Botswana.

1.3 The definition and nature of risk management process

According to Brown and Moles (2012:29), risk is a chance that a good or bad event could happen, and the outcome of the event might be positive or adverse. According to Lyon and Popov (2016:40) risk is a potential hazard or a possibility of loss that results from a given action. In a financial risk management perspective, the term risk indicates that there is an expectation that an

actual outcome may differ from the predicted outcome and such an outcome is either positive or negative. Uncertainty refers to the future that cannot be predicted due to insufficient information about the future outcomes or that the probability of occurrence may not be predicted (Brown & Moles, 2012:29).

It is from this background that due to uncertainty inherently embedded in any business model, firms are propelled to integrate ERM systems in their strategic objectives as a scheme for addressing problems related to business continuity. ERM refers to an alignment of risk management within business strategy and at the same time cultivating management culture into the business operations (COSO, 2013:1). Florio and Leoni (2017:1) refer ERM as a process whereby the board of directors, senior management and other employees are involved in strategy setting, identifying potential areas of risks that may affect the entity and championing these risk areas within their risk appetite in order to provide a reasonable assurance in the achievement of intended organisational goals. The management of risks is fundamental to good corporate governance of an enterprise; hence this fosters the going concern of a firm. Many firms including micro-lenders in Botswana face challenges that are related to bad corporate governance and this creates business continuity problems.

Good corporate governance ensures that firms are governed and run properly in order to meet organisational objectives (King, 2016:12). Poor corporate governance and lack of best practices have contributed to corporate failure and financial crises (examples of corporate failures are, Polly Peck International, the Bank of Credit and Commerce International, British and Commonwealth, the Mirror Group News International and Barings Bank). In each of these corporate failures, it is evident that they were a consequence of scandals and corruption cases due to accounting or financial reporting irregularities and inadequate internal controls and poor risk management.

Manipulation of financial accounting is known as *“creative accounting”* or *“window dressing”* and these problems happened due to poor *enterprise risk management and internal controls* in an enterprise (Balaciu, Bogdan, & Vladu, 2009:171). The most widely known poor corporate governance cases are the Enron and World.Com scandals that involved experienced and qualified auditing and accountancy firm Arthur and Anderson. Another example of corporate failure and financial crisis is of a dominant personality known in South Africa, Robert Maxwell, whose business collapsed due to his abusive and dictatorial tendencies. In order to control the prevalence of poor governance in companies, statutory provisions such as Sarbanes (2007) (SOX), King (2016:2) and several others were adopted as frameworks for good corporate governance. Codes and regulations were put in place to enhance internal controls. Therefore, risk identification is important in order to mitigate and manage high levels of risk and corruption. In addition, the link between ERM systems, financial statements, internal controls and good corporate governance is critical and

imperative to business survival. For example, ERM assists in identifying the inherent risks in relation to misstatements and manipulation of internal audit reports.

Kont (2013:226) considers that the processes of accounting and reporting are important to the survival of any organisation. The former helps senior management, shareholders and other users of financial information to make informed decisions (Kont, 2013:226). Informed decisions could only be made if accounts give a “true and fair view” of the financial position of an enterprise (for example in the Botswana context, a proper application and appreciation of Generally Accepted Accounting Principles - GAAP for entities not applying International Financial Reporting Standards - IFRS in this case of Micro-lenders). Therefore, accountants and senior management in micro-lending entities should be aware of the assumptions embedded in the GAAP which include: going concern, reliability, legal form, neutrality, completeness, relevance, materiality, matching and accrual basis of accounting (see GAAP in Botswana for Entities not applying IFRS). There are several other accounting and financial management tools which are effectively used for analysis, measurement, evaluation and interpretation of business projects such as financial accounting ratios, net present value (NPV), the internal rate of return (IRR), payback method and accounting rate of return (ARR) (Correia, Flynn, Uliana, & Wormald, 2015: 85). In addition, the banks apply capital leverage ratio in order to gain confidence in relation to business continuity (See Basel I, II & III).

Good corporate governance advocates for environmental accounting and successful firms comply with this phenomenon (Tanc & Gokoglan, 2015:566). Environmental accounting refers to the development of ‘greener’ communities and societies; hence it ensures good corporate governance and integrity (Tanc & Gokoglan, 2015:566). The concept of environmental accounting pursues the environmental and business continuity development that fosters an ecological approach, hence promoting an equitable society (Tanc & Gokoglan, 2015:566). In addition, environmental accounting is concerned with the fields of accounting responding to the environmental issues. The concept of environmental accounting is debatable when considering shareholder value. The perceived “stance” or “assertion” is that environmental costs and corporate social responsibility erode the investor’s returns (Zech, 2013:683). On the other hand, the opponent “stance” or “assertion” argues that promoting ecological approaches enhances the entity’s corporate image hence more profit and going concern is achieved. This study adopted an integrated risk management process framework which could be used to address going concern problems in the micro-lending sector.

1.4 The state of micro-lending business in Botswana

The state of micro-lending business in Botswana requires attention as several firms in this sector have closed operations due to going concern problems. According to NBFIRA (2014:17), in

Botswana micro-lending business is classified under the Non-Bank Financial Institutions (NBFIs) sector. The NBFIs sector is critical to the economy of Botswana as it provides employment throughout the country. In 2009 the Government of Botswana regulated operational activities for the NBFIs in order to promote and safeguard firms which comply with NBFIRA rules and regulations. According to NBFIRA (2014:17), rules and regulations refer to registration and licensing of a micro-lender, submission of audited annual financial statements, annual returns and annual tax returns. In addition, to the above stated rules and regulations, the micro-lender is subjected to external audit which is conducted by NBFIRA as part of monitoring and control of the sector. In 2014 NBFIRA published statistics which showed the number of active NBFIs from 2009 to 2014 (See Table 1.1).

The statistics in Table 1.1 reflect that 2009 NBFIRA recorded a total of 993 registered and licensed micro-lenders in Botswana. In Table 1.1 the statistics show a downward decrease in numbers of micro-lenders during 2009 to 2013. The statistics reveal that for the past five years there has been a significant decrease of micro-lending business by 750 (76%) in Botswana. This sharp decrease has been attributed to a lack of awareness of ERM systems and failure to interpret financial statements by shareholders, owners or managers in the NBFIs sector. A huge decrease in the growth of the micro-lending companies and poor business continuity motivated this study, especially in the areas which focus on ERM process, going concern, financial accounting and corporate governance.

Table 1.1: Number of Active NBFIs by the Reporting Period

NBFIs by CATEGORIES	Reporting Period				
	2009	2010	2011	2012	2013
Insurers / Reinsurers:	2,372	2,643	2,845	3,141	2,778
Of which:					
Reinsurance Companies	-	2	2	2	3
Short Term Insurance Companies	9	11	12	12	11
Long Term Insurance Companies	6	7	7	8	9
Insurance Brokers	39	42	42	40	45
Corporate Insurance Agencies	318	386	197	204	187
Insurance Agents and Sub- Agents	2,000	2,195	2,585	2,875	2,523
Retirement Funds	220	228	261	278	321
Of which:					
Stand Alone Funds	83	90	104	96	93
Umbrella Funds	6	6	5	6	6
Sub- Funds	123	124	144	168	214
External Funds	3	3	3	3	3
Closed Funds	1	1	1	1	1
Inactive Funds	4	4	4	4	4
Capital Markets:	7	7	7	6	6
Of which:					
Stock Exchange	1	1	1	1	1
Commodities Exchange	1	1	1	0	0
Central Securities Depository	1	1	1	1	1
Stockbrokers/Securities Dealers	4	4	4	4	4
Investment Institutions	41	41	40	66	70
Of Which:					
Asset Managers	13	13	12	12	12
Management Companies for CIUs	5	5	5	6	6
CIUs/ Funds	18	18	18	25	25
Trustees for CIUs	2	2	2	2	2
Custodians	3	3	3	3	3
Investment Advisers	-	-	-	18	22
Lending Activities:	993	361	245	258	280
Of which:					
Micro – Lenders	993	361	218	228	243
Pawn Shops	-	-	27	29	33
Finance and Leasing Companies	-	-	-	1	4

Source: Adapted from the Non-Bank Financial Institutions Regulatory Authority - Annual Statistical Bulletin 2014: 17.

In addition, a comprehensive detailed analysis of decrease in growth in micro-lending companies based on the statistical figures from NBFIRA is shown in Table 1.2.

Table 1.2: Decrease in growth in micro-lending companies in Botswana

Reporting period	2009	2010	Decrease	Increase	Percentage (%) Decrease	Percentage (%) Increase
Number of Micro-lending Companies	993	361	632	-	64%	-
Reporting period	2010	2011				
Number of Micro-lending Companies	361	218	143	-	40%	-
Reporting period	2011	2012				
Number of Micro-lending Companies	218	228	-	10	-	4.6%
Reporting period	2012	2013				
Number of Micro-lending Companies	228	243	-	15	-	6.6%
Reporting Period	2013	2016				
Number of Micro-lending Companies	243	223	20	-	8%	

Source: NBFIRA, 2014:40

The statistics shown in Table 1.2 above clearly indicate that there is a problem with regard to business continuity in the NBFIs in Botswana, hence the need to develop an ERM and sustainability framework to mitigate and manage risk. In Table 1.2 problems for business continuity are evidenced by the decline in the reporting periods 2009 and 2010 of 64% decline, 2010 and 2011 a 40% decline, finally 8% decline was experienced during 2013 and 2016 periods. There have been indications of growth in numbers of micro-lending companies of 4.6% and 6.6% in the reporting periods 2011 to 2012 and 2012 to 2013 respectively. However, these increases are not significant and might not have impacted on the economic development of Botswana. The scenario in relation to the decrease in NBFIs contradicts with national economic objectives of diversification and growing of this sector hence the need to investigate the issues surrounding “going concern concept” in this sector. Going concern problems in relation to micro-lending companies affect several stakeholder groups such as employees, customers, creditors, Government and the community at large (Zech, 2013:683). Therefore, it is imperative to protect and safeguard the NBFIs in Botswana in order to meet the national economic development objectives of the country.

The statistics presented in Table 1.1 and Table 1.2 above show that much work should be done with regard to the protection of micro-lending businesses whose survival is threatened by the high

risk inherent in the nature of this business. According to (NBFIRA, 2014:73), the micro-lending companies are geographically spread and they provide employment throughout the country. Table 1.3 shows the lending activities in Botswana as at 31 December 2013.

Table 1.3: Geographical spread of NBFIRA registered Micro-lenders as at 31 December 2013

DESTINATIONS	NO. OF MICRO-LENDERS	DESTINATIONS	NO. OF MICRO-LENDERS
Gaborone	94	Selebi Phikwe	14
Francistown	39	Orapa	0
Maun	12	Jwaneng	12
Letlhakane	15	Ramotswa	1
Gabane	1	Masunga	3
Bobonong	1	Tamasane	0
Tamasane	0	Kanye	6
Mmadinare	3	Tutume	1
Manyana	1	Sebina	0
Kasane	2	Gabane	1
Ghanzi	2	Mafenyatlala	0
Serowe	3	Shakawe	1
Moshupa	2	Lobatse	3
Palapye	11	Mahalapye	4
Ntlhantle	0	Mochudi	6
Rakops	1	Maunatlala	1
Lerala	1	Molepolole	2
Urban Areas	=	166	
Semi Urban Areas	=	45	
Rural Areas	=	12	
Remote Area	=	6	
Overall Active Micro-lenders	243		

Source: Adapted from the Nor-Bank Financial Institutions Regulatory Authority - Annual Statistical Bulletin 2014: 73.

The micro-lending companies are spread throughout the country and this provides opportunities for lenders to venture into small businesses both in the urban and rural areas. The challenges that are experienced in the micro-lending businesses include poor submission of financial statements and annual returns to NBFIRA as a regulatory requirement. Table 1.4 reflects that 20 micro-lenders out of 228 active companies (8.8%) submitted regulatory returns and financial reports to NBFIRA in the 2012 reporting period. Table 1.4 shows that 19 micro-lenders out of 243 (7.8%) managed to submit regulatory returns and financial reports to NBFIRA in 2013 reporting period (see Table 1.4).

Table 1.4: NBFIs submitting Regulatory Returns / Reports

NBFIs by Categories	Number Active	Number submitted Reports in 2012	Number submitted Reports in 2013
1. Insurance Industry	68	54	54
Reinsurance companies	3	2	2
Short Term Insurance Companies	11	11	11
Long Term Insurance Companies	9	9	9
Insurance Brokers	45	32	32
2. Retirement Fund Administrators	5	5	5
3. Capital Markets	6	6	6
Stock Exchange	1	1	1
Central Securities Depository	1	1	1
Stockbrokers / Securities Dealers	4	4	4
4. Investment Institutions	1815	1815	1815
Asset Managers	12	10	10
Management Companies for CI Us	6	5	5
5. Lending Activities	280		
Micro-lenders	243	20	19
Pawn shops	33	0	0
Finance or Leasing Companies	4	0	0

Source: Adapted from the Non- Bank Financial Institutions Regulatory Authority - Annual Statistical Bulletin 2014: 21.

Poor submission of regulatory returns and financial reports shows lack of awareness about risk management, financial analysis and sustainability in the micro-lending businesses. Furthermore, lack of awareness in ERM, financial analysis and business continuity may expose micro-lenders to risk resulting in the closure of an enterprise. Financial performance for NBFIs including micro-lenders reported in 2013 is shown in Table 1.5 and 1.6.

Table 1.5: Financial Performance (Total Assets) in NBFIs for the period 31 December 2013

NBFIs by Categories	Total Assets in Pula (Millions)	Total Assets in Pula (Millions)	Percentage change (%)
2012			
1. Insurance Industry	20,730.5	20,119.7	(2.9)
Reinsurance companies	38.8	49.7	(28)
Short Term Insurance Companies	1,613.6	1,710.9	(6)
Long Term Insurance Companies	18,754.9	17,848.0	(4.8)
Insurance Brokers	323.2	511.1	58.1
2. Retirement Fund Administrators	1,307.2	1,664.7	27.3
3. Capital Markets	68.5	78.3	14.3
Stock Exchange	30.9	34.5	11.6
Central Securities Depository	7.7	7.5	(2.1)
Stockbrokers / Securities Dealers	39.4	53.2	34.8
4. Investment Institutions	10,270.6	7,578.4	(26.2)
Asset Managers	10,212.5	7,507.2	(26.5)
Management Companies for CI Us	58.1	71.2	22.6
5. Lending Activities	2,382.9	2,281.3	(4.3)
Micro-lenders	2,382.9	2,281.3	(4.3)
Pawn shops	n/a	n/a	n/a
Finance or Leasing Companies	n/a	n/a	n/a
Grand Total	34,759.7	31,722.40	(8.7)

Note: The number of NBFIs reporting for periods ending December 2012 and December 2013 may differ due to companies no longer operating, while other were new entities and have not yet submitted their audited financial statements. Some NBFIs such as insurance agents are not required to submit financial statements.

Source: Adapted from the Non-Bank Financial Institutions Regulatory Authority - Annual Statistical Bulletin 2014: 21.



Table 1.6: Financial Performance (Gross Income and Profit / Loss before Tax) for NBFIs for the year ended 31 December 2013

NBFI's by Categories	Gross Income		Percentage	Profit / Loss		Percentage
			Change (%)	before Tax		Change (%)
	(Millions in Pula)			(Millions in Pula)		
	2012	2013		2012	2013	
1. Insurance Industry	3,968.4	4,118.2	3.8	667.20	827.70	24.0
Reinsurance companies	22.6	35.9	59.0	0.9	2.3	160.4
Short Term Insurance Companies	1,149.7	1,176.2	2.3	164.2	173.6	5.7
Long Term Insurance Companies	2,534.0	2,565.0	1.2	423.8	557.5	31.5
Insurance Brokers	262.1	341.1	30.1	78.4	94.4	20.4
2. Retirement Fund Administrators	537.3	641.1	19.3	88.1	86.3	(2.0)
3. Capital Markets	45.8	62.1	35.7	12.4	22.2	79.0
Stock Exchange	23.0	25.7	11.7	11.2	10.4	(6.9)
Central Securities Depository	6.5	9.6	48.1	2.3	4.5	96.7
Stockbrokers / Securities Dealers	16	26.9	68.0	(1.0)	7.4	818.0
4. Investment Institutions	1,658.4	2,498.8	50.7	108.7	126.7	16.6
Asset Managers	1,578.2	2,412.9	52.9	83.6	114.1	36.4
Management Companies for CI Us	80.2	85.9	7.1	25.0	12.7	(49.5)
5. Lending Activities	814.5	901.9	10.7	445.5	473.6	6.3
Micro-lenders	814.5	901.9	10.7	445.5	473.6	6.3
Pawn shops	n/a	n/a	n/a	n/a	n/a	n/a
Finance or Leasing Companies	n/a	n/a	n/a	n/a	n/a	n/a
Grand Total	7,224.4	8,221.1	17.0	1,321.9	1,536.5	16.2

Note: The number of NBFIs reporting for periods ending December 2012 and December 2013 may differ due to companies that are no longer operating, while other were new entities that have not yet submitted their audited financial statements. Some NBFIs such as insurance agents are not required to submit financial statements.

Source: Adapted from the Non-Bank Financial Institutions Regulatory Authority - Annual Statistical Bulletin 2014: 21.

According to Armendáriz and Morduch (2010:12), the business concept for Yunus was that of giving small loans to villagers so that they start running simple business activities such as rice husking and bamboo weaving. In other words, Yunus was promoting poor households and improving Bangladesh's poverty datum line (Armendáriz & Morduch, 2010:12). In 1976 Yunus set

a special branch that spread throughout all the regions in Bangladesh helping the poor villagers. From this humble beginning, a special branch developed into Grameen Bank and Yunus scooped a Nobel peace prize in 2006. This concept for micro-lending was adopted globally including African countries such as Botswana. Therefore, developing countries, including Botswana, should benchmark their undertakings on the lessons of success and achievement exhibited in the Grameen Bank business model.

1.5 Research problem

The studies conducted by (Mutoko, 2014:29; Mwobobia, 2012:89; Nkwe, 2012:29; Okurut *et al.*, 2011:63; Okurut & Botlhole, 2009:262; Pansiri & Temtime, 2008:251) view that SMMEs, including micro-lenders in Botswana, are significant to economic and social development of an emerging economy. SMMEs are an integral part of entrepreneurship in Botswana promoting creativity and innovation through employment creation and poverty alleviation (Mutoko, 2014:30). However, innovation and creativity in the micro-lending sector might not be achieved because of constraints and challenges that affect performance, growth and business continuity. According to Mutoko (2014:31) challenges that affect SMMEs include access to finance; lack of entrepreneurial skills; bias of education system against self-employment; lack of business start-up training; scarcity of business premises; restrictive government laws and regulations; lack of information on government assistance programmes; lack of marketing skills, lack of data on SMMEs, inherent biases against SMMEs and lack of access to markets. These challenges may expose SMMEs including micro-lending companies to different types of downside risk or pure risk and when trying to mitigate risks high costs are involved. These challenges might affect productivity and ultimately result in bankruptcy and liquidation.

The analysis from NBFIRA on the growth of micro-lenders (See Table 1.2) has shown that there are several problems that are linked to growth, competitiveness and business continuity. The statistics in Table 1.2 suggest that there are problems related to going concern in the micro-lending sector in Botswana. The statistics reflect a drastic and sharp decrease in micro-lending companies from a total of 993 to 243 from the periods 2009 to 2013. A decrease of 76% (750) of micro-lenders in the economy is a great loss to the country and this created a threat to economic growth. If these challenges and problems that are faced by micro-lenders are left unattended, this might result in an increase in unemployment and poverty levels in the country. In order to protect and safeguard micro-lenders it is imperative to develop ERM and sustainability framework that addresses the challenges related to going concern in this sector. The decrease in the numbers may be symptoms of acute risk which might eventually affect the entity as a going concern, in terms of performance, competitiveness and survival (Florio & Leoni, 2017:1).

Poor ERM strategies may result in companies facing financial stress and reputational risk which, combined, lead in liquidation or bankruptcy (Baxter, Bedard, Hoitash, & Yezegel, 2013: 1264). Many listed companies adopt stronger ERM systems that are effective and efficient than unlisted firms that seem to apply ERM systems on ad-hoc basis (Paape & Speklè, 2012:4). Paape and Speklè (2012:4) further argue that listed firms are expected to invest in sophisticated ERM systems through key components of effective corporate governance particularly regulatory influences for example the New York Stock Exchange (NYSE), Botswana Stock Exchange (BSE) and Sarbanes (2007:4). It is strongly perceived that if ERM costs are not considered fully, the going concern of the enterprise may be affected as evidenced in Table 1.2 where micro-lending companies closed their entities within approximately two years of operation. Therefore, if micro-lending companies in Botswana fail to consider risk assessment and costs associated with downside risks, this may result in problems that affect business survival. It is imperative to develop a new stakeholder ERM and sustainability framework that seeks to guide micro-lenders in Botswana.

The new working ERM and sustainability framework addresses the following aspects: absence of risk management strategy and lack of internal controls, high exposure to risk and high failure rate in micro-lending companies, lack of business analysis and valuation using financial statements and lack of culminating culture for good governance. This framework aims at managing and controlling risks such as political risk, legal / regulatory risk, business risk, economic risk, financial risk, technology risk, environmental risk, corporate reputational risk, international risk, fraud and employee malfeasance risk attract costs that results in the process of reducing the level of occurrence (Florio & Leoni, 2017:1). It is from this argument that incorporating ERM costs in the financial statements reduce micro-lending companies' profits and as well as shareholders returns or value (Modigliani & Miller, 1958:263). The Modigliani and Miller (1958:263) study is significant to this research on micro-lenders since there is an aspect of conflicting decisions such as adopting ERM costs and at the same time advocating for profit maximisation. Therefore, in the context of micro-lenders particularly in Botswana, it is imperative to account for costs associated with risk assessments in order for enterprises to remain in business.

The findings in (Tanc & Gokoglan, 2015:568) study on environmental accounting indicates that enterprises that apply environmental accounting achieve a competitive edge hence this add value to the company's overall achievement through the good concept of social corporate responsibility. This study explores objectives of different types of risks and then recommends control measures in favour of both organisational stakeholders through ERM and sustainability framework. In brief, the problem investigated in this study is that many senior managers and owners of micro-lending firms fail to safeguard their companies against costs associated with risks hence when their enterprises are exposed to the actual risk, they are eventually faced with bankruptcy and liquidation challenges. The argument above suggests that micro-lenders in Botswana lack a comprehensive

risk management strategy. In light of the discussion above, the problem investigated in this study is to identify the sources of risks that affect business continuity in the micro-lending sector in Botswana and subsequently develop a framework that could be used to mitigate and manage risks.

1.6 Research aim and objectives

This section focuses on research aim and objectives.

1.6.1 Research aim

The aim of this study was to establish why there is a high failure rate of micro-lending businesses and develop a framework for enterprise risk management and sustainability in micro-lending companies in Botswana. This framework could be used to mitigate and manage down-side risks in micro-lending businesses in Botswana.

1.6.2 Research objectives

Closely linked to the research questions, the primary objective was to establish the causes of the high failure rate among the micro-lending businesses. In support, the subsidiary objectives below rendered significant interrogation in order to, namely:

1.6.2.1 Establish sources of risk that affect sustainability in micro-lending companies.

1.6.2.2 Determine the challenges that contribute to the closure of micro-lending entities.

1.6.2.3 Identify and describe procedures and internal controls in micro-lending businesses.

1.6.2.4 Identify and ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies.

1.6.2.5 Establish the extent to which micro-lending companies understand the application of accounting and reporting as a tool for decision making.

1.6.2.6 Develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

1.7 Research questions

1.7.1 What are the sources of risk that affect sustainability in micro-lending companies?

- 1.7.2 What are the challenges that contribute to the closure of micro-lending entities?
- 1.7.3 Which procedures and internal controls dominate in the micro-lending businesses?
- 1.7.4 What are the leadership styles, management principles and corporate governance cultures dominant in micro-lending companies?
- 1.7.5 How do micro-lending companies understand the application of accounting and reporting as a tool for decision-making?
- 1.7.6 What framework for enterprise risk management could be developed to mitigate risks in micro-lending companies?

1.8 Justification of the study

This study attempted to close the literature and research gaps concerning the role of management, especially senior management, in micro-lending businesses with regard to mitigation and management of risks. This study contributes and enriches the body of knowledge, especially in the risk management, financial management and corporate governance arena particularly in micro-lending companies. This study harmonises the micro-lending entities through the ERM and sustainability framework. There are many sources of risks which were identified, including the following: political risk, legal or litigation risk, regulatory risk, compliance risk, strategic risk, product risk, commodity price risk, product reputational risk, operational risk, economic risk, credit risk, currency risk, interest rate risk, gearing risk, environment risk, fraud risk, corporate reputation risk and culture risk. Mitigating sources of risk in micro-lending businesses assisted in restoring growth, performance, competitiveness and business continuity in this sector particularly in Botswana. The process of mitigating and managing risks could result in effective communication between the senior management and employees in the micro-lending businesses through an enhancement of the holistic approach. A holistic approach embraces the integration and implementation of 14 principles of Henry Fayol in micro-lending companies which resulted in maintaining and protecting existing and new micro-lending businesses in this sector. Maintaining and protecting of existing and new micro-lending businesses could assist the Government in meeting its intended goals of addressing poverty. ERM systems promote an understanding of good corporate governance, best practices, application of six principles of management (for example planning, organising, leading, controlling, communication and coordination), accounting and reporting which are vital in the management of any enterprise (Viscelli, Hermanson, & Beasley, 2017:77). Therefore, the issues of liquidation in the micro-lending companies could be addressed through the integration and implementation of ERM framework that acts as a guide to the operational activities of this sector. An adoption of an ERM system could address many issues that affect growth, performance, business continuity and competitiveness in micro-lending companies particularly in Botswana.

1.9 The scope of the study

This research focuses primarily on the sources of enterprise risk management that affect business continuity in micro-lending companies in Botswana. Among other considerations, the study examined the degree of awareness of ERM and factors that contributed to closure of micro-lending businesses in Botswana. This research targeted privately owned and regulated micro-lenders in Botswana. Insurance companies and registered companies at the BSE were excluded in this study as its main thrust was on SMMEs (micro-lenders).

1.10 Outline of the study

Chapter 1

This chapter introduces the study and gives an overview of the study, which include research background, problem statement, purpose of the study, research questions and objectives, literature that supports research problem and scope of the study.

Chapter 2

The chapter reviews the literature underpinning ERM, financial risk management and good or bad corporate governance and overview of micro-lending businesses. In this chapter the concepts of stakeholder groups and sources of risks, accounting, internal controls and principles of management are discussed.

Chapter 3

The chapter reviews the context of micro-lending businesses in Botswana in relation to ERM and sustainability. The Chapter further discusses the challenges that are faced by micro-lending businesses in Botswana, and the processes followed during the registration of a micro-lending company with the regulator (NBFIRA).

Chapter 4

The chapter deals with the research methodology adopted in this study. It explains the research philosophy, approach, strategy, population, sample, data collection instruments, data collection and analysis, validity, reliability, rigour, trustworthiness of data and ethical issues related to the study.

Chapter 5

The chapter deals with quantitative data analysis, presentation and discussions of results. The quantitative analysis includes descriptive analysis, exploratory analysis (factor analysis), and inferential analysis (*t-tests*, analysis of variance and correlations).

Chapter 6

The chapter provides qualitative data analysis, presentation and discussions of results. The qualitative research used a thematic approach. The results from this chapter meant to confirm or verify the results in chapter 5 above.

Chapter 7

In the chapter, a working ERM and Sustainability framework for micro-lending companies in Botswana was developed. The chapter interrogates all the aspects which were suggested by participants who were involved in the study.

Chapter 8

The chapter focuses on the key findings, conclusions, recommendations and contributions to the body of knowledge.

1.11 Chapter summary

The purpose of the chapter is to provide an introduction, background of the problem and overview of the thesis, which includes 8 chapters. The study is on a huge decrease in numbers of micro-lending companies in Botswana, where approximately 770 micro-lenders out of 993 have been liquidated due to problems related to business continuity. Chapter 1 focuses on the introductory, background, problem statement and purpose of the study. The chapter also provides research objectives, research questions, justification of the study and the scope of the study. An outline of the study is also provided in this chapter. The next chapter 2 focuses on critical review and analysis of the literature and interrelated studies to ERM systems.

CHAPTER 2: AN OVERVIEW OF RISK MANAGEMENT IN A MICRO-LENDING ENVIRONMENT

2 Introduction

This chapter discusses ERM process and other pertinent areas related to financial risk management that could assist organisations to mitigate and manage risk. The aim of this discussion is to identify causes and consequences which influence the ERM process and establish its significance towards going concern. It is imperative to assess ERM processes in order to determine whether they promote growth, performance and the going concern of an organisation. The chapter identifies and explains the concepts related to risk management and its influence on performance, growth and going concern of an organisation.

The idea that firms which adopt ERM processes achieve business objectives through improved going concern is supported by Committee of Sponsoring Organisations of the Treadway Commission (COSO). Since the inception of COSO, this view has been widespread and accepted by many institutions such as the World Bank, International Monetary Fund (IMF) and Organisation for Economic Cooperation and Development (OECD). In contrast to the view that ERM process could assist firms to improve going concern and profitability, evidence in recent trends suggests that organisations have developed mimetic isomorphism strategies that are created to satisfy connected stakeholder groups. This implies that firms apply improbable and non-professional procedures in their ERM processes which do not yield any meaningful results. The major premise is that effective implementation of ERM process requires commitment and support from senior leadership. Logically therefore, before ERM process is implemented there is a need to first understand the consequences that influence risk management and its effect upon improving organisational performance, going concern and profitability.

The rest of the chapter is organised as follows: section 2.1 outlines ERM as a conceptual framework of the study. Section 2.2 discusses different types of frameworks underpinning risk management. Section 2.3 highlights the importance of different types of operational risk modelling. 2.4 identifies different types of sources of risk and section 2.5 discusses the importance of entrepreneurship in the context of micro-lending business. Section 2.6 explains different types of theories of entrepreneurship whilst Section 2.7 discusses different assumptions of stakeholder groups. Section 2.8 outlines the concept of micro-lending and further explains the requirements for registration of a micro-lender in Botswana. The challenges and constraints experienced by micro lenders were also discussed in this section. Section 2.9 discusses the relationship between ERM and accounting. Section 2.10 explains the role of corporate governance in relation to ERM processes. Section 2.11 discusses how internal controls and auditing assist in addressing problems related to business continuity. Section 2.12 discusses the importance of environmental accounting and sustainability in relation to adoption of ERM systems, culminating in the conclusions related to the literature review of the entire chapter.

2.1 Enterprise Risk Management (ERM)

According to Hoyt and Liebenberg (2011:795) implementation and adoption of ERM systems promote increased risk awareness that fosters effective operational and strategic decision making. Academics and scholars such as Miccolis and Shah (2000:3); Hoyt and Liebenberg (2011:795) and Viscelli *et al.* (2017:70) contend that ERM systems promote growth, performance, sustainability and business continuity of a firm. Accounting practitioners play an integral role in the implementation, development and adoption of effective ERM systems (Viscelli *et al.*, 2017:70). COSO (2013:5) is one of the examples for best practices that was implemented and developed in order to assist boards of directors and management in designing and implementing effective ERM processes. The ultimate goal for implementing effective ERM processes is to help the board of directors and executive management to incorporate risk management in their strategy in order to achieve intended organisational objectives (Beasley *et al.*, 2010:1; Beasley *et al.*, 2008:4; Frigo & Anderson, 2011:81; Hoyt & Liebenberg, 2011:795; Lyon & Popov, 2016:40; Paape & Speklè, 2012:1; Pojasek, 2011:85; Viscelli *et al.*, 2017:70).

Viscelli *et al.* (2017:70) refer to the ERM process as an important strategic tool used to assist boards and senior executives to effectively manage, monitor and mitigate risk that may affect the firm's business model and strategic initiatives either positively or negatively. According to Beasley *et al.* (2015:222), large corporations and listed companies delegate the responsibilities for ERM processes, best practices and corporate governance to the audit committee. Senior executives holding the financial accounting roles are responsible for the implementation and adoption of a holistic risk-based approach and effective internal controls (Viscelli *et al.*, 2017:70). According to Viscelli *et al.* (2017:70), the understanding of the knowledge about implementation of ERM processes and risk appetite is treated as highly relevant to the accounting profession and accounting literature.

According to Hoyt and Liebenberg (2011:797), firms that implement ERM program increases expected shareholders return or value. Proponents of ERM such as Hoyt and Liebenberg (2011:799) and Viscelli *et al.* (2017:71) argue that holistic enterprise-wide risk management process enables firms to avoid duplicate risk management activities and expenditure through exploring integrated decision-making across all risk classes and departments. Firms that are engaged in ERM strategies are able to effectively allocate resources hence this improves organisational performance and return on equity (Hoyt & Liebenberg, 2011:797). According to Hoyt and Liebenberg (2011:797) integrated ERM framework enables decision makers to establish the firm's profile which is then used to improve the competitiveness, sustainability and business continuity of an enterprise. Firms that are able to improve information on risk profiling are perceived as highly financially sound hence are able to meet intended organisational objectives (Hoyt & Liebenberg, 2011:797).

According to Beasley *et al.* (2010:2) and Viscelli *et al.* (2017:71) firms have been attracted, influenced and motivated to implement and adopt ERM programs due to the following causes and consequences: scandals; corruption; uncertainty; catastrophic incidents on the environment; industry; competition and corporate failures (See Table 2.1).

Table 2.1: Causes and consequences which influence adoption of ERM programs

Accident / Event	Cause	Consequence
1959 - 1961: Use of medical drug Thalidomide	Thalidomide was a widely prescribed sedative drug that caused generic damage in the babies of women who took the drug	6000 malformed babies were born in 20 countries. The producer of the drug paid compensation.
1960: Coalbrook mining disaster in South Africa	A coal-mining disaster occurred when part of the mine collapsed.	435 miners were trapped underground and all attempts to rescue them failed.
1976: Release of dioxin (dioxin is 10 000 times more toxic than cyanide) Seveso, Italy	For unknown reasons, a safety valve in a factory allowed the discharge into the atmosphere of trichlorophenol derivatives, including dioxin.	736 people were evacuated, and a ban was placed on the consumption of food produced in the area. Compensation payments of approximately R480 million were made. 250 000 cubic meters of contaminated soil had to be buried.
1984: Leak of methylisocyanate, Bhopal, India	High rates of loss of life and injuries occurred partly due to the fact that many people lived in a shanty town that had been built around the factory.	1500 people were killed, and 34 000 people sustained eye injuries, burns, and damage to respiratory tracts and nervous systems. 200 000 people had to leave the area.
1985: King's cross under-ground station fire, London, UK	Accumulated grease on the running tracks of wooden escalators was ignited (perhaps by a match) causing a quickly spreading fire.	31 people died (including one fire officer) and many more were injured.
1986: Kinross Gold Mine fire, South Africa	Welding operations ignited polyurethane foam that had been installed in the mine. The resulting fire released a gas into the mine.	177 miners died in the gas-filled mine.
1988: Piper Alpha off-shore rig explosion, North Sea	An explosion, resulting in fire and followed by further explosions, was caused by an operator error during restart after a safety valve had been removed.	165 men were killed, the platform was destroyed and a total loss of approximately R16 billion was sustained.
1991: Bank of Credit and Commerce International scandal	Fraud which was estimated to be a loss of approximately \$15 billion.	The bank was hiding massive losses and it was at the verge of financial collapse.
1994: Merriespruit slimes dam disaster, Free State, South Africa	The property of the Harmony Gold Mining Company, a mining slimes dam burst its banks, causing sludge to flood the mining	17 people were killed and an estimated R250 million in damages was sustained.

	town.	
1995: A locomotive falls down a mine shaft, Vaal Reefs mine, South Africa	A locomotive fell down a mine shaft at speed.	104 people were killed.
1995: Nick Leeson manipulated the internal controls for Barings Bank.	Manipulation of internal controls and opening of secret Barings bank account.	The Barings bank collapsed and lost around \$1 billion
11 September 2001:	A sophisticated terrorist attack was launched in the United States when four aircraft were hijacked, two of which crashed into the World Trade centre.	This caused the twin towers to collapse and the deaths of thousands of people.
October 2001: Enron	The scandal leads to the Enron Corporation. 	Many executives at Enron were charged of fraud activities and the shareholders filed a lawsuit of \$40 billion. The Sarbanes-Oxley Act was used to penalise Enron's senior management.
July 2002: WorldCom	The largest telephone company filed improper books (creative accounting) approximately \$3.8 billion in expenses.	The WorldCom bankruptcy was the largest in United States history. Many banks refused to provide WorldCom with more money unless it was secured with Assets.
BP Oil spill, the oil disaster 2010:	The largest marine oil spill in the history of the petroleum industry.	The oil spill extensively killed people and damaged the marine, wildlife and fishing and tourism industries.

Source: Constructed by the researcher based on Beasley *et al.* (2010:2) and Viscelli *et al.* (2017:71).

Therefore, most ERM programs have been integrated into organisational plans in order to address corruption and environmental uncertainties, and ultimately achieve the firm's intended business model and objectives. Scholars such as Beasley *et al.* (2010:2) and Viscelli *et al.* (2017:71) concede that firms that fail to implement and adopt ERM activities face challenges that are related to business continuity, competitiveness and sustainability hence the need to conduct this study in Botswana.

2.2 Frameworks underpinning risk management

The frameworks that underpin this study are the ERM model; theories of entrepreneurship and stakeholder assumptions. The following sections provide an explanation of the three frameworks related to risk management.

2.2.1 Risk Management

This study adopted a risk management framework which was developed by Lyon and Popov (2016:40), safety and health professionals. According Lyon and Popov (2016:42) a risk management process consists of eight (8) distinct and sequential components (See Figure 2.1).

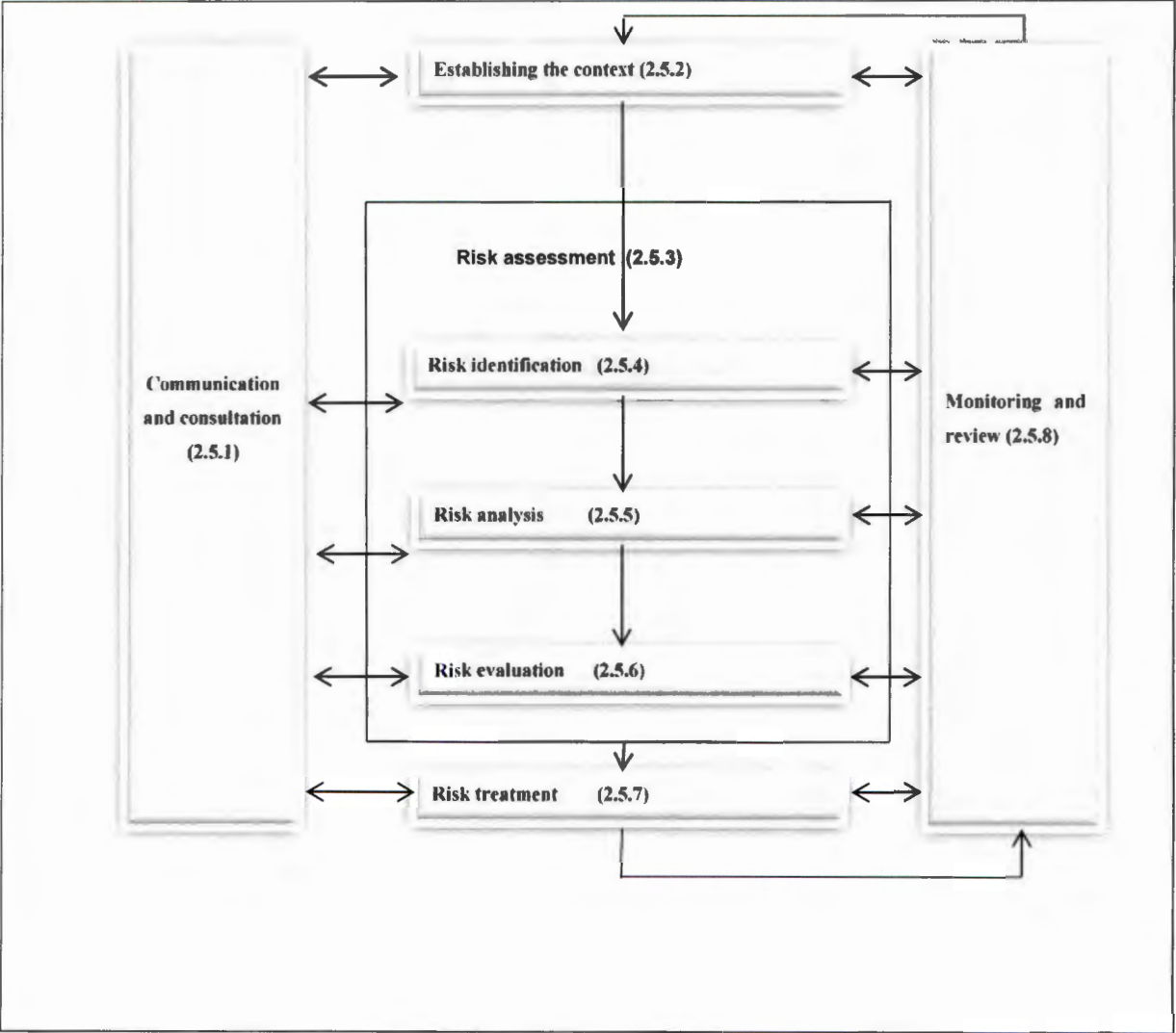


Figure 2.1: Risk Management Process / Model

Source: Adapted from Lyon & Popov (2016:40)

The following sections discuss different views from scholars and practitioners on how the risk management process is used in firms to mitigate and manage risk, based on the Lyon and Popov (2016:40) model.

2.2.2 Communication and consultation

According to Lyon and Popov (2016:40), the first stage in the risk management process is communication and consultation with the internal stakeholders within an enterprise. The competitive global business environment has influenced organisations to be creative and innovative in order to survive in the uncertainty of the global village (Beasley *et al.*, 2010:1). Therefore executives recommend the implementation and adoption of effective ERM systems in order to survive in a turbulent environment (Beasley *et al.*, 2010:1). Beasley *et al.* (2010:4) argue that the majority of organisations communicate information about key risks on an ad hoc basis, particularly in management meetings. However, the study conducted by Beasley *et al.* (2010:4) revealed that large organisations, public companies and financial services organisations communicate and report about risk information on a monthly, quarterly and yearly basis to relevant stakeholders. This was the case with the small firms as they communicate about risk information when need arises (Beasley *et al.*, 2010:1). Communication and reporting on risk information nurtures a culture that is supportive of individuals sharing information about key risk areas in the organisation from the top to the bottom (Viscelli *et al.*, 2017:77). It is important to understand the organisation's culture as this brings in harmony to the organisation hence strengthens a two-way communication process which leads to a proper integration and execution of effective strategic planning and ERM systems (Viscelli *et al.*, 2017:77).

The communication and consultation stage (See Figure 2.1) is two-fold: communication and consultation about information on key risk exposure with all the employees within the firm and communication and consultation with the senior management and executive team (reporting and consultation on risk exposure). Communication and consultation with employees raise awareness and education on adverse / negative risk areas. Communication and consultation with senior management and executive team is perceived as reporting on positive and negative risk areas and consultation in terms of integration of ERM into organisational strategic planning. In most firms a Risk Manager / Chief Risk Officer is appointed as the focal point of communication and consultation. In large organisations, public companies and financial services the Risk Manager / Chief Risk Officer reports to the audit committee which is charged with governance related matters. The responsibility for risk management rests with those charged with governance as they are in charge of overall organisational strategy which is a driver in an enterprise (Cohen *et al.*, 2014:1178).

Pojasek (2011:87) developed a quality toolbox which requires the ERM team to design an enterprise risk management structure that shows channels of communication within an enterprise. An effective enterprise risk management structure enhances all lines of reporting and this brings in harmony within an enterprise (Viscelli *et al.*, 2017:77). Furthermore, effective ERM structure

assists in attaining ERM objectives, because all team members are included from top management to bottom, (See Figure 2.2).

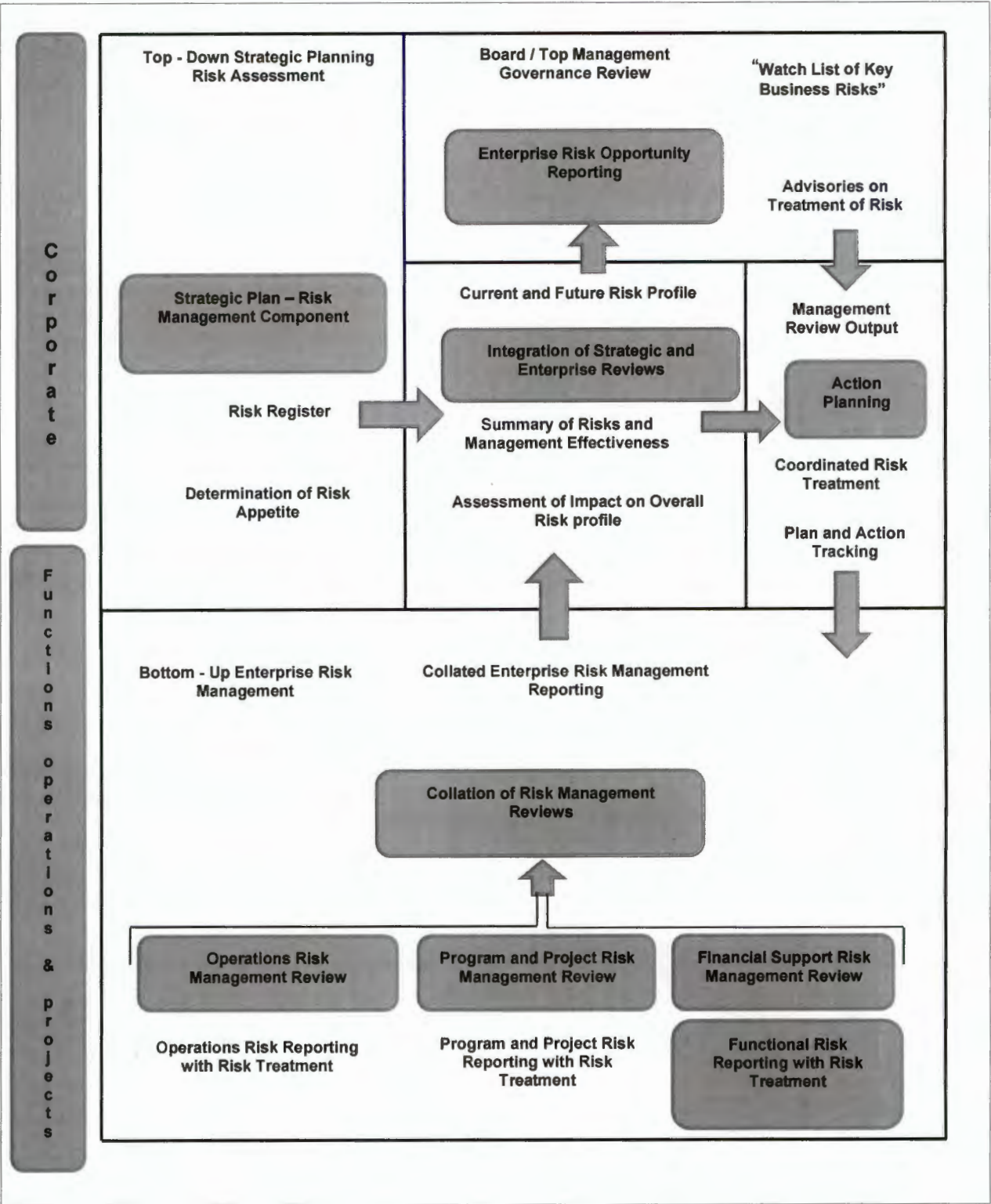


Figure 2.2: Enterprise Risk Management Structure

Source: Adapted from Pojasek, (2011:87)

2.2.3 Establishing the context in which risk occurs

The second stage for risk management process is establishing the context in which risk occurs. According to COSO (2013:1) ERM system may be effective due to the involvement and participation by a firm’s board of directors. As explained in section 2.2.2, those charged with governance should encourage implementation and adoption of an ERM strategy in order to meet organisational objectives. COSO (2013:2) states that when firms are developing ERM frameworks they should consider that appropriate ERM systems vary from firm to firm or industry to industry. There are many types of risk that may adversely affect an enterprise (See section 2.4). Therefore, the Chief Risk Officer and those responsible for risk should be able to ascertain the risk appetite / risk tolerance of the enterprise. COSO (2013:2) refers to risk appetite as the amount of risk an organisation is willing to accept in pursuit of value. It is directly related to an organisation’s strategy expressed as the acceptable balance between growth, risk and return. Correia *et al.* (2015:10 - 12) define risk as the chance that a bad event will happen and a future outcome would be adverse. Risk is a potential hazard or possibility of loss that emanates from a given action and in a financial management perspective, the term risk indicates that there is an expectation that an actual outcome may differ from the predicted outcome (Correia *et al.*, 2015:10 - 12).

The outcome of an event may be positive or negative. Uncertainty refers to the future that cannot be predicted due to insufficient information about the future outcomes or that the probability of occurrence may not be predicted (Correia *et al.*, 2015:10 - 12). Positive risk is known as upside risk and negative risk is called down side risk (pure risk), (Correia *et al.*, 2015:10 - 12). Correia *et al.* (2015:10 - 12) define upside risk as the risk that is considered good because the outcome is better than expected. Downside (pure risk) is defined as risk which is purely bad (Correia *et al.*, 2015:10 - 12). However, for a risk to occur there must be two possible outcomes. For example, if an individual “*toasts a coin*” the toss outcome is either ‘*head or tail*’ hence in risk management the need to secure against the negative outcome. Risk management is the process for identifying and assessing the prevalence, size, frequency of potential risks that an enterprise could face, and take drastic measures in order to avoid or control this risk (Brown & Moles, 2012:2). This study considered downside (pure risk) due to the fact that it affects negatively the firm’s growth, competitiveness, sustainability and business continuity. This is the case with the micro-lenders in Botswana.

The following Table 2.2 shows the steps essential during the design of a risk management program developed by the researcher based on the works of (Pojasek, 2011:87).

Table 2.2: Steps to consider during the design of a risk management program

Step number	Risk management component
Step 1	Understanding the enterprise and its context

Step 2	Establishing risk management policy
Step 3	Creating accountability associated with the management of risk
Step 4	Integrating risk management into organisational process and business model
Step 5	Providing adequate resources for risk management (human and physical resources)

Source: Own source

2.2.4 Risk Assessment

The third stage for risk management process is risk assessment. Lyon and Popov (2016:42) argue that organisations that integrate effective risk assessment strategies within their risk management systems tend to be highly successful and profitable. Risk assessment is a strategic examination of internal and external factors that influence negatively organisational performance, growth, sustainability and business continuity. A risk assessment is a continuous systematic process of examination of significant risks facing an enterprise (Frigo & Anderson, 2011:85).

Specific examples of factors that influence risks were explained in section 2.1 (See Table 2.1). According to Stephens (2003:34), it is inevitable to safeguard businesses after experiencing disasters (for example computer crashes at the commencement of the millennium 2000) and the terrorist attack on New York’s Twin Towers on 11 September 2001. September 2001 changed the face of disaster preparedness and hence influenced the implementation of Disaster Recovery Planning (DRP). The DRP was introduced in order to scale down the potential risks such as terrorist attack; floods, veld fires, fraud and any other natural catastrophe (Stephens, 2003:34). The factors that contributed to a Disaster Recovery Planning are as follows: physical damage; technology failure / out of date technology; credit exposure; internal controls; market factors and operation disruption. These factors were explained in more detail in section 2.4 (Sources of risk).

2.2.5 Risk Identification

The fourth stage for risk management process is risk identification (See Figure 2.1). This is the stage whereby firms identify risk that affects their operations (Lyon & Popov, 2016:44). The main objective of this stage is to find out, recognise and record sources of risk that affects an enterprise. According to COSO (2013:2) sources of risk include political risk; legal or litigation risk; regulatory risk; compliance risk; strategic risk; product risk; commodity risk; product reputation risk; operational risk; economic risk; credit risk; currency risk; interest risk; interest rate risk; gearing risk; environmental risk; fraud risk; corporate reputation risk, and culture risk (a more comprehensive explanation of sources of risk see section 2.4). This stage deals with how organisations address frequency of risk identification and recording and the number of times that are sufficient to update information about key risk areas (Paape & Speklè, 2012:11). Identified risk

is then recorded into the risk register (See Annexure F). The risk register which was used as an example in this study includes the following items: reference number; description of the risk; inherent risk level (impact / probability); description of current control or mitigation methods; residual risk level (impact / probability); acceptable risk or risk appetite and action to be taken (Pojasek, 2011:88). The team responsible for risk management activities update the risk register on a regular basis in line with the terms of reference.

2.2.6 Risk Analysis

The fifth stage for risk management process is the risk analysis (See Figure 2.1). Risk analysis is an understanding of consequences, probabilities and existing controls in a given business environment (Brown & Moles, 2012:2). At this stage it is imperative to discuss the implications of a simple definition of risk as follows: *risk is a deviation of a chance or probability from an anticipated outcome* (Brown & Moles, 2012:16). According to Brown and Moles (2012:16) implications to simple risk definition are as follows: probabilities are attached to risk; risk can be measured, predicted and calculated; risk can be quantified and expressed as a number, parameter or value; risk is concerned with the deviations from the expected outcome and risk is a function of objectives. In other words where there is a possibility of a gain or loss, such a probability is perceived to be a risk.

In relation to risk theory, the probability of an event occurring takes a value that ranges from zero to one (Brown & Moles, 2012:17). This means that an event is impossible if it has a probability of zero because an event is certain if it has a probability of one. The risk theory is interpreted as greatest if the gain or loss-making event has a probability of one (it is certain to occur). Mathematically or statistically a probability (p) of loss lies above zero and is less than one for example $0 < p < 1.0$. This is often known as the odds of gains or losses (Brown & Moles, 2012:17). This is expressed as the ratio of unfavourable to favourable outcomes, for example a gain of 0.25 implies that the odds would be: 0.75:0.25. These are often expressed as 3 to 1 and interpreted as 3 to 1 against success.

This stage has two broad objectives stated as follows:

- The top management of an organisation, especially the Risk Manager / Chief Risk Officer, may consider the likelihood (or probability) of an event occurring and then predict the impact of that event (using statistical tools).
- The top management of an enterprise, particularly the Risk Manager / Chief Risk Officer, may consider using qualitative approach to risk analysis, using the High, Medium and Low descriptors of the likelihood as well as the same to impact.

2.2.7 Risk Evaluation

The sixth stage for risk management process is risk evaluation (See Figure 2.1). Pojasek (2011:87) states that some organisations use risk analysis to quantify risk and others use a qualitative approach to risk analysis. The qualitative approach to risk analysis is in the form of a matrix or a grid. The following grids are examples for qualitative approaches developed by the researcher based on the works of (Pojasek, 2011:89). The purpose for risk evaluation is to provide top management with some indication of the size of the different risks and their impact on organisational objectives. In the grid risk is then measured and ranked against qualitative values of “High”, “Medium” or “Low” based on the likelihood of an event occurring and the impact of the event to the enterprise. An example of grid of likelihood and impact is shown in Figure 2.3.

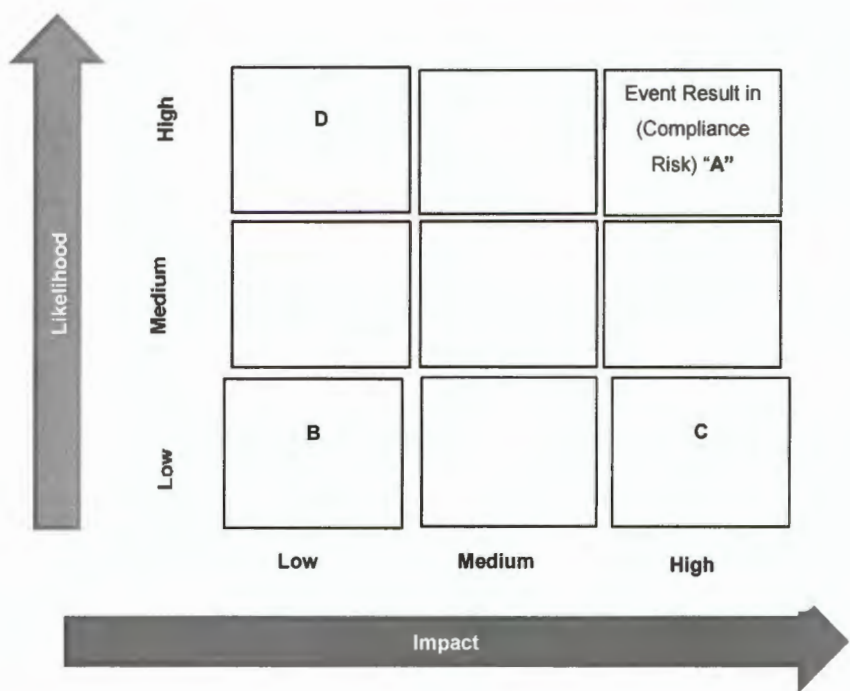


Figure 2.3: Grid of likelihood and impact

Source: (Adapted from on the works of Pojasek, 2011:87).

The grid (See Figure 2.3) shows an event in quadrant “A” that has resulted into compliance risk. For example, the likelihood of this risk in micro-lending businesses in Botswana is high; so is its impact. This is evidenced in the statistics reported by NBFIRA in Botswana where an average of only twenty (20) micro-lending companies out of 243 submitted their returns (reported periods 2012 and 2013). Therefore, this is how the grid in Figure 2.4 is used to evaluate risk in organisations and then the results are recorded in the risk register (See appendix F). A risk register is then used to analyse how risk should be treated (See section 2.2.8).

Many enterprises conduct a cost / benefit analysis or business impact analysis during the risk evaluation stage of the risk management process (Lyon & Popov, 2016:51). Lyon and Popov (2016:51) argue that a risk assessment matrix may be used depending on the criteria adopted with the concerned enterprise (See Table 2.3).

Table 2.3: Severity and Impact matrix

Severity levels	Impact				
	Injury	Safety	Damage of Property	Environmental Impact	Public Impact
Catastrophic (5)	Fatality	External Disaster response	> R2,500,000	Major Environmental Impact to public	Serious impact on large community
Critical (4)	Permanent disability, threatening, life hospitalty	Internal disaster response	R500,000 to R2,500,000	Off - site release; repeat serious violation	Serious impact on small community
Serious (3)	Lost time	Emergency response involving external agencies	R150,000 to R500,000	Release contained within facility repeat violation	Minor impact on families or neighbourhood
Moderate (2)	Medical aid, restricted work	Potential emergency response	R10,000 to R150,000	Contained within facility; minimal impact	Minor impact on individual
Minor (1)	First aid	Reportable occurrence	Up to R10,000	Contained within facility; no impact	Minimal to none

Source: Adapted from Lyon and Popov, (2016: 46)

2.2.8 Risk Treatment

The seventh stage for risk management process is the risk treatment which is based on the risks recorded in the risk register (See Figure 2.1 and Annexure F). According to Pojasek (2011:86) an enterprise should make a decision on how it should treat risk based on its severity / impact or consequences and how it affects the business model. The following strategies are used for prioritising and ranking of risk (Pojasek, 2011:86).

Transfer of risk - This is a strategy where risk is very high and has a huge impact on an enterprise's business model and business continuity. Therefore, it is not safe for an enterprise to ignore this type of risk hence it would be prudent to transfer this risk to a third party such as insurance companies. The insurance industry is known for handling pure risk hence the option of transferring risks assists many firms to concentrate on their core businesses. It is therefore important to understand the insurance classifications of risks or perils as their consequences are useful to the survival of an enterprise. The following Table 2.4 shows common insurance covers / policies and related perils (cause of loss) based on the works of Tuckman (2015:106).

Table 2.4: Common insurance covers

Insurance classifications	Perils
Assets, all risks (perils)	Damage to assets from any perils (unless excluded)
Fire, explosion	Loss or damage to property due to fire or explosion
Natural perils and others	Earthquake, storms, floods, hail and snow
Crime	Theft, burglary, fraud, fidelity, arson, sabotage, terrorism and others
Engineering	Machinery breakdown: loss of damage to machinery and utilities
Transit	Loss of or damage to goods / stock in transit
Motor	Loss of or damage to the vehicle, loss or damage to third parties and injuries to occupants
Legal liability	Environmental impairment, products liability, employers' liability, death or injury to persons
Consequences losses	Business interruption losses due to the loss of assets due to insured perils

Source: Adapted from Tuckman, (2015:106).

Insurance reviews are the responsibility of the personnel delegated to mitigate and manage risk. Identified insurable perils are handled by the insurance industry (See Table 2.4). This means that enterprises protect their businesses through acquisition of insurance covers and pay premiums on monthly, half yearly or annual basis in order to cover for future losses.

Acceptance of risk

Certain types of risks are inherent within a specific business (Tuckman (2015:106). For example, micro-lenders are subject to credit risks as opposed to cash and retail type of business which is exposed to fraud risk. It is difficult to avoid inherent risks otherwise doing so may result in the

withdrawal from that specific industry. A matrix that shows an inherent risk is depicted in Figure 2.4.

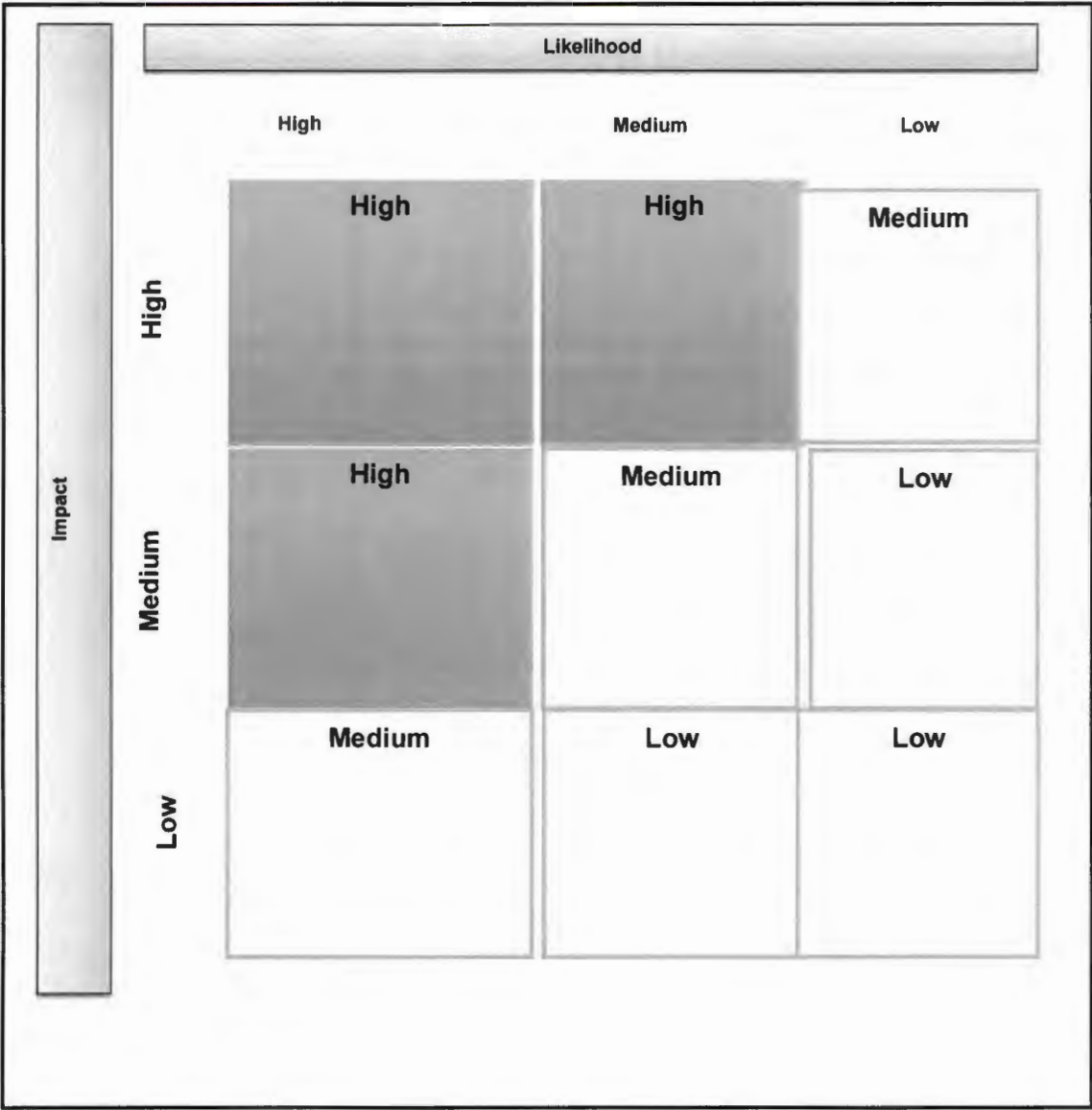


Figure 2.4: A matrix showing inherent risk

Source: Adapted from Lyon and Popov, (2016:46)

However inherent risk is acceptable if the risk-return properties benefit the existence of the firm otherwise it would be unfortunate to continue operations if the cost exceeds the benefits.

Reduction of risk

A reduction risk strategy is associated with prevention as it aims to lessen the impact of risk (Lyon & Popov, 2016:46). Risk can be practically minimised through designing and implementation of

physical risk management programs for example; reduction of the magnitude of the exposure; dealing (physically) with loss producing events and recovering (physically) from loss - producing events. Lyon and Popov (2016:48) suggested that a *Bow Tie Analysis* (See Figure 2.5) can be used for risk pathways and control measures. Lyon and Popov (2016:48), these researchers state that the main strategy for using a *Bow Tie Analysis* is for preventive and control measures for any type of a scenario. When using a *Bow Tie Analysis*, the Chief Risk Officer may identify the causes of risk and mitigation controls between risk and consequences (See Figure 2.5). The concept of using *Bow Tie Analysis* was adapted from safety and health professionals and this technique may be customised to suit any scenario.

Interpretation of a *Bow Tie Analysis* (Figure 2.5) according to Lyon and Popov (2016:48) is as follows: S = Severity ; P = Probability; PE = Preventive Effectiveness, and RPN = Risk Priority Number. The strengths of a *Bow Tie Analysis* are that it displays the present risk exposures and controls. In Figure 2.5 it displays training and development of workers as a preventive measure to risk exposure to the explosion scenario below. The aim is to provide awareness to the employees before the occurrence of the event hence minimise the impact of the consequences. Therefore, in this case of micro-lenders in Botswana it is imperative to advocate for risk management awareness in order to reduce the likelihood of liquidating businesses in this sector.

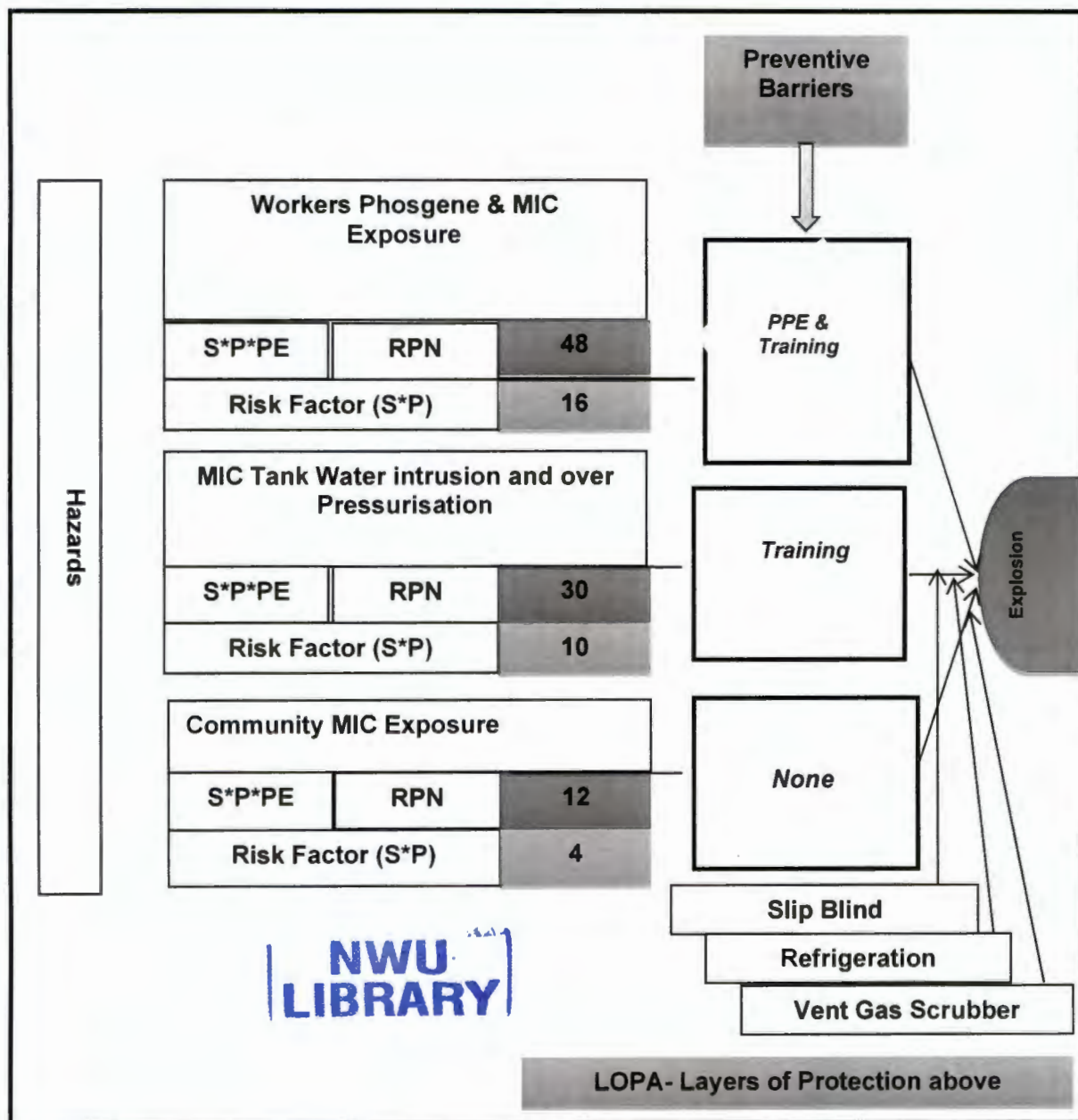


Figure 2.5: Modified Bow Tie Analysis with Risk Scoring

Source: Adapted from Lyon and Popov, (2016:48)

Avoidance of risk

Avoidance is a strategy whereby a firm makes a decision to avoid the risk as the costs outweigh the benefits (Lyon & Popov, 2016:51). This means that an enterprise is forced not to proceed with the project due to the fact that it is associated with an unacceptable high level of risk. A risk action table can be drawn in order to establish the risk levels as shown in Table 2.5.

Table 2.5: Risk action table

Risk Action Levels	
Risk Level	Action
Unacceptable	Immediate action required. Operation not permissible, except in rare and extra - ordinary circumstances.
High	Remedial action is to be given high priority.
Moderate	Remedial action is to be taken at appropriate time.
Low	Remedial action is discretionary. Procedures are to be in place to ensure risk level is maintained.

Source: Adapted from Lyon and Popov, (2016:47)

The avoidance strategy requires senior management to make the decision of selecting an alternative activity as the risk level on the current activity is not acceptable (See Table 2.5 - Unacceptable risk level).

2.2.9 Motoring and Review

Monitoring and review are the eighth stage for the risk management process (See Figure 2.5) Pojasek (2011:87); Tuckman (2015:106) and (Lyon & Popov, 2016:51) argue that management should continuously monitor and review enterprise risk management in order to assess the firm’s risk appetite. According to Tuckman (2015) and Lyon and Popov (2016:51) monitoring and review in risk management process includes determining whether each risk previously identified is still relevant to the organisational area; reviewing the assessments given to the likelihood and impact for each risk; ranking and rating the risk; reviewing the adequacy of existing systems and preventive control measures, in order to manage risk (See *Bow Tie Analysis*); a review of the treatment strategies which the enterprise has previously considered in the risk register, and determining whether there are any new risks, as this is a continuous process.

Lyon and Popov (2016:50) suggested an example for methodologies that could be used as a guide for monitoring and reviewing risk for any enterprise. This guide shows a sequence of methodologies in a risk assessment process (See Figure 2.6).

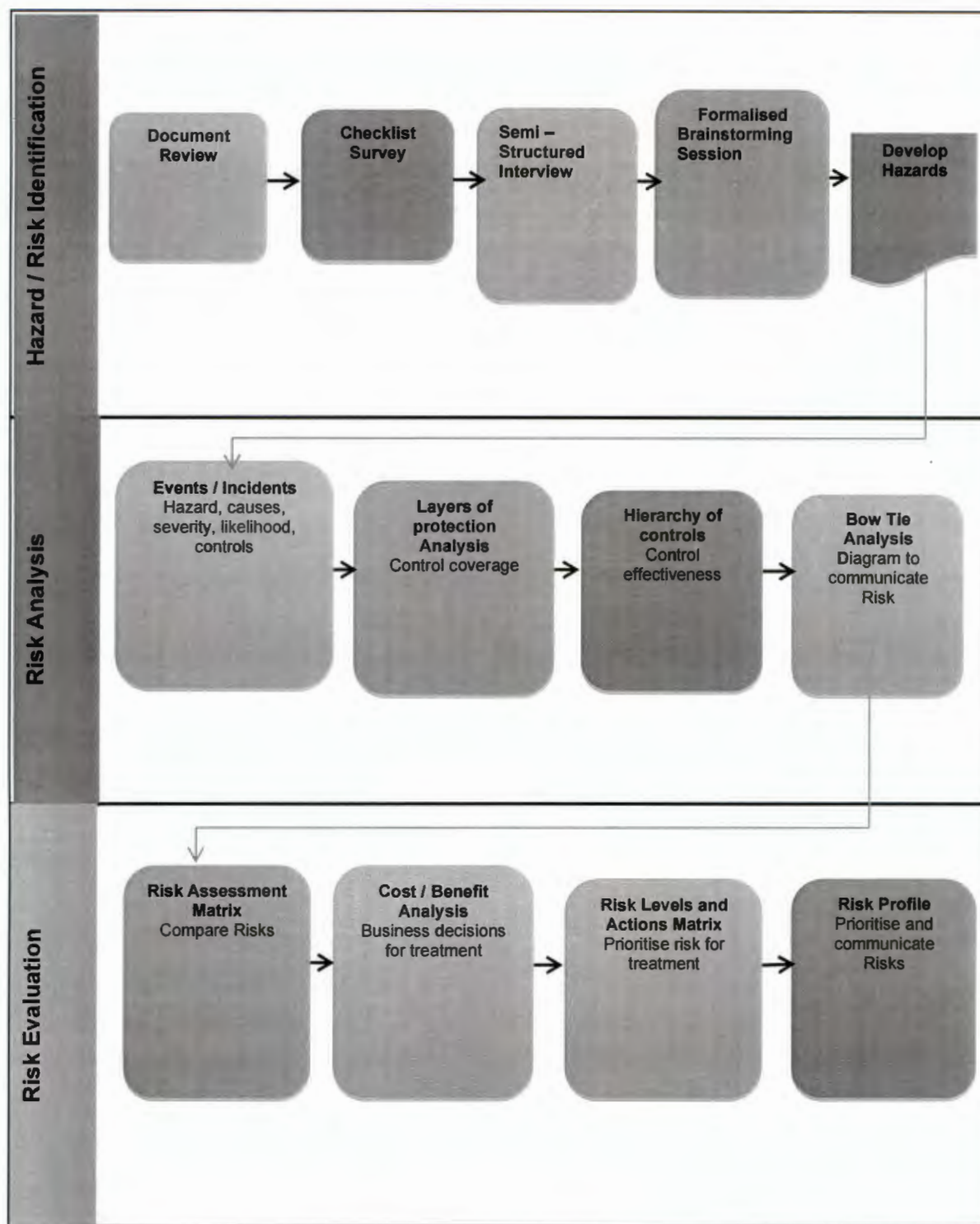


Figure 2.6: Example of a Sequence of Methodologies used in a Risk Assessment

Source: Adapted from Lyon and Popov, (2016:50)

Pojasek (2011:87) and Lyon and Popov (2016:50) argue that organisations that integrate risk management process into the company's overall management system, that is subject to the

system 's requirements of monitoring, review and communication both inside and outside the organisation can have a range of benefits (See Table 2.6).

Table 2.6: Benefits accruing from an effective ERM System

Benefit	Key main areas of the benefit
Shareholder value (Young, 2006)	• Increased returns • Reduced volatility
Attainment of goals set out in the organisation's mission statement	• Meeting objectives • Satisfying expectations of key stakeholders
Operational improvements	• Safeguarding assets • Better decision making • Process - related improvements

Source: Adapted from Pojasek, (2011:95)

2.3 Operational risk modelling

Young (2006:8), Young (2009:82) and Tuckman (2015:508) argue that the purpose of operational risk modelling is to determine an objective value of risks. In the management sciences discipline it is difficult to quantify operational risks and identify future unexpected risks (Tuckman, 2015:508). A method for quantifying future operational risks which was described and explained in this study is stochastic modelling. Stochastic modelling is used to calculate operational risks with the aim of determining the severity, likelihood of operational risks and takes account of the loss history of an enterprise in terms of statistical distribution analysis (Young, 2006:8). Stochastic modelling involves collating of loss data which is then used to determine the loss distributions for the impact and likelihood of losses (Young, 2006:8). Aggregated expected and unexpected losses are obtained as a result of calculating loss distributions. According to Young (2006:84) the two types of stochastic modelling are impact models and likelihood models (See section 2.3.1 and 2.3.2).

2.3.1 Impact models

According to Young (2006:84) impact models are used to determine the impact of operational risk events through the use of exponential distributions (for example Weibull distributions and Pareto distributions). Extreme Value Theory (EVT) is another technique that is used to illustrate the impact of operational risk events (Young, 2006:84). EVT may be used as a strategy for solving the

problem of shortage of operational risk data. Extreme Value Theory (EVT) is a statistical concept that is used for modelling that includes limiting behaviour of extremes for large class of distributions and losses in excess of high threshold for same distribution (Young, 2006:84).

2.3.2 Likelihood models

According to Young (2006:84) likelihood models are used to perform estimate frequency of future operational risk events (examples are Poisson and Binominal distributions). Both the impact and likelihood operational losses are then used to determine the value of operational risk and the expected loss for a given confidence level for a particular period. An aggregated loss distribution can be used to calculate and predict the value of expected and unexpected loss through the application of Monte Carlo simulation model, which gives the probability of the loss amount for a given confidence level (Young, 2006:84). However, the distribution curve in Figure 2.7 can be used to determine the risk appetite of an enterprise (for example the risk a firm is prepared to tolerate or accept).

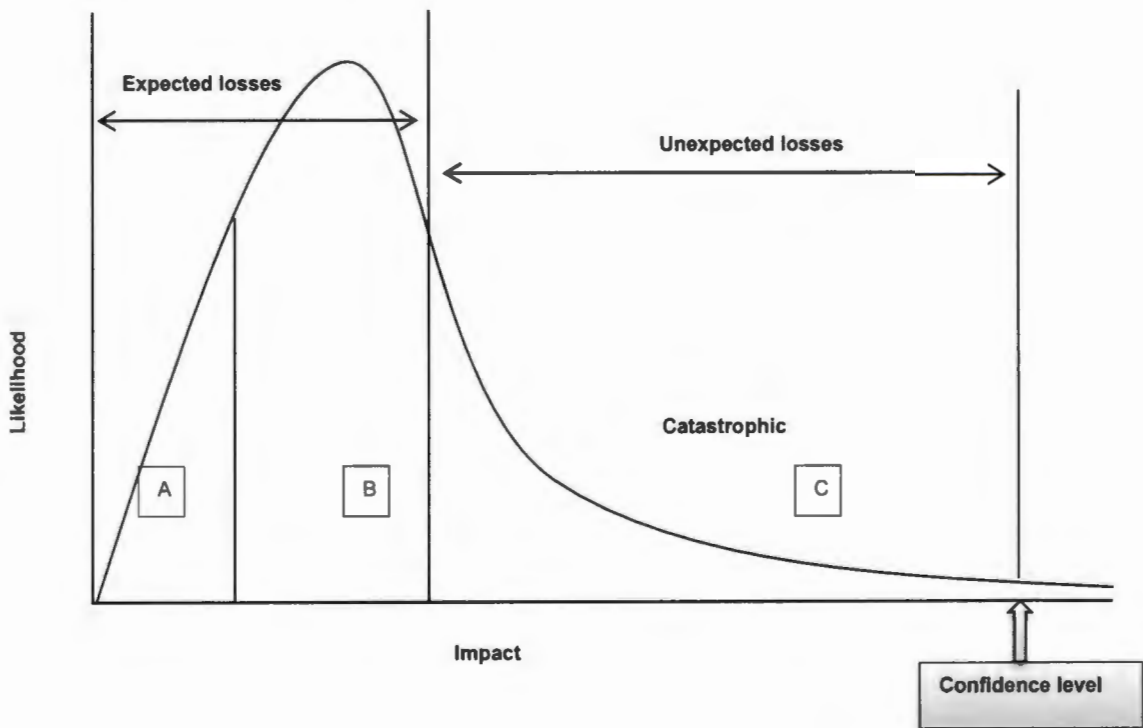


Figure 2.7: Aggregated loss distribution

Source: Adapted from Young, (2006:84)

According to Young (2006:84) an aggregated loss distribution is used to determine the final risk appetite of an enterprise that most senior management adopts in order to implement additional risk control measures. Figure 2.7 reflects a scenario whereby management may decide to allocate more capital towards the catastrophic incidents as these types of events are disastrous and may

cause the organisation to stop hence it is prudent to transfer risk to the insurance industry (See section 2.2.8 for risk transfer).

2.4 Sources of risk

There are different sources of risks that may affect an enterprise's business model, both positively or negatively (Brown & Moles, 2012:29). An understanding and awareness of sources of risks assists senior management in integrating ERM systems into strategic planning (Viscelli *et al.*, 2017:70). Risk affects performance, growth, sustainability and business continuity of many disciplines (for example banks; micro-finance; health and safety; public policy formulation; transportation; the environment; technology; management and sciences and many other areas). Therefore, this section introduces risk landscape known as being *multi-dimensional* (Brown & Moles, 2012:29). There are many ways of explaining the different types of risks facing an enterprise (See Figure 2.8). The sources of risks assist senior management in determining the risk factor that may be sensitive to changes or modification of current and future cash flows of an organisation. The task for senior risk management team is to balance the desirable objectives of risk reduction costs constraints for mitigating risks (cost-benefit analysis). Figure 2.8 illustrates the risk landscape, which includes most of the risks that affect an organisation's growth; performance; sustainability and business continuity.

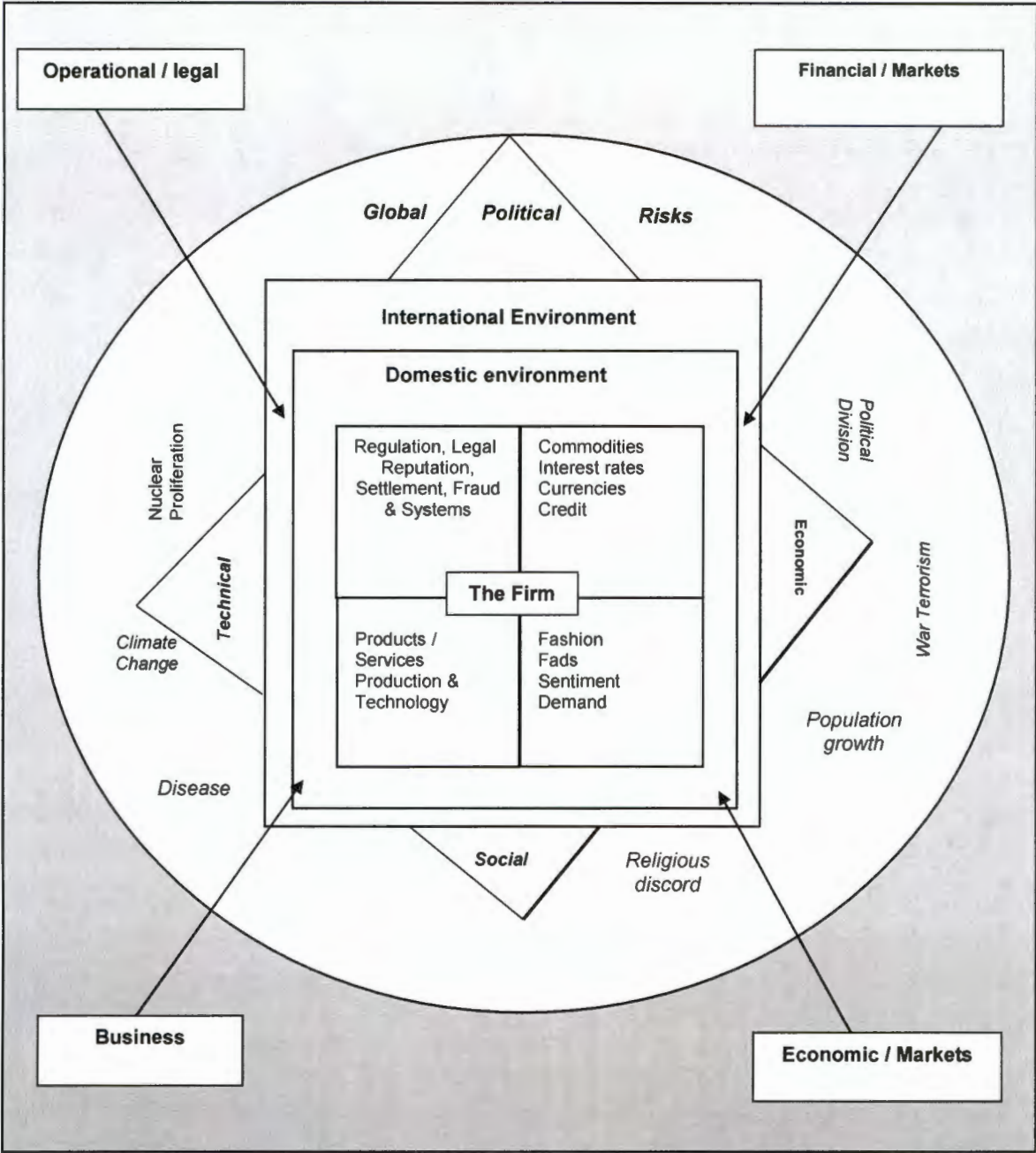


Figure 2.8: The Risk Landscape

Source: Adapted from Brown and Moles, (2012:30)

Subsequent sections provide explanations on different sources of risks that affect performance of an organisation which ultimately may cause the business to collapse.

2.4.1 Political risk

COSO (2013:2) and Tuckman (2015:35) define political risk as the risk that results from political instability in a country. For example, if there is war or political unrest in a country these conditions

will not be favourable for investors to undertake businesses. This type of risk is generally considered as part of external environment which affects any business model as its impact disturbs the firm's growth. This type of risk may push an enterprise out of business as the firm fails to meet intended objectives and goals hence the need to mitigate political risk.

2.4.2 Legal or litigation risk

This risk is closely related to operational risk or reputational risk. Tuckman (2015:35) defines legal or litigation risk as a process whereby responsible senior officials or any other person within the organisation enters into contracts and fail to perform or deliver in line with the agreed terms (breach of contract), that end up as court cases. Court cases may lead into bad publicity as this affects reputation or image of an organisation. For example, micro-lending company being sued by its clients may be required by law to pay heavy damages and this may result into bankruptcy or liquidation.

2.4.3 Regulatory risk

According to studies by (Tuckman, 2015:35; Viscelli *et al.*, 2017:80) regulatory risk arises due to new actions taken by a government and the launch of these actions may affect the financial aspects of an enterprise. For example, if the government imposes a new levy to all registered micro-lending companies and failure to meet this requirement may result in the business being threatened. For example, if heavy penalties and fines are levied to a micro-lending business that fails to meet such regulatory obligations, this may result into bankruptcy and liquidation.

2.4.4 Compliance risk

According to studies by (Sheedy & Griffin, 2017; Tuckman, 2015:35; Viscelli *et al.*, 2017:80) regulatory risk arises from non-compliance issues. These are circumstances whereby a firm fails to meet defined standards or laws of the country. For example, a micro-lending company in Botswana may fail to meet its obligations of paying an operating license hence exposing the business to heavy penalties which may end up as liquidation. Another second example is that of a micro-lender who fails to submit annual returns and this requirement may lead to closure of operations hence the need to mitigate risk.

2.4.5 Strategic risk

Tuckman (2015:37) argues that strategic risk arises from business strategies or financial management decisions (such as investments, acquisitions and mergers) that fail to meet the organisation's intended goals. For example, an acquisition of a subsidiary may turn out to be less profitable from the firm's previously forecasted projections. An example suitable for the NBFIs Sector in Botswana is that of a micro-lending company which may be subjected to competitors with sophisticated and robust credit risk management systems that attract more profitable market share.

These competitive circumstances may ultimately force this non-competitive micro lending company offering business to relatively high-risk customers due to poor strategic decision making.

2.4.6 Product risk

According to Tuckman (2015:36) a product risk arises when a new product is launched or an existing product fails to attract as many customers in relation to the firm's targeted number of clients as per the organisation's projections. For example, a micro-lending business projected to make a profit after selling its service products to one thousand (1,000.00) customers and on a monthly basis this firm reports sales for its service products of approximately nine hundred (900) customers hence this product risk may threaten the firm's business model.

2.4.7 Commodity price risk

This is the risk that arises due to changes in the commodity prices and hence the volatility in prices has a direct impact on expected cash flows of an enterprise (Fraser & Simkins, 2010:240). Examples for commodities with high levels of price volatility, which impact on the firm's expected future cash flows include gold, electricity, wheat, silver, platinum, copper, zinc, diamond, tin, grains, coffee, sugar, oil, gas, and other energy products.

2.4.8 Product reputation risk

Product reputation risk arises due to a problem that emanates from poor standard of a product or service being offered within an enterprise and this results into bad publicity of the firm's image or reputation (Tuckman, 2015:36). For example, in Botswana a micro-lending company may offer a mediocre service to its clients and this would obviously lead into customers switching to competitors where excellence service is offered.

2.4.9 Operational risk

Scholars such as (Ali, Akhtar, & Sadaqat, 2011:153; Tuckman, 2015:15) define operational risk as financial stresses that emanate from operational breakdowns which result from risk loss due to inadequate or failed organisational processes, human resources, or external events. For example, fraudulent activities; inadequate information communication and technology systems; failure in internal controls, mistakes in operational decision making; poor guidelines and procedures or attack from natural disasters such as floods; earthquakes; veld fire and volcanoes. Therefore, there is need to transfer this risk to the insurance industry as a strategy for mitigating risks.

2.4.10 Economic risk

Economic risk is the risk that is influenced by changes in various economic variables which impact on the cash flows or operating strategies of an enterprise (Fraser & Simkins, 2010:240). For example, changes in the gross domestic product; changes in minimum wages and inflation levels and changes in consumer lifestyles and consumer tastes all constitute economic risk.

2.4.11 Credit risk

The studies by (Lai, Azizan, & Samad, 2010:45; Tuckman, 2015:14) define a credit risk as the risk loss that arises due to a change in the factors that influence the credit quality of an asset. Factors that affect credit quality of an asset include the following: credit grade migration, default from debtors and dynamics of recovery rates. A credit risk is defined as the risk whereby a customer fails to pay or is unwilling to pay an obligation or debt as a result of financial distress, dishonesty or for legal reasons (Fraser & Simkins, 2010:240).

2.4.12 Currency risk

The studies by (Lai *et al.*, 2010:45; Tuckman, 2015:14) refer to currency risk as the risk loss that arises due to open or imperfect hedged positions in a certain foreign currency that is denominated by assets and liabilities resulting in fluctuations in profits or values that are measured in the local currency. These hedged positions may have an impact on the firm's operations. Furthermore, foreign exchange volatility may affect the expensive cross-border investment hence result into placing an enterprise at a competitive disadvantage because of staff competition from its foreign competitors. Foreign exchange volatility may result into huge operational losses through uncertainty in a specific investment portfolio. The factors that influence foreign currency volatility are imperfect correlations in the foreign currency price movement and fluctuations in interest rates.

2.4.13 Interest rate risk

Tuckman (2015:25) defines interest rate risk as the risk loss that arises from the value of fixed-income security which falls due to an increase in market interest rates. In large investment portfolios the risk exposure may arise from the differences in the maturities, reset dates of instruments; and cash flows (for example assets that are long or short term in nature). Fraser and Simkins (2010:240) define interest rates as the risk loss that is influenced by changes in market interest rates and the fluctuation impact in the expected cash flows of an enterprise.

2.4.14 Gearing risk

The studies by (Ali *et al.*, 2011: 154; Ashraf, Altunbas, & Goddard, 2007:484; Correia *et al.*, 2015:13-13) define gearing risk as the risk loss that arises due to more debts that finance the enterprise more than the equity. This situation exposes the entity to threat of being taken over by the debt holders as they have more control and influence in the activities of the firm. Therefore, it is discouraged to get exposed to gearing ratio as the shareholders may decide to invest somewhere else. Furthermore, high gearing ratio discourages new investors as the business may be threatened to either bankruptcy or liquidation. Therefore, it is important for financial managers to control the gearing levels in order to protect the interests of shareholders and other stakeholders that are connected to the entity.

2.4.15 Environmental risk

Environmental risk is the risk loss which results from non-compliance against rules and regulations related to the environment (Tanc & Gokoglan, 2015:569). In other words, an enterprise fails to respect the environment in which it is operating and this leads into disagreements between the employees, management and the society at large. A firm's operation may be affected if management fails to observe the rules and regulations related to the environment as the society reacts negatively against non-compliant firms (for example the community may not want to associate with an unethical firm). If the community fails to accept the goods and services offered by an unethical firm, the cash flows for such an enterprise may be affected and this may result into bankruptcy and liquidation.

2.4.16 Fraud risk

Fraud risk is a risk loss arises as a result of an intentional misappropriation of funds and misrepresentation of financial statements by those entrusted as the custodians of financial affairs of an organisation and this may be interpreted as *human factor* (Tuckman, 2015:35). Human factor is categorised as part of the operational risk which is caused by individuals who are greedy as they fail to respect the fundamental principles of ethics and best practices. There are many firms which were affected due to failure to observe best practices such as Enron, World Com, Barings Bank and Bank of Credit and Commerce.

2.4.17 Corporate reputation risk

Corporate reputation risk arises due to poor ethical standards and the reputation or image of an enterprise is affected (Tuckman, 2015:36). For example, in Botswana a micro-lending company may have a relationship with an unethical institution, and it would be deemed unethical as well and this affects its operations through bad publicity hence this leads to customers switching on to other reliable competitors. The firm which is unethical may fail to attract customers and this may lead into bankruptcy and liquidation.

2.4.18 Culture risk

Culture risk is the risk loss that arises from differences in cultures between management, employees and the society at large (Tuckman, 2015:35). Culture risk is categorised as part of the operational risk and it has a direct impact on the entity's cash flows as the community may react negatively towards the firm due to differences in cultures. For example, the issues of ethnic pressure groups may influence the society not to have any relationship with firms being operated by operators of a different ethnic groups; this may be perceived as discrimination in many societies. However, if there are poor relationships between the firm and the community this may affect the business performance and ultimately lead into bankruptcy and liquidation.

2.5 Entrepreneurship

Entrepreneurship is the discovery of new business ideas and opportunities that motivate an individual to start up a new business venture (small or medium sized firm) (Cuervo, Ribeiro, & Roig, 2007:8). In the context of small and medium sized firms an entrepreneur is usually a capitalist (provider of funds) and assumes entrepreneurial and managerial functions. This is a similar case with micro-lenders in Botswana as they assume the entrepreneurial and managerial function hence this may be risky in relation to business decision-making. Entrepreneurial opportunities exist in some instances whereby resources (inputs) are converted into outputs (final products or services) (Cuervo *et al.*, 2007:8). Entrepreneurship may be conceptualised as a discovery of new ideas, products, services or production processes which ultimately result in the creation of new economic activities through a new organisation (Reynolds, 2005:361). Therefore, entrepreneurship is one of the important national economic drivers which are used as a strategy for economic development through creation of new firms, renewal of existing businesses and provision of new job opportunities. Exploiting opportunities may lead into improving and uplifting the wellbeing of the society at large. The concept of job creation through entrepreneurship was also adopted in many emerging economics including Botswana hence the need to protect the micro-lending business that are on the verge of collapse. Therefore, the government of Botswana encourages economic policies that promotes entrepreneurial activities in order to create new firms and renewing existing businesses (NBFIRA, 2014:1). Therefore, it is imperative to evaluate and discuss the theories of entrepreneurship as there are similarities to the context of this study for micro-lending businesses. The following subsequent sections explore the theories of entrepreneurship that were adopted in this study.

2.6 Theories for entrepreneurship

Entrepreneurial behaviour is perceived as behaviour that includes a combination of innovation, - risk-taking and proactiveness into consideration (Cuervo *et al.*, 2007:9). This study adopted the classic theories of innovative entrepreneurship expounded by Schumpeter (1934:39), the high need for achievement by Davis and McClelland (1962:352) and the risk bearing theory proposed by Knight (1921:22).



2.6.1 Innovation theory

Schumpeter (1934:39) proposes the dynamic theory that considers the concept of innovation as the key factor of production. The innovation theory of Schumpeter (1934:39) perceives entrepreneurship as an activity that is influenced through creativity and innovation hence entrepreneurship is viewed as the engine of growth. Similarly the concept for viewing entrepreneurship as the engine for economic growth has been adopted in many developing countries including Botswana. Schumpeter (1934:39) theory perceives an innovator as a person who exploits opportunities for new markets, new products, new resources and a discovery of new

ways of doing things. The concept for innovation based on Schumpeter (1934:39) is illustrated in Figure 2.9.

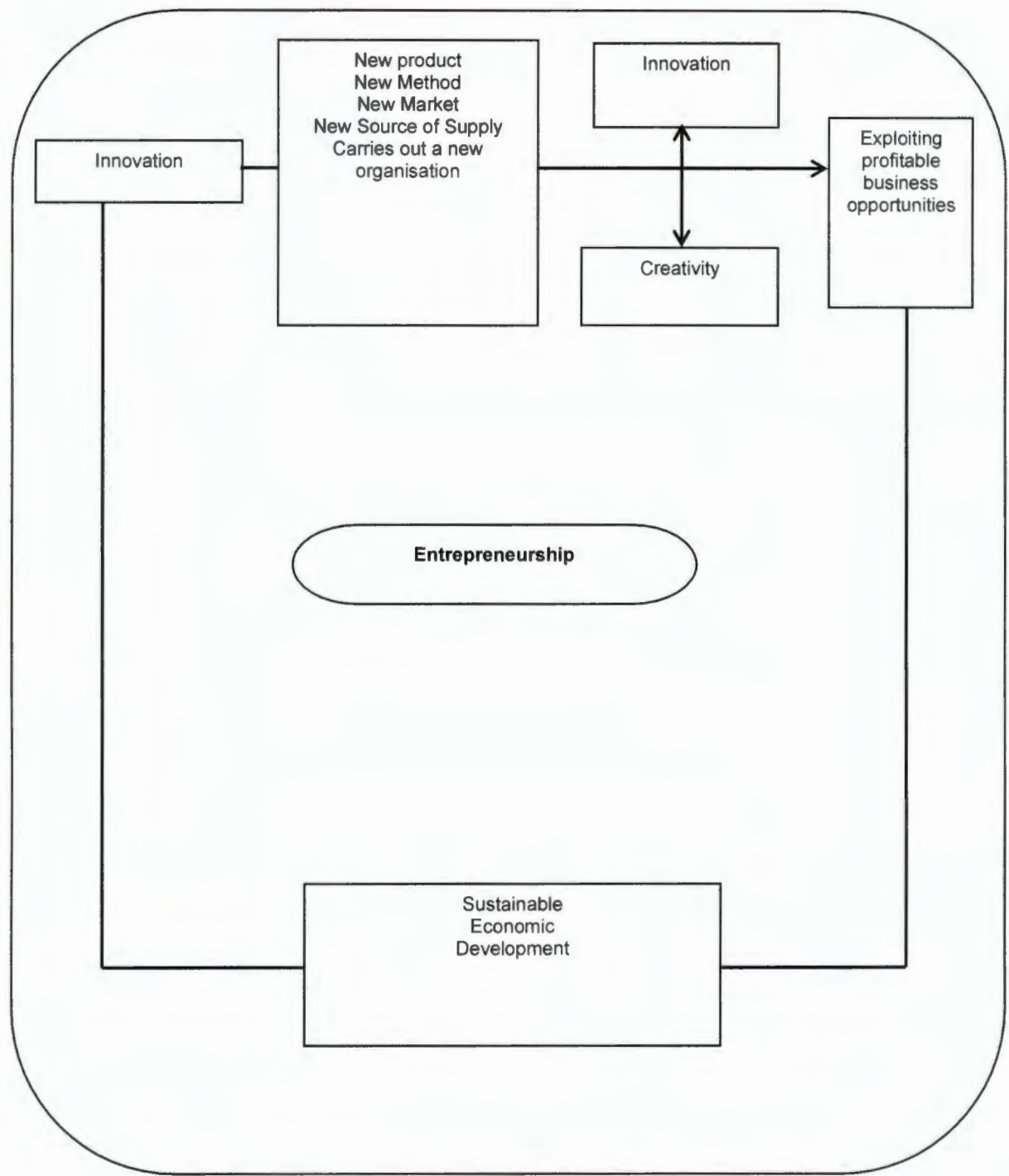


Figure 2.9: Innovation Theory of Entrepreneurship

Source: Adapted from Schumpeter, (1934:39)

Schumpeter (1934:39) suggested the following as the characteristics of an entrepreneur: a motivated person with will power; an individual who is good in selecting correct answers; a person who is enthusiastic and full of energy and a person who can stand social opposition. A major challenge with the innovation theory for Schumpeter (1934:39) ignores the function of risk-taking as his opponents believed that there is risk associated with factors of production. Therefore, the innovation theory of entrepreneurship supports what is called *enterprising spirit* which means using resources to create wealth (economic value). Innovation theory of entrepreneurship is relevant to developing countries including Botswana where innovation is encouraged as part of economic development strategies.

2.6.2 Need for achievement theory

Davis and McClelland (1962:352) view the characteristics of an entrepreneur in two parts as follows: doing new things in an improved way and making decisions under uncertainty conditions. Davis and McClelland (1962:352) argue that entrepreneurship is influenced by high achievement rather than external factors such as money (profits) and any other economic incentives. People with low achievement (n-Ach) orientation perceive profits and incentives as yardsticks of successful entrepreneurs whereas people with high achievement (N-Ach) are not influenced by profits or money rewards. Therefore, entrepreneurship is driven through an individual's intrinsic motivation (inner motive) and the sense of achievement. Davis and McClelland (1962:352) pointed out the following three types of needs that a person acquires during life-time experience: need for achievement, need for power and need for affiliation (see Table 2.7).

Table 2.7: A person's three needs

Need	Characteristics
Need for achievement	A drive to excel, grow and advance
Need for power	A drive to dominate and influence others as followers
Need for affiliation	A drive for freindship , good and postive inter-relationships

Source: Adapted from Davis and McClelland, (1962:352)

According to Davis and McClelland (1962:352) five major traits for a successful entrepreneur are as follows; problem solving (critical thinking); goal setter; effort to achieve goals; two way feedback loop and moderate risk-taker. Therefore, this theory advocates for friendly external environmental

factors such as political, social and economic in order to promote entrepreneurship in both underdeveloped and developing countries.

2.6.3 Risk bearing theory

Knight (1921:22) developed a risk bearing theory that consists of four main elements on the function of entrepreneurs (See Table 2.8).

Table 2.8: Four main elements function of risk bearing theory

Element	Characteristics
Risk creates profit	Profit is earned due to risk
More risk more gain	The more risky the nature of business , the greater the profit earned
Profit as reward and cost	Profit is the reward for assuming risks and is treated as part of the normal cost of production
Entrepreneur's income is uncertain	There is uncertainty on the business' s income where the probabilities of alternative outcomes cannot be determined either by priori or by statitsical inference.

Source: Adapted from Knight, (1921:22)

This theory summarises that profit earned is perceived as the reward for an entrepreneur's effort of conducting a business and the higher the risk, the more the return. In any business venture there is inherent risk hence the need to mitigate enterprise risks.

2.7 Stakeholder assumptions

There are three assumptions applicable to corporate governance as far as practical real-life situation is concerned. The three assumptions for stakeholder conflicts are represented in three different approaches as follows: *The Shareholder Value Approach*, *The Stakeholder Approach* and *The Stakeholder Inclusive Approach* (CIMA, 2016:6; King, 2016:61).

2.7.1 The shareholder value approach

This is the view on corporate governance that the directors should run the company with the objective of maximizing the wealth for firm owners (CIMA, 2016:6; King, 2016:61). This approach promotes the philosophy that advocates for shareholder value and maximisation of wealth. If the objective for shareholder maximisation is not achieved, it means that the firm should not continue

operating as the whole idea is to satisfy shareholder's needs (profit maximisation). According to Zech (2013:681) the shareholder value approach does not balance the demands for multiple stakeholders. The challenges with this approach are advocating for shareholders only at the expense of other stakeholders and problems associated to agent and principle relationship. In the agent-principle relationship the directors of a firm are given the responsibilities to run the entity hence their interests may differ from the interests of the investor and this creates a bad environment of not trusting each other (CIMA, 2016:6; King, 2016:61). In the corporate governance fraternity this is perceived as the stewardship role whereby the directors are supposed to act in utmost good faith on behalf of the shareowners. In this case the directors make decisions on how to pay dividends and what should remain in the firm and hence this creates relationship problems in balancing the needs of multiple stakeholders.

2.7.2 The stakeholder approach

This is the view on corporate governance that the directors should be permitted to run the company in a way that balances the interests of the equity shareholders with those of other stakeholders, particularly the employees (Zech, 2013:682). This is known as the Pluralist approach. The Pluralist philosophy advocates that employees are important assets to any entity as their non-cooperation may disrupt the operations and dent the image of the enterprise. It is from this background that the management should consider two classes of stakeholders: shareholders and employees in order to bring harmony within the entire organisation hence the need to balance the needs of these two classes of stakeholder groups (Zech, 2013:682). On the other hand, the stakeholder approach is criticised for not considering all the stakeholders that are connected to an organisation.

2.7.3 The Stakeholder inclusive approach

This is the view on corporate governance that the directors should run the company in the interests of the equity shareholders but taking into consideration the interests of other stakeholder groups. The stakeholder inclusive approach is the most popular approach as it considers and balances all the demands for different stakeholders connected to an enterprise. According to Zech (2013:682) the stakeholder approach balances the demands for the following classes of stakeholders as shown in Table 2.9.

Table 2.9: Stakeholder groups and possible power sources

Groups	Stakeholders	Objectives
Internal	- Managers - Employees	Career development and pay security and enjoyable jobs
External	- Government - Pressure groups	Compliance with the law and tax Protecting the environment (amongst others)
Connected	- Shareholders - Customers - Financers - Suppliers - Community and Society	Profit, share price and dividends Low prices and quality Interest payments and security High prices and assured demand Access to quality products and Corporate Social Responsibility (CSR)

Source: Adapted from Zech, (2013:683).

The main problem with the stakeholder inclusive approach is that the other stakeholders are balanced at the expense of the shareholders and at times there may be some disagreement between the directors and shareowners on the distribution of profits. However, if the disagreements are not handled properly this may culminate in shareowners shifting investments to competitors hence diluting the entire share prices in the market. The stakeholder inclusive approach encourages a firm’s senior management to be proactive and careful when dealing with the balancing demands for multiple stakeholders since their interests are different as shown in Table 2.9. Despite its criticism, the stakeholder inclusive approach is the most widely used approach in corporate governance and this study adopted this approach.

2.8 Micro-lending

The concept of micro-lending originated in the 1970s, as a vehicle for poverty alleviation (Armendáriz & Morduch, 2010:XIII). The philosophy of micro-credit is a concept whereby the bank issues small loans to small enterprises as capital for business start-ups in order to minimise the level of poverty in poor communities (Armendáriz & Morduch, 2010:XIII). This study differs from the concept of micro-credit as it explores the issue of small loans to households in Botswana, whereas the strategy for micro-credit is to issue small loans to small business owners. In Botswana the concept for micro-finance is different as the micro-lenders would source their own money to inject in the business as capital whilst in the case of Grameen the strategy is that the bank provides loans as capital for start-up or for existing business.

According to ; Harper (2002:238); Akhter, Akhtar, & Jaffri, (2009:1) and Armendáriz and Morduch (2010:XIII) households borrow small loans due to various reasons and circumstances that include the following: illness; rituals; marriages; financial stresses; repairs and maintenance; fixed assets additions; deaths; births and calamities. Micro-lending businesses in developing countries experience challenges in managing their organisations due to high default rates, poor credit-worthiness, decision making and significant government intervention and control (Akhter *et al.*, 2009:1). Grameen Bank started as a micro-finance and then developed into a large classic bank (Bayulgen, 2008:525). However, the way Grameen grew and developed from a micro-finance to a bank is not the case in Botswana as micro-lending firms are experiencing business continuity challenges.

The statistics from NBFIRA (2014:17) clearly indicate that there is a problem linked to business continuity in the micro-lending business in Botswana hence the need to develop an enterprise risk management and sustainability framework for this nature of business in Botswana. The problems for business continuity in micro-lending firms in Botswana are evidenced through the decline in the reporting periods 2009 and 2010 a 64% decline, 2010 and 2011 a 40% decline, finally another 9% decline was experienced in 2013 and 2016 reporting periods. There have been signs of growth in numbers of micro-lending companies of 4.6% and 6.6% in the reporting periods 2011 and 2012 and 2012 and 2013 respectively. However, the increases are not significant and may not have much impact on the economic development of Botswana. The scenario in regard to the decrease in micro-lending businesses contradicts the national economic objectives of diversification and growing of this sector hence the need to investigate the issues in regard to '*going concern concept*' in this sector. Going concern concept in relation to micro-lending affects many stakeholders such as employees, customers, creditors and many others. Therefore, it is imperative to protect and safeguard the micro-lending businesses in Botswana in order to meet the national economic development objectives of the country. However, if the national economic development objectives are achieved it means that there is perceived success in micro-lending business that could grow in similar lines as the famous Grameen Bank.

2.8.1 Requirements for micro-lending business in Botswana

In Botswana all micro-lending firms undergo registration and licensing as per the NBFIRA (2014:1) requirements. Micro-lending firms in Botswana which operate without any licensing are charged heavy penalties that force some of the businesses into liquidation. Licensing requirements for micro-lending business in Botswana are shown in Table 2.10.

Table 2.10: Licensing requirements for micro-lending business in Botswana

Category	Licensing requirements
1	Covering letter on business letterhead
2	Duly completed form 1 by applicant
3	Vetting documentation (work and residence permit, identity cards or passport, bank reference, personal questionnaire, SV Form 1, and Police clearance)
4	Proof of financial liquidity - certified to be in the bank account by the Accountants - P20,000.00 to be maintained at all times by the micro-lender. Proof of payment for license fees - P6, 000.00 to be deposited into NBIFRA's bank account.
5	Statutory documentation - Proof of incorporation see form 2 or form 13
6	Detailed 3 - 5 year business plan
7	Latest financial statements, for existing businesses
8	Resume for manager
9	Resolution of board if it's a company
10	Letter of intent to lease
11	Standard proposed loan application form for customers
12	Proposed dispute resolution and complaints guidance
13	Delinquency policy
14	Loan underwriting policy
15	Service level agreements (if applicable)
16	Proposed organisational structure
17	Proof of Botswana Unified Revenue Services (BURS) registration
18	Form 3 if the business is operating more than one (1) office
19	Consent of spouse
20	Anti - money laundering / combating the financing of terrorism (AML/CFT) policy

Source: (Adapted from NBFIRA, 2014:1).

More detailed information on registration of micro-lending companies in Botswana is presented in Chapter 3 (section 3.4).

2.8.2 Challenges and constraints for micro-lending businesses

The study considered challenges and constraints that are faced by micro-lenders in Botswana as similar to those experienced by SMMEs in Botswana. According to Mutoko (2014:31) SMMEs in Botswana face many challenges and constraints (See Table 2.11).

Table 2.11: Challenges and constraints for micro-lending businesses in Botswana

Number	Challenges and constraints for micro-lending businesses
1	Lack of access to finance
2	Lack of entrepreneurial skills
3	Bias of the education system against self - employment
4	Lack of business start - up training
5	Shortage of business premises
6	Excessive government laws and regulations
7	Lack of information on government assistance programmes
8	Lack of marketing skills
9	Lack of data on SMMEs
10	Inherent biases against SMMEs
11	Lack of access to markets

Source: Adapted from Mutoko, (2014:31).

The challenges and constraints shown in Table 2.11 may have influenced poor performance, growth and business continuity for micro lending business in Botswana.

2.9 Accounting as a decision-making tool in risk management process

This study considers accounting as a discipline which is split into two broad areas such as financial accounting and management accounting. According to Ryan *et al.* (2002:69) the two broad areas of accounting overlap in practice due to the fact that they all provide information to management for decision-making. The differences between the two broad areas are that financial accounting focuses on historical information and management accounting deals with current and future

information (Wood & Sangster, 2008:277). Therefore, accounting is a discipline that is used by managers as a tool for decision-making (Ryan, Scapens, & Theobald, 2002:69).

2.9.1 Financial accounting and reporting as decision-making tools in risk management process

According to Ryan *et al.* (2002:75) financial accounting is considered as historical financial information that is used to measure and communicate the economic performance of an enterprise's activities to all organisational stakeholders. The concept for communicating organisational performance may be perceived as the general financial reporting to the owners of the business, government and regulating bodies. The philosophy of financial reporting is as a result of the agent / principle relationship whereby in practice the directors / senior management report the business results or activities as to be accountable to shareowners, creditors and any other stakeholders (Ryan *et al.*, 2002:75). Financial accounting is a tool that is used for reporting performance of enterprise against set standards and any deviations are subject to investigation (Wood & Sangster, 2008:277). Financial accounting / information is often prepared by accounting practitioners such as financial managers and accountants. In practice financial accounting information is subjected to manipulation with the objective of satisfying the needs of different stakeholder groups. It is in this light that accounting practitioners are required to comply with fundamental principles of professional ethics. The following Table 2.12 shows fundamental principles of professional ethics according to Rossouw, Prozesky, du Plessis, & Prinsloo, (2010:248).



Table 2.12: Fundamental principles of professional ethics

Fundamental Principle	Interpretation
Integrity	A professional accountant should be straightforward and honest in all professional dealing and business relationships.
Objectivity	A professional accountant must not be biased, must not have conflict of interest or undue influence of others to override professional or business judgements.
Professional competence & due care	A professional accountant has a continuing duty to maintain professional knowledge and skill at the level required to ensure that a client or employer receives competent professional service based on current developments in practice, legislation and techniques. A professional accountant should act diligently and in accordance with applicable technical and professional standards when providing professional services.
Confidentiality	A professional accountant should respect the confidentiality of information acquired as a result of professional and business relationships and should not disclose any such information to third parties unless authorised to do so as a legal right or as a duty to disclose. The professional accountant should not use information acquired for personal gain or advantage.
Professional behaviour	A professional accountant should behave in such a way that does not discredit the profession or put the profession into disrupt.



Source: Adapted from Rossouw *et al.* (2010:248).

According to Wood and Sangster (2008:201) financial accounting includes the preparation of a set of financial statements such as the *income statement* (profit and loss), *statement of financial position* (balance sheet), *statement of changes in equity* and *statement of cash flows*. The financial statements reflect the performance of an enterprise for given period and normally the reporting period is twelve (12) months (See Figure 2.10, 2.11, 2.12 and 2.13).

XYZ Pty Ltd

An example of Income Statements for the year ended 31 December 2017 and 2016

	2017	2016
	Pula	Pula
Sales (all credit)	1 672 400	1 574 800
Cost of Sales (all credit)	(878 700)	(812 600)
Gross profit	793 700	762 200
Operating expenses:	(487 900)	(466 600)
Selling and distribution expenses	390 000	370 000
Administrative expenses	97 900	96 600
Operating profit	305 800	295 600
Other income	2 700	3 300
Interest income	2 700	3 300
Profit before interest	308 500	298 900
Interest expense	(11 100)	(10 900)
Profit before tax	297 400	288 000
Taxation	(74 350)	(72 000)
Net profit after tax	223 050	216 000

Figure 2.10: A typical sample of Income Statement

Source: Adapted from Correia *et al.* (2013:5-3).

XYZ Pty Ltd

An example of Statement of Financial Position (Balance Sheets) for the year ended 31 December 2017 and 2016

	2017 Pula	2016 Pula
Assets		
Non - current assets	814 300	783 000
Current assets:	637 900	606 600
Inventories	231 200	203 000
Accounts receivable	289 100	277 800
Cash and cash equivalents	117 600	125 800
Total Assets	1 452 200	1 389 600
Owners' equity and liabilities		
Owners' Equity	653 100	628 900
Non – current liabilities	323 700	378 800
Current liabilities	475 400	381 900
Accounts payable	108 100	100 800
Other current liabilities	367 300	281 100
Total owner's equity and liabilities	1 452 200	1 389 600

Figure 2.11: A typical sample of Statement of Financial Position

Source: Adapted from Correia *et al.* (2013:5-4).

XYZ Pty Ltd

An example of Statement of Changes in Equity for the year ended 31 December 2017

Attributable to Equity Holders of the Company

	Share capital	Share premium	Other reserves	Retained earnings	Total
	Pula	Pula	Pula	Pula	Pula
Balance at 1.1. 2017	50 000	30 000	10 000	140 000	230 000
Profit for the year				45 000	45 000
Dividends relating to 2017				(32 000)	(32 000)
Balance at 31. 12. 2017	50 000	30 000	10 000	153 000	243 000

Figure 2.12: A typical Sample of Statement of Changes in Equity

Source: (Adapted from Correia *et al.*, 2013:5-40).

XYZ Pty Ltd

An example of Statement of Cash Flows for the year ending 31 December 2017

	Pula	Pula
Cash flows from operating activities		
Profit before tax		180
Adjustments for:		
Depreciation	110	
Profit on sale of non - current assets	(5)	
Increase in inventories	(300)	
Increase in trade accounts receivable	(200)	
Increase in trade accounts payable	<u>120</u>	
		<u>(275)</u>
Cash generated from operating activities		(95)
Taxation paid		(230)
		<u></u>
Net cash used in operating activities		<u>(325)</u>
Cash flows from investing activities		
Purchase of non - current assets	(175)	
Proceeds from sale of non - current assets	150	
Proceeds from sale of investments	<u>20</u>	
Net cash used in investing activities		(5)
Cash flows from financing activities		
Proceeds from issue of share capital	300	
Dividend paid	<u>(130)</u>	
Net cash from financing activities		<u>170</u>
Net cash decrease in cash and cash equivalents		(160)
Cash and cash equivalents at beginning of period		<u>100</u>
Cash and cash equivalents at end of period		<u>(60)</u>

Figure 2.13: A typical Sample of Statement of Cash Flows

Source: (Adapted from Correia *et al.*, 2013:5-6).

When accounting practitioners prepare the above set of financial statements, they are guided by International Accounting Standards (IAS), International Financial Reporting Standards (IFRS) or Generally Accepted Accounting Principles (GAAP) applicable to SMMEs. This study adopted the GAAP (2013:12) applicable for SMMEs in Botswana in accordance with the Botswana Institute of Chartered Accountants. This means the SMMEs in Botswana should comply with the principles and assumptions as stated in GAAP (2013:12), (See Table 2.13).

Table 2.13: GAAP applicable to SMMEs in Botswana

Principle	Interpretation
Going concern	Financial statements are prepared on the assumption that an entity is a going concern and will continue to operate for foreseeable future. It is assumed that the entity has neither the intention nor the need to liquidate or significantly curtail the scale of its operations; if such an intention or need exists the financial statements may have to be prepared on a different basis and if so, this must be disclosed.
Reliability	For information to be useful it must be reliable. Information has the quality of reliability when it is free from material error and bias and can be depended upon by users to present faithfully that which it either purports to represent or could reasonably be expected to represent.
Legal form	The legal form of a transaction or contract (arrangement) governs its accounting treatment in the entity's financial statements rather than its substance.
Neutrality	For information to be reliable contained in the financial statements it should be neutral that is free from bias. Financial statements are not neutral if, by the selection or presentation of information, they influence the making of a decision or judgement in order to achieve a predetermined result, goal or outcome.
Completeness	Information contained in the financial statements must be reliable and complete within the bounds of materiality and cost. An omission can cause information to be distorted, false or misleading and thus unreliable and deficient in terms of its relevance.
Relevance	For information to be useful it must be relevant to the decision - making users. Information is deemed to be of good quality and of relevance when it influences the economic decisions of users by helping them evaluate past, present or future events or confirming or correcting past evaluations.
Materiality	Materiality affects the relevance of information. Materiality depends on the size and nature of the omission or misstatement judged in the surrounding circumstances. In some cases, the nature of information alone is sufficient to determine its relevance.
Matching	The matching concept / principle requires an entity to report (recognise) expenses in the same reporting period that related to revenues are recognised. Ideally matching is based on cause and effect relationship. If a cost is not linked to revenues or an accounting period, the expense must be recorded immediately.
Accrual basis accounting	An enterprise must prepare its financial statements using the accrual basis except for cash flow information. This principle is applicable when entity recognises assets, liabilities, equity, income and expenses.

Source: Adapted from GAAP in Botswana, (2013:12)

2.9.2 Management accounting

Management accounting provides financial information that is used by management to make informed decisions in relation to planning and controlling functions (Drury, 2015:8). According to Drury (2015:8) management make effective decisions based on the understanding of the - decision-making, planning and control process (See Figure 2.14).

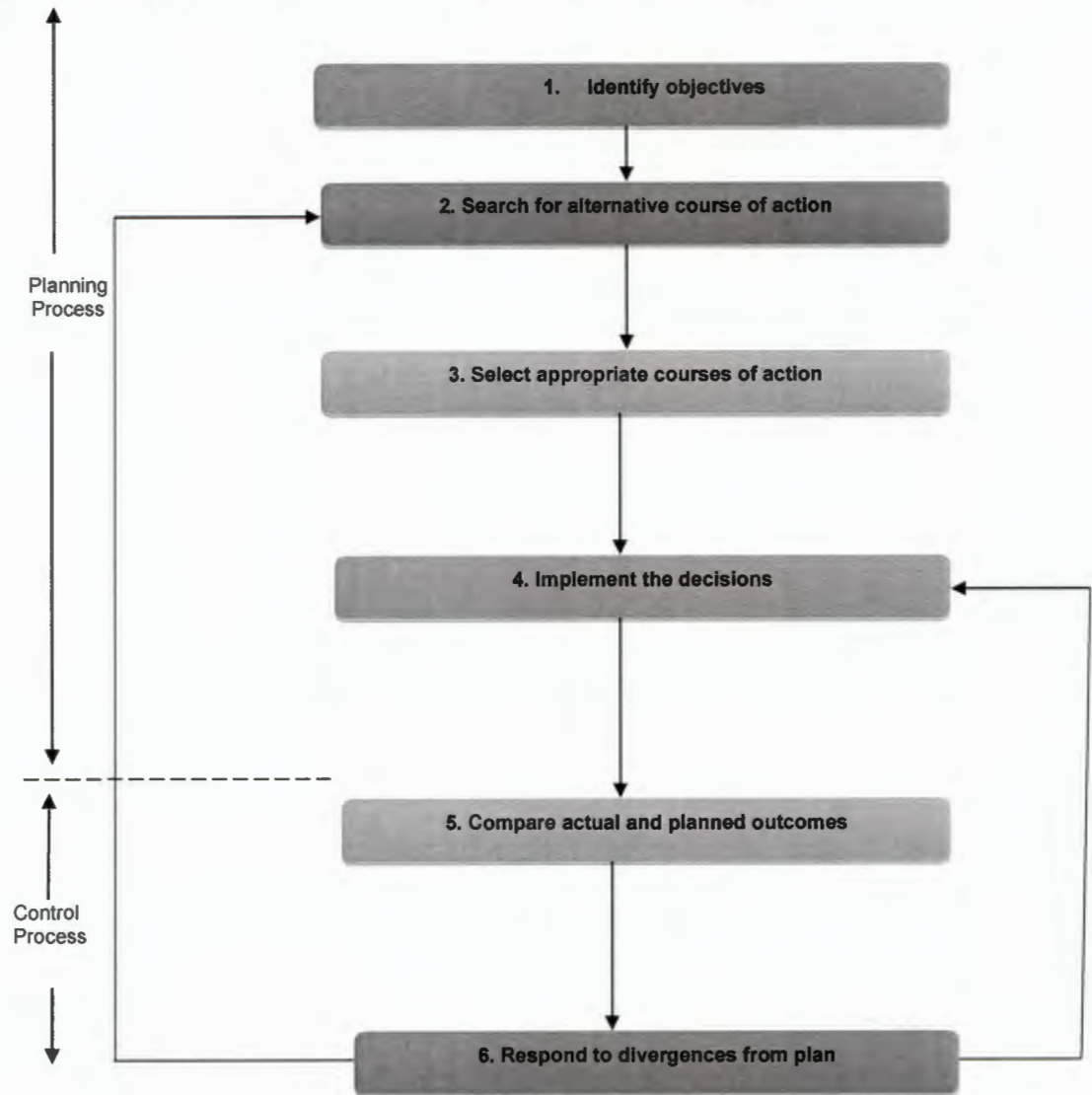


Figure 2.14: The decision - making, planning and control process

Source: Adapted from Drury, (2015: 8)

Planning and control in management accounting involves comparing the actual activities with set standards commonly referred to as budgetary control (Drury, 2015:8). A budget is a plan expressed in financial terms and used for current and future organisational activities. According to Correia *et al.* (2015:416) budgetary control may serve five purposes including: planning; facilitating communication and co-ordination; allocating of resources; controlling profit and operations and

evaluating performance and providing incentives. There are many advantages of budgets and budgetary control (See Figure 2.15).

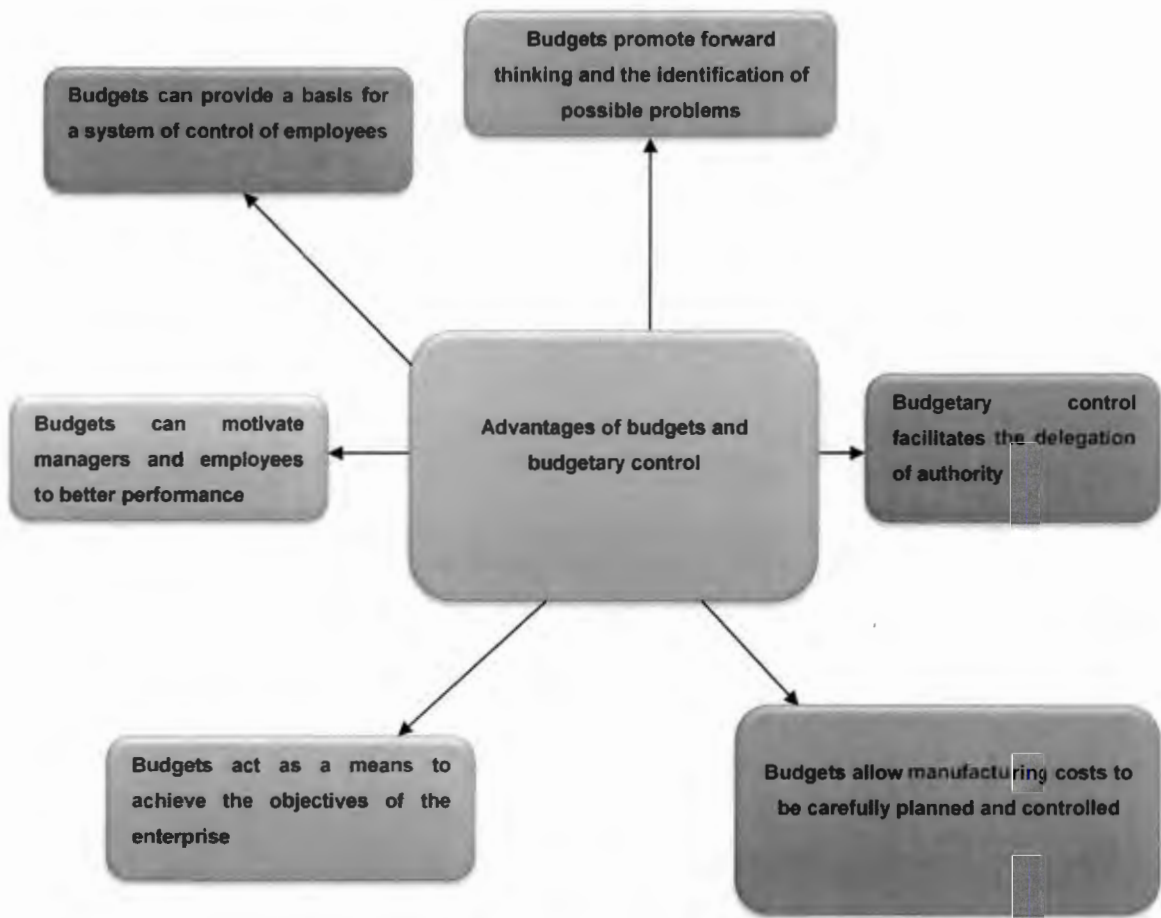


Figure 2.15: Advantages of Budgets and Budgetary Control

Source: Adapted from Drury, (2015:343)

There are many different types of budgets including sales budget; purchases or production budget; cost of sales or cost of production budget; operating expense budget; budgeted income statement; cash budget and budgeted balance sheet (Drury, 2015:344). The following Table 2.14 illustrates in brief guidelines on how to prepare each type of budgets based on the works of (Drury, 2015:344).

Table 2.14: Brief guidelines on how to prepare each type of budget

Type of budget	Guidelines
Sales budget	This is the forecast of sales or revenue expected in future. The following methods may be used to forecast sales or revenue. ▪ Surveys of past and future customers may provide a basis for predicting an increase

	in demand for products or services. ▪ Market tests and market research may be used to determine the number of customers. ▪ Statistical analysis may be used to predict demand.
Production or purchases budget	A production or purchases budget should depend upon the sales or revenue forecasting. The sales or revenue forecasting will determine the number (costs) required to meet demand of the sales or revenue to be generated.
Cost of sales or cost of production	Cost of sales or cost of production budget should depend upon the sales or revenue forecasting. The sales or revenue forecasting will determine the estimated costs required to meet demand of the sales or revenue to be generated.
Operating expense budget	This budget includes the estimate of the following expenses; selling expenses, administrative and other expenses. Some of the expenses are variable (for example delivery charges and commission) and others are fixed (for example rent and insurance expenses).
Budgeted income statement	The budgeted income statement is drawn up from the sales budget, cost of sales budget and operating expense budget. Therefore, it is perceived as the final component of projections of income and expenses for a given period, which indicates a profit (financial performance).
Cash budget	The cash budget shows the expected receipts and expected payments for a given time period. It reflects the monthly cash position of an enterprise. The cash budget is prepared for the purpose of cash planning and control. It helps in identifying cash lying idle for long periods and possible cash shortages.
Budgeted balance sheet	The budgeted balance sheet (statement of financial position) is prepared by starting with the balance sheet for the period just ended and adjusting it using all the activities which are expected to take place during the budgeted period). A budgeted balance sheet can be used to calculate a variety of ratios that are used as performance indicators.

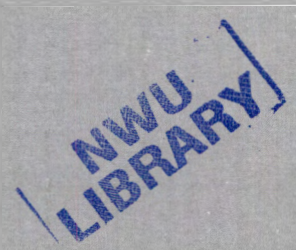
Source: Adapted from Drury, (2015:346)

Accounting ratios

Organisational performance can be measured using accounting ratios which are concepts derived from the following perspectives; financial management; financial accounting and management accounting. Accounting ratios are explained in brief in Table 2.15.

Table 2.15: Accounting ratios

Accounting ratios	Interpretation
Operational Analysis 1. Gross margin = $\frac{\text{Gross Profit}}{\text{Gross Profit} + \text{Gross Sales}} \times 100$	A high profit margin is perceived as indicative of good performance.

Sales 1 2. Profit margin = $\frac{\text{Net Profit after tax} \times 100}{\text{Sales}}$ Sales 1	A high profit margin is perceived as indicative of good performance.
Resource management 1. Inventory turnover = $\frac{\text{Cost of sales}}{\text{Average inventory}}$ 2. Debtor collection period = $\frac{\text{Accounts receivable} \times 365}{\text{Credit sales}}$ 3. Creditor payment period = $\frac{\text{Accounts payable} \times 365}{\text{Credit purchases}}$ 	This is the ratio that is used for inventory management and it commonly use the number of times inventory has turned over during the period of analysis. The higher the turnover rates the better as this is perceived to improve the cash inflows. This is an important ratio used in the management of debtors. This ratio shows how long the trade debtors take to pay their obligations after a credit sale. It is perceived to be poor debt management if the collection period exceeds what is specified in the company's policy hence the need to take drastic measures for debt collection (hand over). This is the most useful ratio used to monitor trade credit and it shows how long the firm takes to pay for goods bought on credit. The high period is better as this is perceived as free interest loan, however it should be managed properly otherwise the entity may be charged interest if the outstanding debt exceeds the required and agreed limit.
Profitability 1. Return on assets ROA = $\frac{\text{Operating profit} \times 100}{\text{Total assets}}$ 1	ROA is an accounting measure, calculated by dividing annual profits by the average net book value of assets. The challenges with ROA are that it ignores the time value

2. Return on own capital employed (ROCE) = $\frac{\text{Operating Profit}}{\text{Capital Employed}} \times \frac{100}{1}$	for money; it is difficult to determine value; there may be no resale value, are used by the community at large and charge for depreciation may have an effect of "double taxation on the taxpayer". ROCE is a measurement that is often used for the analysis of financial statements. It reflects the overall performance of an organisation, expressed as a percentage return on the total investment. It measures how efficient management is in terms of generating profits from available resources. Capital employed = The total funds invested in the business for example: shareholders' funds + long term debt, or total assets less current liabilities. A firm with a high ROCE is usually perceived to be performing well.
Liquidity 1. Current ratio = $\frac{\text{Current assets}}{\text{Current liabilities}}$ 2. Acid test ratio = $\frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}}$	The current ratio attempts to show the ability of an entity to pay off the short - term debts using its current assets. The standard ratio is normally 2:1. The intention of the acid test ratio is to compare the current assets without the burden of inventory which takes time to be turned into cash. The standard ratio is normally 1:1.
Financial leverage 1. Debt to assets = $\frac{\text{Total debt}}{\text{Total Assets}} \times \frac{100}{1}$ 2. Capital gearing ratio = $\frac{\text{Total debt}}{\text{Owners' equity}} \times \frac{100}{1}$	This is the measure of capital structure of an entity. Debt ratio provides useful information for creditors as it measures the availability of assets in the organisation in relation to total debt. If the ratio is high it exposes the firm into risk of being taken over by the creditors

Another formula is	$= \frac{\text{Debt}}{\text{Debt} + \text{Equity}} \times \frac{100}{1}$	(lenders). This is the formula that is commonly used in practice.
Debt service 1. Interest cover	$= \frac{\text{Profit before interest and tax}}{\text{Interest payable}}$	The interest cover ratio shows the number of times profits will cover the interest charge: the higher the ratio the better.
Earnings per share (EPS) EPS	$= \frac{\text{Earnings}}{\text{Number of ordinary shares in issue}}$	Earnings = Profit distributable to ordinary shareholders that is to say after interest, tax and any preference dividend. EPS is based on historical information and is subject to manipulation by changes in accounting policies, mergers or acquisitions. Investors are therefore concerned with future EPS which is difficult to estimate.
Price / Earnings Ratio (P/E Ratio)	$= \frac{\text{Current share price}}{\text{EPS}}$ Or $\frac{\text{Total earnings}}{\text{Total market capitalisation}}$	The P/E ratio is a measure of growth: it compares the market value (a measure of future earnings) to current earnings. The market price will incorporate expectations of all buyers and sellers of the enterprise's shares and this will indicate the future earning power of the entity.
Dividend - pay-out rate	$= \frac{\text{Dividend per share}}{\text{EPS}}$ Or $= \frac{\text{Total dividend}}{\text{Total Earnings}}$	The cash effect of payment of dividends is measured by the dividend - pay-out- rate. The relationship between the above investors' is usually that an entity with a high P/E ratio has a low dividend pay-out ratio as the high growth entity needs to retain the more resources required in an entity. The investor requires a high capital growth and high risk or lower risk, fixed dividend payment and low capital growth.
Dividend yield	$= \frac{\text{Dividend per share}}{\text{Current share price}}$	This is the relationship of the dividend paid to the current market value of a share. The dividend only represents part of the overall return of a share and the part of the return

Dividend cover	=	$\frac{\text{Earnings per share}}{\text{Dividend per share}}$	is capital gain from an increase in the value of the share.
Or	=	$\frac{\text{Total Earnings}}{\text{Total dividend}}$	The higher the dividend cover the more likely it is that the dividend yield can be maintained. Dividend cover also gives an indication of the level of profits being retained by the entity for reinvestment by considering how many times this year's dividend is covered by these year's earnings.

Source: Adapted from Correia et al. (2015:512)

Techniques for analysing capital expenditure proposals

According to Correia *et al.* (2015:85) long term capital expenditure or capital investment should be done in a due diligent manner as this involves huge cash inflows and outflows that affect the entire entity's operations. It is perceived that failure to manage capital expenditure or capital investment may result in the liquidation of the company, therefore when projects such as starting a new company; acquisition of machinery; equipment and land requires effective use of techniques in order to determine feasibility and suitability of the project being undertaken. In financial management the following techniques are often used to analyse cash flows: payback period; accounting rate of return (ARR); net present value (NPV) and internal return of return (IRR) (Correia *et al.*, 2015:85). Techniques for analysing capital expenditure are shown in Table 2.16.

Table 2.16: Techniques for analysing capital expenditure for projects

Techniques for analysing capital expenditure proposals	Formula and interpretation																																																												
Payback period	Payback period = $\frac{\text{Initial investment}}{\text{Net annual cash inflow}}$ This is the amount of time it takes cash flows to recover the original amount of investment of a project. The shorter the period the better as shown in the example below. Example: There are two projects as follows: <table><thead><tr><th></th><th>Project to start company X</th><th>Project to start Y Company</th></tr></thead><tbody><tr><td></td><td>P</td><td>P</td></tr><tr><td>Cash outlay</td><td>650,000</td><td>650,000</td></tr><tr><td>Economic lifetime</td><td>6 years</td><td>4 years</td></tr><tr><td>Average annual net cash</td><td></td><td></td></tr><tr><td>Inflow over the economic</td><td>200,000</td><td>280,000</td></tr><tr><td>Depreciation (straight line</td><td>100,000</td><td>150,000</td></tr></tbody></table> Method) Calculate the payback period to see which company should be chosen based on the payback period. Solution: <table><thead><tr><th colspan="3">Payback period:</th></tr></thead><tbody><tr><td>Initial investment</td><td>=</td><td>Company X</td></tr><tr><td>Net annual cash inflow</td><td></td><td>Company Y</td></tr><tr><td></td><td></td><td>$\frac{P650,000}{P200,000}$</td></tr><tr><td></td><td>=</td><td>$\frac{P650,000}{P280,000}$</td></tr><tr><td></td><td></td><td>3.25 years</td></tr><tr><td></td><td></td><td>2.32 years</td></tr><tr><td></td><td></td><td>$.25 \times 12 \text{ months} = 3 \text{ months}$</td></tr><tr><td></td><td></td><td>$.32 \times 12 = 3.84$</td></tr><tr><td></td><td></td><td>$= 3 \text{ years } 3 \text{ months}$</td></tr><tr><td></td><td></td><td>$.84 \times 30 \text{ days}$</td></tr><tr><td></td><td></td><td>25 days</td></tr><tr><td></td><td></td><td>$= 2, \text{ yrs. } 3 \text{ mths } 25 \text{ days}$</td></tr></tbody></table> Therefore, consider a project (company) with the shorter period which is Y. The reason is that company Y can recover outlay in a shorter time 2 years 3 months and 25 days than company X (3 years 3 months).		Project to start company X	Project to start Y Company		P	P	Cash outlay	650,000	650,000	Economic lifetime	6 years	4 years	Average annual net cash			Inflow over the economic	200,000	280,000	Depreciation (straight line	100,000	150,000	Payback period:			Initial investment	=	Company X	Net annual cash inflow		Company Y			$\frac{P650,000}{P200,000}$		=	$\frac{P650,000}{P280,000}$			3.25 years			2.32 years			$.25 \times 12 \text{ months} = 3 \text{ months}$			$.32 \times 12 = 3.84$			$= 3 \text{ years } 3 \text{ months}$			$.84 \times 30 \text{ days}$			25 days			$= 2, \text{ yrs. } 3 \text{ mths } 25 \text{ days}$
	Project to start company X	Project to start Y Company																																																											
	P	P																																																											
Cash outlay	650,000	650,000																																																											
Economic lifetime	6 years	4 years																																																											
Average annual net cash																																																													
Inflow over the economic	200,000	280,000																																																											
Depreciation (straight line	100,000	150,000																																																											
Payback period:																																																													
Initial investment	=	Company X																																																											
Net annual cash inflow		Company Y																																																											
		$\frac{P650,000}{P200,000}$																																																											
	=	$\frac{P650,000}{P280,000}$																																																											
		3.25 years																																																											
		2.32 years																																																											
		$.25 \times 12 \text{ months} = 3 \text{ months}$																																																											
		$.32 \times 12 = 3.84$																																																											
		$= 3 \text{ years } 3 \text{ months}$																																																											
		$.84 \times 30 \text{ days}$																																																											
		25 days																																																											
		$= 2, \text{ yrs. } 3 \text{ mths } 25 \text{ days}$																																																											
Accounting rate of return (ARR)	$\frac{\text{Average annual profit}}{\text{Initial investment}} \times \frac{100}{1}$ This technique considers the incremental profit that result from a project or proposed business to be launched. When using this technique projects with higher returns are chosen. An example below demonstration how to calculate a return using ARR method (refer to figures given in the example above). Solution: <table><thead><tr><th colspan="3">Accounting rate of return:</th></tr></thead><tbody><tr><td>ARR</td><td>=</td><td>Company X</td></tr><tr><td></td><td></td><td>Company Y</td></tr></tbody></table>	Accounting rate of return:			ARR	=	Company X			Company Y																																																			
Accounting rate of return:																																																													
ARR	=	Company X																																																											
		Company Y																																																											

	<table><tr><td></td><td> Average annual profit X 100 Initial investment 1 100,000 X 100 650,000 1 = 15,38% </td><td> Average annual profit X 100 Initial investment 1 130,000 X 100 650,000 1 = 20% </td></tr><tr><td colspan="3">In calculating the average annual profit, depreciation is deducted from the average annual net cash flow see calculations below: P200,000 – P100,000 = 100,000 P280,000 – P150,000 = 130,000 When using the ARR project Y appears to be of a higher return and a better investment.</td></tr></table>		Average annual profit X 100 Initial investment 1 100,000 X 100 650,000 1 = 15,38%	Average annual profit X 100 Initial investment 1 130,000 X 100 650,000 1 = 20%	In calculating the average annual profit, depreciation is deducted from the average annual net cash flow see calculations below: P200,000 – P100,000 = 100,000 P280,000 – P150,000 = 130,000 When using the ARR project Y appears to be of a higher return and a better investment.																														
	Average annual profit X 100 Initial investment 1 100,000 X 100 650,000 1 = 15,38%	Average annual profit X 100 Initial investment 1 130,000 X 100 650,000 1 = 20%																																	
In calculating the average annual profit, depreciation is deducted from the average annual net cash flow see calculations below: P200,000 – P100,000 = 100,000 P280,000 – P150,000 = 130,000 When using the ARR project Y appears to be of a higher return and a better investment.																																			
Net present value (NPV)	It is perceived that P100 in cash today is not equivalent to P100 in a year's time, five years or ten years. It would be better to receive the P100 today than accept to receive a promise of P100 in future say after one year. The future P100 will be affected with interest rate and the rate of inflation hence the need to use the NPV technique. Correia <i>et al.</i> (2015) suggested four steps to follow when calculating a net present value for a project proposal: ▪ Preparation of a table showing the cash flows during each year of the proposed investment. ▪ Calculate the present value of each cash flow using the required rate of return ▪ Calculation of net present value (NPV) which is the difference between the present values of the projected cash flows and the net present value of the cash outflows. ▪ A positive NPV is accepted (profitable) and a negative NPV is rejected (not profitable). In order to appreciate the following example was used to demonstrate the use of NPV, please note the discount factors were adopted from Correia <i>et al.</i> (2015:T6), <i>Table C presents value of R1 due at the end of n periods.</i> XYZ Pty Ltd has to consider two projects (Y and Z) to invest in and the following figures were extracted from the proposed investments: <table><tr><td></td><td>Project Y</td><td>Project Z</td></tr><tr><td>Proposed investment</td><td>P 75,000</td><td>P80,000</td></tr><tr><td>Expected economic lifetime</td><td>6 years</td><td>6 years</td></tr></table> <table><tr><td>Minimum required rate of return</td><td>12 %</td><td>12 %</td></tr><tr><td>Net annual cash inflows</td><td>P</td><td>P</td></tr><tr><td>Year 1</td><td>20,000</td><td>22,000</td></tr><tr><td>Year 2</td><td>22,000</td><td>22,000</td></tr><tr><td>Year 3</td><td>24,000</td><td>22,000</td></tr><tr><td>Year 4</td><td>26,000 **</td><td>22,000</td></tr><tr><td>Year 5</td><td>23,000</td><td>22,000</td></tr><tr><td>Year 6</td><td>21,000</td><td>22,000</td></tr></table> When using the NPV method which project is viable, see calculations below:			Project Y	Project Z	Proposed investment	P 75,000	P80,000	Expected economic lifetime	6 years	6 years	Minimum required rate of return	12 %	12 %	Net annual cash inflows	P	P	Year 1	20,000	22,000	Year 2	22,000	22,000	Year 3	24,000	22,000	Year 4	26,000 **	22,000	Year 5	23,000	22,000	Year 6	21,000	22,000
	Project Y	Project Z																																	
Proposed investment	P 75,000	P80,000																																	
Expected economic lifetime	6 years	6 years																																	
Minimum required rate of return	12 %	12 %																																	
Net annual cash inflows	P	P																																	
Year 1	20,000	22,000																																	
Year 2	22,000	22,000																																	
Year 3	24,000	22,000																																	
Year 4	26,000 **	22,000																																	
Year 5	23,000	22,000																																	
Year 6	21,000	22,000																																	

Solution for Project Y:

Year	Cash inflow (P)	Discount Factor Refer to: Correia et al. (2015:T6), Table C present value of P1 or R1 due at the end of n periods.	Present value (P)
1	20,000	0,8929	17,858
2	22,000	0,7972	17,538
3	24,000	0,7118	17,083
4	26,000	0,6355	16,523
5	23,000	0,5674	13,050
6	21,000	0,5066	10,639
Total PV			P92,691
Investment			(P75,000)
NPV (positive)			P17,691

Solution project Z:

Net cash inflow	P22,000
Discount factor see Correia et al. (2015:T8), Table D present value of an annuity of P1 or R1 per period.	4.1114
Total Present Value	P90,451
Proposed investment	(80,000)
NPV (positive)	P90,451

Note that the currency used in the examples is in Botswana Pula hence the Rand (R) in the Table C and D has been charged to (P) for consistency purposes only.

Decision made: A project Y should be chosen since it has a higher net present value.

Internal rate of return (IRR)

The other name for internal rate of return (IRR) is time adjusted rate of return which is perceived as the actual economic return earned over the life of the project. IRR is the discount rate at which the present value of the projected cash flows would be equals to the present value of the cash outflows therefore this discount rate makes the NPV of the cash flows equal to zero. When using the IRR method, the project is

only acceptable if this rate exceeds the required rate of return. The IRR method considers time value for money and is more realistic than the accounting rate of return (ARR). The disadvantage for calculating for calculating IRR is when the cash flows are not even because a trial and error method is applied. The following are the procedures for using the trial and error method for calculating IRR adopted from Correia *et al.* (2015);

- Calculate the NPV at the cost of capital rate (r_1)
- Check if the NPV is positive or negative
- If the NPV is positive, then select another rate (r_2) higher than the cost of capital rate. It is important to continue with the trial and error method and if the NPV is negative select a smaller rate, until reaching the correct IRR at which the NPV = 0 or lies somewhere between these rates.
- Calculate the NPV using (r_2)
- Use of interpolation for calculating the exact rate

Example for calculation of IRR using a trial and error method:

XYZ Pty Ltd has to consider two projects (Y and Z) to invest in and the following figures were extracted from the proposed investments:

	Project Y	Project Z
Proposed investment	P 75,000	P80,000
Expected economic lifetime	6 years	6 years
Minimum required rate of return	12 %	12 %
Net annual cash inflows	P	P
Year 1	20,000	22,000
Year 2	22,000	22,000
Year 3	24,000	22,000
Year 4	26,000	22,000
Year 5	23,000	22,000
Year 6	21,000	22,000

When using the IRR method which project is viable, see calculations below:

The NPV calculated in the example solution the NPV is positive and far away from zero and therefore it is important to select a higher rate of 18% (this is a trial and error basis).

Solution: Project Y

Year	Cash inflow	Discount factor 18%	Discount factor 19%	Discount factor 20%	Present value 18%	Present value 19%	Present value 20%
	P				P	P	P
1	20,000	0,8475	0,8403	0,833	16,950	16,806	16,666
2	22,000	0,7182	0,7062	0,6944	15,800	15,536	15,277
3	24,000	0,6086	0,5934	0,5787	14,606	14,242	13,889
4	26,000	0,5158	0,4987	0,4823	13,411	12,966	12,540

governance is a way in which a firm is governed and controlled (for example behaving in an ethical manner, best practices and in compliance with the laws and regulations). Good corporate governance enhances organisational performance and poor governance may lead a firm into liquidation.

Firms in Southern Africa, including Botswana, follow the King IV Report on corporate governance which provides codes, guidelines or principles for good governance (See Table 2.17). Companies that apply and comply with the codes of good governance achieve the following benefits: good and fair ethical culture; good performance; effective control and legitimacy. The following Table 2.17 is an extract of the 17 principles of King IV report on corporate governance that replaced the King III report.

Table 2.17: Extract of 17 principles of corporate governance

Leadership by the governing body	Principles	Practices support and give effect to the principles	Governance outcomes
These are the governing body's primary governance role and responsibilities	Principles embody the aspirations of the journey towards good corporate governance They guide organisations on what they should strive to achieve by application of governance practices		These are the benefits that organisations could realise through good governance
Steers and sets strategic direction	Principle 1: The governing body should lead ethically and effectively. Principle 2: The governing body should govern the ethics of the organisation in a way that supports the establishment of an ethical culture. Principle 3: The governing body should ensure that the organisation is and is seen be a responsible corporate citizen. Principle 4: The governing body should appreciate that the organisation's core purpose, its risks and opportunities, strategy business model, performance and sustainable development are all inseparable of the value creation process. Principle 5: The governing body ensure that reports issued by the organisation enable stakeholders to make informed assessments of the organisation's	PRACTICES	Ethical culture

	performance and its short, medium - and long - term prospects. Principle 6: The governing body should serve as the focal point and custodian of corporate governance in the organisation. Principle 7: The governing body should comprise the appropriate balance of knowledge, skills, experience, diversity and independence for it to discharge its role and responsibilities objectively and effectively.	PRACTICES	
Approves policy and planning	Principle 8: The governing body should ensure that its arrangements for delegation within its own structures promote independent judgement and assist with balance of power and the effective discharge of its duties. Principle 9: The governing body should ensure that the evaluation of its own performance and that of its committees, its chair and its individual members, support continued improvement in its performance and effectiveness. Principle 10: The governing body should ensure that appointment of, and delegation to, management contribute to the role clarity and the effective exercise of authority and responsibilities. Principle 11: The governing body should govern risk in a way that supports the organisation in setting and achieving strategic objectives.		Good performance
Oversees and monitors	Principle 12: The governing body should govern technology and information in a way that supports the organisation setting and achieving its strategic objectives. Principle 13: The governing body should govern compliance with applicable laws and adopted non - binding rules, codes and standards in a way that supports the organisation being ethical and a good corporate citizen.		Effective control

	Principle 14: The governing body should ensure that the organisation remunerates fairly, responsibly and transparently so as to promote the achievement of strategic objectives and positive outcomes in the short, medium and long term.		
Ensure accountability	Principle 15: The governing body should ensure that assurance services and functions enable an effective control environment, and these supports the integrity of information for internal decision - making and of the organisation's external reports. Principle 16: In the execution of its governance role and responsibilities the governing body should adopt a stakeholder - inclusive approach that balances the needs, interests and expectations of material stakeholders in the best interests of the organisation over time. Principle 17: The governing body of an institutional investor organisation should ensure that responsible investment is practiced by the organisation to promote good governance and the creation of value by the companies in which it invests.	P R A C T I C E S	Legitimacy

Source: Adapted from King IV Report, (2016:10)



2.11 Internal control and auditing enhance risk management process

Internal controls are important mechanisms employed within an enterprise by senior management to ensure that there is effective monitoring and control of organisational processes, procedures and policies. Internal controls and auditing enhance organisational performance, growth and going concern and this ultimately maximises the shareowners' wealth (King, 2016:9; Lai *et al.*, 2010:44). Performance and growth in organisations are achieved because effective internal controls and auditing promote high productivity which foster going concern (Lai *et al.*, 2010:44). According to Viscelli *et al.* (2017:69) the accounting profession, specifically the accounting practitioners, play major roles in ensuring the monitoring and controlling of effective control environment (for example internal controls, principles of best practices and effective enterprise risk oversight). In risk

5. The organisation holds individuals accountable for their internal control responsibilities in the pursuit of objectives	16. Enforces accountability through structures, authorities and responsibilities 17. Establishes performance measures, incentives and rewards 18. Evaluates performance measures, incentives and rewards for ongoing relevance 19. Considers excessive pressures 20. Evaluates performance and rewards or disciplines individuals
---	--

Risk Assessment	
Principles	Points of focus
6. The organisation specifies objectives with sufficient clarity to enable the identification and assessment of risks relating to objectives - Operations objectives - External Financial Reporting objectives - External Non - Financial Reporting objectives - Internal Reporting objectives 7. The organisation identifies risks to the achievement of its objectives across the entity and analyses risks as a basis for determining how the risks should be managed 8. The organisation considers potential for fraud in assessing risks to the achievement of objectives	21a Reflects management's choices 22a Considers tolerance for risk 23 Includes operations and financial performance goals 24 Forms a basis for committing of resources 21b Complies with applicable accounting standards 22b considers materiality 25 Reflects entity activities 21c Complies with externally established standards and frameworks 22c Considers the required level of precision 25 Reflects entity activities 21a Reflects management's choices 22c Considers the required level of precision 25 Reflects entity activities 21d Reflects external laws and regulations 22a Considers tolerance for risk 26. Includes entity, subsidiary, division, operating unit and functions levels 27. Analyses internal and external factors 28. Involves appropriate levels of management 29. Estimates significance of risks identified 30. Determines how to respond to risks 31. Considers various types of fraud 32. Assesses incentives and pressures 33. Assesses opportunities 34. Assesses attitudes and rationalisations

9. The organisation identifies and assesses changes that could significantly impact the system of internal control	35. Assesses changes in the external environment 36. Assesses changes in the business model 37. Assesses changes in leadership
Control Activities	
Principles 10. The organisation selects and develops control activities that contribute to the mitigation of risks to the achievement of objectives to acceptable levels 11. The organisation selects and develops general control activities over technology to support the achievement of objectives 12. The organisation deploys control activities through policies that establish what is expected and procedures that put policies into action	Points of focus 38. Integrates with risk assessment 39. Considers entity - specific factors 40. Determines relevant business processes 41. Evaluates a mix of control activity types 42. Considers at what level activities are applied 43. Addresses segregation of duties 44. Determines dependency between the use of technology in business processes and technology general controls 45. Establishes relevant technology infrastructure control activities 46. Establishes relevant security management processes control activities 47. Establishes relevant technology acquisition, development and maintenance process control activities 48. Establishes policies and procedures to support deployment of management's directives 49. Establishes responsibility and accountability for executing policies and procedures 50. Performs in a timely manner 51. Takes corrective action 52. Performs using competent personnel 53. Reassesses policies and procedures
Information and Communication	
Principles 13. The organisation obtains or generates and uses relevant, quality information to support the functioning of other component of internal control 14. The organisation internally communicates information, including objectives and responsibilities for internal control necessary to support the functioning of other components of internal control 15. The organisation communicates with external parties regarding matters affecting the functioning of other components of internal control.	Points of focus 54. Identifies information requirements 55. Captures internal and external sources of data 56. Processes relevant data into information 57. Maintains quality throughout processing 58. Considers costs and benefits 59. Communicates internal control information 60. Communicates with the board of directors 61. Provides separate communication lines 62. Selects relevant method of communication 63. Communicates to external parties 64. Enables inbound communications 65. Communicates with the board of directors 66. Provides separate communication lines 67. Selects relevant method of communication
Monitoring Activities	
Principles 16. The organisation selects, develops, and performs ongoing and or separate evaluations to ascertain	Points of focus 68. Considers a mix of ongoing and separate evaluations 69. Considers rate of change

whether the components of internal control are present and functioning	70. Establishes baseline understanding 71. Uses knowledgeable personnel 72. Integrates with business processes 73. Adjusts scope and frequency 74. Objectively evaluates
17. Internal control deficiencies in a timely manner to those parties responsible for taking corrective action, including senior management and the board of directors as appropriate.	75. Assesses results 76. Communicates deficiencies to parties responsible for corrective action and to senior management and the board of directors. 77. Monitors corrective actions

Source: Adapted from the updated COSO Internal Control Framework, (2013:7)

The integrity of leaderships in small firms is often questionable as it is perceived to be associated with poor management and leadership styles (for example abuse of office, personality dominant and overriding of internal controls). These unethical behaviours may cause poor performance and bad publicity hence lead into problems related to business continuity. Heames, Golden & Taneja (2010:499) argue that effective management, administration and leadership may be achieved through adopting and applying the 14 principles of Henry Fayol (See Table 2.19). Proponents of Henry Fayol’s management theory such as Wren (2001:476), Robbins and Barnwell (2006:27) and Heames *et al.* (2010:499) believe that firms should consider the 14 principles of Henry Fayol in order to meet their intended visions and goals. The following Table 2.19 shows the old and new 14 principles of Henry Fayol adopted from Heames *et al.* (2010:499).

Table 2.19: Henri Fayol’s 14 principles of management

	Principle	Previous interpretation / application	Current interpretation / application
1	Division of work	Specialisation	Specialisation exists. Cross – training is used so that employees (organisations) have more capabilities
2	Authority and responsibility	The right of the boss to give orders and exact obedience	Empowerment and process ownership enable people at all levels to make decisions. Fayol’s ideas are still very relevant (e.g. authority and responsibility must co - equal.

3	Discipline	Obedience; respect based on mandated or freely debated agreements.	Self-discipline. Respect based on knowledge.
4	Unity of command	Employee should receive orders from one boss	With matrix organisations and teams, people receive instructions from multiple people which can cause problems. Functionally employees may report to one boss who evaluates the employee
5	Unity of direction	One plan for a group of activities having the same objective; focusing the effort; primarily vertically oriented	Strategic management involves bottom up, top down and across functional input to integrated plans
6	Subordinate of individual to general interest	supervisor requires this	Team members align individual and team, personal, and work goals. Those goals still have to support the general interest / organisation.
7	Remuneration	Depends on personnel availability, value of employee, economic position of organisation. Individual rewards	Pay for knowledge and core competencies. Team rewards and profit sharing.
8	Centralisation and decentralisation	Role of employees is reduced. Decisions are made by management - a continuum	Role of employee is increased. Local decisions. Process ownership. More decentralisation.
9	Scalar chain	Hierarchical chain of command / line of authority, vertical communication	Horizontal or cross functional authority. Team structure.
10	Order	A place for everything in its place. Social and hierarchical order	Chaos, creativity and innovation.
11	Equity	Equity results from kindness and justice. o	Equity is demanded by workers based on performance.
12	Stability of tenure and personnel	Mediocre managers who stay preferable to outstanding managers who come and go	It is better to have best managers for a while than mediocre managers for a longer time.
13	Initiative	Thinking out and executing a plan. Limits imposed by respect for authority and discipline. A manager who permits the exercise of initiative is valued.	Respect and caring for customers is an impetus for initiative. Managers who encourage initiative are valued. The principle of initiative is relevant to today's concepts of empowerment and process

			ownership.
14	Esprit de corps	Union is strength. Harmony. Real talent coordinates effort. "Dividing enemy forces to weaken them is clever, but dividing one's own team is a grave sin against business"	Only dysfunctional conflict is bad. Diversity and differences are necessary if creativity and innovation are to flourish. The concept of esprit de corps is still relevant in terms of strength of teams to accomplish objectives.

Source: Adapted from Heames *et al.* (2010:499)

Heames *et al.* (2010:499) ; COSO (2013:2) and King (2016:10) both advocate for effective communication which clearly shows the lines of reporting through an organisational structure. A typical example of an organisational structure is shown in Figure 2.16.

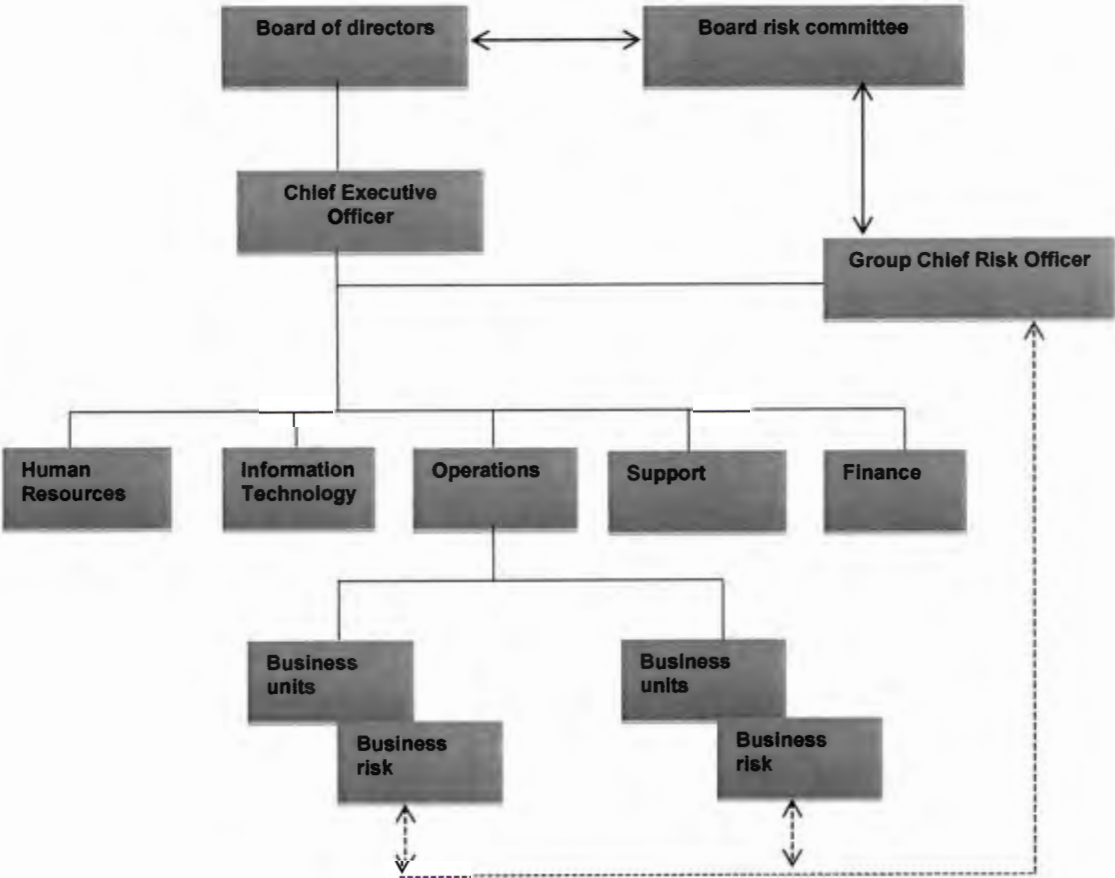


Figure 2.16: Organisational structure

Source: Own source

2.11.2 Auditing

The above sections 2.10 and 2.11 are part of the requirements for auditing as they give assurance and credibility on the business activities and transactions to different stakeholder groups. According to ACCA (2017:7) there are many benefits that accrue to entities that engage assurance firms (See Figure 2.17).

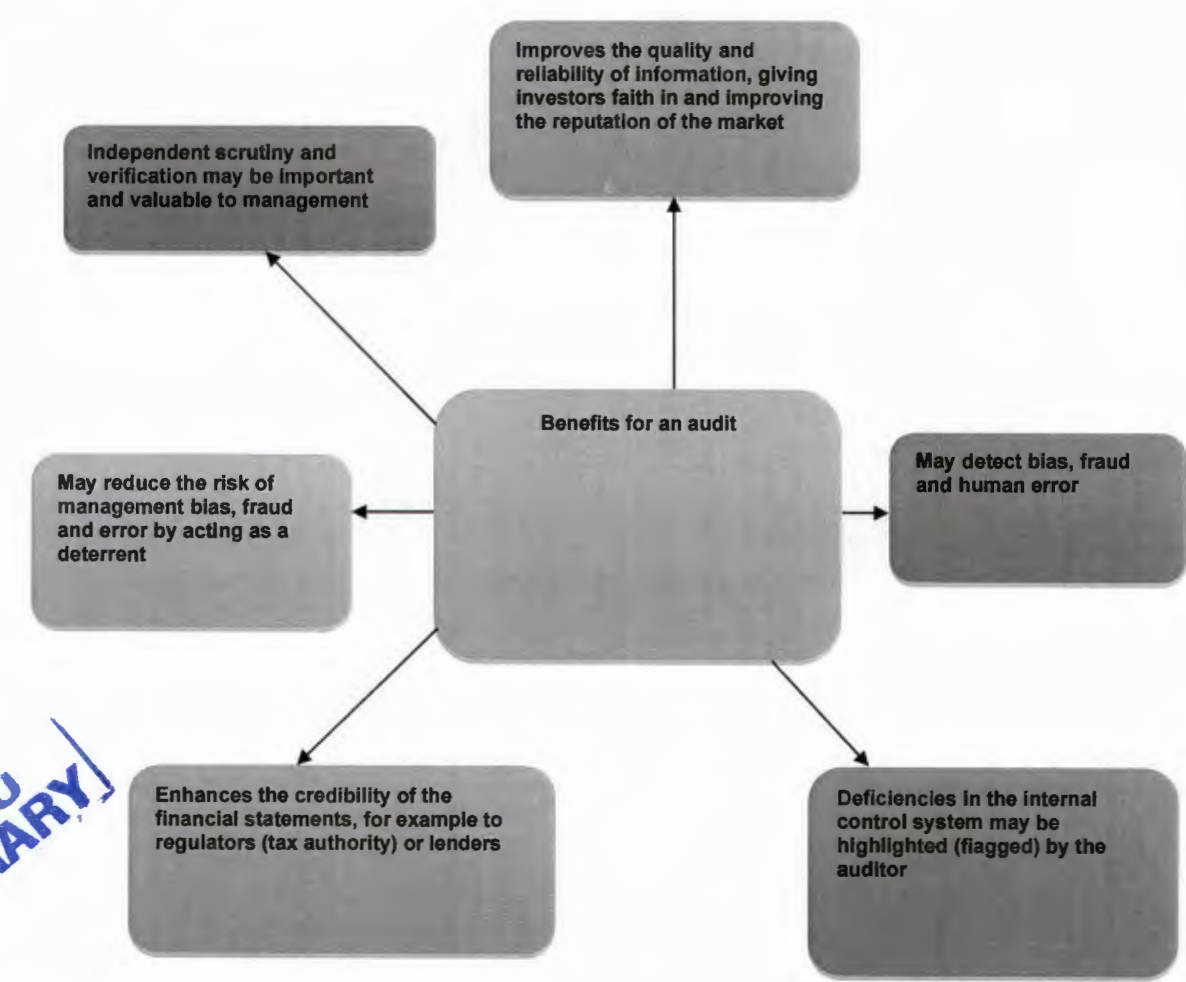


Figure 2.17: Benefits of an audit

Source: Adapted from ACCA, (2017:7)

Furthermore, some of the benefits for both internal and external auditing have already been covered in the above sections and therefore this section focuses on the assertions made by directors in relation to approval of financial statements. Assertions are described and classified according to classes of transactions; account balances and presentation and disclosure (ICAEW, 2014:65). The following Table 2.20 illustrates how assertions or representations are described in different ways during the audit of financial statements.

Table 2.20: Assertions used by the auditor during the audit of financial statements

Category	Assertion	Description
Assertions about classes of transactions and events for the period under audit or review	Occurrence:	Transactions and events that have been recorded have occurred and they belong to the entity. For example, salary expense does not include ghost (unauthorised) employees.
	Completeness:	All transactions and events should be recorded. For example, do not omit or exclude any transactions. For example, all salary costs should be included.
	Accuracy:	Amounts, events and any other data should be recorded appropriately. For example, salary should be accurately calculated.
	Cut - off:	Transactions and events should be recorded in the correct accounting period. Salary should be recognised in the correct accounting period.
	Classification:	Transactions and events should be recorded in the proper accounts. For example, assets should not be recorded as an expense.
Assertions about account balances at year end	Existence:	Assets, liabilities and equity interests exist.
	Rights and obligations:	The entity holds or controls the rights to assets and liabilities are the obligations of the entity.
	Completeness:	All assets, liabilities and equity interests should be recorded without any omissions.
	Valuation and allocation:	Assets, liabilities and equity interests are included in the financial statements at appropriate amounts and any resulting valuation or allocation adjustments are appropriately recorded.
Assertions about presentation and disclosure	Occurrence, rights and obligations:	Disclosed events, transactions and other matters have occurred and pertain to the organisation.
	Completeness:	All disclosures that should have been included in the financial statements have been included.
	Classification and understandability:	Financial information is appropriately presented and described, and disclosures are clearly expressed.
	Accuracy and	Financial and other information are disclosed fairly and at appropriate

	valuation:	amounts.
--	------------	----------

Source: Adapted from ICAEW, (2014: 65)

2.12 Environmental accounting and sustainability

Environmental accounting is about developing ‘greener’ communities and societies; hence it ensures good corporate governance and integrity (Tanc & Gokoglan, 2015:569). The concept of environmental accounting pursues environmental and sustainable development that foster ecological approach, hence promoting the equitability society (Tanc & Gokoglan, 2015:569). Environmental accounting refers to the fields of accounting responding to the environmental issues. This concept of environmental accounting is debatable when it comes to shareholder value as this stance believes that the environmental costs and corporate social responsibility erode the investors’ returns. On the other hand, the stance perceives that promoting ecological approaches enhances the entity’s corporate image hence companies that follow this stance are more profitable. Similar critiques and debates in this line were explained earlier (See section 2.4).

2.13 Chapter summary

This chapter provided a review of literature pertaining to ERM field. The literature shows that ERM systems are integrated into many disciplines such as accounting, auditing, management accounting, management sciences and corporate governance. Literature demonstrates that these disciplines embedded in ERM systems are effective mechanisms used for measuring, monitoring and controlling of organisational performance. A detailed discussion on the ERM process has also been provided. The chapter also reviewed the integrity of leadership in small firms which may provide useful lessons to both owners of micro-lending businesses and the researcher. A key gap that emerged from the literature review was lack of ERM framework to guide the integration of effective mitigating of risks which help to address the problems surrounding business continuity in micro-lending businesses particularly in Botswana. The present study seeks to address this gap through proposing ERM framework that suggests possible strategies of integrating ERM systems in micro-lending businesses in Botswana. The next chapter focuses on ERM process and sustainability in the context of SMMEs in Botswana.

CHAPTER 3: FACTORS INFLUENCING DEVELOPMENT OF SMMEs AND CHALLENGES FACED BY MICRO-LENDING COMPANIES

3 Introduction

This chapter focuses on pertinent factors which influence development of SMMEs, and challenges faced by micro-lending companies in the economy of Botswana. Botswana is historically known as a government-led and run economy dominated by diamonds hence the need for a paradigm shift towards diversification. This ideology promotes the private sector as it could significantly boost Botswana's Gross Domestic Product (GDP). Many developed and developing countries including Botswana are of the view that SMMEs are the engine that drives their economies in addressing problems related to poverty and equal distribution of wealth among households. In addition, the Government of Botswana believes that SMMEs create employment, and several policies and initiatives have been implemented in order to support this sector (See Section 3.2). Despite all these Government initiatives and interventions, SMMEs still face major challenges in relation to business continuity problems. The high failure rate in the micro-lending sector in Botswana has promoted the researcher to conduct this study.

To help understand the history of micro-lending in Botswana the rest of the chapter is organised as follows: Section 3.1 briefly discusses the economy of Botswana. Section 3.2 explores Government initiatives towards SMMEs development. The challenges faced by SMMEs in Botswana are discussed in Section 3.3. Section 3.4 discusses the analysis and evaluation of licensing requirements for micro-lending businesses in Botswana. Section 3.5 explains the adoption of ERM systems and risk management models in Botswana. Sources of risk in the context of Botswana are discussed in Section 3.6. Section 3.7 discusses issues related to compliance with the regulator (NBFIRA). Section 3.8 discusses the internal controls and corporate governance.

3.1 The Economy of Botswana

Botswana is rated as one of the top performing economies in the world due to a good track record of macro-economic policies, sound governance and political stability (AfDB/OECD, 2005:105). According to Nkwe (2012:30) Botswana's per capita income is rated as higher in the world but its growth rate has been affected due to the global economic downturn. According to AfDB/OECD (2005:105) the Government of Botswana has robust fiscal and monetary policies that enable the country to maintain a low level of foreign debt. The Government of Botswana has managed to maintain its natural resources, especially the precious diamond, in contrast to other developing countries that have experienced governance challenges such as corruption activities emanating from inequitable distribution of wealth and natural resources. Botswana economy has transformed from the poorest economy to one of the world's middle-income countries due to a robust economic growth (AfDB/OECD, 2005:105). Therefore, Botswana's economy is viewed as one of the richest countries on the African continent, with an approximately real per capita in excess of \$4,700.

AfDB/OECD (2005:105) and Molin (2015:32) concur that Botswana has experienced high growth in GDP per capita as compared to Sub-Saharan Africa (See Figure 3.1).

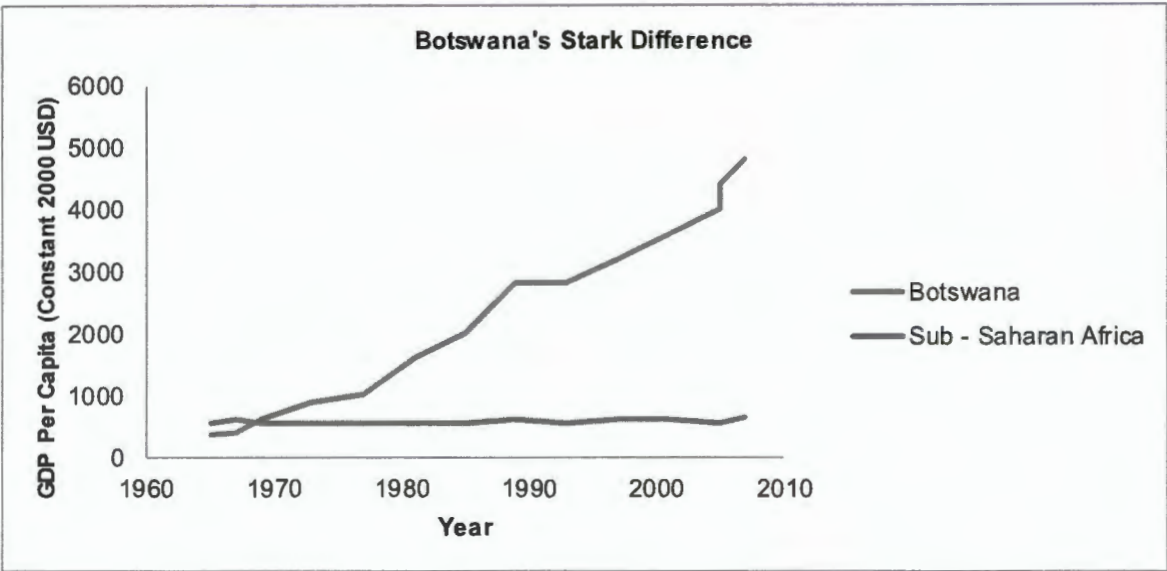


Figure 3.1: GDP per Capita for Botswana and Sub - Saharan Africa

Source: Adapted from Molin, (2015:32)

Despite experiencing a tremendous growth in GDP per capita, Botswana's economy is facing many challenges after the global recession (Molin, 2015:32). Some of the challenges faced in Botswana are as follows: dependent heavily on the diamond wealth and beef production which are saturated in the European market and threatened with the Human Immunodeficiency Virus (HIV) / Acquired Immunodeficiency Syndrome (AIDS) epidemic (Molin, 2015:32). The HIV / AIDS epidemic erodes the past economic gains through provisions for HIV / AIDS preventive measures and supply of medicines. In order to address these challenges which affected economic growth, Botswana launched a National Development Plan 9 (NDP9) covering the reporting periods 2003 / 4 to 2008 / 9 (AfDB/OECD, 2005:105). The main thrust for the NDP9 was to address the problems of unemployment and poverty alleviation through diversifying the economy, which transforms the population's mindset away from diamond production. Many developed and developing countries including Botswana believe that supporting SMMEs is the vehicle for poverty alleviation. This is the stance in Botswana to promote and develop SMMEs as part of the NDP9. The Government of Botswana introduced initiatives and intervention programmes under the NDP9 as mechanisms for addressing problems related to economic development, economic growth, poverty alleviation and unemployment.

Nkwe (2012:32) argues that NDP9 put more emphasis on SMMEs development, growth, competitiveness and business continuity. These strategies happened to be the opposite with the

history of micro-lending businesses in Botswana as they face business continuity challenges (see NBFIRA (2014:17). The statistics reported by NBFIRA (2014:17) show a drastic decrease in the micro-lending sector from a total of 993 to 223 for the period 2009 to 2016. A decrease of 77.50% (770) of micro-lenders in the economy is a great loss to the country and this creates a threat to economic growth. If these challenges and problems faced by micro-lenders are left unattended, they may result in an increase in unemployment and poverty levels in the country. In order to protect and safeguard micro-lenders, it is imperative to develop ERM and sustainability framework that addresses the challenges for growth in this sector. The decrease in numbers in micro-lenders may be symptoms of pure risk which might eventually affect the entity's sustainability, a concept that includes performance and competitiveness of a given business (Florio & Leoni, 2017:1).

Micro-lending business in the Botswana context is viewed as a fundamental element that plays a significant major role in economic development as it addresses problems related to poverty and unemployment. However, with current problems on hand for a huge decrease in the micro-lending, the objective for creating employment in this sector appears threatened. In Botswana micro-lending businesses are categorised under the NBFIs which is regulated by a body known as Non-Bank Financial Institutions Regulatory Authority (NBFIRA). The annual statistical data reported by NBFIRA from 2009 to 2016 (based on the researcher's own calculations) reflects a huge decrease in the numbers of micro-lenders in Botswana (See Table 3.1 and Figure 3.2).

Table 3.1: Decrease in growth in micro-lending companies in Botswana

Reporting period		2009	2010	Decrease	Increase	Percentage (%) Decrease	Percentage (%) Increase
Number of Micro-lending Companies		993	361	632	-	64%	-
Reporting period		2010	2011				
Number of Micro-lending Companies		361	218	143	-	40%	-
Reporting period		2011	2012				
Number of Micro-lending Companies		218	228	-	10	-	4.6%
Reporting period		2012	2013				
Number of Micro-lending Companies		228	243	-	15	-	6.6%
Reporting Period		2013	2016				
Number of Micro-lending Companies		243	223	20	-	8.23%	

Source: Own source

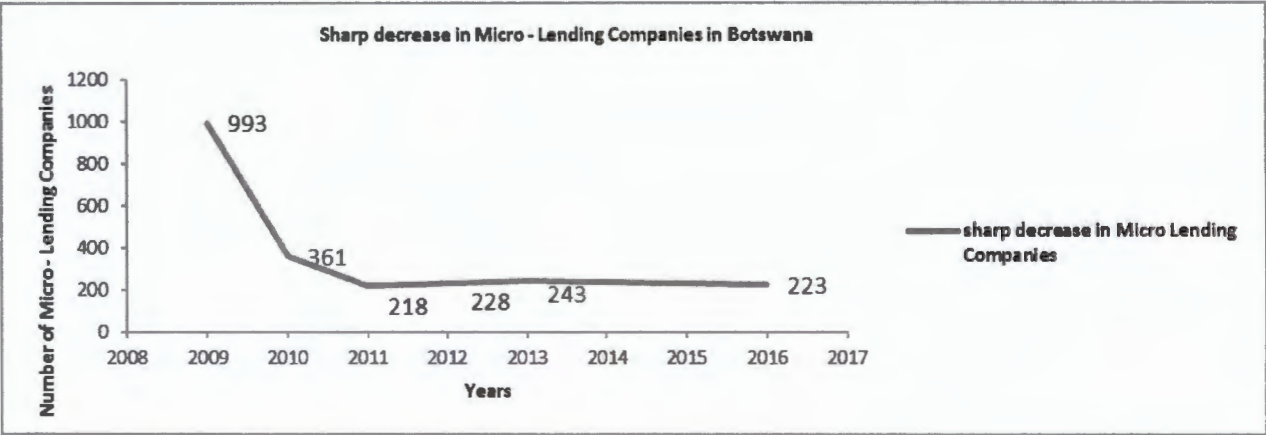


Figure 3.2: A sharp decrease in Micro-lending Companies in Botswana

Source: NBFIRA, (2014:17)

This drastic decrease in micro-lenders is not in line with the government strategies and policies which encourage sustainable growth and development in the sector. A decrease in the number of micro-lenders shows that many companies in this sector liquidated their businesses and this resulted in high levels of unemployment and increased poverty. The statistics in Table 3.1 and Figure 3.2 indicate that 993 micro-lending companies were registered in 2009 and 223 micro-lending firms in 2016 showing a sharp decrease of 770 micro-lending firms. On average a micro-lending firm employs 17 people and therefore, approximately 13 090 employees including owners lost their jobs due to problems associated with business continuity. Therefore, the loss of jobs in the micro-lending sector in Botswana could be attributed to inability of senior management to manage and mitigate risk. This philosophy was borrowed after analysing the definition for ERM, as it is directly quoted from the works of Cohen *et al.* (2014:1179):

“Enterprise risk management (ERM) is a process, effected by an entity’s board of directors, management and other personnel, applied in a strategy that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of the entity’s objectives”.

A huge decrease in micro-lending businesses exposes economic growth and GDP to country risk. It is imperative for all stakeholders concerned to find strategies that address ERM in line with the definition above. According to AfDB/OECD (2005:107) the sector for SMMEs contributed significantly to GDP in Botswana and was placed in position four among the nine sectors in the country during the 2002/03 reporting period. The contribution of SMMEs to the economy is commendable hence the need to safeguard this sector through effective sustainability initiatives such as robust ERM systems.

3.2 Government initiatives towards SMMEs development

Government of Botswana has always supported SMMEs as this sector is perceived to improve the quality of lives of thousands of many Batswana in relation to income generating activities and employment creation. The following are relevant Government interventions and policy initiatives towards SMMEs development in relation to micro-lending firms in Botswana. These initiatives were implemented in order to address the high failure rate in the SMMEs sector in Botswana (Molin, 2015:32).

3.2.1 Financial Assistance Policy (FAP)

According to Sentsho, Maiketso, Sengwaketse, Anderson, & Kayawe (2007:15) , SMMEs including micro-lending businesses play a crucial role as they uplift the quality of standards of unskilled and semi-skilled citizens who fail to be absorbed in the employment cycles of the diamond (capital intensive) and beef (land intensive) industries in Botswana. There is evidence from scholars such as Molin (2015:29) that there is unimpressive performance of SMMEs in the economy of Botswana and this necessitated the formulation and implementation of different policies. In 1982 the Financial Assistance Policy (FAP) was inaugurated in order to support and enhance employability opportunities and industrial development in Botswana. This initiative of promoting SMMEs through the FAP was inclusive of micro-lending companies that were also struggling in relation to sustainability (See Table 3.1 and Figure 3.2). FAP was launched by the Government of Botswana in 1982, amended in 1989 and 1995 with the aim of assisting businesses to be more productive. According to Sathyamoorthi (2002:565) the following were the aims underpinning the FAP:

- To create more jobs in order to address prevalent underemployment and unemployment challenges in Botswana.
- To focus on producing new products or services rather than heavily depend on cattle and mining production, thereby enhancing research and diversification into other new opportunities.
- The economy of Botswana focuses on producing other products that are heavily imported from neighbouring countries hence economic growth becomes much stronger as this reduces dependence on imports.

This Government assistance was of a temporary nature as the beneficiaries of this scheme were assisted for a maximum of five years for ventures that qualified as industrial projects and assistance up to a maximum of eight years if they qualified as agricultural projects. Furthermore, in order for recipients of these financial assistance schemes to qualify they were to meet the criterion of being described as productive business venture. This Government scheme exposed micro-lending sector to operational risks emanating from failure to qualify for the doled assistance. Therefore, operational risk may force micro-lending companies into financial stress hence fail to meet daily obligations for running an entity.

Furthermore, the financial assistance scheme benefited the industries in the marketing or collection function also known as the Linking Service Industries. Industries in the tourism sector were part of the recipients of this financial assistance. According to Sathyamoorthi (2002:565) the projects that were financed under the FAP were as follows:

- Small Scale Businesses
- Medium Scale Businesses
- Large Scale Businesses

The following Table 3.2 shows the categories and sectors of projects which benefited from this financial aid. These sectors and types of businesses were reserved for Botswana citizens as a way of empowering and promoting the locals. The projects shown in Table 3.2 were those ventures with a value of up to P75, 000.00 in fixed investment, including factors of production such as labour, machinery, buildings and equipment.

Table 3.2: Sectors benefited from FAP

	Sectors benefited from FAP	Brief description of the sector
1	Industrial sector	This includes projects such as sewing, knitting, brick moulding, welding carpentry, bakery and pottery.
2	Agricultural sector	Projects on small stock, piggery, poultry, dairy and horticulture.
3	Tourism	Hotels, Motels, lodges, tourist apartments and camps.
4	Other sectors	These include small - scale mining and borehole repair services.

Source: Adapted from the research-based works of Sathyamoorthi, (2002:565)

According to Sathyamoorthi (2002:565) projects with fixed income ranging between P75,000.00 and P2,000,000.00 were eligible for the FAP. However, in addition a non-refundable grant was also awarded to qualifying expanding medium scale projects and new productive businesses. The additional non-refundable grant was awarded to projects that achieved an economic return of 6%. The grants were in three categories as follows: capital, unskilled labour and training. The capital was a grant used to purchase fixed assets or non-current assets. The unskilled labour was for those citizens earning a statutory minimum wage. The grant for training was channelled towards 50% costs of off-job training of citizens who would then be reimbursed during the five-year project period. The grants under the FAP were free of tax.

In 1997 the Government of Botswana appointed a Micro Enterprises Task Force in order to address the challenges in the SMMEs which also included the micro-lending businesses. A final report was submitted to the Ministry of Commerce and Industry in 1998. In 1999 a white paper was written, and this led to a formulation and implementation of a policy (See Table 3.3).

Table 3.3: The objectives for the SMMEs Policy

Objective	Aim of the objective
1	The policy aims at achieving economic diversification of the economy which is one of the main targets.
2	Fostering citizen entrepreneurship and empower the locals with the ability to run businesses, thereby increasing the degree of economic activity under the control of the Batswana citizens.
3	The policy aims at encouraging exports by these enterprises. This would lead to the tapping of export potential of small and medium enterprises in the country.
4	Creation of employment opportunities. This is one of the main objectives of SMMEs and it has been shown that these enterprises have played a major role in employment creation in Botswana. Therefore, this policy aims to create sustained employment opportunities to all.
5	Encourage the development of competitive and sustainable Small, Medium and Micro Enterprises community.
6	The policy aims at encouraging a harmonious blending and establishment of lineage between SMMEs and primary industries in agriculture, mining and tourism.
7	The policy aims at improving the effectiveness and efficiency of the support or delivery services to business enterprises.

Source: Adapted from the works of Sathyamoorthi, (2002:568)

The policy emphasises that the entrepreneur must properly understood the regulations that govern the enterprise in order to avoid heavy penalties due to non-compliance. The policy makers viewed that small business owners were finding it hard to assimilate the philosophy surrounding the laws and regulations that governed their entities hence most businesses collapsed due to non-conformity to these rules. Therefore, it was imperative to protect and safeguard both existing and new SMMEs in Botswana in order to strengthen the effectiveness and efficiency of these businesses. According to Sathyamoorthi (2002:568) SMMEs in 1998 employed a significant number of citizens and this improved the quality of the standard of living for Batswana (See Table 3.4).

Table 3.4: Number of operating establishments by employment size

	Number of Employees	Dec 1997	Dec 1998	Percentage (%) Increase
1	1 – 4	4708	5477	16
2	5 – 29	4157	4956	19
3	30 – 49	498	792	59
4	50 – 99	283	357	26

Source: Adapted from the works of Sathyamoorthi, (2002:568)

The figures above show that there is a significant growth in terms of employment in this sector from December 1997 to December 1998. The movements in terms of growth in employment in relation to size are interpreted as follows: 1-4 employees there was a growth of 16% from December 1997 to December 1998; 5 - 29 employees there was a growth of 19% from December 1997 to December 1998; 30 - 49 employees there was a growth of 59% from December 1997 to December 1998; 50-99 employees there was a growth of 26% from December 1997 to December 1998.

Despite that SMMEs including micro-lending companies were heavily assisted under the FAP, and evidence from scholars such as (Molin, 2015:32) has shown that they failed to be competitive hence most of the enterprises closed shop. The rate of failure for entrepreneurship during this era contradicted the Government objectives that advocated employment creation, economic growth, economic development and diversification. It is evident that the business model for SMMEs in Botswana failed to sustain enterprises and perhaps they should have applied the business model that was initiated by the Grameen Bank, which targeted a group of women with joint liability and responsibilities (Molin, 2015:32). The model for Grameen Bank was highly successful around the globe. The Grameen Bank model was not used in Botswana especially by the NBFIs hence a significant number of companies closed shop due to underperformance and lack of a framework for ERM and sustainability. According to Sathyamoorthi (2002:569) the following were the general problems that affected the effectiveness and efficiency for SMMEs in Botswana:

- lack of support from the local buyers
- lack of skilled labour
- lack of business management skills and,
- non-availability of raw materials

3.2.2 Citizen Entrepreneurial Development Agency (CEDA)

According to Temtime and Pansiri (2004:18) it has been critical for most of developing and developed countries around the globe to consider SMMEs as the engine that drives the economy through creation of wealth and employment. In Botswana, SMMEs are estimated to be 56 300, and employing approximately 125 000 people including the shareowners (Gagoitsepe & Pansiri, 2012:51). The proponents of entrepreneurship in the context Botswana such as Gagoitsepe and Pansiri (2012:51) argue that SMMEs in 1998 were significantly contributing to the country's gross domestic product (GDP) as follows: GDP for small firms estimated at 30% to 45% and GDP for large firms estimated at 38% to 48%. It is clear that countries like Botswana made efforts to develop SMMEs and entrepreneurship. The efforts to diversify the economy through activities such as financial assistance and awarding of grants were not successful due to limited citizen entrepreneurship, lack of direct foreign investment and issues surrounding rental seeking activities. According to Sentsho *et al.*, (2007:12) the manufacturing diversification efforts failure rate was between 80% to 85% and over 70% failure rate for start-ups in the SMMEs. This study does not focus on manufacturing related constraints, but the statistics are important in building arguments towards SMMEs failure rate in Botswana.

A National Conference on Citizen Empowerment was initiated in 1999 as a result of this high failure rates of SMMEs. During the National Conference on Citizen Empowerment a Fourth FAP Evaluation Report was Tabled and discussed. The report necessitated changes in the government

economic policy, and this led into the creation of Citizen Entrepreneurial Development Agency (CEDA).

CEDA was mandated to finance locally owned enterprises with debt capital. The debt capital from CEDA was affordable as competitive rates were offered with the main thrust of economic empowerment and development of Botswana citizens. According to Gagoitseope and Pansiri (2012:51) and Molin (2015:32) CEDA invested millions of dollars towards sustainability and development of SMMEs in Botswana. Despite all these significant investments by CEDA towards SMMEs development, the failure rate of SMMEs including micro-lending companies, was very high. Therefore, this study seeks to address the underperformance in the micro-lending companies through an adoption of a framework for ERM and sustainability in order to promote entrepreneurial development. It is from this background that this study was necessitated by the rate of failure in the micro-lending companies that is still very high despite all the government initiatives and interventions (Sathyamoorthi, 2002:565); & (Sentsho *et al.*, 2007:15).

It is clear that CEDA plays a critical and crucial role in economic growth and development, especially on the provision of entrepreneurship development, funding of debt capital for capital expenditure, business advisory services and training and mentoring of business owners. In a nutshell, CEDA was established with the main objectives of providing financial support for the development of SMMEs in Botswana. The provision of business advisory services by CEDA targeted mainly business-related functions such as management, leadership, marketing management, financial management, financial accounting, operations management, human resource development and human resources management (Temtime & Pansiri, 2004:19). According to Molin (2015:53) the main thrust of CEDA's advisory business services was to address the lack of and inadequate business skills among entrepreneurs in Botswana.



3.2.3 Local Enterprise Authority (LEA)

In 2003 a Small Business Act was enacted and this facilitated the establishment of Local Enterprises Authority (LEA) and the Small Business Council (Sentsho *et al.*, 2007:45). The Small Business Council was given the mandate of an advisory body by the Ministry of Trade and Industry which facilitated the development and formulation of policies and programme initiatives. LEA plays a critical role on issues concerning SMMEs in Botswana such as assisting in start-up processes, improvement of business skills, simplification of the policies and regulatory framework that affect operations for SMMEs, improvement in access to financial assistance and entrepreneurship development (Sentsho *et al.*, 2007:99). Furthermore, LEA has been mandated by policy makers to monitor, advise and mentor small businesses and establishing linkages between SMMEs and larger firms. However, the mandate for LEA was to consolidate all the Government and other initiatives in order to benefit SMMEs in relation to performance, competitiveness and growth. LEA's portfolio management includes the role for training and development, support and monitoring,

coordinating SMMEs development and collaborating all parastatals that are linked to SMMEs development. Despite all these collaborations and initiatives from LEA, the failure rate for SMMEs is still very high, estimated to be over 80% (Temtime & Pansiri, 2004:18).

3.2.4 National Development Plan 10 (NDP10)

Initiatives from the National Development Plan 9 (NDP9), Financial Assistance Policy (FAP), Citizen Entrepreneurial Development Agency (CEDA) and Local Enterprises Authority (LEA) failed to yield significant results in relation to SMMEs performance, competitiveness and growth hence policy makers in Botswana adopted a National Development Plan 10 (NDP10). NDP10 focuses more on human resources development in order to strengthen and enhance the competencies and skills in Botswana. A Human Resource Development Strategy was developed and implemented through the Education and Training Sector Strategic Plan (ETSSP). This resulted in the establishment of Human Resource Development Council (HRDC) and Botswana Qualifications Authority (BQA). HRDC and BQA monitor the quality assurance and research related to education and training under the supervision of the Ministry of Tertiary Education, Research, Science and Technology. The ETSSP's main objective is to put more emphasis on a diversified and supportive, inclusive, sustainable and knowledge-based economy. The mandate for ETSSP stretches all the way to 2020 in order to enhance competent innovative human resources that could assist in economic growth through exporting skills to Europe and other neighbouring countries. The policy makers are of the view that an educated nation could assist in the managing of SMMEs and larger companies in Botswana and hence address the continued rate of failure prevalent in many firms (Nkwe, 2012:32). The following Table 3.5 shows the challenges or lessons learnt during the inauguration of NDP10. Table 3.5 was developed by the investigator based on the study by (Nkwe, 2012:32).

Table 3.5: Challenges learnt during the NDP10

1	Description of challenge / lesson	Interpretation of the challenge / lesson
2	Unemployment rate	Unemployment rate increased from 17.8% in 2010 to 20% in 2013. It was observed that there were many unemployed graduates due the fact that the qualifications failed to match the skills required by the labour market.
3	Lack of specialised skills within the education and training sector	Due to the lack of specialised skills the graduates were unable to cope with industry requirements. This may have been attributable to lack of effective collaboration between Education and Training Providers (ETP) and the industry and commerce at large.
4	Low participation of females in science related subjects / modules	Low number of females participated in Science, Engineering and Mathematics and hence a shift was to be encouraged.
5	The country rated low in terms of innovation	The country continued to be rated low in relation to indicators for innovation.
6	Low labour productivity	Affected the SMMEs and larger industries hence resulted an increase in the rate of unemployment. Many employees

Source: Developed by the researcher based on the works of Nkwe, (2012:32)

The challenges and lessons learnt in Table 3.5 show that there are still constraints that affect performance and growth in the SMMEs including the micro-lending companies hence the need for this study which aims to develop a framework for ERM and sustainability that could address underperformance in this sector. The above challenges exposed micro-lending sector to extreme operational risk emanating from failure to address operational challenges and this resulted into closure of businesses.

3.3 Challenges faced by SMMEs in Botswana

The challenges learnt in Table 3.5 affected the whole country; however, there are challenges specific to SMMEs. Proponents of entrepreneurship in Botswana such as AfDB/OECD (2005:105), Gagoitseope and Pansiri (2012:52), Molin (2015:32), Mutoko (2014:31), Nkwe (2012:30), Okurut and Botlhole (2009:256), Okurut *et al.* (2011:62), Pansiri and Temtime (2008:252), Sathyamoorthi (2002:569) and Sentsho *et al.* (2007:15) argue that there are many challenges that affect growth, competitiveness and performance of SMMEs (See Table 3.6).

Table 3.6: Challenges faced by SMMEs in Botswana

	Description of a challenge	Interpretation of the challenge in relation to the study
1	Lack of access to finance	There is evidence in the literature that SMMEs were financially funded hence in this study it may be perceived be poor financial management of funds and lack of a framework for enterprise risk and sustainability that is used to safeguard financial assets.
2	Lack of entrepreneurial skills	Lack of entrepreneurial skills affects enterprise performance.
3	Bias of the education system against self - employment	The traditional education system promotes formal employment pathway rather than entrepreneurship pathway.
4	Lack of business start - up training	Lack of business start-up training affects entity's performance, competitiveness and growth.
5	Shortage of business premises	Shortage of business premises may lead to bankrupt as funds are challenged towards fixed rental payments.
6	Excessive Government laws and regulations	Excessive Government laws and regulations may promote barriers to entry for new small ventures.
7	Lack of information on Government assistance programmes	Lack of information on Government assistance programmes may discourage new small businesses.
8	Lack of marketing skills	Lack of marketing skills may result in small ventures close shop through liquidity problems.
9	Lack of data on SMMEs	Lack of data on SMMEs may affect the dominance of small businesses in the economy hence hinder progress.
10	Inherent biases against SMMEs	Inherent biases against SMMEs are traditional perceptions for lack of trust in small businesses.

11	Lack of access to markets	Lack of access to markets is a reflection of a small market share which may result into liquidity and liquidation problems.
----	---------------------------	---

Source: Adapted from the works of Mutoko, (2014:31)

There is a link between the above challenges in the SMMEs and the performance of micro-lending companies in Botswana as they also face some of these constraints outlined in Table 3.6. Finally, if these challenges are not attended to, they could result in the following risks which affect the micro-lending sector: credit risk and liquidity risk. These two types of risk if not well managed affect an enterprise and may lead to liquidation as in the case of micro-lending companies, due to failure to meet daily obligations. Furthermore, credit risk may lead into litigation / legal risk because if a company fails to pay its debts, the company could be subjected to lawsuits. If the company is exposed to legal risk, it may result in reputational risk through bad publicity, which ultimately leads to liquidation. Therefore, an adoption of a framework for ERM and sustainability may address some of these constraints which are being faced in the micro-lending sector.

3.4 An analysis and evaluation of licensing requirements for micro-lending businesses in Botswana

The following Table 3.7 shows the licensing requirements for registering a micro-lending business in Botswana from the NBFIRA registration office.

Table 3.7: Licensing requirements for micro-lending business in Botswana

Category	Licensing requirements
1	Covering letter on business letterhead
2	Duly completed form 1 by applicant
3	Vetting documentation (work and residence permit, identity cards or passport, bank reference, personal questionnaire, SV Form 1, and Police clearance)
4	Proof of financial liquidity - certified to be in the bank account by the Accountants - P20,000.00 to be maintained at all times by the micro-lender. Proof of payment for license fees - P6, 000.00 to be deposited into NBIFRA's bank account.
5	Statutory documentation - Proof of incorporation see form 2 or form 13
6	Detailed 3 - 5 - year business plan
7	Latest financial statements, for existing businesses
8	Resume for manager

9	Resolution of board if it's a company
10	Letter of intent to lease
11	Standard proposed loan application form for customers
12	Proposed dispute resolution and complaints guidance
13	Delinquency policy
14	Loan underwriting policy
15	Service level agreements (if applicable)
16	Proposed organisational structure
17	Proof of Botswana Unified Revenue Services (BURS) registration
18	Form 3 if the business is operating more than one (1) office
19	Consent of spouse
20	Anti - money laundering / combating the financing of terrorism (AML/CFT) policy

Source: Adapted from NBFIRA, (2014:1)

Proponents of SMMEs and micro-lending companies in Botswana such as AfDB/OECD (2005:105), Gagoitseope and Pansiri (2012:52), Molin (2015:32), Mutoko (2014:31), Nkwe (2012:30), Okurut and Bothole (2009:256), Okurut *et al.* (2011:62), Pansiri and Temtime (2008:252), Sathyamoorthi (2002:569) and Sentsho *et al.* (2007:15) did not investigate the degree of effectiveness and efficiency for licensing micro-lending companies in Botswana. This current study includes the aspect of measuring the degree of effectiveness and efficiency of the above 20 requirements or criteria listed in Table 3.7.

- **Covering letter on business letterhead:** an official letterhead is required when writing a motivational letter to start a micro-lending business. The letterhead should be authentic and appealing and failure to have good characteristics on a letterhead may lead to reputational risk due to bad publicity. Therefore, reputational risk may result into operational risks, which may affect business continuity.
- **Duly completed form 1 by applicant:** a form 1 should be completed as application for reservation of a company name as per the Republic of Botswana Companies Act Chapter 42:01. The micro-lending company must propose three company names, which should be selected according to preference as the first choice, second choice and third choice. Furthermore, a section on change of name must be completed if it is application that relates

to a proposed change of name of an existing company. The applicant for a change of name should provide the new name and the registered number of the old company name. It is important that the name search is thoroughly conducted as this may lead to reputation risk in case the new name to be registered attracts some ethical related issues. Therefore, it is imperative for a micro-lender to safeguard itself against compliance risk and reputational risk in order to avoid consequences which may result in the firm's closure.

- ***Vetting documentation (work and residence permit, identity cards or passport, bank reference, personal questionnaire, SV form, and Police clearance):*** It is important to safeguard the micro-lending business against compliance risk, operational risk and reputational risk through ensuring proper vetting of documentation. It is deemed that if a micro-lender fails to file proper documentation; such omission or commission may result in compliance risk and operational risk which lead to reputational risk. Therefore, a failure to comply with these requirements may result into business continuity and liquidation problems as in the case of the majority of micro-lending businesses in Botswana. Finally, all micro-lending companies are required to have proper vetting of documentation in order to comply with the regulator (NBFIRA).
- ***Proof of financial liquidity - certified to be in the bank account by the Accountants - P20,000.00 to be maintained at all times by the micro-lender:*** micro-lenders in Botswana are required to maintain P20,000.00 at all the times in their bank current accounts as part of the capital liquidity adequacy. Therefore, failure to maintain the financial liquidity balance by micro-lenders may lead to poor working capital management hence a business with poor financial liquidity may be subjected to operational risk and liquidity risk. Liquidity risk experienced in the micro-lending sector may result in liquidation or closure of entities due to failure to manage and mitigate risk associated to working capital management and cashflow management.
- ***Proof of payment for license fees: P6, 000.00 to be deposited into NBFIRA's bank account:*** a registered micro-lender should pay a license of P6, 000.00 to NBFIRA and proof of deposit should be submitted together with application form as evidence of payment. The payment of a license is treated as commitment to undertake a micro-lending business and failure to pay for a license to NBFIRA may lead to operational risk and compliance risk and the micro lender may face problems associated with business continuity.
- ***Statutory documentation - proof of incorporation; form 2 or form 13:*** a micro-lender should comply with all statutory requirements which include: evidence of certificate of

incorporation, form 2 (for proposed company) and form 13 (for existing company) should be submitted to NBFIRA. This implies that before a micro-lending business commences operation it should be a registered firm and evidence of authentication of the business must be in the form of a certificate of incorporation. Furthermore, all the shareholders of the micro-lending business should be stated on form 2. The sections on form 2 should be duly completed, which includes: name of the shareholders; identify number / registration number; residential address or registered office; postal address; number of shares to be issued to each shareholder; class of shares (ordinary); the amount to be paid or other consideration; signature of shareholder / shareholder representative and the date. The form 2 application requires the micro-lending company to state the names of persons acting as directors and company secretary of the proposed company. Furthermore, in the case of an existing company form 13 must be completed as a notice to change of directors or secretary of the company. However, operating a micro-lending business without complying with statutory obligations may result in operational risk, compliance risk and legal risk. In addition, if it is discovered by the regulators that a micro-lending company is not satisfactorily meeting statutory requirements it may ultimately result in liquidation or it may not be issued a license to operate as a micro-lender.

- **Detailed 3 - 5 year business plan:** a micro-lender should prepare a detailed 3-5 years plan which includes, the firm's vision, mission statement and strategic objectives. The business plan is a detailed road map which indicates how the business will achieve its intended goals on short-term, medium term and long-term. Therefore, the purpose of a business plan is to show how the business will compete in a fast and technologically changing environment. A Business Plan will incorporate cashflow projections which indicate the financial viability of a micro-lender. It is advisable that the Business Plan should be prepared by a qualified Accountant in order to enhance its credibility. Therefore, failure to produce a credible Business Plan may result in problems associated with liquidity risk and credit risk. However, if liquidity risk and credit risk are continuing in existence it may result into liquidation of a micro-lender.
- **Latest financial statements for existing businesses:** an existing micro-lender is required to prepare and produce current financial statements, which are submitted both to NBFIRA and Botswana Unified Revenue Services (BURS). The financial statements are used to measure performance of the enterprise and establish whether it should continue to be existence in the ensuing year ("*Going concern concept*"). Therefore, it is a requirement for micro-lenders to submit financial statements to both regulators such as NBFIRA and BURS, a failure to comply with any one of the regulators may lead into operational risk, compliance risk and reputational risk. Furthermore, a micro-lending firm that fails to adhere

to the requirements of submission of financial statements may be forced to close its business.

- ***Resume for manager:*** it is important to submit a resume for a manager who has the overall responsibilities in making organisational decisions. The resume may include: the credentials of the manager, educational background and experience and contact numbers for referees. It is important to appoint a manager with a good track record in order to avoid operational risk and reputational risk. This implies that managers with bad publicity may lead a micro-lending company into operational and reputational risk. Therefore, in order to safeguard a micro-lending from operational risk and reputational risk it would be proactive for the firm to appoint a manager with sound-track record and who is professionally in good standing.
- ***Resolution of board if it is a company:*** it is important to have a resolution of the board if a micro-lender is a company in order to avoid compliance risk, litigation risk and reputation risk. A resolution of the board will be in the form of meeting minutes as they are acceptable as a record of evidence in case of lawsuits. However, if a micro-lender fails to record a resolution it would be difficult to register the firm and open of a bank account. Therefore, for a micro-lending company to safeguard its operational activities being exposed to compliance risk, litigation risk and reputation risk, it is imperative to record a resolution of the board (meeting minutes signed by the chairperson).
- ***Letter of intent to lease:*** a letter of intent to lease is required before the registration of the micro-lender with NBFIRA as evidence of readiness to start the micro-lending company. The letter of intent to lease is important because at the initial stage the micro-lending business will not have started operational activities hence the need to understand where the firm will be operating from in order to easily trace the entity. However, failure to produce a letter of intent to lease may lead to operational risk and compliance risk. Therefore, it is imperative for a micro-lender to manage and mitigate against operational risk and compliance risk.
- ***Standard proposed loan application form for customers:*** a standard proposed loan application form for customers is required before the registration of the micro-lender with NBFIRA as evidence of readiness to start the micro-lending company. The standard proposed loan application for customers is important because at the initial stage the micro-lending business would not have started operational activities hence the need to understand their operations from the onset. However, failure to produce a standard proposed loan application may lead to operational risk and compliance risk. Therefore, it is

imperative for a micro-lender to manage and mitigate against operational risk and compliance risk.

- ***Proposed dispute resolution and complaints guidance:*** a proposed dispute resolution and complaints guidance must be put in place in case of any future lawsuits. Evidence of a detailed dispute resolution and complaints guidance determines how serious the micro-lending company stands in relation to readiness to start up its operations. However, failure to produce a proposed dispute resolution and complaints guidance may lead into operational risk and compliance risk. Therefore, it is imperative for a micro-lender to be able to manage and mitigate against operational risk, litigation risk and compliance risk by ensuring that there is a comprehensive proposed dispute resolution and complaints guidance.
- ***Delinquency policy:*** a micro-lender must have a clear delinquency policy which stipulates the due dates for the loan repayment. The delinquency policy should clearly state the due date that it is on the 1st day of each month or a payment is considered late if it is not received on the 1st day of each month. A late payment fee may be charged against the customer if the loan repayment is received after the penalty date according to the loan agreement document. The delinquency policy should state the procedures to be taken in relation to a loan defaulter depending on the ageing of the outstanding loan balances, which is normally as follows: 30 days, 60 days, 90 days and 120 days and over. However, if the delinquency policy is not clear in terms of defaulters it may lead into problems related to operational risk, litigation risk, reputational risk and liquidity risk. Therefore, micro-lenders should have a clear delinquency policy in order to safeguard its business against operational risk, litigation risk, reputational risk and liquidity risk.
- ***Loan underwriting policy:*** a micro-lender must develop an effective underwriting policy which is used to decide as to whether an applicant is creditworthy, and a loan should be offered to the client concerned. The underwriting policy should ascertain the minimum requirements of information and analysis needed to grant a credit loan. The micro-lender must ensure that the credit loan underwriting policy is adequate and appropriate for the risk-bearing of capacity of the micro-lending company including any board-established risk appetite tolerances. Therefore, it is imperative for a micro-lender to have an effective loan underwriting policy as a strategy of avoiding credit risk which may eventually force the micro-lending firm into problems that are associated to operational risk and liquidity risk.
- ***Service level agreements (if applicable):*** a micro-lending company may face less challenges if it has service level agreements with its clients as these provide an assurance

of understanding a business once it becomes operational. However, these service level agreements must be appropriately written and understood by both parties in order to avoid problems associated with litigation risk, in case of future misunderstandings.

- ***Proposed organisational structure:*** a micro-lending company should design a proposed organisational structure that shows lines of reporting from the level of Chief Executive Officer to the general hand (for example a cleaner). The proposed organisational structure allows segregation of duties and decisions to be taken at different levels. Furthermore, a proposed organisational structure will empower every subordinate to make decisions based on the level of seniority and this avoids dominance of power from a specific senior individual. A proposed appropriate organisational structure promotes and maintains ethical standards and principles of best practices. Therefore, a micro-lender should have an appropriate proposed organisational structure in order to avoid poor principles of best practices which may lead into strategic and reputational risk.
- ***Proof of Botswana Unified Revenue Services (BURS) registration:*** a micro-lender must be registered with BURS for taxation purposes, which include: Pay as You Earn (PAYE) and Value Added Tax (VAT) and Corporation Tax. As a registered company a micro-lender should contribute in terms of the payment of statutory obligations and failure to do so may lead to compliance risk and litigation risk. Therefore, a micro-lending company must comply with the BURS laws in order to safeguard its business from problems related to liquidation. Furthermore, a micro-lending company should have proof of registration with BURS to avoid issues related to non-compliance with the legislator.
- ***Form 3 if the business is operating more than one (1) office:*** a micro-lending is required to complete a form 3 if it owns a separate office from the main station. The form 3 is known as the Solemn Declaration whereby the owner of a micro-lending company is supposed to disclose the ownership of another office which is separate from the main operational activities. It is a requirement that the Solemn Declaration is signed in the present of a Commissioner of Oaths. The Commissioner of Oaths is also required to sign the Solemn Declaration as this adds value to the authentication and credibility of the form 3. Furthermore, failure to disclose the other offices on form 3 may lead to problems related to operational risk, compliance risk and litigation risk. Therefore, to avoid problems related to operational risk, compliance risk and litigation risk, a micro-lender should disclose other offices on form 3 if the business is operating more than one (1) office.
- ***Consent of spouse:*** it is important for one of the spouses intending to operate a micro-lending company to seek the consent of the spouse as a way of safeguarding against risk

which may affect the two spouses. The micro-lender may obtain debts or sign contracts that may affect both spouses in terms of lawsuits hence the need to request the consent from the other spouse. However, if the micro-lender fail to obtain a consent from the spouse this may lead to a situation whereby the company may face a risk of failing to be registered as a legal entity. Therefore, the consent of a spouse is necessary to avoid issues related to operational risk, compliance risk and litigation risk.

- **Anti-money laundering / combating the financing of terrorism (AML/CFT) policy:** a micro-lending company must put in place effective money laundering measures and practices that promote anti-money laundering / combating the financing of terrorism (AML / CFT) policy. This implies that micro-lender must put in place appropriate procedures and controls that prevent money laundering. Furthermore, a micro-lending company should appoint an official who will be charged with the duties of a Money Laundering Reporting Officer (MLRO). The MLRO will ensure that the business complies with the best principles of anti-money laundering / combating the financing of terrorism. The following is the definition of "Money Laundering" from ACCA (2017:66):

"Money laundering are acts by criminals involving concealing the origin of proceeds from illegal activities maintaining control over the proceeds and directing the proceeds into legal activities so that at the end it appears as if the proceeds were not from illegal activities."

Therefore, a micro-lending company should not be involved in any illegal transactions or activities because these unethical behaviours may lead into problems which are associated with operational risk, compliance risk and legal risk hence, if this is discovered that a micro-lending company is promoting money laundering the business may be forced to close its operations.

3.5 Adoption of ERM systems and risk management models in Botswana

In Botswana there are many Government initiatives which include: the National Development Plan 9 (NDP9), Financial Assistance Policy (FAP), Citizen Entrepreneurial Development Agency (CEDA), Local Enterprises Authority (LEA) and National Development Plan 10 (NDP10) that were formulated with the objective of developing SMMEs, including micro-lending companies in Botswana. It is sufficiently clear that these initiatives did not yield significant results as the rate of failure in SMMEs is still high and this implies that these initiatives have been exposed to risk (See section 3.2). Therefore, it is important to integrate ERM systems and risk management models into these initiatives in order to safeguard against exposure to risk. Scholars such as Okurut *et al.* (2011:64) conducted studies focusing on risk in the banking sector in Botswana and the banking industry, is part of exclusion to this study as the main thrust is on micro-lending companies.

However, the study conducted on developing a working ERM and sustainability framework for micro-lending companies in Botswana closed this gap and act as guidelines for micro-lenders in Botswana.

3.6 Sources of risk

Sources of risk such as political risk, legal or litigation risk, regulatory risk, compliance risk, strategic risk, product risk, commodity price risk, product reputation risk, operational risk, economic risk, credit risk, currency risk, interest rate risk, gearing risk, environmental risk, fraud risk, corporate reputation risk and culture risk affect performance, competitiveness and growth of an enterprise (Tuckman, 2015:35 - 37). In Botswana little has been written on sources of risk in SMMEs especially micro-lending businesses. The study conducted by Okurut *et al.* (2011:64) was more focused on risk in the banking sector in Botswana and the banking industry and is part of an exclusion to the main thrust of this study on micro-lending companies. Therefore, there is a gap in relation to sources of risk in Botswana and it was imperative to conduct a study of this nature due to the fact that awareness of sources of risk may address the problems associated with high failure rate in micro-lending business. However, if micro-lenders fail to put in place procedures and controls which promote ERM systems their businesses may be subjected to the following risks: political risk, legal or litigation risk, regulatory risk, compliance risk, strategic risk, product risk, commodity price risk, product reputation risk, operational risk, economic risk, credit risk, currency risk, interest rate risk, gearing risk, environmental risk, fraud risk, corporate reputation risk and culture risk (Okurut *et al.*, 2011:65) and these risks are associated to problems related to business continuity. According to COSO (2013:1) successful firms are more proactive in terms of implementation of effective and robust ERM systems. Therefore, micro-lenders should give attention to risk and risk - based approaches in order to remain in business and avoid risks associated with business continuity.

3.7 Compliance with the regulator (NBFIRA)

In financial risk management arena, compliance risk is one of the major sources of risk and failure to mitigate this risk may result into liquidation of an enterprise (Tuckman, 2015:35 - 37). In 2016 NBFIRA reported that 20 micro-lending companies out of 223 registered with the regulator's offices, managed to prepare year - end financial statements and submitted returns and audited annual financial reports. NBFIRA (2014:14) has shown that approximately 203 micro-lending companies failed to comply with the regulator's requirements, and this has exposed this sector to high risk in relation to "*going concern concept*", as the regulator closed non - compliance businesses. Going concern concept affect business continuity in this sector and hence contradict the Government of Botswana's main objective of entrepreneurial development (Mutoko, 2014:30). Failure to implement and adopt proper financial accounting may result in issues related to fraud and risk which may force an entity to liquidate (CIMA, 2016:48). A good example of poor

accounting which resulted in fraudulent activities is of the Enron scandal where shareholders lost approximately \$74 billion and forced the entity to be liquidated (Li, 2010:38). Therefore, financial accounting is used for reporting performance of an enterprise against set criteria or standards and any deviations must be investigated (Wood & Sangster, 2008:99). In Botswana SMMEs are guided by GAAP (2013:9) when preparing financial statements and failure to comply with these principles and assumptions may lead to -non-compliance related issues. GAAP (2013:9) requires accounting practitioners to prepare financial statements in line with the following principles and assumptions: going concern, reliability, legal form, neutrality, completeness, relevance, materiality, matching and accrual basis accounting (See Chapter 2, Table 2.13 - GAAP Applicable to SMMEs in Botswana). Based on the statistics and literature from NBFIRA (2014:14) there is little attention on the preparation of financial statements, adherence to GAAP and submission of returns within the micro-lending businesses in Botswana. However, to close this gap it was inevitable to conduct this study.



3.8 Issues related to internal controls and corporate governance

The underperformance in the micro-lending companies in Botswana could have been contributed by issues related to poor internal controls and bad corporate governance. There is limited research on internal controls and corporate governance in Botswana. This is a gap that needs to be investigated and closed as internal controls, effective ERM systems and good corporate governance contribute to the success of an enterprise (COSO, 2013:1). Furthermore, senior executive management working in companies in Botswana adopt the King IV's report which is borrowed from South Africa. Internal control, corporate governance and risk management assist enterprises in effectively monitoring and controlling business processes, procedures and policies (Lai *et al.*, 2010:46). Evidence provided in literature for the high rate of failure in micro-lending companies in Botswana is attributable to poor internal controls, bad corporate governance and lack of effective risk management systems; therefore, it was inevitable to develop an inclusive framework for ERM and sustainability that addresses the gaps in this sector. In addition, proponents of corporate governance and internal controls such as Grant and McGhee (2014:129) argue that to ensure that there is good corporate governance and best practices in organisations, this phenomenon should be viewed beyond principles of corporate governance. Grant and McGhee (2014:129) believe that organisations should consider the character-building structures of company directors or directors' personal ethics in order to enhance good governance and achieve best practices. Finally, if attention on character-building structures of company directors or directors' personal ethics had been given before Enron scandal, the impact where shareholders loss approximately \$74 billion could have been minimised (Grant & McGhee, 2014:129). Therefore, effective internal controls and good corporate governance may only be achieved if there is support from the board of directors, who also respect the principles of best practices (Grant & McGhee, 2014:130).

3.9 Chapter summary

This chapter focused on literature review in relation to performance, competitiveness, growth and sustainability in micro-lending sector in Botswana. Literature shows that there is a high rate of failure in micro-lending sector in Botswana. The Government of Botswana employed many mechanisms to address the underperformance in the SMMEs. Initiatives such as NDP9, FAP, CEDA, LEA and NDP10 were put in place in order to address SMMEs, and entrepreneurship development which meant to uplift the quality and standard of living for the locals and as well as achieving the country's Vision 2016. However, after adopting these Government initiatives, the rate of failure in micro-lending sector was and is still high approximately over 80% hence the need to adopt a framework for ERM and sustainability in the micro-lending companies. A huge decrease in the numbers of micro-lending businesses in Botswana from 993 (2009) to 223 (2016) is worrisome and threatens the economy hence the urgent need to conduct this study. Chapter four of this study focuses on the research methodology and justification for selecting the methodology used.

CHAPTER 4: RESEARCH METHODOLOGY

4. Introduction

The previous chapter discussed ERM and sustainability in the context of Botswana. This chapter discusses the research methodology that informs the study. In addition, the chapter explains how the study was conducted and other informed decisions underpinning the study. This chapter is organised according to the following main sections: research philosophy; research approach; research strategy; research methods and design; quantitative data collection phase; qualitative data collection phase; integration of results and ethical considerations. The next section focuses on research philosophy which provides the paradigm and the Meta-theoretic assumptions underpinning this study.

4.1 Research philosophy

This section discusses the philosophies which were adopted in this financial accounting, management accounting and finance research. Philosophies are basic beliefs or worldviews that guide the study and influence the choices of methods used in a study (Lor, 2011:4). Lor (2011:5) refers to a paradigm in social and organisational theory as the philosophical view on how to position a research. According to Creswell and Plano Clark (2011:119) philosophical assumptions assist in articulating the basis and foundation of a research. Creswell and Plano Clark (2011:119) argue that paradigms (worldviews) shape the development of a research. An understanding of different paradigms helps the study in answering research questions and resolving a research problem. A pragmatic philosophy was used to integrate the findings of this study. Therefore, this study adopted four philosophical assumptions as part of answering the research question and resolving the research problem (See Table 4.1).

Table 4.1: Four levels for developing a research study

Paradigm worldview (Beliefs, for example epistemology & ontology)
Theoretical lens (for example, feminist, racial, social science theories & systems approach)
Methodological approach (for example, ethnography, experiment & mixed methods)
Methods of data collection (for example, interviews, checklists & instruments)

Source: Adapted from Crotty, (1998:88)

According to Crotty (1998:88) there are four major elements of developing and designing a research study, which include: paradigm (worldview), theoretical lens; methodological approach and methods of data collection (See Table 4.1). This study falls under the positivism paradigm and the interpretivism paradigm as explained in sections 4.1.1 and 4.1.2.

4.1.1 Positivism

This study falls under the positivism paradigm which is based on a philosophical approach known as logical positivism. The positivist approach underlines the natural - scientific method in human behavioural research and holds that research must be limited to what human beings may observe and measure objectively (Ryan *et al.*, 2002:36). In the natural - scientific method the study strives to formulate laws that apply to populations that are universally valid and that explain the causes of objectively observable and measurable behaviours (Morgan & Smircich, 1980:493). More than three decades ago, Hopper and Powell (1985:432) argued that the term 'objective' in the research context implies that people other than the investigator should agree on what is being observed, such as the score that the observation should register on a measuring instrument. Therefore, positivism is derived from the natural science and is characterised by the testing of meaning variance hypothesis developed from existing theory using a measurement of observable social realities (Ryan *et al.*, 2002:37).

4.1.2 Interpretivism

This study again falls under an interpretivism paradigm which is the opposite of positivism and is also known as constructivism. In interpretivism, the social world is not a given and it is produced and reinforced through human actions and interpretations of social actors (Ryan *et al.*, 2002:36). Northcutt and McCoy (2004:7) state that the paradigm involves interpretations of reality, changes with time, circumstances, objectives and constituencies. It also involves getting inside the world of those generating the social process and the models are not unidirectional, but are circular or reciprocally interacting models of causality (Northcutt & McCoy, 2004:7). Interpretivism is about understanding how people with commonalities think and feel on a given phenomenon (Northcutt & McCoy, 2004:7). Positivism paradigm may not provide enough solutions on its own hence the need for a combination of two paradigms. Therefore, this study combines the two paradigms, positivism and interpretivism, in order to balance between the objectivity and subjectivity of the worldviews of accounting, management accounting and finance research (See Figure 4.1).

This study adopted pragmatism as the suitable paradigm (worldview) for mixed methods as there is a gap in the finance and accounting mainstream where many researchers believed positivism as the suitable paradigm for finance and accounting research. Selecting mixed methods for this accounting and finance research contributed to the body of knowledge by bringing in new insights into the accounting and finance research environment as this is still a contested paradigm. This section discusses the philosophical foundation of this research and the next section focuses on the

research approach suitable to address the problem of business continuity in micro-lending companies in Botswana.

4.2 Research Approach

Many research problems are complex in nature and they need both quantitative and qualitative dimensions in order to fully address them (Creswell & Plano Clark, 2011:64; Leedy & Ormrod, 2016:329). The problems for performance, growth and competitiveness in micro-lending companies in Botswana are suitable for both quantitative and qualitative data hence this study utilises a mixed methods research. Mixed methods research involves collecting, analysing, interpreting of both quantitative and qualitative data as well as integrating conclusions derived from this data that creates a cohesive account of the research problem pursued in this study (Leedy & Ormrod, 2016:329).

The philosophical stance for using two or multiphase iterative designs is supported by Creswell and Plano Clark (2011:214) as it is believed that a single approach may not be adequate to understand the reality and develop knowledge on micro-lending enterprises in Botswana. Teddlie and Tashakkori (2009:23) argue that more emphasis and importance is given to a research question rather than the method and philosophical worldviews that underline both positivism and interpretivism approaches which can be used in a single study. According to Greene (2007:29) pragmatic assumptions support and value what works to address the research problem and sub-research problems from an epistemological point of view. (Bryman, 2006:107; Greene, 2007:29; Teddlie & Tashakkori, 2009:23) argue that pragmatism supports both inductive and deductive reasoning as part of answering the research questions. A mixed method allows the research to interact with the participants and places importance on the researcher's value system when undertaking the study. The research problem and sub-problems in this study allowed an adoption of a mixed methods design due to the fact that the research questions are suitable for both quantitative and qualitative paradigms. The next section discusses the research strategy.

4.3 Research Strategy

Case study research strategy has been commonly accepted in the accounting and management accounting research but rarely common in finance research environment (Miller & O'Leary, 1987:235). Accounting and management accounting literature has shown that case studies are popularly gaining acceptance in the accounting research as appropriate methods (Ryan *et al.*, 2002:75). The challenges for case study research in accounting are on what constitutes accounting case study and how appropriately it can be used beyond other research methods. According to Ryan *et al.* (2002:142) case study and fieldwork in accounting research refer to the practical setting in an accounting environment. A case study simply means a single unit of analysis, for example it might be a micro-lending company or another form of organisation that could be aggregated to make a unit of analysis. A case study provides an understanding of the nature of accounting in

practice in relation to techniques, procedures and systems on how they are used in this profession of accounting and finance.

4.3.1 Justification of explanatory case study

Ryan *et al.* (2002:144) argue that explanatory case study's main objective is to explain the reasons of the observable accounting practices and systems. Explanatory case study research focuses on a specific case (Creswell & Plano Clark, 2011:228; Leedy & Ormrod, 2016:331; Plano Clark & Ivankova, 2016:97). Explanatory case studies use theory to explain specific problems rather than produce generalisations (Leedy & Ormrod, 2016:331). In this explanatory case study, the investigator used a theory in order to provide explanations of the observed accounting practices and systems. However, there was room to modify theories if they failed to provide lucid explanations. Furthermore, new theories were developed which might be used in other case studies. The main thrust for explanatory case study was to generate theories and frameworks which provide good explanations about the case.

It was difficult to find a clear-cut on the distinctions between these types of case studies. The use of each of the case studies depends on the nature of the research and the methodology employed by an investigator. This study used an explanatory case study which allowed the researcher to gain a deep understanding in studying a phenomenon using multiple sources of evidence (Yin, 2011:20). The explanatory case study was suitable for this research as it addressed the research problem and answering research questions focused on implementation of ERM and sustainability framework in micro-lending companies in Botswana. The explanatory case study used in this research strengthened the use of multiple data sources as part of triangulation (Myers, 2009:56). Furthermore, the explanatory case study provided the researcher with an opportunity to validate the adoption of the ERM and sustainability framework for assisting micro-lending companies about the phenomenon underpinning this study. Explanatory case study was important to this research as it allowed a two-stage phase as follows: phase 1 producing quantitative results and phase 2 producing qualitative interview results (See Figure 4.1).

4.3.2 Justification of number of case studies

Swanson and Rinehart (2016:98) argue that there is no simple answer as to the number of cases sufficient for multiple case studies as this varies with the nature of the research questions and purpose of the research. (Leedy & Ormrod, 2016:331; Yin, 2011:21) suggest that there are five common types of mixed-methods design; convergent design, embedded design, exploratory design, explanatory design and multiphase iterative design. The following is a brief discussion of the explanatory design that was used in this study based on the works of Leedy and Ormrod (2016:331).

Explanatory designs

Leedy and Ormrod (2016:331) argue that explanatory design uses two phase - process whereby the quantitative phase comes first as phase 1. Quantitative phase 1 focuses on collecting a considerable amount of quantitative data in an experiment, ex post facto study or survey. The quantitative phase 1 stage yields statistical numbers such as percentages, mean, variances and standard deviations. A qualitative phase 2 stage is involved in collecting qualitative data as a follow - up of asking a sub - sample of quantitative phase 1 participants to describe perceptions, opinions, reality and truth about their experiences and feelings during the experimental study in quantitative phase 1. The qualitative approach gives the investigator an opportunity of greater substance and meaning towards the numbers collected during quantitative phase 1. This study adopted an explanatory design (See Section 4.4.4).

4.4. Research methods

According to Ryan *et al.* (2002:154) the most common categories of research methods in accounting and finance are quantitative and qualitative. (Otley & Berry, 1994:45; Ryan *et al.*, 2002:75; Spicer, 1992:2) argue that accounting and finance research mainstream borrows research methods from economics, especially the quantitative methods (questionnaires / surveys). In accounting and finance research fewer accounting researchers, scholars and practitioners use qualitative methods hence literature in the qualitative domain is limited. This is a gap that the investigator sought to close through utilising quantitative and qualitative methods in this accounting and finance research.

The quantitative method was used to collect data on a large sample and the qualitative method was then suitable in investigating the participants' perceptions, reality, truth and feelings on the social phenomenon by using the interviews. The adoption of the mixed methods in this study was to address the weaknesses that are inherently found in both quantitative and qualitative methods. A mixed methods research helped to design a focused inquiry about the phenomenon under investigation that would not have been possible in a single method. (Anderson & Widener, 2006:142; Atkinson & Shaffir, 1998:67; Lachmann, Trapp, & Trapp, 2017:43) argue that a mixed method provides a deeper understanding about the phenomenon under discussion and in this case the going concern problems in micro-lending businesses in Botswana.

4.4.1 Mixed methods research design

The researcher adopted a mixed methods as a suitable design for this study because it yielded holistic and richer findings to the complex adoption of a framework in micro-lending companies in Botswana. Mixed methods helped the researcher not to depend on a single method of design in understanding ERM and sustainability adoption in micro-lending businesses. Furthermore, mixed methods helped in validating the results of the ERM and sustainability framework.

The research question and objectives of this study contributed to the selection of the research method. Onwuegbuzie and Leech (2006:474) define mixed methods as involving the collecting, analysing, mixing, interpreting and integrating of quantitative and qualitative data to better understand the underlying research problem. The mixing happens in different stages of the study such as design, data collection and analysis stages which are regarded as the core aspects of mixed research methods (Wiggins, Hughes, Rodriguez, Potter, & Rios-Campos, 2013:279). Romm and Ngulube (2014:158) state that mixed methods take into account different ontological, epistemological, doxological and stating points that direct inquiries about the phenomenon under investigation (scientific inquiry). Teddlie and Tashakkori (2009:22) suggest that there is a third distinct research paradigm which underpins the mixed methods research. Teddlie and Tashakkori (2009:22) link this with a pragmatic paradigm which is able to mix across different philosophical positions. Cameron (2009:145) argues that the proponents of pragmatic paradigm do not identify the “purists” as they feel they have a false dichotomy between quantitative and qualitative research paradigms. According to Creswell and Plano Clark (2011:119) mixed methods which is part of the methodological pluralism incorporates both the positivism and interpretivism epistemologies in a single scientific study of inquiry. Mixed methods in this study was employed through promoting methodological diversity in accounting and finance scientific research inquiry.

4.4.2 Mixed methods research rationale and strengths

Greene, Caracelli, & Graham (1989:196) argue that it is imperative to have a rationale that supports the mixing of quantitative and qualitative methods in one study since one method is not sufficient to capture the trends and details of the situation under investigation. It is believed that when both quantitative and qualitative methods complement one another as they allow a robust analysis by tapping into strengths of each other (Caracelli & Greene, 1993:195; Greene, 2007:29; Miles, Huberman, & Saldaña, 2014:3; Teddlie & Tashakkori, 2009:22). The following Table 4.2 shows the strengths for mixing both quantitative and qualitative in a single study (Leedy & Ormrod, 2016:330).

Table 4.2: Strengths in mixing both quantitative and qualitative methods in a single study

	Reasons / strengths	Description
1	Completeness	A researcher can fully address a research problem and its sub - problems only by collecting, analysing and interpreting both quantitative and qualitative data.
2	Complementarity	Quantitative aspects of the study can compensate for weaknesses in qualitative research and vice - versa.
3	Hypothesis generation and testing	Qualitative data often provide insights that help a researcher in forming hypotheses about the cause and effect relationships - hypotheses that the researcher can subsequently rest through controlled, quantitative research.
4	Development of appropriate research tools and strategies	One type of data can inform and guide subsequent collection of another type of data. For example, unstructured interviews that yield

		qualitative data can guide and inform the construction of appropriate questions for a survey which will yield quantitative data.
5	Resolution of puzzling findings	In quantitative study, various results can sometimes seem inconsistent or contradictory and qualitative data can assist in revealing underlying nuances and meanings that can help the researcher make sense of the numbers.
6	Triangulation	A researcher can make a more convincing case for particular conclusions if both quantitative and qualitative data lead to those conclusions.

Source: Own source

4.4.3 Sequential explanatory mixed methods design

There are four main approaches to research namely quantitative research, qualitative research, mixed methods, and advocacy/participatory approach to research (emancipatory) approach (Welman *et al.*, 2005:8). This research employed a mixed methods research approach, a combination of both the quantitative and qualitative, that enhanced the validity of this research (Plano Clark & Ivankova, 2016:97). Use of the mixed method approach allowed the researcher to gain a deeper and broader understanding of a phenomenon underpinning the study (Plano Clark & Ivankova, 2016:98), as well as improved the quality of research output.

This study used a sequential explanatory design (Plano Clark & Ivankova, 2016:98). Creswell and Plano Clark (2011:119) postulate that in a sequential explanatory design data is collected sequentially in different stages that is quantitative followed by qualitative (Quan - qual). Sequential explanatory design was referred to as a two-phase design (Leedy & Ormrod, 2016:330). This study first collected quantitative data and later qualitative data in order to further verify and authenticate the quantitative data. The overall picture of the research problem provided detailed and comprehensive quantitative data while the qualitative data provided the refinement, extension and further explanation of the general picture of the study. A typical example of an explanatory sequential design is shown on Figure 4.1.

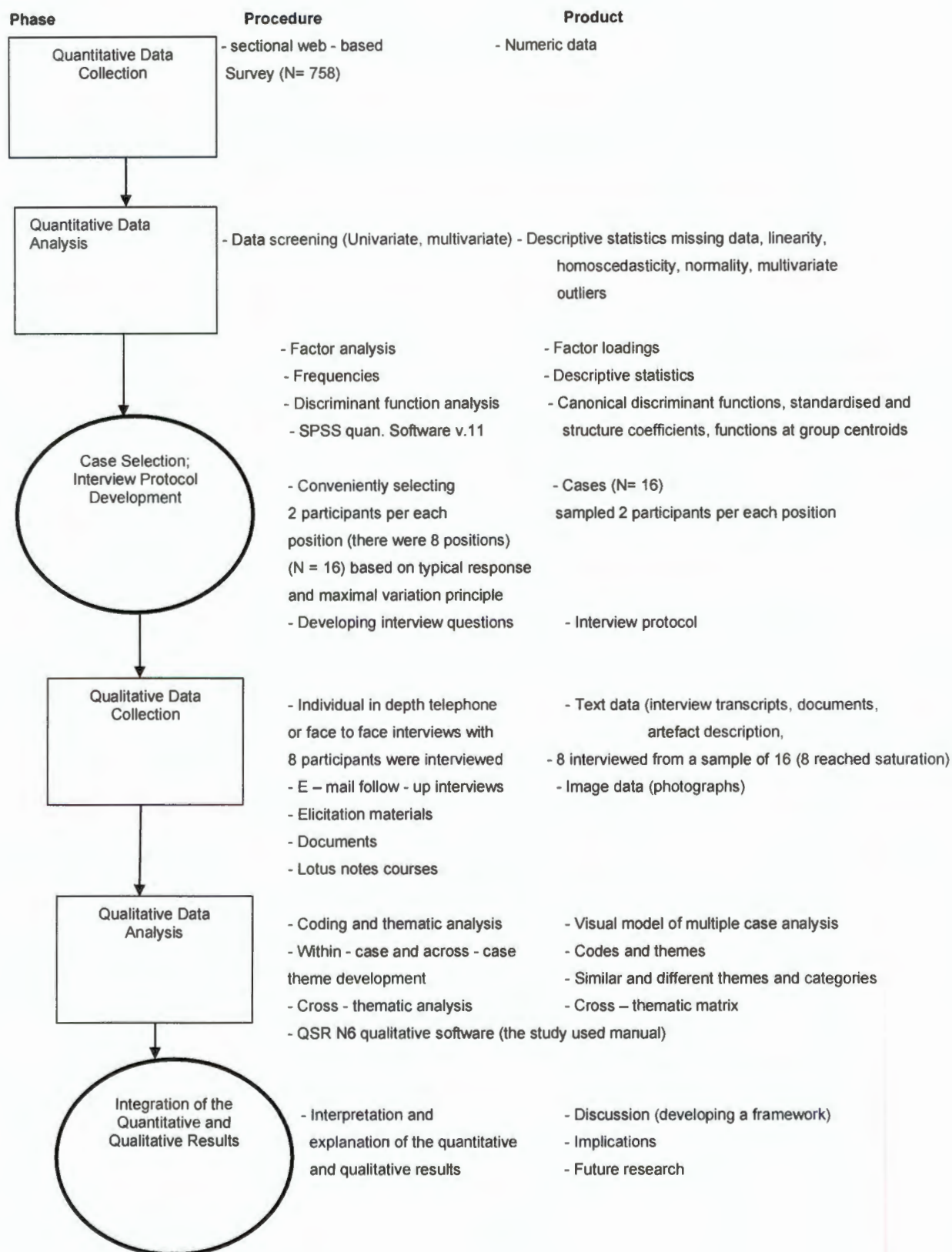


Figure 4.1: Typical Sequential explanatory design

Source: Adapted from Creswell & Plano, (2011: 121).

The advantage of using sequential explanatory design was that it captured the best of both quantitative and qualitative data hence the study collected data from a population through quantitative approaches in the first phase and an in-depth qualitative data collection was then followed in the second phase. In this study 758 open-ended questionnaires were distributed to selected micro-lenders that were registered and regulated by NBFIRA, and then after collecting quantitative data, face-to-face interviews (qualitative methods) were conducted on 8 selected participants who previously participated in the first phase (quantitative methods).

4.5 Quantitative data collection phase 1

In the reporting period 2016 and 2017 approximately 223 micro-lending were registered with NBFIRA in Botswana. NBFIRA (2014) statistics on the website show that micro-lending enterprises in Botswana are unevenly spread within the country. It was not feasible to conduct employee survey for all the 223 micro-lending companies (employing approximately 3,791 employees) and the study used two categories of employees working in the micro-lending companies, according to compliant and non-compliant in respect of size; compliance / regulatory; awareness to ERM systems; financial reporting; corporate governance and internal controls. The micro-lending companies are all registered with NBFIRA but excludes those listed company at the Botswana Stock Exchange (BSE) since this study focuses on SMMEs. This approach for eliminating non-homogenous items from the entire population was adopted from the works of Sheedy and Griffin (2017:4) a study that focused on risk governance in the financial institutions. Names of registered micro-lenders and their employees were treated as anonymous because this study adopted a coding system to represent the name of each employee and the owners (proprietors). The following are the key for codes used to represent each participant throughout this study.

Table 4.3: Key for codes

Category	Code: or coding
Compliant - employees	EMC
Non - compliant employees	EMNC
Non - compliant proprietors	PRNC

Source: Own source

The coding system represents the participant in the following categories: compliant-employees category ranging from: EMC01 - EMC0236; non-compliant category ranging from: EMNC01 - EMNC0339 and non-compliant category ranging from: PRNC01 - PRNC0183. The study coded the questionnaires in advance before they were distributed to the participants for easy reconciliation of total questionnaires sent to participants.

4.5.1 Analysis of sample size used for this study

The following Table 4.3 shows the sample and the coding system based on the range of each category of participants. The sample size for this study was determined based on the guidelines provided in Leedy and Ormrod (2016:184). In Leedy and Ormrod (2016:184) the researchers provided a practical application for identifying a sufficient sample size. The guidelines for selecting a sample size, referred by a symbol “N” (Leedy & Ormrod, 2016:184) are as follows:

- For smaller populations for example N = 100 or fewer, there is little point in sampling: it would be appropriate to consider the entire population.
- If the population size is around 500 (give or take 100) 50% should be sampled.
- If the population size is around 1,500.00, 20% should be sampled.
- Beyond a certain point (about N = 5000), the population size is almost irrelevant and sample size of 400 may be adequate.

Finally, the larger the population, the smaller the percentage and it is important to get a true representation of the population. Therefore, the study used the same guidelines to obtain a sufficient sample size (See calculations below). The study considered the point above where the population size is around 1,500.00, and the recommended 20% should be sampled. Therefore, the study used a population of approximately 3,791 employees, which includes proprietors that are employed in their own businesses. The study used a sample size of 758 employees, including proprietors working in the micro-lending sector ($3791 \times 20\% = 758$).

4.5.2 Sampling technique for phase 1 (quantitative research)

This study followed an explanatory sequential design. Plano Clark and Ivankova (2016:98) state that a stratified random sampling is used if the population is divided into segments called *strata*. The population N = 3791 in this study for micro-lenders which represents an approximate number of employees and proprietors working in micro-lending companies, has been divided into strata in relation to compliant and non-compliant with the regulator (See Table 4.4). A quantitative approach was used in the first stage (phase 1) of this study. According to Dawson (2009:9) the use of a stratified sampling technique provides more precision than simple random samples of the same size. In this case of micro-lending sector, the precision gains were much greater. Stratification technique was used for employees and proprietors working in micro-lending companies registered with NBFIRA (See Table 4.4).

Table 4.4: Sample size according to strata, segment or group

Category	Code	Sample size (n)
Compliant employees	EMC	236
Non-compliant employees	EMNC	339
Non-compliant proprietors	PRNC	183

Total		758
-------	--	-----

Source: Own source

4.5.3 Research instrument

The study developed and designed two (2) questionnaires with the help of a statistician from North West University, Potchefstroom Campus. The first questionnaire (Annexure A) was distributed to proprietors or Chief Executive Officers (CEOs) who represented the owners of the business. The second questionnaire (Annexure A1) was distributed to employees working in micro-lending sector. The questionnaires (Annexure A and A1) contained instructions and important definition of ERM. The two questionnaires were divided into sections and from section one to four of the two instruments, the questions are similar. The research instrument (Annexure A) contains five (5) sections whilst research instrument (Annexure A1) contains section one (1) to section four (4) only. The research instrument (Annexure A) includes section five (5) that focuses on the critical success factors which influenced proprietors to start up a micro-lending company. The study used a sequential explanatory research design and adopted modified questions which were already tested before in other scientific studies. The questions were aligned with the research problem and research questions for this study.

The questions which were crafted and modified in both instruments were adopted from the scholars such as (Florio & Leoni, 2017:61; Gagoitseope & Pansiri, 2012:56; Hoyt & Liebenberg, 2011:803; Pansiri & Temtime, 2008:255; Pansiri & Temtime, 2010:52; Sheedy & Griffin, 2017:7; Swamy, 2011:39; Temtime & Pansiri, 2004:20; Yang, Shen, Ho, Drew, & Chan, 2009:341; Yazdanparas & Alhenawi, 2017:58; Young, 2009:B1-388).

The following were the sections covered in both research instruments: section one focuses on the respondent’s demographic information; section two focuses on sources of business for micro-lending company, challenges / constraints faced by micro lending company; section three focuses on approach for micro-lending company towards ERM; section four asks respondents on corporate governance and firm performance and section five targeted the proprietor and asked respondents about the critical success factors that influence them to develop or own a micro-lending company in Botswana.

4.5.4 Reliability tests

The study used statistics such as *t*-tests and Analysis of Variance (*Anova*) to detect the differences between or among groups (See Chapter 5, Section 5.4.1). In addition, the study used questions and frameworks from literature review to construct the questionnaire (See Annexure A and Annexure A1) for the quantitative phase 1. A five-point Likert - scale was used to develop the questionnaire with the following ranges: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree

and 5 = strongly agree. The study provided instructions to the participants of each stratum on specific sections to answer in the questionnaire during the survey. The questionnaire was pre-tested (piloted) among few participants working in the micro-lending companies in Botswana to check for effectiveness and efficiency of the instrument before the main data collection. The pilot study consisted of 30 participants, representing both employees and proprietors so as to refine questions based on the feedback (See Annexure A and A1 - paragraph for *the reliability of the questionnaire*).

The participants involved in the pilot studies were not part of the main survey in order to avoid repetition of findings. The study used Cronbach's alpha values which tested constructs (themes) for acceptable reliability. The researcher dropped unreliable variables before computing scores of acceptable constructs. Scholars such as (Cortina, 1993:99; Nunnally, 1978:26; Vaske, Beaman, & Sponarski, 2017: 165) argue that an instrument is reliable if it is consistent each time it is used to measure the same subject under the same conditions. Acceptable reliability Cronbach alpha values are between 0.6 to 0.8 and unacceptable when it is below 0.6. However, scholars such as (Cortina, 1993:99; Nunnally, 1978:26; Vaske *et al.*, 2017:165) recommended 0.6 as acceptable reliability. The Cronbach alpha values for this study were between 0.6 to 0.9 hence met acceptable thresholds.

4.5.5 Quantitative data analysis

The quantitative data was analysed using the Statistical Package for Social Sciences (SPSS) computer software. The following Table 4.5 shows a reconciliation of the questionnaires distributed to the participants and those received from all the respondents.

Table 4.5: Reconciliation between sample size (n) and questionnaires received

Category	Code and range	Sample size (n)	Questionnaires received	Questionnaires not received and spoiled	% of response rate
Compliant - employees	EMC01 – EMCO236	236	208	28	88%
Non-compliant employees	EMNC01 – EMNC0339	339	298	41	87%
Non-compliant proprietors	PRNC01 – PRNC0183	183	161	22	87%
Total		758	667	91	87%

Source: Own source

The response rate of 87% is acceptable for a study of this nature. Therefore, descriptive statistics such as frequency tables, standard deviations and correlations were generated in order to provide summarised data for trends and patterns (Teddlie & Tashakkori, 2009:22). Variable relationships

within groups were described using summary of indicators from numeric data obtained from descriptive statistics. However, inferential statistics methods were used to enhance descriptive statistics about the sample data (Teddle & Tashakkori, 2009:22). Teddle and Tashakkori (2009:22) argue that inferential statistics are used to confirm or disconfirm descriptive findings between groups and relationships between variables. The study used inferential statistics for the testing of group means, relationships between variables and estimating the degree of error in inferences (Teddle & Tashakkori, 2009:23). Teddle and Tashakkori (2009:22) postulate that significant tests through group means and multiple regression analysis help in determining the degree of relationships between variables.

The study used a univariate to test the dependent variables in order to answer part of the research question. The study also tested the relationship between predicted (dependent) variables before the univariate statistics through the use of multivariate statistics. Correlations were conducted on ERM processes being the dependent variable and other constructs as independent variables. In addition, analytical tools such as mean, variance, standard deviation and correlations were employed in the analysis of data.



4.6 Qualitative data collection phase 2

Qualitative data collection phase 2 was conducted after the quantitative data collection phase 1 (Leedy & Ormrod, 2016:331). The qualitative phase 2 of this study used a convenient sampling strategy to select a sample of sixteen (16) participants, where two (2) representatives from each of the stratum was chosen based on their positions. The sample size of 16 participants included those respondents who participated in the first stage of quantitative phase. In this qualitative research, the objective was to develop an in-depth explanation of central phenomenon, based on the participants' perceptions and opinions (Creswell & Plano Clark, 2011:119). Semi-structured questions based on the results of the first stage of quantitative (phase 1) were used during the face-to-face interviews. In addition, the interviews were tape-recorded in order to enhance the effectiveness of the qualitative data collection method. According to (Yin, 2011:20) qualitative approach affords the opportunity to study human beings under real-life situations in relation to the world's conditions about a phenomenon.

Semi-structured questions were used in the study as they allowed participants to share their views, feelings, perceptions and opinions on the subject under investigation. The benefit of qualitative research was that it provided an opportunity to understand the participants' different perceptions, views and feelings towards an adoption of an ERM and sustainability framework. (Creswell & Plano Clark, 2011:119; Northcutt & McCoy, 2004:210) argue that qualitative research reveals participants' perspectives and views, and not the researcher's biased meaning of a phenomenon. In addition, qualitative research involves sources of evidence from participants, data analysis and interpretation of data (Creswell & Plano Clark, 2011:120). The qualitative research was used to

effectively interpret and analyse the context in which people's lives take place hence influence human events. The objective of this second phase of qualitative data collection was to develop concepts which explain a social process through interpretations.

The qualitative research addressed the complexity of ERM and sustainability framework adoption decision-making in micro-lending companies and the diversity of participants by using multiple sources of evidence, thus triangulation enhanced credibility and trust-worthiness of the research (Creswell & Plano Clark, 2011:123). This qualitative research provided participants with an opportunity to describe their real-life experiences; articulate perceived relationship among these experiences; produce a conceptual map which represent how they understand an adoption of ERM and sustainability framework.

4.6.1 Sampling techniques for phase 2 (qualitative research)

The participants in the second qualitative phase were selected based on equal representation of each stratum. In addition, results from the first quantitative phase were considered in generating the themes. The participants for the qualitative phase were drawn from diverse demographics such as gender, education, department and position. A convenient sampling strategy was used in selecting respondents using a convenient sampling technique. The convenient sampling technique provided valuable information related to the research questions. The relationship between quantitative research phase 1 and qualitative research phase 2 was determined using the results from the quantitative data analysis phase 1. The objective of qualitative data collection phase 2 was to explain significant findings from quantitative data analysis phase 2. The significant variables from the quantitative analysis were used to design interview guides (See Annexure B and Annexure B1). Questions from the interview schedules (Annexure B and Annexure B1) were used to answer inconclusive findings which resulted from the quantitative phase 1. The study targeted to interview a sample of sixteen (16) participants for the follow up of quantitative phase 1. Therefore, the face-to-face interviews assisted in getting more insights and deeper understanding from the participants on differences in the construct's variables.

4.6.2 Interview schedules

The study developed two (2) interview schedules as follows: interview schedule for proprietors (See Annexure B) and another for employees (See Annexure B1). The two interview schedules both included section one to section four; however, the interview schedule for proprietors has an extra Section five, which focuses on the perceptions of the owners or senior management of micro-lending companies.

The sections one to four were answered with both participants (employees and proprietors) as there were similarities and commonalities within these questions. However, section five was

answered by proprietors only because of the relevance and nature appropriate for the business owners.

4.6.3 Qualitative interviews

The research problem and objectives of the study influenced the choices of data collection techniques. Yin (2011:20) argues that the use of many sources of evidence complement each other in a single case study. In this study face-to-face interviews targeted a sample size of sixteen (16) participants drawn from different positions and semi-structured questions were used (Creswell & Plano Clark, 2011:119). The sample size of 16 participants for the qualitative approach was used until the researcher reached saturation level (this is the level where no new themes were recorded from the participants). In this study saturation level was reached after interviewing the first group / set of interviewers (selected by relevant positions). The investigator interviewed first set of 8 participants from the targeted sample of 16 participants and the interviewees continued to repeat the same themes without any new themes during the interview process (therefore, saturation was reached). The following Table 4.6 shows the demographics for 8 participants who were interviewed.

Table 4.6: Demographics for participants who were interviewed

FLO01	Employee	Female	19	Certificate BGSCE	Front Line Officer (FLO)	1	Full-time	Motswana	1
RM01	Employee	Female	25	Professional Certificate	Risk Manager (RM)	2	Part-time	Other	1
OM01	Employee	Male	49	Bachelor's degree	Operations Manager (OM)	2	Full-time	Motswana	1
ACC01	Employee	Female	35	Professional Certificate	Accountant (ACC)	2	Part-time	Zimbabwean	1
HRM01	Employee	Female	20	Professional - Certificate	Human Resources Manager (HRM)	1	Part-time	Motswana	1
LO01	Employee	Female	22	Professional Diploma	Loans Officer (LO)	1	Full-time	Motswana	1
CEO01	Proprietor	Male	48	Professional Certificate	CEO - Proprietor (CEO)	2	Full-time	Motswana	1
BM01	Proprietor	Male	26	Honours' Degree	Board Member (BM)	2	Full-time	Motswana	1

Total									8

Source: Own source

Face-to-face interviews were flexible as good rapport with participants was maintained in relation to the adoption of ERM and sustainability framework. A semi-structured qualitative interview was suitable in this accounting and finance case study research as it strengthened the gathering of data from diverse participants (Myers, 2009:10). Enterprise Risk Management and sustainability framework adoption decision making were complex and required an environment where participants spoke freely about the phenomenon under investigation. Face-to-face interviews were carried out on the adoption of ERM and sustainability framework on the following group of participants: front line officer; loans officer; operations manager; human resources manager; accountant; risk manager; CEO / proprietor and board member (See Table 4.7). The study adopted a coding system of names and positions as already indicated to maintain anonymity.

Table 4.7: Coding system for interviewees (participants)

	Position	Coding system
1	Front Line Officer (FLO)	FLO01
2	Risk Manager (RM)	RM01
3	Operations Manager (OM)	OM01
4	Accountant (ACC)	ACC01
5	Human Resources Manager (HRM)	HRM01
6	Loans Officer (LO)	LO01
7	CEO - Proprietor (CEO)	CEO01
8	Board Member (BM)	BM01
Total	8	8

Source: Own source

The participants were asked to sign consent form before the actual interview process (See Annexure D). The study used interview schedules (See Annexure B and B1) during the interview process. A pre-test of interview schedules was conducted on two (2) respondents in order to identify potential problems and established possible solutions prior to data collection. According to (Park, Sha, & Pan, 2014:646; Willis, 2015:362) pre-test in qualitative research establishes how participants understand the questions asked, consistency in the way questions are asked, that the questions are understood the same way, that the participants answer the questions, the questions asked are in line with what the researcher intended to ask and all participants understand the terminology. The results for the pre-test were used in the final analysis in order to avoid

duplication. There are many techniques used for pre-testing research instruments such as literature review; focus groups; expert review, interviewer debriefing; observational interviews behaviour coding and cognitive interviews (Rothgeb, Willis, & Forsyth, 2007:6). The circumstances for pre-test should be similar to the actual process of data collection. This study used an expert review for pre-testing the interview schedules.

In addition, the actual interviews were tape recorded to retain the exact words from each participant. Supplementary notes were taken during the face-to-face interview process. The audio recorded qualitative data were transcribed into narrative text data and then processed. The text data for the qualitative analysis was then coded, and themes were developed using manual approach and literature review. The following Figure 4.2 illustrates the steps for thematic analysis which was adopted in this inductive approach based on the suggestions of Braun, Clarke, & Terry (2014:114).

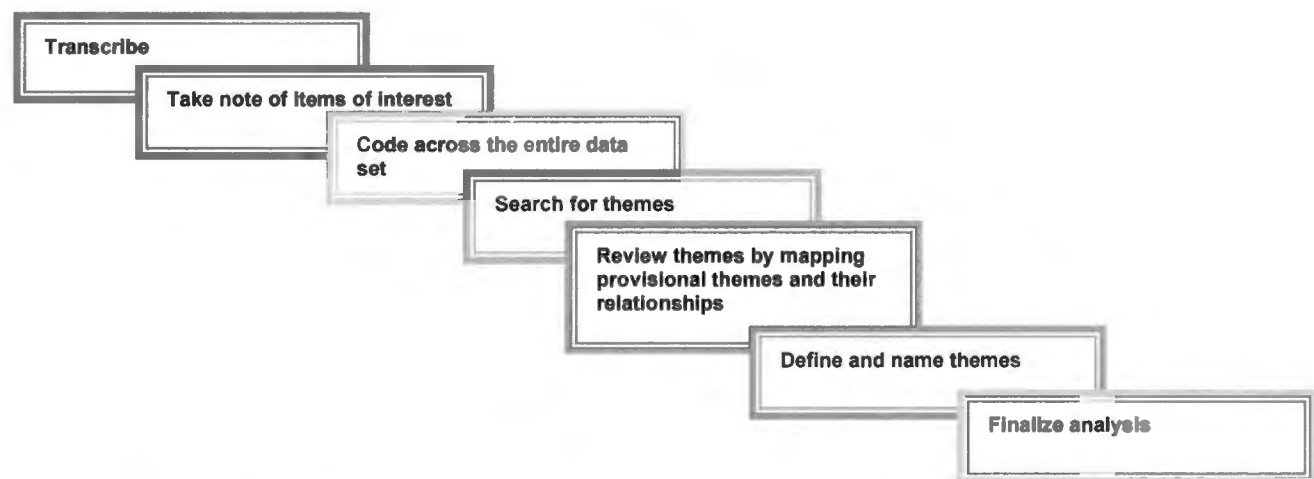


Figure 4.2: Steps in thematic analysis

Source: Adapted from Braun and Clarke, (2013:175)

The steps in Figure 4.2 were adopted in this study and are detailed in Chapter 6 section 6.5.

4.6.4 Qualitative data analysis

Themes were derived from the research objectives and research questions based on the participants’ perceptions and views towards an adoption of ERM and sustainability framework in micro-lending companies. Many scholars such as (Dwulit, 2017:199; Halverson, Graham, Spring, Drysdale, & Henrie, 2014:21) concur that thematic analysis allows for the examination of different topics, participants’ voices and provides verbatim and quotations extracted from the data. Thematic analysis was essential for enhancing reliability of data and achieving an in-depth understanding of the phenomenon under discussion. An inductive approach was used in identifying themes and

patterns of meaning across the qualitative data collected. Corden and Sainsbury (2006:98) argue that verbatim quotations eliminate risk of fabricating findings. Practical interviews were used in the presentation in Chapter 6 of this study.

4.6.5 Qualitative data validation

Yin (2011:20) argues that reviewing critically other researchers' work enhances transparency, trustworthiness and credibility of the study. Therefore, the study achieved validity through triangulation, checking participants' inquiries, eliminating bias and spending time in the field. The use of various research strategies in this study yielded rich descriptions which reflected reality and truth about the phenomenon underpinning this thesis (Corden & Sainsbury, 2006:98). In a qualitative research the traditional notions of validity and reliability do not apply in this nature of study and the alternative to this is the set of criteria linked to the rigour of the study (Locke, 2000:59). Therefore, the most important aspects in a qualitative research is ensuring trustworthiness, data integrity, accuracy and credibility of qualitative results. The study met and satisfied the criterion which includes: credibility, transferability, dependability and confirmability through the use of the guidelines shown in Table 4.8 below, based on the works of Lincoln and Guba (1985), cited in (Locke, 2000:59).

Table 4.8: Techniques to ensure the trustworthiness of qualitative research

Traditional criteria	Trustworthiness criteria	Methods of meeting trustworthiness criteria
Internal validity	Credibility	✓ Extended engagement in the field ✓ Triangulation of data types ✓ Peer debriefing ✓ Member checks
External validity	Transferability	Detailed (thick) description of: ✓ Concepts and categories in the grounded theory ✓ Structures and processes related to processes revealed in the data
Reliability	Dependability	✓ Purposive and theoretical sampling ✓ Informants' confidentiality protected ✓ Inquiry audit of data collection, management and analysis processes
Objectivity	Confirmability	Explicit separation of 1 st order and 2 nd order findings Meticulous data management and recording: Verbatim transcription of interviews: ✓ Careful notes of observations ✓ Clear notes on theoretical and methodological decisions ✓ Accurate records of contacts and interviews

Source: Lincoln and Guba, (1985, cited in Locke, 2001:59)

The following is a summary of the criterion shown in Table 4.8: *credibility*: adoption of appropriate, well recognised research methods;

- *transferability*: provision of background data to establish context of study and detailed description of phenomenon in question to allow comparisons to be made (degree to which findings are applicable / transferable)
- *data integrity and accuracy*: this means that the data reflects reality thus replicability (ability of another independent researcher to reach the researcher's conclusions);
- *dependability*: employment of "overlapping methods" (ability of findings to be repeated if inquiry is replicated under the same conditions) and
- *confirmability*: triangulation to reduce effect of investigator bias.

In order to make valid conclusions based on the participants' findings, other researchers' results that were similar and dissimilar to this present study were considered. The use of other independent researchers' work assisted the researcher to achieve internal validity of this research. The present study used participants' actual language (words) to describe events. (Saunders, Lewis, & Thornhill, 2003:76; Yin 2011:20) argue that researchers should be methodical when conducting a research in order to allow for completeness, cross-checking research procedures and data validation. Multiple perspectives were used in strengthening the research results and making valid conclusions. The research utilised multiple data sources to increase construct validity (Yin, 2011:20). Finally, internal validity was addressed through rival explanation, pattern matching and explanation building. Analytical generalisations were suitable for generalising this qualitative research on concepts and theoretical constructs similar to other situations (Myers, 2009:10; Yin, 2011:20).

4.7 Integration of results

According to Venkatesh, Brown, & Bala (2013:23) meta-inferences refer to the integration of quantitative and qualitative results. Meta-inferences in this study allowed comparison of quantitative and qualitative analysis for rich insights into the findings about the phenomenon (ERM and sustainability framework) on decision making in micro-lending companies.

4.8 Ethical considerations

According to Robben and Sluka (2012:46) a researcher must not plagiarise, fabricate or provide false evidence, or knowingly misrepresent information or sources. Ethical principles were observed and respected throughout this study. The researcher obtained participants' consent to participate in this study (See Annexure D). Individual interviews were conducted on a face-to-face basis between the researcher and each interviewee, and information was kept confidential. No information was divulged to third parties as this would be infringement of the participants' rights to privacy. A formal ethical clearance for this study was approved by an appropriate authority (NBFIRA) (See Annexure

C). Permission to conduct this study was granted by NBFIRA a regulator of micro-lending companies in Botswana. The researcher also obtained consent to participate in this study from the participants (See Annexure D). The participants were not forced to participate and those willing to withdraw were allowed to do so at any time. The names of the participants remained anonymous as the study used codes to represent each individual. Finally, the proposal for this study was approved by the Human Resource Research Ethics Committee (HRREC) (See Annexure E) of North West University (NWU).

4.9 Chapter summary

This chapter discussed the research methodology which was followed in this study for developing a working framework for ERM and sustainability that may assist micro-lending companies in addressing business continuity problems. In addition, this chapter provided an explanation of how sequential explanatory mixed methods (quantitative - qualitative) research (known as Quan-Qual research) was used in this study. The research positioning and philosophy in this study helped in providing a foundation and grounding for the study. The chapter also discussed the research paradigm, research methodology, research design, justification of utilising mixed methods, the study population, sampling, data collection, data analysis, data presentation and ethical considerations. The validity, credibility and reliability of the study were also explained. The next chapter presents and discusses the findings from the quantitative phase 1 of this study.

CHAPTER 5: PRESENTATION OF QUANTITATIVE DATA ANALYSIS AND DISCUSSION OF FINDINGS

5.1 Introduction

This chapter focuses on empirical presentation, analysis and discussion of findings for data collected from a survey of micro-lending firms in Botswana. The chapter comprises the demographic data which forms an integral part of the descriptive analysis and the statistical analysis of quantitative data. Findings from primary data gathered through completed questionnaires are reported in order to reach conclusions about the problem under investigation.

The sample that was targeted for the quantitative method was 758 of micro-lending employees and proprietors in Botswana. There were 667 respondents who participated and completed the questionnaires from micro-lending firms. The respondents were also categorised as compliant 208 and non-compliant 459. SPSS software was used to analyse the quantitative data. Statistical tests were computed at 5% level of significance. This chapter is divided into three sections as follows: the first section presents the descriptive statistics which include sample data, of frequency tables and relationships between demographics; the next section deals with factor analysis for items which were used to measure the factors that affect Enterprise Risk Management (ERM) in micro-lending companies in Botswana. Factor analysis for these items was used to measure factors that contribute to the adoption of a framework for ERM and Sustainability that mitigates sources of risk in micro-lending companies. The results of exploratory factor analysis were analysed. Communality of data was assessed, and Cronbach's Alpha was used to assess the reliability of constructs. Sufficient validity and reliability were achieved through relationships between constructs based on multiple independent variables. Finally, the degree of satisfaction was established from using a framework for enterprise risk management and sustainability which was analysed using independent samples of *t-tests*. The chapter concludes with a section that deals with inferential analysis on the adoption of a framework for enterprise risk management and sustainability in micro-lending companies used to mitigate sources of risk. The following Figure 5.1 shows a flow diagram of the procedures adopted in the quantitative analysis.

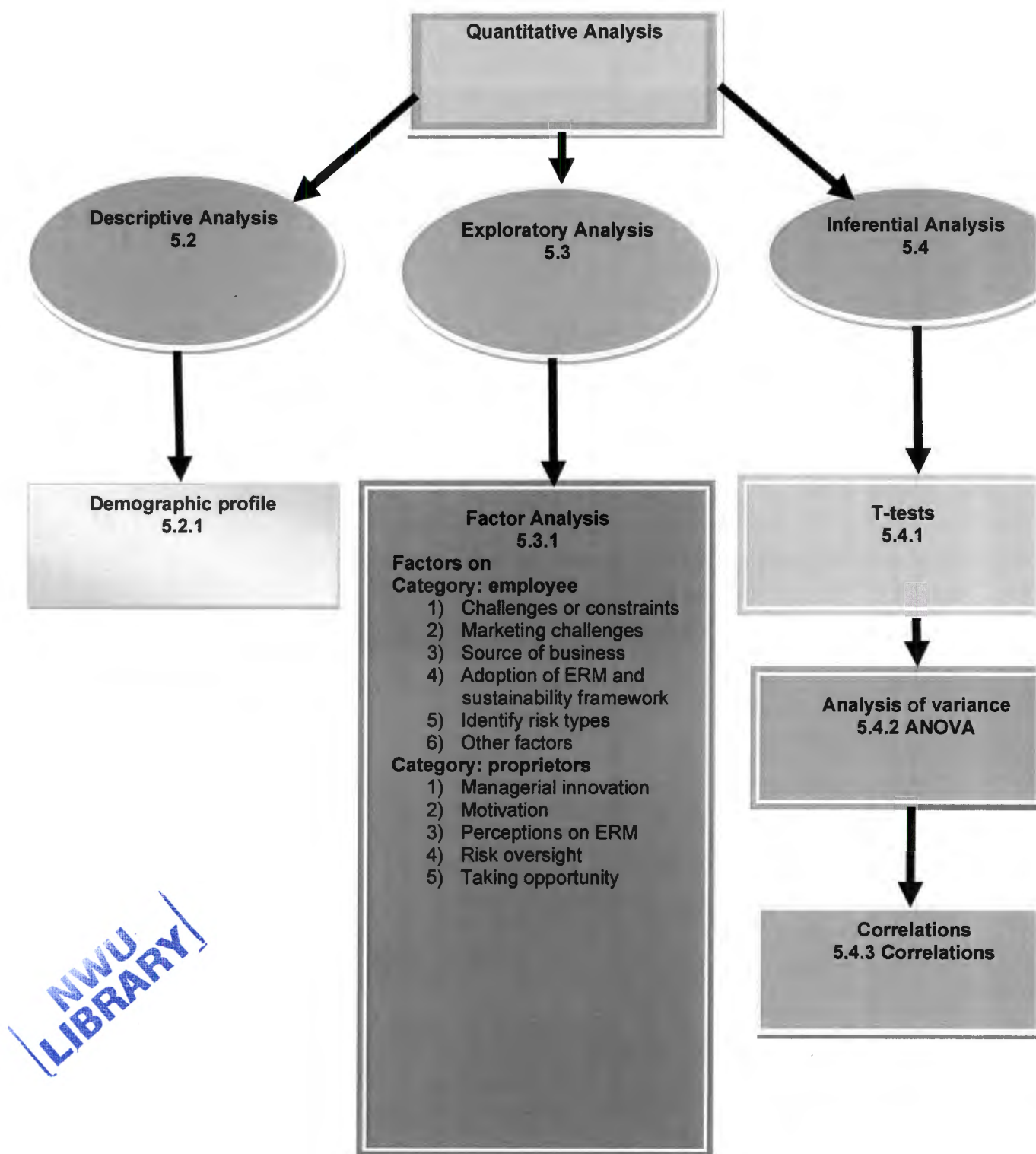


Figure 5.1: Quantitative Analysis flow diagram

Source: Own source

5.2 Descriptive statistics

Frequency tables were used to analyse the respondents' demographic profile. Comparisons on key variables were made in order to assess how close the characteristics of a sample are to the entire population.

5.2.1 Demographic profile of survey respondents

This section deals with the demographic characteristics of respondents who participated in this survey through structured questionnaires and is based on the participants' gender, age, nationality, employment status, highest qualification, job position, number of years worked, micro-lending company registered with NBFIRA, trained to work in a micro-lending company and involvement in ERM adoption.

Table 5.1: Respondents demographic profile

Gender		Age Group	
Male	36.4%	18 – 30 years	25.19%
Female	63.6%	31 – 40 years	24.41%
		41 – 50 years	13.3%
		51 – 60 years	18.4%
		61 years +	18.7%
Nationality		Employment status	
Motswana	93.8%	Full time	94.5%
Zimbabwean	5.5%	Part time	5.5%
Others	.7%		
Highest Qualification		Job Position	
Certificate in BGCSE or Equivalent	8.1%	Frontline Officers	17.5%
Professional Certificate & Diploma	61.9%	Operations Manager	7.9%
Bachelor's Degree	15.5%	Risk Manager	1.9%
Honours Degree	7.8%	Accountant	4.8%
Master's degree	5.1%	Human Resources Manager	3.7%

Doctoral Degree	1.6%		CEO – Proprietor	49.4%
			Loans Officer	13.5%
			Board Member	1.3%
Number of Years Worked			Micro-lending Company Registered with NBFIRA	
Less than 2 years	37.8%		Yes	98.7
2 – 5 years	58.8%		No	1.3
6 – 10 years	2.8%			
11– 15 years	.6%			
Trained to work in a micro-lending company			Involvement in ERM adoption	
Yes	12.9%		Yes	2.2%
No	87.1%		No	97.8%

Source: Field data

5.2.1.1 Gender

The findings on gender distribution of participants were analysed using frequencies and are shown in Table 5.1 above. The results indicate that female participants (63.6%) were more predominant than their male counterparts (36.4%). In this study it may be inferred that more women participated in micro-lending businesses than their male counterparts. The results for this study concur with the findings of the proponents of micro-lending business such as Ngo and Wahhaj (2012). Furthermore, the policy makers support women empowerment and hence they target women in micro-lending credit programmes as a direct means of delivering a wider social benefit.

In Southern African countries including Botswana there are pressure groups which were established as Non-Governmental Organisations (NGOs) in order to protect and advocate for the girl child and vulnerable women. NGOs were introduced in the developing countries due to the prevalence of violence and abusive practices against the girl child and vulnerable women. In the past it has been seen that males were violent and abusive to the girl child and towards vulnerable women, hence policy makers implemented restrictive measures and laws against these perpetrators. The findings on violence and abuse of women gave birth to the famous conference which was held in Beijing China known as the Beijing Conference “and the subsequent Beijing Declaration and Platform for Action 15th September 1995”. The main outcome for the Beijing Conference was to promote the goals that enhance equality, development and peace for all the

women everywhere in the interest of all humanity. Therefore, the Beijing Declaration (1995) established mechanisms where voices of both females and males were to be treated the same and inscribed as *equal rights* or *gender equality*. Furthermore, apart from the Beijing conference, there are many other proponents that support females at both household and workplace levels. The bargaining theory is a good example of a theory that advocates for women as effective negotiators as they can bargain on behalf of their households. The bargaining theory is a concept that believes women are powerful in bargaining and negotiating credit loans hence they can secure credit loans. If women access to credit loans to be extended to the spouse this is likely to benefit the household and the entire community. In most cases if it was the male counterpart who gets access to credit loans it may not benefit the entire community, showing that women are responsible persons.

The critique of the bargaining theory views this concept differently as they feel that woman borrowers may fail to meet the repayment obligations due to other household commitments and then they become defaulters. If women become defaulters, then the concept of becoming powerful negotiator diminishes and such clients would then fail to access credit loans. Furthermore, women are high risk in terms of issuing credit loans, and this could affect the performance and sustainability of micro-lending company. The results shown in Table 5.1 indicate that a larger proportion of respondents was from females (63.6%) hence this reflected that more women are employed in micro-lending companies in Botswana than men.

5.2.1.2 Age group

The distribution of participants by age group was measured using frequencies (See Table 5.1). The findings revealed age group as follows: 18 - 30 years (25.19%); 31 - 40 years (24.41%); 41 - 50 years (13.3%), 51 - 60 years (18.4%) and 61 years and above (18.7%). The findings reflect that the majority of the respondents were aged between 18 - 30 years, followed by those who were in the age group of between 31 - 40 years whilst the minority age range was between 41 - 50 years.

The findings of this study imply that micro-lending companies employ young people between the age 18 - 30 years who have just completed senior secondary school or tertiary education level. The results imply that it is easy for micro-lending companies to attract the youth to work for their institutions as they would be desperately looking for employment. The youth are willing to be paid minimum wage as they get exposed to both social and economic challenges. The results reveal that the combination of age groups between 18 - 30 years and 31 - 40 years are in the youth category. In Botswana a youth is defined by age up to 40 years and it emerges that this is the age range that is employed in the micro-lending companies. The findings reflect a decline in the age group between 41 - 50 years which show a stability of adults being retained at the workplace. In the age group between 41 - 50 years individuals are well experienced and qualified hence this range represents the minority of the respondents working in micro-lending companies as they are

absorbed and work in large corporations. These findings confirm those of a study by Aw, Silva, & Palmer (2007:435).

5.2.1.3 Nationality

The distribution of participants by nationality was measured using frequencies (See Table 5.1). The findings revealed nationality as follows: Motswana (93.8%); Zimbabweans (5.5%). The findings reflect that most of the respondents were Motswana, followed by Zimbabweans, whilst the minority submitted that they are from other nationalities.

The findings of this study imply that micro-lending companies employ locals (Batswana - 93.8%) as these firms were set-up to create job opportunities for local citizens particularly the youths. There are many schemes in Botswana which were established to create employment especially for vulnerable women and youths hence many Batswana work in micro-lending firms and own these companies. There are many initiatives that restrict access to employment to foreign nationalities such as the localization policy. The localization policy encourages the employer to give preference to Batswana when offering employment. The expatriates are only employed in some instances where there is proof of scarce skills and shortage of critical skills otherwise locals should be employed first. The locals are also protected through restriction in relation to issuance of work permits for non-citizens because the application for permits is under rigorous checks and balances before the permit is granted. Finally, the results in Table 5.1 for nationality revealed that the employment of other nationalities is subject to strict conditions, hence micro-lending companies are dominated by a majority of local citizens. These findings confirm those of a study by Parkhe (1993:302).

5.2.1.4 Employment status

The distribution of respondents by employment status was measured using frequencies (See Table 5.1). The findings revealed employment status as follows: full-time (94.5%) and part-time (5.5%). The findings reflect that most of the respondents were full-time, whilst the minority were from part-time employees.

The findings of this study imply that micro-lending companies employ full-time employees. Micro-lending companies are of the view of employing full-time employees rather than part-time employees. Employers in the micro-lending sector are of the view that employing of full-time employees bring effectiveness and efficiency within the enterprise. However, the critics of full-time employment believe that part-time employees are more effective as they want to maintain their short-time contracts. The findings reflect that the minority were from part-time and these jobs are normally occupied by people from other nationalities. The findings indicate that fewer people who are employed as part-time employees managed to penetrate these micro-lending companies as

they have scarce skills due to restrictive regulations. The localization policy encourages employers to give preference to Batswana, when offering employment. The expatriates are therefore fewer and employed on part-time basis. Finally, the results in Table 5.1 for employment status revealed that the employment of other nationalities is subject to strict conditions and these are employed on part time basis hence micro-lending companies are dominated by a majority of full-time employees. These findings confirm those of a study by Budhwar and Mellahi (2007:3).

5.2.1.5 Highest qualification

The distribution of respondents by highest qualification was measured using frequencies (See Table 5.1). The findings revealed highest qualification as follows: Certificate in BGCSE or Equivalent (8.1%); Professional Certificate & Diploma (61.9%); Bachelor's Degree (15.5%); Honours' Degree (7.8%); Masters' Degree (5.1%) and Doctoral Degree (1.6%). The findings indicate that most of the respondents were holders of Professional Certificate and Diploma, followed by holders of a Bachelor's degree whilst a minority were the holders of Doctoral Degree.

The findings of this study imply that micro-lending companies employ people with Professional Certificates and Diplomas as they are easy to attract in terms of salary packages. The results also reflect that it is difficult for employers in the micro-lending companies to attract prospective employees who hold postgraduate qualifications such as Honours' Degree, Master's Degree and Doctoral Degree. The findings suggest that prospective employees with postgraduate qualifications are mostly attracted by banks, medium to large businesses and large corporations. Furthermore, it is not a norm to find qualified employees with Doctoral Degrees working outside the tertiary sector (education industry). However, the small proportion of employees with Doctoral Degree qualifications are either occupying Chief Executive Officers (CEO) positions, Board Member positions or they are the owners of the micro-lending businesses (proprietors). In some instances, those with Doctoral Degree get employment in the micro-lending for purposes of gaining experience and once they get qualified it becomes easy to look for greener pastures in larger institutions.

The results imply that it is easy for micro-lending companies to attract the youth to work in their institutions as they would be desperately looking for employment as some of the youths hold qualifications which are not attractive to large corporations. The youths with Professional Certificates and Diplomas are willing to be paid minimum wage as they would be exposed to both social and economic challenges. These findings confirm those of a study by Hanushek and Wößmann (2006:66).

5.2.1.6 Job position

The distribution of respondents by job position was measured using frequencies (See Table 5.1). The findings revealed job position as follows: Chief Executive Officer - Proprietor (49.4%); Frontline Officers (17.5%); Loans Officer (13.5%); Operations Manager (7.9%); Accountant (4.8%); Human Resources Manager (3.7%); Risk Manager (1.9%) and Board Member (1.3%). The findings indicate that most of the respondents were Chief Executive Officers (CEO) - Proprietors, followed by Frontline Officers whilst the minority were the Risk Managers (1.9%) and Board Members (1.3), respectively.

The findings of this study imply that micro-lending companies are managed by Chief Executive Officers (CEO) who are owners of the enterprises. The findings imply that CEOs for micro-lending companies make final decisions which may be individual centred hence could affect the performance of the enterprise. Furthermore, the findings show that structures for micro-lending are rigid in relation to checks and balances in the organisation as positions which assist in effective internal control appeared to be in the minority in the hierarchy. For instance, positions of accountants, risk managers and board members have been compromised which may result in poor governance and lack of best practices. Proponents of ERM are of the view that positions for accountants, risk managers and board members assist senior management of an enterprise in promoting safeguards against poor performance and threats to business continuity. These positions are held by practitioners who were trained on how to mitigate sources of risk hence the need to have a balanced organogram. The findings also revealed that positions of Frontline Officers and Loans Officers are popular in micro-lending business as their duties are operational in nature. The results imply that the duties of Operational Managers have been delegated to Frontline Officers and Loans Officers and this compromises on quality assurance. If quality assurance is compromised, many gaps arise in the organisations, and this may result in poor governance as there is a distinct lack of effective internal controls and poor accounting systems. These findings confirm to those of a study by Swamy (2011:38).

5.2.1.7 Number of years worked

The distribution of respondents by number of years worked was measured using frequencies (See Table 5.1). The findings revealed number of years worked as follows: Less than 2 years (37.8%); 2 - 5 years (58.8%); 6 - 10 years (2.8%) and 11 - 15 years (.6%). The findings reflect that the majority of the respondents have long service of between 2 - 5 years, followed by long service of less than 2 years whilst the minority were between the long service of 6 - 10 years and 11 - 15 years.

The findings of this study imply that micro-lending companies' long service is between 2 - 5 years and this shows that many individuals are not experienced. Furthermore, employing people who are

not well experienced may affect the smooth running of the enterprise's operations, may result into problems associated with business continuity. Staff who are experienced may expose an enterprise to high risk which may affect the effectiveness and efficiency of the business model. Proponents of ERM are of the view that experienced personnel may assist enterprise to adhere and comply with good corporate governance and best practices which influence growth, competitiveness and sustainability. In this case quality assurance has been compromised through employing only a minority experienced personnel, who may fail to put in place effective internal controls and accounting systems. These findings confirm to those of a study by Dalal, Lam, Weiss, Welch, & Hulin (2009:1053) which reached similar conclusions with regards to the extent of experience in the workforce for micro-lending enterprises.

5.2.1.8 Micro-lending company registered with NBFIRA

The distribution of participants by micro-lending company registered with NBFIRA was measured using frequencies (See Table 5.1). The findings revealed micro-lending company registered with NBFIRA as follows: Yes (98.7%) and No (1.30%). The findings indicate that most of the respondents were registered with NBFIRA. NBFIRA is the regulator that monitors the day to day operations of micro-lending businesses in Botswana. The findings reflect that a minority of the respondents were not registered with NBFIRA. According to the requirements of NBFIRA (2014), micro-lending companies not registered may be at the verge of collapsing. It is a serious offence to operate a micro-lending company without a license and such entities may be exposed to heavy penalties.

5.2.1.9 Trained to work in a micro-lending company

The distribution of respondents by trained to work in a micro-lending company was measured using frequencies (See Table 5.1). The findings revealed trained to work in micro-lending company as follows: Yes (12.9%) as the minority whilst the majority was not trained to work in such establishments (87.10%).

The findings of this study imply that there is lack of training in micro-lending companies hence this gap may contribute to poor performance and effectiveness within an enterprise. Lack of training may lead to poor quality mechanisms which compromise the enterprise's performance. This gap in relation to training may affect the effectiveness of ERM systems which may expose the entity into high risk. The results indicated a minority of respondents (12.9%) who have been trained to work in a micro-lending which shows that training and development of staff should be given preference as well incorporated into the framework for ERM systems. These findings are similar to those of a study by Ford (2014:14).

5.2.1.10 Involvement in ERM adoption

The distribution of respondents by involvement in ERM adoption was measured using frequencies (See Table 5.1). The findings show involvement in ERM adoption as follows: Yes (2.2%) as minority whilst the majority (97.8%). The findings of this study imply that there is little involvement in relation to adoption in ERM systems in micro-lending companies. The findings also imply that there is high risk in terms of mitigation of risk in micro-lending companies hence the need for an effective framework for ERM and Sustainability. Framework for ERM and Sustainability may assist micro-lending firms in implementing effective internal controls and accounting systems, which may contribute in mitigating risk. It is perceived that effective ERM systems, internal controls and accounting systems influence an organisation to prosper and continue to operate for the foreseeable future. These findings are similar to those of a study by Sheedy and Griffin (2017:2)

5.3 Exploratory factor analysis

Exploratory Factor Analysis (EFA) is a statistical approach used to determine correlations among the variables of a data set. EFA provides a structure which groups variables based on strong correlations.

5.3.1 Factor analysis

Factor analysis was carried out in this study and the following are the purposes for performing factor analysis:

- To ascertain emerging factors from a questionnaire which was used during the survey
- To establish and explain the correlations within the data set of observed variables
- To identify and reduce the items or questions into smaller number of factors that explain most of the observable variances in a much larger number of manifest variables
- To screen variables for subsequent analysis such as regression or discriminant analysis

The method of factor analysis which was used in this research is known as the Principal Component Analysis. The Principal Component Analysis combines variables into small number of subsets (Ozfidan & Burlbaw, 2017:6660). The Kaiser-Meyer-Olkin (KMO) is a statistical test which measures the suitability of data for factor analysis (Ozfidan & Burlbaw, 2017:6660). The study used the Kaiser's rule, which allows a given factor to explain at least the equivalent of one variable's variance and is used for deciding the most appropriate factor to use for interpretation. KMO statistical test measures sampling adequacy for each variable. When a value is 0, it is an indication of diffusion in the pattern of correlations and this shows that the factor analysis is inappropriate. Field, Miles, & Field (2012:35) argue that a KMO value which is closer to 1, indicates patterns of correlations that are useful, and they predict reliable factors.

The exploratory factor analysis identified factors with the following KMO values on data set involving employees: Challenges / constraints faced with micro-lending company obtained a KMO

of (0.970). Marketing challenges / constraints faced with micro-lending company obtained a KMO of (0.889). Sources of business for micro-lending company obtained a KMO of (0.919). Adoption of enterprise risk management obtained a KMO of (0.894). Control measures of enterprise risk management obtained a KMO of (0.769). Employee exposures as an important part of enterprise risk management obtained a KMO of (0.860). External exposures as important part of enterprise risk management obtained a KMO of (0.936). Methods as the most appropriate to identify various risk types obtained a KMO of (0.867). Important elements of enterprise risk management process obtained a KMO of (0.873). Primary factors of enterprise risk management obtained a KMO of (0.852). Primary risk types within your organisation obtained a KMO of (0.924). Process exposures as important part of enterprise risk management obtained a KMO of (0.831). Implementation of qualitative methods to measure enterprise risk management obtained a KMO of (0.762). Implementation of quantitative methods to measure enterprise risk management obtained a KMO of (0.837). Risk financing techniques obtained a KMO of (0.607). System exposures as important part of enterprise risk management obtained a KMO of (0.923). Corporate governance obtained a KMO of (0.949). Profitability and liquidity ratios obtained a KMO of (0.947) and finally Critical success factors for stakeholder management obtained a KMO of (0.967).



The exploratory factor analysis identified factors with the following KMO values on data set involving proprietors: Managerial and innovation obtained a KMO of (0.706). Motivation obtained a KMO of (0.594). Perceptions towards Risk Manager (RM) obtained a KMO of (0.640). Other risk oversight obtained a KMO of (0.630) and finally Taking opportunities obtained a KMO of (0.650).

The associated Bartlett's Test of Sphericity was found in nineteen cases representing employee (respondents) and five cases representing proprietors (respondents), which is a total of 24 cases to be statistically significant at the $p \leq .000$. The study used the principal component analysis method to extract factors from the data which describes the best underlying relationships or correlations among variables. The study used eigenvalues of 1 and above with loads of 0.3 in the exploratory factor analysis. The challenges / constraints faced by micro-lending company accounted total percentages of variance explained of 69.02%. Marketing challenges / constraints faced by micro-lending company accounted total percentages of variance explained of 72.64%. Sources of business for micro-lending accounted total percentages of variance explained of 62%. Adoption of enterprise risk management accounted total percentages of variance explained of 75.42%. Control measures of enterprise risk management accounted total percentages of variance explained of 90.46%. Employee exposures as an important part of enterprise risk management accounted total percentages of variance explained at 68.07%. External exposures as important part of enterprise risk management accounted total percentages of variance explained at 87.67%. Methods as the most appropriate to identify various risk types accounted total percentages of variance explained of 90.95%. Important elements of enterprise risk management process accounted total percentages

of variance explained of 92.09%. Primary factors of enterprise risk management accounted total percentages of variance explained of 87.18%. Primary risk types within your organisation accounted total percentages of variance explained of 77.49%. Process exposures as important part of enterprise risk management accounted total percentages of variance explained of 89.48%. Implementation of qualitative methods to measure enterprise risk management accounted total percentages of variance explained of 88.42%. Implementation of quantitative methods to measure enterprise risk management accounted total percentages of variance explained of 80.10%. Risk financing techniques accounted total percentages of variance explained of 68.23%. System exposures as important part of enterprise risk management accounted total percentages of variance explained of 85.82%. Corporate governance accounted total percentages of variance explained of 81.58%. Profitability and liquidity ratios accounted total percentages of 76.18% and finally critical success factors for stakeholder management accounted total percentages of variance explained of 85.31%. These variances were related to employee (respondents).

The following variances were related to the proprietors (respondents): Managerial and innovation accounted total percentages of variance explained of 74.21%. Motivation accounted total percentages of variance explained of 62.51%. Perceptions towards Risk Manager (RM) accounted total percentages of variance explained of 69.68%. Other risk oversight accounted total percentages of variance explained of 79.72% and finally, taking opportunities accounted percentages of variance explained of 60.15%.

The KMO of identified factors ranged from 0.594 to 0.970 for both employees and proprietors (respondents) and therefore KMO values were close to 1 which reflects that the patterns of correlations were relatively compact hence factor analysis produced reliable factors. Furthermore, the associated Bartlett's Test of Sphericity was found to be statistically significant in all twenty-four cases as $p \leq .000$.

The findings show levels of reliability which were measured by Cronbach's Alpha as follows:

Challenges / constraints faced with micro-lending company (0.974). Marketing challenges / constraints faced with micro-lending company (0.900). Sources of business for micro – lending (0.844). Adoption of enterprise risk management (0.952). Control measures of enterprise risk management (0.947). Employee exposures as an important part of enterprise risk management (0.905). External exposures as important part of enterprise risk management (0.971). Methods as the most appropriate to identify various risk types (0.965). Important elements of enterprise risk management process (0.971). Primary factors of enterprise risk management (0.950). Primary risk types within your organisation (0.951). Process exposures as important part of enterprise risk management (0.961). Implementation of qualitative methods to measure enterprise risk management (0.934). Implementation of quantitative methods to measure enterprise risk

management (0.913). Risk financing techniques (0.735). System exposures as important part of enterprise risk management (0.971). Corporate governance (0.984). Profitability and liquidity ratios (0.970) and finally critical success factors for stakeholder management (0.988).

Cronbach's Alpha values on data set involving proprietors: Managerial and innovation (0.884). Motivation (0.757). Perceptions towards Risk Manager (RM) (0.660). Other risk oversight (0.856) and finally taking opportunities (0.668).

The findings of this study were measured by Cronbach's Alpha, and revealed that all the identified factors had acceptable levels of reliability as there were 0.70 and above. This shows that there were high levels of consistency of the 5 - point Likert scales used in the questionnaire as alluded by Nunnally (1978:26).

The following Table 5.2 shows the mean values and standard deviation scores of ERM and sustainability by micro-lending companies in Botswana. The highest mean values and standard deviation scores were analysed based on the employee and proprietor perspectives. The highest mean value was 4.6854 with a standard deviation score of 0.61857 based on employee perspective, from variable challenges / constraints. The second highest mean values were 4.6297 with standard deviation scores of 0.63228 based on employee perspective, which were from the following two variables; marketing challenges and primary risks.

The highest mean value was 3.3540 with a standard deviation score of 0.73184 based on a proprietor perspective was from a variable motivation. The second highest mean value was 2.7660 with a standard deviation score of 0.94269 based on a proprietor perspective was from a variable risk oversight.

Table 5.2: Descriptive Statistics for Enterprise Risk Management and Sustainability

Challenges / Constraints	667	4.6854 ± 0.61857
Marketing challenges	667	4.6297 ± 0.63228
Sources of business	667	4.3958 ± 0.57238
Adoption	667	1.7322 ± 0.61354
Control measures	667	2.5947 ± 0.69183
Employee exposures	667	2.3853 ± 0.81953
External exposures	667	2.1679 ± 1.22316
Identify risk types	667	2.1582 ± 0.90684

Important elements	667	2.1252 ± 0.94593
Primary factors	667	2.0206 ± 0.89399
Primary risks	667	4.6297 ± 0.63228
Process exposures	667	2.0266 ± 1.04225
Qualitative methods	667	1.8561 ± 0.82358
Quantitative methods	667	1.9543 ± 0.72180
Risk financing techniques	667	2.5832 ± 0.6475
Systems exposures	667	2.0240 ± 1.05178
Corporate governance	667	2.3067 ± 1.15700
Profitability and liquidity ratios	667	2.0528 ± 0.92799
Stakeholder management	667	2.1799 ± 1.00828
Proprietor perspective	N	Mean / Standard deviation
Managerial innovation	161	2.5429 ± 0.41075
Motivation	161	3.3540 ± 0.73184
Perceptions	161	1.3851 ± 0.68471
Risk oversight	161	2.7660 ± 0.94269
Taking opportunity	161	1.6729 ± 0.31285

Source: Own Source

5.3.1.1 Challenges / constraints

Table 5.3: Likert scale: Challenges / constraints

To what extent would you agree or disagree with each of the following challenges / constraints that affect performance of micro-lending companies? Indicate your response on a scale ranging from Strongly agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. *(Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).*

A factor analysis was carried out on challenges / constraints that affect performance of micro-lending companies in Botswana. The challenges / constraints consist of customers, organisational design, managerial background, human resources management development, working capital, marketing activities, managerial activities, investment analysis, social-economic problems (interest

rates, inflation and retrenchments), technological changes, competitive strategy, personal factors, attracting and recruiting suitable staff, experience in owning or running a business, business location / business site, accessibility of growth financing sources, strict government regulations, financial liquidity of P20,000.00 to be maintained at the times and ownership of enterprise being individual proprietor. A mean of **4.6854** and a low standard deviation of **0.61857** were confirmed through the factor challenges / constraints. This mean reflects a tendency towards a higher end of the Likert scale above 4 in Table 5.3 and this implies that there are challenges / constraints that affect performance of micro-lending companies. It therefore means that micro-lending companies should address these challenges / constraints in order to remain viable and achieve a good business model which influences growth, competitiveness and performance. These findings concur with studies conducted by Mutoko (2014:29), which concluded that challenges faced by SMMEs including micro-lending companies threaten their survival, business continuity and growth. This means that challenges / constraints that affect performance of micro-lending should be embedded in their enterprise risk management systems.

5.3.1.2 Marketing challenges

Table 5.4: Likert scale: Marketing challenges

To what extent would you agree or disagree with each of the following marketing challenges / constraints that affect performance of micro-lending companies? Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. <i>(Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).</i>

A factor analysis was carried out on marketing challenges / constraints that affect performance of micro-lending companies in Botswana. The marketing challenges / constraints consist of product / service marketing, marketing research and information, pricing policy and strategy, trained sales staff and promoters and market segmentation. A mean of **4.6297** and a low standard deviation of **0.63228** were confirmed through the factor marketing challenges / constraints. This mean reflects a tendency towards a higher end of the Likert scale of above 4 in Table 5.4 and this implies that there are several marketing challenges / constraints that affect performance, growth and competitiveness of micro-lending companies. According to Temtime and Pansiri (2004:20) marketing action as a strategy is a pillar to any success of an enterprise hence the need to invest heavily in marketing strategies. This means that for business continuity and effective business model, micro-lending companies should have robust marketing strategies. These findings concur with studies conducted by Mutoko (2014:29), which concluded that challenges faced by SMMEs threaten competitiveness, growth and sustainability. Therefore, micro-lending enterprises should

infuse robust marketing strategies into their overall business strategic plans in order to remain competitive.

5.3.1.3 Sources of business

Table 5.5: Likert scale: Sources of business

The following sources of business for micro-lending companies affect organisational performance and require an adoption of ERM framework that mitigates risk. Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. <i>(Please simply put a “circle” on a number representing your preferred answer, if you make a mistake, put an “X” across the circle and choose another answer).</i>

A factor analysis was carried out on sources of business that affect organisational performance and require an adoption of ERM framework that mitigates risk in micro-lending companies in Botswana. The sources of business for micro-lending include the following but not limited to: credit card, mortgage, home improvement loan, business loan, car loan, student loan, personal loan and payday loan. A mean of **4.3958** and a low standard deviation of **0.57238** were confirmed through the factor business sources. This mean reflects a tendency towards a higher end of the Likert scale above 4 in Table 5.5 and this implies that the borrowers (customers) tend to borrow loans including facilities such as credit card, mortgage, home improvement loans, business loans, car loans, student loans, personal loans and payday loans. This shows that the borrowers have many credit loans, and this has a direct effect on their rate of repayment. This means that many of the customers are defaulters hence affect the working capital for micro-lending as they fail to sustain their businesses. The borrowing process should have procedures and effective criteria for lending money, credit limit and nature of borrowing. There must be proper screening processes for credit customers as most of them are likely to have been blocked from borrowing from commercial banks. These results concur with studies conducted by Yazdanparas and Alhenawi (2017:81), which concluded that borrowers can be categorised according to their personality traits and attitudes towards certain borrowing options and abilities to meet obligations hence the need to approach their needs differently. For example, households borrowing money for personal loans and payday loans should be treated differently from those borrowing for mortgage, home improvement and business loans as their needs are not the same. Furthermore, it is evidenced by studies conducted by Bayulgen (2008:527) that successful micro-lending companies, such as the Grameen Bank in Bangladesh offer credit loans to potential clients who are usually individuals with business acumen. It is perceived that potential entrepreneurship customers' behaviour / attitude towards repayment of debts is good hence this deters too many defaulters. In relation to this study all customers are offered credit loans hence the business is affected by many defaulters. In the financial management arena, bad debts affect the business model as well as strategic business

plans and this may lead to liquidation, as in the case of many micro-lending companies in Botswana. The screening of clients is very important in a micro-lending company and failure to include effective monitoring and control systems in place poses a high risk to the business model. Screening of credit clients should be incorporated into the organisation's enterprise risk management systems in a micro-lending entity.

5.3.1.4 Adoption

Table 5.6: Likert scale: Adoption

To what extent has your organisation adopted the following in relation to enterprise risk management? Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. <i>(Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).</i>
--

A factor analysis was carried out on the adoption of enterprise risk management and sustainability that mitigates sources of risk. The adoption of enterprise risk management and sustainability that mitigates sources of risk include the following: an adoption of enterprise risk management that aligns with strategy and objectives; an adoption of risk identification as an important ongoing process; an adoption of a separate enterprise risk management structure; an adoption of a direct reporting line where a risk management reports to the CEO; an adoption of enterprise risk management as a function and responsibility of the board of directors; an adoption of liquidity regulatory capital allocation for enterprise risk management; an adoption of a framework for enterprise risk management and sustainability that mitigates sources of risk and an adoption of enterprise risk management process as an integral part of the enterprise's overall management process. A low mean of **1.7922** and a low standard deviation of **0.61354** were confirmed through the factor adoption. This mean reflects a tendency towards at a lower end of the Likert scale above 2 in Table 5.6 and this implies that fewer micro-lending companies use enterprise risk management in their businesses in mitigating risk. This means that there is a need for an adoption of a robust framework for enterprise risk management and sustainability in micro-lending companies in Botswana. An adoption of ERM by micro-lending company will ensure effective and efficient internal control systems which assist in promoting enterprise risk management systems that enhances organisational performance, competitiveness and growth. However, if there is growth in these enterprises it means that there is organisational survival for the foreseeable future which is the main thrust of this study. Adoption is a factor which supports the need for conducting this study as it influences micro-lending companies in adopting a robust enterprise risk management process that aligns with strategy and objectives for organisational survival.

These findings concur with studies conducted by Bromiley, McShane, Nair, & Rustambekov (2015:266) which justified that failure by enterprises in adopting effective enterprise risk management may lead to high operational costs that results in liquidation if there are no robust internal control mechanisms. Furthermore, advocates for enterprise risk management such as Arena, Arnaboldi, & Azzone (2010:659) argued that there are many benefits in decision making and management control which derive from effective enterprise risk management systems. Therefore, the results of this study reveal that it is important for micro-lending companies to adopt effective enterprise management and sustainability framework which could ultimately assist these businesses to continue in existence for feasible future.

5.3.1.5 Control measures for ERM

Table 5.7: Likert scale: Control measures for ERM

To what extent has your organisation recognised the importance of and implemented the following control measures of enterprise risk management? Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. (Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).

A factor analysis was carried out on the importance of and implementation of control measures of enterprise risk management. The importance of and implementation of control measures of enterprise risk management consists of, policy, procedures, internal controls and risk reporting. A moderate mean of **2.5947** and a low standard deviation of **0.69183** were confirmed through the factor control measures. This mean reflects a tendency towards middle of the Likert scale above 2.5 in Table 5.7 and this implies that control measures in micro-lending are neither effective nor non-effective. This means that micro-lending companies should work towards an improvement plan in order to remain viable since control measures are important for effective and efficient running of enterprise. Furthermore, these findings show that if there are poor control measures, many micro-lending companies in Botswana may be subjected to liquidation hence contradicts with the Government's main objectives and policies for promoting SMMEs. These results concur with studies conducted by Arena *et al.* (2010:661) which advocates for aligning control activities with policies and procedures in order to enhance effective control measures that reduce operational costs. However, if there is reduction in operational costs it means more profit is then ploughed back or invested into the business and there may be room for expansion of the business.

5.3.1.6 Employee exposure

Table 5.8: Likert scale: employee exposures

To what extent has your organisation recognised the following employee exposure as an

important part of enterprise risk management? Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. *(Please simply put a “circle” on a number representing your preferred answer, if you make a mistake, put an “X” across the circle and choose another answer).*

A factor analysis was carried out on how micro-lending company recognises employee exposure as an important part of enterprise risk management. Employee exposures which a micro-lending company recognized as an important part of enterprise risk management include the following: incompetence; human error (negligence); low morale; high staff turnover; fraudulent / criminal activities by employees and lack of training. A moderate mean of **2.3853** and a low standard deviation of **0.81953** were confirmed through the factor employee exposures. This mean reflects a tendency which is almost towards the lower end of the Likert scale above 2. in Table 5.8 and this implies that there is a lack of employee exposures to enterprise risk management hence the need for an adoption of a framework. The findings indicate that there is low morale and high staff turnover and lack of training within some of the micro-lending companies. It is perceived that employees who are disgruntled and have low morale may be involved in fraudulent activities and this may lead to poor performance. It is also evidenced in this study that there is lack of training in micro-lending companies (See section 5.2.1.9) where only 12.9% of the respondents agreed that they trained to work for micro-lending companies. Training and development are an important aspect of organisational success and micro-lending companies should invest in this area in order to remain competitive and gain a wider market share. These findings concur with studies conducted by Fraser and Simkins (2016:694) which emphasises on risk workshops as part of training and development among the team. Training and development enhance and build essential team spirit, which encourages cooperation among the team members. Therefore, training and development should be embedded into the framework for enterprise risk management.

5.3.1.7 External exposures

Table 5.9: Likert scale: External exposures

To what extent has your organisation recognised the following external exposures as important part of enterprise risk management? Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. *(Please simply put a “circle” on a number representing your preferred answer, if you make a mistake, put an “X” across the circle and choose another answer).*

A factor analysis was carried out on how micro-lending company recognise external exposures as important part of enterprise risk management. External exposures which a micro-lending company

recognized as important part of enterprise risk management include the following but not limited to: acts of God (lighting, veld fire and floods); external criminal activities; domestic political upheaval; regulatory and compliance; legal actions; business environment changes and deterioration of micro-lending company's reputation perceived by the market. A moderate mean of **2.1679** and a low standard deviation of **1.22316** were confirmed through the factor external exposures. This mean reflects a tendency which is almost towards the lower end of the Likert scale of above 2. in Table 5.9 and this implies that majority of the micro-lending companies are not aware of that external exposures may cause disaster in their businesses, if they lack planning. It is imperative for micro-lending companies to safeguard their businesses against these external exposures as they may be catastrophic to enterprise's continuity hence the need to be prudent through transferring the risk to insurance firms. Insurance industry is known for handling pure risk and an option of transferring risks assists many firms to focus or concentrate on their core businesses. According to Valsamakis, Vivian, & Du Toit (2010:253) it is important to understand the concepts behind insurance and the classifications of risks or perils as their consequences are useful to the survival of an enterprise.

5.3.1.8 Identify risk types

Table 5.10: Likert scale: Identify risk types

To what extent has your organisation recognized the following methods as the most appropriate to identify various risk types? Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. <i>(Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).</i>

A factor analysis was carried out on how micro-lending company recognise methods as the most appropriate to identify various risk types. Methods that are appropriately used to identify various risk types are as follows: workshops; process mapping; comparisons with other organisations and discussions with peers. A moderate mean of **2.1582** and a low standard deviation of **0.90684** were confirmed through the factor identify risk types. This mean reflects a tendency which is almost towards the lower end of the Likert scale of above 2. in Table 5.10 and this implies that there is a lack of awareness in micro-lending companies in relation to recognition of methods used for identification of various types of risk. Therefore, this factor shows that there is a need to develop a framework for enterprise risk management and sustainability which assists micro-lending companies in designing appropriate methods used for identification of various risk types. These findings concur with studies conducted by Fraser and Simkins (2016:694) which emphasises on risk workshops as part of training and development among the team. Workshops, process mapping and comparisons with other organisations play a pivotal role in enterprise risk management.

NWU
LIBRARY

Therefore, these methods used in identification of various types of risks should be embedded in the framework for enterprise risk management.

5.3.1.9 Important elements

Table 5.11: Likert scale: Important elements

To what extent has your organisation recognized the following as the important elements of an enterprise risk management process? Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. *(Please simply put a “circle” on a number representing your preferred answer, if you make a mistake, put an “X” across the circle and choose another answer).*

A factor analysis was carried out on how micro-lending company recognized important elements of an enterprise risk management process. The important elements of an enterprise risk management include the following: risk identification; risk evaluation / measurement; risk control and risk financing. A moderate mean of **2.1252** and a low standard deviation of **0.94593** were confirmed through the factor important elements. This mean reflects a tendency towards the lower end of the Likert scale of above 2. in Table 5.11 and this implies that there is a lack of awareness in micro-lending companies in terms of recognition of important elements of an enterprise risk management process. It is perceived that if an enterprise fails to recognise important elements of an enterprise risk management process such as risk identification; risk evaluation / measurement; risk control and risk financing may be exposed to high risk which may significantly affects the ability of achieving critical business models and ultimately jeopardize the sustainability, competitiveness and growth of the company (Lyon & Popov, 2016:40). These findings concur with studies conducted by (Lyon & Popov, 2016:40) as it advocates that firms which incorporate effective enterprise risk management processes and adopt operational risk management framework systems within their strategic plans tend to be highly successful organisations. Therefore, it is imperative to incorporate these important elements of enterprise risk management into the framework for micro-lending companies as mechanisms of safeguarding and addressing the challenges of business closure which is so prevalent in this sector.

5.3.1.10 Primary factors

Table 5.12: Likert scale: Primary factors

To what extent has your organisation implemented the following as primary factors of enterprise risk management? Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. *(Please simply put a “circle” on a number representing your preferred answer, if you make a mistake, put an “X” across the circle and choose another answer).*

A factor analysis was carried out on how micro-lending companies implemented primary factors of enterprise risk management. The primary factors for an enterprise risk management include employees' misconduct; processes; systems and external factors (e.g. natural disasters, fraud; political pressures). A moderate mean of **2.0206** and a low standard deviation of **0.89399** were confirmed through the factor primary factors. This mean reflects a tendency which is almost towards the lower end of the Likert scale of above 2. in Table 5.12 and this implies that there are poor implementation strategies of primary factors of enterprise risk management in micro-lending companies. According to Lyon and Popov (2016:40) organisations that fail to recognise and implement the primary factors of enterprise risk management such as employees' misconduct; processes; systems and external factors (e.g. natural disasters, fraud; political pressures) tend to face business continuity challenges. Micro-lending companies in Botswana are in the same predicament as they face business continuity challenges as evidenced in the empirical data from NBFIRA (2014:17). Therefore, this study provides an intervention to the survival of existing and future micro-lending companies in Botswana as it addresses pertinent issues towards restoration of business models in this sector. These findings concur with studies conducted by (Lyon & Popov, 2016:40) that promote effective and efficient enterprise risk management systems which tend to enhance business sustainability.

5.3.1.11 Primary risks

Table 5.13: Likert scale: Primary risks

To what extent would you agree or disagree to the following types of primary risk types within your organisation? Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. <i>(Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).</i>
--

A factor analysis was carried out on the types of primary risk within a micro-lending company. The following are the primary types of risk: credit risk; market risk; liquidity risk; interest risk; country risk; reputation risk; legal risk and operational risk. A factor analysis was carried out on types of primary risks that affect performance of micro-lending companies in Botswana. The primary types of risk are credit risk; market risk; liquidity risk; interest risk; country risk; reputation risk; legal risk and operational risk which affect performance of micro-lending companies in Botswana. A mean of **4.6297** and a low standard deviation of **0.63228** were confirmed through the factor types of primary risk. This mean reflects a tendency towards a higher end of the Likert scale of above 4 in Table 5.13 and this implies that types of primary risks affect performance, growth, competitiveness and business continuity of micro-lending companies. It is imperative for firms to safeguard their businesses through mitigation of primary risks in order to secure their presence in the business

world, otherwise failure may result into liquidation as in the case of micro-lending companies in Botswana. Micro-lending companies in Botswana face business continuity challenges as evidenced with empirical data from NBFIRA (2014:17). Therefore, for the sector to remain viable and successful it is imperative to develop a framework for enterprise risk management and sustainability which could be used as a mechanism of safeguarding against sources of risk. According to Lyon and Popov (2016:40) organisations that fail to mitigate risk such as credit risk; market risk; liquidity risk; interest risk; country risk; reputation risk; legal risk and operational risk tend to face business continuity challenges as in the case of micro-lending companies in Botswana. Therefore, this study acts as an intervention to the survival of existing and future micro-lending companies in Botswana as it addresses pertinent issues that affect performance and business continuity in this sector. These findings concur with studies conducted by (Lyon & Popov, 2016:40) that promote effective and efficient enterprise risk management strategies which tend to promote business sustainability. Furthermore, similar sentiments have been submitted by risk management advocates such as Baxter *et al.* (2013:1264) and Hoyt and Liebenberg (2011:797) who suggest that enterprise risk management improves performance, helps firms to avoid losses, bankruptcy and reputational costs. Therefore, micro-lending firms should adopt risk management frameworks as they enhance effective decision-making.

5.3.1.12 Process exposures

Table 5.14: Likert scale: Process exposures

To what extent has your organisation recognized process exposures as important part of enterprise risk management? Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. (Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).
--

A factor analysis was carried out on how micro-lending company recognized process exposures as important part of enterprise risk management process. The process exposures as part of important of enterprise risk management include the following errors in procedures / methodologies; documentation errors; product complexity and security risks. A moderate mean of **2.0266** and a low standard deviation of **1.04225** were confirmed through the factor process exposures. This mean reflects a tendency which is almost towards the lower end of the Likert scale of above 2. in Table 5.14 and this implies that there is a lack of awareness in micro-lending companies in terms of recognition of process exposures as important part of enterprise risk management. It is imperative to educate employees and management about process exposures such as errors in procedures / methodologies; documentation errors; product complexity and security risks, since these processes and procedures promote effective and efficient risk management systems. The emphasis on effective and efficient risk management systems was also supported in studies by

Fraser and Simkins (2016:690), whereby financial regulators promote robust enterprise risk management as a way of managing and mitigating risk. These findings concur with Fraser and Simkins (2016:690) as they both have some commonalities in relation to challenges in the implementation of enterprise risk management. Therefore, it would be important for micro-lending companies to incorporate process exposures in their risk management systems.

5.3.1.13 Qualitative methods used to measure ERM

Table 5.15: Likert scale: Qualitative methods used to measure ERM

To what extent has your organisation recognized the importance of and implemented the following qualitative methods to measure enterprise risk management? Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. <i>(Please simply put a “circle” on a number representing your preferred answer, if you make a mistake, put an “X” across the circle and choose another answer).</i>

A factor analysis was carried out on implementation of qualitative methods used to measure enterprise risk management. The qualitative methods used to measure enterprise risk management are as follows: historical data to forecast the likelihood of a potential loss; self-risk assessments and risk process flows. A low mean of **1.8561** and a low standard deviation of **0.82358** were confirmed. This mean reflects a tendency which is almost towards the lower end of the Likert scale of above 2. in Table 5.15 and this implies that there are poor implementation strategies in relation to recognition of qualitative methods used for measuring enterprise risk management. Qualitative methods used to measure enterprise risk management are important as it would be easier to identify which risk types are more prevalent in each business unit hence proper mitigation strategies may be implemented. These findings further imply that micro-lending companies in Botswana rarely use qualitative methods to measure enterprise risk management. According to Florio and Leoni (2017:6) organisations that fail to deploy qualitative methods used for measuring enterprise risk management such as historical data to forecast the likelihood of a potential loss; self-risk assessments and risk maps / process flows tend to face business continuity challenges as in the case of micro-lending companies in Botswana. Therefore, this study acts as an intervention to the survival of existing and future micro-lending companies in Botswana as it addresses pertinent issues including advocating for use of qualitative methods. These findings concur with studies conducted by Florio and Leoni (2017:6) as both studies promote effective and efficient enterprise risk management objectives which tend to promote business sustainability.

5.3.1.14 Quantitative methods used to measure ERM

Table 5.16: Likert scale: Quantitative methods used to measure ERM

To what extent has your organisation recognized the importance of and implemented the

following quantitative methods to measure enterprise risk management? Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. *(Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).*

A factor analysis was carried out on implementation of quantitative methods used to measure enterprise risk management. The quantitative methods used to measure enterprise risk management are casual modelling; risk indicators; escalation triggers and loss-event database. A low mean of **1.9543** and a low standard deviation of **0.72180** were confirmed through the factor quantitative methods. This mean reflects a tendency towards the lower end of the Likert scale of above 2. in Table 5.16 and this implies that there are poor implementation strategies in relation to quantitative methods used to measure enterprise risk management. Quantitative methods used to measure enterprise risk management are important as it would be easier to identify which risk types are more prevalent in each business unit hence proper mitigation strategies may be implemented. These findings further imply that micro-lending companies in Botswana rarely use quantitative methods to measure enterprise risk management. According to Florio and Leoni (2017:6) organisations that fail to recognise quantitative methods used for measuring enterprise risk management such as casual modelling; risk indicators; escalation triggers and loss-event database tend to face business continuity challenges as in the case of micro-lending companies in Botswana. Therefore, this study acts as an intervention to the survival of existing and future micro-lending companies in Botswana as it addresses pertinent issues including advocating for use of quantitative methods. These findings concur with studies conducted by Florio and Leoni (2017:6) as both studies promote effective and efficient enterprise risk management objectives which tend to promote business sustainability.

5.3.1.15 Risk financing techniques

Table 5.17: Likert scale: Risk financing techniques

To what extent has your organisation recognized the importance of and implemented the following risk financing techniques? Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. *(Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).*

A factor analysis was carried out on implementation of risk financing techniques used in enterprise risk management systems to mitigate sources of risk. The risk financing techniques used in enterprise risk management systems to mitigate sources are risk transfers (to third parties -

insurance companies; risk retention (funded) and risk retention (unfunded). A moderate mean of **2.5832** and a low standard deviation of **0.72180** were confirmed through the factor risk financing techniques. This mean reflects a tendency towards the lower end of the Likert scale of above 2. in Table 5.17 and this implies that majority of the micro-lending companies are not aware of that failure to adopt risk financing techniques may cause disaster in their businesses, if there is lacking effective planning. It is imperative for micro-lending companies to safeguard their businesses against through risk transfers to third parties such as insurance companies as they may be catastrophic to an enterprise's continuity hence the need to be prudent so that they focus on core areas of their business models. The insurance industry is known for handling pure risk and an option of transferring risks assists many firms to focus or concentrate on their core businesses. According to Valsamakis *et al.* (2010:253) it is important to understand the concepts behind insurance and the classifications of risks or perils as their consequences are useful to the survival of an enterprise.

5.3.1.16 Systems exposures

Table 5.18: Likert scale: Systems exposures

To what extent has your organisation recognized the following system exposures as an important part of enterprise risk management? Indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. <i>(Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).</i>

A factor analysis was carried out on how micro-lending company recognized systems exposures as important part of enterprise risk management process. The systems exposures as part of important of enterprise risk management include system infiltration; system failures; hackers (e.g. fraud through systems); programming errors; information risk; telecommunication risk and obsolescence of systems. A moderate mean of **2.0240** and a low standard deviation of **1.05178** were confirmed through the factor process systems exposures. This mean reflects a tendency which is almost towards the lower end of the Likert scale of above 2. in Table 5.18 and this implies that there is a lack of awareness in micro-lending companies in terms of recognition of systems exposures as important part of enterprise risk management. It is imperative to educate employees and management about systems exposures such as system infiltration; system failures; hackers (e.g. fraud through systems); programming errors; information risk; telecommunication risk and obsolescence of systems. However, if attention is not given to systems exposures, this oversight may lead to challenges associated to business continuity as in the case of micro-lending companies in Botswana. The emphasis on effective and efficient risk management systems was also supported in the studies by Fraser and Simkins (2016:690), whereby financial regulators

promote robust enterprise risk management in managing and mitigating risk. These findings concur with studies conducted by Fraser and Simkins (2016:690) as they both have some commonalities in supporting effective implementation of enterprise risk management. Therefore, it would be important for micro-lending companies to incorporate effective systems exposures in their risk management systems in order to remain in a competitive environment.

5.3.1.17 Corporate governance

Table 5.19: Likert scale: Corporate governance

The following corporate governance mechanisms affect performance, growth and competitiveness of a micro-lending company, indicate your agreement or disagreement on scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. <i>(Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).</i>
--

A factor analysis was carried out on corporate governance mechanisms that affect the performance, growth and competitiveness of a micro-lending company. The corporate governance mechanisms that affect the performance, growth and competitiveness of a micro-lending company are as follows: ownership; board size; outsiders in board; audit committee; outsiders in audit committee; total employees in the firm; human resources manager; family CEO; firm size; fixed assets; investments; total assets; solidarity; nature of firm and firm age. A moderate mean of **2.3067** and a low standard deviation of **1.15700** were confirmed through the factor corporate governance. This mean reflects a tendency towards the lower end of the Likert scale of above 2. In Table 5.19 and this implies that there is a lack of awareness in micro-lending companies in terms of understanding risk governance. The strategy on how to manage the business and corporate structures are important for decision - making. The COSO (2013:1) and the King (2016:43) provide that there must be a separation of duties of the Chief Executive Officer (CEO) and other influential positions such as Financial Director in order to remove individual dominance in decision-making. In this study the results reveal that the CEO plays so many roles in the managing of micro-lending firm and this may be associated with some elements of biasness. In Table 5.1 the results reflect that 49.4% of the respondents are CEOs - Proprietors, 7.9% are Operations Mangers, 4.8% are Accountants, 17,5% are Frontline Officers, 1.9% are Risk Managers, 3.7% are Human Resources Managers, 13,5% are Loans Officers and 1,3% Board Members. This shows that majority of the responsibilities rest in the CEOs - Proprietors' mandate. However, if decisions are made by one individual they may be subject to bias as evident in the studies by Sheedy and Griffin (2017:2). Sheedy and Griffin (2017:2) argue that the presence or the balancing of the organisational reporting structure with Chief Risk Officers (CRO) brings in independent and well - resourced risk management function which promote best practices. This study shows a small proportion of respondents who hold Risk Manager's position in micro-lending companies and is typically

opposite of the principles of good governance. Furthermore, the results reflect a small number of respondents from Accountants who may be also charged with the risk management roles in the absence of CROs, therefore this study shows that there is lack of corporate governance practices which may have affected the performance of micro-lending firms. It is perceived that good corporate governance and best practices promote effective risk structures and efficient rules, processes and procedures that lead to organisational success. A risk culture embedded in corporate governance plays a potentially crucial role, which enhance effective controls and monitoring systems (Sheedy & Griffin, 2017:2). Therefore, micro-lending companies should incorporate a risk culture in their strategic planning which promotes good corporate governance and best practices in order to be financially sound and viable. It is also imperative for micro-lending companies to consider separation of duties to avoid dominance of one individual and this promotes best practices. Therefore, there is a need for appointing non - executive directors, risk managers and accountants in order to align with good corporate governance strategies. This entails that the sector should have mechanisms that promotes and enforce effective human resources management and human resources development policies and procedures that comply with best practices and licensing requirements for micro-lending business. Furthermore, the NBFIRA requires a proposed organisational structure during the licensing stage and may help to enforce a provision for requirement appointment of critical persons of certain positions before approving a micro-lender to start a business (for example appointment of an Accountant, Risk Manager and Non-Executive Board Member). In order to avoid costs these positions may be on part-time basis. In some instances, the position of a risk manager may be merged with the accountant's position and then the duties of the accountant include risk management roles.

5.3.1.18 Profitability and liquidity ratios

Table 5.20: Likert scale: Profitability and liquidity ratios

The following profitability and liquidity ratios affect performance, growth and competitiveness of a micro-lending company, indicate your agreement or disagreement on scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. <i>(Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).</i>
--

A factor analysis was carried out on profitability and liquidity ratios that affect the performance, growth and competitiveness of a micro-lending company. The profitability and liquidity ratios that affect the performance, growth and competitiveness of a micro-lending company are as follows: return on assets (ROA); return on equity (ROE); debt to assets ratio; capital gearing ratio; interest cover; earnings per share; price / earnings ratio (P/E Ratio); dividend pay - out ratio; dividend yield; dividend cover; current ratio; acid test ratio; inventory turnover; creditor payment period; debtor collection period; gross profit margin and profit margin. A low mean of **2.0528** and a low

standard deviation of **0.92799** were confirmed through the factor profitability ratios. This mean reflects a tendency which is almost towards the lower end of the Likert scale of above 2. in Table 5.20 and this implies most of the micro-lending companies in Botswana are not applying profitability ratios used for measuring organisational performance. In financial management profitability ratios are used to measure organisational performance and financially sound of an entity. Practitioners and scholars such as (Florio & Leoni, 2017:7);(Hoyt & Liebenberg, 2011:808) and (Swamy, 2011:41) concur that organisations that fail to apply accounting ratios such as profitability ratios and liquidity have challenges related to business continuity and sustainability. This is the case with micro-lending companies in Botswana as they are faced with business continuity challenges as the reduction in numbers, year on year is reflected with empirical evidence from (NBFIRA, 2014:17). There is also a challenge in the licensing requirements for micro-lending company particularly on the area of financial liquidity as it is determined in a form an amount of P20,000.00 instead of being in a form of a financial ratio. The background to the financial liquidity in the micro-lending sector in Botswana is that a prospective company should show evidence of P20, 000.00 in its bank account and this appears to be a small amount to cater for working capital.

Therefore, it is imperative to maintain a certain ratio similar to the model that is used in the banking sector such as the Capital Adequacy (Basel III). According to Grody and Hughes (2016:130) Capital Adequacy (Basel III) is a tool used for evaluation, monitoring and control of the financial well - being of the financial services sector particularly in the banking sector. The Capital Adequacy is measured with the leverage ratio which measures the liquidity of the bank and this is an initiative that was introduced during the financial crackdown, the period following the global financial crisis. This study does not focus on financial institutions, but characteristics of micro-lending sectors are almost similar to the financial sectors and policy makers may incorporate or adopt some of the philosophies behind the Basel III initiatives. Furthermore, micro-lending companies depend heavily on financial reporting (financial statements) which are perceived to be historical and may not immediately assist in detecting or predicting the current and future financially stability of an enterprise. Therefore, it would be prudent to adopt a framework for enterprise risk management and sustainability that comprises of a Capital Adequacy Risk Ratio which links between NBFIRA and micro-lending firms through technology (software). The NBFIRA will then flag those micro-lenders which shows red signals and then advised accordingly through financial advisors. Therefore, this strategy will assist in avoiding micro-lending companies to face sustainability challenges.

5.3.1.19 Stakeholder management

Table 5.21: Likert scale: Stakeholder management

The following critical success factors for stakeholder management affect performance, growth and competitiveness of a micro-lending company, indicate your agreement or disagreement on scale

ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. (Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).

A factor analysis was carried out on stakeholder management that affect the performance, growth and competitiveness of a micro-lending company. The following are the critical success factors for stakeholder management that affect performance, growth and competitiveness of a micro-lending company: managing stakeholders with social responsibilities (economic, legal, environmental and ethical); exploring stakeholder's needs and constraints to micro-lending companies; communicating with and engaging stakeholders properly and frequently; understanding the area of stakeholders' interests; identifying stakeholders properly; keeping and promoting a good relationship; analysing conflicts and coalitions among stakeholders; predicting the influence of stakeholders accurately; formulating appropriate strategies to management stakeholders; assessing attributes (power, urgency, and proximity) of stakeholders; compromising conflicts among stakeholders effectively; formulating a clear statement of micro-lending mission; predicting stakeholders' reactions for implementing the strategies; analysing the change of stakeholders' influence and relationships and assessing stakeholders' behaviour. A low mean of **2.1799** and a low standard deviation of **1.00828** were confirmed through the factor stakeholder management. This mean reflects a tendency which is almost towards the lower end of the Likert scale of above 2. in Table 5.21 and this implies most of the micro-lending companies are not aware of the importance reasons for identifying stakeholders. The study by scholars such as (Yang *et al.*, 2009:337) pointed out that it is imperative to identify a company's stakeholder and also understanding their interests. Therefore, organisations are required to promote a good relationship between the business and stakeholders as this is vital for the successful delivery of organisational milestones and operational objectives. This is not the case with the micro-lending companies as evidenced with the findings in Table 5.21. Therefore, it is imperative for micro-lending companies in Botswana to adopt a strategy which recognise stakeholder management as it enhance trust and commitment among all stakeholders and lead to organisational competitive edge.

5.3.1.20 Managerial innovation

Table 5.22: Likert scale: Managerial innovation

To what extent would you agree or disagree that managerial innovation are critical success factors for development of micro-lending companies? Indicate your agreement or disagreement on scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. (Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).

A factor analysis was carried out on managerial innovation that are critical success factors for development of micro-lending companies. The following are managerial innovation that are critical success factors for development of micro-lending companies: management constantly seeks to develop new ideas; our business invests in research and development; innovative ideas are rewarded in our business; customers are encouraged to perceive innovation as an opportunity; our business is prepared to do new products / services in our industry; we constantly modifies our product / service to better serve our customers and we prefer to be the first in the market with new products / services. A moderate mean of **2.5429** and a low standard deviation of **0.41075** were confirmed through the factor managerial innovation. This mean reflects a tendency which is almost towards the lower end of the Likert scale of above 2. in Table 5.22 and this implies that there is lack of managerial innovation within the micro-lending sector. It is imperative for micro-lending to be innovative in order to remain competitive and this may lead to organisational success. This is not the case with micro-lending companies in Botswana hence this sector is associated with business continuity and sustainability problems. The studies by Temtime and Pansiri (2004:21) also pointed out that there are claims that major cause of small business failure are as result of poor management and lack of managerial innovative actions. Therefore, it is imperative for management of micro-lending companies to be innovative in order to remain competitive.

5.3.1.21 Motivation

Table 5.23: Likert scale: Motivation



To what extent would you agree or disagree that motivation is a critical success factor for development of micro-lending companies? Indicate your agreement or disagreement on scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. *(Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).*

A factor analysis was carried out on motivation that is a critical success factor for development of micro-lending companies. The following are motivation critical success factors for development of micro-lending companies: I can always manage to solve difficult problems if I try hard enough; I am confident that I can deal efficiently with unexpected events; I can solve most problems if I invest the necessary effort; I can remain calm when facing difficulties because I can rely on my coping abilities; I can usually find several solutions when confronted with problems; I can usually think of a solution when I am in trouble and I can handle whatever comes my way. A high mean of **3.3540** and a low standard deviation of **0.73184** were confirmed through the factor motivation. This mean reflects a tendency which is almost towards the high end of the Likert scale of above 2. in Table 5.23 and this implies that the respondents as the owners of the business are motivated to start - up their own firms. The challenges are that they lack managerial innovative skills and there is lack of

human resource development as evidenced with the level of education in the sector, majority of respondents are professional certificates and diplomas holders. Furthermore, there is also evidence that only 12.9% of the respondents are trained to work for micro-lending companies. Therefore, motivation on its own may not assist the proprietors to be successful if there are no other complimentary factors such as managerial innovative as pointed out in the studies by Pansiri and Temtime (2010:51). It is then perceived that for micro-lending companies to address the business continuity challenges they need to satisfy all the complimentary factors such as managerial innovative and training and development.

5.3.1.22 Perceptions

Table 5.24: Likert scale: Perceptions

To what extent would you agree or disagree that perceptions towards the Risk Manager (RM) are critical success factors for development of micro-lending companies? Indicate your agreement or disagreement on scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. <i>(Please simply put a “circle” on a number representing your preferred answer, if you make a mistake, put an “X” across the circle and choose another answer).</i>
--

A factor analysis was carried out on perceptions towards the Risk Manager (RM) that are critical success factors for development of micro-lending companies. The following are perceptions towards the Risk Manager (RM) that are critical success factors for development of micro-lending companies: the RM has a big say in the decisions we make; the RM has helped improve our micro-lender’s performance; the RM is respected by the board and the RM is able to communicate clearly with directors and other executives. A low mean of **1.3851** and a low standard deviation of **0.68471** were confirmed through the factor perceptions. This mean reflects a tendency which is extremely towards the lower end of the Likert scale of below 2. in Table 5.24 and this implies that micro-lending are not considering the importance of a position of Risk Manager (Chief Risk Officer). In Risk management a position of a Risk Manager is vital to the successful of a risk management system. The position of Risk Manager is supported with practitioners and scholars such as Bromiley *et al.* (2015:266) ; Lundqvist (2015:446) and (Sheedy & Griffin, 2017:9) as they pointed out that successful enterprises risk management system use the services of risk managers (Chief Risk Officers). The findings for the studies by Sheedy and Griffin (2017:9) are extremely different and the opposite to the findings of this study for micro-lending companies, with high mean of above 5 and a low mean of below 1 respectively, on perceptions towards the Chief Risk Officers (Risk Managers). In the studies by Sheedy and Griffin (2017:9) it implies that it is important to recruit Risk Managers and this is not the case of micro-lending companies. Furthermore, the lack of understanding the importance of employing Risk Managers in micro-lending companies in Botswana is shown in the findings for positions of respondents, which is a 1.9%. Therefore, it is

important for micro-lending companies to highly consider the positions of Risk Mangers on its human resources management policies in order to achieve effective and efficient enterprise risk management systems and avoid the challenges related to business continuity and sustainability.

5.3.1.23 Risk oversight

Table 5.25: Likert scale: Risk oversight

To what extent would you agree or disagree that other risk oversight are critical success factors for development of micro-lending companies? Indicate your agreement or disagreement on scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. (Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).
--

A factor analysis was carried out on other risk oversight that are critical success factors for development of micro-lending companies. The following are other risk oversight that are critical success factors for development of micro-lending companies: the risk committee meets often enough to provide genuine oversight of the organisation's risks; our processes ensure that business activities are consistent with risk appetite; directors meet regularly with the executive; I have sufficient time to review the materials sent to me in advance of meetings; the board owns the risk appetite statement and reviews it on regular basis; we often don't have time to think about all the risk implications when making decisions and businesses with usually high profits attract greater than usual scrutiny. A moderate mean of **2.7660** and a low standard deviation of **0.94269** were confirmed through the factor risk oversight. This mean reflects a tendency which is almost towards the lower end of the Likert scale of above 2. in Table 5.25 and this implies that there is a lack of awareness in micro-lending companies in terms of understanding risk oversight. Risk oversight is important to the success of an enterprise risk management system and this is supported by studies of Sheedy and Griffin (2017:9). The findings for the studies by Sheedy and Griffin (2017:9) are extremely different and the opposite to the findings of this study for micro-lending companies, with high mean of above 5 and a low mean of above 2 respectively, on oversight risk. In the studies by Sheedy and Griffin (2017:9) it implies that it is important to recognise oversight risk and this is not the case of micro-lending companies. Therefore, it is important for micro-lending companies to highly consider oversight risk into its processes, policies and procedures in order to achieve effective and efficient enterprise risk management systems and avoid the challenges related to business continuity and sustainability.

5.3.1.24 Taking opportunity

Table 5.26: Likert scale: Taking opportunity

To what extent would you agree or disagree that taking opportunities are critical success factors

for development of micro-lending companies? Indicate your agreement or disagreement on scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree = 1. *(Please simply put a "circle" on a number representing your preferred answer, if you make a mistake, put an "X" across the circle and choose another answer).*

A factor analysis was carried out on taking opportunities that are critical success factors for development of micro-lending companies. The following are critical success factors for development of micro-lending companies through taking opportunities: I will take opportunity even if it is risk; I study the business news with the aim to seize the opportunity when it arises; I act quickly when I see the opportunity; I am always on the lookout for opportunities to make money; I view problems as potential opportunities and I am always happy to take opportunities created by the Government. A low mean of **1.6729** and a low standard deviation of **0.31285** were confirmed through the factor taking opportunities. This mean reflects a tendency which is extremely towards the lower end of the Likert scale of below 2. in Table 5.26 and this implies that micro-lending are not considering taking opportunities in their marketing sphere. This is also supported by the findings on managerial innovation which reflect that there is lack of own initiatives in the micro-lending companies. Taking opportunities and managerial innovative may complements each other, therefore if all these initiatives are lacking it would be difficult to manage and mitigate risks in this sector. Therefore, micro-lending proprietors should be innovative in order to remain competitive as most of the problems related to business continuity are linked with the mangers' characteristics and firm performance (Pansiri & Temtime 2010:48).

5.4 Inferential analysis

Analysis on *t-tests* were conducted on employees and proprietors, which show the relation among dependent and independent variables. In addition, Analysis of variance (ANOVA) was also employed to determine whether there are any significant differences to the extent in which the different variables measure enterprise risk management in micro-lending companies cause by individual main effects and the interaction between these variables. The following subsequent sections focus on the *t-tests* which were conducted in micro-lending companies in Botswana.

5.4.1 T. tests

The main objective of this study was to develop a framework for enterprise risk management and sustainability in micro-lending companies in Botswana. This framework would be used to be mitigate down-side risks in micro-lending businesses in Botswana, which affect business continuity, sustainability, competitiveness, growth and performance. Analysis on *t-tests* were conducted on employees and proprietors, which show the relation among dependent and independent variables. The *t-tests* were conducted on the following (employment status; have you been trained to work in a micro-lending company; have been involved in ERM adoption in your

organisation; respondent groups; gender and is your organisation registered with NBFIRA). These *t-tests* in this section were based on the employees' perspectives and proprietors' perspectives.

5.4.1.1 Employment status

The findings revealed that there was a statistically significant difference between employment status and sources of business for micro-lending companies in Botswana, ($t = 3.092$, $p = 0.002$), an independent samples *t-test* was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents view sources of business for micro-lending such as credit card; mortgage; home improvement loan; business loan; car loan; student loan; personal loan and payday loan. The findings reflect a mean of 4.4123 for full-time employment status and a mean of 4.1149 for part-time employment status. The respondents who were on full-time employment status understood the sources of business more than those who were on part-time employment status. Therefore, micro-lending companies should put in place employment policies which encourages full-time employment rather than part-time employment status as those on full-time would have experience to mitigate risk. The challenges for employing part-time employees are that chances for violating, internal controls and rules as they may not be worried about any consequences about organisation's future. Furthermore, there is high risk in terms of employing part-time employees hence micro-lending companies should adopt human resources management policies which advocate for full-time employment in order to avoid costs related to poor enterprise risk management. The findings on demographic of this study revealed that critical positions such as risk managers and accountants occupied by part-time respondents expose micro-lending businesses to risk. This *t-tests* satisfy one of the objectives of this study, to ascertain procedures and internal controls in micro-lending businesses. It is perceived that poor internal controls may affect organisational performance which may lead to problems associated with sustainability and business continuity.

The findings revealed that there was a statistically significant difference between employment status and challenges / constraints faced with micro-lending company, ($t = 4.584$, $p = 0.000$), an independent samples *t-test* was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents view challenges / constraints faced with micro-lending company such as; customers relationship; organisational design; managerial background; human resources management development; working capital; marketing activities; managerial activities; investment analysis; social-economic problems (interest rates, inflation and retrenchments); technological changes; competitive strategy; personal factors; attracting and recruiting suitable staff; experience in owning or running business; business location / business site; accessibility of growth financing sources; strict government regulations; financial liquidity of P20,000.00 to be maintained all the times and ownership of enterprise being individual proprietor. The results reflect a mean of 4.7116 for full-time employment status and a mean of 4.2390 for part-

time employment status. The respondents who were on full-time employment status understood and experienced more of the above challenges and constraints as compared to part-time employment status respondents. Therefore, micro-lending companies are encouraged to employ full-time employees or should be able to invest in human capital especially training and development of part-time employees. Training and development would assist micro-lending firms in equipping all employees with the capabilities of overcoming the challenges and constraints in other words they would be in position of turning the above challenges and constraints into opportunities, this may lead into reduction of operating costs. Therefore, reduction of costs may influence organisational profitability and hence this would address the challenges associated with sustainability and business continuity, which is so prevalent in micro-lending businesses in Botswana (NBFIRA, 2014:17). However, failure to address the above challenges may lead into liquidation and this t-test satisfies one of the objectives of this study, to determine the challenges that contribute to the closure of micro-lending entities. This shows that if a lot of attention is not given to these challenges / constraints may lead into poor enterprise risk management as with the case of micro-lending companies in Botswana.

The findings revealed that there was a statistically significant difference between employment status and marketing challenges / constraints faced with micro-lending company, ($t = 4.813$, $p = 0.000$), an independent samples t-test was performed (See Table 5.27). The results show that there is a statistically significant difference on how respondents viewed marketing challenges / constraints faced with micro-lending company such as; product / service marketing; marketing research and information; pricing policy and strategy; trained sales staff and promoters and market segmentation. The findings reflect a mean of 4.6578 for full-time employment status and a mean of 4.1514 for part-time employment status. The respondents who were on full-time employment status understood the marketing challenges / constraints as compared to part-time employment status respondents. The findings indicate that full-time employees are more experienced and exposed to the marketing challenges / constraints faced with micro-lending and hence it is appropriate for this sector to shift from part-time employment to full-time employment in order to increase a fair understanding of the challenges within their enterprises. However, failure to address the above challenges may lead into liquidation and this t-test satisfies one of the objectives of this study, to determine the challenges that contribute to the closure of micro-lending entities. This shows that if a lot of attention is not given to these marketing challenges / constraints may lead into poor enterprise risk management as with the case of micro-lending companies in Botswana.

The findings revealed that there was a statistically significant difference between employment status and primary risks, ($t = 4.813$, $p = 0.000$), an independent samples t-test was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents viewed primary risk types within their organisations such as; credit risk; market risk; liquidity risk;

interest rate risk; country risk; reputation risk; legal risk and operational risk. The findings reflect a mean of 4.6578 for full-time employment status and a mean of 4.1514 for part-time employment status. The respondents who were on full-time employment status understood the primary risk as compared to part-time employment status respondents. The respondents on part-time may not have enough to deal with primary risk hence there is need for intervention through training and development of all staff members about sources of risk in order to avoid issues related to sustainability and growth. This t-tests on primary risk and employment status addresses one of the objectives of the study, to establish sources of risk that affect sustainability in micro-lending companies. The sources of risk that affect sustainability in micro-lending companies are as follows; credit risk; market risk; liquidity risk; interest rate risk; country risk; reputation risk; legal risk and operational risk and these sources of risk should be included in the framework for enterprise risk management and sustainability for micro-lending in Botswana. This would be part of the contribution of this study to policy makers and other stakeholders.

The findings revealed that there was a statistically significant difference between employment status and primary factors, ($t = -5.105$, $p = 0.000$), an independent samples t-test was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents viewed primary factors of enterprise risk management within their organisations such as; employees' misconduct; processes; systems and external factors (e.g. natural disasters; fraud, political pressures). The findings reflect a low mean of 1.9786 for full-time employment status and a high mean of 2.7365 for part-time employment status. The respondents who were on part-time employment status are more conscious than full-time employment status in relation to implementation of primary factors of enterprise risk management. This may be perceived as resistance to change hence strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. The findings reflected that majority of employees are on full-time, therefore in order to address problems associated to business continuity in micro-lending it is encouraged to implement awareness on primary factors of enterprise risk management. This t-tests satisfy one of the objectives of this study, to determine the challenges that contributes to the closure of micro - lending companies.

The findings revealed that there was a statistically significant difference between employment status and employee exposures, ($t = -6.129$, $p = 0.000$), an independent samples t-test was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents viewed employee exposures as an important part of enterprise risk management within their organisations such as; incompetence; human error (negligence); low morale; high staff turnover; fraudulent / criminal activities by employees and lack of training. The findings reflect a low mean of 2.3394 for full-time employment status and a high mean of 3.1667 for part-time

employment status. The respondents who were on part-time employment status recognised the importance of employee exposures more than full-time employment status in relation to enterprise risk management. This shows that the part-time employees are more knowledgeable than full-time employees hence the need to engage them as full-time personnel. This is supported by the findings that most respondents responsible to championing and mitigating risks are employed on part-time basis (risk managers and accountants). Furthermore, the findings indicated low percentages of (1.9% and 4.8%) for respondents who are risk managers and accountants, respectively (See Table 5.2). This shows that micro-lending companies are exposed to high risk and attention to recruitment processes, procedures, policies, rules and regulations should be revised. A policy should be put place that any registered micro-lending company should have a position of risk manager or accountant who is also charged of enterprise risk management responsibilities and roles. However, if this situation is not attended the country may continue to witness closure of micro-lending entities which is a scenario that contradicts with the nation's objective of creation of employment and reduction of poverty. This t-tests satisfy one of the objectives of this study, to determine the challenges that contributes to the closure of micro - lending companies.

The findings revealed that there was a statistically significant difference between employment status and process exposures, ($t = - 6.129$, $p = 0.000$), an independent samples t-test was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents viewed process exposures as an important part of enterprise risk management within their organisations such as; errors in procedures / methodologies; documentation errors; product complexity and security risks. The findings reflect a low mean of 1.9683 for full-time employment status and a high mean of 3.0203 for part-time employment status. The respondents who were on part-time employment status recognized the importance of process exposures more than full-time employment status in relation enterprise risk management. This shows that the part-time employees are more knowledgeable than full-time employees hence the need to engage them as full-time personnel. This is supported by the findings that most respondents responsible to championing and mitigating risks are employed on part-time basis (risk managers and accountants). Furthermore, the results indicated low percentages of (1.9% and 4.8%) for respondents who are risk managers and accountants, respectively (See Table 5.2). The results also show that the majority of respondents' highest qualification was a professional certificate and diploma constituting a ratio of 61.9% of the respondents. This shows that micro-lending companies are exposed to high risk and attention should be given to training and development, recruitment processes, procedures, policies, rules and regulations. A policy should be put place that any registered micro-lending company should have a position of qualified, experienced and -well-trained risk manager or accountant who are also charged of enterprise risk management responsibilities and roles. However, if this situation is not attended to the country may continue to

witness closure of micro-lending entities which is a scenario that contradicts with the nation's objective of creation of employment and reduction of poverty. This t-tests satisfy one of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending companies.

The findings revealed that there was a statistically significant difference between employment status and system exposures, ($t = - 5.684$, $p = 0.000$), an independent samples t-test was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents viewed system exposures as an important part of enterprise risk management within their organisations such as; system infiltration; system failures; hackers (e.g. fraud through systems); programming errors; information risk; telecommunication risk and obsolescence of systems. The findings reflect a low mean of 1.9692 for full-time employment status and a high mean of 2.9575 for part-time employment status. The respondents who were on part-time employment status recognized the importance of system exposures more than full-time employment status in relation to enterprise risk management. This shows that the part-time employees are more knowledgeable than full-time employees hence the need to engage them as full-time personnel. This is supported by the results that most respondents responsible to championing and mitigating risks are employed on part-time basis (risk managers and accountants). Furthermore, the findings indicated low percentages of (1.9% and 4.8%) for respondents who are risk managers and accountants, respectively (See Table 5.2). The findings also show that the majority of respondents' highest qualification was a professional certificate and diploma constituting a ratio of 61.9% of the respondents. This shows that micro-lending companies are exposed to high risk and more emphasis must be given towards training and development as strategy of closing this gap which may lead to poor enterprise risk management. A policy should be put in place that any registered micro-lending company must employ risk takers and champions in order to address problems related to business continuity and sustainability. However, if this situation is not attended to micro-lending entities may continue to collapse as evidenced in this study. This t-tests satisfy two of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending companies and to ascertain procedures and internal controls in micro-lending businesses.

The findings revealed that there was a statistically significant difference between employment status and external exposures, ($t = - 4.699$, $p = 0.000$), an independent samples t-test was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents viewed external exposures as an important part of enterprise risk management within their organisations such as; acts of God (lightning, veld fire and floods; external criminal activities; domestic political upheaval; regulatory and compliance; legal actions; business environment changes; deterioration of micro-lending company's reputation perceived by the

market; strikes and money laundering). The findings reflect a low mean of 2.1148 for full-time employment status and a high mean of 3.0721 for part-time employment status. The respondents who were on part-time employment status recognized the importance of external exposures more than full-time employment status in relation enterprise risk management. This shows that the part-time employees are more knowledgeable than full-time employees hence the need to engage them as full-time personnel. However, a failure to meet some of the requirements for external exposures such as regulatory and compliance; legal actions and money laundering may result into a collapse of an enterprise. This is supported by the results that most respondents responsible to championing and mitigating risks are employed on part-time basis (risk managers and accountants) and those on full-time basis are not in a position to mitigate sources of risk. Furthermore, the findings indicated low percentages of (1.9% and 4.8%) for respondents who are risk managers and accountants, respectively (See Table 5.2). The results also show that the majority of respondents' highest qualification was a professional certificate and diploma constituting a ratio of 61.9% of the respondents. This shows that micro-lending companies are exposed to high risk and more emphasis must be given towards training and development as strategy of closing this gap which may lead to poor enterprise risk management. A policy should be put in place that any registered micro-lending company must employ risk takers and champions in order to address problems related to business continuity and sustainability. However, if this situation is not attended to micro-lending entities may continue to collapse as evidenced in this study. This t-tests satisfy two of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending companies and to ascertain procedures and internal controls in micro-lending businesses.

The findings revealed that there was a statistically significant difference between employment status and important elements, ($t = - 3.769$, $p = 0.000$), an independent samples t-test was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents viewed important elements as an important part of enterprise risk management within their organisations such as; risk identification; risk evaluation / measurement; risk control; and risk financing. The findings reflect a low mean of 2.0921 for full-time employment status and a high mean of 2.6892 for part-time employment status. The respondents who were on part-time employment status recognised importance elements more than full-time employment status in relation to enterprise risk management. This shows that the part-time employees are more knowledgeable than full-time employees hence the need to engage them as full-time personnel. However, a failure to understand the importance of elements of enterprise risk management such as; risk identification; risk evaluation / measurement; risk control; and risk financing may result into a collapse of an enterprise. The lack of understanding of importance elements for enterprise risk management is supported by the results of this study which reflect that most respondents responsible to championing and mitigating risks are employed on part-time basis (risk managers

and accountants) and those on full-time basis are not in a position to mitigate sources of risk. Furthermore, the findings indicated low percentages of (1.9% and 4.8%) for respondents who are risk managers and accountants, respectively (See Table 5.2). The results also show that the majority of respondents' highest qualification was a professional certificate and diploma which constitute a ratio of 61.9% of the respondents. This shows that micro-lending companies are exposed to high risk and more emphasis must be given towards training and development as a strategy of closing this gap which may lead into poor enterprise risk management. A policy should be put in place that any registered micro-lending company must apply all the elements of enterprise risk management such as; risk identification; risk evaluation / measurement; risk control; and risk financing. However, a failure to implement these important elements may lead into problems associated with business continuity and sustainability as evidenced in this study of the micro-lending sector. This t-tests satisfy three of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending companies; to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between employment status and methods used to identify risk types, ($t = -3.460$, $p = 0.001$), an independent samples t-test was performed (See Table 5.27). The results show that there is a statistically significant difference on how respondents viewed appropriate methods used to identify risk types as an important part of enterprise risk management within their organisations such as; workshops; process mapping; comparisons with other organisations and discussions with peers. The findings reflect a low mean of 2.1290 for full-time employment status and a high mean of 2.6554 for part-time employment status. The respondents who were on part-time employment status managed to identify methods used to mitigate risk more than full-time employment status in relation to enterprise risk management. This shows that the part-time employees are more knowledgeable than full-time employees hence the need to engage them as full-time personnel. However, a failure to understand appropriate methods used to identify enterprise risk management such as; workshops; process mapping; comparisons with other organisations and discussions with peers may result into a collapse of an enterprise. The lack of understanding using appropriate methods to identify risk is supported with the findings for this study which reflect that most of respondents who are responsible for championing and mitigating risks are employed on part-time basis (risk managers and accountants) and those on full-time basis are not in a position to mitigate sources of risk. Furthermore, the findings indicated low percentages of (1.9% and 4.8%) for respondents who are risk managers and accountants, respectively (See Table 5.2). The results also show that the majority of respondents' highest qualification was a professional certificate and diploma which constitute a ratio of 61.9% of the respondents. This shows that micro-lending companies are exposed to high risk and more emphasis must be given towards training and development as a

strategy of closing this gap which may lead into poor enterprise risk management. A policy should be put in place that any registered micro-lending company must use appropriate methods such as; workshops; process mapping; comparisons with other organisations and discussions with peers in order to mitigate risk. However, a failure to use appropriate methods for risk identification may lead into challenges / constraints associated with business continuity and sustainability as evidenced in this study for micro-lending sector. This t-tests satisfy four of the objectives of this study, to establish sources of risk that affect sustainability in micro-lending companies; to determine the challenges that contributes to the closure of micro-lending companies; to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between employment status and qualitative methods, ($t = - 6.488$, $p = 0.000$), an independent samples t-test was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents viewed qualitative methods used to measure enterprise risk management within their organisations such as; historical data to forecast the likelihood of a potential loss; self - risk assessments and risk maps / process flows. The findings reflect a low mean of 1.8074 for full-time employment status and a high mean of 2.6847 for part-time employment status. The respondents who were on part-time employment status managed to appreciate qualitative methods used to measure enterprise risk management more than full-time employment status. This shows that the part-time employees appreciate qualitative methods more than full-time employees hence the need to engage them as full-time personnel. However, a failure to appreciate methods used to measure enterprise risk management such as; historical data to forecast the likelihood of a potential loss; self - risk assessments and risk maps / process flows may result into a collapse of an enterprise. Therefore, poor appreciation of methods used to measure enterprise risk management is supported with the results of this study which reflect that most of respondents who are responsible for championing and mitigating risks are employed on part-time basis (risk managers and accountants) and those on full-time basis are not in a position to mitigate sources of risk. Furthermore, the findings indicated low percentages of (1.9% and 4.8%) for respondents who are risk managers and accountants, respectively (See Table 5.2). The results also show that the majority of respondents' highest qualification was a professional certificate and diploma which constitute a ratio of 61.9% of the respondents. This shows that micro-lending companies are exposed to high risk and more emphasis must be given towards training and development as a strategy of closing this gap which may lead into poor enterprise risk management systems and best practices. A policy should be put in place that any registered micro-lending company must use qualitative methods such as; historical data to forecast the likelihood of a potential loss; self - risk assessments and risk maps / process flows in order to appropriately measure risk. However, a failure to use appropriate qualitative methods for risk measurement may lead into challenges /

constraints related to business continuity and sustainability as evidenced in this study for micro-lending sector. This t-tests satisfy four of the objectives of this study, to establish sources of risk that affect sustainability in micro-lending companies; to determine the challenges that contributes to the closure of micro-lending companies; to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.



The findings revealed that there was a statistically significant difference between employment status and quantitative methods, ($t = -4.564$, $p = 0.000$), an independent samples t-test was performed (See Table 5.27). The results show that there is a statistically significant difference on how respondents viewed quantitative methods used to measure enterprise risk management within their organisations such as; casual modelling; risk indicators; escalation triggers and loss - event database. The findings reflect a low mean of 1.9238 for full-time employment status and a high mean of 2.4730 for part-time employment status. The respondents who were on part-time employment status managed to appreciate quantitative methods used to measure enterprise risk management more than full-time employment status. This shows that the part-time employees appreciate quantitative methods more than full-time employees hence the need to engage them as full-time personnel. However, a failure to appreciate methods used to measure enterprise risk management such as; casual modelling; risk indicators; escalation triggers and loss - event database may result into a collapse of an enterprise. Therefore, poor appreciation of methods used to measure enterprise risk management is supported with the findings of this study which reflect that most of respondents who are responsible for championing and mitigating risks are employed on part-time basis (risk managers and accountants) and those on full-time basis are not in a position to mitigate sources of risk. Furthermore, the findings indicated low percentages of (1.9% and 4.8%) for respondents who are risk managers and accountants, respectively (See Table 5.2). The results also show that the majority of respondents' highest qualification was a professional certificate and diploma which constitute a ratio of 61.9% of the respondents. This shows that micro-lending companies are exposed to high risk and more emphasis must be given towards training and development as a strategy of closing this gap which may lead into poor enterprise risk management systems and best practices. A policy should be put in place that any registered micro-lending company must use quantitative methods such as; casual modelling; risk indicators; escalation triggers and loss - event database in order to appropriately measure risk. However, a failure to use appropriate quantitative methods for risk measurement may lead into challenges / constraints related to business continuity and sustainability as evidenced in this study for micro-lending sector. This t-tests satisfy four of the objectives of this study, to establish sources of risk that affect sustainability in micro-lending companies; to determine the challenges that contributes to the closure of micro-lending companies; to ascertain procedures and internal controls in micro-

lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between employment status and control measures, ($t = -4.976$, $p = 0.000$), an independent samples t-test was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents viewed control measures as an important part of enterprise risk management within their organisations such as; policy and procedures; internal controls and risk reporting. The findings reflect a low mean of 2.5630 for full-time employment status and a high mean of 3.1351 for part-time employment status. The respondents who were on part-time employment status recognized the importance of control measures more than full-time employment status in relation to enterprise risk management. This shows that the part-time employees are more knowledgeable than full-time employees hence the need to engage them as full-time personnel. This is supported by the results that most respondents responsible for championing and mitigating risks are employed on part-time basis (risk managers and accountants). Furthermore, the results indicated low percentages of (1.9% and 4.8%) for respondents who are risk managers and accountants, respectively (See Table 5.2). The findings also show that the majority of respondents' highest qualification was a professional certificate and diploma constituting a ratio of 61.9% for the respondents. This shows that micro-lending companies are exposed to high risk and attention should be given to training and development, recruitment processes, procedures, policies, internal controls; risk reporting; rules and regulations. A policy should be put place that any registered micro-lending company should have a position of qualified, experienced and well - trained risk managers or accountants who are also charged with enterprise risk management responsibilities and roles. However, if this situation is not attended to the country may continue to witness closure of many micro-lending entities which is a scenario that contradicts with the nation's objective of employment creation and poverty reduction. This t-tests satisfy two of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending companies and to ascertain procedures and internal controls in micro-lending businesses.

The findings revealed that there was a statistically significant difference between employment status and risk financing techniques, ($t = -2.474$, $p = 0.014$), an independent samples t-test was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents viewed risk financing techniques as an important part of enterprise risk management within their organisations such as risk transfers (to third parties-insurance companies); risk retention (funded) and risk retention (unfunded). The findings reflect a low mean of 2.5683 for full-time employment status and a high mean of 2.8378 for part-time employment status. The respondents who were on part-time employment status managed to appreciate risk financing techniques as part of enterprise risk management more than full-time employment status.

This shows that the part-time employees appreciate risk financing techniques more than full-time employees hence the need to engage them as full-time personnel. However, a failure to appreciate risk financing techniques as part of enterprise risk management such as; risk transfers (to third parties- insurance companies); risk retention (funded) and risk retention (unfunded) may result into a collapse of an enterprise. Therefore, poor appreciation of risk financing techniques as part of enterprise risk management is supported by the findings of this study which reflect that most of respondents who are responsible for championing and mitigating risks are employed on part-time basis (risk managers and accountants) and those on full-time basis are not in a position to mitigate sources of risk. Furthermore, the findings indicated low percentages of (1.9% and 4.8%) for respondents who are risk managers and accountants, respectively (See Table 5.2). The findings also show that the majority of respondents' highest qualification was a professional certificate and diploma which constitute a ratio of 61.9% of the respondents. This shows that micro-lending companies are exposed to high risk and more emphasis must be given towards risk financing techniques as a strategy of closing this gap which may lead into poor enterprise risk management systems and best practices. A policy should be put in place that any registered micro-lending company must apply risk financing techniques such as; risk transfers (to third parties - insurance companies); risk retention (funded) and risk retention (unfunded) in order to manage and mitigate risk. However, a failure to use appropriate risk financing techniques for managing and mitigating risk may lead into challenges / constraints related to business continuity and sustainability as evidenced in this study for micro-lending sector. This t-tests satisfy four of the objectives of this study, to establish sources of risk that affect sustainability in micro-lending companies; to determine the challenges that contributes to the closure of micro-lending companies; to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between employment status and adoption of enterprise risk management, ($t = -1.501$, $p = 0.0134$), an independent samples t-test was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents viewed adoption of enterprise risk management as important aspect of organisational performance as follows; an adoption of enterprise risk management process that aligns with strategy and objectives; an adoption of risk identification as an important ongoing process; an adoption of a separate enterprise risk management structure; an adoption of a direct reporting line where a risk management reports to the CEO; an adoption of enterprise risk management as a function and responsibility of the board of directors; an adoption of liquidity regulatory capital allocation for enterprise risk management; an adoption of a framework for enterprise risk management and sustainability that mitigates sources of risk and an adoption of enterprise risk management process as an integral part of the enterprise's overall management process. The findings reflect a low mean of 1.7835 for full-time employment status and a mean of

1.9392 for part-time employment status. The respondents who were on part-time employment status was in favour of an adoption of enterprise risk management and sustainability framework which would be used to manage and mitigate risk, more than full-time employment status. This shows that the part-time employees understand the importance of effective and efficient enterprise risk management systems more than full-time employees hence the need to engage them as full-time personnel. However, a failure to use the part-time employees' expertise may lead to poor enterprise risk management strategies, thus affecting organisation performance, competitiveness and growth. Therefore, poor best practices related to enterprise risk management in micro-lending companies is supported with the findings of this study which reflect that most of respondents who are responsible for championing and mitigating risks are employed on part-time basis (risk managers and accountants) and those on full-time basis are not in a position to mitigate sources of risk. Furthermore, the findings indicated low percentages of (1.9% and 4.8%) for respondents who are risk managers and accountants, respectively (See Table 5.1). The findings also show that the majority of respondents' highest qualification was a professional certificate and diploma which constitute a ratio of 61.9% of the respondents. This shows that micro-lending companies are exposed to high risk and the strategy to address this challenge is through an adoption of enterprise risk management and sustainability framework which would be used to manage and mitigate risks. A policy should be put in place that any registered micro-lending company must adopt a framework for enterprise risk management and sustainability in order to address challenges related to business continuity. The framework for enterprise risk management and sustainability may take into cognisance the following adoptions: an adoption of risk identification as an important ongoing process; an adoption of a separate enterprise risk management structure; an adoption of a direct reporting line where a risk management reports to the CEO; an adoption of enterprise risk management as a function and responsibility of the board of directors; an adoption of liquidity regulatory capital allocation for enterprise risk management; an adoption of a framework for enterprise risk management and sustainability that mitigates sources of risk and an adoption of enterprise risk management process as an integral part of the enterprise's overall management process. This t-tests satisfy two of the objectives of this study, to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between employment status and profitability and liquidity ratios, ($t = -6.743$, $p = 0.000$), an independent samples t-test was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents viewed the application of profitability and liquidity ratios as follows; return on assets (ROA); return on equity (ROE); debt to assets ratio; capital gearing ratio; interest cover; earnings per share; price / earnings ratio (P/E Ratio); dividend pay-out ratio; dividend yield; dividend cover; current ratio; acid test ratio; inventory turnover; creditor payment period; debtor

collection period; gross profit margin and profit margin. The findings reflect a low mean of 1.9960 for full-time employment status and a high mean of 3.0208 for part-time employment status. The respondents who were on part-time employment status understood the application of profitability and liquidity ratios that are used to measure organisational performance more than full-time employment status. This shows that the part-time employees are well acquainted with the application of accounting and reporting as a tool for decision making more than full-time employees hence the need to engage them as full-time personnel. However, a failure to apply effective accounting systems including accounting ratios may lead to poor enterprise risk management strategies, thus affecting organisation performance, competitiveness and growth. Therefore, poor best practices related enterprise to risk management and effective accounting systems in micro-lending companies is supported with the findings of this study which reflect that most of respondents who are responsible for championing and mitigating risks are employed on part-time basis (risk managers and accountants) and those on full-time basis are not in a position to apply the accounting ratios. Furthermore, the findings indicated low percentages of (1.9% and 4.8%) for respondents who are risk managers and accountants, respectively (See Table 5.1). The findings also show that the majority of respondents' highest qualification was a professional certificate and diploma which constitute a ratio of 61.9% of the respondents. This shows that micro-lending companies are exposed to high risk and the strategy to address this challenge is through interpretation of accounting ratios for example profitability and liquidity ratio (return on assets (ROA); return on equity (ROE); debt to assets ratio; capital gearing ratio; interest cover; earnings per share; price / earnings ratio (P/E Ratio); dividend pay-out ratio; dividend yield; dividend cover; current ratio; acid test ratio; inventory turnover; creditor payment period; debtor collection period; gross profit margin and profit margin) used to measure organisational performance. A policy should be put in place that any registered micro-lending company must use accounting ratios as performance indicators in order to address problems associated with sustainability and business continuity. This t-test satisfies one of the objectives of this study, to ascertain procedures and internal controls in micro-lending businesses. Finally, these performance indicators (profitability ratios and liquidity ratios) would be embedded in the framework for enterprise risk management and sustainability.

The findings revealed that there was a statistically significant difference between employment status and corporate governance, ($t = -3.657$, $p = 0.000$), an independent samples t-test was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents viewed the application of corporate governance as follows; ownership; board size; outsiders in board; audit committee; outsiders in audit committee; total employees in the firm; human resource manager; family CEO; firm size; fixed assets; investments; total assets; solidity; nature of firm and firm age. The findings reflect a low mean of 2.2674 for full-time employment status and a high mean of 2.9766 for part-time employment status. The respondents who were on

part-time employment status understood the concept of good corporate governance which influence organisation's performance more than full-time employment status. This shows that the part-time employees are well acquainted with King (2016)'s Report which argues that poor corporate governance affects organisation's performance and growth. Therefore, poor best practices related lack of good corporate governance affects the entity's business continuity as evidenced in this case of micro-lending in Botswana. A policy should be put in place that any registered micro-lending company must comply with the King's Report in order to be competitive and be able to mitigate risks. Furthermore, micro-lending companies may address the issues related to poor corporate governance through employment of risk managers and accountants who will be charged of good governance. This t-tests satisfy one of the objectives of this study, to ascertain leadership styles, management principles and corporate governance cultures that is dominant in micro-lending companies. Finally, good corporate governance should be embedded in the framework for enterprise risk management and sustainability.

The findings revealed that there was a statistically significant difference between employment status and stakeholder management, ($t = - 3.029$, $p = 0.003$), an independent samples t-test was performed (See Table 5.27). The findings show that there is a statistically significant difference on how respondents viewed the concept of stakeholder management as follows; managing stakeholders with social responsibilities (economic, legal, environmental and ethical); exploring stakeholders' needs and constraints to micro-lending companies; communicating with and engaging stakeholders properly and frequently; understanding the area of stakeholders' interest; identifying stakeholders properly; analysing conflicts and coalitions among stakeholders; predicting the influence of stakeholders accurately; assessing attributes (power, agency, proximity) of stakeholders; compromising conflicts among stakeholders effectively; formulating clear statement of micro-lending missions; predicting stakeholders' reactions for implementing the strategies; analysing the change of stakeholders' influence and relationships during life span of the enterprise and assessing stakeholders' behaviour. The findings reflect a low mean of 2.1514 for full-time employment status and a high mean of 2.6649 for part-time employment status. The respondents who were on part-time employment status understood the concept of stakeholder management which influence organisation's performance more than full-time employment status. This shows that the part-time employees are well acquainted to the concept of stakeholder management which argues that poor recognition of organisation's stakeholders affects firm's performance and growth. Therefore, poor best practices related poor stakeholder management affects the entity's business continuity as evidenced in this case of micro-lending in Botswana. A policy should be put in place that any registered micro-lending company must adhere to good stakeholder management in order to be competitive and be able to mitigate risks. Furthermore, micro-lending companies may address the issues related to poor corporate governance through employment of risk managers and accountants who will be charged with knowledge and good concepts of stakeholder

management. This t-tests satisfy one of the objectives of this study, to ascertain leadership styles, management principles and corporate governance cultures that is dominant in micro-lending companies. Finally, good corporate governance should be embedded in the framework for enterprise risk management and sustainability.



Table 5.27: Independent samples t-test for employment status: Full-time and Part-time.

Employee perspective	T	Df	Sig. (2 - tailed)
Construct			
Sources of business	3.092	665	0.002
Challenges / Constraints	4.584	665	0.000
Marketing challenges	4.813	665	0.000
Primary risks	4.813	665	0.000
Primary factors	-5.105	665	0.000
Employee exposures	-6.129	665	0.000
Process exposures	-6.129	665	0.000
Systems exposures	-5.684	665	0.000
External exposures	-4.699	665	0.000
Important elements	-3.769	665	0.000
Identify risk types	-3.460	665	0.001
Qualitative methods	-6.488	665	0.000
Quantitative methods	-4.564	665	0.000
Control measures	-4.976	665	0.000
Risk financing techniques	-2.474	665	0.014
Adoption	-1.501	665	0.134
Profitability and liquidity ratios	-6.743	665	0.000
Corporate governance	-3.657	665	0.000
Stakeholder management	-3.029	665	0.003

Source: Own Source

5.4.1.2: Have you been trained to work in micro-lending company? Yes or No (employee perspective)

The findings revealed that there was a statistically significant difference between you have been trained to work in a micro-lending company and sources of business for micro-lending companies in Botswana, ($t = -13.498$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed training to work for a micro-lending company across the dichotomous values Yes or No. The findings reflect a mean of 3.7064 for "Yes" respondents and a mean of 4.1149 for "No". The respondents who were not trained were more than those trained to work in micro-lending company, and this reflects some inconsistency in this sector as it is too risky to employ people who are not trained. Furthermore, there is high risk in terms of understanding sources of businesses that affect micro-lending as this would not be clear to respondents since they are not trained to work in this sector. The findings revealed that it was critical to put in place effective human resources management policies which support training and development programmes in this sector. This t-test satisfies one of the objectives of this study, to determine the challenges that contribute to the closure of micro-lending entities. Therefore, it is imperative to incorporate robust internal policies in this sector for human resources development in order to reduce the level of risks which may lead to problems associated with sustainability and business continuity.

The findings revealed that there was a statistically significant difference between having been trained to work in a micro-lending company and challenges / constraints faced with micro-lending company, ($t = -15.400$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed between you have been trained to work in micro-lending company? and challenges / constraints faced with micro-lending company. The findings reflect a mean of 3.8617 for "Yes" respondents and a mean of 4.8073 for "No" respondents. The respondents who were in favour No were many and this reflects that many respondents were not trained to work in a micro-lending hence this contributed to challenges that affect business continuity. Therefore, micro-lending companies are encouraged to employ full-time employees or should be able to invest in human capital especially training and development of part-time employees as a strategy of overcoming the challenges and constraints which may lead into high operating costs. Therefore, reduction of costs may influence organisational profitability and hence this would address the challenges associated with sustainability and business continuity, which is so prevalent in micro-lending businesses in Botswana (NBFIRA, 2014:17). However, failure to address the above challenges may lead into liquidation and this t-test satisfies one of the objectives of this study, to determine the challenges that contribute to the closure of micro-lending entities. This shows that if a lot of attention is not given to these challenges / constraints may lead into poor enterprise risk management as with the case of micro-lending companies in Botswana.

The findings revealed that there was a statistically significant difference between have you been trained to work in a micro-lending company? and marketing challenges / constraints faced with micro-lending company, ($t = -15.499$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed you have been trained to work in a micro-lending company? and marketing challenges / constraints faced with micro-lending company. The findings reflect a mean of 3.7837 for "Yes" respondents and a mean of 4.7549 for "No" respondents. The respondents who recorded a "No" were many as compared to "Yes", therefore, this shows a lack of training and development in micro-lending companies in Botswana. However, failure to improve on training and development strategies may lead into liquidation and this t-tests satisfy one of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending entities.

The findings revealed that there was a statistically significant difference between have been trained to work in a micro-lending company and primary risks, ($t = -15.499$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed have you been trained to work in a micro-lending company? and primary risk types within their organisations. The findings reflect a mean of 3.7837 for respondents who recorded "Yes" and a mean of 4.7549 for respondents who recorded "No". The respondents who were recorded "No" were many and this shows that there is a lack of training in the area that deals with primary risk types. Therefore, there is a need of an intervention through training and development of all staff members about sources of risk in order to address issues related to sustainability and growth. This t-tests on primary risk and employment status addresses one of the objectives of the study, to establish sources of risk that affect sustainability in micro-lending companies. This would be part of the contribution of this study to policy makers and other stakeholders.

The findings revealed that there was a statistically significant difference between have been trained to work in a micro-lending company? and primary factors, ($t = 13.614$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed have been trained to work in a micro-lending company? and primary factors of enterprise risk management within their organisations. The findings reflect a mean of 3.1047 for respondents who recorded "Yes" and a low mean of 1.8602 for respondents who recorded "No". The respondents who recorded "Yes" were more conscious in relation to training to work in a micro-lending company in terms of dealing with primary factors of enterprise risk management. The challenges would have been on implementation and resistance to change, therefore strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. This t-

tests satisfy one of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been trained to work in a micro-lending company? and employee exposures, ($t = 10.827$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed have you been trained to work in a micro-lending company? and employee exposures as an important part of enterprise risk management within their organisations. The results reflect a mean of 3.2093 for respondents who recorded "Yes" and a mean of 2.2633 for respondents who recorded "No". The respondents who recorded "Yes" were more conscious in relation to training to work in a micro-lending company in terms of dealing with employee exposures as an important part of enterprise risk management. The challenges would have been on implementation and resistance to change, therefore strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. This t-tests satisfy one of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been trained to work in a micro-lending company? and process exposures, ($t = 10.734$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed have you been trained to work in a micro-lending company? and process exposures as an important part of enterprise risk management within their organisations. The findings reflect a mean of 3.0669 for respondents who recorded "Yes" and a mean of 1.8728 for respondents who recorded "No". The respondents who recorded "Yes" were more conscious in relation to training to work in a micro-lending company in terms of dealing with process exposures as an important part of enterprise risk management. The challenges would have been on implementation and resistance to change, therefore strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. This t-tests satisfy one of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been trained to work in a micro-lending company? and system exposures, ($t = 11.148$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents who viewed system exposures as an important part of enterprise risk management within their organisations. The findings reflect a mean of 3.1080 for respondents who recorded "Yes" and a mean of 1.8635 for respondents who recorded "No". The respondents who recorded "Yes" were more conscious in relation to training to

work in a micro-lending company in terms of dealing with system exposures as an important part of enterprise risk management. The challenges would have been on implementation and resistance to change, therefore strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. This t-tests satisfy one of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been trained to work in a micro-lending company? and external exposures, ($t = 12.572$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed external exposures as an important part of enterprise risk management within their organisations. The findings reflect a mean of 3.5601 for respondents who recorded "Yes" and a mean of 1.9618 for respondents who recorded "No". The respondents who recorded "Yes" were more conscious in relation to training to work in a micro-lending company in terms of dealing with external exposures as an important part of enterprise risk management. The challenges would have been on implementation and resistance to change, therefore strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. This t-tests satisfy one of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been trained to work in micro-lending company? and important elements, ($t = 6.748$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed have you been trained to work in a micro-lending company? and important elements as an important part of enterprise risk management within their organisations. The findings reflect a mean of 2.7471 for respondents who recorded "Yes" and a mean of 2.0331 for respondents who recorded "No". The respondents who recorded "Yes" were more conscious in relation to training to work in a micro-lending company in terms of dealing with important elements parts of enterprise risk management. The challenges would have been on implementation and resistance to change, therefore strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. This t-tests satisfy one of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been trained to work in a micro-lending company? and methods used to identify risk types, ($t = 6.207$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that

there is a statistically significant difference on how respondents viewed have you been trained to work in a micro-lending company? and appropriate methods used to identify risk types as an important part of enterprise risk management within their organisations. The findings reflect a mean of 2.7093 for respondents who recorded "Yes" and a mean of 2.0766 for respondents who recorded "No". The respondents who recorded "Yes" were more conscious in relation to training to work in a micro-lending company in terms of dealing with methods used to identify risk types. The challenges would have been on implementation and resistance to change, therefore strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. This t-tests satisfies one of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been trained to work in a micro-lending company? and qualitative methods used in the ERM process, ($t = 9.691$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed have you been trained to work in a micro-lending company? and qualitative methods used to measure enterprise risk management within their organisations. The findings reflect a mean of 2.6085 for respondents who recorded "Yes" and a mean of 1.7447 for respondents who recorded "No". The respondents who recorded "Yes" were more conscious in relation to training to work in a micro-lending company in terms of dealing with qualitative methods used to identify sources of risk. The challenges would have been on implementation and resistance to change, therefore strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. This t-tests satisfy two of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending companies and to establish sources of risk that affect sustainability in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been trained to work in a micro-lending company? and quantitative methods used in the ERM process, ($t = 7.755$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed have you been trained to work in a micro-lending company? and quantitative methods used to measure enterprise risk management within their organisations. The findings reflect a mean of 2.4942 for respondents who recorded "Yes" and a mean of 1.8744 for respondents who recorded "No". The respondents who recorded "Yes" were more conscious in relation to training to work in a micro-lending company in terms of dealing with quantitative methods used to identify sources of risk. The challenges would have been on implementation and resistance to change, therefore strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. This t-tests satisfy two of the objectives of this study, to determine the

challenges that contributes to the closure of micro-lending companies and to establish sources of risk that affect sustainability in micro-lending companies.

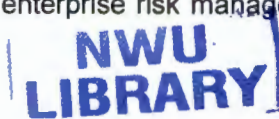
The findings revealed that there was a statistically significant difference between have you been trained to work in a micro-lending company? and control measures, ($t = 3.570$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed have you been trained to work in a micro-lending company? and control measures as an important part of enterprise risk management within their organisations. The findings reflect a mean of 2.8411 for respondents who recorded "Yes" and a mean of 2.5582 for respondents who recorded "No". The respondents who recorded "Yes" were more conscious in relation to training to work in a micro-lending company in terms of dealing with control measures for monitoring and controlling of enterprise risk management. The challenges would have been on implementation and resistance to change, therefore strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. This t-tests satisfy two of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending companies and to establish sources of risk that affect sustainability in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been trained to work in a micro-lending company and risk financing techniques, ($t = 4.192$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed have you been trained to work in a micro-lending company? and risk financing techniques as important part of enterprise risk management within their organisations. The findings reflect a mean of 2.8527 for respondents who recorded "Yes" and a mean of 2.5433 for respondents who recorded "No". The respondents who recorded "Yes" were more conscious in relation to training to work in a micro-lending company in terms of dealing with risk financing techniques used for monitoring and controlling enterprise risk management. The challenges would have been on implementation and resistance to change, therefore strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. This t-tests satisfy one of the objectives of this study, to establish sources of risk that affect sustainability in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been trained to work in a micro-lending company? and adoption of enterprise risk management, ($t = 12.173$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed have you been trained to work in a micro-lending company? and adoption of enterprise risk management as

important aspect of organisational performance. The findings reflect a mean of 2.4724 for respondents who recorded "Yes" and a mean of 1.6915 for respondents who recorded "No". The respondents who recorded "Yes" were more conscious in relation to training to work in a micro-lending company in terms of an adoption of an enterprise risk management framework. The challenges would have been on implementation of enterprise risk management framework and resistance to change (shift to a robust ERM systems), therefore strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. This t-tests satisfy two of the objectives of this study, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been trained to work in a micro-lending company? and profitability and liquidity ratios, ($t = 15.726$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed have you been trained to work in a micro-lending company? and the application of profitability and liquidity ratios. The findings reflect a mean of 3.3077 for respondents who recorded "Yes" and a mean of 1.8671 for respondents who recorded "No". The respondents who recorded "Yes" were more conscious in relation to training to work in a micro-lending company in terms of profitability and liquidity ratios used to measure organisational performance and growth. The challenges would have been on implementation of these accounting ratios and resistance to change (shift to robust reporting systems and accounting ratios), therefore strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. This t-tests satisfy two of the objectives of this study, to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.



The findings revealed that there was a statistically significant difference between have you been trained to work in a micro-lending company? and corporate governance, ($t = 11.679$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed have you been trained to work in a micro-lending company? and the application of corporate governance principles. The findings reflect a mean of 3.5465 for respondents who recorded "Yes" and a mean of 2.1232 for respondents who recorded "No". The respondents who recorded "Yes" were more conscious in relation to training to work in a micro-lending company in terms of good corporate governance used to influence best practices and organisational performance. The challenges would have been on implementation of good corporate governance and resistance to comply and therefore strict

measures are required to address poor enterprise risk management which is linked to performance and sustainability problems. This t-tests satisfy three of the objectives of this study, to establish sources of risk that affect sustainability in micro-lending companies, to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies and to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies.

The findings revealed that there was a statistically significant difference between have been trained to work in a micro-lending company? and stakeholder management, ($t = 13.185$, $p = 0.000$), an independent samples t-test was performed (See Table 5.28). The findings show that there is a statistically significant difference on how respondents viewed have you been trained to work in micro-lending company? and the concept of stakeholder management. The findings reflect a mean of 3.3721 for respondents who recorded “Yes” and a mean of 2.0034 for respondents who recorded “No”. The respondents who recorded “Yes” were more conscious in relation to training to work in a micro-lending company in terms of stakeholder management concept used to influence best practices and organisational performance. The challenges would have been on implementation of stakeholder management concepts and resistance to change and therefore strict measures are required to address the issues surrounding poor enterprise risk management which is linked to performance and sustainability problems. This t-tests satisfy four of the objectives of this study, to establish sources of risk that affect sustainability in micro-lending companies, to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies and to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies.

Table 5.28: Independent samples t-test for have you been trained to work in a micro-lending company? Yes or No.

Employee perspective	T	Df	Sig. (2 - tailed)
Construct			
Sources of business	-13.498	665	0.000
Challenges / Constraints	-15.400	665	0.000
Marketing challenges	-15.499	665	0.000
Primary risks	-15.499	665	0.000
Primary factors	13.614	665	0.000
Employee exposures	10.827	665	0.000
Process exposures	10.734	665	0.000

Systems exposures	11.148	665	0.000
External exposures	12.572	665	0.000
Important elements	6.748	665	0.000
Identify risk types	6.207	665	0.000
Qualitative methods	9.691	665	0.000
Quantitative methods	7.755	665	0.000
Control measures	3.570	665	0.000
Risk financing techniques	4.192	665	0.000
Adoption	12.173	665	0.000
Profitability and liquidity ratios	15.726	665	0.000
Corporate governance	11.679	665	0.000
Stakeholder management	13.185	665	0.000

Source: Own Source

5.4.1.3: Have you been involved in ERM adoption in your organisation?

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation and sources of business for micro-lending companies in Botswana, ($t = -6.121$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed involved in ERM adoption in your organisation and sources of business for micro-lending companies in Botswana as follows; Yes or No. The findings reflect a mean of 3.5250 for “Yes” respondents and a mean of 4.4158 for “No” respondents. The findings show that many respondents were not involved in ERM adoption in their organisations hence the need for training and development in this sector. The findings reflected that 15 respondents (2,25%) recorded a “Yes” against 652 respondents (97.75%) who recorded “No” and this is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy one of the objectives of this study, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and challenges / constraints faced with micro-lending company, ($t = -7.904$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed between have you been involved in ERM adoption in your organisation? and challenges / constraints faced with micro-lending company. The findings show that there is a statistically

significant difference on how respondents viewed involved in ERM adoption in your organisation and challenges / constraints faced with micro-lending company in Botswana as follows; Yes or No. The findings reflect a mean of 3.4912 for “Yes” respondents and a mean of 4.7129 for “No” respondents. The findings show that many respondents were not involved in ERM adoption in their organisations hence the need for training and development in this sector. The findings reflected that 15 respondents (2,25%) recorded a “Yes” against 652 respondents (97.75%) who recorded “No” and this is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy one of the objectives of this study, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and marketing challenges / constraints faced with micro-lending company, ($t = -7.592$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have been involved in ERM adoption in your organisation? and marketing challenges / constraints faced with micro-lending company. The findings show that there is a statistically significant difference on how respondents viewed involved in ERM adoption in your organisation and marketing challenges / constraints faced with micro-lending company in Botswana as follows; Yes or No. The findings reflect a mean of 3.4533 for “Yes” respondents and a mean of 4.6567 for “No” respondents. The findings show that many respondents were not involved in ERM adoption in their organisations hence the need for training and development in this sector. The findings reflected that 15 respondents (2,25%) recorded a “Yes” against 652 respondents (97.75%) who recorded “No” and this is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy one of the objectives of this study, to determine the challenges that contributes to the closure of micro-lending entities.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and primary risks, ($t = -7.592$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation? and primary risk types within their organisations. The findings show that there is a statistically significant difference on how respondents viewed involved in ERM adoption in your organisation and primary risk types as follows; Yes or No. The findings reflect a mean of 3.4533 for “Yes” respondents and a mean of 4.6567 for “No” respondents. The findings show that many respondents were not involved in ERM adoption in their organisations hence the need for training and development in this sector. The findings reflected that 15 respondents

(2,25%) recorded a “Yes” against 652 respondents (97.75%) who recorded “No” and this is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy two of the objectives of this study, to establish sources of risk that affect sustainability in micro-lending companies and to determine the challenges that contributes to the closure of micro-lending entities.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and primary factors, ($t= 4.961$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and primary factors of enterprise risk management within their organisations as follows Yes or No. The findings reflect a mean of 3.1333 for “Yes” respondents and a mean of 1.9850 for “No” respondents. The findings show that few of the respondents were not involved in ERM adoption in their organisations in relation to primary factors but there is an indication of some weaknesses in the way they mitigate risks and there is no framework which is being used to manage risk. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability in micro-lending companies in Botswana (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM adoption). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy one of the objectives of this study, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and employee exposures, ($t= 4.101$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and employee exposures of enterprise risk management within their organisations as follows Yes or No. The findings reflect a mean of 3.2333 for “Yes” respondents and a mean of 2.3658 for “No” respondents. The findings show that few of the respondents were not involved in ERM adoption in their organisations in relation to employee exposures but there is an indication of some weaknesses in the way they mitigate risks and there is no framework which is being used to manage risk. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and

sustainability in micro-lending companies in Botswana (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM adoption). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy one of the objectives of this study, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and process exposures, ($t= 4.604$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and process exposures of enterprise risk management within their organisations as follows Yes or No. The findings reflect a mean of 3.2333 for "Yes" respondents and a mean of 1.9988 for "No" respondents. The findings show that few of the respondents were involved in ERM adoption in their organisations in relation to process exposures but there is an indication of some weaknesses in the way they mitigate risks and there is no framework which is being used to manage risk. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability in micro-lending companies in Botswana (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM adoption). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy one of the objectives of this study, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and system exposures, ($t= 3.779$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and system exposures of enterprise risk management within their organisations as follows Yes or No. The findings reflect a mean of 3.0286 for "Yes" respondents and a mean of 2.0009 for "No" respondents. The findings show that few of the respondents were not involved in ERM adoption in their organisations in relation to system exposures but there is an indication of some weaknesses in the way they mitigate risks and there is no framework which is being used to manage risk. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability

in micro-lending companies in Botswana (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM adoption). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy one of the objectives of this study, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and external exposures, ($t = 4.620$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and external exposures of enterprise risk management within their organisations as follows Yes or No. The findings reflect a mean of 3.5889 for “Yes” respondents and a mean of 2.1352 for “No” respondents. The findings show that few of the respondents were not involved in ERM adoption in their organisations in relation to external exposures but there is an indication of some weaknesses in the way they mitigate risks and there is no framework which is being used to manage risk. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability in micro-lending companies in Botswana (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM adoption). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy one of the objectives of this study, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and important elements, ($t = 2.179$, $p = 0.030$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and important elements of enterprise risk management within their organisations as follows Yes or No. The findings reflect a mean of 2.6500 for “Yes” respondents and a mean of 2.1131 for “No” respondents. The findings show that few of the respondents were not involved in ERM adoption in their organisations in relation to important elements but there is an indication of some weaknesses in the way they mitigate risks and there is no framework which is being used to manage risk. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability

in micro-lending companies in Botswana (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM adoption). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy one of the objectives of this study, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and identify risk types ($t= 1.840$, $p = 0.066$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and identify risk types of enterprise risk management within their organisations as follows Yes or No. The findings reflect a mean of 2.5833 for “Yes” respondents and a mean of 2.1484 for “No” respondents. The findings show that few of the respondents were not involved in ERM adoption in their organisations in relation to risk types but there is an indication of some weaknesses in the way they mitigate risks and there is no framework which is being used to manage risk. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability in micro-lending companies in Botswana (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM adoption). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy two of the objectives of this study, to establish sources of risk that affect sustainability in micro lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and qualitative methods ($t= 3.787$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and qualitative methods use to mitigate risks within their organisations as follows Yes or No. The results reflect a mean of 2.6444 for “Yes” respondents and a mean of 1.8379 for “No” respondents. The findings show that few of the respondents were not involved in ERM adoption in their organisations in relation to qualitative methods used to mitigate risks but there is an indication of some weaknesses in the way they mitigate risks and there is no framework which is being used to manage risk. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective.

Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability in micro-lending companies in Botswana (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM adoption). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy one of the objectives of this study, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and quantitative methods ($t = 3.628$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and quantitative methods used to mitigate risks within their organisations as follows Yes or No. The findings reflect a mean of 2.6167 for “Yes” respondents and a mean of 1.9390 for “No” respondents. The findings show that few of the respondents were not involved in ERM adoption in their organisations in relation to quantitative methods used to mitigate risks but there is an indication of some weaknesses in the way they mitigate risks and there is no framework which is being used to manage risk. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability in micro-lending companies in Botswana (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM adoption). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy one of the objectives of this study, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and control measures ($t = 1.415$, $p = 0.157$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and control measures used to mitigate risks within their organisations as follows Yes or No. The findings reflect a mean of 2.8444 for “Yes” respondents and a mean of 2.5890 for “No” respondents. The findings show that few of the respondents were not involved in ERM adoption in their organisations in relation to control measures used to mitigate risks but there is an indication of some weaknesses in the way they mitigate risks and there is no framework which is being used to manage risk. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings

reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability in micro-lending companies in Botswana (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM adoption). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy two of the objectives of this study, to ascertain procedures and internal controls in micro-lending business and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and risk financing techniques ($t = 1.179$, $p = 0.239$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and risk financing techniques used to mitigate risks within their organisations as follows Yes or No. The findings reflect a mean of 2.7778 for "Yes" respondents and a mean of 2.5787 for "No" respondents. The findings show that few of the respondents were not involved in ERM adoption in their organisations in relation to risk financing techniques used to mitigate risks but there is an indication of some weaknesses in the way they mitigate risks and there is no framework which is being used to manage risk. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability in micro-lending companies in Botswana (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM adoption). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy one of the objectives of this study, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and adoption ($t = 6.232$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and adoption a framework used to mitigate risks within their organisations as follows Yes or No. The findings reflect a mean of 2.7417 for "Yes" respondents and a mean of 1.7703 for "No" respondents. The findings show that few of the respondents were not involved in ERM adoption in their organisations in relation to adoption of a framework used to mitigate risks but there is an indication of some weaknesses in the way they mitigate risks and there is no framework which is being used to manage risk. Therefore, there is a need for training and development in this

sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability in micro-lending companies in Botswana (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM adoption). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy one of the objectives of this study, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and profitability ratios ($t = 4.767$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and use of profitability ratios as follows Yes or No. The findings reflect a mean of 3.1641 for "Yes" respondents and a mean of 2.0273 for "No" respondents. The findings show that few of the respondents were not involved in ERM adoption in their organisations in relation to profitability ratios used to measure performance of an organisation but there is an indication of some weaknesses in the way they mitigate risks and there is no framework which is being used for the calculation of profitability and liquidity ratios. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability in micro-lending companies in Botswana, which incorporates profitability and liquidity ratios (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM using accounting ratios). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems associated with business continuity and sustainability. This t-tests satisfy two of the objectives of this study, to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and corporate governance ($t = 3.521$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and comply to best practices such as good corporate governance that influences organisational performance as follows Yes or No. The findings reflect a mean of 3.3378 for "Yes" respondents and a mean of 2.2830 for "No" respondents. The findings show that few of the respondents were not involved in ERM adoption in their organisations in relation to good

corporate governance which lead to improved organisational growth but there is an indication of some weaknesses in in terms of compliance to governance as there is a lack of a framework which is used to monitor leadership, staff and executive management. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability in micro-lending companies in Botswana, which incorporates best practices such as good governance cultures (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM adoption). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management in order to address the problems issues related to poor corporate governance which may lead to business continuity and sustainability problems. This t-tests satisfy two of the objectives of this study, to ascertain leadership styles, management principles and corporate governance cultures that is dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings revealed that there was a statistically significant difference between have you been involved in ERM adoption in your organisation? and stakeholder management ($t = 4.259$, $p = 0.000$), an independent samples t-test was performed (See Table 5.29). The findings show that there is a statistically significant difference on how respondents viewed have you been involved in ERM adoption in your organisation and adherence to best practices such as stakeholder management that influences organisational performance as follows Yes or No. The findings reflect a mean of 3.3378 for “Yes” respondents and a mean of 2.2830 for “No” respondents. The findings show that few of the respondents were not involved in ERM adoption in their organisations in relation to comply with the principles of stakeholder management which lead to improved organisational growth but there is an indication of some weaknesses in in terms of compliance to stakeholder management as there is a lack of a framework to be used for identifying stakeholder interests and power. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability in micro-lending companies in Botswana, which incorporates best practices such as stakeholder management (2.25% for those involved in ERM adoption against 97.75% those not involved in ERM adoption). Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management which incorporates stakeholder management in order to address the issues related to stakeholder power and interests which may lead to business continuity and sustainability problems. This t-tests satisfy two of the objectives of this study, to ascertain leadership styles, management principles and corporate governance cultures that is dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

Table 5.29: Independent samples t-test for have you been involved in ERM adoption in your organisation? Yes or No.

Employee perspective	T	Df	Sig. (2 - tailed)
Construct			
Sources of business	-6.121	665	0.000
Challenges / Constraints	-7.904	665	0.000
Marketing challenges	-7.592	665	0.000
Primary risks	-7.592	665	0.000
Primary factors	4.961	665	0.000
Employee exposures	4.101	665	0.000
Process exposures	4.604	665	0.000
Systems exposures	3.779	665	0.000
External exposures	4.620	665	0.000
Important elements	2.179	665	0.000
Identify risk types	1.840	665	0.066
Qualitative methods	3.787	665	0.000
Quantitative methods	3.628	665	0.000
Control measures	1.415	665	0.157
Risk financing techniques	1.179	665	0.239
Adoption	6.232	665	0.000
Profitability and liquidity ratios	4.767	665	0.000
Corporate governance	3.521	665	0.000
Stakeholder management	4.259	665	0.000

Source: Own Source



5.4.1.4: Respondent group: compliant and non - compliant

The findings revealed that there was a statistically significant difference between respondent group and complaint vs non - compliant. The findings for respondent group reflect that 31% (208) of respondents comply with NBFIRA and 69% (459) are not complying with NBFIRA. The findings show that all constructs are dominated with fewer micro-lending complying with the regulator and Table 5.30 shows the sample size, mean and standard deviation and Table 5.31 shows an independent samples t-test that were performed. Therefore, it has been concluded that many of the micro-lending firms do not comply with the regulator (NBFIRA). Therefore, failure to comply with the regulator is associated with poor reporting and lack of effective internal controls. Finally, the policy makers should ensure that all the micro-lending companies must comply through

advocating for an effective framework for enterprise risk management and sustainability, whereby compliance and reporting are emphasised. Therefore, there is a need for training and development in this sector, in order to avoid the use of ERM systems that are ineffective. Furthermore, the findings reveal that there is a need for an effective, robust framework for enterprise risk management and sustainability in micro-lending companies in Botswana, which incorporates best practices. Therefore, there is an indication that it is imperative to develop a framework for enterprise risk management which incorporates issues associated with business continuity and sustainability problems. The t-tests in Table 5.31 satisfy three of the objectives of this study, to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

Table 5.30: Group statistics for respondent group

Employee perspective	Sample (n)	Mean	Std Deviation
Construct			
Sources of business: <i>Complaint</i>	208	3.8828	0.81632
<i>Non - Complaint</i>	459	4.6283	0.03948
Challenges / Constraints: <i>Complaint</i>	208	4.0564	0.80647
<i>Non - Complaint</i>	459	4.9704	0.03689
Marketing challenges: <i>Complaint</i>	208	4.0529	0.88230
<i>Non - Complaint</i>	459	4.8911	0.09971
Primary risks: <i>Complaint</i>	208	4.0529	0.88230
<i>Non - Complaint</i>	459	4.8911	0.09971
Primary factors: <i>Complaint</i>	208	3.0276	0.69818
<i>Non - Complaint</i>	459	1.5643	0.52212
Employee exposures: <i>Complaint</i>	208	3.2973	0.83689
<i>Non – Complaint</i>	459	1.9720	0.33352
Process exposures: <i>Complaint</i>	208	3.2103	0.94724
<i>Non - Complaint</i>	459	1.4902	0.49936
Systems exposures: <i>Complaint</i>	208	3.2926	0.80748
<i>Non - Complaint</i>	459	1.4491	0.50187
External exposures: <i>Complaint</i>	208	3.7452	0.7776
<i>Non - Complaint</i>	459	1.4532	0.51025
Important elements: <i>Complaint</i>	208	2.8798	0.79246
<i>Non - Complaint</i>	459	1.7832	0.80094
Identify risk types: <i>Complaint</i>	208	2.8293	0.77496
<i>Non - Complaint</i>	459	1.8540	0.79191
Qualitative methods: <i>Complaint</i>	208	2.7356	0.70885
<i>Non - Complaint</i>	459	1.4575	0.49874
Quantitative methods: <i>Complaint</i>	208	2.6346	0.70362
<i>Non - Complaint</i>	459	1.6460	0.47788
Control measures: <i>Complaint</i>	208	2.9599	0.88465
<i>Non - Complaint</i>	459	2.4292	0.50424
Risk financing techniques: <i>Complaint</i>	208	2.9423	0.75422
<i>Non - Complaint</i>	459	2.4205	0.51579

Adoption:	<i>Complaint</i>	208	2.2806	0.54787
	<i>Non - Complaint</i>	459	1.5708	0.50242
Profitability and liquidity ratios:	<i>Complaint</i>	208	3.1424	0.75275
	<i>Non - Complaint</i>	459	1.5591	0.46120
Corporate governance:	<i>Complaint</i>	208	3.6574	0.58949
	<i>Non - Complaint</i>	459	1.6947	0.76528
Stakeholder management:	<i>Complaint</i>	208	3.3282	0.70773
	<i>Non - Complaint</i>	459	1.6595	0.61785

Source: Own Source

Table 5.31: Independent samples t-test for respondent group: compliant and non - compliant.

Employee perspective	T	Df	Sig. (2 - tailed)
Construct			
Sources of business	-19.532	665	0.000
Challenges / Constraints	-24.247	665	0.000
Marketing challenges	-20.090	665	0.000
Primary risks	-20.090	665	0.000
Primary factors	30.048	665	0.000
Employee exposures	29.210	665	0.000
Process exposures	30.643	665	0.000
Systems exposures	35.947	665	0.000
External exposures	45.228	665	0.000
Important elements	16.434	665	0.000
Identify risk types	14.833	665	0.000
Qualitative methods	26.710	665	0.000
Quantitative methods	21.196	665	0.000
Control measures	9.813	665	0.000
Risk financing techniques	10.401	665	0.000
Adoption	16.388	665	0.000
Profitability and liquidity ratios	33.337	665	0.000
Corporate governance	32.831	665	0.000
Stakeholder management	30.848	665	0.000

Source: Own Source

5.4.1.5: Is your organisation registered with NBFIRA? Yes or No (employee perspective)

The findings revealed that there was a statistically significant difference between registered with NBFIRA and not registered with NBFIRA. NBFIRA as a regulator it is very strict in terms of registration and heavy penalties are imposed to wrong-doers hence, the findings indicate only 9 respondents from 9 institutions which are not registered out of 667 employees who were part of this survey. The 9 unregistered may have been revoked with the regulator during the time of the study as this is not common in terms of non - compliance on registration of a micro-lending institution. The non - registration of micro-lending may affect the business continuity of the concerned entities. An independent samples t-test was performed (See Table 5.32). The t-tests in Table 5.32 satisfy three of the objectives of this study, to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies and to determine the challenges that contributes to the closure of micro-lending entities.

Table 5.32: Is your organisation registered with NBFIRA? Yes or No (employee perspective)

Employee perspective	T	Df	Sig. (2 - tailed)
Construct			
Sources of business	2.911	665	0.004
Challenges / Constraints	4.615	665	0.000
Marketing challenges	4.895	665	0.000
Primary risks	4.895	665	0.000
Primary factors	-3.238	665	0.001
Employee exposures	-2.826	665	0.005
Process exposures	-2.183	665	0.029
Systems exposures	-2.678	665	0.008
External exposures	-2.060	665	0.040
Important elements	-1.553	665	0.121
Identify risk types	-0.768	665	0.443
Qualitative methods	-2.852	665	0.004
Quantitative methods	-2.291	665	0.022
Control measures	-1.447	665	0.148
Risk financing techniques	-1.082	665	0.280
Adoption	-2.330	665	0.020
Profitability and liquidity ratios	-2.734	665	0.006
Corporate governance	-2.262	665	0.024
Stakeholder management	-2.331	665	0.020

Source: Own Source

5.4.1.6: Gender: Female and Male (proprietor perspective)

The findings revealed that there was a statistically significant difference between gender and motivation, ($t = -2.176$, $p = 0.031$), an independent samples t-test was performed (See Table 5.33). The findings show that there is a statistically significant difference on how respondents viewed motivation based on gender, female or male. The findings reflect a mean of 3.4434 for female respondents and a mean of 3.1818 for male respondents and this implies that there are many women who own their own businesses. There are so many factors which motivate females to start-up businesses such as social-economic hardships and politically related to women empowerment. However, strategies should be put in place to motivate males to start up their own businesses so that there is a balance in ownership. Based on the findings from this study 34% of males own their businesses as compared to 64% of woman. On the contrary to the perceptions that females may be motivated to start-up their own businesses due to economic pressure and challenges, this may be risk to their businesses as they may lack skills for managing a company which results into mismanagement. Therefore, it is imperative for policy makers to put in place strategies which are inclusive of both females and males as proprietors. This may address the issues surrounding the dominance by females as while as reduce problems associated with business continuity and sustainability. This t-tests satisfy three of the objectives of this study, to establish sources of risk that affect sustainability in micro-lending companies, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies and to ascertain leadership styles, management principles and corporate governance cultures that dominant in micro-lending companies.

The findings revealed that there was a statistically significant difference between gender and managerial innovation, ($t = -3.009$, $p = 0.003$), an independent samples t-test was performed (See Table 5.33). The findings show that there is a statistically significant difference on how respondents viewed managerial innovation based on gender, female or male. The findings reflect a mean of 2.6113 for female respondents and a mean of 2.4109 for male respondents and this implies that there are many women who understands about managerial innovation. There are so many factors that influence females to have managerial innovation skills such as being patient and perseverance. Furthermore, females are naturally innovative and creative hence they dominate the world of work than their male counterparts. However, strategies should be put in place to motivate males to be innovative and creative in order to create balanced situation in relation to business ownership. Based on the findings from this study 34% of males own their businesses as compared to 64% of woman. On the contrary to the perceptions that females have managerial innovative skills may discourage their counterparts to be productive, which may result into challenges associated with business continuity and sustainability. This t-tests satisfy three of the objectives of this study, to establish sources of risk that affect sustainability in micro-lending companies, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-

lending companies and to ascertain leadership styles, management principles and corporate governance cultures that dominant in micro-lending companies.

The findings revealed that there was a statistically significant difference between gender and taking opportunity, ($t = -0.889$, $p = 0.375$), an independent samples t-test was performed (See Table 5.33). The findings show that there is a statistically significant difference on how respondents viewed taking opportunity based on gender, female or male. The findings reflect a mean of 1.6887 for female respondents and a mean of 1.6424 for male respondents and this implies that there are many women who are risk takers. There are so many factors that influence females to be risk takers such as; pressure from economic hardships and politically motivated (women empowerment) hence maximize on any opportunities available to them. On the contrary to the perceptions that females are risk takers due to economic pressure and challenges, this may be risk to their businesses as they may lack skills for managing a company which results into mismanagement. Therefore, it is imperative for policy makers to put in place strategies which are inclusive of both females and males to understand risk appetite. This may address the issues surrounding the dominance by females as while as reduce problems associated with business continuity and sustainability. This t-tests satisfy three of the objectives of this study, to establish sources of risk that affect sustainability in micro-lending companies, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies and to ascertain leadership styles, management principles and corporate governance cultures that dominant in micro-lending companies.

The findings revealed that there was a statistically significant difference between gender and perceptions on ERM, ($t = -2.256$, $p = 0.025$), an independent samples t-test was performed (See Table 5.33). The findings show that there is a statistically significant difference on how respondents viewed perceptions on ERM based on gender, female or male. The findings reflect a mean of 1.4717 for female respondents and a mean of 1.2182 for male respondents and this implies that there are many women who understand the ERM systems. Contrary to the perception that females understand ERM systems, there is still problems associated with business continuity and sustainability which is a failure to mitigate risks. The female respondents may be aware of ERM systems, but the problems would be related to implementation and effectiveness. Therefore, inclusive training and development strategies should be put in place through policy makers (NBFIRA) in order to address challenges and problems related to performance and growth as the case of micro-lending in Botswana. This t-tests satisfy three of the objectives of this study, to establish sources of risk that affect sustainability in micro-lending companies, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies and to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies.

The findings revealed that there was a statistically significant difference between gender and risk oversight, ($t = -3.164$, $p = 0.002$), an independent samples t-test was performed (See Table 5.33). The findings show that there is a statistically significant difference on how respondents viewed risk oversight based on gender, female or male. The findings reflect a mean of 2.9308 for female respondents and a mean of 2.4485 for male respondents and this implies that there are many women who understand risk oversight. Contrary to the perception that females understand risk oversight, whilst there are problems associated with business continuity and sustainability which is a failure to mitigate risks. The female respondents are aware of risk oversight, but the problems would be related to implementation and effectiveness. Therefore, inclusive training and development strategies should be put in place through policy makers (NBFIRA) in order to address challenges and problems related to performance and growth as the case of micro-lending in Botswana. This t-tests satisfy three of the objectives of this study, to establish sources of risk that affect sustainability in micro-lending companies, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies and to ascertain leadership styles, management principles and corporate governance cultures that dominant in micro-lending companies.

Table 5.33: Independent samples t-test for gender: female and male.

Proprietor perspective	T	Df	Sig. (2 - tailed)
Construct			
Motivation	-2.176	159	0.031
Managerial innovation	-3.009	159	0.003
Taking opportunity	-0.889	159	0.375
Perceptions on ERM	-2.256	159	0.025
Risk oversight	-3.164	159	0.002

Source: Own Source

5.4.1.7: Is your organisation registered with NBFIRA? Yes or No (proprietor perspective)

The findings revealed that there was a statistically significant difference between registered with NBFIRA and not - registered with NBFIRA. NBFIRA as a regulator it is very strict in terms of registration and heavy penalties are imposed to wrong - doers hence, the findings indicate only 1 respondent from 1 institution which is not registered out of 161 proprietors who were part of this survey. An independent samples t-test was performed (See Table 5.34). The t-tests in Table 5.34 satisfy three of the objectives of this study, to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making, to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending

companies and to determine the challenges that contributes to the closure of micro-lending entities.

Table 5.34: Independent samples t-test for: is your organisation registered with NBFIRA?

Proprietor perspective	T	Df	Sig. (2 – tailed)
Construct			
Motivation	0.142	159	0.887
Managerial innovation	0.837	159	0.404
Taking opportunity	1.089	159	0.278
Perceptions on ERM	0.563	159	0.574
Risk oversight	0.105	159	0.916

Source: Own Source



5.4.1.8: Have you been trained to work for a micro-lending company? Yes or No (proprietor perspective)

The findings revealed that there was a statistically significant difference between the respondents who were trained and not trained to work for a micro-lending company. The findings indicate only 1 respondent from 1 institution who has been trained to work in micro-lending company out of 161 proprietors who were part of this survey. This shows that proprietors are chancers as they lack training and development hence the need to incorporate human resource development strategies into the ERM in order to avoid problems associated with business continuity and sustainability. This shows that micro-lending companies are managed with people who are not well trained to work in this sector hence they face challenges that contribute to closure of the business. Therefore, it is imperative to develop framework for enterprise risk management and sustainability in micro-lending companies in Botswana. This t-tests satisfy two of the objectives of this study to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies and to determine the challenges that contributes to the closure of micro-lending entities. An independent samples t-test was performed (See Table 5.35).

Table 5.35: Independent samples t-test for: have you been trained to work in micro-lending company?

Proprietor perspective	T	Df	Sig. (2 – tailed)
Construct			
Motivation	-0.142	159	0.887
Managerial innovation	-0.837	159	0.404
Taking opportunity	-1.089	159	0.278
Perceptions on ERM	-0.563	159	0.574
Risk oversight	-0.105	159	0.916

Source: Own Source

5.4.2 Analysis of variance (ANOVA)

Analysis of variance (ANOVA) was conducted on the demographic information for employee perspective and proprietor perspective. The ANOVA was based on age, nationality, education, occupation, service of work and registration with NBFIRA. The analysis was conducted to assess whether respondent profiles in the micro-lending companies were similar. Sources of business, challenges/ constraints, marketing challenges, primary risks, primary factors, employee exposures, process exposures, system exposures, external exposures, important elements, identify risk types, qualitative methods, quantitative methods, control measures, risk financing techniques, adoption, profitability ratios, corporate governance and stakeholder management were analysed by means of statistical techniques. A one - way analysis of variance (ANOVA) and the test of homogeneity of variance were used to test for significant variations between measures. Where applicable Levene Statistics were conducted to ascertain nature of group differences. The findings of a one-way ANOVA are discussed in this chapter.

5.4.2.1 Influence of demographic on other variables (employee perspective)

It was appropriate to investigate whether statistically significant differences existed between five variables such as; age, nationality, education, occupation and service of work (independent variable for ANOVA) and Sources of business, challenges / constraints, marketing challenges, primary risks, primary factors, employee exposures, process exposures, system exposures, external exposures, important elements, identify risk types, qualitative methods, quantitative methods, control measures, risk financing techniques, adoption, profitability ratios, corporate governance and stakeholder management (dependent variable) a one - way ANOVA was conducted (See Tables 5.36 and 5.37).

Table 5.36: ANOVA influence of age, education and occupation (employee perspective)

Employee perspective			Age			Education			Occupation		
			DF	F	Sig	DF	F	Sig	DF	F	Sig
Construct											
Sources of business			4	15.390	0.000	5	26.658	0.000	7	36.053	0.000
Challenges / Constraints			4	25.720	0.000	5	34.605	0.000	7	40.977	0.000
Marketing challenges			4	19.989	0.000	5	33.087	0.000	7	34.141	0.000
Primary risks			4	19.989	0.000	5	33.087	0.000	7	34.141	0.000
Primary factors			4	20.037	0.000	5	32.083	0.000	7	44.213	0.000
Employee exposures			4	15.431	0.000	5	24.300	0.000	7	28.219	0.000
Process exposures			4	18.493	0.000	5	25.872	0.000	7	23.969	0.000
Systems exposures			4	23.630	0.000	5	28.425	0.000	7	31.834	0.000
External exposures			4	28.820	0.000	5	31.501	0.000	7	38.717	0.000
Important elements			4	4.651	0.001	5	9.108	0.000	7	18.999	0.000
Identify risk types			4	5.339	0.000	5	9.291	0.000	7	16.649	0.000
Qualitative methods			4	15.857	0.000	5	22.557	0.000	7	18.270	0.000
Quantitative methods			4	13.022	0.000	5	15.866	0.000	7	9.305	0.000
Control measures			4	2.673	0.031	5	5.124	0.000	7	8.057	0.000
Risk financing techniques			4	3.215	0.013	5	8.555	0.000	7	4.167	0.000
Adoption			4	11.366	0.000	5	17.271	0.000	7	30.661	0.000
Profitability and liquidity ratios			4	26.220	0.000	5	43.262	0.000	7	27.942	0.000
Corporate governance			4	22.636	0.000	5	21.912	0.000	7	21.041	0.000
Stakeholder management			4	22.629	0.000	5	32.709	0.000	7	38.080	0.000

Source: (Own Source)

• Influence of age on other variables (employee perspective)

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable sources of business. The findings from ANOVA reflect that there is a significant variance between age and sources of business. This is validated by the means of two age groups between 18 - 30 years (mean of 4.1310) and 61 years plus (mean of 4.5770), a difference of 0.446. The findings reflect that the majority of the respondents are in the bracket 18 - 30 years (167) are still novice as far as business acumen is concerned as compared with the age group 61 years plus. This is a challenge in the micro-lending especially on this variable as the majority may not understand sources of business, this may affect the performance of enterprise as in the case of non - performing in this sector. The findings reflect that age has influence on sources of business (F= 15.390, p = 0.000). This means that sources of business have impact on the competitiveness of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable challenges / constraints. The findings from ANOVA reflect that there is a significant variance between age and challenges / constraints. This is validated by the means of two age groups between 18 - 30 years (mean of 4.3142) and 61 years plus (mean of 4.8960), a difference of 0.5818. The findings reflect that the majority of the respondents are in the bracket 18 - 30 years (167) are still novice as far as understanding challenges / constraints that affects performance of enterprise as compared with the age group 61 years plus. This is a challenge in the micro-lending especially on this variable as the majority may not understand challenges / constraints, this may affect the performance of enterprise as in the case of non - performing in this sector. The findings reflect that age has influence on challenges / constraints and issue of maturity should be considered as a recommendation to business owners / policy makers ($F= 25.720$, $p = 0.000$). This means that challenges / constraints have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age as the independent variable influences the dependent variable which was marketing challenges. The findings from ANOVA reflect that there is a significant variance between age and marketing challenges. This is validated by the means of two age groups between 18 - 30 years (mean of 4.2850) and 61 years plus (mean of 4.8240), a difference of 0.539. The findings reflect that the majority of the respondents are in the bracket 18 - 30 years (167) are still novice as far as understanding marketing challenges that affects performance of enterprise as compared with the age group 61 years plus. This is a challenge in the micro-lending especially on this variable as the majority may not understand marketing challenges, this may affect the performance of enterprise as in the case of non - performing in this sector. The findings reflect that age has influence on marketing challenges and issue of maturity should be considered as a recommendation to business owners / policy makers ($F= 19.989$, $p = 0.000$). This means that marketing challenges have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable primary risks. The findings from ANOVA reflect that there is a significant variance between age and primary risks. This is validated by the means of two age groups between 18 - 30 years (mean of 4.2850) and 61 years plus (mean of 4.8240), a difference of 0.539. The findings reflect that the majority of the respondents are in the bracket 18 - 30 years (167) are still novice as far as understanding primary risks that affects performance of enterprise as

compared with the age group 61 years plus. This is a challenge in the micro-lending especially on this variable as the majority may not understand primary risks, this may affect the performance of enterprise as in the case of non - performing in this sector. The findings reflect that age has influence on primary risk and issue of maturity should be considered as a recommendation to business owners / policy makers ($F= 19.989$, $p = 0.000$). This means that marketing challenges have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

The policy makers should seriously consider age group (61 years plus) for the following variables (sources of business; challenges / constraints; marketing challenges and primary risks) as indicated with ANOVA that maturity is required in order to minimize risks which may affect the business model. However, it would be imperative to offer positions such as risk managers / chief risk officers, accountants, operations manager, chief executive officers, board members who are in this age group as they would be experienced in relations to the above variables. In contrary to this recommendation the proprietor may be of any age from 18 years to 61 years plus as long strict measures are taken to employ risks practitioners within the enterprise. This recommendation is important in order to avoid discriminating the young generation becoming entrepreneurs (proprietors).

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable primary factors. The findings from ANOVA reflect that there is a significant variance between age and primary factors. This is validated by the means of two age groups between 18 - 30 years (mean of 2.3802) and 61 years plus (mean of 1.6420), a difference of 0.7382. The findings reflect that the majority of the respondents are in the bracket 18 - 30 years (167) are aware of primary factors as compared to the age group 61 years plus (125). The lack of awareness of the group 61 years plus may affects performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as a bridging gap. They are many factors which contributes to the awareness among the young group of age between 18 - 30 years such as; eager to learn, interests to use internet and technology. The findings reflect that age has influence on primary factors and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F= 20.037$, $p = 0.000$). This means that primary factors have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable employee exposures. The findings from ANOVA reflect that there is a significant variance between age and employee exposures. This is validated by the means of two age groups between 18 - 30 years (mean of 2.6257) and 61 years plus (mean of 2.0693), a difference of 0.5564. The findings reflect that the majority of the respondents are in the bracket 18 - 30 years (167) are aware of employee exposures as compared to the age group 61 years plus (125). The lack of awareness of the age group 61 years plus may affects performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as a bridging gap. They are many factors which contributes to the awareness among the young group of age between 18 - 30 years such as; eager to learn, creative, innovative, interests to use internet and technology (tech - savvy). Whilst the age group 61 years plus is technophobia (dislikes technology). The findings reflect that age has influence on employee exposures and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F= 15.431$, $p = 0.000$). This means that employee exposures have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable process exposures. The findings from ANOVA reflect that there is a significant variance between age and process exposures. This is validated by the means of two age groups between 31 - 40 years (mean of 2.4003) and 61 years plus (mean of 1.6380), a difference of 0.7623. The findings reflect that the majority of the respondents are in the bracket 31 - 40 years (163) are aware of process exposures as compared to the age group 61 years plus (125). The lack of awareness of the age group 61 years plus may affect performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as a bridging gap. They are many factors which contributes to the awareness among the group of age between 31 - 40 years such as; energetic, eager to learn, creative, innovative, interests to use internet and technology (tech - savvy). Whilst the age group 61 years plus is technophobia (dislikes technology). The findings reflect that age has influence on process exposures and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F= 18.493$, $p = 0.000$). This means that process exposures have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable system exposures. The findings from ANOVA reflect that there is a significant variance between age and system exposures. This is validated by the means of two age groups between 31 - 40 years (mean of 2.4198) and 61 years plus (mean of 1.5817), a difference of 0.8381. The findings reflect that the majority of the respondents are in the bracket 31 - 40 years (163) are aware of system exposures as compared to the age group 61 years plus (125). The lack of awareness of the age group 61 years plus may affect performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as a bridging gap. They are many factors which contributes to the awareness among the group of age between 31 - 40 years such as; energetic, eager to learn, creative, innovative, interests to use internet and technology (tech - savvy). Whilst the age group 61 years plus is technophobia (dislikes technology). The findings reflect that age has influence on system exposures and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F= 23.630$, $p = 0.000$). This means that system exposures have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable external exposures. The findings from ANOVA reflect that there is a significant variance between age and external exposures. This is validated by the means of two age groups between 31 - 40 years (mean of 2.7076) and 61 years plus (mean of 1.5933), a difference of 1.1143. The findings reflect that the majority of the respondents are in the bracket 31 - 40 years (163) are aware of external exposures as compared to the age group 61 years plus (125). The lack of awareness of the age group 61 years plus may affect performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as a bridging gap. They are many factors which contributes to the awareness among the group of age between 31 - 40 years such as; energetic, eager to learn, creative, innovative, interests to use internet and technology (tech - savvy). Whilst the age group 61 years plus is technophobia (dislikes technology). The findings reflect that age has influence on external exposures and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F= 28.820$, $p = 0.000$). This means that external exposures have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable important elements. The findings from ANOVA reflect that there is a significant variance between age and important elements. This is validated by the means of two age groups between 18 - 30 years (mean of 2.3054) and 51 - 60 years (mean of 1.8862), a difference of 0.4192. The findings reflect that the majority of the respondents are in the bracket 18 - 30 years (167) are aware of important elements as compared to the age group 51 - 60 years (123). The lack of awareness of the age group 51 - 60 years may affect performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as a bridging gap. They are many factors which contributes to the awareness among the group of age between 18 - 30 years such as; energetic, eager to learn, creative, innovative, interests to use internet and technology (tech - savvy). Whilst the age group 51 - 60 years is technophobia (dislikes technology). The findings reflect that age has influence on external exposures and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F= 4.651$, $p = 0.001$). This means that important elements have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable identify risk types. The findings from ANOVA reflect that there is a significant variance between age and identify risk types. This is validated by the means of two age groups between 31 - 40 years (mean of 2.3206) and 51 - 60 years (mean of 1.9167), a difference of 0.4039. The findings reflect that the majority of the respondents are in the bracket 31 - 40 years (163) are aware of identify risk types as compared to the age group 51 - 60 years (123). The lack of awareness of the age group 51 - 60 years may affect performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as a bridging gap. They are many factors which contributes to the awareness among the group of age between 18 - 30 years such as; energetic, eager to learn, creative, innovative, interests to use internet and technology (tech - savvy). Whilst the age group 51 - 60 years is technophobia (dislikes technology). The findings reflect that age has influence on identify risk types and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F= 5.339$, $p = 0.000$). This means that identify risk types have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable qualitative methods. The findings from ANOVA reflect that there is a significant variance between age and qualitative methods. This is validated by the means of two age groups between 18-30 years (mean of 2.1218) and 61 years plus (mean of 1.5787), a difference of 0.5431. The findings reflect that the majority of the respondents are in the bracket 18-30 years (167) are aware of qualitative methods as compared to the age group 61 years plus (125). The lack of awareness of the age group 61 years plus may affect performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as a bridging gap. They are many factors which contributes to the awareness among the group of age between 18 - 30 years such as; energetic, eager to learn, creative, innovative, interests to use internet and technology (tech-savvy). Whilst the age group 61 years plus is technophobia (dislikes technology). The findings reflect that age has influence on qualitative methods and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F = 15.857$, $p = 0.000$). This means that qualitative methods have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable quantitative methods. The findings from ANOVA reflect that there is a significant variance between age and quantitative methods. This is validated by the means of two age groups between 31 - 40 years (mean of 2.1779) and 41 - 50 years (mean of 1.7219), a difference of 0.456. The findings reflect that the majority of the respondents are in the bracket 31 - 40 years (163) are aware of quantitative methods as compared to the age group 41 - 50 years (89). The lack of awareness of the age group 41- 50 years may affect performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as a bridging gap. They are many factors which contributes to the awareness among the group of age between 31 - 40 years such as; energetic, good in calculus and statistics, good in numeracy, creative, innovative, interests to use internet and technology (tech - savvy). Whilst the age group 41 - 50 years may be technophobia (dislikes technology and near retirement age). The findings reflect that age has influence on quantitative methods and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F = 13.022$, $p = 0.000$). This means that quantitative methods have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable control measures. The findings from ANOVA reflect that there is a significant variance between age and control measures. This is validated by the means of two age groups between 18 - 30 years (mean of 2.7066) and 61 years plus (mean of 2.4853), a difference of 0.2213. The findings reflect that the majority of the respondents are in the bracket 18 - 30 years (167) are aware of control measures as compared to the age group 61 years plus (125). The lack of awareness of the age group 61 years plus may affect performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as a bridging gap. They are many factors which contributes to the awareness among the group of age between 18 - 30 years such as; energetic, eager to learn, creative, innovative, interests to use internet and technology (tech - savvy). Whilst the age group 61 years plus is technophobia (dislikes technology). The findings reflect that age has influence on control measures and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F= 2.673$, $p = 0.031$). This means that control measures have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable risk financing techniques. The findings from ANOVA reflect that there is a significant variance between age and risk financing techniques. This is validated by the means of two age groups between 18 - 30 years (mean of 2.6966) and 51 - 60 years (mean of 2.4770), a difference of 0.2196. The findings reflect that the majority of the respondents are in the bracket 18 - 30 years (167) are aware of risk financing techniques as compared to the age group 51 - 60 years (123). The lack of awareness of the age group 51 - 60 years may affect performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as a bridging gap. They are many factors which contributes to the awareness among the group of age between 18 - 30 years such as; energetic, eager to learn, creative, innovative, interests to use internet and technology (tech - savvy). Whilst the age group 51 - 60 years is technophobia (dislikes technology). The findings reflect that age has influence on risk financing techniques and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F= 3.215$, $p = 0.013$). This means that risk financing techniques have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable adoption. The findings from ANOVA reflect that there is a significant variance between age and adoption. This is validated by the means of two age groups between 18 - 30 years (mean of 2.0075) and 61 years plus (mean of 1.5650), a difference of 0.4425. The findings reflect that the majority of the respondents are in the bracket 18 - 30 years (167) are aware of adoption as compared to the age group 61 years plus (125). The lack of awareness of the age group 61 years plus may affect performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as a bridging gap. They are many factors which contributes to the awareness among the group of age between 18 - 30 years such as; energetic, eager to learn, creative, innovative, interests to use internet and technology (tech - savvy). Whilst the age group 61 years plus is technophobia (dislikes technology). The results reflect that age has influence on adoption and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F= 11.366$, $p = 0.000$). This means that adoption have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable profitability and liquidity ratios. The findings from ANOVA reflect that there is a significant variance between age and profitability and liquidity ratios. This is validated by the means of two age groups between 18 - 30 years (mean of 2.5463) and 61 years plus (mean of 1.6960), a difference of 0.8503. The findings reflect that the majority of the respondents are in the bracket 18 - 30 years (167) are knowledgeable of profitability and liquidity ratios as compared to the age group 61 years plus (125). The lack of awareness of the age group 61 years plus may affect performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as a bridging gap. They are many factors which contributes to the awareness among the group of age between 18 - 30 years such as; energetic, eager to learn, creative, innovative, interests to use internet and technology (tech - savvy). Whilst the age group 61 years plus is technophobia (dislikes technology). The findings reflect that age has influence on profitability and liquidity ratios and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F= 26.220$, $p = 0.000$). This means that profitability and liquidity ratios have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable profitability and liquidity ratios. The findings from ANOVA reflect that there is a significant variance between age and profitability and liquidity ratios. This is validated by the means of two age groups between 18 - 30 years (mean of 2.5463) and 61 years plus (mean of 1.6960), a difference of 0.8503. The findings reflect that the majority of the respondents are in the bracket 18 - 30 years (167) are knowledgeable of profitability and liquidity ratios as compared to the age group 61 years plus (125). The lack of awareness of the age group 61 years plus may affect performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as bridging gap. They are many factors which contributes to the awareness among the group of age between 18 - 30 years such as; energetic, eager to learn, creative, innovative, interests to use internet and technology (tech - savvy). Whilst the age group 61 years plus is technophobia (dislikes technology). The results reflect that age has influence on profitability and liquidity ratios and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F= 26.220$, $p = 0.000$). This means that profitability and liquidity ratios have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable corporate governance. The findings from ANOVA reflect that there is a significant variance between age and corporate governance. This is validated by the means of two age groups between 31 - 40 years (mean of 2.7742) and 61 years plus (mean of 1.7835), a difference of 0.9907. The results reflect that the majority of the respondents are in the bracket 31 - 40 years (163) are aware of corporate governance as compared to the age group 61 years (125). The lack of awareness of the group 61 years plus may affect performance of enterprise hence the need to put in place a framework for enterprise risk management and sustainability as bridging gap. They are many factors which contributes to the awareness among the group of age between 18 - 30 years such as; energetic, eager to learn, creative, innovative, interests to use internet and technology (tech - savvy). Whilst the age group 61 years plus is technophobia (dislikes technology). The findings reflect that age has influence on corporate governance and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F= 22.636$, $p = 0.000$). This means that corporate governance has impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how age the independent variable influences the dependent variable stakeholder management. The findings from ANOVA reflect that there is a significant variance between age and stakeholder management. This is validated by the means of two age groups between 18 - 30 years (mean of 2.5601) and 61 years plus (mean of 1.7680), a difference of 0.7921. The results reflect that the majority of the respondents are in the bracket 18 - 30 years (167) are knowledgeable of stakeholder management as compared to the age group 61 years plus (125). The lack of awareness of the age group 61 years plus may affect performance of an enterprise hence the need to put in place a framework for enterprise risk management and sustainability as bridging gap. They are many factors which contributes to the awareness among the group of age between 18 - 30 years such as; energetic, eager to learn, creative, innovative, interests to use internet and technology (tech - savvy). Whilst the age group 61 years plus is technophobia (dislikes technology). The findings reflect that age has influence on stakeholder management and issue of developing a framework is of paramount important and should be considered as a recommendation to business owners / policy makers ($F= 22.629$, $p = 0.000$). This means that stakeholder management have impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

- **Influence of education on other variables (employee perspective)**

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable sources of business. The findings from ANOVA reflect that there is a significant variance between education and sources of business. This is validated by the means of two qualifications; professional certificate & diploma (mean of 4.5566) and doctoral degree (mean of 3.4091), a difference of 1.1475. The findings reflect that the majority 413 out of 667 (62%) of the respondents are professional certificate & diploma holders, and this may cause a limitation in terms of understanding sources of business. The shortages of respondents with higher qualifications may exposure micro-lending companies to high risks. The gap between the doctoral degree levels shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through the policy makers (NBFIRA). The results reflect that education has influence on sources of business. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The results are significant as in Table 5.36 ($F=26.658$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable challenges / constraints. The findings from ANOVA reflect that there is a significant variance between education and challenges / constraints. This is validated by the means of two qualifications; professional certificate & diploma (mean of 4.8889) and doctoral degree (mean of 3.5646), a difference of 1.3243. The findings reflect that the majority 413 out of 667 (62%) of the respondents are professional certificate & diploma holders, and this may cause a limitation in terms of understanding challenges / constraints. The shortages of respondents with higher qualifications may exposure micro-lending companies to high risks. The gap between the doctoral degree levels shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through the policy makers (NBFIRA). The results reflect that education has influence on challenges / constraints. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training and development polices. The results are significant as in Table 5.36 ($F=34.605$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges / constraints that contribute to the closure of micro-lending entities and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable marketing challenges. The findings from ANOVA reflect that there is a significant variance between education and marketing challenges. This is validated by the means of two qualifications; professional certificate & diploma (mean of 4.8218) and doctoral degree (mean of 3.3455), a difference of 1.4763. The findings reflect that the majority 413 out of 667 (62%) of the respondents are professional certificate & diploma holders, and this may cause a limitation in terms of understanding marketing challenges. The shortages of respondents with higher qualifications may exposure micro-lending companies to high risks. The gap between the doctoral degree levels shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through the policy makers (NBFIRA). The findings reflect that education has influence on marketing challenges. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The findings are significant as in Table 5.36 ($F=33.087$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable primary risks. The findings from ANOVA reflect that there is a significant variance between education and primary risks. This is validated by the means of two qualifications; professional certificate & diploma (mean of 4.8218) and doctoral degree (mean of 3.3455), a difference of 1.4763. The findings reflect that the majority 413 out of 667 (62%) of the respondents are professional certificate & diploma holders, and this may cause a limitation in terms of understanding primary risks. The shortages of respondents with higher qualifications may exposure micro-lending companies to high risks. The gap between the doctoral degree levels shown by difference in means is very high and attention should be given in terms of increase in the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through the policy makers (NBFIRA). The results reflect that education has influence on primary risks. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The finding are significant as in Table 5.36 ($F=33.087$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2 and 6; to determine the challenges that contributes to the closure of micro-lending entities and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.



ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable primary factors. The findings from ANOVA reflect that there is a significant variance between education and primary factors. This is validated by the means of two qualifications; professional certificate & diploma (mean of 1.7228) and doctoral degree (mean of 3.0227), a difference of 1.2999. The findings reflect that 11 respondents (1.7%) with doctoral degrees understand how to deal with primary factors due to their level of education. Therefore, this implies that 98.30% (656) of the respondents require appreciation and orientation to the knowledge of primary risks. This means that lack of understanding of primary factors may results in poor processes and internal controls. The shortages of respondents without higher qualifications may exposure micro-lending companies into high risks. The gap between the doctoral degree levels shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). The findings reflect that education has influence on primary factors. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The findings are significant as shown on Table 5.36 ($F=32.083$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2, 3 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures and internal controls in micro-lending businesses

and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable employee exposures. The findings from ANOVA reflect that there is a significant variance between education and employee exposures. This is validated by the means of two qualifications; professional certificate & diploma (mean of 2.1368) and doctoral degree (mean of 3.0000), a difference of 0.8632. The findings reflect that 11 respondents (1.7%) with doctoral degrees understand how to deal with employee exposures due to their level of education. Therefore, this implies that 98.30% (656) of the respondents require appreciation and orientation to the knowledge of employee exposures. This means that lack of understanding of employee exposures may results in poor processes and internal controls. The shortages of respondents without higher qualifications may exposure micro-lending companies into high risks. The gap between the doctoral degree levels shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). The results reflect that education has influence on employee exposures. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The findings are significant as shown on Table 5.36 ($F=24.300$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2, 3 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable process exposures. The findings from ANOVA reflect that there is a significant variance between education and process exposures. This is validated by the means of two qualifications; professional certificate & diploma (mean of 1.7228) and doctoral degree (mean of 3.0227), a difference of 0.8632. The findings reflect that 11 respondents (1.7%) with doctoral degrees understand how to deal with process exposures due to their level of education. Therefore, this implies that 98.30% (656) of the respondents require appreciation and orientation to the knowledge of process exposures. This means that lack of understanding of process exposures may results in poor processes and internal controls. The shortages of respondents without higher qualifications may expose micro-lending companies into high risks. The gap between the doctoral degree levels shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through

policy makers (NBFIRA). The findings reflect that education has a significant influence on process exposures. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The findings are significant as shown on Table 5.36 ($F=25.872$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2, 3 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable system exposures. The findings from ANOVA reflect that there is a significant variance between education and system exposures. This is validated by the means of two qualifications; professional certificate & diploma (mean of 1.6856) and doctoral degree (mean of 3.0779), a difference of 1.3923. The findings reflect that 11 respondents (1.7%) with doctoral degrees understand how to deal with system exposures due to their level of education. Therefore, this implies that 98.30% (656) of the respondents require appreciation and orientation to the knowledge of system exposures. This means that lack of understanding of system exposures may results in poor processes and internal controls. The shortages of respondents without higher qualifications may exposure micro-lending companies into high risks. The gap between the doctoral degree levels shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). The findings reflect that education has influence on system exposures. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The findings are significant as shown on Table 5.36 ($F=28.425$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2, 3 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable external exposures. The findings from ANOVA reflect that there is a significant variance between education and external exposures. This is validated by the means of two qualifications; professional certificate & diploma (mean of 1.7563) and doctoral degree (mean of 3.5455), a difference of 1.7892. The findings reflect that 11 respondents (1.7%) with doctoral degrees understand how to deal with external exposures due to their level of education. Therefore, this implies that 98.30% (656) of the respondents require appreciation and orientation to

the knowledge of external exposures. This means that lack of understanding of external exposures may result in poor processes and internal controls. The shortages of respondents without higher qualifications may exposure micro-lending companies into high risks. The gap between the doctoral degree levels shown by difference in means is very high and attention should be given in terms of increasing the minimum level of education to a Bachelor's degree in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). The findings reflect that education has influence on important external exposures. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The findings are significant as shown on Table 5.36 ($F=31.501$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2, 3 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable important elements. The findings from ANOVA reflect that there is a significant variance between education and important elements. This is validated by the means of two qualifications; professional certificate & diploma (mean of 1.9522) and doctoral degree (mean of 2.9091), a difference of 0.9569. The findings reflect that 11 respondents (1.7%) with doctoral degrees understand how to deal important elements due to their level of education. Therefore, this implies that 98.30% (656) of the respondents require appreciation and orientation to the knowledge of important elements. This means that lack of understanding of important elements may results in poor processes and internal controls. The shortages of respondents without higher qualifications may exposure micro-lending companies into high risks. The gap between the doctoral degree levels shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). The findings reflect that education has influence on important elements. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The findings are significant as shown on Table 5.36 ($F=9.108$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2, 3 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable identify risk types. The findings from ANOVA reflect that there is a significant variance between education and identify risk types. This is validated by the means of two qualifications; professional certificate & diploma (mean of 1.9976) and doctoral degree (mean of 3.0682), a difference of 1.0706. The findings reflect that 11 respondents (1.7%) with doctoral degrees understand how to deal with risk types due to their level of education. Therefore, this implies that 98.30% (656) of the respondents require appreciation and orientation to the knowledge of identify risk types. This means that lack of understanding of identify risk types may results in poor processes and internal controls. The shortages of respondents without higher qualifications may exposure micro-lending companies into high risks. The gap between the doctoral degree levels shown by difference in means is very high and attention should be given in terms of increasing the minimum level of education to a Bachelor's degree in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). The findings reflect that education has influence on identify risk types. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The findings are significant as shown on Table 5.36 ($F=9.291$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2, 3 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable qualitative methods. The findings from ANOVA reflect that there is a significant variance between education and qualitative methods. This is validated by the means of two qualifications; professional certificate & diploma (mean of 1.9976) and doctoral degree (mean of 3.0682), a difference of 1.0706. The findings reflect that 11 respondents (1.7%) with doctoral degrees understand how to deal with qualitative methods due to their level of education. Therefore, this implies that 98.30% (656) of the respondents require appreciation and orientation to the knowledge of qualitative methods. This means that lack of understanding of qualitative methods may results in poor processes and internal controls. The shortages of respondents without higher qualifications may exposure micro-lending companies into high risks. The gap between the doctoral degree levels shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). The findings reflect that education has an influence on qualitative methods. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development

polices. The findings are significant as shown on Table 5.36 ($F=22.557$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2, 3 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable quantitative methods. The findings from ANOVA reflect that there is a significant variance between education and quantitative methods. This is validated by the means of two qualifications; professional certificate & diploma (mean of 1.7809) and doctoral degree (mean of 2.8182), a difference of 1.0706. The findings reflect that 11 respondents (1.7%) with doctoral degrees understand how to deal with quantitative methods due to their level of education. Therefore, this implies that 98.30% (656) of the respondents require appreciation and orientation to the knowledge of quantitative methods. This means that lack of understanding of quantitative methods may results in poor processes and internal controls. The shortages of respondents without higher qualifications may exposure micro-lending companies into high risks. The gap between the doctoral degree levels shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). The findings reflect that education has an influence on quantitative methods. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The findings are significant as shown on Table 5.36 ($F=15.866$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2, 3 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable control measures. The findings from ANOVA reflect that there is a significant variance between education and control measures. This is validated by the means of two qualifications; professional certificate & diploma (mean of 2.4972) and certificate in BGCSE (mean of 2.8210), a difference of 0.3238. The findings indicate that the respondents with certificates in BGCSE recognise control measures more than those with professional certificate & diploma. This is a strange scenario and more effective controls should put in place as they are more respondents with professional certificate & diploma (413) as compared to 54 with certificate

in BGCSE, this implies that this act should be addressed in order to avoid jeopardizing the procedures and internal controls which may lead into problems related to business continuity. This means that lack of understanding of control measures may result into poor best practices and internal governance which may exposure micro-lending companies into high risks. The gap between professional certificate & diploma and certificate in BGCSE, shown by difference in means is very high and attention should be given in terms of a restoration of this anomaly in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). The findings reflect that education has influence on control measures. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The findings are significant as shown in Table 5.36 ($F=5.124$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2, 3,4 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures and internal controls in micro-lending businesses; to ascertain leadership styles, management principles and corporate governance cultures that is dominant in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

.ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable risk financing techniques. The findings from ANOVA reflect that there is a significant variance between education and risk financing techniques. This is validated by the means of two qualifications; professional certificate & diploma (mean of 2.4649) and doctoral degree (mean of 3.0303), a difference of 0.5654. The findings reflect that 11 respondents (1.7%) with doctoral degrees understand how to deal with risk financing techniques due to their level of education. Therefore, this implies that 98.30% (656) of the respondents require appreciation and orientation to the knowledge of risk financing techniques. This means that lack of understanding of risk financing techniques may results in poor processes and internal controls. The shortages of respondents without higher qualifications may exposure micro-lending companies into high risks. The gap between the doctoral degree level shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). The findings reflect that education has influence on risk financing techniques. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The findings are significant as shown on Table 5.36 ($F=8.555$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2, 3 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures and internal controls in micro-lending businesses and to develop a

framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable adoption. The findings from ANOVA reflect that there is a significant variance between education and adoption. This is validated by the means of two qualifications; professional certificate & diploma (mean of 1.6305) and doctoral degree (mean of 2.4318), a difference of 0.8013. The findings reflect that 11 respondents (1.7%) with doctoral degrees understand how to deal with adoption due to their level of education. Therefore, this implies that 98.30% (656) of the respondents require appreciation and orientation to the knowledge of adoption. This means that lack of understanding of adoption may results in poor processes and internal controls. The shortages of respondents without higher qualifications may exposure micro-lending companies into high risks. The gap between the doctoral degree level shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). The findings reflect that education has influence on adoption. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The results are significant as shown on Table 5.36 ($F=17.271$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2, 3 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable profitability and liquidity ratios. The findings from ANOVA reflect that there is a significant variance between education and profitability and liquidity ratios. This is validated by the means of two qualifications; professional certificate & diploma (mean of 1.7037) and doctoral degree (mean of 3.3217), a difference of 1.618. The findings reflect that 11 respondents (1.7%) with doctoral degrees understand how to deal with profitability and liquidity ratios due to their level of education. Therefore, this implies that 98.30% (656) of the respondents require appreciation and orientation to the knowledge of profitability and liquidity ratios. This means that lack of understanding of profitability and liquidity ratios may results in poor processes and internal controls. The shortages of respondents without higher qualifications may exposure micro-lending companies into high risks. The gap between the doctoral degree level shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). The findings

reflect that education has influence on profitability and liquidity ratios. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The findings are significant as shown on Table 5.36 ($F=43.262$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2, 3 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures and internal controls in micro-lending businesses and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable corporate governance. The findings from ANOVA reflect that there is a significant variance between education and corporate governance. This is validated by the means of two qualifications; professional certificate & diploma (mean of 1.9680) and doctoral degree (mean of 3.2667), a difference of 1.2987. The results reflect that 11 respondents (1.7%) with doctoral degrees understand how to deal with corporate governance due to their level of education. Therefore, this implies that 98.30% (656) of the respondents require appreciation and orientation to the knowledge of profitability and liquidity ratios. This means that lack of understanding of corporate governance may results in poor processes and internal controls. The shortages of respondents without higher qualifications may exposure micro-lending companies into high risks. The gap between the doctoral degree level shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). The findings reflect that education has influence on corporate governance. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development polices. The findings are significant as shown on Table 5.36 ($F=21.912$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA address objectives 2, 3, 4 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that is dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how education the independent variable influences the dependent variable stakeholder management. The findings from ANOVA reflect that there is a significant variance between education and stakeholder management. This is validated by the means of two qualifications; professional certificate & diploma (mean of 1.8357) and doctoral degree (mean of 3.3636), a difference of 1.5279. The findings reflect that 11 respondents

(1.7%) with doctoral degrees understand how to deal with stakeholder management due to their level of education. Therefore, this implies that 98.30% (656) of the respondents require appreciation and orientation to stakeholder management. This means that lack of understanding of stakeholder management may result in poor processes and internal controls. The shortages of respondents without higher qualifications may expose micro-lending companies into high risks. The gap between the doctoral degree level shown by difference in means is very high and attention should be given in terms of increasing the level of education in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). The findings reflect that education has influence on corporate stakeholder management. Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training development policies. The findings are significant as shown on Table 5.36 ($F=32.709$, $p = 0.000$). This means that education has an impact on the performance of an enterprise. This ANOVA addresses objectives 2, 3, 4 and 6; to determine the challenges that contribute to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that is dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Influence of occupation on other variables (employee perspective)**

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable sources of business. The findings from ANOVA reflect that there is a significant variance between occupation and sources of business. This is validated by too extreme means of two occupations; CEO - Proprietor (mean of 4.6136) and Risk Manager (RM) (mean of 3.0962), a difference of 1.5174. The findings reflect that CEO - Proprietors as the ambassador of the company and captain, they understand the sources of business that affect performance in their businesses more than Risk Managers. Therefore, this implies that CEO - Proprietors have strong orientation in business development than their counterparts Risk Managers. Furthermore, CEO - Proprietors understand the business complexities as they are visionary, strategist and tactician, and have good business acumen, hence they are technocrats in the area of sources of business that affect the execution of a business model. This means that lack of understanding of sources of business by Risk Managers may result into a catastrophe in relation to processes and internal controls. The huge differences in means is very high (1.5174) and attention should be given in terms of orientation and training of Risk Managers in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). Therefore, it is imperative to develop a framework for enterprise risk management which incorporates effective training and development policies. The results are significant as shown on Table 5.36 ($F=36.053$, $p = 0.000$).

This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 2, 3, 4 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that is dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable challenges / constraints. The findings from ANOVA reflect that there is a significant variance between occupation and challenges / constraints. This is validated by too extreme means of two occupations; CEO - Proprietor (mean of 4.9533) and Risk Manager (RM) (mean of 3.4534), a difference of 1.4999. The findings reflect that CEO - Proprietors as the ambassador of the company and captain, they understand the challenges / constraints that affect performance in their businesses more than Risk Managers. Therefore, this implies that CEO - Proprietors have strong orientation in business development than their counterparts Risk Managers. Furthermore, CEO - Proprietors understand the business complexities as they are visionary, strategist and tacticians who have good business acumen, hence they are technocrats in the area of challenges / constraints that affect the execution of a business model. This means that lack of understanding of challenges / constraints by Risk Managers may result into a catastrophe in relation to processes and internal controls. The huge differences in means is a telling factor (1.4999) and attention should be given in terms of orientation and training of Risk Managers in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which incorporates effective training development polices. The results are significant as shown on Table 5.36 ($F=40.977$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 2, 3, 4 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable marketing challenges. The findings from ANOVA reflect that there is a significant variance between occupation and marketing challenges. This is validated by too extreme means of two occupations; CEO - Proprietor (mean of 4.8878) and Risk Manager (RM) (mean of 3.5692), a difference of 1.3186. The findings reflect that CEO - Proprietors as the

ambassador of the company and captain, they understand the marketing challenges that affect performance in their businesses more than Risk Managers. Therefore, this implies that CEO - Proprietors have strong orientation in business development than their counterparts Risk Managers. Furthermore, CEO - Proprietors understand the business complexities as they are visionary, strategist and tactician and have good business acumen, hence they are technocrats in the area of marketing challenges that affect the execution of a business model. This means that lack of understanding of marketing challenges by Risk Managers may result into a catastrophe in relation to processes and internal controls. The differences in means is very high (1.3186) and attention should be given in terms of orientation and training of Risk Managers in this sector in order to avoid bankruptcy or insolvency. Therefore, training and development strategies should be encouraged in the whole sector through policy makers (NBFIRA). Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which incorporates effective training and development policies. The findings are significant as shown on Table 5.36 ($F=34.141$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 2, 3, 4 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.



ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable primary risks. The findings from ANOVA reflect that there is a significant variance between occupation and primary risks. This is validated by too extreme means of two occupations; CEO - Proprietor (mean of 4.8878) and Risk Manager (RM) (mean of 3.5692), a difference of 1.3186. The findings reflect that CEO - Proprietors as the backbone of an organisation and through interaction they able to identify primary risks. Therefore, this implies that CEO - Proprietors have strong orientation in business development than their counterparts Risk Managers. The challenges with the CEO - Proprietors are that they are not able to implement and execute an effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, policies processes and internal controls. Finally, the differences in means is very high (1.3186) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.36 ($F=34.141$, $p =$

0.000). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 2, 3, 4 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable primary factors. The findings from ANOVA reflect that there is a significant variance between occupation and primary factors. This is validated by too extreme means of two occupations; Board Member (mean of 2.8611) and CEO - Proprietor (mean of 1.5152), a difference of 1.3459. The findings are in line with the principles of best practices and good corporate governance which recognise Board Members, this is evidenced with the results of this study which reveal that Board Members are knowledgeable and understand the variable primary factors. The principles of best practices such as (COSO, 2013:1-29) and (King, 2016:61) advocate for Board Members' positions as they play an integral independent role. The role of a Board Member assist in removing the dominance by one individual such as CEO or Financial Director, as this may lead to fraudulent activities and lack of corporate governance. The challenges with the CEO - Proprietors may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, polices processes and internal controls. Finally, the differences in means is very high (1.3459) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.36 ($F=44.213$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 2, 3, 4 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable employee exposures. The findings from ANOVA reflect that

there is a significant variance between occupation and employee exposures. This is validated by too extreme means of two occupations; Accountant (mean of 3.4479) and CEO - Proprietor (mean of 2.0666), a difference of 1.3813. The findings reflect a huge gap between the CEO - Proprietor and the rest of the employees due to the fact that this is a senior management role, which deals with vision, strategies and mission. Therefore, employee exposures from the CEO - Proprietor is limited as evidenced in this study; incompetence; human error (negligence); low morale; high staff turnover; fraudulent / criminal activities by employees and lack of training. Therefore, findings align with the principles of best practices that Accountants are more knowledgeable on employee exposures more than the CEO - Proprietor as this is part of the finance personnel's day to day activities. The role of an Accountant is to ensure that there is an effective and efficient system that deals with incompetence; human error (negligence); low morale; high staff turnover; fraudulent / criminal activities by employees and lack of training. Furthermore, after identifying these symptoms related to poor performance the Accountant would then implement and execute robust effective monitoring and control systems. The challenges with the CEO - Proprietors may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, policies, processes and internal controls. Finally, the differences in means is very high (1.3813) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector, to be implemented through NBFIRA (policy maker). The findings are significant as shown on Table 5.36 ($F=28.219$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 2, 3, 4 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable process exposures. The findings from ANOVA reflect that there is a significant variance between occupation and process exposures. This is validated by too extreme means of two occupations; Accountant (mean of 3.3203) and CEO - Proprietor (mean of 1.6425), a difference of 1.6778. The findings reflect a huge gap between the CEO - Proprietor and the rest of the employees due to the fact that this is a senior management role, which deals with vision, strategies and mission. Therefore, process exposures from the CEO - Proprietor is limited

as evidenced in this study: errors in procedures / methodologies; documentation errors; product complexity and security risks. Therefore, the findings of this study align with the principles of best practices that Accountants are responsible for documentation as part of the process exposures more than the CEO - Proprietor as this is part of the finance person's mandate. The role of an Accountant is to ensure that there is proper documentation and an effective process, efficient system that deals with incompetence; errors in procedures / methodologies; documentation errors; product complexity and security risks. Furthermore, after identifying these symptoms related to poor processes the Accountant would then implement and execute robust effective and efficient monitoring and control systems. The challenges with the CEO - Proprietors may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, policies, processes and internal controls. Finally, the differences in means is very high (1.6778) and attention to detail should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector, to be implemented through NBFIRA (policy maker). The findings are significant as shown on Table 5.36 ($F=23.969$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 2, 3, 4 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable system exposures. The findings from ANOVA reflect that there is a significant variance between occupation and system exposures. This is validated by too extreme means of two occupations; Accountant (mean of 3.2634) and CEO - Proprietor (mean of 1.5745), a difference of 1.6889. The findings reflect a huge gap between the CEO - Proprietor and the rest of the employees due to the fact that this is a senior executive management role, which deals with vision, strategies and mission. Therefore, system exposures from the CEO - Proprietor is limited as evidenced in this study; system infiltration; system failures; hackers (e.g. fraud through systems); programming errors; information risk; telecommunication risk and obsolescence of systems. Therefore, the findings of this study align with the principles of best practices that Accountants are responsible for documentation as part of the system exposures more than the CEO - Proprietor as this is part of the finance person's mandate. The role of an Accountant is to

ensure that there is proper documentation and an effective process efficient system that deals with incompetence; system infiltration; system failures; hackers (e.g. fraud through systems); programming errors; information risk; telecommunication risk and obsolescence of systems. Furthermore, after identifying these symptoms related to poor systems and processes the Accountant would then implement and execute robust effective and efficient monitoring and control systems. The challenges with the CEO - Proprietors may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, policies processes and internal controls. Finally, the differences in means is very high (1.6889) and attention to detail should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector, to be implemented through NBFIRA (policy maker). The results are significant as shown on Table 5.36 ($F=31.834$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 2, 3, 4 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable external exposures. The findings from ANOVA reflect that there is a significant variance between occupation and external exposures. This is validated by too extreme means of two occupations; Human Resource Manager (HRM) (mean of 3.4067) and CEO - Proprietor (mean of 1.5828), a difference of 1.8239. The findings reflect a huge gap between the CEO - Proprietor and the rest of the employees especially the Human Resources Manager due to the fact that CEO - Proprietor) is a senior executive management role, which deals with vision, strategies and mission. Therefore, external exposures from the CEO - Proprietor to the following is limited as evidenced in this study; acts of God (lighting, veld fire and floods); external criminal activities; domestic political upheaval; regulatory and compliance; legal actions; business environment changes; deterioration of micro-lending company's reputation perceived by the market; strikes and money laundering. Therefore, the findings of this study align with the principles of best practices which assume that Human Resources Managers are responsible and compliance with regulatory issues as part of the external exposures more than the CEO - Proprietor as this is part of the HRM's mandate. The role of an HR Practitioner (HRM) is to ensure that there are proper

regulatory and adherence to compliance in relation to; acts of God (lighting, veld fire and floods); external criminal activities; domestic political upheaval; regulatory and compliance; legal actions; business environment changes; deterioration of micro-lending company's reputation perceived by the market; strikes and money laundering. Furthermore, after identifying these symptoms related to regulations and compliance the Human Resource Manager would then implement and execute robust effective and efficient human resources management monitoring and control systems. The challenges with the CEO - Proprietors may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, policies, processes and internal controls. However, it would prudent to suggest that CEO - Proprietor positions must require potential candidates with human resources management background and HRM qualification in order to avoid bankruptcy or insolvency as a result of non - performing. Finally, the differences in means is very high (1.8239) and attention to detail should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector, to be implemented through NBFIRA (policy maker). The findings are significant as shown on Table 5.36 ($F=38.717$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 2, 3, 4 and 6; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable important elements. The findings from ANOVA reflect that there is a significant variance between occupation and important elements. This is validated by too extreme means of two occupations; Board Member (mean of 2.8611) and CEO - Proprietor (mean of 1.7622), a difference of 1.0989. The findings are in line with the principles of best practices and good corporate governance which recognise Board Members, this is evidenced with the results of this study which reveal that Board Members are knowledgeable and understand the variable important elements. The important elements as part of the enterprise risk management include the following; risk identification; risk evaluation / measurement; risk control and risk financing. The principles of best practices such as (COSO, 2013:1-29) and (King, 2016:61) advocate for Board Members' positions as they play an integral independent role. The role of a Board Member assist in removing the dominance (biasness) by or of one individual such as CEO or Financial Director,

as this may lead to fraudulent activities and lack of corporate governance. According to King (2016:16) Board Members are charged with corporate governance and risk management responsibilities and roles. The challenges with the CEO - Proprietors may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, policies, processes and internal controls. Finally, the differences in means is very high (1.0989) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.36 ($F=18.999$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 1, 2, 3, 4 and 6; to establish sources of risk that affect sustainability in micro-lending companies; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable identify risk types. The findings from ANOVA reflect that there is a significant variance between occupation and identify risk types. This is validated by too extreme means of two occupations; Loans Officer (mean of 2.7806) and CEO - Proprietor (mean of 1.8354), a difference of 0.9452. The results are in line with the work ethics for a Loans Officers which require them to identify risk types. The findings of this study reveal that Loans Officer are more knowledgeable in identifying risk types which affect performance of their enterprises. The role of Loans Officer requires assisting an organisation in recognising appropriate methods used to identify risk types such as; workshops; process mapping; comparisons with other organisations and discussions with peers. Furthermore, Loans officer are able to identify risk types due their nature of work which allows interaction with the customers and the community at large in which they operate. The challenges with the CEO - Proprietors may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, policies, processes and internal controls. Finally, the differences in means is very high (0.9452) and attention should be given in terms of an adoption of

effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.36 ($F=16.649$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 1, 2, 3, 4 and 6; to establish sources of risk that affect sustainability in micro-lending companies; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable qualitative methods. The findings from ANOVA reflect that there is a significant variance between occupation and qualitative methods. This is validated by too extreme means of two occupations; Risk Manager (RM) (mean of 2.6667) and CEO - Proprietor (mean of 1.5732), a difference of 1.0935. The results are in line with the principles of best practices and good corporate governance which recognise Risk Managers, and this is shown with the findings of this study which reveal that Risk Managers are knowledgeable and understand the variable qualitative methods. The qualitative methods used in enterprise risk management to identify sources of risk include the following; historical data forecast the likelihood of a potential loss; self - risk assessments and risk maps / process flows. The principles of best practices in the (COSO, 2013:1-29) and (King, 2016:61) advocate for Risk Managers' positions (Chief Risk Officer) as they play an integral independent role. The role of a Risk Manager is to assist in removing the dominance (biasness) by or of one powerful individual such as CEO or Financial Director, as this may lead to fraudulent activities and poor corporate governance. According to King (2016:16) Risk Managers are charged with corporate governance and risk management responsibilities and roles. These challenges from the CEO - Proprietors may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, polices, processes and internal controls. Finally, the differences in means is very high (1.0935) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.36 ($F=18.270$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This

ANOVA address objectives 1, 2, 3, 4 and 6; to establish sources of risk that affect sustainability in micro-lending companies; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable quantitative methods. The findings from ANOVA reflect that there is a significant variance between occupation and quantitative methods. This is validated by too extreme means of two occupations; Accountant (mean of 2.5234) and Operations Manager (mean of 1.6651), a difference of 0.8583. The findings reflect a huge gap between the Operations Manager and the rest of the employees due to the fact that operational duties are all - rounder hence require more time in understanding quantitative methods. Therefore, quantitative methods exposure from the Operations Manager appears to be limited as evidenced in this study. The quantitative methods used to measure enterprise risk management include; casual modelling; risk indicators; escalation triggers and loss event database. Therefore, the findings of this study align with the principles of best practices that Accountants are responsible for managing and mitigating risk as part of their roles for enterprise risk management. The role of an Accountant is to ensure that there are effective and efficient quantitative methods used for mitigation of risk such as: casual modelling; risk indicators; escalation triggers and loss event database. Therefore, it is imperative for an Accountant to put in place a robust effective and efficient monitoring and control system, in order to address challenges being faced with the Operations Managers. Finally, the Operations Managers' predicament may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, polices, processes and internal controls. In addition, the difference in means is very high (0.8583) and attention to detail should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector, to be implemented through NBFIRA (policy maker). The findings are significant as shown on Table 5.36 ($F=9.305$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 1, 2, 3, 4, 5 and 6; to establish sources of risk that affect sustainability in micro-lending companies; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles,

management principles and corporate governance cultures that are dominant in micro-lending companies, to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable control measures. The findings from ANOVA reflect that there is a significant variance between occupation and control measures. This is validated by too extreme means of two occupations; Accountant (mean of 3.2813) and Operations Manager (mean of 2.3145), a difference of 0.9668. The findings reflect a huge gap between the Operations Manager and the rest of the employees due to the fact that operational duties are all - rounder hence require more time in understanding control measures. Therefore, control measures exposure to the Operations Manager appears to be limited as evidenced in this study. The control measures used to measure enterprise risk management include; policy and procedures; internal controls and risk reporting. Therefore, the findings of this study align with the principles of best practices that Accountants are responsible for managing and mitigating risk as part of their roles for enterprise risk management. The role of an Accountant is to ensure that there are effective and efficient control measures used for mitigating risk such as: policy and procedures; internal controls and risk reporting. Therefore, it is imperative for an Accountant to put in place a robust effective and efficient monitoring and control system, in order to address challenges being faced with the Operations Managers. Finally, the Operations Managers' predicament may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, policies, processes and internal controls. In addition, the difference in means is very high (0.9668) and attention to detail should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector, to be implemented through NBFIRA (policy maker). The findings are significant as shown on Table 5.36 ($F=8.057$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 1, 2, 3, 4, 5 and 6; to establish sources of risk that affect sustainability in micro-lending companies; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies, to ascertain whether micro-lending companies understand the

application of accounting and reporting as a tool for decision making and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable risk financing techniques. The findings from ANOVA reflect that there is a significant variance between occupation and risk financing techniques. This is validated by too extreme means of two occupations; Accountant (mean of 2.9479) and Operations Manager (mean of 2.4528), a difference of 0.4951. The findings reflect a huge gap between the Operations Manager and the rest of the employees due to the fact that operational duties are all - rounder hence require more time in understanding risk financing techniques. Therefore, risk financing techniques exposure to the Operations Manager appears to be limited as evidenced in this study. The risk financing techniques used in enterprise risk management include; risk transfers (to third parties - insurance companies); risk retention (funded) and risk retention (unfunded). Therefore, the findings of this study align with the principles of best practices that Accountants are responsible for managing and mitigating risk as part of their roles for enterprise risk management. The role of an Accountant is to ensure that there are effective and efficient control measures used for mitigating risk such as: risk retention (funded) and risk retention (unfunded). Therefore, it is imperative for an Accountant to put in place a robust effective and efficient monitoring and control system, in order to address challenges being faced with the Operations Managers. Finally, the Operations Managers' predicament may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, policies, processes and internal controls. In addition, the difference in means is very high (0.4951) and attention to detail should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector, to be implemented through NBFIRA (policy maker). The findings are significant as shown on Table 5.36 ($F=4.167$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 1, 2, 3, 4, 5 and 6; to establish sources of risk that affect sustainability in micro-lending companies; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies, to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable adoption. The findings from ANOVA reflect that there is a significant variance between occupation and adoption. This is validated by too extreme means of two occupations; Board Member (mean of 2.7083) and CEO - Proprietor (mean of 1.5217), a difference of 1.1866. The results are in line with the principles of best practices and good corporate governance which recognise Board Members and is shown with the findings of this study which reveal that Board Members are in favour of the variable adoption of a framework for enterprise risk management and sustainability. In contrary to this assertion / claim by Board Members, CEO - Proprietors are not in support of an adoption of this framework as evidenced with the findings. The framework is very effective and efficient, the behaviour for CEO - Proprietors, appears to be resistance to change. Therefore, to avoid this resistance it would important to enforce the framework as a law from the regulator's point view. It is also recommended to use the Lewin's model of change during the implementation of the ERM and sustainability framework in order to achieve inclusiveness in the entire process. The principles of best practices such as (COSO, 2013:1-29) and (King, 2016:61) advocate for Board Members' positions as they play an integral independent role such as implementation of ERM systems. The role of a Board Member assist in removing the dominance (biasness) by or of one individual such as CEO or Financial Director, as this may lead to fraudulent activities, resistance to change and lack of corporate governance. According to King (2016:16) Board Members are charged with corporate governance and enterprise risk financial management responsibilities and roles. The challenges with the CEO - Proprietors may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, polices, processes and internal controls, which lead into bankruptcy and insolvency. Finally, the difference means is very high (1.1866) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.36 ($F=30.661$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 1, 2, 3, 4 and 6; to establish sources of risk that affect sustainability in micro-lending companies; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable profitability and liquidity ratios. The findings from ANOVA reflect that there is a significant variance between occupation and profitability and liquidity ratios. This is validated by too extreme means of two occupations; Risk Manager (RM) (mean of 3.3550) and CEO - Proprietor (mean of 1.6501), a difference of 1.7049. The findings are in line with the principles of best practices and good corporate governance which recognise Risk Managers, and this is shown with the findings of this study which reveal that Risk Managers are knowledgeable and understand how to use profitability and liquidity ratios. The profitability and liquidity ratios used to measure and monitor organisational performance are as follows; return on assets (ROA); return on equity (ROE); debt to assets ratio; capital gearing ratio; interest cover; earnings per share; price / earnings ratio (P/E Ratio); dividend pay-out - ratio; dividend yield; dividend cover; current ratio; acid test ratio; inventory turnover; creditor payment period; debtor collection period; gross profit margin and profit margin. The principles of best practices in the (COSO, 2013:1-29) and (King, 2016:61) advocate for Risk Managers' positions (Chief Risk Officer) as they play an integral independent role. The role of a Risk Manager is to assist in eliminating risks through risk financial management which uses accounting ratios such as; return on assets (ROA); return on equity (ROE); debt to assets ratio; capital gearing ratio; interest cover; earnings per share; price / earnings ratio (P/E Ratio); dividend pay-out - ratio; dividend yield; dividend cover; current ratio; acid test ratio; inventory turnover; creditor payment period; debtor collection period; gross profit margin and profit margin. According to King (2016:16) Risk Managers are charged with corporate governance and risk management responsibilities and roles. These challenges for CEOs - Proprietors failure to understand profitability and liquidity ratios may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, policies, processes and internal controls. Finally, the differences in means is very high (1.7049) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.36 ($F=27.942$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 1, 2, 3, 4 and 6; to establish sources of risk that affect sustainability in micro-lending companies; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a

framework for enterprise risk management that can be used to mitigate risks in micro lending companies.



ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable corporate governance. The findings from ANOVA reflect that there is a significant variance between occupation and corporate governance. This is validated by too extreme means of two occupations; Risk Manager (RM) (mean of 3.3550) and CEO - Proprietor (mean of 1.6501), a difference of 1.9049. The findings are in line with the principles of best practices and good corporate governance which recognise Risk Managers, and this is shown with the findings of this study which reveal that Risk Managers are knowledgeable and understand the variable corporate governance. The following are some of the factors that affect corporate governance culture if a fair attention is provided for; ownership; board size; outsiders in audit committee; total employees in the firm; human resources manager; family CEO; firm size; fixed assets; investments; total assets; solidity; nature of firm and firm age. The principles of best practices in the (COSO, 2013:1-29) and (King, 2016:61) advocate for Risk Managers' positions (Chief Risk Officer) as they play a pivotal role which minimises risk. The role of a Risk Manager is to assist in removing the dominance (biasness) by or of one powerful individual such as CEO or Financial Director, as this may lead to fraudulent activities and poor corporate governance. According to King (2016:16) Risk Managers are charged with corporate governance and risk management responsibilities and roles. These challenges faced with the CEO - Proprietors for not understanding good corporate governance cultures may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, policies processes and internal controls. Finally, the differences in means is very high (1.9049) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.36 ($F=21.041$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 1, 2, 3, 4, 5 and 6; to establish sources of risk that affect sustainability in micro-lending companies; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies, to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making

and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.36 to find out how occupation the independent variable influences the dependent variable stakeholder management. The findings from ANOVA reflect that there is a significant variance between occupation and stakeholder management. This is validated by too extreme means of two occupations; Risk Manager (RM) (mean of 3.3179) and CEO - Proprietor (mean of 1.6685), a difference of 1.6494. The findings are in line with the principles of best practices and good corporate governance which recognise Risk Managers, and this is shown with the findings of this study which reveal that Risk Managers are knowledgeable and understand the variable stakeholder management. The following are some of the dimensions or approaches that influence stakeholder management; the stakeholder value approach; the stakeholder approach and the shareholder - inclusive approach (Zech, 2013:683). The principles of best practices in the (COSO, 2013:1-29) and (King, 2016:61) advocate for Risk Managers' positions (Chief Risk Officer) as they play a pivotal role which minimises risk and ensure there is economic balance between stakeholders. The role of a Risk Manager is to assist in removing the dominance (biasness) by or of one powerful individual such as CEO or Financial Director, as this may lead to fraudulent activities and poor corporate governance. According to King (2016:16) Risk Managers are charged with corporate governance and risk management responsibilities and roles. These challenges faced with the CEO - Proprietors for not understanding dimensions for stakeholder management may be resolved through an adoption of effective and efficient ERM system hence the need for the guidelines (effective and efficient framework for enterprise risk management and sustainability). This means that lack of an effective and efficient framework for enterprise risk management and sustainability in the sector may result into poor and ineffective procedures, policies, processes and internal controls. Finally, the differences in means is very high (1.6494) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.36 ($F=38,080$, $p = 0.000$). This means that occupation has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 1, 2, 3, 4, 5 and 6; to establish sources of risk that affect sustainability in micro-lending companies; to determine the challenges that contributes to the closure of micro-lending entities; to ascertain procedures, and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies, to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

Finally, the findings on occupation have reveal that there are three positions which are dominating in the micro-lending companies such as: Risk Manager; Accountant and Board Member. Therefore, it is imperative to have all these positions on board to avoid bankruptcy and insolvency. Furthermore, the study has revealed that there are few respondents for these three important positions (Risk Managers =13; Accountants = 32 and Board Members = 9), it should be recommended to be part of the ERM and sustainability framework. Therefore, a micro-lending should not be registered if these three positions are not in existence as they play a pivotal role in risk financial management. The findings also indicate the dominance with the CEO - Proprietors as respondents of this study, about 328 (49%) of all the respondents. This is an indication that CEO - Proprietors are powerful in making decisions and they may not tolerate any criticism from other staff members, and this may have contributed to the closure of so many micro-lending entities. Therefore, during the implementation of the ERM and sustainability framework it would be prudent to use the Lewin's three stage model and the Mendelow's power / interest matrix. The Lewin's three stage model will assist CEO - Proprietors in understanding the need for change and the Mendelow's power / interest matrix will assist in unpacking the sources of stakeholder power.

Table 5.37: ANOVA influence of nationality on service of work (employee perspective)

Employee perspective	Nationality			Service of work		
	DF	F	Sig	DF	F	Sig
Construct						
Sources of business	2	7.953	0.000	3	5.657	0.001
Challenges / Constraints	2	5.112	0.006	3	12.160	0.000
Marketing challenges	2	3.692	0.025	3	7.937	0.000
Primary risks	2	3.692	0.025	3	7.937	0.000
Primary factors	2	7.563	0.001	3	23.264	0.000
Employee exposures	2	7.196	0.001	3	11.231	0.000
Process exposures	2	5.286	0.005	3	11.709	0.000
Systems exposures	2	5.958	0.003	3	14.546	0.000
External exposures	2	2.931	0.054	3	16.894	0.000
Important elements	2	1.694	0.185	3	12.204	0.000
Identify risk types	2	1.988	0.138	3	6.282	0.000
Qualitative methods	2	4.227	0.015	3	11.543	0.000
Quantitative methods	2	2.648	0.072	3	7.939	0.000
Control measures	2	1.728	0.178	3	3.345	0.019
Risk financing techniques	2	1.477	0.229	3	0.969	0.407
Adoption	2	6.301	0.002	3	9.076	0.000
Profitability and liquidity ratios	2	7.230	0.001	3	18.400	0.000
Corporate governance	2	2.326	0.098	3	12.546	0.000
Stakeholder management	2	6.010	0.003	3	18.897	0.000

Source: Own Source

- **Influence of nationality on other variables (employee perspective)**

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable sources of business. The findings from ANOVA reflect that there is a significant variance between nationality and sources of business. This is validated by too extreme means of two nationalities; Zimbabwe (mean of 4.4561) and other nationalities (mean of 3.4000), a difference of 1.0561. The findings reveal that there is lack of knowledge of sources of business in other nationalities other than Zimbabwe. Therefore, it is imperative to train other nationalities in relation to sources of business and this may be embedded in the ERM and sustainability framework. Furthermore, micro-lending companies are encouraged to have diversified personnel in order to share ideas from other countries. This means that lack of diversification in manpower planning may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the differences in means is very high (1.0561) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=7.953$, $p = 0.000$). This means that nationality has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 4 and 6; to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable challenges / constraints. The findings from ANOVA reflect that there is a significant variance between nationality and challenges / constraints. This is validated by too extreme means of two nationalities; Motswana (mean of 4.6929) and other nationalities (mean of 3.8105), a difference of 0.8824. The findings reveal that there is lack of knowledge of challenges / constraints in other nationalities except Batswana. Therefore, it is imperative to train other nationalities in relation to challenges / constraints and this may be embedded in the ERM and sustainability framework. Furthermore, micro-lending companies are encouraged to train other nationalities in order to promote diversification of personnel and sharing of ideas. This means that lack of training and development of other nationalities may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (0.8824) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The

findings are significant as shown on Table 5.37 ($F=5.112$, $p = 0.006$). This means that nationality has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 4 and 6; to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable marketing challenges. The findings from ANOVA reflect that there is a significant variance between nationality and marketing challenges. This is validated by too extreme means of two nationalities; Motswana (mean of 4.6410) and other nationalities (mean of 3.9200), a difference of 0.721. The findings reveal that there is lack of knowledge of marketing challenges in other nationalities except for Batswana. Therefore, it is imperative to train other nationalities in relation to marketing challenges and this may be embedded in the ERM and sustainability framework. Furthermore, micro-lending companies are encouraged to train other nationalities in order to promote diversification of personnel and sharing of ideas. This means that lack of training and development of other nationalities may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (0.721) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.37 ($F=3.692$, $p = 0.025$). This means that nationality has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 4 and 6; to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable primary risks. The findings from ANOVA reflect that there is a significant variance between nationality and primary risks. This is validated by too extreme means of two nationalities; Motswana (mean of 4.6410) and other nationalities (mean of 3.9200), a difference of 0.721. The findings reveal that there is lack of knowledge of primary risks in other nationalities except for Batswana. Therefore, it is imperative to train other nationalities in relation to primary risks and this may be embedded in the ERM and sustainability framework. Furthermore, micro-lending companies are encouraged to train other nationalities in order to promote diversification of personnel and sharing of ideas. This means that lack of training and development

of other nationalities may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (0.721) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=3.692$, $p = 0.025$). This means that nationality has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 4 and 6; to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable primary factors. The findings from ANOVA reflect that there is a significant variance between nationality and primary factors. This is validated by too extreme means of two nationalities; other nationalities (mean of 3.4500) and Motswana (mean of 1.9980), a difference of 1.452. The findings reveal that there is lack of knowledge of primary factors in other Botswana rather than other nationalities. Therefore, it is imperative to train all nationalities in relation to primary factors and this may be embedded in the ERM and sustainability framework. Furthermore, micro-lending companies are encouraged to train all nationalities in order to promote diversification of personnel and sharing of ideas. This means that lack of training and development of other nationalities may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.452) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=7.563$, $p = 0.001$). This means that nationality has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 4 and 6; to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable employee exposures. The findings from ANOVA reflect that there is a significant variance between nationality and employee exposures. This is validated by too extreme means of two nationalities; other nationalities (mean of 3.4667) and Motswana (mean of 2.3592), a difference of 1.1075. The findings reveal that there is lack of knowledge of employee

exposures in Botswana. Therefore, it is imperative to train all nationalities in relation to employee exposures and this may be embedded in the ERM and sustainability framework. Furthermore, micro-lending companies are encouraged to train all nationalities in order to promote diversification of personnel and sharing of ideas. This means that lack of training and development in all nationalities may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.1075) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.37 ($F=7.196$, $p = 0.001$). This means that nationality has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 4 and 6; to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable process exposures. The findings from ANOVA reflect that there is a significant variance between nationality and process exposures. This is validated by too extreme means of two nationalities; other nationalities (mean of 3.0500) and Motswana (mean of 1.9956), a difference of 1.0544. The findings reveal that there is lack of knowledge of employee exposures in Botswana. Therefore, it is imperative to train all nationalities in relation to employee exposures and this may be embedded in the ERM and sustainability framework. Furthermore, micro-lending companies are encouraged to train all nationalities in order to promote diversification of personnel and sharing of ideas. This means that lack of training and development in all nationalities may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.0544) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=5.286$, $p = 0.005$). This means that nationality has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 4 and 6; to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable system exposures. The findings from ANOVA reflect that there is a significant variance between nationality and system exposures. This is validated by too extreme means of two nationalities; other nationalities (mean of 3.0857) and Motswana (mean of 1.9904), a difference of 1.0953. The findings reveal that there is lack of knowledge of system exposures in Botswana. Therefore, it is imperative to train all nationalities in relation to system exposures and this may be embedded in the ERM and sustainability framework. Furthermore, micro-lending companies are encouraged to train all nationalities in order to promote diversification of personnel and sharing of ideas. This means that lack of training and development in all nationalities may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.0953) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=5.958$, $p = 0.003$). This means that nationality has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 4 and 6; to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable external exposures. The findings from ANOVA reflect that there is no significant variance between nationality and external exposures. The findings are not significant as shown on Table 5.37 ($F=2.931$, $p = 0.054$).

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable important elements. The findings from ANOVA reflect that there is no significant variance between nationality and important elements. The findings are not significant as shown on Table 5.37 ($F=1.694$, $p = 0.185$).

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable identify risk types. The findings from ANOVA reflect that there is no significant variance between nationality and identify risk types. The results are not significant as shown on Table 5.37 ($F=1.988$, $p = 0.138$).

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable qualitative methods. The findings from ANOVA reflect that there

is a significant variance between nationality and qualitative methods. This is validated by too extreme means of two nationalities; other nationalities (mean of 2.5333) and Motswana (mean of 1.8336), a difference of 0.6997. The findings reveal that there is lack of knowledge in qualitative methods in Botswana. Therefore, it is imperative to train all nationalities in relation to system exposures and this may be embedded in the ERM and sustainability framework. Furthermore, micro-lending companies are encouraged to train all nationalities in order to promote diversification of personnel and sharing of ideas. This means that lack of training and development in all nationalities may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (0.6997) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=4.227$, $p = 0.015$). This means that nationality has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 4 and 6; to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable quantitative methods. The findings from ANOVA reflect that there is no significant variance between nationality and quantitative methods. The results are not significant as shown on Table 5.37 ($F=2.648$, $p = 0.072$).

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable control measures. The findings from ANOVA reflect that there is no significant variance between nationality and control measures. The results are not significant as shown on Table 5.37 ($F=1.728$, $p = 0.178$).



ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable control measures. The findings from ANOVA reflect that there is no significant variance between nationality and control measures. The findings are not significant as shown on Table 5.37 ($F=1.728$, $p = 0.178$).

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable risk financing techniques. The findings from ANOVA reflect that there is no significant variance between nationality and risk financing techniques. The findings are not significant as shown on Table 5.37 ($F=1.477$, $p = 0.229$).

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable adoption. The findings from ANOVA reflect that there is a significant variance between nationality and adoption. This is validated by too extreme means of two nationalities; other nationalities (mean of 2.7500) and Zimbabwean (mean of 1.7500), a difference of 1.0000. The findings reveal that there is lack of knowledge of adoption among the Zimbabweans nationalities. Therefore, it is imperative to train Zimbabweans in relation to adoption of ERM systems and this may be embedded in the ERM and sustainability framework. Furthermore, micro-lending companies are encouraged to train all nationalities in order to promote diversification of personnel and sharing of ideas. This means that lack of training and development in all nationalities may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.0000) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=6.301$, $p = 0.002$). This means that nationality has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 4 and 6; to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable profitability and liquidity ratios. The findings from ANOVA reflect that there is a significant variance between nationality and profitability and liquidity ratios. This is validated by too extreme means of two nationalities; other nationalities (mean of 3.3077) and Botswana (mean of 2.0238), a difference of 1.2839. The results reveal that there is lack of knowledge of adoption among the Botswana nationalities. Therefore, it is imperative to train Botswana in relation to profitability and liquidity ratios of ERM systems and this may be embedded in the ERM and sustainability framework. Furthermore, micro-lending companies are encouraged to train all nationalities in order to promote diversification of personnel and sharing of ideas. This means that lack of training and development in all nationalities may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.2839) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.37 ($F=7.230$, $p = 0.001$). This means that nationality has an impact on the performance, competitiveness and sustainability of an enterprise.

This ANOVA address objectives 4 and 6; to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable corporate governance. The findings from ANOVA reflect that there is no significant variance between nationality and corporate governance. The results are not significant as shown on Table 5.37 ($F=2.326$, $p = 0.098$).

ANOVA was conducted in Table 5.37 to find out how nationality the independent variable influences the dependent variable stakeholder management. The findings from ANOVA reflect that there is a significant variance between nationality and stakeholder management. This is validated by too extreme means of two nationalities; other nationalities (mean of 3.7200) and Motswana (mean of 2.1654), a difference of 1.5546. The findings reveal that there is lack of knowledge of stakeholder management among Batswana. Therefore, it is imperative to train Batswana in relation to stakeholder management and this may be embedded in the ERM and sustainability framework. Furthermore, micro-lending companies are encouraged to train all nationalities in order to promote diversification of personnel and sharing of ideas. This means that lack of training and development in all nationalities may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.5546) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.37 ($F=6.010$, $p = 0.003$). This means that nationality has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA address objectives 4 and 6; to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

- **Influence of service of work on other variables (employee perspective)**

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable sources of business. The findings from ANOVA reflect that there is a significant variance between service of work and sources of business. This is validated by too extreme means of service of work; 2 - 5 years (mean of 4.4662) and 11- 15 years (mean of 4.0938), a difference of 0.3724. The findings reflect that those respondents with less years at work are familiar to sources of business. This implies that those with more years at the work-place

should undergo a training related to sources of business in order to avoid problems associated with business continuity. This means that lack of training and development on sources of business may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (0.3724) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=5.657$, $p = 0.001$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable challenges / constraints. The findings from ANOVA reflect that there is a significant variance between service of work and challenges / constraints. This is validated by too extreme means of service of work; 2 - 5 years (mean of 4.7782) and 11- 15 years (mean of 3.9868), a difference of 0.7914. The findings reflect that those respondents with less years at work are familiar to challenges / constraints. This implies that those with more years at the work-place should undergo a training related to challenges / constraints in order to avoid problems associated with business continuity. This means that lack of training and development on challenges / constraints may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (0.7914) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.37 ($F=12.160$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable marketing challenges. The findings from ANOVA reflect that there is a significant variance between service of work and marketing challenges. This is validated by too extreme means of service of work; 2 - 5 years (mean of 4.7087) and 11- 15 years (mean of 3.8000), a difference of 0.9087. The findings reflect that those respondents with less years at work are familiar to marketing challenges. This implies that those with more years at the work-place should undergo a training related to marketing challenges in order to avoid problems associated

with business continuity. This means that lack of training and development on marketing challenges may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (0.9087) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=7.937$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable primary risks. The findings from ANOVA reflect that there is a significant variance between service of work and primary risks. This is validated by too extreme means of service of work; 2 - 5 years (mean of 4.7087) and 11- 15 years (mean of 3.8000), a difference of 0.9087. The findings reflect that those respondents with less years at work are familiar to primary risks. This implies that those with more years at the work-place should undergo a training related to primary risks in order to avoid problems associated with business continuity. This means that lack of training and development on primary risks may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (0.9087) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=7.937$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable primary factors. The findings from ANOVA reflect that there is a significant variance between service of work and primary factors. This is validated by too extreme means of service of work; 6 - 10 years (mean of 3.1711) and 2 - 5 years (mean of 1.8297), a difference of 1.3414. The findings reflect that those respondents more experienced at work are familiar to primary factors than those with less experience. This implies that those with less experience at the work-place should undergo a training related to primary factors in order to avoid problems associated with business continuity. This means that lack of training and development on

primary factors may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.3414) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=23.264$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable employee exposures. The findings from ANOVA reflect that there is a significant variance between service of work and employee exposures. This is validated by too extreme means of service of work; 11 - 15 years (mean of 3.2500) and 2 - 5 years (mean of 2.2776), a difference of 0.9724. The findings reflect that those respondents more experienced at work are familiar to employee exposures than those with less experience. This implies that those with less experience at the work-place should undergo a training related to employee exposures in order to avoid problems associated with business continuity. This means that lack of training and development on employee exposures may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (0.9724) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.37 ($F=11.231$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable process exposures. The findings from ANOVA reflect that there is a significant variance between service of work and process exposures. This is validated by too extreme means of service of work; 6 - 10 years (mean of 3.1711) and 2 - 5 years (mean of 1.9024), a difference of 1.2687. The findings reflect that those respondents more experienced at work are familiar to process exposures than those with less experience. This implies that those with less experience at the work-place should undergo a training related to process exposures in order to avoid problems associated with business continuity. This means that lack of training and

development on process exposures may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.2687) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.37 ($F=11.709$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable system exposures. The findings from ANOVA reflect that there is a significant variance between service of work and system exposures. This is validated by too extreme means of service of work; 11 - 15 years (mean of 3.4286) and 2 - 5 years (mean of 1.8735), a difference of 1.5551. The findings reflect that those respondents more experienced at work are familiar to system exposures than those with less experience. This implies that those with less experience at the work-place should undergo a training related to system exposures in order to avoid problems associated with business continuity. This means that lack of training and development on system exposures may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.5551) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=14.546$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable external exposures. The findings from ANOVA reflect that there is a significant variance between service of work and external exposures. This is validated by too extreme means of service of work; 11 - 15 years (mean of 4.1667) and 2 - 5 years (mean of 1.9562), a difference of 2.2105. The findings reflect that those respondents more experienced at work are familiar to external exposures than those with less experience. This implies that those with less experience at the workplace should undergo a training related to external exposures in order to avoid problems associated with business continuity. This means that lack of training and

development on external exposures may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (2.2105) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.37 ($F=16.894$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable important elements. The findings from ANOVA reflect that there is a significant variance between service of work and important elements. This is validated by too extreme means of service of work; 6 - 10 years (mean of 4.1667) and 2 - 5 years (mean of 1.9522), a difference of 2.2145. The findings reflect that those respondents more experienced at work are familiar to important elements than those with less experience. This implies that those with less experience at the workplace should undergo a training related to important elements in order to avoid problems associated with business continuity. This means that lack of training and development on important elements may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (2.2145) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.37 ($F=12.204$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable identify risk types. The findings from ANOVA reflect that there is a significant variance between service of work and identify risk types. This is validated by too extreme means of service of work; 11 - 15 years (mean of 2.3125) and 2 - 5 years (mean of 2.0402), a difference of 0.2723. The findings reflect that those respondents more experienced at work are familiar to identify risk types than those with less experience. This implies that those with less experience at the work-place should undergo a training related to identify risk types in order to avoid problems associated with business continuity. This means that lack of training and

development on identify risk types may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (0.2723) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=6.282$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable qualitative methods. The findings from ANOVA reflect that there is a significant variance between service of work and qualitative methods. This is validated by too extreme means of service of work; 11 - 15 years (mean of 2.8333) and 2 - 5 years (mean of 1.7551), a difference of 1.0782. The findings reflect that those respondents more experienced at work are familiar to qualitative methods than those with less experience. This implies that those with less experience at the work-place should undergo a training related to qualitative methods in order to avoid problems associated with business continuity. This means that lack of training and development on qualitative methods may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.0782) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=11.543$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable quantitative methods. The findings from ANOVA reflect that there is a significant variance between service of work and quantitative methods. This is validated by too extreme means of service of work; 11 - 15 years (mean of 2.5625) and 2 - 5 years (mean of 1.9226), a difference of 0.6399. The findings reflect that those respondents more experienced at work are familiar to quantitative methods than those with less experience. This implies that those with less experience at the work-place should undergo a training related to quantitative methods in order to avoid problems associated with business continuity. This means that lack of training and

development on quantitative methods may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (0.6399) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=7.939$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable control measures. The findings from ANOVA reflect that there is a significant variance between service of work and control measures. This is validated by too extreme means of service of work; 6 - 10 years (mean of 3.0702) and less than 2 years (mean of 2.5569), a difference of 0.5133. The findings reflect that those respondents more experienced at work are familiar to control measures than those with less experience. This implies that those with less experience at the workplace should undergo a training related to control measures in order to avoid problems associated with business continuity. This means that lack of training and development on control measures may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (0.5133) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=3.345$, $p = 0.019$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable risk financing techniques. The findings from ANOVA reflect that there is no significant variance between nationality and risk financing techniques. The results are not significant as shown on Table 5.37 ($F=0.969$, $p = 0.407$).

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable adoption. The findings from ANOVA reflect that there is a significant variance between service of work and adoption. This is validated by too extreme means

of service of work; 11 - 15 years (mean of 2.2813) and 2 - 5 years (mean of 1.6945), a difference of 0.5868. The findings reflect that those respondents more experienced at work are familiar to adoption than those with less experience. This implies that those with less experience at the workplace should undergo a training related to adoption in order to avoid problems associated with business continuity. This means that lack of training and development on adoption may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (0.5868) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=9.076$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objective 6; to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable profitability and liquidity ratios. The findings from ANOVA reflect that there is a significant variance between service of work and profitability and liquidity ratios. This is validated by too extreme means of service of work; 6 - 10 years (mean of 3.3603) and 2 - 5 years (mean of 1.9207), a difference of 1.4396. The findings reflect that those respondents more experienced at work are familiar to profitability and liquidity ratios than those with less experience. This implies that those with less experience at the work-place should undergo a training related to profitability and liquidity ratios in order to avoid problems associated with business continuity. This means that lack of training and development on profitability and liquidity ratios may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.4396) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=18.400$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objectives 5 and 6; to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable corporate governance. The findings from ANOVA reflect that

there is a significant variance between service of work and corporate governance. This is validated by too extreme means of service of work; 11 - 15 years (mean of 3.5000) and 2 - 5 years (mean of 2.1241), a difference of 1.3759. The findings reflect that those respondents more experienced at work are familiar to corporate governance than those with less experience. This implies that those with less experience at the workplace should undergo a training related to corporate governance in order to avoid problems associated with business continuity. This means that lack of training and development on corporate governance may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.3759) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=12.546$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objectives 4 and 6; to ascertain leadership styles, management principles and corporate governance cultures that is dominant in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.37 to find out how service of work the independent variable influences the dependent variable stakeholder management. The findings from ANOVA reflect that there is a significant variance between service of work and stakeholder management. This is validated by too extreme means of service of work; 6 - 10 years (mean of 3.1193) and 2 - 5 years (mean of 1.9660), a difference of 1.1533. The findings reflect that those respondents more experienced at work are familiar to stakeholder management than those with less experience. This implies that those with less experience at the workplace should undergo a training related to stakeholder management in order to avoid problems associated with business continuity. This means that lack of training and development on stakeholder management may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.1533) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.37 ($F=18.897$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objectives 4 and 6; to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-

lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

Table 5.38: ANOVA influence of age and education (proprietor perspective)

Proprietor perspective		Age			Education		
	DF	F	Sig	DF	F	Sig	
Construct							
Motivation	4	1.064	0.376	4	1.779	0.136	
Managerial innovation	4	1.444	0.222	4	0.138	0.968	
Taking opportunity	4	0.081	0.513	4	1.526	0.197	
Perceptions on ERM	4	0.602	0.599	4	0.667	0.616	
Risk oversight	4	0.674	0.611	4	0.920	0.454	

Source: Own Source

• **Influence of age on other variables (proprietor perspective)**

ANOVA was conducted in Table 5.38 to find out how age the independent variable influences the dependent variable motivation. The findings from ANOVA reflect that there is no significant variance between age and motivation. The findings are not significant as shown on Table 5.38 (F=1.064, p = 0.376).

ANOVA was conducted in Table 5.38 to find out how age the independent variable influences the dependent variable managerial innovation. The findings from ANOVA reflect that there is no significant variance between age and managerial innovation. The findings are not significant as shown on Table 5.38 (F=1.444, p = 0.222).

ANOVA was conducted in Table 5.38 to find out how age the independent variable influences the dependent variable taking opportunity. The findings from ANOVA reflect that there is no significant variance between age and opportunity. The results are not significant as shown on Table 5.38 (F=0.823, p = 0.513).

ANOVA was conducted in Table 5.38 to find out how age the independent variable influences the dependent variable perceptions on ERM. The findings from ANOVA reflect that there is no significant variance between age and perceptions on ERM. The results are not significant as shown on Table 5.38 (F=0.692, p = 0.599).

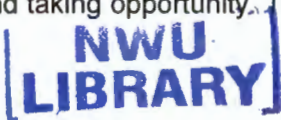
ANOVA was conducted in Table 5.38 to find out how age the independent variable influences the dependent variable risk oversight. The findings from ANOVA reflect that there is no significant variance between age and risk oversight. The findings are not significant as shown on Table 5.38 ($F=0.674$, $p = 0.611$).

- **Influence of education on other variables (proprietor perspective)**

ANOVA was conducted in Table 5.38 to find out how education the independent variable influences the dependent variable motivation. The findings from ANOVA reflect that there is no significant variance between education and motivation. The findings are not significant as shown on Table 5.38 ($F=1.779$, $p = 0.136$).

ANOVA was conducted in Table 5.38 to find out how education the independent variable influences the dependent variable managerial innovation. The findings from ANOVA reflect that there is no significant variance between education and managerial innovation. The findings are not significant as shown on Table 5.38 ($F=0.138$, $p = 0.968$).

ANOVA was conducted in Table 5.38 to find out how education the independent variable influences the dependent variable taking opportunity. The findings from ANOVA reflect that there is no significant variance between education and taking opportunity. The results are not significant as shown on Table 5.38 ($F=1.526$, $p = 0.197$).



ANOVA was conducted in Table 5.38 to find out how education the independent variable influences the dependent variable perceptions on ERM. The findings from ANOVA reflect that there is no significant variance between education and perceptions on ERM. The results are not significant as shown on Table 5.38 ($F=0.667$, $p = 0.616$).

ANOVA was conducted in Table 5.38 to find out how education the independent variable influences the dependent variable risk oversight. The findings from ANOVA reflect that there is no significant variance between education and risk oversight. The results are not significant as shown on Table 5.38 ($F=0.920$, $p = 0.454$).

Table 5.39: ANOVA influence of nationality on service of work (proprietor perspective)

Proprietor perspective		Nationality			Service of work	
		DF	F	Sig	DF	Sig
Construct						
Motivation		1	0.890	0.347	2	0.204

Managerial innovation	1	1.023	0.313	2	7.221	0.001
Taking opportunity	1	0.279	0.598	2	42.632	0.000
Perceptions on ERM	1	0.154	0.696	2	8.116	0.000
Risk oversight	1	0.777	0.379	2	1.064	0.348

Source: Own Source

• **Influence of nationality on other variables (proprietor perspective)**

ANOVA was conducted in Table 5.39 to find out how nationality the independent variable influences the dependent variable motivation. The findings from ANOVA reflect that there is no significant variance between nationality and motivation. The findings are not significant as shown on Table 5.39 (F=0.890, p = 0.347).

ANOVA was conducted in Table 5.39 to find out how nationality the independent variable influences the dependent variable managerial innovation. The findings from ANOVA reflect that there is no significant variance between nationality and managerial innovation. The findings are not significant as shown on Table 5.39 (F=1.023, p = 0.313).

ANOVA was conducted in Table 5.39 to find out how nationality the independent variable influences the dependent variable taking opportunity. The findings from ANOVA reflect that there is no significant variance between nationality and taking opportunity. The findings are not significant as shown on Table 5.39 (F=0.279, p = 0.598).

ANOVA was conducted in Table 5.39 to find out how nationality the independent variable influences the dependent variable perceptions on ERM. The findings from ANOVA reflect that there is no significant variance between nationality and perceptions on ERM. The findings are not significant as shown on Table 5.39 (F=0.154, p = 0.696).

ANOVA was conducted in Table 5.39 to find out how nationality the independent variable influences the dependent variable risk oversight. The findings from ANOVA reflect that there is no significant variance between nationality and risk oversight. The findings are not significant as shown on Table 5.39 (F=0.777, p = 0.379).

• **Influence of service of work on other variables (proprietor perspective)**

ANOVA was conducted in Table 5.39 to find out how service of work the independent variable influences the dependent variable motivation. The findings from ANOVA reflect that there is no

significant variance between service of work and motivation. The findings are not significant as shown on Table 5.39 ($F=1.606$, $p = 0.204$).

ANOVA was conducted in Table 5.39 to find out how service of work the independent variable influences the dependent variable managerial innovation. The findings from ANOVA reflect that there is a significant variance between service of work and managerial innovation. This is validated by too extreme means of service of work; 6 - 10 years (mean of 4.0000) and less than 2 years (mean of 2.4600), a difference of 1.54. The findings reflect that those respondents with more experience at work are familiar to managerial innovation than those with less experience. This implies that those with less experience at the work-place should undergo a training related to managerial innovation in order to avoid problems associated with business continuity. This means that lack of training and development on managerial innovation may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (1.54) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.39 ($F=7.221$, $p = 0.001$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objectives 3, 4, 5 and 6; to ascertain procedures and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies, to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.39 to find out how service of work the independent variable influences the dependent variable taking opportunity. The findings from ANOVA reflect that there is a significant variance between service of work and taking opportunity. This is validated by too extreme means of service of work; 6 - 10 years (mean of 4.0000) and less than 2 years (mean of 1.6167), a difference of 2.3833. The findings reflect that those respondents with more experience at work are familiar to taking opportunity than those with less experience. This implies that those with less experience at the work-place should undergo a training related to taking opportunity in order to avoid problems associated with business continuity. This means that lack of training and development on taking opportunity may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (2.3833) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore,

it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The findings are significant as shown on Table 5.39 ($F=42.632$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objectives 3, 4, 5 and 6; to ascertain procedures and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies, to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.39 to find out how service of work the independent variable influences the dependent variable perceptions on ERM. The findings from ANOVA reflect that there is a significant variance between service of work and perceptions on ERM. This is validated by too extreme means of service of work; 6 - 10 years (mean of 4.0000) and less than 2 years (mean of 1.3000), a difference of 2.7000. The findings reflect that those respondents with more experience at work are familiar to perceptions on ERM than those with less experience. This implies that those with less experience at the workplace should undergo a training related to perceptions on ERM in order to avoid problems associated with business continuity. This means that lack of training and development on perceptions on ERM may be addressed through an effective and efficient framework for enterprise risk management and sustainability. Finally, the difference in means is very high (2.700) and attention should be given in terms of an adoption of effective and efficient framework for ERM and sustainability in this sector in order to avoid business continuity problems. Therefore, it is imperative to develop a framework for enterprise risk management and sustainability which acts as a guideline to all the micro-lending businesses in this sector. The results are significant as shown on Table 5.39 ($F=8.116$, $p = 0.000$). This means that service of work has an impact on the performance, competitiveness and sustainability of an enterprise. This ANOVA addresses objectives 3, 4, 5 and 6; to ascertain procedures and internal controls in micro-lending businesses, to ascertain leadership styles, management principles and corporate governance cultures that are dominant in micro-lending companies, to ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision making and to develop a framework for enterprise risk management that could be used to mitigate risks in micro lending companies.

ANOVA was conducted in Table 5.39 to find out how service of work the independent variable influences the dependent variable risk oversight. The findings from ANOVA reflect that there is no significant variance between service of work and risk oversight. The findings are not significant as shown on Table 5.39 ($F=1.064$, $p = 0.348$).

5.4.3 Correlations between key variables

A correlation matrix (See Table 5.40) was used to interpret the correlations between key variables based on employee perspective (sources of business; challenges / constraints; marketing challenges; primary risks; primary factors; employee exposures; process exposures; system exposures; external exposures; important elements; identify risk types; qualitative methods; quantitative methods; control measures; risk financing techniques; adoption; profitability ratios; corporate governance and stakeholder management).

5.4.3.1 Correlations between key variables (employee perspective)

- **Correlations between sources of business and other key identified variables**

The results shown on correlation matrix Table 5.40 reveal that sources of business are significantly and positively associated with challenges / constraints ($r = 0.827$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect the challenges / constraints to increase in the same direction as sources of business are increasing. A micro-lending company which offer credit loans to its customers may experience non - payment of accounts (defaulters) and this is associated with the challenges / constrains related to customer relationship management. A micro-lending company which experience many defaulters may result into problems related to business continuity as empirically evidenced in this sector of micro-lending businesses. Therefore, it is imperative to consider challenges / constraints in the framework for ERM and sustainability. This correlation fulfils objective 2, to determine the challenges that contributes to the closure of micro-lending entities.

The results shown on correlation matrix Table 5.40 reveal that sources of business are significantly and positively associated with marketing challenges ($r = 0.731$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect the marketing challenges to increase in the same direction as sources of business are increasing. A micro-lending company may need to train its loans officers in order to increase its sales and market share and this strategy is associated with market segmentation strategy. The more a firm increases its costs of training the more it will penetrate a bigger market hence the need to incorporate marketing challenges in the framework for ERM and sustainability. This correlation fulfils objective 2, to determine the challenges that contributes to the closure of micro-lending entities.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and positively associated with primary risks ($r = 0.731$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect the primary risks to increase in the same direction as sources of business are increasing. A micro-lending company which increase its customer base may be exposed to high risks. Therefore, there is a need to incorporate

primary risks when developing a framework for ERM and sustainability. This correlation fulfils objective 1, to establish sources of risk that affect sustainability in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with primary factors ($r = - 0.494$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect the primary factors to increase the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in primary factors since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with employee exposures ($r = - 0.321$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect the employee exposures to increase in the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in employee exposures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with process exposures ($r = - 0.376$, $p < 0.01$). The results reveal that the sources of business for micro-lending may affect process exposures to increase in the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in process exposures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with system exposures ($r = - 0.338$, $p < 0.01$). The findings

reveal that the sources of business for micro-lending companies may affect system exposures to increase in the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in system exposures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with external exposures ($r = -0.376$, $p < 0.01$). The findings reveal that the sources of business for micro-lending may affect external exposures to increase in the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in external exposures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with important elements ($r = -0.294$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect important elements to increase in the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in important elements since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with identify risk types ($r = -0.241$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect identify risk types to increase in the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in identify risk types since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This

correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with qualitative methods ($r = -0.377$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect qualitative methods to increase in the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in qualitative methods since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with quantitative methods ($r = -0.337$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect quantitative methods to increase in the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in quantitative methods since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with control measures ($r = -0.110$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect control measures to increase in the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in control measures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with risk financing techniques ($r = - 0.198$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect risk financing techniques to increase in the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in risk financing techniques since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with adoption ($r = - 0.484$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect adoption to increase in the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in adoption since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with profitability and liquidity ratios ($r = - 0.514$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect profitability and liquidity ratios to increase in the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in profitability and liquidity ratios since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with corporate governance ($r = - 0.355$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect corporate governance to increase in the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in corporate governance since

these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that sources of business are significantly and negatively associated with stakeholder management ($r = - 0.472$, $p < 0.01$). The findings reveal that the sources of business for micro-lending companies may affect stakeholder management to increase in the opposite direction as sources of business are decreasing. Therefore, an increase in sources of business may not influence an increase in stakeholder management since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

- **Correlations between challenges / constraints and other key identified variables**

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and positively associated with marketing challenges ($r = 0.893$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect marketing challenges to increase in the same direction as challenges / constraints are increasing. Therefore, an increase in challenges / constraints will result into an increase in marketing challenges since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and positively associated with primary risks ($r = 0.893$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect primary risks to increase in the same direction as challenges / constraints are increasing. Therefore, an increase in challenges / constraints will result into an increase in primary risks since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a

framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with primary factors ($r = - 0.547$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect primary factors to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in primary factors since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with employee exposures ($r = - 0.354$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect employee exposures to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in employee exposures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with process exposures ($r = - 0.400$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect process exposures to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in process exposures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with system exposures ($r = - 0.385$, $p < 0.01$). The findings

reveal that challenges / constraints for micro-lending companies may affect system exposures to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in system exposures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with external exposures ($r = -0.412$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect external exposures to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in external exposures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.



The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with important elements ($r = -0.352$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect important elements to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in important elements since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with identify risk types ($r = -0.294$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect identify risk types to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in identify risk types since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings.

This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with qualitative methods ($r = -0.428$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect qualitative methods to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in qualitative methods since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with quantitative methods ($r = -0.358$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect quantitative methods to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in quantitative methods since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with control measures ($r = -0.126$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect control measures to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in control measures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with risk financing techniques ($r = - 0.202$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect risk financing techniques to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in risk financing techniques since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with adoption ($r = - 0.531$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect adoption to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in adoption since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with profitability and liquidity ratios ($r = - 0.579$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect profitability and liquidity ratios to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in profitability and liquidity ratios since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with corporate governance ($r = - 0.416$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect corporate governance to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in corporate

governance since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that challenges / constraints are significantly and negatively associated with stakeholder management ($r = -0.416$, $p < 0.01$). The findings reveal that challenges / constraints for micro-lending companies may affect stakeholder management to increase in the opposite direction as challenges / constraints are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in stakeholder management since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

- **Correlations between marketing challenges and other key identified variables**

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and positively associated with primary risks ($r = 1.000$, $p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect primary risks to increase in the same direction as marketing challenges are increasing. Therefore, an increase in marketing challenges will result into an increase in primary risks since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with primary factors ($r = -0.524$, $p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect primary factors to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in primary factors since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-

lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with employee exposures ($r = - 0.284, p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect employee exposures to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in challenges / constraints may not influence an increase in employee exposures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with process exposures ($r = - 0.313, p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect process exposures to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in marketing challenges may not influence an increase in process exposures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with system exposures ($r = - 0.288, p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect system exposures to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in marketing challenges may not influence an increase in system exposures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with external exposures ($r = - 0.333, p < 0.01$). The findings

reveal that marketing challenges for micro-lending companies may affect external exposures to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in marketing challenges may not influence an increase in external exposures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with important elements ($r = -0.327$, $p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect important elements to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in marketing challenges may not influence an increase in important elements since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with identify risk types ($r = -0.289$, $p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect identify risk types to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in marketing challenges may not influence an increase variable identify risk types since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with qualitative methods ($r = -0.345$, $p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect qualitative methods to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in marketing challenges may not influence an increase variable qualitative method since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This

correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with quantitative methods ($r = -0.265$, $p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect quantitative methods to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in marketing challenges may not influence an increase variable quantitative method since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with control measures ($r = -0.027$, $p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect control measures to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in marketing challenges may not influence an increase variable control measures since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with risk financing techniques ($r = -0.097$, $p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect risk financing techniques to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in marketing challenges may not influence an increase variable risk financing technique since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with adoption ($r = - 0.538, p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect adoption to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in marketing challenges may not influence an increase variable adoption since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with profitability and liquidity ratios ($r = - 0.476, p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect profitability and liquidity ratios to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in marketing challenges may not influence an increase variable profitability and liquidity ratios since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with corporate governance ($r = - 0.364, p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect corporate governance to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in marketing challenges may not influence an increase variable corporate governance since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that marketing challenges are significantly and negatively associated with stakeholder management ($r = - 0.483, p < 0.01$). The findings reveal that marketing challenges for micro-lending companies may affect stakeholder management to increase in the opposite direction as marketing challenges are decreasing. Therefore, an increase in marketing challenges may not influence an increase variable

management stakeholder since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

- **Correlations between primary risks and other key identified variables**

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with primary factors ($r = - 0.524$, $p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect primary factors to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in primary factors may not influence an increase variable primary risks since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with employee exposures ($r = - 0.284$, $p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect employee exposures to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in employee exposures may not influence an increase variable primary risks since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with process exposures ($r = - 0.313$, $p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect process exposures to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in process exposures may not influence an increase variable primary risks since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with system exposures ($r = - 0.288, p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect system exposures to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in system exposures may not influence an increase of variable primary risks since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with external exposures ($r = - 0.333, p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect external exposures to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in external exposures may not influence an increase of variable primary risks since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with important elements ($r = - 0.327, p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect implements to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in important elements may not influence an increase of variable primary risks since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with identify risk types ($r = - 0.289, p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect identify risk types to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in identify risk types may not influence an increase of variable primary risks since these two variables are moving on the

opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with qualitative methods ($r = - 0.345$, $p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect qualitative methods to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in qualitative methods may not influence an increase of variable primary risks since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with quantitative methods ($r = - 0.265$, $p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect quantitative methods to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in quantitative methods may not influence an increase of variable primary risks since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with control measures ($r = - 0.027$, $p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect control measures to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in control measures may not influence an increase of variable primary risks since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with risk financing techniques ($r = -0.097$, $p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect risk financing techniques to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in risk financing techniques may not influence an increase of variable primary risks since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with adoption ($r = -0.538$, $p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect adoption to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in adoption may not influence an increase of variable primary risks since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with profitability and liquidity ratios ($r = -0.476$, $p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect profitability and liquidity ratios to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in profitability and liquidity ratios may not influence an increase of variable primary risks since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with corporate governance ($r = -0.364$, $p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect corporate governance to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in corporate governance may not influence an increase of variable primary risks since these two variables are moving on

the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary risks are significantly and negatively associated with stakeholder management ($r = - 0.483$, $p < 0.01$). The findings reveal that primary risks for micro-lending companies may affect stakeholder management to increase in the opposite direction as primary risks are decreasing. Therefore, an increase in corporate governance may not influence an increase of variable primary risks since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

- **Correlations between primary factors and other key identified variables**

The findings shown on correlation matrix Table 5.40 reveal that primary factors are significantly and positively associated with employee exposures ($r = 0.469$, $p < 0.01$). The findings reveal that primary factors for micro-lending companies may affect employee exposures to increase in the same direction as primary factors are increasing. Therefore, an increase in primary factors will result into an increase in employee exposures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary factors are significantly and positively associated with process exposures ($r = 0.452$, $p < 0.01$). The findings reveal that primary factors for micro-lending companies may affect process exposures to increase in the same direction as primary factors are increasing. Therefore, an increase in primary factors will result into an increase in process exposures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary factors are significantly and positively associated with system exposures ($r = 0.469$, $p < 0.01$). The findings reveal that primary factors for micro-lending companies may affect system exposures to increase in the same direction as primary factors are increasing. Therefore, an increase in primary factors will result into an increase in system exposures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary factors are significantly and positively associated with external exposures ($r = 0.502$, $p < 0.01$). The findings reveal that primary factors for micro-lending companies may affect external exposures to increase in the same direction as primary factors are increasing. Therefore, an increase in primary factors will result into an increase in external exposures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary factors are significantly and positively associated with important elements ($r = 0.513$, $p < 0.01$). The findings reveal that primary factors for micro-lending companies may affect important elements to increase in the same direction as primary factors are increasing. Therefore, an increase in primary factors will result into an increase in important elements since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary factors are significantly and positively associated with identify risk types ($r = 0.543$, $p < 0.01$). The findings reveal that primary factors for micro-lending companies may affect identify risk types to increase in the same direction as primary factors are increasing. Therefore, an increase in primary factors will result into an increase in identify risk types since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of

risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary factors are significantly and positively associated with qualitative methods ($r = 0.352, p < 0.01$). The findings reveal that primary factors for micro-lending companies may affect qualitative methods to increase in the same direction as primary factors are increasing. Therefore, an increase in primary factors will result into an increase in qualitative methods since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary factors are significantly and positively associated with quantitative methods ($r = 0.354, p < 0.01$). The findings reveal that primary factors for micro-lending companies may affect quantitative methods to increase in the same direction as primary factors are increasing. Therefore, an increase in primary factors will result into an increase in quantitative methods since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary factors are significantly and positively associated with control measures ($r = 0.037, p < 0.01$). The findings reveal that primary factors for micro-lending companies may affect control measures to increase in the same direction as primary factors are increasing. Therefore, an increase in primary factors will result into an increase in control measures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary factors are significantly and positively associated with risk financing techniques ($r = 0.038, p < 0.01$). The findings reveal that primary factors for micro-lending companies may affect risk financing techniques to increase in

the same direction as primary factors are increasing. Therefore, an increase in primary factors will result into an increase in risk financing techniques since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary factors are significantly and positively associated with adoption ($r = 0.781$, $p < 0.01$). The findings reveal that primary factors for micro-lending companies may affect adoption to increase in the same direction as primary factors are increasing. Therefore, an increase in primary factors will result into an increase in adoption since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary factors are significantly and positively associated with profitability and liquidity ratios ($r = 0.584$, $p < 0.01$). The findings reveal that primary factors for micro-lending companies may affect profitability and liquidity ratios to increase in the same direction as primary factors are increasing. Therefore, an increase in primary factors will result into an increase in profitability and liquidity ratios since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary factors are significantly positively associated with corporate governance ($r = 0.584$, $p < 0.01$). The findings reveal that primary factors for micro-lending companies may affect corporate governance to increase in the same direction as primary factors are increasing. Therefore, an increase in primary factors will result into an increase in corporate governance since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a

framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that primary factors are significantly and positively associated with stakeholder management ($r = 0.584$, $p < 0.01$). The findings reveal that primary factors for micro-lending companies may affect stakeholder management to increase in the same direction as primary factors are increasing. Therefore, an increase in primary factors will result into an increase in stakeholder management since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between employee exposures and other key identified variables**

The findings shown on correlation matrix Table 5.40 reveal that employee exposures are significantly and positively associated with process exposures ($r = 0.914$, $p < 0.01$). The findings reveal that employee exposures for micro-lending companies may affect process exposures to increase in the same direction as employee exposures are increasing. Therefore, an increase in employee exposures will result into an increase in process exposures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that employee exposures are significantly and positively associated with system exposures ($r = 0.877$, $p < 0.01$). The findings reveal that employee exposures for micro-lending companies may affect system exposures to increase in the same direction as employee exposures are increasing. Therefore, an increase in employee exposures will result into an increase in system exposures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that employee exposures are significantly and positively associated with external exposures ($r = 0.824$, $p < 0.01$). The findings reveal that employee exposures for micro-lending companies may affect external exposures to increase in the same direction as employee exposures are increasing. Therefore, an increase in employee exposures will result into an increase in external exposures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that employee exposures are significantly and positively associated with important elements ($r = 0.405$, $p < 0.01$). The findings reveal that employee exposures for micro-lending companies may affect important elements to increase in the same direction as employee exposures are increasing. Therefore, an increase in employee exposures will result into an increase in important elements since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that employee exposures are significantly and positively associated with identify risk types ($r = 0.360$, $p < 0.01$). The findings reveal that employee exposures for micro-lending companies may affect identity risk types to increase in the same direction as employee exposures are increasing. Therefore, an increase in employee exposures will result into an increase in identify risk types since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that employee exposures are significantly and positively associated with qualitative methods ($r = 0.779$, $p < 0.01$). The findings reveal that employee exposures for micro-lending companies may affect qualitative methods to increase in the same direction as employee exposures are increasing. Therefore, an increase in employee exposures will result into an increase in qualitative methods since these two variables

are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that employee exposures are significantly and positively associated with quantitative methods ($r = 0.684$, $p < 0.01$). The findings reveal that employee exposures for micro-lending companies may affect quantitative methods to increase in the same direction as employee exposures are increasing. Therefore, an increase in employee exposures will result into an increase in quantitative methods since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.



The findings shown on correlation matrix Table 5.40 reveal that employee exposures are significantly and positively associated with control measures ($r = 0.605$, $p < 0.01$). The findings reveal that employee exposures for micro-lending companies may affect control measures to increase in the same direction as employee exposures are increasing. Therefore, an increase in employee exposures will result into an increase in control measures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that employee exposures are significantly and positively associated with risk financing techniques ($r = 0.523$, $p < 0.01$). The findings reveal that employee exposures for micro-lending companies may affect risk financing techniques to increase in the same direction as employee exposures are increasing. Therefore, an increase in employee exposures will result into an increase in risk financing techniques since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that employee exposures are significantly and positively associated with adoption ($r = 0.171$, $p < 0.01$). The findings reveal that employee exposures for micro-lending companies may affect adoption to increase in the same direction as employee exposures are increasing. Therefore, an increase in employee exposures will result into an increase in adoption since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that employee exposures are significantly and positively associated with profitability and liquidity ratios ($r = 0.729$, $p < 0.01$). The findings reveal that employee exposures for micro-lending companies may affect profitability and liquidity ratios to increase in the same direction as employee exposures are increasing. Therefore, an increase in employee exposures will result into an increase in profitability and liquidity ratios since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that employee exposures are significantly and positively associated with corporate governance ($r = 0.640$, $p < 0.01$). The findings reveal that employee exposures for micro-lending companies may affect corporate governance to increase in the same direction as employee exposures are increasing. Therefore, an increase in employee exposures will result into an increase in corporate governance since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that employee exposures are significantly and positively associated with stakeholder management ($r = 0.533$, $p < 0.01$). The findings reveal that employee exposures for micro-lending companies may affect stakeholder management to increase in the same direction as employee exposures are increasing. Therefore, an increase in employee exposures will result into an increase in stakeholder management since these two variables are moving in the same directions. Finally, both variables should be embedded

into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between process exposures and other key identified variables**

The findings shown on correlation matrix Table 5.40 reveal that process exposures are significantly and positively associated with system exposures ($r = 0.895$, $p < 0.01$). The findings reveal that process exposures for micro-lending companies may affect system exposures to increase in the same direction as process exposures are increasing. Therefore, an increase in process exposures will result into an increase in system exposures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that process exposures are significantly and positively associated with external exposures ($r = 0.828$, $p < 0.01$). The findings reveal that process exposures for micro-lending companies may affect external exposures to increase in the same direction as process exposures are increasing. Therefore, an increase in process exposures will result into an increase in external exposures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that process exposures are significantly and positively associated with important elements ($r = 0.404$, $p < 0.01$). The findings reveal that process exposures for micro-lending companies may affect important elements to increase in the same direction as process exposures are increasing. Therefore, an increase in process exposures will result into an increase in important elements since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that process exposures are significantly and positively associated with identify risk types ($r = 0.373$, $p < 0.01$). The findings reveal that process exposures for micro-lending companies may affect identify risk types to increase in the same direction as process exposures are increasing. Therefore, an increase in process exposures will result into an increase in identify risk types since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that process exposures are significantly and positively associated with qualitative methods ($r = 0.817$, $p < 0.01$). The findings reveal that process exposures for micro-lending companies may affect qualitative methods to increase in the same direction as process exposures are increasing. Therefore, an increase in process exposures will result into an increase in qualitative methods since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that process exposures are significantly and positively associated with quantitative methods ($r = 0.729$, $p < 0.01$). The findings reveal that process exposures for micro-lending companies may affect quantitative methods to increase in the same direction as process exposures are increasing. Therefore, an increase in process exposures will result into an increase in quantitative methods since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that process exposures are significantly and positively associated with control measures ($r = 0.615$, $p < 0.01$). The findings reveal that process exposures for micro-lending companies may affect control measures to increase in the same direction as process exposures are increasing. Therefore, an increase in process exposures will result into an increase in control measures since these two variables are moving in the same

directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that process exposures are significantly and positively associated with risk financing techniques ($r = 0.535$, $p < 0.01$). The findings reveal that process exposures for micro-lending companies may affect risk financing techniques to increase in the same direction as process exposures are increasing. Therefore, an increase in process exposures will result into an increase in risk financing techniques since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that process exposures are significantly and positively associated with adoption ($r = 0.160$, $p < 0.01$). The findings reveal that process exposures for micro-lending companies may affect adoption to increase in the same direction as process exposures are increasing. Therefore, an increase in process exposures will result into an increase in adoption since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that process exposures are significantly and positively associated with profitability and liquidity ratios ($r = 0.756$, $p < 0.01$). The findings reveal that process exposures for micro-lending companies may affect profitability and liquidity ratios to increase in the same direction as process exposures are increasing. Therefore, an increase in process exposures will result into an increase in profitability and liquidity ratios since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that process exposures are significantly and positively associated with corporate governance ($r = 0.638, p < 0.01$). The findings reveal that process exposures for micro-lending companies may affect corporate governance to increase in the same direction as process exposures are increasing. Therefore, an increase in process exposures will result into an increase in corporate governance since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that process exposures are significantly and positively associated with stakeholder management ($r = 0.543, p < 0.01$). The findings reveal that process exposures for micro-lending companies may affect stakeholder management to increase in the same direction as process exposures are increasing. Therefore, an increase in process exposures will result into an increase in stakeholder management since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between system exposures and other key identified variables**

The findings shown on correlation matrix Table 5.40 reveal that system exposures are significantly and positively associated with external exposures ($r = 0.917, p < 0.01$). The findings reveal that system exposures for micro-lending companies may affect external exposures to increase in the same direction as system exposures are increasing. Therefore, an increase in system exposures will result into an increase in external exposures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that system exposures are significantly and positively associated with important elements ($r = 0.431, p < 0.01$). The findings reveal that system exposures for micro-lending companies may affect important elements to increase in the same direction as system exposures are increasing. Therefore, an increase in system exposures

will result into an increase in important elements since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that system exposures are significantly and positively associated with identify risk types ($r = 0.376$, $p < 0.01$). The findings reveal that system exposures for micro-lending companies may affect identify risk types to increase in the same direction as system exposures are increasing. Therefore, an increase in system exposures will result into an increase in identify risk types since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that system exposures are significantly and positively associated with qualitative methods ($r = 0.846$, $p < 0.01$). The findings reveal that system exposures for micro-lending companies may affect qualitative methods to increase in the same direction as system exposures are increasing. Therefore, an increase in system exposures will result into an increase in qualitative methods since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that system exposures are significantly and positively associated with quantitative methods ($r = 0.734$, $p < 0.01$). The findings reveal that system exposures for micro-lending companies may affect quantitative methods to increase in the same direction as system exposures are increasing. Therefore, an increase in system exposures could result into an increase in quantitative methods since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a

framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that system exposures are significantly and positively associated with control measures ($r = 0.621$, $p < 0.01$). The findings reveal that system exposures for micro-lending companies may affect control measures to increase in the same direction as system exposures are increasing. Therefore, an increase in system exposures could result into an increase in control measures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that system exposures are significantly and positively associated with risk financing techniques ($r = 0.598$, $p < 0.01$). The findings reveal that system exposures for micro-lending companies may affect risk financing techniques to increase in the same direction as system exposures are increasing. Therefore, an increase in system exposures could result into an increase in risk financing techniques since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that system exposures are significantly and positively associated with adoption ($r = 0.151$, $p < 0.01$). The findings reveal that system exposures for micro-lending companies may affect adoption to increase in the same direction as system exposures are increasing. Therefore, an increase in system exposures could result into an increase in adoption since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that system exposures are significantly and positively associated with profitability and liquidity ratios ($r = 0.819$, $p < 0.01$). The findings reveal that system exposures for micro-lending companies may affect profitability and liquidity

ratios to increase in the same direction as system exposures are increasing. Therefore, an increase in system exposures could result into an increase in profitability and liquidity ratios since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that system exposures are significantly and positively associated with corporate governance ($r = 0.709$, $p < 0.01$). The findings reveal that system exposures for micro-lending companies may affect corporate governance to increase in the same direction as system exposures are increasing. Therefore, an increase in system exposures could result into an increase in corporate governance since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that system exposures are significantly and positively associated with stakeholder management ($r = 0.605$, $p < 0.01$). The findings reveal that system exposures for micro-lending companies may affect stakeholder management to increase in the same direction as system exposures are increasing. Therefore, an increase in system exposures could result into an increase in stakeholder management since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between external exposures and other key identified variables**

The findings shown on correlation matrix Table 5.40 reveal that external exposures are significantly and positively associated with important elements ($r = 0.428$, $p < 0.01$). The findings reveal that external exposures for micro-lending companies may affect important elements to increase in the same direction as external exposures are increasing. Therefore, an increase in external exposures could result into an increase in important elements since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to

establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that external exposures are significantly and positively associated with identify risk types ($r = 0.387$, $p < 0.01$). The findings reveal that external exposures for micro-lending companies may affect identify risk types to increase in the same direction as external exposures are increasing. Therefore, an increase in external exposures could result into an increase in identify risk types since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that external exposures are significantly and positively associated with qualitative methods ($r = 0.817$, $p < 0.01$). The findings reveal that external exposures for micro-lending companies may affect qualitative methods to increase in the same direction as external exposures are increasing. Therefore, an increase in external exposures could result into an increase in qualitative methods since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that external exposures are significantly and positively associated with quantitative methods ($r = 0.713$, $p < 0.01$). The findings reveal that external exposures for micro-lending companies may affect quantitative methods to increase in the same direction as external exposures are increasing. Therefore, an increase in external exposures could result into an increase in quantitative methods since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that external exposures are significantly and positively associated with control measures ($r = 0.560, p < 0.01$). The findings reveal that external exposures for micro-lending companies may affect control measures to increase in the same direction as external exposures are increasing. Therefore, an increase in external exposures could result into an increase in control measures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that external exposures are significantly and positively associated with risk financing techniques ($r = 0.573, p < 0.01$). The findings reveal that external exposures for micro-lending companies may affect risk financing techniques to increase in the same direction as external exposures are increasing. Therefore, an increase in external exposures could result into an increase in risk financing techniques since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that external exposures are significantly and positively associated with adoption ($r = 0.204, p < 0.01$). The findings reveal that external exposures for micro-lending companies may affect adoption to increase in the same direction as external exposures are increasing. Therefore, an increase in external exposures could result into an increase in adoption since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that external exposures are significantly and positively associated with profitability and liquidity ratios ($r = 0.823, p < 0.01$). The findings reveal that external exposures for micro-lending companies may affect profitability and liquidity ratios to increase in the same direction as external exposures are increasing. Therefore, an increase in external exposures will result into an increase in profitability and liquidity ratios since these two variables are moving in the same directions. Finally, both variables should be embedded

into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that external exposures are significantly and positively associated with corporate governance ($r = 0.751$, $p < 0.01$). The findings reveal that external exposures for micro-lending companies may affect corporate governance to increase in the same direction as external exposures are increasing. Therefore, an increase in external exposures could result into an increase in corporate governance since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that external exposures are significantly and positively associated with stakeholder management ($r = 0.664$, $p < 0.01$). The findings reveal that external exposures for micro-lending companies may affect stakeholder management to increase in the same direction as external exposures are increasing. Therefore, an increase in external exposures could result into an increase in stakeholder management since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.



- **Correlations between important elements and other key identified variables**

The findings shown on correlation matrix Table 5.40 reveal that important elements are significantly and positively associated with identify risk types ($r = 0.848$, $p < 0.01$). The findings reveal that important elements for micro-lending companies may affect identity risk types to increase in the same direction as important elements are increasing. Therefore, an increase in important elements could result into an increase in identify risk types since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that important elements are significantly and positively associated with qualitative methods ($r = 0.438$, $p < 0.01$). The findings reveal that important elements for micro-lending companies may affect qualitative methods to increase in the same direction as important elements are increasing. Therefore, an increase in important elements could result into an increase in qualitative methods since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that important elements are significantly and positively associated with quantitative methods ($r = 0.382$, $p < 0.01$). The findings reveal that important elements for micro-lending companies may affect quantitative methods to increase in the same direction as important elements are increasing. Therefore, an increase in important elements could result into an increase in quantitative methods since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that important elements are significantly and positively associated with control measures ($r = 0.261$, $p < 0.01$). The findings reveal that important elements for micro-lending companies may affect control measures to increase in the same direction as important elements are increasing. Therefore, an increase in important element could result into an increase in control measures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that important elements are significantly and positively associated with risk financing techniques ($r = 0.159$, $p < 0.01$). The findings reveal that important elements for micro-lending companies may affect risk financing techniques to increase in the same direction as important elements are increasing. Therefore, an increase in important elements could result into an increase in risk financing techniques since

these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that important elements are significantly and positively associated with adoption ($r = 0.409$, $p < 0.01$). The findings reveal that important elements for micro-lending companies may affect adoption to increase in the same direction as important elements are increasing. Therefore, an increase in important elements could result into an increase in adoption since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that important elements are significantly and positively associated with profitability and liquidity ratios ($r = 0.390$, $p < 0.01$). The findings reveal that important elements for micro-lending companies may affect profitability and liquidity ratios to increase in the same direction as important elements are increasing. Therefore, an increase in important elements could result into an increase in profitability and liquidity ratios since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that important elements are significantly and positively associated with corporate governance ($r = 0.627$, $p < 0.01$). The findings reveal that important elements for micro-lending companies may affect corporate governance to increase in the same direction as important elements are increasing. Therefore, an increase in important elements could result into an increase in corporate governance since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that important elements are significantly and positively associated with stakeholder management ($r = 0.632$, $p < 0.01$). The findings reveal that important elements for micro-lending companies may affect stakeholder management to increase in the same direction as important elements are increasing. Therefore, an increase in important elements could result into an increase in stakeholder management since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between identify risk types and other key identified variables**

The findings shown on correlation matrix Table 5.40 reveal that identify risk types are significantly and positively associated with qualitative methods ($r = 0.360$, $p < 0.01$). The findings reveal that identify risk types for micro-lending companies may affect qualitative methods to increase in the same direction as identify risk types are increasing. Therefore, an increase in identify risk types could result into an increase in qualitative methods since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that identify risk types are significantly and positively associated with quantitative methods ($r = 0.360$, $p < 0.01$). The findings reveal that identify risk types for micro-lending companies may affect quantitative methods to increase in the same direction as identify risk types are increasing. Therefore, an increase in identify risk types could result into an increase in quantitative methods since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that identify risk types are significantly and positively associated with control measures ($r = 0.181$, $p < 0.01$). The findings reveal that identify risk types for micro-lending companies may affect control measures to increase in the same direction as identify risk types are increasing. Therefore, an increase in identify risk types

could result into an increase in control measures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that identify risk types are significantly and positively associated with risk financing techniques ($r = 0.109$, $p < 0.01$). The findings reveal that identify risk types for micro-lending companies may affect risk financing techniques to increase in the same direction as identify risk types are increasing. Therefore, an increase in identify risk types could result into an increase in risk financing techniques since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that identify risk types are significantly and positively associated with adoption ($r = 0.452$, $p < 0.01$). The findings reveal that identify risk types for micro-lending companies may affect adoption to increase in the same direction as identify risk types are increasing. Therefore, an increase in identify risk types could result into an increase in adoption since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that identify risk types are significantly and positively associated with profitability and liquidity ratios ($r = 0.334$, $p < 0.01$). The findings reveal that identify risk types for micro-lending companies may affect profitability and liquidity ratios to increase in the same direction as identify risk types are increasing. Therefore, an increase in identify risk types could result into an increase in profitability and liquidity ratios since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that identify risk types are significantly and positively associated with corporate governance ($r = 0.591$, $p < 0.01$). The findings reveal that identify risk types for micro-lending companies may affect corporate governance to increase in the same direction as identify risk types are increasing. Therefore, an increase in identify risk types could result into an increase in corporate governance since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that identify risk types are significantly and positively associated with stakeholder management ($r = 0.617$, $p < 0.01$). The findings reveal that identify risk types for micro-lending companies may affect stakeholder management to increase in the same direction as identify risk types are increasing. Therefore, an increase in identify risk types could result into an increase in stakeholder management since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between qualitative methods and other key identified variables**

The findings shown on correlation matrix Table 5.40 reveal that qualitative methods are significantly and positively associated with quantitative methods ($r = 0.777$, $p < 0.01$). The findings reveal that qualitative methods for micro-lending companies may affect quantitative methods to increase in the same direction as qualitative methods are increasing. Therefore, an increase in qualitative methods could result into an increase in quantitative methods since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that qualitative methods are significantly and positively associated with control measures ($r = 0.687$, $p < 0.01$). The findings reveal that qualitative methods for micro-lending companies may affect control measures to increase in the same direction as qualitative methods are increasing. Therefore, an increase in

qualitative methods could result into an increase in control measures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that qualitative methods are significantly and positively associated with risk financing techniques ($r = 0.612$, $p < 0.01$). The findings reveal that qualitative methods for micro-lending companies may affect risk financing techniques to increase in the same direction as qualitative methods are increasing. Therefore, an increase in qualitative methods could result into an increase in risk financing techniques since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that qualitative methods are significantly and positively associated with adoption ($r = 0.099$, $p < 0.01$). The findings reveal that qualitative methods for micro-lending companies may affect adoption to increase in the same direction as qualitative methods are increasing. Therefore, an increase in qualitative method could result into an increase in adoption since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that qualitative methods are significantly and positively associated with profitability and liquidity ratios ($r = 0.785$, $p < 0.01$). The findings reveal that qualitative methods for micro-lending companies may affect profitability and liquidity ratios to increase in the same direction as qualitative methods are increasing. Therefore, an increase in qualitative methods could result into an increase in profitability and liquidity ratios since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that qualitative methods are significantly and positively associated with corporate governance ($r = 0.602$, $p < 0.01$). The findings reveal that qualitative methods for micro-lending companies may affect corporate governance to increase in the same direction as qualitative methods are increasing. Therefore, an increase in qualitative methods could result into an increase in corporate governance since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that qualitative methods are significantly and positively associated with stakeholder management ($r = 0.514$, $p < 0.01$). The findings reveal that qualitative methods for micro-lending companies may affect stakeholder management to increase in the same direction as qualitative methods are increasing. Therefore, an increase in qualitative methods could result into an increase in stakeholder management since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between quantitative methods and other key identified variables**

The findings shown on correlation matrix Table 5.40 reveal that quantitative methods are significantly and positively associated with control measures ($r = 0.671$, $p < 0.01$). The findings reveal that quantitative methods for micro-lending companies may affect control measures to increase in the same direction as quantitative methods are increasing. Therefore, an increase in quantitative methods could result into an increase in control measures since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that quantitative methods are significantly and positively associated with risk financing techniques ($r = 0.559$, $p < 0.01$). This could reveal that quantitative methods for micro-lending companies may affect risk financing techniques to increase in the same direction as quantitative methods are increasing. Therefore, an

increase in quantitative methods could result into an increase in risk financing techniques since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that quantitative methods are significantly and positively associated with adoption ($r = 0.130$, $p < 0.01$). The findings reveal that quantitative methods for micro-lending companies may affect adoption to increase in the same direction as quantitative methods are increasing. Therefore, an increase in quantitative methods could result into an increase adoption since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that quantitative methods are significantly and positively associated with profitability and liquidity ratios ($r = 0.693$, $p < 0.01$). The findings reveal that quantitative methods for micro-lending companies may affect profitability and liquidity ratios to increase in the same direction as quantitative methods are increasing. Therefore, an increase in quantitative methods could result into an increase profitability and liquidity ratios since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that quantitative methods are significantly and positively associated with corporate governance ($r = 0.579$, $p < 0.01$). This could reveal that quantitative methods for micro-lending companies may affect corporate governance to increase in the same direction as quantitative methods are increasing. Therefore, an increase in quantitative methods could result into an increase corporate governance since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that quantitative methods are significantly and positively associated with stakeholder management ($r = 0.493$, $p < 0.01$). The findings reveal that quantitative methods for micro-lending companies may affect stakeholder management to increase in the same direction as quantitative methods are increasing. Therefore, an increase in quantitative methods could result into an increase stakeholder management since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between control measures and other key identified variables**

The findings shown on correlation matrix Table 5.40 reveal that control measures are significantly and positively associated with risk financing techniques ($r = 0.661$, $p < 0.01$). The findings reveal that control measures for micro-lending companies may affect risk financing techniques to increase in the same direction as control measures are increasing. Therefore, an increase in control measures will result into an increase risk financing technique since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that control measures are significantly and negatively associated with adoption ($r = - 0.158$, $p < 0.01$). The findings reveal that control measures for micro-lending companies may affect adoption to increase in the opposite direction as control measures are decreasing. Therefore, an increase in adoption may not influence an increase of variable control measure since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that control measures are significantly and positively associated with profitability and liquidity ratios ($r = 0.577$, $p < 0.01$). The findings reveal that control measures for micro-lending companies may affect profitability and liquidity ratios to increase in the same direction as control measures are increasing. Therefore, an increase in

control measures could result into an increase profitability and liquidity ratios since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that control measures are significantly and positively associated with corporate governance ($r = 0.363$, $p < 0.01$). The findings reveal that control measures for micro-lending companies may affect corporate governance to increase in the same direction as control measures are increasing. Therefore, an increase in control measures will result into an increase corporate governance since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that control measures are significantly and positively associated with stakeholder management ($r = 0.226$, $p < 0.01$). The findings reveal that control measures for micro-lending companies may affect stakeholder management to increase in the same direction as control measures are increasing. Therefore, an increase in control measures could result into an increase stakeholder management since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between risk financing techniques and other key identified variables**

The results shown on correlation matrix Table 5.40 reveal that risk financing techniques are significantly and negatively associated with adoption ($r = -0.091$, $p < 0.01$). The findings reveal that risk financing techniques for micro-lending companies may affect adoption to increase in the opposite direction as risk financing techniques are decreasing. Therefore, an increase in adoption may not influence an increase of variable risk financing techniques since these two variables are moving on the opposite directions. Finally, both variables should be embedded into the framework for ERM and sustainability, except that they should not have similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies

and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that risk financing techniques are significantly and positively associated with profitability and liquidity ratios ($r = 0.617, p < 0.01$). The findings reveal that risk financing techniques for micro-lending companies may affect profitability and liquidity ratios to increase in the same direction as risk financing techniques are increasing. Therefore, an increase in risk financing techniques could result into an increase profitability and liquidity ratios since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that risk financing techniques are significantly and positively associated with corporate governance ($r = 0.372, p < 0.01$). The findings reveal that risk financing techniques for micro-lending companies may affect corporate governance to increase in the same direction as risk financing techniques are increasing. Therefore, an increase in risk financing techniques could result into an increase corporate governance since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.



The findings shown on correlation matrix Table 5.40 reveal that risk financing techniques are significantly and positively associated with stakeholder management ($r = 0.270, p < 0.01$). The findings reveal that risk financing techniques for micro-lending companies may affect stakeholder management to increase in the same direction as risk financing techniques are increasing. Therefore, an increase in risk financing techniques could result into an increase stakeholder management since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between adoption and other key identified variables**

The findings shown on correlation matrix Table 5.40 reveal that adoption are significantly and positively associated with profitability and liquidity ratios ($r = 0.263$, $p < 0.01$). The findings reveal that adoption for micro-lending companies may affect profitability and liquidity ratios to increase in the same direction as adoption are increasing. Therefore, an increase in adoption could result into an increase profitability and liquidity ratios since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that adoption are significantly and positively associated with corporate governance ($r = 0.393$, $p < 0.01$). The findings reveal that adoption for micro-lending companies may affect corporate governance to increase in the same direction as adoption are increasing. Therefore, an increase in adoption could result into an increase corporate governance since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that adoption are significantly and positively associated with stakeholder management ($r = 0.530$, $p < 0.01$). The findings reveal that adoption for micro-lending companies may affect stakeholder management to increase in the same direction as adoption are increasing. Therefore, an increase in adoption could result into an increase stakeholder management since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between profitability and liquidity ratios and other key identified variables**

The results shown on correlation matrix Table 5.40 reveal that profitability and liquidity ratios are significantly and positively associated with corporate governance ($r = 0.680$, $p < 0.01$). The findings reveal that profitability and liquidity ratios for micro-lending companies may affect corporate governance to increase in the same direction as profitability and liquidity ratios are increasing.

Therefore, an increase in profitability and liquidity ratios could result into an increase corporate governance since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.40 reveal that profitability and liquidity ratios are significantly and positively associated with stakeholder management ($r = 0.650$, $p < 0.01$). The findings reveal that profitability and liquidity ratios for micro-lending companies may affect stakeholder management to increase in the same direction as profitability and liquidity ratios are increasing. Therefore, an increase in profitability and liquidity ratios could result into an increase stakeholder management since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between corporate governance and key identified variable**

The findings shown on correlation matrix Table 5.40 reveal corporate governance is significantly and positively associated with stakeholder management ($r = 0.841$, $p < 0.01$). The findings reveal that corporate governance for micro-lending companies may affect stakeholder management to increase in the same direction as corporate governance are increasing. Therefore, an increase in corporate governance could result into an increase stakeholder management since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

Table 5.40: Correlations (employee perspective)

[illegible]

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

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

Source: Own Source

5.4.3.2 Relationships between variables (proprietor perspective)

A correlation matrix (See Table 5.41) was used to interpret the correlations between key variables based on proprietor perspective (motivation; managerial innovation; taking opportunity; perceptions on ERM and risk oversight).

- **Correlations between motivation and key identified variables**

The findings shown on correlation matrix Table 5.41 reveal that motivation is significantly and positively associated with managerial innovation ($r = 0.773$, $p < 0.01$). The findings reveal that motivation in the micro-lending companies may affect managerial innovation to increase in the same direction as motivation is increasing. Therefore, an increase in motivation could result into an increase managerial innovation since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.41 reveal that motivation is significantly and positively associated with taking opportunity ($r = 0.525$, $p < 0.01$). The findings reveal that motivation in the micro-lending companies may affect taking opportunity to increase in the same direction as motivation is increasing. Therefore, an increase in motivation could result into an increase taking opportunity since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.41 reveal that motivation is significantly and positively associated with perceptions on ERM ($r = 0.677$, $p < 0.01$). The results reveal that motivation in the micro-lending companies may affect perceptions on ERM to increase in the same direction as motivation is increasing. Therefore, an increase in motivation could result into an increase perception on ERM since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.41 reveal that motivation is significantly and positively associated with risk oversight ($r = 0.791$, $p < 0.01$). The results reveal that motivation in

the micro-lending companies may affect risk oversight to increase in the same direction as motivation is increasing. Therefore, an increase in motivation could result into an increase risk oversight since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between managerial innovation and key identified variables**

The findings shown on correlation matrix Table 5.41 reveal that managerial innovation is significantly and positively associated with taking opportunity ($r = 0.820$, $p < 0.01$). The findings reveal that managerial innovation in the micro-lending companies may affect taking opportunity to increase in the same direction as managerial innovation is increasing. Therefore, an increase in managerial innovation could result into an increase taking opportunity since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.41 reveal that managerial innovation is significantly and positively associated with perceptions on ERM ($r = 0.769$, $p < 0.01$). The findings reveal that managerial innovation in the micro-lending companies may affect perceptions on ERM to increase in the same direction as managerial innovation is increasing. Therefore, an increase in managerial innovation could result into an increase perception on ERM since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.41 reveal that managerial innovation is significantly and positively associated with risk oversight ($r = 0.714$, $p < 0.01$). The findings reveal that managerial innovation in the micro-lending companies may affect risk oversight to increase in the same direction as managerial innovation is increasing. Therefore, an increase in managerial innovation could result into an increase risk oversight since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to

establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between taking opportunity and key identified variables**

The findings shown on correlation matrix Table 5.41 reveal that taking opportunity is significantly and positively associated with perceptions on ERM ($r = 0.663$, $p < 0.01$). The findings reveal that managerial innovation in the micro-lending companies may affect perceptions on ERM to increase in the same direction as taking opportunity is increasing. Therefore, an increase in taking opportunity could result into an increase perception on ERM since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

The findings shown on correlation matrix Table 5.41 reveal that taking opportunity is significantly and positively associated with risk oversight ($r = 0.419$, $p < 0.01$). The findings reveal that managerial innovation in the micro-lending companies may affect risk oversight to increase in the same direction as taking opportunity is increasing. Therefore, an increase in taking opportunity will result into an increase risk oversight since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

- **Correlations between perceptions on ERM and key identified variable**

The findings shown on correlation matrix Table 5.41 reveal that perceptions on ERM is significantly and positively associated with risk oversight ($r = 0.913$, $p < 0.01$). The findings reveal that managerial innovation in the micro-lending companies may affect risk oversight to increase in the same direction as perceptions on ERM is increasing. Therefore, an increase in taking perceptions on ERM could result into an increase risk oversight since these two variables are moving in the same directions. Finally, both variables should be embedded into the framework for ERM and sustainability and should be given similar rankings. This correlation fulfils objectives 1 and 6, to establish sources of risk that affect sustainability in micro-lending companies and to develop a framework for enterprise risk management that can be used to mitigate risks in micro-lending companies.

Table 5.41: Correlations (proprietor perspective)

		Correlations				
Constructs		FA_Sec5_Motivation	FA_Sec5_ManagementInnovation	FA_Sec5_TakingOpportunity	FA_Sec5_Perceptions_on_ERM	FA_Sec5_RiskOversight
FA_Sec5_Motivation	Pearson Correlation	1	.773**	.825**	.677**	.791**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000
	N	161	161	161	161	161
FA_Sec5_ManagementInnovation	Pearson Correlation	.773**	1	.820**	.769**	.714**
	Sig. (2-tailed)	0.000		0.000	0.000	0.000
	N	161	161	161	161	161
FA_Sec5_TakingOpportunity	Pearson Correlation	.825**	.820**	1	.663**	.419**
	Sig. (2-tailed)	0.000	0.000		0.000	0.000
	N	161	161	161	161	161
FA_Sec5_Perceptions_on_ERM	Pearson Correlation	.677**	.769**	.663**	1	.913**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000
	N	161	161	161	161	161
FA_Sec5_RiskOversight	Pearson Correlation	.791**	.714**	.419**	.913**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
	N	161	161	161	161	161

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

Source: Own Source



5.5 Chapter Summary

In this chapter focus was on empirical analysis and findings gathered from the study. Statistical analysis of quantitative data was reported in this chapter. Findings from primary data were reported in this chapter, explained, interpreted and conclusions were drawn from this study. The chapter presented the findings derived from data analysis using a quantitative method. Quantitative data analysis was done using SPSS from a sample size of 667. The chapter presented descriptive statistics, factor analysis, inferential analysis, ANOVA and correlations among identified key variables in relation to micro-lending companies in Botswana. The respondents were employees and proprietors from the micro-lending sector regulated by NBFIRA. The next chapter focuses on qualitative data analysis and discussion of findings.

CHAPTER 6: QUALITATIVE DATA ANALYSIS, PRESENTATION AND DISCUSSION OF RESULTS

6 Introduction

Quantitative data analysis and discussion of findings were presented in the previous chapter. Qualitative data presentation, analysis and discussion of findings are presented in this chapter. The chapter discusses the themes that emerged from the interviews conducted with employees and proprietors in the micro-lending sector in Botswana. Consent was granted by interviewees (participants) and interviews were recorded and transcribed. In the qualitative frame of the research, structured interview was utilised to examine the level of understanding what influences the closure of micro-lending businesses in Botswana. Themes were derived from the research objectives and research questions based on the participants' perceptions and views towards an adoption of ERM and sustainability framework in micro-lending companies. Thematic analysis extends the study in examining different topics, understanding participants' voices and presenting data where verbatim quotations have been extracted to substantiate the perceptions. Thematic analysis is essential for enhancing reliability of data and achieving an in-depth understanding of the phenomenon under discussion. An inductive approach was used in identifying the themes and patterns of meanings across the qualitative data collected. Verbatim quotations eliminate the risk of fabricating findings and enhances the ethical status of the study. In order to understand the raw data from the participants, summaries were given at the end of each section.

6.1 Participants

The study selected 16 participants in this structured interview. The 16 participants were conveniently selected according to the positions which generally dominate in a micro-lending sector, such as Front-Line Officer (FLO); Risk Manager (RM); Accountant (ACC); Human Resources Manager (HRM); CEO - Proprietor (CEO); Loans Officer (LO) and Board Member (BM). A pilot study was conducted on 2 participants (1 employee and 1 proprietor). This pilot study aimed to refine the questions and remove bias. The pilot study achieved data consistency and errors were eliminated. In the final interviews the study managed to interview 8 participants (6 employees and 2 proprietors) working in the micro-lending sector in Botswana. An additional 8 participants were not interviewed as the data reached saturation with only 8 participants. Therefore, it was not necessary to continue to interview the rest of the 16 participants as saturation was reached during the interviews with the first 8 participants. A convenient sampling technique was used in selecting the 8 participants for the face-to-face individual interviews. Individual face-to-face interviews were conducted in the month of August in 2018. The participants were assigned codes which represent their positions (for example - Front Line Officer = FLO01; Risk Manager = RM01; Operations Manager = OM01; Accountant = ACC01; Human Resources Manager = HRM01; Loans Officer = LO01; CEO - Proprietor and Board Member = BM01). The main intention of the study was to interview 16 participants, but the interview process reached saturation on 8 participants. Therefore,

since saturation of themes was reached, the other 8 were not included as part of the analysis (See Table 6.1).

Table 6.1: Demographics for participants who were interviewed

Code	Category	Gender	Age (Years)	Educational level	Position	Service of work (No. of years)	Employment Status	Nationality	Number
FLO01	Employee	Female	19	Certificate BGSCE	Front Line Officer (FLO)	1	Full-time	Motswana	1
RM01	Employee	Female	25	Professional Certificate	Risk Manager (RM)	2	Part-time	Other	1
OM01	Employee	Male	49	Bachelor's degree	Operations Manager (OM)	2	Full-time	Motswana	1
ACC01	Employee	Female	35	Professional Certificate	Accountant (ACC)	2	Part-time	Zimbabwean	1
HRM01	Employee	Female	20	Professional - Certificate	Human Resources Manager (HRM)	1	Part-time	Motswana	1
LO01	Employee	Female	22	Professional Diploma	Loans Officer (LO)	1	Full-time	Motswana	1
CEO01	Proprietor	Male	48	Professional Certificate	CEO - Proprietor (CEO)	2	Full-time	Motswana	1
BM01	Proprietor	Male	26	Honours' Degree	Board Member (BM)	2	Full-time	Motswana	1
Total									8

Source: Field Data

The Table 6.1 above indicates that all the positions which dominate in the micro-lending were considered as part of the sample for this qualitative analysis. The main aim for using a convenience sampling technique was to ensure that all possible positions which dominate in the micro-lending sector were properly represented. Therefore, the results of this study were generalised on the entire population.

6.2 Data gathering

The researcher selected questions that suit both the employees and proprietors working in the micro-lending sector in Botswana. The questions were semi-structured (See Annexure B and B1) and included verbal questions where the respondents answered in much detail. The researcher

recorded the responses on an audio recorder in addition to scripted notes on a note pad. Simultaneously, before interviewing the respondents the researcher conducted a short brainstorming exercise in order to prepare each individual participant for the final interview. Below is the structure of interview questions asked during the final interview and extracted from Annexure B and B1:

Section One: Demographic factors of respondents: Educational level, age, gender and years of experience.

- a) Do you think the following factors: educational level, age, gender and years of experience have an influence towards performance, growth and competitiveness of a micro-lending company?
- b) Do you think the following factors: educational level, age, gender and years of experience have an influence on the adoption of a framework for enterprise risk management and sustainability in micro-lending companies in Botswana?

Section two: Sources of risk that affect sustainability of micro-lending businesses.

- a) What do you think are the sources of risk that affect organisational performance and require the adoption of ERM framework that mitigates risk?
- b) Tell me what you think are the challenges / constraints that are faced by a business that may result in the closure of micro-lending entities?
- c) In your opinion, what do think are the marketing challenges / constraints that are faced by a micro-lending company?
- d) What is your perception towards an adoption of a framework for enterprise risk management and sustainability in micro-lending companies in Botswana?

Section three: Lending company's approach towards Enterprise Risk Management (ERM).

- a) Which of the approaches are recognized in your enterprise in relation to ERM?

Section four: Characteristics of corporate governance and firm performance

- a) Do you think your organisation uses profitability and liquidity ratios to measure and monitor the business's performance, growth and competitiveness?
- b) Which critical success factors influence management of stakeholders in your organisation?
- c) What do you think are the leadership styles that exist in your organisation?
- d) Do you think your organisation recognises the 14 principles of management of Henri Fayol?
- e) What do you think are the corporate governance cultures that exist in your organisation?
- f) What is your recommendation on the factors that influence success of micro-lending entities?

The above sections one to four were answered by both participants (employees and proprietors) as there were similarities and commonalities within these questions. However, section five below was answered by proprietors only because of their specific roles as business owners.

Section five: Characteristics of critical success factors for development of micro-lending company.

What is your perception towards critical success factors such as: entrepreneurial motives; motivation; managerial innovation; taking opportunities; self-sufficiency; business linkages; initiative; problem solving; strategy; knowledge and understanding; responsibilities of a risk manager and risk oversight in relation to the development and sustainability of a micro-lending company?

6.3 Qualitative data analysis

Yin (2011:20) submits that reviewing critically other researchers and scholars' work enhances transparency, trustworthiness and credibility of the study under investigation. Therefore, the researcher achieved validity through triangulation, checking participants' inquiries, eliminating bias and spending time in the field. The use of various research strategies by the researcher yielded rich descriptions which reflected reality and truth about the phenomenon examined in this study (Corden & Sainsbury, 2006:98). In a qualitative research the traditional notions of validity and reliability do not apply in this study and the alternative to this is the set of criteria to judge the rigor of the study (Locke, 2000:59). Therefore, the most important aspects in a qualitative research entail how to ensure trustworthiness, data integrity, accuracy and credibility of qualitative results. The researcher satisfied the criteria of credibility, transferability, dependability and confirmability through the guidelines shown in Chapter 4, Table 4.8 based on the works of Lincoln and Guba (1985), cited in (Locke, 2000:59).

The following is a summary of the criteria (See chapter 4, Table 4.8) based on the works of Lincoln and Guba (1985), cited (Locke, 2000:59):

- *credibility*: adoption of appropriate, well recognised research methods (this is where findings are believable);
- *transferability*: provision of background data to establish context of study and detailed description of phenomenon in question to allow comparisons to be made (degree to which findings are transferable)
- *data integrity and accuracy*: this means that the data reflects reality thus replicability (ability of another independent researcher to reach similar conclusions);
- *dependability*: employment of "overlapping methods" (ability of findings to be repeated if inquiry is replicated under the same conditions) and
- *confirmability*: triangulation to reduce effect of investigator bias.

In order for the researcher to make valid conclusions based on the participants' findings, other researchers' results similar and dissimilar to this present study were considered. The use of other independent researchers' work assisted the researcher to achieve internal validity in this research. The present study used the participants' exact language (words) to describe events as the context of language was significant to this research. (Saunders *et al.*, 2003:76; Yin, 2011:20) argue that researchers should be methodical when conducting a research in order to allow for completeness, cross-checking research procedures and data validation. Multiple perspectives were used in strengthening the research results and making valid conclusions. The research utilised multiple data sources during data collection as this helped to increase construct validity (Yin, 2011:20). Finally, the issue of internal validity was addressed through rival explanation, pattern matching and explanation building. Analytical generalisations were found suitable for generalising this qualitative research on concepts and theoretical constructs to other similar situations (Myers, 2009:10; Yin, 2011:20). Meta-inference is the integration of quantitative and qualitative results (Venkatesh *et al.*, 2013:23). Meta-inferences allowed the comparison of quantitative and qualitative analysis to offer rich insights into the research findings. Triangulation of quantitative and qualitative results was then achieved from the rich insights about the phenomenon (ERM and sustainability framework) decision making in micro-lending companies.

6.4 Inductive approach

This study used an inductive approach which involves the analysis of data and provides little or no pre-determined theory, framework or structure (Creswell & Plano Clark, 2011:119). During the analysis of the data the researcher attempted to make sense and interpreted the phenomena in relation to the meanings given by the participants (Northcutt & McCoy, 2004:43). According to Jebreen (2012:170) the research used inductive approach for the following reasons:

- to summarise combined varied raw data into meaningful information
- to create a link between the objectives of the study and the results from raw data and to make the links clearer through these links
- to use the text data for developing a theory, based on the experiences and processes encountered through the participants

Qualitative research presents data in descriptive narrative with texts, words and attempts to understand the meanings of a phenomena in natural settings (Creswell & Plano Clark, 2011:119). This implies that the researcher studies things in their natural state and attempts to make sense and meaning through interpretation of phenomena (Denzin & Lincoln, 2005:45). According to Denzin and Lincoln (2005:45) qualitative research methods have taken different directions and adopted content analysis, word counts and grounded theory. Furthermore, Guba and Lincoln (1988:82) postulated that inductive approach is used to develop a theory from data collected during the study. In addition, the themes then emerge from explanations of the social phenomenon, which

are built from the raw data. Guba and Lincoln (1988:82) refer to the outcomes of inductive approach as naturalistic or qualitative inquiry where patterns generate theories. This assertion was emphasised by Neuman (2000:68) who avers that inductive approach establishes the interconnectedness of thoughts and therefore this specifies a sequence of phases or links between the parts of a whole.

An inductive approach is based on assumptions and understanding of the phenomenon underpinning the study through participants' responses, perceptions, opinions about the reality (Kleining & Witt, 2000:2). The emphasis is that the inductive approach uses theories for preliminary understanding of a phenomenon under investigation (Flick, 1992:176). This is a similar approach to the one in which this study was conducted. The researcher used an inductive approach to formulate themes from understanding performance in the micro-lending sector in Botswana and how ineffective enterprise risk management affects business continuity in this sector. Furthermore, the researcher borrowed some of the emerging themes from other available literature to explain the behaviour and attitudes of people (Creswell & Plano Clark, 2011:62). Therefore, through a qualitative study the researcher managed to generate and assembled usable and cumulative body of knowledge (Silverman, 2015:63). Generally, theory is perceived to be linked to some research methodologies and the epistemologies which inform these methods (Guba & Lincoln, 2005:45). The researcher generated raw data through a direct interaction with the phenomenon being studied, the data was then broken down into meaningful and manageable units and it was also coded, and synthesised in the patterns that were formulated (Leech & Onwuegbuzie, 2007:558). The inductive approach begins with categorisation and organisation in order to search for patterns, critical key themes and meanings which emerge from the data (Strauss & Corbin, 1994:220). The process is sometimes called open coding (Strauss & Corbin, 1994:220). Onwuegbuzie and Leech (2006:475), further explain that qualitative data analysis involves transformation of raw data through searching, evaluating, recognising, coding, mapping, exploring and describing patterns, trends, themes and categories in the raw data and this provides underlying meanings of a phenomenon by interpretation. Furthermore, Patton (2002:41) argues that this process is called inductive analysis and creative synthesis.

According to Onwuegbuzie and Leech (2006:475) there are normally seven commonly used techniques for analysing qualitative data - methods such as constant comparison; keywords in context; word count; classical content analysis; domain analysis; taxonomic analysis and componential analysis. Further to the study of these seven qualitative data analysis techniques, Dawson (2009:119 - 125) developed the techniques and divided them into four components: thematic analysis; comparative analysis; content analysis and discourse analysis. However, Madill and Gough (2008:204) categorised techniques of analysing qualitative data as discursive; thematic; structured and instrumental. Madill and Gough (2008:204) posit that these techniques are not

mutually exclusive, and it is possible to use a combination of these categories in order to understand the phenomenon underpinning the study. Categories of techniques may be combined in order to achieve data analysis triangulation which enhances validity and reliability of the study (Onwuegbuzie & Leech, 2006:476). Braun *et al.* (2014:118) emphasize that theories and theoretical concepts sometimes act as guidelines for the formulation of qualitative analysis. However, the researcher's disciplinary knowledge and epistemology may shape the direction and pace of the qualitative data analysis (Braun *et al.*, 2014:118). Furthermore, qualitative data analysis may be analysed using computer software for example Atlas. Qualitative data analysis may be done manually by the researcher using disciplinary knowledge and epistemology. This study used manual thematic data analysis as explained in section 6.5 below.

6.5 Thematic data analysis

Thematic analysis is a method used in qualitative research to identify themes, patterns of meaning of raw data in relation to the research question (Braun *et al.*, 2014:118). In this study the researcher repeated the terms and typologies, and this assisted in generating analytic patterns and themes of the phenomenon under investigation (Braun *et al.*, 2014:118). Therefore, the main thrust of thematic analysis was to generate domains (Braun *et al.*, 2014:118). The steps in the thematic analysis are outlined below (See Figure 6.1) based on the works of Braun *et al.* (2014:118).

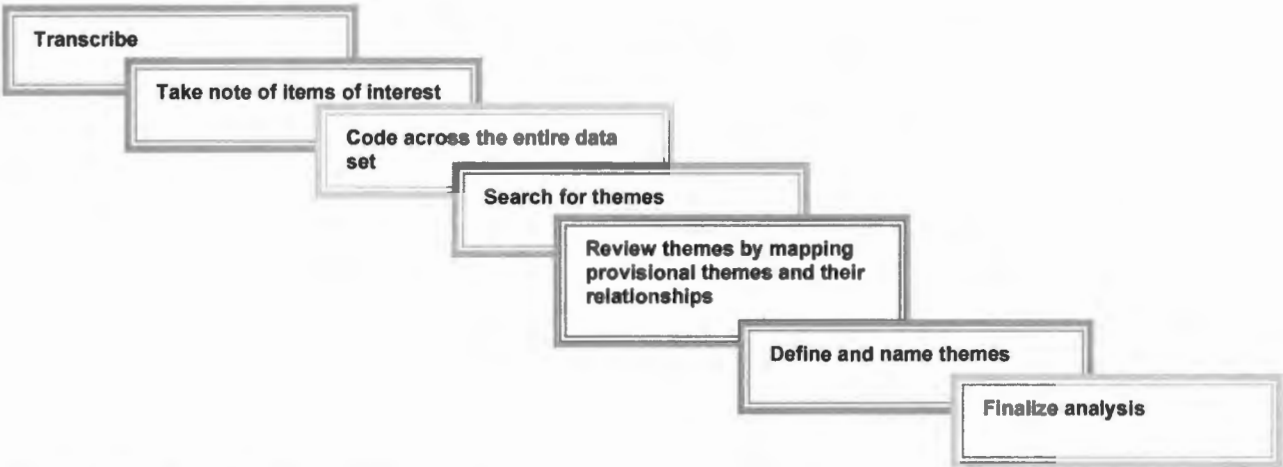


Figure 6.1: Steps in thematic analysis

Source: Adapted from Braun and Clarke, (2013:175)

Furthermore, Harding (2013:112) suggested the following steps involved in analysing themes:

- identifying the theme and creating a category
- creating codes from different illustrative issues into the category
- creating sub-categories to reflect different elements of the themes; and
- utilizing the themes to explain relationships between different parts of the data and building theory.

The following are data analysis strategies (See Figure 6.2) developed by Jebreen (2012:172).

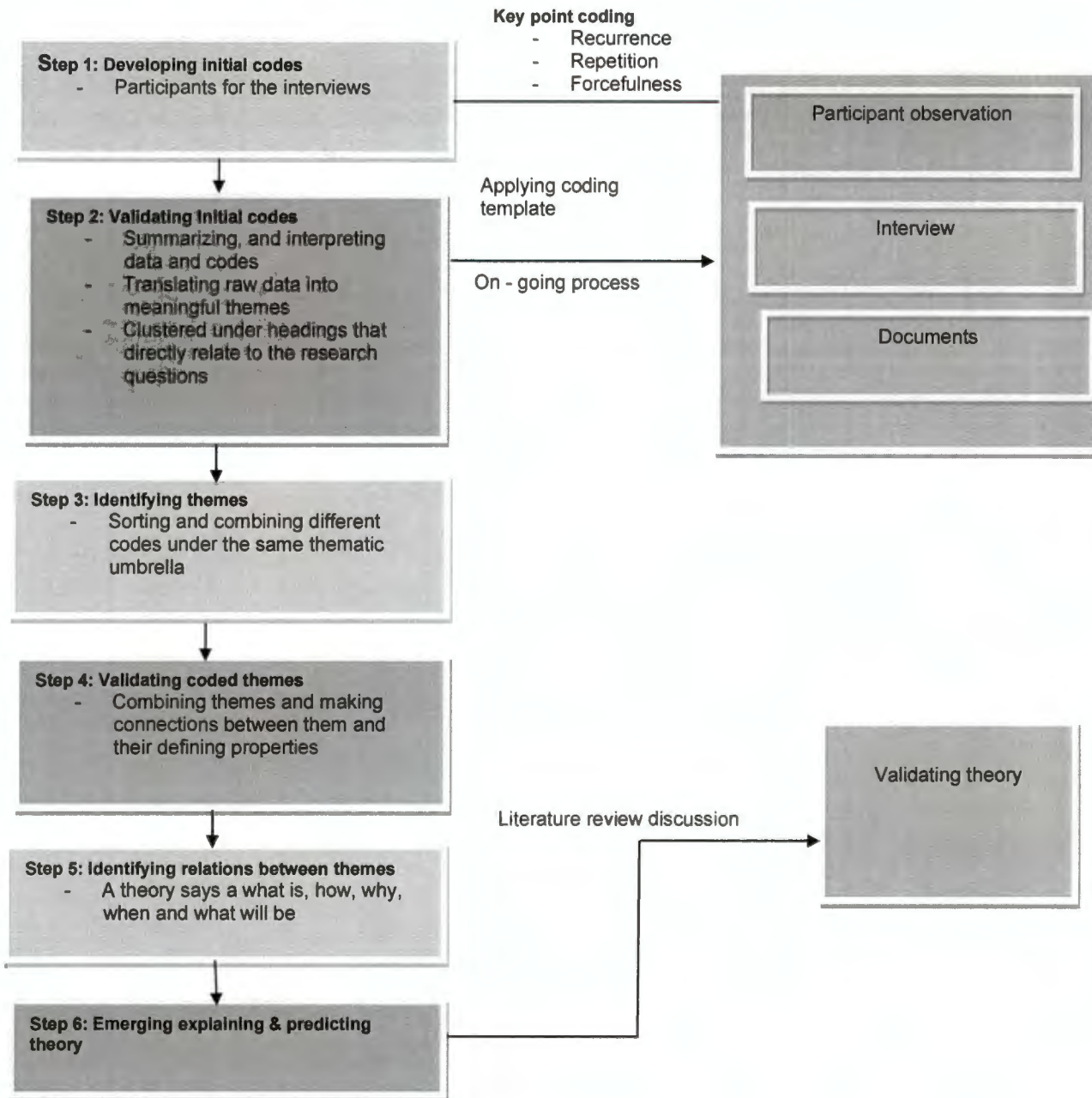


Figure 6.2: Data analysis strategies

Source: (Adapted from Jebreen, 2012:172)

The researcher maintained the relevance of this qualitative research analysis through ensuring consistency, neutrality and applicability to the research problem (Ellsberg & Heise, 2005:211). The scientific rigour, validity, reliability, trustworthiness and credibility of this study were demonstrated through the use of data analysis strategies as shown on Figure 6.2. The researcher followed all the six steps for data analysis strategies as shown and explained in Figure 6.2. The researcher

analysed the data gathered from interviews and it was meaningful and understandable. The researcher recorded the interview and collected the data through note-taking and audio recording. The combination of the note-taking and recording assisted the researcher to analyse the interviews, which were then transcribed in full. In addition, notes were taken from the interview during the process and themes emerged (See Table 6.3). Furthermore, the researcher listened to the interview recording and reading the verbatim transcriptions. Table 6.3 shows the description, common themes, different perceptions and the research objectives addressed (Ellsberg & Heise, 2005:211). The interview outcomes were related to the opinions and perceptions towards an adoption of ERM and sustainability framework.

Therefore, these themes formed the basis for the formulation of a final framework validated against the ERM process and other related topics as detailed in Chapter 2 of this study. The themes were selected through content analysis of transcripts and each description contains a theme and sub-themes.

The following key was used in the thematic analysis Table 6.3, especially the last column on the research objective (s) to be answered / addressed by the themes (See Table 6.3, column 4). The following Table 6.2 show the Key for comments on objectives answered. Each research objective was assigned to a number (See Table 6.2).

Table 6.2: Research objectives (Matrix)

	Research objectives	Assigned number
1	To establish sources of risk that affect sustainability in micro-lending companies.	1
2	To determine the challenges that contributes to the closure of micro-lending entities.	2
3	To ascertain procedures and internal controls in micro-lending businesses.	3
4	To ascertain leadership styles, management principles and corporate governance cultures that is dominant in micro-lending companies.	4
5	To ascertain whether micro-lending companies understand the application of accounting and reporting as a tool for decision-making.	5
6	To develop a framework for enterprise risk management that could be used to mitigate risks in micro-lending companies.	6

Source: Own Source

The following Table 6.3 shows thematic analysis obtained from open-coding themes.

Table 6.3: Thematic analysis obtained from open - coding themes

Description	Common themes	Themes with different perceptions	Assigned number (see Table 6.2)
Demographic related problems			
Demographics factors such as age, gender, educational level and years of experience affect performance	✓ Age gap affects performance ✓ Educational deficiencies affect performance ✓ Gender differences affect performance ✓ Lack of experience affect performance		2
Demographics factors such as age, gender, educational level and years of experience influence adoption of ERM and Sustainability framework	✓ Lack of maturity influences adoption of ERM and sustainability framework ✓ Agenda differences influence adoption of ERM and sustainability framework ✓ Lack of education influence adoption of ERM and sustainability framework ✓ Lack of experience influence adoption of ERM and sustainability framework		6
Description	Common themes	Themes with different perceptions	Assigned number (see Table 6.2)
Sources of risk that affect sustainability of micro-lending businesses			
Sources of risk	✓ Credit risk ✓ Market risk ✓ Liquidity risk ✓ Interest rate risk ✓ country risk ✓ Reputation risk ✓ Legal risk ✓ operational risk	✓ Country risk does not affect sustainability of micro-lending businesses	1
Description	Common themes	Themes with different perceptions	Assigned number (see Table 6.2)
Challenges / constraints that contribute to the closure of micro-lending entities			
Factors that contributed to closure of micro-lending entities	✓ lack of customer relationship management skills		2
	✓ Economic situation such as inflation, high interest rates, unemployment, retrenchments and stagnate salaries		2

	✓ Poor leadership styles (powerful – dominance by one individual in decision making) ✓ Lack of Human Resources Management and Human Resources development policies ✓ Poor working capital management ✓ Lack of government involvement ✓ Lack to access to finance / credit facilities ✓ Poor implementation of bookkeeping and accounting records ✓ Technology, internet and software challenges ✓ Low capital adequacy / liquidity (Maximum P20,000.00) ✓ Poor strategic positioning (lack of good location / business premises) ✓ Poor communication skills ✓ Education and training (life - long learning) ✓ Lack of collateral security ✓ Lack of entrepreneurship skills ✓ Lack of ERM systems ✓ Lack of ERM structure (organogram) ✓ lack of risk champions ✓ Failure to implement risk register		4 2 2 2 2 2,3,5 2 2 2 2 2 2 2 2 2 2 2 2
Reasons for starting a micro-lending company	✓ Unemployment ✓ Survival ✓ Poverty ✓ income generating to support extended family ✓ Independence		2
Lack of preference sources of business (priorities)	✓ Credit card ✓ Mortgage ✓ Improvement loan ✓ Business loan ✓ Car loan ✓ student loan ✓ Personal loan ✓ Payday loan		2
Lack of ranking strategies (external control mechanisms)	✓ Poor ranking of micro – lending business according to size, capability, human capital and available capital adequacy		2
Description	Common themes	Themes with different perceptions	Assigned number (see Table 6.2)
Enterprise Risk Management (ERM)			
Primary factors for enterprise risk management	✓ Employees' misconduct ✓ Processes ✓ Systems ✓ External factors (e.g. natural disasters, fraud, political pressures).		3, 6
Employee exposures	✓ Incompetence ✓ Human error negligence ✓ Low morale (poor salaries)		4,6 4,6 4,6

	✓ High staff turnover ✓ Fraudulent / criminal activities by employees ✓ lack of training and development		4,6 3,4,5,6 4,6
Process exposures	✓ Errors in procedures ✓ Documentation errors ✓ Product complex ✓ Security systems (passwords and accessibility)		2,3,5,6
System exposures	✓ System infiltration ✓ System failures ✓ Hackers (e.g. fraud through systems) ✓ Programming errors (lack of expertise) ✓ Information risk (security systems) ✓ Telecommunication risk ✓ Obsolescence of systems (Micro-lending systems very old (e.g. independent use of smart - fin and Sage Pastel Accounting))		2,3,5,6
External exposures	✓ lack of recognition of Acts of God (lighting, veld fire and floods) ✓ External criminal activities ✓ Domestic political upheaval ✓ Regulatory and compliance ✓ Legal actions ✓ Business environment changes ✓ Deterioration of micro-lending company's reputation perceived by the market ✓ Strikes ✓ Money laundering		2,4,6
Elements of enterprise risk management process	✓ Risk identification ✓ Risk evaluation / measurement ✓ Risk control ✓ Risk financing		1,3,6
Appropriate methods of identification of various risk types	✓ workshops ✓ process mapping ✓ comparisons with other organisations ✓ Discussions with peers		1,3,6
Qualitative methods for measurement of ERM	✓ Historical data to forecast the likelihood of potential loss ✓ Self - risk assessment ✓ Risk maps / process flows		1,3,6
Quantitative methods for measurement of ERM	✓ Casual modelling ✓ Risk indicators ✓ Escalation triggers ✓ Loss - event data base		1,3,6
Control measures	✓ Policy and procedures ✓ Internal controls ✓ Risk reporting ✓ Financial reporting		3,5,6
Risk financing techniques	✓ Risk transfers (to third parties - insurance companies) ✓ Risk retention (funded) ✓ Risk retention (unfunded)		1,3,6
Alignment of ERM to	✓ Poor mission statement, vision, strategic		1,2,3,4,5,6

business strategies	- objectives, ✓ Continuous improvement ✓ Risk management structure ✓ Risk manager reporting to CEO and the board of directors ✓ Board of directors responsible for ERM ✓ Capital adequacy / liquidity (mandatory - regulator) linked to ERM and external monitoring (NBFIRA) ✓ Lack of ERM and Sustainability framework		
Profitability and liquidity ratios	✓ Failure to use financial accounting ratios		2,3,5,6
Corporate governance cultures (best practices)	✓ Appointment of Executive Directors (ED) and Non - Executive Directors (NED) as part of ERM strategy ✓ Recognise corporate governance culture as part of ERM ✓ Board of directors to drive the ERM strategy ✓ Recognise key positions (Risk Manager - RM, Accountant - Acc and Board Member - BM) ✓ Incorporate King's report and COSO best practices applicable to SMMEs (Micro – lending businesses). ✓ Financial Management and Financial reporting ✓ Financial Management risk reporting	NWU LIBRARY	2,3,4,5,6
Critical success factors for stakeholder management	✓ Balance between economic, social, legal, environment and ethics ✓ Poor communication with all stakeholders ✓ Lack of ranking the types of stakeholders ✓ Lack of good relationship ✓ Resolve conflicts between stakeholders ✓ Stakeholder influence (interests and power) ✓ Analyse stakeholder attributes / traits (power, urgency, proximity, monopoly and interest) ✓ Clear policies related to each stakeholder ✓ Stakeholder behaviour		4,6
Description	Common themes	Themes with different perceptions	Assigned number (see Table 6.2)
Critical success factors for development of micro-lending company (Proprietor perceptions, belief, opinion and attitude towards (concept) - reason for start - up business)			
Entrepreneurial motives (intentions)	✓ Lack of income (intentions income generation) ✓ Success of business is through my own effort ✓ Leadership style ✓ Solve problems single handed ✓ Very calm when faced with challenges		2

	✓ Find solutions to problems		
Managerial innovation & Initiative	✓ Develop new ideas ✓ Invest in research & development ✓ Innovative and creative ✓ Engagement / partnership with other companies (local, regional and international) ✓ Networking with other firms		2
Taking opportunities	✓ Risk taker ✓ Quick in exploring opportunities ✓ View problems as opportunities for growth		2
Self - sufficiency	✓ Quick to scan the environment ✓ Quick decision making ✓ Rarely seek business advice ✓ Often seek suggestions from family members		2
Perceptions towards risk manager	✓ Risk Manager (RM) makes informed decisions ✓ Risk Manager (RM) reports to CEO or Board of Directors ✓ Clear guidelines / framework for the Risk Manager (RM)		2,3,4,6
Other risk oversight	✓ Conduct ERM meetings on a regular basis ✓ View ERM as a continuous process ✓ Maintenance of risk register		2,3,4,6
Description	Common themes	Themes with different perceptions	Assigned number (see Table 6.2)
Leadership styles and principles of management			
Types of leadership	✓ Transactional leadership ✓ Autocratic leadership ✓ Bureaucratic leadership (power is dominant to one powerful individual) ✓ Hierarchical leadership (order of rank) ✓ Top-down approach (decisions are made at the top)		4,6
Application of Henri Fayol's 14 principles of management	✓ Division of work (segregation of duties) ✓ Authority and responsibility ✓ Unity of command ✓ Discipline		4,6
Description	Common themes	Themes with different perceptions	Assigned number (see Table 6.2)
Ensuring the success of a micro-lending entities			
Factors that influence growth, performance and competitiveness of a micro-lending company	✓ Bottom-up approach (decisions are made at each level) ✓ Transformational leadership ✓ Financial management and financial reporting		6

	✓ Compliance with laws, regulations and social & environmental related ethics ✓ Adoption of effective ERM and Sustainability framework ✓ Implementation of the disaster recovery plan ✓ Recognise ERM as a continuous process ✓ Effective HRM policies ✓ Technology and internet (supportive of intranet and extranet) ✓ Cloud software linked to NBFIRA (Daily control mechanisms) ✓ Recognise stakeholder management (apply Mendelow's power / interest matrix) ✓ Change management - learning organisation (apply Lewin's three-stage model) ✓ Good corporate governance (best practices) ✓ creating networking or partnership within local, regional and international businesses ✓ Strategically positioning (good, attractive, and proximity location) ✓ Education and training (life-long learning) ✓ Effective screening of credit clients ✓ Priorities sources of business ✓ Segregation of duties / powers		
--	---	--	--

Source: Own Source

The themes displayed in Table 6.3 above were obtained from the framework of the open-coding transcription of the interview analysis. The detailed discussion on the themes above were discussed based on the literature and the objectives of the study.

6.6 Discussion of the qualitative review from the open-coding findings

The study concentrated on the adoption of ERM and sustainability framework in micro-lending businesses in Botswana. The study sought to investigate why there is a high degree of closure of micro-lending businesses in Botswana. This section provides a description in relation to Table 6.3 above. Furthermore, the interview quotes from the participants are used to clarify the meanings attributed to the transcribed data. The quotes were taken exactly (direct) from the participants, therefore the chances of manipulating data were eliminated as these were direct words from the respondents' ideas. The study used direct quotes (words) in order to ensure credibility of the qualitative research as the data confirmed and validated some of the literature. In addition, the themes were purely obtained from the views of the participants working in micro-lending companies in Botswana. The participants were labelled as follows: (Front Line Officer = FLO01;

Risk Manager = RM01; Operations Manager = OM01; Accountant = ACC01; Human Resources Manager = HRM01; Loans Officer = LO01; CEO - Proprietor and Board Member = BM01), for more details see Table 6.1. The labelling of participants in this coding was important in promoting ethical issues related to anonymity. The discussion of the interview commences with descriptions of common themes by 8 participants and immediately followed by different perceptions, beliefs and opinions by employees and proprietors employed in micro-lending companies.

6.6.1 Demographic related problems

A business may be affected either positively or negatively by specific problems related to demographics. This is a problem if negative demographics are not addressed; they may hinder performance, growth or competitiveness of micro-lending businesses. This section covers the perceptions, beliefs and opinions of the participants towards demographics related problems in micro-lending companies.

6.6.1.1 Demographics factors such as age, gender, educational level and years of experience affect performance.

Performance of SMMEs including micro-lending businesses is affected by demographics factors and if this problem is not addressed, this may lead to bankruptcy or insolvency. Some of the common themes that emerged include age gap affects performance, educational deficiencies affect performance, gender differences affect performance, and lack of experience affects business performance.

- **Common themes**

Age may influence the performance of an individual and ultimately affect organisational performance. Many businesses have been forced to close due to an ageing employee structure (Aw *et al.*, 2007:435). Some of the participants believed that age, educational deficiencies, gender differences and lack of experience affect both individual and organisational performance.

The following were the quotes from the participants in relation to this common theme.

Code HRM01 said;

"In my opinion I think factors such as age, gender, educational level and experience contribute to poor performance, especially a person with a BGCSE Certificate [Ordinary Level] and is ageing in most cases they underperform. As a Human Resources Manager many line managers bring these cases to my attention."

Code CEO01 said:

"I have a problem with ladies and gentlemen who sometimes hold lower level of qualifications and are also ageing. These people sometimes sleep during working hours and I wonder why they are still coming to work, instead [of] retiring. If they retire it would be good as they have time to relax".

Code FLO01 said;

"I believe that age affect[s] performance because my uncle who was working in another micro-lending company in Gaborone was asked to go on early retire[ment] due to poor performance. I think gender also affect[s] performance if a company is managed by senior lady where there [are] many females there will be a lot of conflicts among them and at times they fail to manage each other because of difference in personalities and personal clashes".

Code RM01 said:

"I believe that all demographics factors affect performance because a young employee these days perform[s] much better than the old age as young people [are] computer wizards - understand technology, therefore perform excellently."

Code OM01 said:

"I think different sex such as gender affects performance especially ladies they sometimes perform badly if they are emotional charged. I have experienced that women bring their emotions to the work-place and this causes some of them to produce sub-standard piece of work."

Code ACC01 said:

"I recommend that age and experience is required for this nature of work, because if people are exposed to cash and money at an early stage of life, they tend to be involved in fraud. In my community the environment tends to favour employing females as they have a belief that women may [not] be vulnerable to stealing [fraud] than their male counter-parts. I recommend more ladies to be in this position without subjecting males to discrimination".

Code LO01 said:

"I think age affect performance as you grow old you may not perform the same as young individual. I know two people who have been given lighter duties due to ageing and they also finish work early in the afternoon, immediately after lunch they go home to rest. This affects performance because their positions are then covered by the remaining staff and this creates tension among young people and older people in our institution."

Code BM01 said:

"When I was working in one of the micro-lending companies, I had problems with young personnel because of their negative attitude towards work in terms of behaviour. Some were coming in late to work especially Mondays and some were coming drunk. At times you would see young people watching videos during working hours or playing music and What'sUp (social media). I discovered that young employees are now addicted to social media and it is important to always monitor them during working hours. It is important to balance young employees and older employees."

The participants agreed that demographic factors (See Table 6.3) affect individual performance and ultimately hinder organisational growth, performance and competitiveness.

- **Themes with different perceptions**

In this section there were themes with different perceptions on the challenges faced by micro-lending establishments in Botswana.

It is recommended that effective measures and policies should be implemented to avoid these challenges, this could eventually result in non- performance and ultimately closure of an enterprise. The objective 2 was addressed by this section (to determine the challenges that contribute to the closure of a micro-lending entities).

6.6.1.2 Demographics factors such as age, gender, educational level and years of experience influence adoption of ERM and sustainability framework

Interviews were conducted to find out whether demographic factors influence adoption of ERM and sustainability framework. It is imperative to understand the factors so that during implementation careful attention is given as they contribute to the challenges that affect the closure of micro-lending companies.

- **Common themes**

The following were the common themes which the participants interpreted as follows:

Code HRM01 said:

"In my opinion demographics factors influence adoption of ERM and Sustainability framework especially educational level because it will be easy to explain to an individual who is educated. Therefore, I support that demographics factors influence positively or negatively the adoption of ERM and Sustainability framework."

Code ACC01 said:

"In my view demographics factors such as age, gender, educational level and years of experience affect performance. The employees with low educational level may face challenges in understanding the ERM systems and terminologies. It is perceived that young people may adapt easily to ERM systems as they are good in understanding technology than elder people. Therefore, it is important to diversify workforce."

Code BMO01 said:

"I think demographics factors such as age, gender, educational level and years of experience affect both organisational performance and individual performance. Therefore, it is imperative to consider these demographics factors when making decisions."

The rest of the participants agreed that demographics influence the adoption of ERM and sustainability framework. Therefore, demographics factors should be considered when developing a working ERM and sustainability framework during the implementation stage.

6.6.2 Sources of risk that affect sustainability of micro-lending business

The sources of risk that affect sustainability of micro-lending business were identified as follows: credit risk, market risk, liquidity risk, interest risk, country risk, reputation risk, legal risk and operational risk.

6.6.2.1 Sources of risk

- **Common themes**

The following were the common themes which the participants interpreted as follows:

Code RM01 said:

"I agree that the sources of risk [in a micro-lending company] are credit risk, market risk, liquidity risk, interest risk, country risk, reputation risk, legal risk and operational risk."

Code BMO01 said:

"In my view credit risk is a major risk that affect micro-lending businesses as many clients [trade debtors] become defaulters. Sources of risk such as market risk, liquidity risk, interest rate risk, reputation risk, legal risk and operational risk contribute to sustainability problems in the micro-lending sector. A liquidity risk is also a common risk [threat] in this sector."

Code OM01 said:

"I think the main sources of risks which affect performance are credit risk and liquidity risk as these risks result in poor working capital management. In this sector many clients fail to pay their loans, and we get affected by the credit risk in this sector. There are other sources of risk that contribute to problems of sustainability in the micro-lending sector such as market risk, liquidity risk, interest rate risk, reputation risk, legal risk and operational risk. The liquidity risk is one that is also common in our sector as there is no capital adequacy ratio used to measure the performance of the business on day to day basis. In my view country risk does not affect performance of micro-lending companies."

- **Themes with different perceptions**

This was the only theme with different perceptions as country risk was perceived as not a serious threat to the business because there is peace in Botswana, this is based on participant OM01. This is a sign that there is a weak interpretation of risks in this sector since ERM does not only target on how peaceful the country is, but there are other factors connected to country risk such as change in the country's legislation and compliance related issues. Therefore, training and development is vital in this sector as a vehicle of awareness to sources of risk. However, all the participants except participant OM01 agreed that country risk affects performance of micro-lending companies.

6.6.3 Challenges that contribute to the closure of micro-lending entities

The challenges that are faced by SMMEs are similar to the challenges faced by micro-lending businesses in Botswana (See Chapter 3, Table 3.6).

6.6.3.1 Factors that contributed to closure of micro-lending entities

- **Common themes**

The following were the common themes according to the participants:

Code OM01 said:

“Based on my experience [as Operations Manager] the challenges we encounter in the micro-lending sector are lack of capital for setting-up a business and lack of trained staff [employees] in the sector.”

Code CEO01 said:

“In my view the challenges that influence the closure of micro-lending firms are that a sizeable number Chief Executive Officers [Proprietors] lack on how to delegate to others and often make decisions which negatively affect their businesses.”

Code RM01 said:

“In my opinion the major marketing challenge that is faced by micro-lending companies is the retention of customers, because of competition [threat] from the banking sector and the informal sector (unregistered micro-lenders).”

In summary the challenges which affected the performance, growth and competitiveness of micro - lending companies were lack of access to finance, lack of trained personnel in the sector, poor leadership and management style and poor customer relationship management. Therefore, it is imperative to address these challenges in order to address issues related to business continuity.

6.6.3.2 Reasons for starting micro-lending company

The reasons for starting micro-lending company (unemployment, survival, poverty, income generating to support extended family and independence) could influence the closure of businesses in this sector (see Table 6.3). These reasons may be linked to solutions which address socio-economic challenges hence most of the micro-lenders may not have any passion to become entrepreneurs.

The following were the common themes which the participants submitted:

- **Common themes**

The following are some of the quotes:

Code CEO01 said:

"I believe that the reasons for starting a business are as a result of unemployment and poverty and these also contributed to the closure of micro-lending businesses as some of the owners, at initial stage may not have any skills for starting up a business as they think of just making money."

Code BMO01 said:

"I think the reasons for starting business are survival and independence which influence the closure of business in the micro-lending sector because proprietors may not have that interest to start up a business. They are only using their business as a front to make cash."

In summary the participants agreed that closure of micro-lending businesses could be related to the reasons why proprietors started their businesses, which include: unemployment, survival, poverty, income generating to support extended family and independence. Therefore, this may imply that the majority of the proprietors were forced into entrepreneurship not by choice but due to circumstances beyond their control (socio-economic challenges).

6.6.3.3 Lack of preference of sources of business (priorities)

The study showed that there is no preference as to the reasons why clients borrow money. In some instances, the clients borrow money to spend on consumables that are not as important to merit a credit loan.

- **Common themes**

The following are some of the quotes:

Code FLO01 said;

"In my view some clients [customers] borrow money to spend on luxury items and they will then fail to pay their debts. Some clients [customers] are defaulters from large commercial banks hence they will come to borrow from us small businesses."

Code CEO01 said;

"In my opinion [the] majority of our clients borrow money for payment of their credit cards, personal loans to buy cars. However, few clients [customers] borrow money for home improvement, student loan, business loan, and mortgage."

Therefore, it is important to rank clients who borrow money in order to avoid defaulters. Furthermore, it is important to introduce collateral security against the credit loan as a way of safeguarding against defaulting of payments.

6.6.3.4 Lack of ranking strategies (external control mechanisms)

The policy maker should have some strategy for ranking of micro-lending companies and then allocate them capital adequacy ratio for monitoring purposes.

- **Common themes**

The following are some of the quotes:

Code CEO01 said:

“I think It is important to differentiate micro-lending companies so that they will not be treated the same. Therefore, the policy maker (NBFIRA) should be in a position to rank the micro-lending sector according to size and nature. This will assist when allocating funds.”

Code BMO01 said:

“In my opinion ranking of micro-lenders [in relation to capital and size] by the regulator [NBFIRA] will assist in the management and monitoring of micro-lending businesses.”

The outcome from interviews suggested that micro-lending should be classified or categorised according to size, capital, number of employees and number of years in operations.

6.6.4 Enterprise Risk Management (ERM)

ERM process should be implemented in any business set-up including micro-lending businesses as it enhances performance, growth, sustainability and assist in addressing problems related to business continuity. ERM is part of an organisational continuous improvement process, which is often championed by Risk Managers (Chief Risk Officers).

6.6.4.1 Primary factors for enterprise risk management

Primary factors for enterprise risk management include employee’s misconduct, processes, systems and external factors (e.g. natural disasters, fraud and political pressures) (See Table 6.3).

The following were some of the quotes on primary factors for enterprise risk management:

- **Common themes**

The following are some of the quotes:

Code RM01 said:

"I agree that primary factors for ERM should be championed by the Risk Manager, since he or she is responsible for monitoring and review of this process."

Code CEO01 said:

"In my organisation we have a dedicated Risk Manager [who] is responsible for the implementation of ERM systems and [continuous] monitoring of this process."

Code BMO01 said:

"Yes, our company manages primary factors for ERM through the help of a Risk Manager [who] is employed on a part-time basis. The monitoring of ERM systems is critical especially in micro-lending businesses hence the need to employ an expert."

The results show that successful ERM systems are supported by Risk Managers who report to the CEO of the entire organisation. Therefore, it is important for micro-lending companies in Botswana to employ Risk Managers in order to mitigate and manage risk.

6.6.4.2 Employee exposure

In risk management negative employee exposure should be avoided in order for an enterprise to achieve its intended objectives for ERM systems. Furthermore, a strategy which promotes awareness of employee exposure (See Table 6.3) to the entire organisation help the staff members to be committed and co-operate, hence negative exposure may be eliminated.

- **Common themes**

The following are some of the quotes:

Code HRM01, said:

"I believe that ERM systems should be embedded in the employees' job descriptions as some of them are of the opinion that it is not their responsibility."

Code CEO01 said:

"In my company employee exposures [negative] are explained in the employee code of conduct. This means that in my organisation employees go through orientation about negative exposure[s] which affect organisational performance and growth."

This shows that it is important for micro-lending companies to increase awareness in relation to employee exposure. Furthermore, promoting awareness on employee exposure in an enterprise could enhance productivity and ultimately result in achieving intended organisational goals.

6.6.4.3 Process exposure

Micro-lending businesses may improve their performance and growth if they promote employee process exposure within their entire organisation. In risk management it is perceived that employees should be exposed to organisational processes as a strategy of fostering effectiveness and efficiency of the entire organisation. Employees are the pillars of any business set-up hence they contribute to the success of an organisation. Therefore, it is important to involve them in understanding the organisation's processes, since they are key stakeholders.

- **Common themes**

The following are some of the quotes:

Code FLO01 said;

"I believe that employees should be exposed to organisational processes because they interact with customers on a day to day basis. If employees are exposed to processes, they will [employees] save customer's time since they become efficient."

Code OM01 said:

"In my view an understanding of the firm's processes may assist our business to grow through attracting more customers. I support our organisation to commit awareness for process exposure."

Code ACC01 said:

"As an Accountant I support process exposures as this reduce[s] the number of errors in procedures, processes and documentation. Therefore, I encourage micro-lending companies to promote process exposure."

Code LO01 said:

"I think as a Loans Officer; it is important to understand my firm 's processes [procedures] in order to avoid default customers [bad debts] as this affect the performance for our organisation. In my view all the employees who deal directly with customers should undergo a training related to processes, procedures and policies."

The results show that process exposures are vital to the survival of an organisation as the understanding of procedures, processes and policies promote the entity's reputation. It is believed that good processes in micro-lending companies may result in improved performance which could ultimately attract more customers and improves customer retention.

6.6.4.4 System exposure

In risk management it is believed that organisational systems play a significant role to the success of an enterprise hence the need to emphasize on the implementation of effective systems. Therefore, it is important for micro-lending companies to ensure that all staff members (employees) understand system exposures (See Table 6.3) related to their firm in order to remain competitive in this dynamic business environment.

- **Common themes**

The following are some of the quotes:

Code ACC01 said:

"My role as an Accountant is to ensure that all the employees in my firm understand and appreciate all the systems. I make sure that there is proper awareness of system exposures in order for us to minimise risk associated to poor procedures and system. I believe that risk related to poor procedures and systems has a cost implication."

Code RM01 said:

"I believe that a two-way communication process will assist my firm in the implementation of effective systems which help in achieving ERM objectives. In my organisation we believe in knowledge sharing among employees as a way of promoting employee morale because a happy workforce will boost productivity."

The results show that employees are the backbone of any successful system hence it is imperative to involve employees during the implementation of ERM processes. Therefore, micro-lending should ensure that employees are exposed to organisational systems in order to achieve ERM objectives.

6.6.4.5 External exposures

World-wide it is believed that organisations including micro-lending companies are subjected to external exposures (See Table 6.3) hence the need to increase the level of awareness. It is imperative for micro-lending companies to be aware of external exposures which may affect

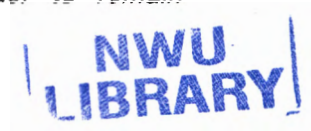
organisational performance and the entire business model. An understanding of external exposures by micro-lenders could assist in mitigating risk as it would be a threat to the business.

- **Common themes**

The following are some of the quotes:

Code CEO01 said:

"I believe that my role as a CEO is to understand external exposures and assists the firm to reduce the degree of risk. In my view it is important to understand the business environment changes in order to remain competitive in business."



Code BMO01 said:

"As a Board Member there is a need to bring information about the external environment which may affect performance in my firm. I believe that the information on external exposures assists in the implementation of ERM system."

Code OM01 said:

"My role as Operational Manager is to ensure that my subordinates are aware of external exposures. I think awareness to external exposures assist our firm to understand competition [threats] to our business."

Code LO01 said:

"In my view as a Loans Officer I need to scan the external environment so that I understand how our competitors [other micro-lending companies] are charging [pricing] their clients. I perform this activity in order to ensure that there is no over / under [charging] to clients. If we fail to understand external business environment competition may push us out of business."

The results show that external exposures are a threat to the performance of any enterprise hence the need to understand changes in the external business environment. Therefore, micro-lenders should understand threats which may affect performance. It is important for micro-lenders to implement effective ERM systems which could assist in identifying external factors that affect business model.

6.4.6 Elements of enterprise risk management

There are four elements of enterprise risk management which emerged from this study (See Table 6.3). These four elements are linked and connected to each other which implies that both should

be embedded in the ERM process in order to achieve organisational objectives. Therefore, if micro-lenders adopt ERM framework, all the four elements should be considered and missing any one of the elements could result in a serious lapses of the risk management processes.

- **Common themes**

The following are some of the quotes:

Code BM01 said:

"In my view it is important to recognise all the four elements of ERM in the entire organisation in order to enhance individual performance and organisational performance."

Code RM01 said:

"In my opinion I agree that elements of ERM should be integrated within ERM framework in order to achieve intended [organisational] goals."

The elements of ERM are vital to an effective and efficient ERM systems. Therefore, based on the perceptions of the participants these elements of ERM should be embedded in ERM and sustainability framework.

6.6.4.7 Appropriate methods of identification of various risk types

In risk management there are appropriate methods which are used for identification of various risk types (See Table 6.3). These appropriate methods assist firms in understanding sources of risk. In addition, if micro-lenders implement ERM framework it could be appropriate to use these methods to identify sources of risk and record in a risk register (See Annexure F). Furthermore, a risk register may assist micro-lenders to understand acceptable risk or risk appetite.

- **Common themes**

The following are some of the quotes:

Code ACC01 said:

"I assist my firm to use appropriate methods of identification of various risk types. In my firm common simple methods [workshops and discussions with peers] are used for risk identification."

Code RM01 said:

"In my role as a Risk Manager I often use process mapping and comparisons with other organisations [benchmarking] as appropriate methods of identification of various risk types. As a risk champion I record all identified risk in a risk register."

The results show that both the Accountant and Risk Manager use appropriate methods for risk identification hence micro-lenders could benefit if they use similar methods to identify sources of risk. In addition, the results show that the positions of an Accountant and Risk Manager are important in relation to risk identification. This implies that for micro-lenders to remain competitive they need to recruit experts such as Accountants and Risk Managers and as well maintaining these key positions.

6.6.4.8 Qualitative methods for measurement of ERM

Qualitative methods are the techniques used for measurement of ERM and this include the historical data to forecast the likelihood of potential loss, self-risk assessment and risk maps / process flows (See Table 6.3). The “Grid risk” of likelihood and impact can be used to measure and rank qualitative values of High, Medium or Low based on the likelihood of event occurring and the impact of the event to an enterprise. The outcomes as a result of risk measure and rank of qualitative values of High, Medium or Low are then recorded in a risk register, this assists in determining the acceptable risk or risk appetite of an enterprise. It is perceived that firms which apply this method to measure ERM are likely to meet their set standards as this technique enhance performance. The use of this technique requires experience and expertise and in most cases the Accountants and Risk Managers often perform this task as they are trained as risk professionals.

- **Common themes**

The following are some of the quotes:

Code ACC01 said:

“I think it is important to use the Risk Grid as it assist to identify the likelihood and impact of risk. The Risk Grid is a good tool as it enable management to identify risk values as [High, Medium or Low]. Our company uses a risk register to record the risk values obtained from the Risk Grid.”

Code RM01 said:

“Based on my experience as a Risk Champion, qualitative methods require expertise and majority of companies [micro-lending companies] avoid using these techniques. I have observed that failure to use appropriate qualitative methods as a measurement of ERM may affect a firm’s performance.”

The results show that it is imperative to use qualitative methods to identify the risk values as this assist a firm in establishing its risk appetite (acceptable risk). In addition, the results have shown

that application of qualitative methods as a measurement of ERM is challenging hence micro-lenders are encouraged to engage expertise such as Risk Managers and Accountants in order to accomplish organisational goals.

6.6.4.9 Quantitative methods for measurement of ERM

Quantitative methods for measurement of ERM are techniques used by firms to calculate future operational risks. The techniques used for quantifying future operational risks is commonly known as stochastic modelling. A stochastic modelling is used to calculate operational risk and this assist to establish severity, likelihood of operational risks and takes account of the loss history (statistical distribution analysis). There are two types of stochastic modelling as follows: impact models and likelihood models. Impact models are used in determining the impact of operational risk events through exponential distributions and the likelihood are used to perform estimate frequency of future operational events. These techniques use heavily mathematical and statistical tools and require individuals with high intelligence quotient (High IQ). Therefore, if micro-lenders adopt quantitative methods for measurement of ERM in their strategies, they need to recruit professionals with high level of IQ who make quick and accurate decisions.

- **Common themes**

The following are some of the quotes:

Code ACC01 said:

"I think most of the firms they do not know how to use the quantitative methods as techniques for measuring ERM. I have seen that these methods [quantitative methods] involve mathematical and statistical calculations which are challenging. I have observed that wrong calculations affect organisational performance."

Code RM01 said:

"As a Risk Manager I have learnt that there are few [er] individuals who have the competence for calculating future operational risks using quantitative methods [stochastic modelling]. I have also observed that small companies fail to afford the salaries for such practitioners as they are on high demand."

It is evidenced from the results above that the application of quantitative methods as techniques for measurement of ERM are complex hence professionals with high IQ should be engaged. The practitioners and professionals who are responsible for risk championing are scarce and expensive hence micro-lenders could outsource these services in order to achieve their ERM objectives.

6.6.4.10 Control measures

Control measures are vital to survival of any enterprise hence the need to put in place effective and efficient internal controls, policies, procedures, financial and risk reporting mechanisms. In risk management, companies that fail to put in place effective control measures may be subjected to corporate failure due to poor performance. It is therefore, recommended that micro-lenders should put in place effective control measures in order to avoid problems related to going concern.

- **Common themes**

The following are some of the quotes:

Code LO01 said:

"I think effective controls measures depend on the top management [senior management] as some override internal controls. I believe if top management override [manipulate] internal controls as they use the powers vested in their offices, it is a disaster for corporate failure as junior staff may also do the same."

Code CEO01 said:

"In my opinion a lot of companies are either successful [fail] because of the CEO's attitude towards internal control [control measures]. I have noticed that a CEO who support control measures, succeed in his [her] work and a CEO who does not support control measures will produce results which are mediocre."

The results show that top management are the pillar for effective control measures hence they need to embrace and support effective and efficient internal controls, policies, procedures, financial and risk reporting mechanisms. Therefore, top management in the micro-lending companies should support and promote effective control measures in order to avoid corporate failure. In addition, top management in the micro-lending sector should lead with example as role models, so that junior staff could adopt and implement similar principles of best practices.

6.6.4.11 Risk financing techniques

Risk financing techniques are the activities which provide a platform for reimbursement of losses which occur and financing of other programmes that reduce uncertainty and risk or that enhance positive outcomes. The following are examples of risk financing techniques: risk transfers to third parties (insurance companies), risk retention (funded) and risk retention (unfunded). It is imperative for micro-lenders to integrate risk financing techniques into the strategic planning in order to remain in business (business continuity).

- **Common themes**

The following are some of the quotes:

Code LO01 said:

"In my view a business that offers credit loans [micro-lending] is risk [y] and requires understanding of risk financing techniques. I have observed that there are a lot of clients who are defaulters [bad debtors] and this threaten our business survival as the amounts of bad debts are very high, year on year. I think the best solution to our problem is proper implementation of risk financing techniques, especially third parties insurance companies."

Code OM01 said:

"On my current position I have written huge amounts of bad debts [defaulters] due to uncertainty of our business. In my view the only way forward is to introduce a protection insurance cover for each borrower 's loan book balance. Otherwise if risk financing techniques are not implemented, we will witness several micro-lending companies closing their businesses."

The results show that there is a problem in relation to bad debtors (defaulters) in the micro-lending sector and failure to address this challenge could result in corporate failure. Therefore, micro-lenders are recommended to implement risk financing techniques as strategies which promote business continuity.

6.6.4.12 Alignment of ERM to business strategies

In risk management it is critical to align ERM with business strategies and these activities to be successful they require commitment and support from senior management. In addition, it is perceived that poor mission statement, vision and strategic objectives create problems related to business continuity. Therefore, firms including micro-lenders should treat ERM as part of continuous improvement as this is an ongoing activity. Furthermore, micro-lenders should put in place an inclusive risk management structure, which involve all personnel and the board of directors taking the lead to the entire team. Finally, for micro-lenders to be able to achieve set goals, there should be a Capital Adequacy Ratio (CAR) in place that is controlled and monitored through the regulator (NBFIRA).

- **Common themes**

The following are some of the quotes:

Code CEO01 said

"I have observed that it is important to get support and commitment from top management in order to achieve strategies which align with ERM initiatives. I have experienced that if top management fail to support alignment of ERM to business strategies, the firm will not achieve its goals."

Code BMO01 said:

"As a Board Member I should be seen to be motivated to drive the agenda that supports alignment of ERM to business strategies. I know firms which have closed operations because of poor mission statement, vision, strategic objectives and failure to align ERM to strategic objectives."

The results have shown that, for ERM strategies to be successful, they need support and commitment from senior management especially the board of Directors and Chief Executive Officers. In addition, the Board of Directors should be able to align ERM to the strategic plans in order to achieve intended organisational objectives. Finally, senior management in the micro-lending businesses should be committed to align ERM to business strategies to remain competitive in this turbulent business environment.

6.6.4.13 Profitability and liquidity ratios

Financial accounting is considered as historical financial information that is used to measure and communicate the economic performance of an enterprise to all the organisational stakeholders. In financial management, financial accounting is a tool that is used for reporting performance of an enterprise against set standards and any deviations are subject to investigation. In addition, organisational performance may be measured using accounting ratios (See Chapter 2, Table 2.15) which are concepts derived from the following perspectives: financial management, financial accounting and management accounting. In financial management it is perceived that successful organisations measure performance using both profitability and liquidity ratios (See Chapter, 2 Table 2.15). Therefore, micro-lenders should use profitability and liquidity ratios in order to achieve their intended business objectives, otherwise the sector could continue experiencing challenges related to business closure.

- **Common themes**

The following are some of the quotes:

Code CEO01 offered the following observation:

“Our company uses key ratios such as gross profit margin and current ratio. My company does not use the ratios such as Return on Asset (ROA) and Return on Capital Employed (ROCE). However, we have learnt from these interviews that we should apply profitability and liquidity ratios that are applicable to our nature of business in order to measure our firm’s performance. It is also important to engage an Accountant as part of an executive team. It is also encouraged to have separation of duties in order comply with the principles of corporate governance and best practices.”

Code ACC01 said:

“Based on my knowledge of financial management, [Financial] accounting ratios are key to a success of an organisation. Therefore, training should be conducted which is related to the application of these ratios otherwise without training, it will be difficult to understand the concepts behind this activity.”

Code RM01 said:

“I would like to suggest a daily Capital Adequacy Ratio [CAR] which will be monitored by NBFIRA [regulator] and policy maker. In my view the CAR will assist in addressing issues surrounding closure of micro- lending businesses.”

The results generally imply that the micro-lending sector in Botswana is not fully using financial accounting ratios to measure organisational performance hence the need to introduce an integrated daily Capital Adequacy Ratio (CAR) for monitoring purposes. In addition, micro-lending companies should use the GAAP applicable to SMMEs in Botswana (See Chapter 2, Table 2.13) during the preparation of financial statements in order to achieve financial management objectives. Furthermore, it is advisable for micro-lenders to use techniques for analysing capital expenditure projects (See Chapter 2, Table 2.16) in order to venture into a profitability and viable business.

6.6.4.14 Corporate governance cultures (best practices)

Corporate governance plays a major role in the strategic planning of an entity's enterprise risk management. Corporate governance culture is a way in which an organisation is governed or controlled, thus behaving in an ethical manner, application of best practices and compliance with laws and regulations. It is perceived that good corporate governance enhances organisational performance and poor (bad) governance may lead a firm into liquidation or closure as in the case

of micro-lending companies in Botswana. In addition, companies that comply with the the codes of good governance and principles of corporate governance (See Chapter 2, Table 2.17), achieve the following benefits: good and fair ethical culture, good performance, effective control and legitimacy. It is therefore, recommended that micro-lending companies should incorporate King's report and best practices applicable to SMMEs in order to address issues related to business continuity and business closure.

- **Common themes**

The following are some of the quotes:

Code BM01 said:

"I support that senior management of [any] organisation should comply with the principles of corporate governance [best practices] as their company will earn credibility from all the stakeholders. I think, if top management fail to respect codes of good governance, their company may be subjected to reputational risk and eventually loss business to competitors"

Code CEO01 said

"I have experienced that organisations with best practices [good governance] perform much better than those with poor corporate governance. I would like to encourage micro-lenders to comply with good principles of corporate governance in order to turnaround their businesses."

Based on the participants' perceptions it is vital to comply with the principles of corporate governance as this assist an entity to perform excellently, as well as gain good corporate image. It is from this background that micro-lending companies should incorporate principles of corporate governance to remain in business and avoid issues related to corporate fail, which is very high in this sector.

6.6.4.15 Critical success factors for stakeholder management

In risk management it is believed stakeholder management is critical to the survival of an enterprise. Stakeholder management is the balance between economic, social, legal environment and ethics in the environment in which the business is operating from. In addition, top management should understand that it is important to communicate with all the stakeholders connected to their firms. Therefore, micro - lending companies should be able to analyse stakeholder attributes / traits (See Table 6.3) in order to understand their behaviour and influence (interests and power).

Furthermore, micro-lenders should put in place clear policies related to each stakeholder as a strategy that enhances good relationship with the entity.

- **Common themes**

The following are some of the quotes:

Code CEO01 said:

"In my view companies with clear policies on stakeholder management are much better than those who do not have any policy. I think stakeholder management assist senior management in resolving any conflicts which may affect relationship among the stakeholders."

Code BM01 said:

"In my firm stakeholder management help us to identify the behaviour each stakeholder group. We have seen that understanding of stakeholder behaviour help[s] our organisation to know each stakeholder's influence and it is then much easier to deal and handle them."

The results show that it is important to understand the critical success factors for stakeholder management as this assist in meeting their expectations. In addition, it is crucial for firms to meet stakeholder expectations as they are key to the success of the business. Therefore, it is recommended that micro-lending companies should be able to incorporate the interests and power of each stakeholder group in order to remain competitive in business. Furthermore, if micro-lending companies fail to incorporate interests and power for each stakeholder group this may result into poor relationships which could ultimately lead into liquidation or business closure.

6.6.5 Critical success factors for development of micro-lending company (proprietor perceptions, beliefs, opinions and attitudes towards - research for start - up business)

This section target proprietors or business owners as it is important to understand the motive (intention) which influences the proprietors / owners to start their micro lending businesses. The intention for setting-up a micro-lending business may have an influence or a bearing on performance, growth and competitiveness of the business hence the need to interview this target group.

6.6.5.1 Entrepreneurial motives (intentions)

The reasons for starting a micro-lending business vary from individual to individual as they are different pull and push challenges in each person's life. Based on the themes emerged from this qualitative study, entrepreneurs are described in two-fold: passion driven philosophy and socio-

economic driven philosophy. The results from this study are more inclined towards the socio-economic driven philosophy which include: unemployment, survival, poverty, income generating to support extended family and independence.

- **Common themes**

The following are some of the quotes:

Code CEO01 said:

"I started this business as a way of creating employment after so many years of being unemployed. I [often] make decisions single handed because, success of this business is through my own effort and sweat."

Code BM01 said:

"I had to venture into this business in order to generate [earn] income to support my extended family. I had to borrow P20,000.00 which was needed for setting-up a micro-lending business. I had to employ people to run this business because of lack of knowledge about this business [micro-lending business]."

The results show that many of the participants started their businesses for income generating purposes. The challenge is that majority of the participants started business as a vehicle for addressing socio-economic problems and it could be prudent to initiate training and development interventions related to entrepreneurship development skills. Entrepreneurial development skills may assist micro-lenders in changing their mindset in relation to business development and how to make winning (positive) decisions.

6.6.5.2 Managerial innovation and initiative

It is believed that successful organisations use highly sophisticated technology and organise their innovation efforts through generation of new ideas and research and development initiatives. In addition, high performing enterprises partner with other companies both locally, regionally and internationally. Based from the themes which emerged in this qualitative study, majority of micro-lenders are not investing in research and development.

- **Common themes**

The following are some of the quotes:

Code BM01, said:

"In my company costs are very high and we do not spend money towards research and development. I feel that research and development is for large corporations and not for small businesses."

Code CEO01 said:

"I have discovered from this interaction that our company should network with other firms. Our firm has been operating without benchmarking with other companies both local, regional and international"

The results imply that some of the participants are not promoting research and development. It is believed that firms who fail to invest in research and development may not generate new business ideas. It is perceived that firms which embrace innovation and creativity perform much better than traditional organisations. Therefore, it is vital for micro-lending companies to adopt strategies which enhance an understanding of managerial innovation and thus help in networking with other firms. Finally, if micro-lenders partner or engage with other companies it may assist to be strategically positioned through knowledge sharing that could ultimately address problems related to business continuity.

6.6.5.3 Taking opportunities

It is believed that successful entrepreneurs are risk takers as they are quick to explore any available opportunities. Risk takers are perceived as individuals who view problems as opportunities for growth. In risk management it is important to understand the degree of risk as High, Medium or Low so that the business could be able to determine their acceptable risk (risk appetite). Based on the themes which emerge from this qualitative study micro-lenders are risk takers, but they are not able to establish their risk appetite which is a threat to the survival of micro-lending companies.

- **Common themes**

The following are some of the quotes:

Code BM01, said:

"I believe that in life we survive through risk, I see risk everywhere and starting a business is risk[y]. In life people should take advantage of any opportunities, even if they fail one day, they will definitely make it."

Code CEO01 said:

"In my opinion it is good to convert threats [risk] into opportunities. I am a risk taker that is why I started this business. I believe if one fails to grab opportunities he will be overtaken by events [competition]."

The results imply that majority of the participants are risk takers, but the only challenge is on how to mitigate and manage risk. Therefore, it is vital for the micro-lending sector to introduce ERM systems which could assist them in realising their dreams (goals). It is recommended that the

micro-lending companies could use the past mistakes to turnaround their businesses as part of the lessons learnt from the invention of electric light bulb by Thomas Alva Edison. The history of the electric light bulb was an opportunity which was discovered by Edison and was associated with a risk (threat) as he experienced one thousand (1,000.00) mistakes during his invention. It was perceived that Edison made 1,000.00 unsuccessful attempts to invent the electric light bulb and the following is a conversation between Edison and the reporter:

Quotes for the invention of the electric light bulb:

Reporter's question (quote):

"How did you feel to fail 1000 times?"

Thomas Edison replied (quote):

"I did not fail 1000 times [but] the light bulb was an invention with 1000 steps."

The bulb invention story discussed above reflects the characteristics of a risk taker, who does not give up on opportunities quiet easily. Therefore, micro-lenders should learn from Edison's invention that perseverance yield high dividends.

6.6.5.4 Self-sufficiency

In entrepreneurship space, self-sufficiency is encouraged as a strategy to determine whether the founder(s) of the firm is able to supply own needs or make decisions without external assistance or contribution. Based on the themes which emerged from this study, self-sufficiency include but not limited to: quick scan of the environment, speed in decision making, rarely seek external advise and often depend on the suggestions from the extended family. In this 21st century it is important for organisations to be both inward-looking and forward-looking where the founder(s) should use own knowledge and share knowledge with external environment, also known as internal and external benchmarking in business management arena. It is believed that failure to benchmark may result into poor administration of enterprise as in the case of micro-lending businesses, where a significant number of micro-lenders closed their operations due to poor performance.

- **Common themes**

The following are some of the quotes:

Code CEO01 said:

"In my organisation I rarely seek external advise because as a founder I make all the decisions that affect [my] business. I think it is not necessary to seek help from other people who did not put any pula in my business venture. I rather fail to run the business on my own."

Code BM01, said:

"I rely on my own ideas. I am not a person who takes other people's ideas because I struggled to raise the capital for my business, I suggest that if anyone want to make [any] decisions they should start their own businesses."

The results show that the participants are traditionalist who fail to understand both inward-looking and forward-looking philosophies hence a paradigm shift is required in the micro-lending businesses. The paradigm shift could assist the micro-lenders to be flexible as they may be able to provide both internal and external benchmarking to their businesses. Therefore, failure to change in the way they run their businesses may lead in some firms continuing to close operations hence an intervention is needed through an adoption of ERM framework.

6.6.5.5 Perceptions towards Risk Manager

A Risk Manager is viewed as an important senior official in relation to mitigation and management of risk in most of organisations. It is believed that a Risk Manager is part of the executive management team who makes informed decisions which assist firms to perform well in a competitive environment. In some instances, Risk Managers report to the CEO of the company or to the Board of Directors and this shows how this position is highly respected in ERM.

- **Common themes**

The following are some of the quotes:

Code CEO01 said:

"I have seen that at times senior management in our sector override the decisions that are made by the Risk Manager. I have observed during our interaction that [Risk Manager] plays an influential role which may lead a firm to high heights or to its grave."

Code BM01, said:

"I noticed during the interview that Risk Manager's position is key to the survival of an organisation. I will definitely recommend the recruitment of a Risk Manager if we happen to adopt an ERM framework in our organisation."

The results show that the participants respect the position of a Risk Manager. In addition, this position of Risk Manager is viewed as key to the survival of an organisation. Risk Managers are scarce in most countries including Botswana and it could be prudent to recommend micro-lending companies to engage them on a part-time basis. Furthermore, Risk Managers are expensive

hence the idea for employing these practitioners on part-time basis should be highly considered in the micro-lending sector.

6.6.5.6 Other risk oversight

In risk management it is important to conduct ERM meetings on a regular basis with all the employees for the entire organisation. Based on the results from the study most of the micro-lending companies do not have ERM systems in place hence ERM meetings are not common in the sector. However, micro-lending companies are aware of ERM systems, which are viewed as part of continuous improvement process. Therefore, it is imperative for micro-lending companies to adopt an ERM framework as a strategy that could assist in addressing problems related to business continuity which is prevalent in this sector.

- **Common themes**

The following are some of the quotes:

Code BM01, said:

“In my organisation I treat other risk oversight seriously [and] in future we will consider ERM as part of [our] continuous improvement process.”

Code CEO01 said:

“As a CEO of my organisation I support ERM systems. I think if we introduce ERM systems in our firm, meetings will be held on regular basis. I will encourage my team to keep a record of all risk types in a risk register. I know that at the moment my subordinates are not maintaining any risk register.”

The results show that participants are aware of other risk oversight and willing to adopt ERM systems in their organisations. In addition, participants believed that ERM framework is part of a continuous improvement process. Therefore, it is prudent to recommend an adoption of ERM systems in the micro-lending companies as a strategy for addressing problems related to poor performance in the sector.

6.6.6 Leadership styles and principles of management

6.6.6.1 Types of leadership

The participants were convinced that using both autocratic, bureaucratic and hierarchic type of leadership is not sustainable and is likely to affect the enterprises’ going concern. These types of leadership (autocratic, bureaucratic and hierarchic) have influenced low morale, high absenteeism, lack of co-operation among team members and high labour turnover. The use of such types of

leadership could have contributed to the closure of micro-lending companies in Botswana due to poor performance.

- **Common themes**

The following are some of the quotes:

Code CEO01 said:

"In my company I often use autocratic type of leadership as I do not want workers to make decisions related to cash management. I make decisions on my own because I am the only person [who] invested money in my business."

Code BM01, said:

"I have seen that in our sector we use [either] autocratic, bureaucratic and hierarchic type of leadership, which originates from the boss mentality syndrome. The boss mentality syndrome is where decisions are only made by the owner or [board member] and no one else is allowed. When I am emotionally charged, I may tell employees that this is my company not your company period."

The results show that proprietors use autocratic, bureaucratic and hierarchic types of leadership which tends to affect performance of subordinates. It is perceived that employee with low morale could produce mediocre type of work, which may lead into reputational risk. A paradigm shift is recommended in the micro-lending sector from autocratic, bureaucratic and hierarchic to transformational leadership. The paradigm shift could foster employee morale and boost productivity which ultimately addresses the problems associated with closure of businesses in the micro-lending sector in Botswana. In addition, the micro-lending companies should empower employees in order to get good results and remain in business.

6.6.6.2 Application of Henri Fayol's 14 principles of management

In strategic management it is encouraged to apply Henri Fayol's 14 principles of management in order to meet intended strategic objectives. The new Henri Fayol's 14 principles of management (See Chapter 2, Table 2.19) advocates for employee empowerment, alignment of team members to organisational goals and horizontal team structure. Therefore, senior management in the micro-lending companies should adopt Henri Fayol's 14 principles of management as strategy to improve performance, growth and competitiveness in the sector.

- **Common themes**

The following are some of the quotes:

Code CEO01 said:

"In my opinion organisations that apply Henri Fayol's 14 principles of management perform much better. I have discovered that in our sector we do not regularly use [Henri Fayol's 14] principles of management. I think the challenge is that the sector lack competencies on how to apply these principles."

Code BM01, said:

"I have experienced that most firms in our sector often apply division of work, authority and responsibility, unity of command and discipline for Henri Fayol's management principles. I have seen that the use of these principles of management [in our sector] is limited."

The results have shown that majority of micro-lending companies are not fully applying Henri Fayol's 14 principles of management. Therefore, micro-lending companies in Botswana are encouraged to apply Henri Fayol's 14 principles of management in order to remain in business and at the same time become competitive. In addition, micro-lending companies should be trained on how to apply Henri Fayol's 14 principles of management as a strategy for enhancing knowledge, skills and competencies for senior management in the sector.

6.6.7 Ensuring the success of micro-lending entities

There are several strategies which ensure success of an enterprise including micro-lending entities, if they are properly executed. Based on the themes emerged from this qualitative study, factors that influence growth, performance and competitiveness of a micro-lending company are shown in Table 6.3.

6.6.7.1 Factors that influence growth, performance and competitiveness

- **Common themes**

The following are some of the quotes:

Code BM01, said:

"I believe that transformational leadership is the type of leadership which influence the success of any organisation. I think this type of leadership empowers subordinates to make decisions and at the same time promote high morale which translate into high productivity. I believe that, if there is high productivity the organisation will meet its intended goals."

Code CEO01 said:

"I think a firm which uses a bottom-up approach perform much better than a firm that adopts top-down approach. I have seen that decisions are [quickly] made at each level in a bottom-up approach as compared to a top-down approach."

The results show good observations as they all promote productivity and an environment where decisions are quickly made. It is, therefore, prudent to recommend micro-lending companies to adopt transformational leadership and bottom-up approach. In contrast, if employees are having low morale, they perform badly which may result into losses or loss of business. When there is poor performance or low productivity the company may be forced into liquidation as in the case of micro-lending companies in Botswana.

6.7 Chapter summary

This chapter covered all the suggestions from the participants which could contribute in the development of a framework for ERM and sustainability (See Chapter 7). The suggestions from the literature review and participants support the survival of the micro-lending sector in Botswana. It is therefore imperative that some of the suggestions are implemented internally by the micro-lending business and some implemented by the policy makers. Finally, the sector should work hand in hand with the policy makers such as NBFIRA and Botswana Unified Revenue Authority (BURS). The micro-lending firms should ensure compliance in order to avoid unnecessary fines and penalties imposed on them by these regulators. The next chapter focuses on the framework for ERM and sustainability in micro-lending companies in Botswana based on the participants' perceptions and opinions.

CHAPTER 7: A FRAMEWORK FOR ENTERPRISE RISK MANAGEMENT AND SUSTAINABILITY IN MICRO-LENDING COMPANIES IN BOTSWANA

7.1 Introduction

The previous two chapters of this study presented the results and interpretation of quantitative and qualitative methods. This chapter focuses on the framework for ERM and Sustainability which could be appropriate for micro-lending companies in Botswana. The design of enterprise risk management and sustainability framework was informed by inputs from the results of the survey and from interviews which were carried out from proprietors, owners and employees working for micro-lending companies. Proprietors should spearhead implementation of these responses with help from their employees. ERM and sustainability initiatives and proposed strategies should be considered in micro-lending companies as they may improve growth, performance, competitiveness and sustainability in this sector in Botswana. Lessons learnt from micro-lending companies that are doing well, especially in Bangladesh (Grameen Bank) and from literature review, contributed to the development of the enterprise risk management and sustainability framework presented in this chapter.

7.2 Related literature on ERM process and its integration to the ERM and Sustainability framework

Lyon and Popov (2016:46) developed a risk management model with specific steps taken when mitigating risks. This model is used in many companies but requires some modification to suit the context of micro-lending companies in Botswana. The framework for this study incorporated and recognized the contribution from both quantitative surveys and qualitative methods in order to make it applicable in the context of micro-lending in Botswana. Furthermore, risk financing technique is a phenomenon and idea that was developed to address uncertainty events by Beasley *et al.* (2015:220) and this was also incorporated in this working framework for enterprise risk management and sustainability developed for the context in Botswana. The risk financing technique will assist both micro-lending sector and the policy makers (NBFIRA) to predict current and future risk which is uncertain to identify the actual costs. The risk financing technique was also developed due to unethical practices and uncertainty events which happened such as scandals, corruption, catastrophic incidents on the environment (global warming), industry competition and corporate failures.

It is from this background that most of the micro-lending companies in Botswana have closed businesses due to corporate failure and this may have been precipitated by lack of effective ERM and sustainability systems. Furthermore, COSO (2013:1) views enterprise risk management as a continuous process which calls for the constant monitoring of both positive and negative aspects within enterprises. Most important is negative risk as it affects the enterprise's performance, growth and competitiveness. Pojasek (2011:88) developed a risk register which is used to record and

constantly monitor the impact and likelihood of different types of risk. This tool could also be used in the micro-lending companies to record and monitor the different types of risks lurking in the micro-lending sector. The risk register could also be used as a checklist by the regulator (NBFIRA) during audit period of the micro-lending companies. In brief, the risk register describes the type of risk, nature, the impact and its likelihood. Therefore, a Risk Manager and team of subordinates may use the risk register to record different types of risk in their micro-lending businesses which could be reported to the Chief Executive Officer on a regular basis. Furthermore, the challenges faced by SMMEs from the study conducted by Gagoitseope and Pansiri (2012:52) are almost similar to the challenges faced by micro-lending businesses in Botswana. These challenges hinder growth, performance and competitiveness of both micro-lending businesses and SMMEs and as a result lack of effective enterprise risk management and sustainability framework could lead to business closure. Therefore, a framework for ERM and Sustainability in this study could address the problems related to growth, performance, competitiveness and business continuity. The contribution of this study lies in that it protects current and future enterprises and assists micro-lending enterprises to succeed hence create future jobs, by so doing meeting the country's main objective of creating jobs through SMMEs at the same time reducing the level of poverty. Furthermore, this promotes economic growth and enhances the growth of the gross domestic product which ultimately results in a higher rating of the national economy. This will create good relations with other countries and the economy would have promote equity among the citizens.

7.3 Contribution of participants to the framework for ERM and sustainability in micro-lending companies in Botswana

Participants in this study suggested various strategies which could be incorporated into enterprise risk management and sustainability for micro-lending companies in Botswana in order to improve the growth, performance and competitiveness in the entire micro-lending sector. Therefore, improvement in the performance in the micro-lending sector will stimulate economic growth and promote the entire population to be prosperous, which is the main goal of the country. Furthermore, stimulating economic growth will ultimately result in creating more current employment and future employment opportunities which will align with one of the country's goals of reducing poverty. The following are some of the aspects suggested by the participants and incorporated into a framework for enterprise risk management and sustainability in the micro-lending sector:

- Stakeholder management
- ERM reporting including risk register
- Human resources management policies
- Education and training (life-long learning)
- Enterprise risk management structure (organogram)
- Daily Capital Adequacy Ratio (CAR) integrated through cloud software

- Ranking strategies of micro-lenders (by the regulator)
- Financial reporting and financial management
- Corporate governance culture
- Risk management process
- Transformational leadership
- Prioritise sources of business
- Communication

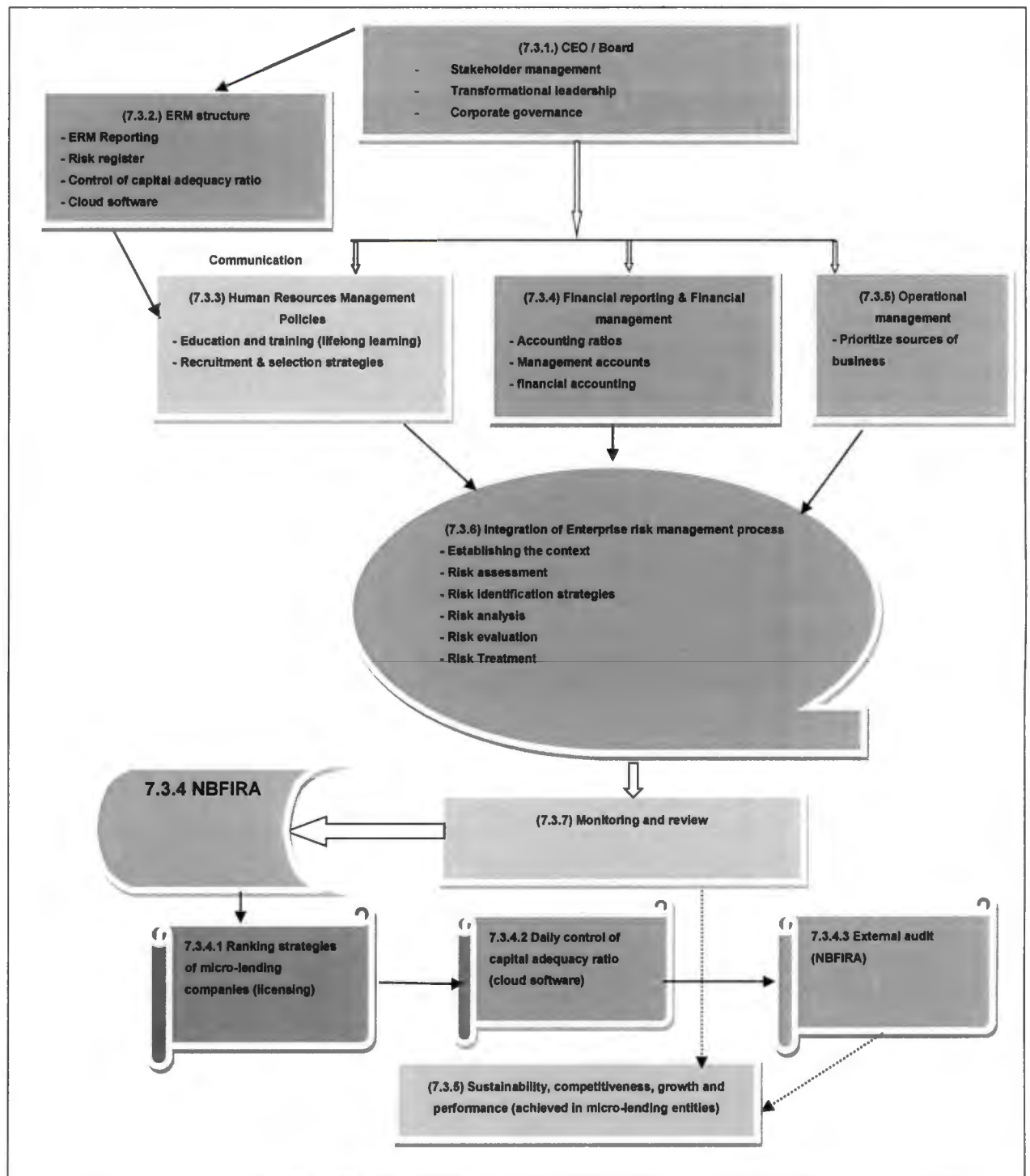


Figure 7.1: A Framework for ERM and Sustainability in micro-lending companies in Botswana

Source: Own Source

7.3.1 CEO / Board

A framework for ERM and sustainability (Figure 7.1) starts from the CEO and the board since they are the drivers of strategy. The participants and the literature insisted that the CEO and board of directors ought to support and commit themselves to ERM systems. The senior management

should commit themselves to supporting the following in order to achieve a successful effective and efficient ERM and sustainability: stakeholder management, transformational leadership, corporate governance, effective processes, policies and procedures.



7.3.2 ERM structure

This framework for ERM and sustainability advocates for the separation of ERM structure where Risk Manager and team champion the implementation of ERM systems through the following: ERM reporting, risk register, control and monitor Capital Adequacy Ratio (CAR). The Capital Adequacy Ratio (CAR) is authorized capital by the regulator (NBFIRA), which needs to be monitored on a daily basis and any discrepancy or fluctuations of the closing balance should be reported. This is monitored through cloud software connected as extranet between a micro-lending company and the regulator, NBFIRA. This assists the micro-lending sector to achieve an effective cash flow management system which averts the company's exposure to risk in terms of business continuity.

➤ **What is cloud software?**

The following are the quotes from Anderson and Rainie (2010:8) for the definition of cloud:

"A cloud is an elastic execution environment of resources involving multiple stakeholders and providing a metered service at multiple granularities for a specified level of quality (of service)".

"To be more specific, a cloud is a platform or infrastructure that enables exaction of code (services applications) in a managed and elastic fashion."

Cloud is an online platform that allows execution of tasks in various forms across multiple resources, related to manageability, elasticity and system platform independence (Anderson & Rainie, 2010:8). Figure 7.2 demonstrates how cloud software operates and this is the same way it is adopted by NBFIRA, with the relation to linking to the micro-lending sector, based on the studies by Anderson and Rainie (2010:8).

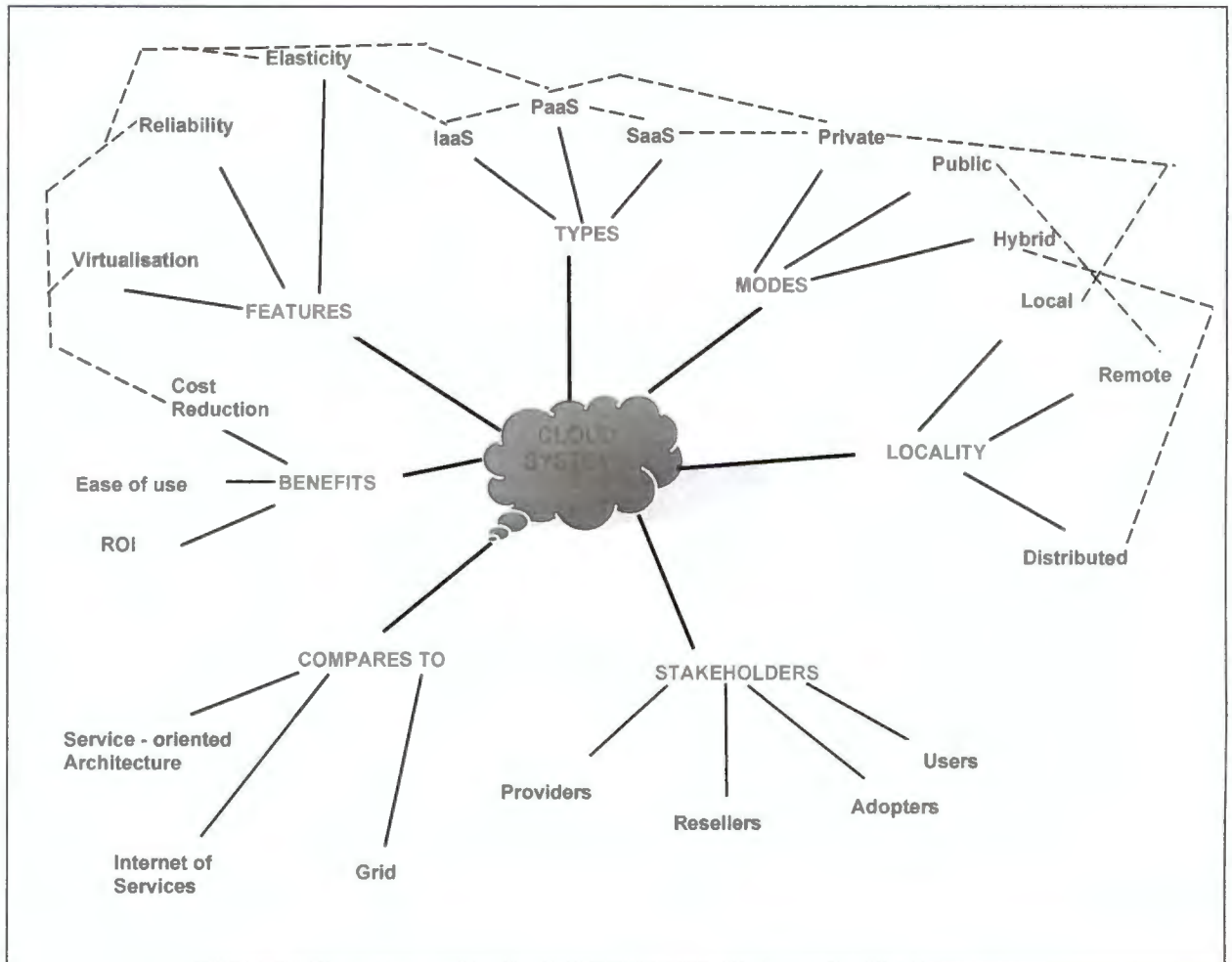


Figure 7.2: Non - exhaustive view on the main aspects forming a cloud system

Source: Adapted from Anderson & Rainie, (2010:8).

The following are the main types of clouds (currently in use) based on a study by Anderson and Rainie (2010:9)

- **Cloud Infrastructure as a Service (IaaS):** This is also known as the *Resource Cloud*, and it provides manageable and scalable services to the user. This ultimately provides enhanced virtualisation capabilities. Therefore, different resources may be provided through a service interface. In the case of micro-lending both NBFIRA and individual micro-lending firms will be users of the cloud and a service interface will be either “MASCOM”, “BEMOILE” or “ORGANGE”. In addition, computer clouds provide access to computational resources such as the Central Processing Units (CPUs), Smartphones and Laptops.
- **Cloud Platform as a Service (PaaS):** This is perceived to provide computational resources through the cloud platform upon applications and services that can be developed and

hosted. The PaaS has dedicated applications that control the behaviour of a server hosting engine which replicates and executes user requests for example access rates. Therefore, both NBFIRA and the micro-lending sector will be connected to the server using internet and this is known as *Cloud*. The benefits of the cloud systems include: cost reduction, ease of use and Return on Investment (ROI). The ROI is achieved in a more favourable manner which implies that the benefits of using cloud outweighs the cost expenditure associated to implementation of cloud.

- **Cloud Software as a Service (SaaS):** This is also known as the Service or Application Cloud which offers recommendations to specific business functions and business processes that are provided with cloud capabilities. For example, Sage Pastel Accounting and Quick Books provide applications / services using cloud infrastructure or platform (application accounting software functionality is offered within a cloud). This implies that micro-lending sector will then produce their accounts using real-time processing and can be accessed by the regulator / policy maker (NBFIRA) through a dedicated server (cloud) at anytime and anywhere in the world. Therefore, the features for cloud systems are *elasticity*, which triggers *reliability* and *virtualisation* that would be enhanced through this platform. It is, therefore, imperative to recommend NBFIRA to connect with the micro-lending sector in order to promptly access information with each micro-lending firm so that those not performing may be assisted immediately rather than wait for information which will be outdated. This implies that any non-performing micro-lending firm will be flagged immediately, and attention is then given through the daily Capital Adequacy Ratio (CAR) as it would be below the prescribed threshold from the regulator. Finally, this will assist in addressing the problems associated with sustainability, business continuity, growth and poor performance, which are currently prevalent in the micro-lending sector.

7.3.3 Human resources management policies

The Risk Manager, as a champion, will communicate with human resources management practitioners to implement effective human resources policies that support diversity in the workforce. Furthermore, effective policies could be developed to empower both genders to continue learning and promote lifelong learning as part of the continuous professional development. In addition, human resources should maintain and upgrade robust recruitment and selection policies which strategically position the business. Finally, the human resources management should view the workforce as assets which are important for managing the rest of the other intangible assets hence promoting human capital initiatives.

7.3.4 Financial reporting and financial management

The senior management and employees should believe that financial reporting and financial management are the tools used for measuring performance within an enterprise. A failure in producing financial statements, budgets, cashflow projections, management reports and interpretation of accounting ratios may result in bankruptcy and insolvency as in the case of micro-lending companies in Botswana. Therefore, production of the financial statements should be treated as part of senior management functions and failure to comply may result in heavy penalties being imposed upon the entity and its senior officers. Therefore, the following should be part of the ERM and sustainability continuous improvement process: interpretation of accounting ratios, financial accounting, financial management and management accounting. The financial statements should be embedded in the ERM and sustainability framework as part of the reporting mechanism to NBFIRA.

7.3.5 Operations management

The mitigation of risk should start from the operational level of the entire organisation during the process and screening of clients. Furthermore, the Operations Manager and team should champion the screening of clients in order to reduce the number of clients becoming defaulters. Financial management and statistical tools should be implemented in the operational process for monitoring the recruitment of clients. This could be a strategy which avoids clients turning into bad debtors as they impact on the performance of the enterprise and at times threaten the entire firm to close the business. Therefore, the team that offers loans should have guidelines which prioritize the reasons for borrowing from clients which include sources of business such as credit card, mortgage, home improvement, business loan, car loan, student loan, personal loan, payday loan. Furthermore, the loan officers should ascertain the collateral loan security in order to safeguard any uncertainty of defaulting.

7.3.6 Integration of ERM process

The Risk Manager should integrate the ERM process that includes the following: establishing the context, risk assessment, risk identification, risk analysis using both qualitative and quantitative methods, risk evaluation and risk treatment. These elements would assist in managing and mitigating risks.

7.3.7 Monitoring and review

A framework for ERM and sustainability advocates for continuous constant monitoring and review of ERM processes. This should be the responsibility of all the employees including the support and commitment from senior management. This ERM system should be both internally and externally monitored.

7.4 NBFIRA

A framework for ERM and sustainability requires support from the policy makers such as NBFIRA in order to remain functional. Therefore, NBFIRA as regulator of micro-lending activities, should work closely with this sector and any deviations to compliance must attract heavy penalties and fines. Furthermore, the businesses should be well-funded through initiatives from the policy makers in order to avoid the closing of business as evidenced in this study in the case of micro-lending businesses.

7.4.1 Ranking strategies of micro-lending companies (licensing)

It is imperative to rank all the licensed micro-lending businesses in order to allocate each business with a Capital Adequacy Ratio and value to be maintained daily.

7.4.2 Daily control of Capital Adequacy Ratio (CAR)

A Capital Adequacy Ratio (CAR) should be implemented in this sector. The CAR is authorized capital ratio by the regulator (NBFIRA), which needs to be monitored on a daily basis and any discrepancy of the closing balance should be reported. This will be monitored through cloud software connected as extranet between a micro-lending company and the regulator NBFIRA. A detailed explanation and definitions of cloud software are in section 7.3.2 of this study. This is likely to assist the micro-lending sector to achieve an effective cash flow management system which limits possibilities of exposure of the company to risk in terms of business continuity.

7.4.3 External audit (NBFIRA)

The regulator should perform routine and random audits where the following should be produced by each micro-lending firm: risk reporting, training programmes, risk structure and ERM initiatives. The financial reports should be audited both by NBFIRA as well as external auditors from established and reputable firms. This promotes credibility of the financial statements.

7.4.4 Sustainability, competitiveness, growth and performance (achieved in micro-lending companies)

Promoting all the above suggestions implies that the problems of business continuity will be addressed. Therefore, a framework for ERM and sustainability promotes going concern, competitiveness, growth and performance of the micro-lending sector as whole.

7.5 Chapter summary

This section covered concepts and practices related to business continuity which are currently prevalent in the micro-lending sector. However, if these suggestions are implemented, especially the applications surrounding the funding (access to finance) and the implementation of Adequacy Capital Ratio (CAR) would improve the entire sector. Finally, an improvement in the micro-lending

sector could influence the creation of new jobs and maintenance of current jobs hence this facilitates in the reduction of the level of poverty in the country. The next chapter proffers conclusions and recommendations directly derived from this study.

CHAPTER 8: KEY FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

This final chapter builds from the discussion and interpretation of the results from the previous chapter. It draws conclusions which are directly related to the main research questions posed in this study. In addition, the chapter discusses the contribution of this study on the role of enterprise risk management in the development of micro-lenders for the future. This chapter draws conclusions from empirical findings, the qualitative results, and identifies the major contributions proffered to the body of knowledge through developing an integrated perspective of corporate governance culture and leadership in micro-lending companies and providing an integrated framework for enterprise risk management and sustainability, defining and delineating the role of accounting, reporting and internal controls for micro-lending companies. In essence, the chapter offers empirical validation of theoretical propositions, informing and providing guidelines to policy at institutional level that promote growth, competitiveness, going concern, principles of management and Generally Accepted Accounting Principles (GAAP) applicable to micro-lending companies. All these contribute to improved standard of living, charting the contribution to future research, limitations of the study, and offer recommendations for future work, specifically the implications for future study.

8.2 Conclusions from empirical findings

Based on the findings drawn from descriptive statistics, it is concluded that ERM process in Botswana is growing at a slow pace and overall risk management best practices are still at an infant stage in developing countries. The study examined if sources of risk, internal controls and compliance to legislation and corporate governance enhance going concern in the micro-lending sector in Botswana. The findings demonstrate that micro-lending firms fail to mitigate and manage risks and are exposed to problems related to going concern, hence resulting in bankruptcy and liquidation. The study concludes that Botswana is characterised by a high failure rate of micro-lenders, whereby majority of firms close operations within two years from the date of inception. The study concludes that there is a sharp decrease in numbers of micro-lending firms in Botswana which are attributed to a lack of awareness in ERM systems and failure to understand the interpretation of financial statements by shareholders / owners or managers in the NBFIs. Against this backdrop, this study investigated the determinants of ERM and their effects on going concern and developed an integrated framework of ERM and sustainability for enhancing critical survival and business continuity in the micro-lending sector in Botswana. ERM provides guidance on internal controls and minimises corporate failure, financial crises and fraudulent activities (Cohen *et al.*, 2014:1178). In addition, the findings for this study concur with those submitted by Arena *et al.* (2010:661) which advocates for aligning control activities with policies and procedures in order to enhance effective control measures that lead to reduction of operational costs. The study

concludes that a reduction in operational costs implies that more profits are then invested into the business and this could provide opportunities for further business growth.

Most of the studies in Botswana have focused on examining the critical challenges and Government initiatives for development of SMMEs, with a view to understanding organisational performance, growth and competitiveness. Unlike the aforementioned studies in Botswana, on critical challenges in the micro-lender sector, this one is an empirical study that examined sources of risk in the micro-lending businesses and their influence on improved organisational competitiveness, growth and going concern. The study concludes that proprietors in the micro-lending sector are employed in their businesses as Chief Executive Officers (CEOs) and in most cases make decisions that adversely impact on the survival of an enterprise. The findings revealed that CEOs as owners of their businesses override internal controls and any other mechanisms which could inhibit them getting access to valuable assets. The study concludes that due to this dominance by proprietors, organisational performance, growth and competitiveness are then compromised, and this ultimately leads into maladministration, corruption, weak internal controls and poor best practices. This implies that problems associated with business continuity which culminate in corporate failure are attributed to a lack of good corporate governance, especially at leadership level. The study concludes that ERM integrates and embraces the concept of good governance which advocates transparency and accountability within the leadership and management of an enterprise (Cohen *et al.*, 2014:1178).

Therefore, the findings amply demonstrate that good corporate governance enhances organisational reputation, thereby enhancing the entity's profitability which is also linked to going concern. In addition, poor corporate governance affects the entity's going concern due to factors associated with bad publicity, level of education, and ineffectiveness, which lead to reputational risks and ultimately result in bankruptcy as in the case of micro-lending companies in Botswana. The findings revealed that most of the people working in the micro-lending sector are certificate and diploma holders and this rather low level of education could affect the performance for both the individuals and the organisations. The study concludes that low level of education could be a factor contributing to a lack of understanding of, interpretation of financial statements, how to implement effective internal controls and put in place best practices related to corporate governance. The study concludes that compromising on effectiveness and efficient preparation of financial statements could significantly affect performance, growth and competitiveness of a micro-lending business. Financial statements are used as tools for decision-making hence require a significantly high degree of financial appreciation which is lacking in the micro-lending sector. The majority of the micro-lenders employ accountants and risk managers on a part-time contract due to lack of appreciation of the importance of these key positions.

The role of accountants and risk managers is critical to the survival of any enterprise as they are involved in the implementation of effective internal controls which fosters profitability and organisational growth. The study concluded that accountants and risk managers champion the risk management process of an enterprise hence their positions are critical, and this is lacking in the micro-lending sector in Botswana. In addition, the findings revealed that most of the employees working in the micro-lending sector are not well trained, and this could expose the entire sector to high risks, associated with challenges connected to business continuity. The study concludes that lack of training in the micro-lending companies creates a huge gap which is characterised by poor performance that ultimately culminate in the liquidation of such entities.

The findings revealed that females are predominant than male counterparts in the micro-lending sector in Botswana. This study concluded that more woman occupy senior positions such as CEOs and Board Members in the micro-lending sector in Botswana. The studies by Ngo and Wahhaj (2012:6) suggest that policy makers promote women empowerment in the sectorial small businesses which provides a wider social benefit. This business concept is the brainchild of initiatives voiced at the Beijing Conference "Beijing Declaration and Platform for Action 15th September 1995". The main outcome from the Beijing Conference was to promote entrepreneurial goals that enhance equality, development and peace for all the woman everywhere in the interests of all humanity. Therefore, the results from the Beijing Declaration (1995) established mechanisms where the voices of both females and males were to be treated the same within the cherished paradigm of *equal rights* or *gender equality*. Furthermore, apart from the Beijing conference, there are many other theories that support female empowerment at both household and work-place levels. A bargaining theory is a good example of a theory that advocates for women as effective negotiators as they could bargain on behalf of their households. The bargaining theory is privileges the fact that women are powerful in bargaining and negotiating credit loans hence they can secure credit loans. If women access credit loans which are extended to the spouse, then this accrues significant benefit to the household and the entire community. This study concludes that if male counterparts are given more preference to credit loans, the proceeds may not benefit the entire community. The money received by males from loans may be deviated and used secretly, implying that women act as responsible persons. In contrast, the bargaining theory views this concept differently, as it conceptualises woman borrowers as heavily loaded with household duties and responsibilities making them tend to become defaulters. If women become defaulters, then the concept of being powerful negotiators could be diminished, resulting in poor access to credit loans. This study concludes that lending money to women exposes micro-lenders in Botswana to high risk since woman have many debts which they fail to systematically service.

The findings revealed that youth dominate as proprietors and employees in the micro-lending companies in Botswana. The study concluded that micro-lenders employ young people between

the age 18-30 years who have just completed senior secondary school or tertiary education level. This implies that it is easy for micro-lending companies to attract the youth to work in their institutions as they would be desperately looking for employment. In addition, the study concluded that youths accept minimum wages and low salaries as they are both exposed to social and economic challenges. It was concluded that there is a decline in employing age group between 41-50 years in this sector, who would exhibit maturity and experience attained during their working life period. The study concludes that there is no diversity of employees in this NBFIs which enhances sharing of ideas and information.

The findings revealed that there is a preponderance to employ those whose nationality are Motswana in the micro-lending sector. This shows that the micro-lending sector promotes the localization policy which encourages firms to employ majority of locals. The study found that micro-lending companies are some of the government-initiated undertakings which promote job opportunities for local citizens, particularly youths. The study concluded that there are several schemes in Botswana which were established to create employment especially for vulnerable women and youths and micro-lending firms are not an exception. In addition, the study identified that there are several initiatives which restrict foreign nationalities access to employment due to localization policy. The localization policy encourages employers to give preference of employment to Batswana locals in order to fulfil a national objective of poverty alleviation at the same time improving the standard of living for locals. The study established that expatriates could be offered employment in some instances, perhaps where there are scarce skills and a shortage of critical skills; otherwise locals must benefit based from the localization policy. Based on this localization policy, the study concludes that locals are preferentially protected because of restrictive measures in terms of issuance of work permits to non-citizens. Therefore, the application for work permits is meticulously and rigorously checked before any permits are approved. The study concludes that there is some balance between locals and other nationalists as this promotes diversification of skills and knowledge-sharing that is facilitated through skills transfer especially from the highly skilled expatriate labour cohort.

The findings reveal that employment status in the micro-lending sector is more on the full-time aspect rather than part-time basis. The study concluded that micro-lending sector faces challenges related to huge salary bills that call for the stringent elimination of key positions of an Accountant, Risk Manager and Board Member. In addition, employers in the micro-lending sector are of the view that employing of full-time employees bring effectiveness and efficiency into the enterprise. However, critics of full-time employment believed that part-time employees are more effective as they want to maintain their short-time contracts. The findings reflected that the minority positions for part-time jobs are normally occupied by people from other nationalities. The study concluded that there is a relationship between part-time positions and compliance with localization policy. The

reasons why these few employees managed to secure a part-time positions in the micro-lending companies is because they possess scarce skills which may override restrictive employment regulations. The study concludes that the micro-lending sector discourages diversification which could promote creative innovation and ultimately result in rich information sharing among the employees and good workmanship.

The findings revealed that the highest qualifications for proprietors and employees in the micro-lending sector are professional certificates & diplomas. The study concluded that micro-lenders employ individuals with professional certificates and diplomas because they are easy to attract in terms of low salary packages offered. In addition, the study concluded that it is difficult for micro-lenders to attract prospective employees who hold postgraduate qualifications such as honours' degree, master's degree and doctoral degree as they normally demand hefty salary packages. The study found that prospective employees with postgraduate qualifications are mostly attracted to work within the banking sector, medium to large businesses and large corporations. Furthermore, the study concluded that it is rare to find qualified employees with doctoral degrees working outside the tertiary and research sector (education and research industry). However, a small proportion of employees with doctoral degree qualifications are either occupying Chief Executive Officers (CEO) positions, Board Member positions or they are the owners of the micro-lending businesses (proprietors). The study found that in some instances, those with a doctoral degree get employment in the micro-lending sector for purposes of gaining experience and once they are experienced it becomes much easier for them to penetrate the job market in large institutions. Therefore, the study concludes that it is easy for micro-lending companies to attract youths to work for their firms because they are desperate, and without extensive experience. The findings in this study are corroborated by those of a study by Hanushek and W ößmann (2006:66), which identified that SMMEs sector employs majority of youths due to the similar reasons alluded above.

The results revealed that a majority of the participants are not involved in ERM adoption (97.8%) hence the need for training and development of the entire sector. The findings of this study imply that there is little involvement in the adoption of ERM systems in micro-lending companies. The results imply that there is high risk in terms of mitigation of risk in micro-lending companies hence the need for an effective framework for ERM and Sustainability. Framework for ERM and Sustainability may assist micro-lending firms in implementing effective internal controls and accounting systems which could contribute in mitigating risk. The study found that effective ERM systems, internal controls and financial reporting influence an organisation to prosper and continue to operate into the foreseeable future and this evidence is supported through findings of a study which was conducted by Sheedy and Griffin (2017:2).

Based on the factor analysis, the study concludes that the challenges which face micro-lending companies include: customer relationship management, organisational design, managerial background, human resources management development, working capital, marketing activities, managerial activities, investment analysis, social-economic problems (interest rates, inflation and retrenchments), technological changes, competitive strategy, personal factors, attracting and recruiting suitable staff, experience in owning or running a business, business location / business site, accessibility of growth financing sources, strict government regulations, financial liquidity of P20,000.00 to be maintained at all times and ownership of enterprise being individual proprietor. Based on the findings from this study, micro-lenders should address the aforementioned challenges in order to remain viable and achieve a good business model which influences growth, competitiveness and performance. These findings concur with studies conducted by Mutoko (2014:29), which revealed similar challenges faced by SMMEs and threaten business survival and growth. In addition, the study concluded that marketing challenges / constraints affect performance of micro-lending companies in Botswana. The findings revealed that the marketing challenges / constraints include product / service marketing, marketing research and information, pricing policy and strategy, trained sales staff and promoters and market segmentation. This implies that there are several marketing challenges / constraints that affect performance, growth and competitiveness of micro-lending companies. According to Temtime and Pansiri (2004:20) marketing action in strategic management is perceived as a pillar to a success of an enterprise hence the need for firms to invest heavily in marketing strategies. This implies that for business continuity and attaining objectives for a business model, micro-lenders should have robust marketing strategies. These findings concur with those of a study conducted by Mutoko (2014:29), which identified similar challenges that are faced by SMMEs. Therefore, the study found that micro-lending companies should have robust marketing strategies in their overall business strategic plans in order to remain competitive.

Based on the factor analysis, the study concluded the micro-lending sector is faced by challenges related to lack of leadership styles, lack of application of management principles and poor corporate governance culture. In addition, the study concluded that micro-lenders use autocratic and bureaucratic leadership which contributed to poor profitability and ultimately resulted in bankruptcy and liquidation of firms in this sector. The study finally concluded that it is imperative for proprietors / owners in the micro-lending sector to change from transactional, autocratic and bureaucratic leadership to transformational leadership in order to remain in business.

Derivative from the factor analysis which was carried out on profitability and liquidity ratios, the study concluded that micro-lenders rarely apply accounting ratios such as return on assets (ROA); return on equity (ROE); debt to assets ratio; capital gearing ratio; interest cover; earnings per share; price / earnings ratio (P/E Ratio); dividend pay-out ratio; dividend yield; dividend cover;

current ratio; acid test ratio; inventory turnover; creditor payment period; debtor collection period; gross profit margin and profit margin. The study found that in financial management, profitability and liquidity ratios are used to measure organisational performance and financial soundness of an entity. Practitioners and scholars such as (Florio & Leoni, 2017:57; Hoyt & Liebenberg, 2011:808; Swamy, 2011:41) concur that organisations that fail to apply accounting ratios such as profitability ratios and liquidity have challenges related to going concern. The study found that micro-lending companies in Botswana are faced by going concern challenges, that is, year on year as reflected with empirical evidence from (NBFIRA, 2014:17). The findings revealed that challenges related to licensing requirements for micro-lending company particularly on the area of financial liquidity whereby P20, 000.00 is used as the initial capital for start - up of a micro-lender. The study concluded that initial capital of P20, 000.00 appears to be a small amount to cater for working capital. Therefore, the study concluded that a micro-lender should maintain a certain ratio similar to the model that is used in the banking sector referred to as *Capital Adequacy* (Basel III). According to Grody and Hughes (2016:130) *Capital Adequacy* (Basel III) is a tool used for evaluation, monitoring and controlling of financial well-being of the financial services sector, particularly in a banking sector. The *Capital Adequacy* is measured by the leverage ratio which measures the liquidity of the bank and this is an initiative that was introduced during the financial crackdown, the period following the global financial crisis.

This study adopted a similar concept from the financial institutions as the characteristics of the banking fraternity resonate well with the micro-lending sector. The study found that micro-lending companies depend heavily on financial reporting (financial statements) which are perceived to be historical and may not immediately assist in detecting or predicting the current and future financial stability of an enterprise. Therefore, it was concluded that it could be prudent for micro-lenders adopting a framework for enterprise risk management and sustainability that comprises a *Capital Adequacy Risk Ratio* and link between NBFIRA, and micro-lending firms through technology (cloud - software - SaaS). In addition, NBFIRA could then flag micro-lenders which show red signals and then these would be advised accordingly through financial advisors before it is too late for the micro-lender to close operations.

8.3 Conclusions from qualitative results

The following were the results drawn from the overall qualitative results. There were a number of challenges which affected going concern in the micro-lending sector in Botswana. The following are some of the key summaries for the challenges faced by the micro-lending sector in Botswana based on the qualitative results:

The study concludes that micro-lenders did not understand how the application of stakeholder approaches or dimensions affect the ultimate growth of an enterprise. A failure to understand the

concept of stakeholder approaches or dimensions contributes to the closure of micro-lending businesses in Botswana. In addition, failure by micro-lending companies to deal or treat stakeholder interest or power resulted in reputational risk which exposed this sector to going concern problems. (CIMA, 2016:6; King, 2016:61) concur that stakeholder conflicts are represented in three different dimensions as follows: *The Shareholder Value Approach*, *The Stakeholder Approach* and *The Stakeholder Inclusive Approach*. The definitions for the three approaches are explained as follows:

- 1) ***The Shareholder Value Approach***: This is the view on corporate governance that the directors should run the company with the objective of maximizing the wealth of its owners, the equity shareholders (CIMA, 2016:6; King, 2016:61).
- 2) ***The Stakeholder Approach***: This is the view on corporate governance that directors should be permitted to run the company in a way that balances the interests of the equity shareholders with those of other stakeholders, particularly the employees. This is also known as the Pluralist approach (CIMA, 2016:6; King, 2016:61).
- 3) ***The Stakeholder Inclusive Approach***: This is the view on corporate governance that the directors should run the company in the interests of the equity shareholders, but taking into consideration the interests of other stakeholder groups (CIMA, 2016:6; King, 2016:61).

The study finally concluded that it was imperative that senior management in the micro-lending companies be able to distinguish between *The Shareholder Value Approach*, *The Stakeholder Approach* and *The Stakeholder Inclusive Approach* as this could assist in prioritizing the needs of all stakeholders within their entities (Zech, 2013:683).

The study finally concluded that there are three approaches applicable to corporate governance as far as practical real-life is concerned. From a financial management perspective, both the shareholder value approach and the stakeholder approach are not favourable as they do not promote the interests of all the stakeholders. Therefore, the stakeholder-inclusive approach, also known as the pluralist concept, is generally accepted from a financial management perspective because it promotes the interests of all stakeholders. In addition, the study found that there is a debate that consideration of interests of all the stakeholders could reduce returns / dividends for shareholders or shareowners. The study found that it is from this background that senior management for micro-lending companies are in the dilemma of satisfying and balancing conflicting and competing interests between different stakeholders (Zech, 2013:683).

The study concluded that senior management for micro-lending companies in Botswana are responsible and accountable to shareholders or investors hence the need to fulfil the goals for achieving high share price and high-income returns. In a financial management perspective, it is perceived that when there is a higher risk there are higher returns and if there is a lower risk then there is a lower return (Correia *et al.*, 2015:31). The study found that it was imperative for micro-lenders to understand the application of a power / interest matrix which was developed by Mendelow in 1991 (cited in (CIMA, 2016:51). The Mendelow power / interest matrix (1991) is shown on Figure 8.1.

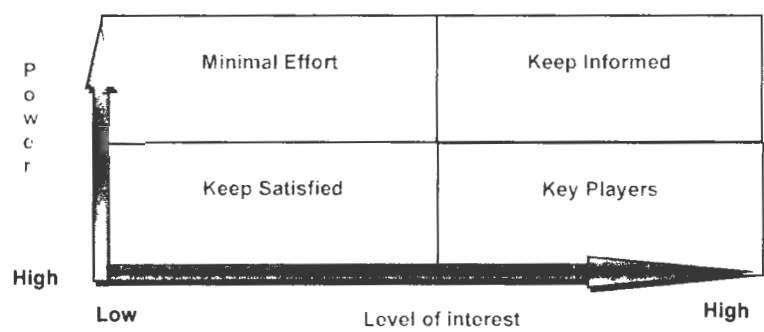


Figure 8.1: Mendelow Stakeholder Mapping: Power / interest matrix

Source: Adapted from CIMA, 2016:51

The following is a brief discussion on the Mendelow Stakeholder Mapping: Power / interest matrix:

- **Minimal power:** These stakeholders lack interest and power hence they are open to influence. The stakeholders in this quadrant are more likely than others to accept what they are told and follow instructions (CIMA, 2016:51). The study concluded that the quadrant represents employees working in the micro-lending firms.
- **Keep informed:** The stakeholders in this quadrant are interested in the enterprise's strategy but lack the power to initiate anything. Therefore, management needs to convince opponents to the strategy that the plans have been justified because they would try to gain power by joining hands with parties with high power but low interest (CIMA, 2016:51).
- **Keep satisfied:** The main task for the stakeholders in this quadrant is to keep them satisfied in order to avoid them gaining interest to move to the key players' quadrant. This may involve reassuring these stakeholders of what is expected from the outcomes of the strategy well in advance (CIMA, 2016:52).

- **Key players:** The stakeholders in this quadrant are the main drivers of change and they may be a significant barrier to management plans if they are not treated properly and with caution. Therefore, these stakeholders' participation in the planning process is very important. Finally, the study concludes that management in the micro-lending firms are expected to constantly communicate with this group of stakeholders in relation to business plans (business model) and discuss the issues related to implementation and execution of these business plans (CIMA, 2016:52).

The study found that rigid leadership styles (transactional, autocratic, bureaucratic, hierarchical and top-down approach) are common in the micro-lending businesses. It was concluded that proprietors and senior management in the micro-lending sector use most of these leadership styles; transactional, autocratic, bureaucratic, hierarchical and top-down approach. The study found that rigid leadership styles which are commonly used in the micro-lending businesses tend to discourage a philosophy of employee empowerment as it demotivates higher performing employees. Therefore, if leadership styles which are rigid fail to be monitored and controlled, these could lead to low morale which results in low productivity. Therefore, low productivity could lead to low profits, which ultimately results in liquidation as the case with micro-lending businesses in Botswana. The study concluded that leadership in the micro-lending sector is encouraged to adopt transformational leadership. In addition, the study found that there are benefits associated with transformational leadership such as employee empowerment, employee recognition, increase in employee morale and high productivity. Should all these positive benefits achieved, the businesses in the micro-lending sector could be profitable, and this might ultimately enhance going concern in the sector.

The study found that micro-lenders in Botswana are limited to specific types of principles of management which include: division of work, authority and responsibility, unit of command and discipline. In addition, the study found that a majority of the senior management in the micro-lending sector normally use only four principles, from the 14 principles of management developed by Henry Fayol (See Chapter 2, Table 2.19). The study concluded that it is important to apply all the 14 principles of management developed by Henry Fayol in order to gain credibility in the environment within which micro-lending businesses operate. The study found that in the case of micro-lending businesses in Botswana the integrity of leadership might be often questionable as it is perceived to be associated with poor management and bureaucratic leadership styles (for example abuse of office, personality dominant and overriding of internal controls). The study concluded that some of these unethical behaviours could cause poor performance and bad publicity which might lead to problems related to going concern. Heames *et al.*, (2010:490) argue that effective management, good administration and effective leadership could be achieved through integration of the entity's goals together with 14 principles of Henry Fayol. The study found

that proponents of Henry Fayol's management theory such as (Heames *et al.*, 2010:490; Robbins & Barnwell, 2006:13; Wren, 2001:476) believe that firms which integrate organisational goals with the 14 principles of Henry Fayol tend to achieve set goals and therefore it is important to motivate micro-lenders to apply these 14 principles.

The study found that micro-lenders fail to use accounting ratios and there is less application of budgetary control. In addition, it was found that a majority of the micro-lending businesses do not apply all the useful and relevant accounting ratios which are applicable to their business environment. The study concluded that minority of the micro-lenders are of the view that application of budgetary control might enhance business operations. Finally, the study concluded that it is important to encourage micro-lending businesses to use accounting ratios and apply budgetary control (budgets) in order to monitor organisational performance.

The study found that there is lack of training and development (lifelong learning) in the micro-lending sector in Botswana. In addition, the study established that most of the micro-lenders fail to understand the processes and policies which are related to this sector and hence this resulted in employees doing what they call "*cutting corners*". The study concluded that the consequences of "cutting corners" result in huge debt balances (large amounts of defaulters) to an extent of failing to collect amounts being owed which are then classified as irrecoverable. It was concluded that training and development and human resources management policies are key to success in this sector as they reinforce positive performance of an enterprise.

The study found that there is poor communication coupled with the rigid leadership styles such as transactional, autocratic, bureaucratic, and hierarchical and top-down approach identified in the micro-lending sector which promote a one-way communication process. The study concluded that micro-lending sector is encouraged to promote a two-way communication, which results in increased staff morale and high productivity. The study concluded that for a two-way communication process to be achieved in the micro-lending sector, a three-stage model of change management developed by Lewin (1947:199) cited in CIMA (2016:516) could be adopted in the sector (See Figure 8.2).

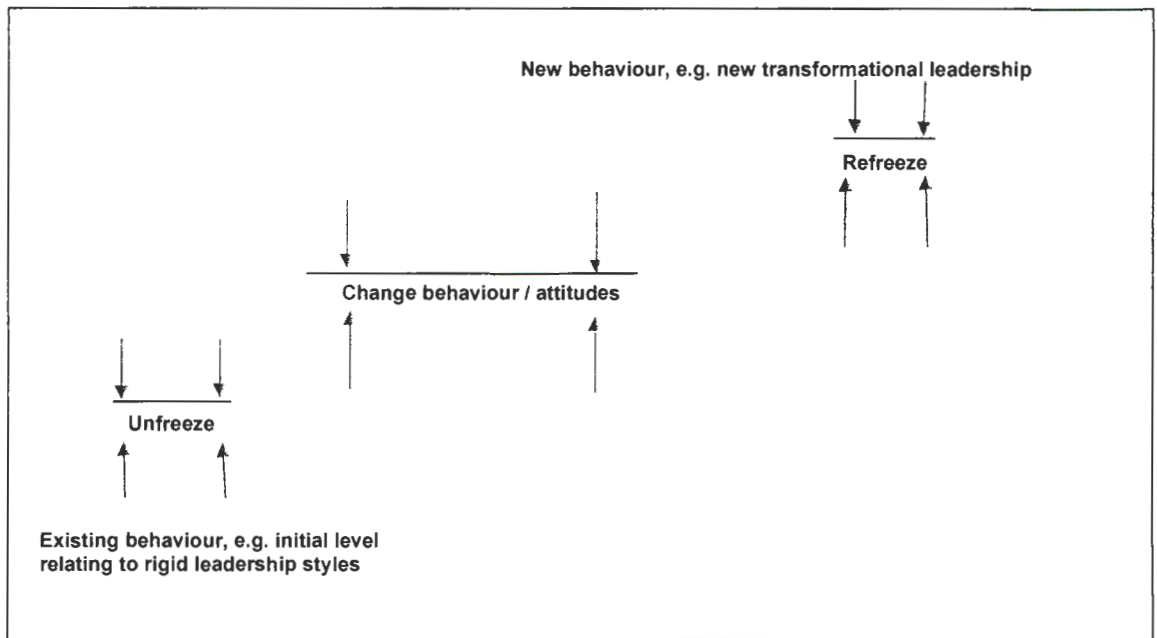


Figure 8.2: Lewin's three - stage model

Source: Adapted from Lewin, (1947: 199), cited in CIMA (2016:516)

Unfreezing: At this stage managers in the micro-lending sector need to initiate change behaviour from the rigid leadership. They need to accept that they overrun internal control systems, and this could culminate into fraud by employees, suppliers and customers. This stage creates a platform for motivation to change by convincing the affected members of the undesirability of the present situation and its consequences. According to (Lewin, 1947:199), cited in CIMA (2016:516) the following are the ways used to destabilize the present unwanted behaviour:

- Identifying and exploiting existing areas of bad behaviour which result in low morale and low productivity.
- Creating or introducing new internal controls and restrict rules which require segregation of duties within an enterprise.
- Increasing management knowledge about leadership styles, principles of best practices and the need for change.

Change: The change process at this stage is mainly concerned with identifying what the new behaviour or norm should be, and this involves the following:

- Establishing new patterns of behaviour
- Setting up new reporting relationships
- Creating new reward / incentive schedules
- Introducing a new style of management

Refreezing: This stage is about refreezing or stabilizing the change that involves ensuring that senior management do not slip back into old ways. This stage involves reinforcement of the new pattern of work by:

- Larger rewards will flow to the managers who managed the change.
- Publicity of success stories and new heroes through word of mouth may assist in expanding and growing the enterprise.

The study found that there is no Capital Adequacy Ratio (CAR), which could be used as a control measure in the micro-lending sector. The study concluded that majority of the micro-lenders advocate for an adoption of CAR which could be used to identify symptoms of going concern problems. The study concluded that CAR could flag non-performing ratios on daily basis and corrective action is promptly taken without waiting for the audits or publications of the financial statements which are historical in nature.

The study found that risk registers (See Annexure F) are not used in the micro-lending sector as a form of recording sources of risk. A risk register is used to record all the risk that affects a business in relation to their rankings such as high risk, moderate risk and low risk. In addition, the study found that this activity of recording in a risk register could assist micro-lending companies in ascertaining their risks appetite. The study concluded that it is important for micro-lending businesses to keep and maintain risk registers because every company should be able to manage and mitigate risk in order to remain in business. The following section focuses on the major contributions to the body of knowledge based on the findings and results from this study.

8.4 Major contributions to the body of knowledge from this study

8.4.1 Developing an integrated perspective of corporate governance culture and leadership in micro-lending companies

This study provides an integrated perspective of sound corporate governance culture and leadership. The study found that sound corporate governance fosters competitiveness, going concern and growth in micro-lending companies. In addition, the study found that good corporate governance culture and leadership in micro-lending companies are necessary because they promote organisational development. The study concluded that the existing model for the law of agent and principle has some limitations in small business operations as financial decisions are made by the owner, irrespective of how good or bad they are (Swamy, 2011:39). Furthermore, the existing corporate governance (for example the principles of King Report IV) focus more on large corporations and those listed on the stock exchange (Swamy, 2011:40). Therefore, the developed framework could assist in separating the proprietor from the business hence embraces sound governance culture that promotes the '*law of persona*' (See the case for Salomon vs Salomon &

Co Ltd) whereby the company is perceived as a separate entity from the owner. This framework could assist to detach the owners from the business hence promote competitiveness, growth and going concern particularly on performance of micro-lending companies.

8.4.2 Providing an integrated framework for enterprise risk management and sustainability

This study provides an integrated framework which outlines the sources of risk (that affect the performance of micro-lending companies) such as political risk, legal or litigation risk, regulatory risk, compliance risk, strategic risk, product risk, commodity price risk, product reputational risk, operational risk, economic risk, credit risk, currency risk, interest rate risk, gearing risk, environment risk, fraud risk, corporate reputation risk, culture risk and leadership risk. The framework developed in this study considers leadership risk as a major source due to the fact that financial decisions are often made by the owners of micro-lending companies. Some of the decisions which are made through the owners could have negative impact on the enterprise's performance, growth, competitiveness and sustainability. As such, this framework creates enterprise risk management awareness to policy makers, shareowners and senior management of micro-lending companies. A risk register (See Annexure F) could then be used to collect and record enterprise risk management data that may then be used to measure the degree of risk using the likelihood and consequences grid which was developed by Pojasek (2011:88). The outcome from the use of the grid could assist management in the micro-lending sector to prioritise high-risk areas when mitigating risk. The management responsible for mitigating risk (Risk Managers) in the micro-lending sector may be able to apply the TARA risk model. The TARA risk model focuses on transfer of risk, acceptance of risk (risk appetite), risk reduction and risk avoidance. Insights from this study thus extends to limitations in existing frameworks which are applicable to large corporations and the banking sector such as the Basel I, II, III and capital leverage ratio (capital adequacy). This framework links the policy maker (NBFIRA) with the micro-lending businesses through cloud software (See Figure 7.2). The link would be in relation to risk appetite as well as sufficient capital or security deposit in order to protect and safeguard going concern in the micro-lending sector. This study enables micro-lenders, other SMMEs and countries to address the issues on going concern and then formulate strategies, policies and practices that could be used to mitigate and manage enterprise risk through application of this framework.

A CAR could be implemented by micro-lending companies that could act as a link between NBFIRA and the sector. The recommended link between NBFIRA and micro-lending sector could provide real-time information about the performance of each registered entity in this sector to the regulator. The CAR for each micro-lender would be monitored on a daily basis and any discrepancy or fluctuation of the closing balance should be reported. This could be monitored through cloud software connected as extranet between a micro-lending company and the regulator

NBFIRA. This assists the micro-lending sector to achieve an effective cash flow management system which avoids the company getting subjected to risk in terms of going concern.

8.4.3 Defining and delineating the role of accounting, reporting and internal controls for micro-lending companies

The integrated ERM framework promotes proper presentation of financial accounting, reporting and internal controls in order to restore going concern in the micro-lending companies. The framework makes provision whereby the roles of accountant, risk manager, board member and the owners are separated. The separation of roles could assist in removing the philosophy of dominance by one individual who controls all the financial affairs of an enterprise and make negative decisions which may ultimately affect performance, competitiveness, growth and going concern of a micro-lending company. The framework, therefore, focuses on training and development in relation to proper implementation of systems and internal controls which advocates for segregation of duties.

8.4.4 Providing empirical validation of theoretical propositions

In this study, a functionalist paradigm was adopted in the first phase of this study where questionnaires were used to gather evidence from the respondents (company owners / senior management and employees working in this sector). The findings are objective as they relied heavily on statistical tools. Furthermore, this study was again placed under the interpretive paradigm in the second phase of the investigation in order to inquire from the respondents about the reality and the truth on enterprise risk management awareness. The respondents under the interpretive paradigm were closer to the phenomenon hence the need to inquire about their perceptions and feelings towards the subject matter. Morgan (1980:495) advocates that choosing a paradigm leads ultimately to the methodology used in the study. This study falls within the broad area of accounting, auditing and governance hence the findings provided empirical evidence that influences enterprise risk management in the micro-lending businesses. This study could help accountants, auditors, academics, practitioners and policy makers including NBFIRA to understand the relationship between the aforementioned principles and concepts that have limitations in the literature.

8.4.5 Informing and providing guidelines to policy at institutional level that promotes growth, competitiveness and going concern

This study informs policy at institutional level in terms of formulation of guidelines, procedures, policy, review, adoption of monitoring and evaluation strategies for the effective enterprise risk management systems that promote going concern and enhance economic development. There are challenges attributable to risk management the world over with regard to financial reporting and going concern (see Enron, Barring Banks and World Com). The following regulations and codes were made as an effort in addressing these challenges (King Report IV, Sarbanes Act, Basel I, II



and III). However, there are limitations towards the development of an integrated framework for understanding enterprise risk management in micro-lending companies, particularly in Botswana. This study promotes maximum economic efficiency as it could assist policy makers in making informed decisions in relation to enterprise risk management and ultimately addresses going concern problems which are prevalent in the micro-lending sector.

8.4.6 Providing principles of management and Generally Accepted Accounting Principles (GAAP) applicable to micro-lending companies

The study could assist practitioners such as managers, accountants, chief risk takers and auditors in terms of developing effective principles of management and generally accepted accounting principles (GAAP) that are applicable for the micro-lending companies. The framework may assist practitioners in understanding good principles of management and best practices that bring harmony and foster productivity. An understanding of sound GAAP consists of different mechanisms which are classified as going concern, reliability, legal form, neutrality, completeness, relevance, matching and accrual basis of accounting. Financial statements are normally prepared on the assumption that an entity is a going concern and will therefore, continue to operate for foreseeable future (Wood & Sangster, 2008:130). Therefore, practitioners may be able to understand the relationship between enterprise risk management, financial accounting, internal audit, corporate governance and sound best practices in the micro-lending companies. This could contribute to the growth of micro-lenders and hence foster economic development.

8.4.7 Contributing to improved standard of living

This study provides mechanisms that promote the living standard and well-being of the community in which micro-lending companies operates from. It helps to improve the Gross Domestic Product (GDP) and enhances the level of poverty datum line through creation of employment and provision of small loans to poor households. An understanding of GDP levels assists policy makers in planning both in the current period and future periods. Overall this study advocates and promotes the standard of living for poor households through maintenance and protection of existing and new micro-lending entities.

8.4.8 Contribution to future research

This study provides researchers and practitioners with a framework that fosters growth, competitiveness and going concern in the micro-lending companies. There is an emerging body of knowledge that examines enterprise risk management and is more biased towards listed companies, insurance firms and banks for example, King IV Report, Sarbanes, Basel I, II, III, Cadbury Report, Organisation for Economic Co-operation Development (OECD) and Botswana Stock Exchange (BSE) Listing. However, all these past attempts may not have fully integrated enterprise risk management in micro-lending companies. Finally, this framework provides researchers, practitioners and accountants with a base from which to examine and evaluate

enterprise risk management in micro-lending companies and provide basis for future research. Future research area as a contribution from this study could be an investigation on the impact of cloud software on the performance of micro-lending companies.

8.5 Limitations of the study

In any study there are always some limitations that affect the research process. Therefore, there are limitations which were experienced from the beginning and throughout the study such as follows:

- There were challenges in obtaining up-to-date literature in relation to micro-lending sector and enterprise risk management in the context of Botswana.
- The available literature in the context of Botswana is more inclined towards SMMEs in the agriculture sector, mining sector, construction sector and manufacturing sector rather than in the micro-lending sector.
- In some instances, majority of the proprietors and employees in the micro-lending businesses did not know much about ERM systems.
- The survey (a questionnaire approach) was costly due to distance and substantial amounts directed towards travel costs and accommodation were paid during collection of data.
- The study was also based on the perceptions, beliefs and opinions of the participants which may be subjective and restricted in terms of the possibilities of generalization of the results.
- In some instances, there were clashes between interview appointments with both the proprietors and employees to be interviewed and this implies missing of scheduled interviews.
- At times the appointments with both proprietors and employees were not fruitful as the concerned participants were occupied and engaged in other activities hence scheduled appointments for interviews were cancelled and replaced with new appointments.
- In some instances, participants did not know the role of the policy makers including NBFIRA as regulator, and hence the sector failed to comply with the requirements and as a result their operations were closed.

8.6 Recommendations for future work

This type of research which is complex and requires scholars and practitioners to be well prepared, patient, wherein the attributes of perseverance and need for good interpersonal skills lead to successfully executing the entire research process. The reason is that the study deals with sensitive areas where the challenges and constraints affecting business performance and going concern were discussed and may have resulted in resistance by participants if not handled in a professional manner. Furthermore, entrepreneurship is a hot topic which affects the society at

large. This complexity requires extra caution to allow participation and engagement between the investigator and the participants involved in the study. It is, therefore, necessary to give attention to some aspects which emerged during the course of the study, which include the following recommendations for future work:

- Prospective proprietors in the micro-lending sector should undergo training and development before starting any businesses.
- Employees who join micro-lending sector should undergo an orientation exercise that covers the entire processes, procedures and systems of managing a micro-lending firm before they start working in their respective companies.
- The policy makers (NBFIRA) should link the daily Capital Adequacy Ratio (CAR) with each micro-lending firm in order to promptly identify the liquidity and going concern related problems.
- Micro-lending companies are encouraged to have a diversity workforce in future as a strategy for promoting information sharing among the workers.
- The proprietors for micro-lending sector should undergo some training and development on how to mitigate and manage risk which may affect performance, growth, competitiveness and going concern of their businesses.
- The micro-lending firms should introduce a risk register as tool to be used in ascertaining sources of risk and risk appetite. The register may be used as a basis for recording risk that affects an enterprise, which therefore ranks risk as high risk, medium risk and low risk.
- Proprietors for micro-lending businesses should appreciate financial accounting, management accounting (budgeting) and financial management in order to make informed decisions.
- Micro-lending sector should adopt human resources management policies which advocate implementation of roles of an Accountant, Risk Manager and Board Member, as these are viewed as key positions for any successful enterprise.
- The micro-lending sector should shift from rigid leadership styles to transformational leadership in order to foster staff morale and high productivity.
- The micro-lending sector should comply and respect the principles of corporate governance and best practices due to the fact that this process promotes good organisational image, brand and reduces reputational risks.
- The micro-lending sector should integrate Lewin's three stage model during the communication change management process as a way of overcoming resistance to change.
- The micro-lending sector is encouraged to introduce a two-way communication process conceived to increase staff morale and high productivity.
- Micro-lending companies are encouraged to have in place mission statements, visions and strategic objectives that aligns with their ERM systems as a strategy for addressing

problems associated with closure of business operations, which is so prevalent in this sector.

- The proprietors in the micro-lending sector should incorporate the 14 principles of Henry Fayol into sectorial policy in order to achieve their realized visions and dreams.
- The micro-lending sector should apply the power / interest matrix for Mendelow in order to manage and enhance stakeholder management.
- The micro-lending sector should not continue charging compound interests on loan book balances as this may increase the level of defaulters, which ultimately worsens the situation of irrecoverable bad debts.
- The P20, 000.00 initial capital required during registration of a micro-lending company, should be increased as it is inadequate and not sufficient to serve as working capital.

8.7 Implications for future study

Based on the investigation conducted on the micro-lending businesses in Botswana there is a need to focus on the following areas in order to achieve the country's objectives of reducing poverty through employment creation in Botswana.

Furthermore, future research could focus on the impact of government initiatives which support the growth of micro-lending businesses in Botswana. Several proprietors in the micro-lending sector may not have good leadership skills and this affects performance of an enterprise hence the need to focus on a topic that deals with the impact of adoption of venture capitalists as this may result in micro-lending company leadership acquiring skills from the venture capital leadership.

Another area of research could be on the collaboration between two or more micro-lending entities which may result in sharing of new ideas and ultimately grow the business to another level. Finally, another research area may be on comparative performance for micro-lending companies in two different countries for example Botswana and South Africa. The study may help in leveraging the two businesses as the two countries share experiences obtained from the same sector hence may assist business owners build their businesses in their own space of operations.

8.8 Chapter summary

This chapter presented the summary of the key findings and results from Chapter 5 to 7, and as well as addressing the research problem, research questions and research objectives. The research questions were answered, and the study clarified the challenges / constraints that affect performance, growth, competitiveness and going concern in the micro-lending sector. In the light of the aforementioned, it was evidenced that successful businesses use effective ERM systems and hence there is a need to adopt this integrated framework for ERM and Sustainability in the micro-lending companies in Botswana. Therefore, a framework for ERM and Sustainability that was

developed in this study is a major contributing factor to the success of existing and future micro-lending companies in Botswana. The ERM and Sustainability framework could act as a guide for both policy makers and proprietors in this sector. Finally, the application of this framework could work successful if the policy makers (NBFIRA), collaborate with proprietors / owners in this sector, and safeguard the survival of this nature of business.

References

- ACCA. 2017. Audit and Assurance F8. United Kingdom Kaplan Publishing
- AfDB/OECD. 2005. Botswana: African Economic Outlook 2004/ 2005. Gaborone
- Akhter, W., Akhtar, N. & Jaffri, S.K.A. 2009. Islamic micro-finance and poverty alleviation: A case of Pakistan. *Proceeding of the 2 nd CBRC, Lahore*.
- Ali, K., Akhtar, M.F. & Sadaqat, S. 2011. Financial and non-financial business risk perspectives—empirical evidence from commercial banks. *Middle Eastern Finance and Economics*, 11(11):150-160.
- Anderson, J.Q. & Rainie, H. 2010. The future of cloud computing: Pew Internet & American Life Project Washington, DC.
- Anderson, S.W. & Widener, S.K. 2006. Doing Quantitative Field Research in Management Accounting. *Handbooks of Management Accounting Research*, 1:319-341.
- Arena, M., Arnaboldi, M. & Azzone, G. 2010. The organizational dynamics of Enterprise Risk Management. *Accounting, Organizations and Society*, 35(7):659-675.
- Armendáriz, B. & Morduch, J. 2010. The economics of microfinance: MIT press.
- Ashraf, D., Altunbas, Y. & Goddard, J. 2007. Who transfers credit risk? Determinants of the use of credit derivatives by large US banks. *The European Journal of Finance*, 13(5):483-500.
- Atkinson, A.A. & Shaffir, W. 1998. Standards for Field Research in Management Accounting. *Journal of Management Accounting Research*, 10:41-68.
- Aw, D., Silva, A.B. & Palmer, D.B. 2007. Immunosenescence: emerging challenges for an ageing population. *Immunology*, 120(4):435-446.
- Balaciu, D., Bogdan, V. & Vladu, A.B. 2009. A brief review of creative accounting literature and its consequences in practice. *Annales Universitatis Apulensis: Series Oeconomica*, 11(1):170.
- Baxter, R., Bedard, J.C., Hoitash, R. & Yezegel, A. 2013. Enterprise Risk Management Program Quality: Determinants, Value Relevance, and the Financial Crisis. *Contemporary Accounting Research*, 30(4):1264-1295.
- Bayulgen, O. 2008. Muhammad Yunus, Grameen Bank and the Nobel Peace Prize: What Political Science Can Contribute to and Learn From the Study of Microcredit. *International Studies Review*, 10(3):525-547.
- Beasley, M., Branson, B. & Hancock, B. 2010. Report on the current state of enterprise risk oversight. *The ERM Initiative at North Carolina State University, Raleigh, NC*.
- Beasley, M., Branson, B. & Pagach, D. 2015. An analysis of the maturity and strategic impact of investments in ERM. *Journal of Accounting and Public Policy*, 34(3):219-243.
- Beasley, M., Pagach, D. & Warr, R. 2008. Information conveyed in hiring announcements of senior executives overseeing enterprise-wide risk management processes. *Journal of Accounting, Auditing & Finance*, 23(3):311-332.
- Braun, V. & Clarke, V. 2013. Successful qualitative research: A practical guide for beginners: sage.
- Braun, V., Clarke, V. & Terry, G. 2014. Thematic analysis. *Qual Res Clin Health Psychol*, 24:95-114.
- Bromiley, P., McShane, M., Nair, A. & Rustambekov, E. 2015. Enterprise Risk Management: Review, Critique, and Research Directions. *Long Range Planning*, 48(4):265-276.
- Brown, K. & Moles, P. 2012. Credit risk management. *Edinburgh Business School, Heriot-Watt University, UK*.
- Bryman, A. 2006. Integrating quantitative and qualitative research: How is it done? *Qualitative Research*, 6(1):97-113.
- Budhwar, P. & Mellahi, K. 2007. Introduction: human resource management in the Middle East. *The International Journal of Human Resource Management*, 18(1):2-10.
- Cameron, R. 2009. A sequential mixed model research design: Design, analytical and display issues. *International Journal of Multiple Research Approaches*, 3(2):140-152.
- Caracelli, V.J. & Greene, J.C. 1993. Data Analysis Strategies for Mixed-Method Evaluation Designs. *Educational Evaluation and Policy Analysis*, 15(2):195-207.
- CIMA. 2016. Risk Management - Strategic Paper 3 CIMA . London BPP

- Cohen, J.R., Krishnamoorthy, G. & Wright, A. 2014. Enterprise risk management and the financial reporting process: The experiences of audit committee members, CFOs, and external auditors. *Contemporary Accounting Research*, 34(2):1178 - 1209.
- Corden, A. & Sainsbury, R. 2006. Exploring 'Quality': Research Participants' Perspectives on Verbatim Quotations. *International Journal of Social Research Methodology*, 9(2):97-110.
- Correia, C., Flynn, D., Uliana, E. & Wormald, M. 2015. Financial management: Lansdowne : Juta, 2015. 8th edition.
- Cortina, J.M. 1993. What is coefficient alpha? An examination of theory and applications. *American Psychological Association*, 78:98-104.
- COSO. 1992. Internal Control - Integrated Framework
- COSO. 2013. The Updated COSO Internal Control Framework. *Internal Control Framework* 31 September 2013
- Creswell, J.W. & Plano Clark, V.L. 2011. Designing and conducting mixed methods research: Los Angeles : SAGE Publications, c2011. 2nd ed.
- Crotty, M. 1998. The foundations of social research : meaning and perspective in the research process: Sage.
- Cuervo, Á., Ribeiro, D. & Roig, S. 2007. Entrepreneurship. Springer. p. 1-20).
- Dalal, R.S., Lam, H., Weiss, H.M., Welch, E.R. & Hulin, C.L. 2009. A within-person approach to work behavior and performance: Concurrent and lagged citizenship-counterproductivity associations, and dynamic relationships with affect and overall job performance. *Academy of Management Journal*, 52(5):1051-1066.
- Davis, R.C. & McClelland, D.C. 1962. The achieving society: JSTOR.
- Dawson, C. 2009. Introduction to research methods : a practical guide for anyone undertaking a research project: Oxford : How To Books, 2009. 4th ed.
- Denzin, N.K. & Lincoln, Y.S. 2005. The Sage handbook of qualitative research: Sage Publications Ltd.
- Drury, C. 2015. Management and cost accounting: Andover, Hampshire : Cengage Learning, [2015] Ninth edition.
- Dwulit, M.P. 2017. Student Perceptions of Therapeutic Recreation: An Exploratory Study. *Therapeutic Recreation Journal*, 51(3):193-205.
- Ellsberg, M.C., Heise, L. & Organization, W.H. 2005. Researching violence against women: practical guidelines for researchers and activists. Cambridge: Cambridge University Press.
- Field, A., Miles, J. & Field, Z. 2012. Discovering statistics using R: Sage publications.
- Flick, U. 1992. Triangulation revisited: strategy of validation or alternative? *Journal for the theory of social behaviour*, 22(2):175-197.
- Florio, C. & Leoni, G. 2017. Enterprise risk management and firm performance: The Italian case. *The British Accounting Review*, 49(1):56-74.
- Ford, J.K. 2014. Improving training effectiveness in work organizations: Psychology Press.
- Fraser, J. & Simkins, B. 2010. Enterprise risk management: Today's leading research and best practices for tomorrow's executives. Vol. 3: John Wiley & Sons.
- Fraser, J.R.S. & Simkins, B.J. 2016. The challenges of and solutions for implementing enterprise risk management. *Business Horizons*, 59(6):689-698.
- Frigo, M.L. & Anderson, R.J. 2011. Strategic risk management: A foundation for improving enterprise risk management and governance. *Journal of Corporate Accounting & Finance*, 22(3):81-88.
- GAAP. 2013. GAAP in Botswana for Entities not Applying IFRS
- Gagoitseope, P.K. & Pansiri, J. 2012. Evaluation of critical success factors for developing small and medium-sized enterprises in Botswana. *Journal of African Business*, 13(1):51-61.
- Grant, P. & McGhee, P. 2014. Corporate Governance Reform: Character-Building Structures. *Business Ethics: A European Review*, 23(2):125-138.
- Greene, J.C. 2007. Mixed methods in social inquiry: San Francisco, CA : Jossey-Bass, c2007. 1st ed.
- Greene, J.C., Caracelli, V.J. & Graham, W.F. 1989. Toward a Conceptual Framework for Mixed-Method Evaluation Designs. *Educational Evaluation and Policy Analysis*, 11(3):255-274.
- Grody, A.D. & Hughes, P.J. 2016. Risk Accounting-Part 1: The risk data aggregation and risk reporting (BCBS 239) foundation of enterprise risk management (ERM) and risk governance. *Journal of Risk Management in Financial Institutions*, 9(2):130-146.

- Guba, E.G. & Lincoln, Y.S. 1988. Naturalistic and rationalistic enquiry. *Educational research, methodology and measurement: An international handbook*:81-85.
- Guba, E.G. & Lincoln, Y.S. 2005. Paradigmatic Controversies. *Contradictions, and*.
- Halverson, L.R., Graham, C.R., Spring, K.J., Drysdale, J.S. & Henrie, C.R. 2014. A thematic analysis of the most highly cited scholarship in the first decade of blended learning research. *The Internet and Higher Education*, 20:20-34.
- Hanushek, E.A. & Wößmann, L. 2006. Does educational tracking affect performance and inequality? Differences-in-differences evidence across countries. *The Economic Journal*, 116(510):C63-C76.
- Harding, J. 2013. *Qualitative data analysis from start to finish*: Sage.
- Harper, M. 2002. Beyond micro-credit: Putting development back into micro-finance: Oxfam.
- Heames, J., Golden Pryor, M. & Taneja, S. 2010. Henri Fayol, practitioner and theoretician—revered and reviled. *Journal of Management History*, 16(4):489-503.
- Hopper, T. & Powell, A. 1985. Making sense of research into the organizational and social aspects of management accounting: A review of its underlying assumptions [1]. *Journal of management Studies*, 22(5):429-465.
- Hoyt, R.E. & Liebenberg, A.P. 2011. The value of enterprise risk management. *Journal of risk and insurance*, 78(4):795-822.
- ICAEW. 2014. Assurance Moorgate Place London Institute of Chartered Accountants England and Wales
- Jebreen, I. 2012. Using inductive approach as research strategy in requirements engineering. *International Journal of Computer and Information Technology*, 1(2):162-173.
- King. 2016. King IV Report on Corporate Governance for Southern Africa 2016.
- Kleining, G. & Witt, H. 2000. The qualitative heuristic approach: A methodology for discovery in psychology and the social sciences. Rediscovering the method of introspection as an example. (In ed's. Forum Qualitative Sozialforschung/Forum: Qualitative Social Research organised by Germany University of Hamburg.
- Knight, F.H. 1921. Risk, Uncertainty and Profit.
- Kont, K.-R. 2013. Cost accounting and scientific management in libraries: a historical overview. *Journal of Management History*, 19(2):225-240.
- Lachmann, M., Trapp, I. & Trapp, R. 2017. Diversity and validity in positivist management accounting research—A longitudinal perspective over four decades. *Management Accounting Research*, 34:42-58.
- Lai, F.W., Azizan, N. & Samad, M. 2010. Shareholders value creation through enterprise risk management. *International Journal of Business Research*, 10(1):44-57.
- Leech, N.L. & Onwuegbuzie, A.J. 2007. An array of qualitative data analysis tools: a call for data analysis triangulation. *School psychology quarterly*, 22(4):557.
- Leedy, P.D. & Ormrod, J.E. 2016. *Practical research: planning and design*: Boston : Pearson, [2016] Eleventh edition.
- Lewin, K. 1947. Group decision and social change. *Readings in social psychology*, 3(1):197-211.
- Li, Y. 2010. The case analysis of the scandal of Enron. *International Journal of Business and Management*, 5(10):37.
- Lincoln, Y.S. & Guba, E.G. 1985. *Naturalistic inquiry*. Vol. 75: Sage.
- Locke, K.D. 2000. *Grounded theory in management research*: Sage.
- Lor, P. 2011. Preparing for research: metatheoretical considerations. *International & Comparative Librarianship*:04-15.
- Lundqvist, S.A. 2015. Why firms implement risk governance — Stepping beyond traditional risk management to enterprise risk management. *Journal of Accounting and Public Policy*, 34(5):441-436.
- Lyon, B.K. & Popov, G. 2016. The Art of Assessing Risk. (cover story). *Professional Safety*, 61(3):40.
- Madill, A. & Gough, B. 2008. Qualitative research and its place in psychological science. *Psychological methods*, 13(3):254.
- Masood, T., Weston, R. & Rahimifard, A. 2013. A model-driven approach to enabling change capability in SMEs. *International Journal of Advanced Manufacturing Technology*, 69(1-4):805-821.

- Miccolis, J. & Shah, S. 2000. Enterprise risk management: An analytic approach. Tillinghast: Towers Perrin Monograph.
- Miles, M.B., Huberman, A.M. & Saldaña, J. 2014. Qualitative data analysis : a methods sourcebook: Thousand Oaks, California : SAGE Publications, Inc., [2014] Third edition.
- Miller, P. & O'Leary, T. 1987. Accounting and the construction of the governable person(Issue):235.
- Modigliani, F. & Miller, M.H. 1958. The cost of capital, corporation finance and the theory of investment. *The American economic review*:261-297.
- Molin, L. 2015. Performance of Microfinance and Entrepreneurship in Botswana: The Role of Trust. *International Journal of Economics & Business Studies*, 5(1/2):29-50.
- Morgan, G. 1980. Paradigms, metaphors, and puzzle solving in organization theory. *Administrative science quarterly*:605-622.
- Morgan, G. & Smircich, L. 1980. The case for qualitative research. *Academy of management review*, 5(4):491-500.
- Mutoko, W.R. 2014. Challenges of access to markets and opportunities for small, medium and micro enterprises (SMMEs) in Botswana. *European Scientific Journal*.
- Mwobobia, F.M. 2012. Empowering of Small-Micro and Medium Enterprises (SMMEs): A Case of Botswana. *Business and Management Research*, 1(4):88.
- Myers, M.D. 2009. Qualitative research in business & management: Los Angeles : SAGE, c2009.
- NBFIRA. 2014. Annual Statistical Bulletin 2014. Gaborone Nbfira.
- Neuman, W.L. 2000. The meanings of methodology. *Social research methods*:60-87.
- Ngo, T.M.-P. & Wahhaj, Z. 2012. Microfinance and gender empowerment. *Journal of Development Economics*, 99(1):1-12.
- Nkwe, N. 2012. Role of SMES in Botswana. *American International Journal of contemporary research*, 2(8):29-37.
- Northcutt, N. & McCoy, D. 2004. Interactive qualitative analysis: A systems method for qualitative research: Sage.
- Nunnally, J.C. 1978. Psychometric theory: New York : McGraw-Hill, c1978. 2nd ed.
- Okurut, F., Olalekan, Y. & Mangadi, K. 2011. Credit rationing and sme development in Botswana: implications for economic diversification. *Botswana Journal of Economics*, 8(12):62-85.
- Okurut, F.N. & Bothole, T. 2009. Informal financial markets in Botswana: a case study of Gaborone City. *Development Southern Africa*, 26(2):255-270.
- Onwuegbuzie, A.J. & Leech, N.L. 2006. Linking research questions to mixed methods data analysis procedures 1. *The Qualitative Report*, 11(3):474-498.
- Otley, D.T. & Berry, A.J. 1994. Case study research in management accounting and control. *Management Accounting Research*, 5(1):45-65.
- Ozfidan, B. & Burlbaw, L.M. 2017. Development, Validation, and Application for a Bilingual Education Curriculum in Turkey. *Eurasia Journal of Mathematics, Science and Technology Education*, 13(10):6659-6669.
- Paape, L. & Speklè, R.F. 2012. The adoption and design of enterprise risk management practices: An empirical study. *European Accounting Review*, 21(3):533-564.
- Pansiri, J. & Temtime, Z.T. 2008. Assessing managerial skills in SMEs for capacity building. *Journal of management development*, 27(2):251-260.
- Pansiri, J. & Temtime, Z.T. 2010. Linking firm and managers' characteristics to perceived critical success factors for innovative entrepreneurial support. *Journal of Small Business and Enterprise Development*, 17(1):45-59.
- Park, H., Sha, M.M. & Pan, Y. 2014. Investigating validity and effectiveness of cognitive interviewing as a pretesting method for non-English questionnaires: Findings from Korean cognitive interviews. *International Journal of Social Research Methodology*, 17(6):643-658.
- Parkhe, A. 1993. Partner nationality and the structure-performance relationship in strategic alliances. *Organization science*, 4(2):301-324.
- Patton, M.Q. 2002. Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative social work*, 1(3):261-283.
- Plano Clark, V.L. & Ivankova, N.V. 2016. Mixed methods research : a guide to the field: Los Angeles : SAGE, [2016].

- Pojasek, R.B. 2011. Linking sustainability to risk management. *Environmental Quality Management*, 21(2):85-96.
- Powell, R. 1991. Absolute and relative gains in international relations theory. *American Political Science Review*, 85(4):1303-1320.
- Reynolds, P.D. 2005. Understanding business creation: Serendipity and scope in two decades of business creation studies. *Small Business Economics*, 24(4):359-364.
- Robben, A.C. & Sluka, J.A. 2012. *Ethnographic fieldwork: An anthropological reader*: John Wiley & Sons.
- Robbins, S.P. & Barnwell, N. 2006. *Organisation theory: Concepts and cases*: Pearson Education Australia.
- Romm, N. & Ngulube, P. 2014. Mixed methods research. *Addressing research challenges: Making headway for emerging researchers*.
- Rossouw, D., Prozesky, M., du Plessis, C. & Prinsloo, F. 2010. *Ethics for Accountants & Auditors*. OUP Catalogue.
- Rothgeb, J., Willis, G. & Forsyth, B. 2007. QUESTIONNAIRE PRETESTING METHODS: DO DIFFERENT TECHNIQUES AND DIFFERENT ORGANIZATIONS PRODUCE SIMILAR RESULTS? *Bulletin de Mithodotogie Soclotoglut*(96):5-31.
- Ryan, B., Scapens, R.W. & Theobald, M. 2002. *Research method and methodology in finance and accounting*. Hampshire:: Cengage Learning EMEA
- Sarbanes. 2007. *Guide to the Sarbanes - Oxley Act (SOX ACT) Internal Control Reporting Requirements* Dec 2007.
- Sathyamoorthi, C.R. 2002. Government Policy and Entreperneurship Performance: The Case of Small, Medium and Micro Enterprises in Botswana. *Pakistan Jorunal of Applied Sciences* 2 (5): 563 - 569.
- Saunders, M., Lewis, P. & Thornhill, A. 2003. *Research methods for business students*: Upper Saddle River, NJ : Prentice Hall, 2003. 3rd ed.
- Schumpeter, J.A. 1934. The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle. *Journal of Comparative Research in Anthropology and Sociology* 55.
- Sentsho, J., Maiketso, T.J., Sengwaketse, M., Anderson, V.N. & Kayawe, T. 2007. (In Sentsho, J., ed.: BIDPA; Citizen Entrepreneurial Development Agency.
- Sheedy, E. & Griffin, B. 2017. Risk governance, structures, culture, and behavior: A view from the inside. *Corporate Governance: An International Review*:n/a-n/a.
- Shin, S.-Y., Park, W.-W. & Lim, H.S. 2013. What makes small-and medium-sized enterprises promote organizational creativity: The contingency perspective. *Social Behavior and Personality: an international journal*, 41(1):71-82.
- Silverman, D. 2015. *Interpreting qualitative data*: Sage.
- Spicer, B.H. 1992. The resurgence of cost and management accounting: a review of some recent developments in practice, theories and case research methods. *Management Accounting Research*, 3(1):1-37.
- Stephens, D.O. 2003. Protecting records. *Information Management*, 37(1):33.
- Strauss, A. & Corbin, J. 1994. Grounded theory methodology. *Handbook of qualitative research*, 17:273-285.
- Swamy, V. 2011. Corporate Governance and Firm Performance in Unlisted Family Owned Firms. *International Journal of Business Insights & Transformation*, 4(2):37-52.
- Swanson, J. & Rinehart, A.K. 2016. PERSPECTIVES ON...: Data in context: Using case studies to generate a common understanding of data in academic libraries. *The Journal of Academic Librarianship*, 42:97-101.
- Tanc, A. & Gokoglan, K. 2015. The Impact of Environmental Accounting on Strategic Management Accounting: A Research on Manufacturing Companies. *International Journal of Economics and Financial Issues*, 5(2):566-573
- Teddle, C. & Tashakkori, A. 2009. *Foundations of mixed methods research : integrating quantitative and qualitative approaches in the social and behavioral sciences*: Los Angeles : SAGE, c2009.
- Termtine , Z.T. & Pansiri, J. 2004. *Small Business Critical Success/Failure Factors In Developing Economies: Some Evidences From Botswana*: Science Publications, 2004.

<http://nwulib.nwu.ac.za/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edsoai&AN=edsoai.861102919&site=eds-live>
[http://www.thescipub.com/pdf/10.3844/ajassp.2004.18.25;](http://www.thescipub.com/pdf/10.3844/ajassp.2004.18.25)
<http://www.doaj.org/doaj?func=openurl&genre=article&issn=15469239&date=2004&volume=1&issue=1&spage=18> Date of access 20170107.

Tuckman, B. 2015. The Essentials of Risk Management. *Journal of Derivatives*(4):105.

Valsamakis, A.C., Vivian, R.W. & Du Toit, G.S. 2010. Risk management: Sandton : Heinemann, 2010. 4th ed.

Vaske, J.J., Beaman, J. & Sponarski, C.C. 2017. Rethinking Internal Consistency in Cronbach's Alpha. *Leisure Sciences*, 39(2):163-173.

Venkatesh, V., Brown, S.A. & Bala, H. 2013. BRIDGING THE QUALITATIVE-QUANTITATIVE DIVIDE: GUIDELINES FOR CONDUCTING MIXED METHODS RESEARCH IN INFORMATION SYSTEMS. *MIS Quarterly*, 37(1):21-54.

Viscelli, T.R., Hermanson, D.R. & Beasley, M.S. 2017. The Integration of ERM and Strategy: Implications for Corporate Governance. *Accounting Horizons*, 31(2):69-82.

Welman, C., Kruger, F. & Mitchell, B. 2005. Research methodology: Oxford University Press Cape Town.

Wiggins, N., Hughes, A., Rodriguez, A., Potter, C. & Rios-Campos, T. 2013. La Palabra es Salud (The Word Is Health): Combining Mixed Methods and CBPR to Understand the Comparative Effectiveness of Popular and Conventional Education. *Journal of Mixed Methods Research*, 8(3):278-298.

Willis, G.B. 2015. RESEARCH SYNTHESIS. *Public Opinion Quarterly*, 79:359-395.

Wood, F. & Sangster, A. 2008. Business Accounting 1 & 2: Harlow UK. Pearson Education Limited.

Wren, D.A. 2001. Henri Fayol as strategist: a nineteenth century corporate turnaround. *Management Decision*, 39(6):475-487.

Yang, J., Shen, G.Q., Ho, M., Drew, D.S. & Chan, A.P. 2009. Exploring critical success factors for stakeholder management in construction projects. *Journal of civil engineering and management*, 15(4):337-348.

Yazdanparas, A. & Alhenawi, Y. 2017. Personality and borrowing behavior: An examination of the role of need for material resources and need for arousal traits on household's borrowing decisions. *Financial Services Review*, 26(1):55-85.

Yin, R.K. 2011. Qualitative research from start to finish. New York, NY, US: Guilford Press.

Young, J. 2006. Operational Risk Management: The practical application of a qualitative approach: Van Schaik.

Young, J. 2009. A structured approach to operational risk management in a banking environment. UNISA.: 2009-08-25T10:45:52Z.

Zech, N. 2013. Stakeholder Relationship Management in the Context of Crisis Management. *New Challenges of Economic and Business Development-2013 International Scientific Conference*:681-692.

ANNEXURE A: DATA COLLECTION TOOL (QUESTIONNAIRE)



RESEARCH QUESTIONNAIRE
BY
PFUMBUDZAYI ROBERT MACHERA

The questionnaire below is part of the Doctor of Philosophy in Economic and Management Sciences (PhD in Business Management and Administration) study that seeks to develop a framework for enterprise risk management and sustainability in micro-lending companies in Botswana.

A. INSTRUCTIONS:

1. You are kindly requested to complete this questionnaire it will not take you more than 30 minutes to complete and please do not write your name on this document.
2. By answering this questionnaire you consent to take part in this study.

B. IMPORTANT DEFINITION

Florio and Leoni (2017:1) refer enterprise risk management (ERM) as a process whereby the board of directors, senior management and other employees are involved: in strategy setting, identifying potential areas of risks that may affect the entity and championing these risk areas within their risk appetite in order to provide a reasonable assurance in the achievement of intended organisational goals.

Contact details:

Pfumbudzayi Robert Machera: rmachera@gmail.com mobile: +267 74557884 (Researcher)

or

Professor W Musvoto: Wedzerai.Musvoto@nwu.ac.za +27 762152255 (Promoter)

QUESTIONNAIRE

To be completed by proprietor of the business or on behalf of the proprietor.

SECTION ONE

Respondents Demographic Information

For each question below please put an "X" in the "brackets" to the immediate right of your preferred answer (as shown on the right). If your answer to a question is not in the options provided, write it in the space to the right of "Other (*Please specify*)". Please answer all questions.

1.1 Gender Male [] Female []

1.2 Age group	18 – 30 years []	31 – 40 years []	41 – 50 years []
	51 – 60 years []	61 years + []	

1.3 Nationality Motswana [] Zimbabwean []
Other (Please specify) _____

1.4 Employment status Full-time ☐ Part-time ☐

1.5 Please state your highest qualification

Certificate BGCSE or Equivalent []

Professional Certificate & Diploma []

Bachelor's degree []

Honours degree []

Master's degree []

Doctoral degree []

Other (Please specify) _____

1.6 Job position Front Line Officer - FLO [] Operations Manager - OM []

Risk Manager - RM [] CEO - Proprietor - CEO []

Accountant - Acc [] Loans Officer - LO []

Human Resources Manager - HRM [] Board Member - BM []

1.7 Number of years worked Less than 2 years [] 2–5 years [] 6–10 years []

11–15 years [] Greater than 16 years []

1.8 Is your organisation registered with NBFIRA? Yes ☐ No ☐

1.9 Have you been trained to work in a micro-lending company? Yes [] No []

1.10 Have you been involved in ERM adoption in your organisation? Yes ☐ No ☐

SECTION TWO

2	To what extent would you agree or disagree with each of the following statements on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2 to Strongly Disagree = 1 (Please simply put a "circle" on a number representing your preferred answer. If you make a
---	--

	<i>mistake, put an "X" across the circle and choose another answer.)</i>					
2.1	The following sources of business for micro-lenders affect organisational performance and require an adoption of ERM framework that mitigates risk.					
	Sources of business for micro-lending					
2.1.1	Credit card	1	2	3	4	5
2.1.2	Mortgage	1	2	3	4	5
2.1.3	Home improvement loan	1	2	3	4	5
2.1.4	Business loan	1	2	3	4	5
2.1.5	Car loan	1	2	3	4	5
2.1.6	Student loan	1	2	3	4	5
2.1.7	Personal loan	1	2	3	4	5
2.1.8	Payday loan	1	2	3	4	5
2.2	To what extent would you agree or disagree with each of the following challenges / constraints that affect performance of micro-lending companies indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2 to Strongly Disagree = 1. (Please simply put a "circle" on a number representing your preferred answer. If you make a mistake, put an "X" across the circle and choose another answer.)					
	Challenges / constraints faced with micro-lending company					
2.2.1	Customers relationship	1	2	3	4	5
2.2.2	Organisational design	1	2	3	4	5
2.2.3	Managerial background	1	2	3	4	5
2.2.4	Human resource management development	1	2	3	4	5
2.2.5	Working capital	1	2	3	4	5
2.2.6	Marketing activities	1	2	3	4	5
2.2.7	Managerial activities	1	2	3	4	5
2.2.8	Investment analysis	1	2	3	4	5
2.2.9	Social - economic problems (interest rates, inflation & retrenchments)	1	2	3	4	5

2.2.10	Technological Changes	1	2	3	4	5
2.2.11	Competitive strategy	1	2	3	4	5
2.2.12	Personal factors	1	2	3	4	5
2.2.13	Attracting and recruiting suitable staff	1	2	3	4	5
2.2.14	Experience in owning or running business	1	2	3	4	5
2.2.15	Business location / business site	1	2	3	4	5
2.2.16	Accessibility of growth financing sources	1	2	3	4	5
2.2.17	Strict Government regulations	1	2	3	4	5
2.2.18	Financial liquidity of P20,000.00 to be maintained all the times	1	2	3	4	5
2.2.19	Ownership of Enterprise being individual proprietor	1	2	3	4	5
2.3	To what extent would you agree or disagree with each of the following marketing challenges / constraints that affect performance of micro-lending companies indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2 to Strongly Disagree = 1. (Please simply put a "circle" on a number representing your preferred answer. If you make a mistake, put an "X" across the circle and choose another answer.)					
	Marketing challenges / constraints faced with micro-lending company					
2.3.1	Product / service marketing	1	2	3	4	5
2.3.2	Marketing research and information	1	2	3	4	5
2.3.3	Pricing policy and strategy	1	2	3	4	5
2.3.4	Trained sales staff and promoters	1	2	3	4	5
2.3.5	Market segmentation	1	2	3	4	5

SECTION THREE

Your micro-lending company's approach towards enterprise risk management (ERM).

3.	To what extent would you agree or disagree with each of the following statements on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2 to Strongly Disagree = 1. (Please simply put a "circle" on a number representing your preferred answer. If you make a
----	--

	<i>mistake, put an "X" across the circle and choose another answer.)</i>					
3.1	To what extent would you agree or disagree to the following types of primary risk types within your organisation?					
3.1.1	Credit risk	1	2	3	4	5
3.1.2	Market risk	1	2	3	4	5
3.1.3	Liquidity risk	1	2	3	4	5
3.1.4	Interest rate risk	1	2	3	4	5
3.1.5	Country risk	1	2	3	4	5
3.1.6	Reputation risk	1	2	3	4	5
3.1.7	Legal risk	1	2	3	4	5
3.1.8	Operational risk	1	2	3	4	5
3.2	To what extent has your organisation implemented the following as primary factors of enterprise risk management?					
3.2.1	Employees misconduct	1	2	3	4	5
3.2.2	Processes	1	2	3	4	5
3.2.3	Systems	1	2	3	4	5
3.2.4	External factors (e.g. natural disasters, fraud, political pressures etc.)	1	2	3	4	5
3.3	To what extent has your organisation recognised the following employee exposures as an important part of enterprise risk management?					
3.3.1	Incompetence	1	2	3	4	5
3.3.2	Human error (negligence)	1	2	3	4	5
3.3.3	Low morale	1	2	3	4	5
3.3.4	High staff turnover	1	2	3	4	5
3.3.5	Fraudulent / criminal activities by employees	1	2	3	4	5
3.3.6	Lack of training	1	2	3	4	5
3.4	To what extent has you recognised the following process exposures as important part of enterprise risk management?					

3.4.1	Errors in procedures / methodologies	1	2	3	4	5
3.4.2	Documentation errors	1	2	3	4	5
3.4.3	Product complexity	1	2	3	4	5
3.4.4	Security risks	1	2	3	4	5
3.5	To what extent has your organisation recognised the following system exposures as an important part of enterprise risk management?					
3.5.1	System infiltration	1	2	3	4	5
3.5.2	System failures	1	2	3	4	5
3.5.3	Hackers (e.g. fraud through systems)	1	2	3	4	5
3.5.4	Programming errors	1	2	3	4	5
3.5.5	Information risk	1	2	3	4	5
3.5.6	Telecommunication risk	1	2	3	4	5
3.5.7	Obsolescence of systems	1	2	3	4	5
3.6	To what extent has your organisation recognised the following external exposures as important part of enterprise risk management?					
3.6.1	Acts of God (lighting, veld fire and floods)	1	2	3	4	5
3.6.2	External criminal activities	1	2	3	4	5
3.6.3	Domestic political upheaval	1	2	3	4	5
3.6.4	Regulatory and compliance	1	2	3	4	5
3.6.5	Legal actions	1	2	3	4	5
3.6.6	Business environment changes	1	2	3	4	5
3.6.7	Deterioration of micro-lending company's reputation perceived by the market	1	2	3	4	5
3.6.8	Strikes	1	2	3	4	5
3.6.9	Money laundering	1	2	3	4	5
3.7	To what extent has your organisation recognised the following as important elements of an enterprise risk management process?					

3.7.1	Risk identification	1	2	3	4	5
3.7.2	Risk evaluation / measurement	1	2	3	4	5
3.7.3	Risk control	1	2	3	4	5
3.7.4	Risk financing	1	2	3	4	5
3.8	To what extent has your organisation recognised the following methods as the most appropriate to identify various risk types?					
3.8.1	Workshops	1	2	3	4	5
3.8.2	Process mapping	1	2	3	4	5
3.8.3	Comparisons with other organisations	1	2	3	4	5
3.8.4	Discussions with peers	1	2	3	4	5
3.9	To what extent has your organisation recognised the importance of and implemented the following qualitative methods to measure enterprise risk management?					
3.9.1	Historical data to forecast the likelihood of a potential loss	1	2	3	4	5
3.9.2	Self - risk assessments	1	2	3	4	5
3.9.3	Risk maps / process flows	1	2	3	4	5
3.10	To what extent has your organisation recognised the importance of and implemented the following quantitative methods to measure enterprise risk management?					
3.10.1	Casual modelling	1	2	3	4	5
3.10.2	Risk indicators	1	2	3	4	5
3.10.3	Escalation triggers	1	2	3	4	5
3.10.4	Loss - event database	1	2	3	4	5
3.11	To what extent has your organisation recognised the importance of and implemented the following control measures of enterprise risk management?					

3.11.1	Policy and procedures	1	2	3	4	5
3.11.2	Internal controls	1	2	3	4	5
3.11.3	Risk reporting	1	2	3	4	5
3.12	To what extent has your organisation recognised the importance of and implemented the following risk financing techniques?					
3.12.1	Risk transfers (to third parties - insurance companies)	1	2	3	4	5
3.12.2	Risk retention (funded)	1	2	3	4	5
3.12.3	Risk retention (unfunded)	1	2	3	4	5
3.13	To what extent has your organisation adopted the following in relation to enterprise risk management?					
3.13.1	An adoption of enterprise risk management process that aligns with strategy and objectives.	1	2	3	4	5
3.13.2	An adoption of risk identification as an important ongoing process.	1	2	3	4	5
3.13.3	An adoption of a separate enterprise risk management structure.	1	2	3	4	5
3.13.4	An adoption of a direct reporting line where a risk management reports to the CEO.	1	2	3	4	5
3.13.5	An adoption of enterprise risk management as a function and responsibility of the board of directors.	1	2	3	4	5
3.13.6	An adoption of liquidity regulatory capital allocation for enterprise risk management.	1	2	3	4	5
3.13.7	An adoption of a framework for enterprise risk management and sustainability that mitigates sources of risk.	1	2	3	4	5
3.13.8	An adoption of enterprise risk management process as an integral part of the enterprise's overall management process.	1	2	3	4	5

SECTION FOUR
CORPORATE GOVERNANCE AND FIRM PERFORMANCE

4.	The following profitability ratios, liquidity ratios, corporate governance mechanisms and stakeholder management affect performance, growth and competitiveness of a micro-lending company, indicate your agreement or disagreement on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2 and Strongly Disagree = 1. (Please simply put a "circle" on a number representing your preferred answer. If you make a mistake, put an "X" across the circle and choose another answer.)					
4.1	Profitability and liquidity ratios					
4.1.1	Return on assets (ROA)	1	2	3	4	5
4.1.2	Return on Equity (ROE)	1	2	3	4	5
4.1.3	Debt to assets ratio	1	2	3	4	5
4.1.4	Capital gearing ratio	1	2	3	4	5
4.1.5	Interest cover	1	2	3	4	5
4.1.6	Earnings per share	1	2	3	4	5
4.1.7	Price / Earnings ratio (P/E Ratio)	1	2	3	4	5
4.1.8	Dividend pay-out ratio	1	2	3	4	5
4.1.9	Dividend yield	1	2	3	4	5
4.1.10	Dividend cover	1	2	3	4	5
4.1.11	Current ratio	1	2	3	4	5
4.1.12	Acid test ratio	1	2	3	4	5
4.1.13	Inventory turnover	1	2	3	4	5
4.1.14	Creditor payment period	1	2	3	4	5
4.1.15	Debtor collection period	1	2	3	4	5
4.1.16	Gross profit margin	1	2	3	4	5
4.1.17	Profit margin	1	2	3	4	5
4.2	Corporate governance					
4.2.1	Ownership	1	2	3	4	5
4.2.2	Board size	1	2	3	4	5
4.2.3	Outsiders in board	1	2	3	4	5

4.2.4	Audit committee	1	2	3	4	5
4.2.5	Outsiders in Audit committee	1	2	3	4	5
4.2.6	Total employees in the firm	1	2	3	4	5
4.2.7	Human resource manager	1	2	3	4	5
4.2.8	Family CEO	1	2	3	4	5
4.2.9	Firm size	1	2	3	4	5
4.2.10	Fixed assets	1	2	3	4	5
4.2.11	Investments	1	2	3	4	5
4.2.12	Total assets	1	2	3	4	5
4.2.13	Solidity	1	2	3	4	5
4.2.14	Nature of firm	1	2	3	4	5
4.2.15	Firm age	1	2	3	4	5
4.3	Critical success factors for stakeholder management					
4.3.1	Managing stakeholders with social responsibilities (economic, legal, environmental and ethical)	1	2	3	4	5
4.3.2	Exploring stakeholders' needs and constraints to micro-lending companies	1	2	3	4	5
4.3.3	Communicating with and engaging stakeholders properly and frequently	1	2	3	4	5
4.3.4	Understanding the area of stakeholders' interests	1	2	3	4	5
4.3.5	Identifying stakeholders properly	1	2	3	4	5
4.3.6	Keeping and promoting a good relationship	1	2	3	4	5
4.3.7	Analysing conflicts and coalitions among stakeholders	1	2	3	4	5

4.3.8	Predicting the influence of stakeholders accurately	1	2	3	4	5
4.3.9	Formulating appropriate strategies to manage stakeholders	1	2	3	4	5
4.3.10	Assessing attributes (power, urgency, and proximity) of stakeholders	1	2	3	4	5
4.3.11	Compromising conflicts among stakeholders effectively	1	2	3	4	5
4.3.12	Formulating a clear statement of micro-lending missions	1	2	3	4	5
4.3.13	Predicting stakeholders' reactions for implementing the strategies	1	2	3	4	5
4.3.14	Analysing the change of stakeholders' influence and relationships during life span of the enterprise	1	2	3	4	5
4.3.15	Assessing stakeholders' behaviour	1	2	3	4	5

SECTION FIVE

5.	To what extent would you agree or disagree with each of the following statements on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2 to Strongly Disagree = 1. (Please simply put a "circle" on a number representing your preferred answer. If you make a mistake, put an "X" across the circle and choose another answer.)					
	<i>Critical success factors for development of micro-lending companies</i>					
5.1	Entrepreneurial Motives					
5.1.1	I started business as I did not have source of income	1	2	3	4	5
5.1.2	I am convinced that the success or failure of my business depends on my own effort	1	2	3	4	5
5.1.3	I like to be my own boss	1	2	3	4	5
5.1.4	Running a successful business makes one respectable in their community	1	2	3	4	5

5.2	Motivation					
5.2.1	I can always manage to solve difficult problems if I try hard enough	1	2	3	4	5
5.2.2	I am confident that I can deal efficiently with unexpected events	1	2	3	4	5
5.2.3	I can solve most problems if I invest the necessary effort	1	2	3	4	5
5.2.4	I can remain calm when facing difficulties because I can rely on my coping abilities	1	2	3	4	5
5.2.5	I can usually find several solutions when confronted with problems	1	2	3	4	5
5.2.6	I can usually think of a solution when I am in trouble	1	2	3	4	5
5.2.7	I can handle whatever comes my way	1	2	3	4	5
5.3	Managerial Innovation					
5.3.1	Management constantly seeks to develop new ideas	1	2	3	4	5
5.3.2	Our business invests in research and development	1	2	3	4	5
5.3.4	Innovative ideas are rewarded in our business	1	2	3	4	5
5.3.5	Customers are encouraged to perceive innovation as an opportunity	1	2	3	4	5
5.3.6	Our business is prepared to do new products / services in our industry	1	2	3	4	5
5.3.7	We constantly modify our product / service to better serve our customers	1	2	3	4	5
5.3.8	We prefer to be the first in the market with new products / services	1	2	3	4	5
5.4	Taking opportunities					
5.4.1	I will take an opportunity even if it is risk	1	2	3	4	5
5.4.2	I study the business news with the aim to seize the opportunity when it arises	1	2	3	4	5
5.4.3	I act quickly when I see the opportunity	1	2	3	4	5
5.4.4	I am always on the lookout for opportunities to make money	1	2	3	4	5
5.4.5	I view problems as potential opportunities	1	2	3	4	5

5.4.6	I am always happy to take opportunities created by the Government	1	2	3	4	5
5.5	Self - sufficiency					
5.5.1	I study the environment to sense the problem before they come	1	2	3	4	5
5.5.2	It is my responsibility to resolve problems in my business	1	2	3	4	5
5.5.3	I rarely seek assistance until I have seriously tried to find a solution	1	2	3	4	5
5.6	Business linkages					
5.6.1	I consult business experts whenever faced with a problem	1	2	3	4	5
5.6.2	I seek suggestions from friends when encounter unusual problem	1	2	3	4	5
5.6.3	I seek suggests from family members when encounter unusual problem	1	2	3	4	5
5.7	Initiative					
5.7.1	I liaise with big companies to have them sub contract to me whenever they have won the tender	1	2	3	4	5
5.7.2	Our business invests in research and development	1	2	3	4	5
5.7.3	Customers are encouraged to perceive innovation as an opportunity	1	2	3	4	5
5.7.4	We have international friends who keep us informed of the industry developments internationally	1	2	3	4	5
5.8	Problem solving					
5.8.1	I usually think of many ways to solve a problem	1	2	3	4	5
5.8.2	I seek to solve most of the problem personally	1	2	3	4	5
5.8.3	Management constantly seeks to develop new ideas	1	2	3	4	5
5.9	Strategy					
5.9.1	Our strategy is more about maximizing short - term profits than ensuring long - term sustainability	1	2	3	4	5
5.9.2	We are more likely to prioritise customers / clients over profits	1	2	3	4	5
5.9.3	We are more likely to prioritise human resources over profits	1	2	3	4	5

5.10	Knowledge and understanding					
5.10.1	I have sufficient knowledge about risk to perform my role well	1	2	3	4	5
5.10.2	I have a good understanding of the aggregate risk profile of this organisation and how it is changing	1	2	3	4	5
5.10.3	Director training in risk management is adequate given the complexity of reports requiring review	1	2	3	4	5
5.11	Perceptions towards the Risk Manager (RM)					
5.11.1	The RM has a big say in the decisions we make	1	2	3	4	5
5.11.2	The RM has helped improve our micro-lender's performance	1	2	3	4	5
5.11.3	The RM is respected by the board	1	2	3	4	5
5.11.4	The RM is able to communicate clearly with directors and other executives	1	2	3	4	5
5.12	Other risk oversight					
5.12.1	The risk committee meets often enough to provide genuine oversight of the organisation's risks	1	2	3	4	5
5.12.2	Our processes ensure that business activities are consistent with risk appetite	1	2	3	4	5
5.12.3	Directors meet regularly with the executive	1	2	3	4	5
5.12.4	I have sufficient time to review the materials sent to me in advance of meetings	1	2	3	4	5
5.12.5	The board owns the risk appetite statement and reviews it on a regular basis	1	2	3	4	5
5.12.6	We often don't have time to think about all the risk implications when making decisions	1	2	3	4	5
5.12.7	Businesses with usually high profits attract greater than usual scrutiny	1	2	3	4	5

6. Any other comments or suggestions (Please use the space below and continue on a separate piece of paper if necessary).

- **Reliability of the questionnaire**

As the respondent of this survey for ERM the researcher would appreciate if you could also answer the following diagnostic questions relating to the questionnaire by marking the appropriate answer with a cross (X), or commenting on the space provided:

1. *How many minutes did you take to complete this questionnaire?*

1.1	0 to 10 minutes	
1.2	10 to 20 minutes	
1.3	20 to 30 minutes	
1.4	30 to 40 minutes	
1.5	More than 40 minutes	

2. *To what degree did the questionnaire interested you and motivated you to respond?*

2.1	To no degree	
2.2	To a lesser degree	
2.3	To a fair degree	
2.4	To a high degree	
2.5	Totally	

3. *To what degree was the language understandable?*

3.1	To no degree	
3.2	To a lesser degree	
3.3	To a fair degree	
3.4	To a high degree	
3.5	Totally	

4. *How would you describe the questions as applicable to enterprise risk management?*

4.1	Not applicable	
4.2	Applicable	
4.3	Totally applicable	

5. *Are the instructions for the questionnaire clear?*

5.1	Yes	
5.2	No	

6. If your answer is no, please indicate where you have experienced challenges / problems and what changes you would recommend

7. *In your opinion to what degree do the questions follow a logic sequence?*

7.1	To no degree	
7.2	To a lesser degree	
7.3	To a fair degree	
7.4	To a high degree	
7.5	Totally	

8. *In your opinion to what degree is the scale applicable to the questions?*

8.1	To no degree	
8.2	To a lesser degree	
8.3	To a fair degree	
8.4	To a high degree	
8.5	Totally	

9. *In your opinion to what degree did you understand the aim of the questionnaire?*

9.1	To no degree	
9.2	To a lesser degree	
9.3	To a fair degree	
9.4	To a high degree	
9.5	Totally	

10. *In your opinion was the questionnaire too long?*

10.1	Yes	
10.2	No	

*****Thank you*****

ANNEXURE A 1: DATA COLLECTION TOOL (QUESTIONNAIRE)



RESEARCH QUESTIONNAIRE BY PFUMBUDZAYI ROBERT MACHERA

The questionnaire below is part of the Doctor of Philosophy in Economic and Management Sciences (PhD in Business Management and Administration) study that seeks to develop a framework for enterprise risk management and sustainability in micro-lending companies in Botswana.

A. INSTRUCTIONS:

1. You are kindly requested to complete this questionnaire it will not take you more than 30 minutes to complete.
2. By answering this questionnaire you consent to take part in this study.

B. IMPORTANT DEFINITION

Florio and Leoni (2017:1) refer enterprise risk management (ERM) as a process whereby the board of directors, senior management and other employees are involved: in strategy setting, identifying potential areas of risks that may affect the entity and championing these risk areas within their risk appetite in order to provide a reasonable assurance in the achievement of intended organisational goals.

Contact details:

Pfumbudzayi Robert Macheru: rmacheru@gmail.com mobile: +267 74557884 (Researcher)

or

Professor W Musvoto: Wedzerai.Musvoto@nwu.ac.za +27 762152255 (Promoter)

QUESTIONNAIRE

To be completed by all employees

SECTION ONE

Respondents Demographic Information

For each question below please put an "X" in the "brackets" to the immediate right of your preferred answer (as shown on the right). If your answer to a question is not in the options provided, write it in the space to the right of "Other (Please specify)". Please answer all questions. [X]

- 1.1 Gender Male [] Female []
- 1.2 Age group 18 – 30 years [] 31 – 40 years [] 41 – 50 years []
51 – 60 years [] 61 years + []

- 1.3 Nationality Motswana [] Zimbabwean []
Other (Please specify) _____

- 1.4 Employment status Full-time [] Part-time []

- 1.5 Please state your highest qualification
- | | |
|------------------------------------|-----|
| Certificate BGCSE or Equivalent | [] |
| Professional Certificate & Diploma | [] |
| Bachelor's degree | [] |
| Honours degree | [] |
| Master's degree | [] |
| Doctoral degree | [] |

Other (Please specify) _____

- 1.6 Job position Front Line Officer - FLO [] Operations Manager - OM []
Risk Manager - RM [] CEO - Proprietor - CEO []
Accountant - Acc [] Loans Officer - LO []
Human Resources Manager - HRM [] Board Member - BM []

- 1.7 Number of years worked Less than 2 years [] 2– 5 years [] 6 –10 years []
11–15 years [] Greater than 16 years []

- 1.8 Is your organisation registered with NBFIRA? Yes [] No []

- 1.9 Have you been trained to work in a micro-lending company? Yes [] No []

- 1.10 Have you been involved in ERM adoption in your organisation? Yes [] No []

SECTION TWO

2	To what extent would you agree or disagree with each of the following statements on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2 to Strongly Disagree = 1 (Please simply put a "circle" on a number representing your preferred answer. If you make a mistake, put an "X" across the circle and choose another answer.)
---	--

2.1	The following sources of business for micro-lenders affect organisational performance and require an adoption of ERM framework that mitigates risk.					
	Sources of business for micro-lending					
2.1.1	Credit card	1	2	3	4	5
2.1.2	Mortgage	1	2	3	4	5
2.1.3	Home improvement loan	1	2	3	4	5
2.1.4	Business loan	1	2	3	4	5
2.1.5	Car loan	1	2	3	4	5
2.1.6	Student loan	1	2	3	4	5
2.1.7	Personal loan	1	2	3	4	5
2.1.8	Payday loan	1	2	3	4	5
2.2	To what extent would you agree or disagree with each of the following challenges / constraints that affect performance of micro-lending companies indicate your response on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2 to Strongly Disagree = 1. (Please simply put a "circle" on a number representing your preferred answer. If you make a mistake, put an "X" across the circle and choose another answer.)					
	Challenges / constraints faced with micro-lending company					
2.2.1	Customers relationship	1	2	3	4	5
2.2.2	Organisational design	1	2	3	4	5
2.2.3	Managerial background	1	2	3	4	5
2.2.4	Human resource management development	1	2	3	4	5
2.2.5	Working capital	1	2	3	4	5
2.2.6	Marketing activities	1	2	3	4	5
2.2.7	Managerial activities	1	2	3	4	5
2.2.8	Investment analysis	1	2	3	4	5
2.2.9	Social - economic problems (interest rates, inflation & retrenchments)	1	2	3	4	5
2.2.10	Technological Changes	1	2	3	4	5

2.2.11	Competitive strategy	1	2	3	4	5
2.2.12	Personal factors	1	2	3	4	5
2.2.13	Attracting and recruiting suitable staff	1	2	3	4	5
2.2.14	Experience in owning or running business	1	2	3	4	5
2.2.15	Business location / business site	1	2	3	4	5
2.2.16	Accessibility of growth financing sources	1	2	3	4	5
2.2.17	Strict Government regulations	1	2	3	4	5
2.2.18	Financial liquidity of P20,000.00 to be maintained all the times	1	2	3	4	5
2.2.19	Ownership of Enterprise being individual proprietor	1	2	3	4	5
2.3	To what extent would you agree or disagree with each of the following marketing challenges constraints that affect performance of micro-lending companies indicate your response on scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2 to Strongly Disagree = 1. (Please simply put a "circle" on a number representing your preferred answer. If you make a mistake, put an "X" across the circle and choose another answer.)					
	Marketing challenges / constraints faced with micro-lending company					
2.3.1	Product / service marketing	1	2	3	4	5
2.3.2	Marketing research and information	1	2	3	4	5
2.3.3	Pricing policy and strategy	1	2	3	4	5
2.3.4	Trained sales staff and promoters	1	2	3	4	5
2.3.5	Market segmentation	1	2	3	4	5

SECTION THREE

Your micro-lending company's approach towards enterprise risk management (ERM).

3.	To what extent would you agree or disagree with each of the following statements on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2 to Strongly Disagree = 1. (Please simply put a "circle" on a number representing your preferred answer. If you make a mistake, put an "X" across the circle and choose another answer.)					
-----------	--	--	--	--	--	--

3.1	To what extent would you agree or disagree to the following types of primary risk types within your organisation?					
3.1.1	Credit risk	1	2	3	4	5
3.1.2	Market risk	1	2	3	4	5
3.1.3	Liquidity risk	1	2	3	4	5
3.1.4	Interest rate risk	1	2	3	4	5
3.1.5	Country risk	1	2	3	4	5
3.1.6	Reputation risk	1	2	3	4	5
3.1.7	Legal risk	1	2	3	4	5
3.1.8	Operational risk	1	2	3	4	5
3.2	To what extent has your organisation implemented the following as primary factors of enterprise risk management?					
3.2.1	Employees misconduct	1	2	3	4	5
3.2.2	Processes	1	2	3	4	5
3.2.3	Systems	1	2	3	4	5
3.2.4	External factors (e.g. natural disasters, fraud, political pressures etc.)	1	2	3	4	5
3.3	To what extent has your organisation recognised the following employee exposures as an important part of enterprise risk management?					
3.3.1	Incompetence	1	2	3	4	5
3.3.2	Human error (negligence)	1	2	3	4	5
3.3.3	Low morale	1	2	3	4	5
3.3.4	High staff turnover	1	2	3	4	5
3.3.5	Fraudulent / criminal activities by employees	1	2	3	4	5
3.3.6	Lack of training	1	2	3	4	5
3.4	To what extent has you recognised the following process exposures as important part of enterprise risk management?					
3.4.1	Errors in procedures / methodologies	1	2	3	4	5

3.4.2	Documentation errors	1	2	3	4	5
3.4.3	Product complexity	1	2	3	4	5
3.4.4	Security risks	1	2	3	4	5
3.5	To what extent has your organisation recognised the following system exposures as an important part of enterprise risk management?					
3.5.1	System infiltration	1	2	3	4	5
3.5.2	System failures	1	2	3	4	5
3.5.3	Hackers (e.g. fraud through systems)	1	2	3	4	5
3.5.4	Programming errors	1	2	3	4	5
3.5.5	Information risk	1	2	3	4	5
3.5.6	Telecommunication risk	1	2	3	4	5
3.5.7	Obsolescence of systems	1	2	3	4	5
3.6	To what extent has your organisation recognised the following external exposures as important part of enterprise risk management?					
3.6.1	Acts of God (lighting, veld fire and floods)	1	2	3	4	5
3.6.2	External criminal activities	1	2	3	4	5
3.6.3	Domestic political upheaval	1	2	3	4	5
3.6.4	Regulatory and compliance	1	2	3	4	5
3.6.5	Legal actions	1	2	3	4	5
3.6.6	Business environment changes	1	2	3	4	5
3.6.7	Deterioration of micro-lending company's reputation perceived by the market	1	2	3	4	5
3.6.8	Strikes	1	2	3	4	5
3.6.9	Money laundering	1	2	3	4	5
3.7	To what extent has your organisation recognised the following as important elements of an enterprise risk management process?					
3.7.1	Risk identification	1	2	3	4	5

3.7.2	Risk evaluation / measurement	1	2	3	4	5
3.7.3	Risk control	1	2	3	4	5
3.7.4	Risk financing	1	2	3	4	5
3.8	To what extent has your organisation recognised the following methods as the most appropriate to identify various risk types?					
3.8.1	Workshops	1	2	3	4	5
3.8.2	Process mapping	1	2	3	4	5
3.8.3	Comparisons with other organisations	1	2	3	4	5
3.8.4	Discussions with peers	1	2	3	4	5
3.9	To what extent has your organisation recognised the importance of and implemented the following qualitative methods to measure enterprise risk management?					
3.9.1	Historical data to forecast the likelihood of a potential loss	1	2	3	4	5
3.9.2	Self - risk assessments	1	2	3	4	5
3.9.3	Risk maps / process flows	1	2	3	4	5
3.10	To what extent has your organisation recognised the importance of and implemented the following quantitative methods to measure enterprise risk management?					
3.10.1	Casual modelling	1	2	3	4	5
3.10.2	Risk indicators	1	2	3	4	5
3.10.3	Escalation triggers	1	2	3	4	5
3.10.4	Loss - event database	1	2	3	4	5
3.11	To what extent has your organisation recognised the importance of and implemented the following control measures of enterprise risk management?					
3.11.1	Policy and procedures	1	2	3	4	5

3.11.2	Internal controls	1	2	3	4	5
3.11.3	Risk reporting	1	2	3	4	5
3.12	To what extent has your organisation recognised the importance of and implemented the following risk financing techniques?					
3.12.1	Risk transfers (to third parties - insurance companies)	1	2	3	4	5
3.12.2	Risk retention (funded)	1	2	3	4	5
3.12.3	Risk retention (unfunded)	1	2	3	4	5
3.13	To what extent has your organisation adopted the following in relation to enterprise risk management?					
3.13.1	An adoption of enterprise risk management process that aligns with strategy and objectives.	1	2	3	4	5
3.13.2	An adoption of risk identification as an important ongoing process.	1	2	3	4	5
3.13.3	An adoption of a separate enterprise risk management structure.	1	2	3	4	5
3.13.4	An adoption of a direct reporting line where a risk management reports to the CEO.	1	2	3	4	5
3.13.5	An adoption of enterprise risk management as a function and responsibility of the board of directors.	1	2	3	4	5
3.13.6	An adoption of liquidity regulatory capital allocation for enterprise risk management.	1	2	3	4	5
3.13.7	An adoption of a framework for enterprise risk management and sustainability that mitigates sources of risk.	1	2	3	4	5
3.13.8	An adoption of enterprise risk management process as an integral part of the enterprise's overall management process.	1	2	3	4	5

SECTION FOUR
CORPORATE GOVERNANCE AND FIRM PERFORMANCE

4.	The following profitability ratios, liquidity ratios, corporate governance mechanisms and stakeholder management affect performance, growth and competitiveness of a micro-lending company, indicate your agreement or disagreement on a scale ranging from Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2 and Strongly Disagree = 1. (Please simply put a "circle" on a number representing your preferred answer. If you make a mistake, put an "X" across the circle and choose another answer.)					
4.1	Profitability and liquidity ratios					
4.1.1	Return on assets (ROA)	1	2	3	4	5
4.1.2	Return on Equity (ROE)	1	2	3	4	5
4.1.3	Debt to assets ratio	1	2	3	4	5
4.1.4	Capital gearing ratio	1	2	3	4	5
4.1.5	Interest cover	1	2	3	4	5
4.1.6	Earnings per share	1	2	3	4	5
4.1.7	Price / Earnings ratio (P/E Ratio)	1	2	3	4	5
4.1.8	Dividend pay-out ratio	1	2	3	4	5
4.1.9	Dividend yield	1	2	3	4	5
4.1.10	Dividend cover	1	2	3	4	5
4.1.11	Current ratio	1	2	3	4	5
4.1.12	Acid test ratio	1	2	3	4	5
4.1.13	Inventory turnover	1	2	3	4	5
4.1.14	Creditor payment period	1	2	3	4	5
4.1.15	Debtor collection period	1	2	3	4	5
4.1.16	Gross profit margin	1	2	3	4	5
4.1.17	Profit margin	1	2	3	4	5
4.2	Corporate governance					
4.2.1	Ownership	1	2	3	4	5
4.2.2	Board size	1	2	3	4	5
4.2.3	Outsiders in board	1	2	3	4	5

4.2.4	Audit committee	1	2	3	4	5
4.2.5	Outsiders in Audit committee	1	2	3	4	5
4.2.6	Total employees in the firm	1	2	3	4	5
4.2.7	Human resource manager	1	2	3	4	5
4.2.8	Family CEO	1	2	3	4	5
4.2.9	Firm size	1	2	3	4	5
4.2.10	Fixed assets	1	2	3	4	5
4.2.11	Investments	1	2	3	4	5
4.2.12	Total assets	1	2	3	4	5
4.2.13	Solidity	1	2	3	4	5
4.2.14	Nature of firm	1	2	3	4	5
4.2.15	Firm age	1	2	3	4	5
4.3	Critical success factors for stakeholder management					
4.3.1	Managing stakeholders with social responsibilities (economic, legal, environmental and ethical)	1	2	3	4	5
4.3.2	Exploring stakeholders' needs and constraints to micro-lending companies	1	2	3	4	5
4.3.3	Communicating with and engaging stakeholders properly and frequently	1	2	3	4	5
4.3.4	Understanding the area of stakeholders' interests	1	2	3	4	5
4.3.5	Identifying stakeholders properly	1	2	3	4	5
4.3.6	Keeping and promoting a good relationship	1	2	3	4	5

4.3.7	Analysing conflicts and coalitions among stakeholders	1	2	3	4	5
4.3.8	Predicting the influence of stakeholders accurately	1	2	3	4	5
4.3.9	Formulating appropriate strategies to manage stakeholders	1	2	3	4	5
4.3.10	Assessing attributes (power, urgency, and proximity) of stakeholders	1	2	3	4	5
4.3.11	Compromising conflicts among stakeholders effectively	1	2	3	4	5
4.3.12	Formulating a clear statement of micro-lending missions	1	2	3	4	5
4.3.13	Predicting stakeholders' reactions for implementing the strategies	1	2	3	4	5
4.3.14	Analysing the change of stakeholders' influence and relationships during life span of the enterprise	1	2	3	4	5
4.3.15	Assessing stakeholders' behaviour	1	2	3	4	5

5. Any other comments or suggestions (*Please use the space below and continue to next page*).

- **Reliability of the questionnaire**

As the respondent of this survey for ERM the researcher would appreciate if you could also answer the following diagnostic questions relating to the questionnaire by marking the appropriate answer with a cross (X), or commenting on the space provided:

1. *How many minutes did you take to complete this questionnaire?*

1.1	0 to 10 minutes	
1.2	10 to 20 minutes	
1.3	20 to 30 minutes	
1.4	30 to 40 minutes	
1.5	More than 40 minutes	

2. *To what degree did the questionnaire interested you and motivated you to respond?*

2.1	To no degree	
2.2	To a lesser degree	
2.3	To a fair degree	
2.4	To a high degree	
2.5	Totally	

3. *To what degree was the language understandable?*

3.1	To no degree	
3.2	To a lesser degree	
3.3	To a fair degree	
3.4	To a high degree	
3.5	Totally	

4. *How would you describe the questions as applicable to enterprise risk management?*

4.1	Not applicable	
4.2	Applicable	
4.3	Totally applicable	

5. *Are the instructions for the questionnaire clear?*

5.1	Yes	
5.2	No	

6. If your answer is no, please indicate where you have experienced challenges / problems and what changes you would recommend

7. *In your opinion to what degree do the questions follow a logic sequence?*

7.1	To no degree	
7.2	To a lesser degree	
7.3	To a fair degree	
7.4	To a high degree	

7.5	Totally	
-----	---------	--

8. In your opinion to what degree is the scale applicable to the questions?

8.1	To no degree	
8.2	To a lesser degree	
8.3	To a fair degree	
8.4	To a high degree	
8.5	Totally	

9. In your opinion to what degree did you understand the aim of the questionnaire?

9.1	To no degree	
9.2	To a lesser degree	
9.3	To a fair degree	
9.4	To a high degree	
9.5	Totally	

10. In your opinion was the questionnaire too long?

10.1	Yes	
10.2	No	

*****Thank you*****

ANNEXURE B: RESEARCH INTERVIEW GUIDE

It all starts here™



BY

PFUMBUDZAYI ROBERT MACHERA DOCTOR OF PHILOSOPHY IN ECONOMIC AND MANAGEMENT SCIENCES STUDENT (NORTH WEST UNIVERSITY - MAFIKENG CAMPUS)

Proprietor interview

The interview guide is part of the Doctor of Philosophy in Economic and Management Sciences study that seeks to develop a framework for Enterprise Risk Management and Sustainability in Micro-lending Companies in Botswana

INSTRUCTIONS:

You are kindly requested to take 30 to 45 minutes of your time to answer questions in this face - to - face interview. Your responses will be treated in utmost confidence. You will first be asked questions related to demographic information; sources of business; challenges; approaches to enterprise risk management; critical factors and thereafter your perception towards an adoption of a framework for enterprise risk management and sustainability in micro-lending companies in Botswana.

Section One: Demographic factors of respondents; educational level, age, gender and years of experience.

- a) Do you think the following factors: educational level, age, gender and years of experience have an influence towards performance, growth and competitiveness of a micro-lending company?
- b) Do you think the following factors: educational level, age, gender and years of experience have influence on the adoption of a framework for enterprise risk management and sustainability in micro-lending companies in Botswana?

Section two: Sources of risk that affect sustainability of micro-lending businesses.

- a) What do you think are the sources of risk that affect organisational performance and require an adoption of ERM framework that mitigates risk?
- b) Tell me what you think are the challenges / constraints that are faced with a business that may result into the closure of micro-lending entities?

- c) In your opinion what do think are the marketing challenges / constraints that are faced with micro-lending company?
- d) What is your perception towards an adoption of a framework for enterprise risk management and sustainability in micro-lending companies in Botswana?

Section three: Lending company’s approach towards Enterprise Risk Management (ERM).

- a) Which of the approaches are recognized in your enterprise in relation to ERM?

Section four: Characteristics of corporate governance and firm performance

- a) Do you think your organisation uses profitability and liquidity ratios to measure and monitor the business’s performance, growth and competitiveness?
- b) Which critical success factors influence management of stakeholders in your organisation?
- c) What do you think are the leadership styles that exist in your organisation?
- d) Do you think your organisation recognise the 14 principles of management of Henri Fayol?
- e) What do you think are the corporate governance cultures that exist in your organisation?
- f) What is your recommendation of the factors that influence success of micro-lending entities?

Section five: Characteristics of critical success factors for development of micro-lending company.

What is your perception towards critical success factors such as: entrepreneurial motives; motivation; managerial innovation; taking opportunities; self - sufficiency; business linkages; initiative; problem solving; strategy; knowledge and understanding; responsibilities of a risk manager and risk oversight in relation to the development and sustainability of a micro-lending company?

=====

ANNEXURE B 1: RESEARCH INTERVIEW GUIDE

It all starts here



NORTH WEST UNIVERSITY
YUNIBESITHI YA BOKONE-BOPHIRIMA
NOORDWES UNIVERSITEIT

BY

PFUMBUDZAYI ROBERT MACHERA DOCTOR OF PHILOSOPHY IN ECONOMIC AND
MANAGEMENT SCIENCES STUDENT (NORTH WEST UNIVERSITY - MAFIKENG CAMPUS)

Employee interview

The interview guide is part of the Doctor of Philosophy in Economic and Management Sciences study that seeks to develop a framework for Enterprise Risk Management and Sustainability in Micro-lending Companies in Botswana

INSTRUCTIONS:

You are kindly requested to take 30 to 45 minutes of your time to answer questions in this face - to - face interview. Your responses will be treated in utmost confidence. You will first be asked questions related to demographic information; sources of business; challenges; approaches to enterprise risk management; critical factors and thereafter your perception towards an adoption of a framework for enterprise risk management and sustainability in micro-lending companies in Botswana.

Section One: Demographic factors of respondents; educational level, age, gender and years of experience.

- a) Do you think the following factors: educational level, age, gender and years of experience have an influence towards performance, growth and competitiveness of a micro-lending company?
- b) Do you think the following factors: educational level, age, gender and years of experience have influence on the adoption of a framework for enterprise risk management and sustainability in micro-lending companies in Botswana?

Section two: Sources of risk that affect sustainability of micro-lending businesses.

- a) What do you think are the sources of risk that affect organisational performance and require an adoption of ERM framework that mitigates risk?
- b) Tell me what you think are the challenges / constraints that are faced with a business that may result into the closure of micro-lending entities?

- c) In your opinion what do think are the marketing challenges / constraints that are faced with micro-lending company?
- d) What is your perception towards an adoption of a framework for enterprise risk management and sustainability in micro-lending companies in Botswana?

Section three: Lending company’s approach towards Enterprise Risk Management (ERM).

- a) Which of the approaches are recognized in your enterprise in relation to ERM?

Section four: Characteristics of corporate governance and firm performance

- a) Do you think your organisation uses profitability and liquidity ratios to measure and monitor the business's performance, growth and competitiveness?
- b) Which critical success factors influence management of stakeholders in your organisation?
- c) What do you think are the leadership styles that exist in your organisation?
- d) Do you think your organisation recognise the 14 principles of management of Henri Fayol?
- e) What do you think are the corporate governance cultures that exist in your organisation?
- f) What is your recommendation of the factors that influence success of micro-lending entities?

=====

ANNEXURE C: ETHICAL CLEARANCE LETTER FROM NBFIRA

Office Address:
Botswana Financial Institutions Regulatory Authority
P.O. Box 220
Gaborone
Tloasehe, Gaborone
Botswana
Telephone: +267 310 2251
Fax: +267 310 2271
Email: info@nbfiira.org.bw

NBFIRA

September 21, 2017

Ref: CNBFIRA 8/6/3-II (34)

Mr. Phumbudzayi R. Machera
P.O. Box AAD 738 AD
Kgale View
Gaborone

Dear Sir,

REQUEST FOR PERMISSION TO CONDUCT A PhD RESEARCH PROJECT MICRO LENDING SECTOR IN BOTSWANA

1. Reference is made to your letter dated March 28, 2017 regarding the above matter.
2. Please be advised that even though the micro lending sector falls under the purview of the Non-Bank Financial Institutions Regulatory Authority (NBFIRA), the Regulatory Authority does not have a mandate to grant permission for the conduct of research on the sectors it regulates. However, the regulatory authority appreciates the efforts of researchers who deem it necessary to advise on their intentions to conduct research of this nature on the sectors that fall under its purview.
3. Therefore be advised that NBFIRA has no objection against you in conducting research in the field of micro lending in Botswana.
4. Please share the outcome of your research with the Regulatory Authority.

Yours faithfully


Mxhosi Kebalefetsa
Acting Director - Lending Activities

Contact: Eric Mogotsakgotla
Email: ericmogotsakgotla@nbfiira.org.bw
Phone: 3686145

NON-BANK FINANCIAL INSTITUTIONS REGULATORY
AUTHORITY
3RD AND 4TH FLOOR EXPONENTIAL BUILDING
PLOT 84861 NEW CBD
PRIVATE BAG 00014 GABORONE BOTSWANA
PHONE: +267 310 2251-267 310 2271 FAX: +267 310 2271

ANNEXURE D: INFORMED CONSENT



It all starts here™



NORTH - WEST UNIVERSITY CONSENT TO PARTICIPATE IN RESEARCH

A Framework for Enterprise Risk Management and Sustainability in Micro-lending Companies in Botswana

You are herewith requested to participate in research conducted by Pfumbudzayi Robert Machera, who is studying towards a Doctor of Philosophy in Economic and Management Sciences (PhD in Business Management) at Graduate School of Business and Governance, North - West University. The results of this study will be contained in a thesis. You were selected as a possible participant in this study because you are one of the senior management / owners of micro-lending who was randomly picked and considered trustworthy in giving information on the sources of risk that affect micro-lending companies in Botswana.

1. PURPOSE OF THE STUDY

The aim of this study is to develop a framework for enterprise risk management and sustainability in micro-lending companies in Botswana. This framework will be used to mitigate down - side risks in micro-lending businesses in Botswana.

2. PROCEDURES

You are kindly requested to participate in this study whereby you complete the questionnaire in the first phase of this study and return it to the investigator. You may also be requested to participate in the second phase of the study where you will be interviewed. During the individual interviews audio recording will be used.

3. POTENTIAL RISKS AND DISCOMFORTS

The results will only be used for this purpose of this study. To prevent individuals from identified, the participants will remain anonymous; hence the results will not be associated to any person or company's names. The researcher will use letters as pseudonyms.

4. POTENTIAL BENEFITS TO SUBJECTS AND / OR SOCIETY

The participants will benefit from this research because the outcomes of this study will assist their companies hence this enhances business continuity, competitiveness, growth and performance. The participant will gain knowledge about enterprise risk management through participating in this study. However, if there is significant improvement in micro-lending companies both the government and society will be uplifted through economic development. There will be also creation of employment and this may assist in alleviating poverty.

5. PAYMENT FOR PARTICIPATION

The participants will not receive any form of payment because they are keen to understand the sources of risk that affect their businesses. The participants will not be forced to participate in this study.

6. CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with the participants will remain confidential and will be disclosed only with the participants' permission or as required by law. Confidentiality will be maintained by means of signing of the voluntary informed consent form immediately before the study commences. In this study individual confidentiality will be upheld through the use of unmarked questionnaire and interview schedules. Each participant will be assigned with a code and then identified with that code. The data will be safeguarded on the investigator's personal laptop and the passwords will be continually changed in order to make accessibility impossible. The information will only be available to the Graduate School of Business and Governance, North - West University. The researcher will also seek ethical clearance from NBFIRA an institution that regulates micro-lenders in Botswana. The results will be published for educational purposes at Graduate School of Business and Governance, North - West University but names of participants will not be given in view of the requirement of anonymity in this study. This research will involve activities that audio - recorded and before recording the researcher will request the participants' permission. The participants have the right to deny this request.

7. PARTICIPATION AND WITHDRAWAL

You may withdraw to participate from this study at any time. The researcher may withdraw you from this research if circumstances arise which warrant such an act to do so.

8. IDENTIFICATION OF INVESTIGATOR

If you need to ask any questions about this study, please feel free to conduct the research personnel at the Graduate School of Business and Governance, North - West University: Principal investigator, Promoter, Co – Investigator (s).

If you need to contact the researcher and the promoter, their details are as follows:

- 1) Principal investigator: Pfumbudzayi Robert Machera
Mobile number: 00267 74557884
- 2) Promotor: Professor Wedzerai Musvoto
Mobile number: 0027 603560137

9. RIGHTS OF RESEARCH SUBJECTS

Please note that you may withdraw your consent any time and discontinue without being penalised. You are not waiving any legal claims, rights or remedies because of your participation in this research. If you have any questions regarding your rights as a research subject, contact Dr Lekunze (Research Manager) on 0027 18 3892437 / 2827 at the Graduate School of Business and Governance, North - West University.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

The information above was explained to me by Pfumbudzayi Robert Machera in English and I am in command of this language. I am willing to participate in this study.

I hereby consent voluntarily and willing to participate in this study. I have been given a copy of this form.

Name of Subject / Participant

Name of Legal Representative (if applicable)

Signature of Subject / Participant or Legal Representative: Date

SIGNATURE OF INVESTIGATOR

I declare that I explained the information provided in this document toS/he was given enough time to ask questions and our conversation was in English.

Signature of Investigator: Date:

**ANNEXURE E: NORTH WEST UNIVERSITY: HUMAN RESOURCE RESEARCH ETHICS
COMMITTEE (HRREC) - CLEARANCE LETTER**

22838082@nwu.ac.za
Per e-mail



Private Bag X6001, Potchefstroom
South Africa, 2520

Tel: +27(18) 299-1111/2222
Web: <http://www.nwu.ac.za>
Human Resource Research Ethics Committee
Tel: 018 269 2044
Email: Betchani.Tchereni@nwu.ac.za

Dear PROF SARATIEL WEDZERAI MUSVOTO

02-Nov-2017

APPROVAL OF ETHICS APPLICATION: NWU-HS-2017-0201

The following application has been reviewed by the Human Resource Research Ethics Committee (HRREC) on 24-Oct-2017.

Name of student: R P MACHERA.

Name of supervisor/promoter: PROF SARATIEL WEDZERAI MUSVOTO

Title of study: A Framework for Enterprise Risk Management and Sustainability in Micro - Lending Companies in Botswana.

Application Risk Level: Minimal, low or negligible risk.

This letter serves to inform you that your application has been approved from 24-Oct-2017 to 23-Oct-2020.

Special conditions of the approval (if applicable):

Yours Sincerely

A handwritten signature in black ink, appearing to read 'B. Tchereni', with a stylized flourish at the end.

Prof B. Tchereni

Chairperson: Human Resource Research Ethics Committee (HRREC)

ANNEXURE F: RISK REGISTER (ADAPTED FROM POJASEK, 2011:88)

[illegible]

ANNEXURE G: CONFIRMATION CERTIFICATE FROM THE EDITOR



Office: 0183892451

FACULTY OF EDUCATION

Cell: 0729116600

Date: 23rd March, 2019

TO WHOM IT MAY CONCERN

CERTIFICATE OF EDITING

I, **Muchativugwa Liberty Hove**, confirm and certify that I have read and edited the entire thesis, **A Framework for Enterprise Risk Management and Sustainability in Micro-lending Companies in Botswana** by **Pfumbudzayi Robert Machera**, Orcid.org 0000-0002-3678-9192, submitted in fulfilment of the requirements for the degree *Doctor of Philosophy in Economic and Management Sciences with Business Administration*, at the **North-West University**, South Africa.

Pfumbudzayi Robert Machera was supervised by **Professor Saratiel Wedzerai Musvoto** of the North-West University.

I hold a PhD in English Language and Literature in English and am qualified to edit such a thesis for cohesion and coherence. The views expressed herein, however, remain those of the researcher/s.

Yours sincerely

Dr M.L.Hove (PhD, MA, PGDE, PGCE, BA Honours – English)



[illegible]