EFFECT OF FINANCIAL MANAGEMENT PRACTICES
ON THE BUSINESS EFFICIENCY OF SMALL AND
MEDIUM ENTERPRISES IN NIGERIA

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Effect of Financial Management Practices on the Business Efficiency of Small And Medium Enterprises in Nigeria

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A thesis submitted in partial fulfillment for the degree of Doctor of Philosophy in Entrepreneurship in the Jomo Kenyatta University of Agriculture and Technology

2016
DECLARATION

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

Signed............................................................ Date........................................

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This thesis has been submitted for examination with my approval as university supervisor.

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DEDICATION

This study is dedicated to all members of my family both immediate and extended. Further dedication is to my late mother.
ACKNOWLEDGEMENT

My gratitude to the Almighty God for His mercies and for bringing me this far. I wish to convey my sincere gratitude to my supervisor professor R.W. Gakure and Dr. George Orwa for their immeasurable guidance, support, encouragement and availability during the study. I am also grateful to my family for their patience, support and encouragement.

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TABLE OF CONTENTS

DECLARATION ........................................................................................................ iii
DEDICATION ........................................................................................................ iv
ACKNOWLEDGEMENT ........................................................................................ v
LIST OF FIGURES ............................................................................................. xvi
LIST OF ABBREVIATIONS AND ACRONYMS ............................................. xix
ABSTRACT ......................................................................................................... xx
OPERATIONAL DEFINITION OF TERMS .................................................. xxi

CHAPTER ONE .................................................................................................. 1
INTRODUCTION .................................................................................................. 1
1.0 Overview ........................................................................................................ 1
1.1 Background to the study ................................................................................ 1
1.1.1 SMEs and Financial Management in Nigeria ......................................... 3
1.2 Statement of Problem .................................................................................... 4
1.3 General Objectives ....................................................................................... 5
1.3.1 Specific Objectives .................................................................................. 5
1.4 Research Hypotheses .................................................................................... 6
1.5 Justification ................................................................................................... 6
1.6 Scope of the Study ....................................................................................... 7
1.7 Limitation of the Study................................................................................ 7

CHAPTER TWO ................................................................................................. 8
LITERATURE REVIEW ...................................................................................... 8
2.0 Introduction .................................................................................................. 8
2.1 Theoretical Framework ................................................................................ 8
2.1.1 Theory of Financial Capital: ................................................................ 8
2.1.2 Theory of intellectual capital performance (ICP): .........................................9
2.1.3 Small and Medium Enterprises .......................................................................9
2.2 Challenges of SMEs in Nigeria ...........................................................................9
2.3 Financial Management in SMEs .........................................................................10
2.4 Conceptual Review ..............................................................................................12
  2.4.1 Working Capital Management .................................................................12
  2.4.2 Investment Decision .....................................................................................12
  2.4.3 Financing Decision .......................................................................................12
  2.4.4 Accounting Information System (AIS) .....................................................12
2.5 Theoretical Literature Review ............................................................................13
  2.5.1 Capital Structure Theory ...........................................................................13
  2.5.2 Pecking Order Theory of Financing ........................................................25
  2.5.3 Technology Diffusion Theory .....................................................................28
2.6 Conceptual Framework .......................................................................................29
2.7 Empirical Literature Review .............................................................................32
  2.7.1 Financial Management ...............................................................................32
  2.7.2 Working Capital Management ...................................................................34
  2.7.3 Investment Decision ...................................................................................40
  2.7.4 Financing Decision ......................................................................................47
  2.7.5 Accounting Information System ...............................................................50
2.8 Business Efficiency in SMEs ............................................................................64
2.9 Technical efficiency: ..........................................................................................65
  2.9.1 Allocative efficiency: ..................................................................................65
  2.9.2 Economic efficiency: ...................................................................................65
2.10 Parametric methods: .........................................................................................66
2.11 Stochastic frontier approach (SFA): .................................................................66
2.12 Distribution-free approach (DFA): ................................................................. 67  
2.13 Thick frontier approach (TFA): ................................................................. 67  
2.14 Non-Parametric methods: ................................................................. 68  
2.15 Data envelopment analysis (DEA): ......................................................... 68  
2.16 The previous literatures on efficiency: ..................................................... 69  
2.17 Internationalization of operations; ........................................................... 72  
2.18 Determinants of the Technical Efficiency: .............................................. 73  
2.19 Size: ........................................................................................................ 73  
2.20 Profitability: ............................................................................................ 75  

CHAPTER THREE ......................................................................................... 77  
RESEARCH METHODOLOGY ....................................................................... 77  
3.1 Introduction .............................................................................................. 77  
3.2 Research Design ....................................................................................... 77  
3.2.1 Research Philosophy ........................................................................... 78  
3.3 Target Population ...................................................................................... 79  
3.4 Sampling Frame ......................................................................................... 79  
3.5 Sample and Sampling Technique ............................................................... 80  
3.6 Sample size ............................................................................................... 80  
3.7 Data Collection Instruments ...................................................................... 81  
3.8 Pilot Study .................................................................................................. 82  
3.9 Data Processing and Analysis ................................................................... 83  
3.9.1 Statistical Tools and their Justification .................................................. 84  
3.9.2 The OLS Regression Model ................................................................. 84  

CHAPTER FOUR ........................................................................................... 85  
RESEARCH FINDINGS AND DISCUSSION ................................................. 85  
4.1 Introduction .............................................................................................. 85
4.6 Regression Analysis between Investment decision and Business efficiency in SMEs in Nigeria

4.7 Financial Decision

4.7.1 Knowledge of Various Sources of Fund

4.7.2 Calculating Debt to Equity Ratio

4.7.3 Selecting the optimal capital structure

4.7.4 Regression Analysis between Financial Decision and Business efficiency in SMEs in Nigeria

4.7.5 Accounting information system

4.7.6 Storage of Information

4.7.7 Processing of Information

4.8 Regression Analysis between Accounting information system and Business efficiency in SMEs in Nigeria

4.8.1 Financial Reporting and Analysis

4.8.2 Income Statement

4.8.3 Balance Sheet

4.8.4 Cash Flow Report

4.8.5 Regression Analysis between Financial Reporting and Analysis and Business efficiency in SMEs in Nigeria

4.8.6 Multiple Regression Analysis between the independent variables and Business efficiency in SMEs in Nigeria

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

5.2 Summary of Findings

5.3 Recommendations
5.3.1 There is relationship between Working Capital Management and Business Efficiency of SMEs

5.3.2 There is relationship between Investment Decision and Business Efficiency of SMEs

5.3.3 There is a relationship between Financing Decision and Business Efficiency of SMEs

5.3.4 There is a relationship between Accounting Information System and business efficiency of SMEs

5.3.5 There is a relationship between Financial Reporting and Analysis and business efficiency of SMEs

5.4 Conclusion

5.5 Recommendations

5.6 Areas of Future Research

REFERENCES

APPENDICES
LIST OF TABLE

Table 3.1 Sampling........................................................................................................... 81
Table 4.1 Reliability Test Results...................................................................................... 86
Table 4.2 Multicolinearity ................................................................................................. 87
Table 4.3 Cash Management Policy .................................................................................. 88
Table 4.4 Influence of Cash Management Policy on Business Efficiency ......................... 88
Table 4.5 Average Financial Liquidity Ratio ..................................................................... 88
Table 4.6 Chi-Square Tests................................................................................................. 91
Table 4.7 Does your firm have specific measures for managing receivables? ................. 92
Table 4.8 If yes, how has this enhance business efficiency in your firm? .......................... 93
Table 4.9 If no, how did this affect business efficiency in your firm? ............................... 94
Figure 4.3.3: Impact of lack of Receivable Management Policy on Business Efficiency ................................................................................................................................. 94
Table 4.10 Please indicate the total Naira value of your receivables for the years shown ............................................................................................................................................ 95
Table 4.11 Chi-Square Tests.............................................................................................. 98
Table 4.12 Are there inventory management policies in your firm? ................................. 99
Table 4.13 If yes, how has this affected the business efficiency in your firm? ....... 100
Table 4.14 If no, how did this affect the business efficiency in your firm? ............. 101
Table 4.15 Please indicate the opening and closing stock value of your firm during the last five years shows below .......................................................................................... 102
Table 4.16 How many times did your firm record maximum reorder stock level during the last five years? .................................................................................................. 104
Table 4.17 Chi-Square Tests............................................................................................ 106
Table 4.18 Model Summary b .......................................................................................... 108
Table 4.19 ANOVA a........................................................................................................ 108
Table 4.20 Coefficients a .................................................................................................. 108
Table 4.21 Does your firm prepare budget? .................................................................... 109
Table 4.22 If yes, how does this help your firm in achieving your goals? ....................... 110
Table 4.23 How much was budgeted for the following years ........................................... 112
Table 4.24 Chi-Square Tests .............................................................................................................. 114
Table 4.25 Does your enterprise have any policy for managing networking capital?.................. 115
Table 4.26 shows that 87% of the firms have any policy for managing networking while the remaining 13% did not have it. .................................................................................. 115
Table 4.27 If yes, how does this help in the efficiency your firm? .............................................. 116
Table 4.28 If no, how does this affected the efficiency of your enterprise? .......................... 117
Table 4.29 Chi-Square Tests .............................................................................................................. 118
Table 4.30 Does your firm have any policy on investment analysis? ........................................ 119
Table 4.31 If yes, how has this affected the business efficiency in your firm? .......................... 120
Table 4.32 If no, how did this affected the business efficiency in your firm? .......................... 121
Table 4.33 Model Summary ...................................................................................................... 123
Table 4.34 ANOVA .............................................................................................................................. 124
Table 4.35 Coefficients ...................................................................................................................... 124
Table 4.36 Does your enterprise have any policy for calculating cost of capital?........... 125
Table 4.37: Influence of Calculating Cost of Capital on Business Efficiency ......................... 126
Table 4.37 If yes, how does this help in the efficiency your firm? .............................................. 126
Table 4.38 If no, how does this affected the efficiency of your enterprise? .......................... 127
Table 4.39 please indicate the cost of capital of your firm for the following years .......................... 128
Table 4.40 Chi-Square Tests .............................................................................................................. 130
Table 4.41 Does your firm ever consider debt to equity ratio? ................................................. 131
Table 4.42 If yes, how does this enhance the efficiency of your firm? .................................. 132
Table 4.43 If no, how does this affected the efficiency of your firm? .................................. 133
Table 4.44 kindly indicate the debt to equity ratio for the following ................................. 134
Table 4.45 Chi-Square Tests .............................................................................................................. 136
Table 4.46 Does your enterprise have any specific policies for business expansion? ........ 137
Table 4.47 If yes, how does these policies impacted on the efficiency of your business? .......................... 138
Table 4.48 If no, how has this affected the efficiency of your business? .......................... 139
Table 4.49 Chi-Square Tests .............................................................................................................. 141
Table 4.50 Model Summary ...................................................................................................... 142
Table 4.51 ANOVA .............................................................................................................................. 143
Table 4.52 Coefficients ...................................................................................................................... 143
Table 4.53  Does your enterprise use computer in keeping and processing financial transactions? 144
Table 4.54  If yes, how does these impacted on the business efficiency of your enterprise? 145
Table 4.55  If no, how does this affected the efficiency of your enterprise? ....... 147
Table 4.56 Chi-Square Tests .................................................................................. 148
Table 4.57  Does your enterprise have system of storing financial information?.. 149
Table 4.58  If yes, how does this enhances the efficiency of your enterprise? ...... 150
Table 4.59  If no, how does this affected the business efficiency of your enterprise?151
Table 4.60 Chi-Square Tests .................................................................................. 153
Table 4.61  Does your enterprise have system of processing of financial information 154
Table 4.62  If yes, how does it impacted on the business efficiency of your enterprise? 155
Table 4.63  If no, how has it affected the business efficiency of your enterprise? 156
Table 4.64 Chi-Square Tests .................................................................................. 158
Table 4.65 Model Summary$^b$ ............................................................................. 159
Table 4.66 ANOVA$^a$ ......................................................................................... 160
Table 4.67 Coefficients$^a$ ...................................................................................... 160
Table 4.68  Does your enterprise calculate it revenue and expenses?............ 161
Table 4.69  If yes, how does it impacted on the business efficiency of your enterprise? 162
Table 4.70  Kindly indicate your firm’s record of revenue and expenditure for the following years ................................................................. 164
Table 4.71 Chi-Square Tests .................................................................................. 165
Table 4.72  Does your enterprise consider the calculation of the profit and losses 166
Table 4.73  If yes, how does this impacted on the efficiency of your business? ... 167
Table 4.74  kindly indicate the profit and losses you incurred in the following years168
Table 4.75 Chi-Square Tests .................................................................................. 169
Table 4.76  Does your enterprise keep record of cash flow? ......................... 169
Table 4.77  If yes, how has these impacted on the efficiency of your business? ... 170
Table 4.78  If no, how does this affected the efficiency of your business? ........ 172
Table 4.79 Chi-Square Tests ................................................................. 173
Table 4.80 Model Summaryb ............................................................... 175
Table 4.81 ANOVAa ................................................................. 175
Table 4.82. Coefficientsa ................................................................. 176
Table 4.83 Model Summaryb ............................................................... 178
Table 4.84 ANOVA ................................................................. 178
Table 4.85 Overall Regression Coefficients ........................................... 179
Table 4.86: Overall Regression Coefficients ........................................... 180
LIST OF FIGURES

Fig. 1.1 Conceptual Framework ........................................................................................................... 31

Figure 4.3.1 Does the firm have specific measures for managing receivables? ........ 92
Figure 4.3.2 Influence of having Receivable Management Policy on Business
Efficiency .............................................................................................................................................. 93

Figure 4.3.4 Total Naira value of receivables for the years shown ............................................. 95
Figure 4.3.5 Are there inventory management policies in your firm? ........................................ 99
Figure 4.3.6 Effect of Inventory Management on Business efficiency ...................................... 100

Figure 4.3.7 Impact of lack of Inventory Management on Business efficiency .................... 101
Figure 4.3.8 Opening and closing stock value of the firms during the last five years ........ 103
Figure 4.3.9 Average number of reorder stock level during the last five years .......................... 105

Figure 4.4 Scatter Diagram of working capital management and business efficiency of SMEs ........................................................................................................................................... 107

Figure 4.4.1 Does firms prepare budget? ......................................................................................... 110
Figure 4.4.2 How does budget preparation help firms in achieving goals? ........................ 111
Figure 4.4.3 Average amount budgeted ......................................................................................... 112

Figure 4.4.4 Does enterprise have any policy for managing networking capital? ........ 115
Figure 4.4.5 Effect of networking capital on the efficiency of firms .............................................. 117
Figure 4.4.6 Effect of lack of networking capital on the efficiency of firms ............................ 118

Figure 4.4.7 Does firms have any policy on investment analysis? .............................................. 119
Figure 4.4.8 Effect of the Policy on Business Efficiency ................................................................. 120

Figure 4.4.9 Effect of lack of the Policy on Business Efficiency .................................................... 121

Figure 4.5 Scatter Diagram of investment decision and business efficiency of SMEs 123

Figure 4.5.1 Does enterprise have any policy for calculating cost of capital? ..................... 126
Figure 4.5.2 Influence of Calculating Cost of Capital on Business Efficiency .............................. 127
Figure 4.5.3 Impact of lack of Calculating Cost of Capital on Business Efficiency 128

Figure 4.5.4 The cost of capital of your firm for the following years ........................................... 129

Figure 4.5.5 Does the firms ever consider debt to equity ratio? ................................................. 131
Figure 4.5.6 How does consideration of debt to equity ratio enhance the efficiency of firms 132
Figure 4.5.7 how does no considering of debt to equity ratio enhance the efficiency of firms 133

Figure 4.5.8 Debt to equity ratio ........................................................................................................134

Table 4.5.9 Does the enterprise have any specific policies for business expansion? 137

Figure 4.6 Impacted of policies on the efficiency of business ..................................................138

Figure 4.6.1 Impacted of no policies on the efficiency of business ...........................................139

Figure 4.6.2: Scatter Diagram of financial decision and business efficiency of SMEs 142

Figure 4.6.3 Does enterprise use computer in keeping and processing financial transactions? 145

Figure 4.6.4 Impact of using computer in keeping and processing financial transactions on business efficiency of enterprise .................................................................146

Figure 4.6.5 Impact of not using computer in keeping and processing financial transactions on business efficiency of enterprise ..............................................................................147

Figure 4.6.5 Does enterprise have system of storing financial information? ..........150

Figure 4.6.6 Impact of storing financial information on business efficiency ..........151

Figure 4.6.7 Impact of not storing financial information on business efficiency ....152

Figure 4.6.8 Does enterprise have system of processing of financial information? .154

Figure 4.6.9 Effect of system of processing of financial information on business performance ..........................................................................................................................156

Figure 4.6.9 Effect of not having system of processing of financial information on business performance ..........................................................................................................................157

Figure 4.7: Scatter Diagram of accounting information system and business efficiency of SMEs .............................................................................................................................................159

Figure 4.7.1 Does enterprise calculate it revenue and expenses? .......................162

Figure 4.7.2 Impact of calculating revenue and expenses on business efficiency ...163

Figure 4.7.3 firm’s record of revenue and expenditure .......................................................164

Figure 4.7.5 Does enterprise consider the calculation of the profit and losses you incur in your business? ..................................................................................................................166

Figure 4.7.6 Impact of calculation of the profit and losses ........................................167

Figure 4.7.7 the profit and losses you incurred .................................................................168

Figure 4.7.9 Does enterprise keep record of cash flow? ..............................................170

Figure 4.8 Impact of keeping record of cash flow on business efficiency ..........171
Figure 4.8.1 Impact of not keeping record of cash flow on business efficiency ..... 173
Figure 4.8.2: Scatter Diagram of financial reporting and analysis and business
efficiency of SMEs ........................................................................................................... 174
Figure 4.8.2: Scatter Diagram of the independent variables and business efficiency
of SMEs ............................................................................................................................ 177
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
</tr>
<tr>
<td>CA</td>
<td>Competitive Advantage</td>
</tr>
<tr>
<td>CBN</td>
<td>Central Bank of Nigeria</td>
</tr>
<tr>
<td>ECOWAS</td>
<td>Economic Community of West African State</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GNP</td>
<td>Gross National Product</td>
</tr>
<tr>
<td>NBS</td>
<td>National Bureau of Statistics</td>
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<tr>
<td>NCC</td>
<td>Nigerian Communication Commission</td>
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<tr>
<td>NEPC</td>
<td>Nigerian Investment Promotion Commission</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PM</td>
<td>Project Manager</td>
</tr>
<tr>
<td>RBV</td>
<td>Resource Based View</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium Enterprises</td>
</tr>
<tr>
<td>SMEDAN</td>
<td>Small and Medium Enterprise Development Agency of Nigeria</td>
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<tr>
<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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ABSTRACT

The purpose of this study was to determine the effects of financial management practice on the business efficiency of small and medium enterprises in Nigeria. This involved modern financial management practices. Small and Medium Enterprises play a very significant role in the process of industrialisation and sustenance of economic growth encouragement of entrepreneurship, employment generation, reduction of poverty and contribution to gross domestic product (GDP) in many countries, Nigeria inclusive. They perform that vital role through innovation and production of various goods and services which empower the process of sourcing such funds as well as the effective utilization and efficient management of the funds constitute major challenges of the involvement of well trained professionals accountants to attract. At the main objectives of this research was to establish relationship between financial management practices and the business efficiency of small and medium enterprises in Kaduna – Nigeria. The independent variables of the study are working capital management, investment decision, financial decisions, accounting information system and financial reporting and analysis. A descriptive research design was used to analyse data. Advanced statistical analysis was conducted using both inferential and descriptive statistical analysis and regression analysis model. Sample of 230 questionnaires were administered. The study was conducted in Kaduna-Nigeria being a former headquarters of Northern Nigeria is a cosmopolitan area and have numerous small and medium enterprises. The findings revealed that, financial management practices have a significant influence on the business efficiency small and medium enterprises in Kaduna-Nigeria i.e., is therefore, recommended that the government in Nigeria need to introduce new policies through agencies that will encourage SMEs in Nigeria to live and train professional financial experts in their firms. The research also recommends that SMEs should always use the modern financial techniques in keeping financial records.
Operational Definition of Terms

**Accounting Information System:** An accounting information system (AIS) is a system of collection, storage and processing of financial and accounting data that is used by decision makers. (Turyahebwa, 2013).

**Business Efficiency:** Is a situation in which an organisation maximizes benefit and profit, while minimizing effort and expenditure. For the purpose of this study, business efficiency is defined in terms of profitability growth. Profitability refers to the rate of return on company’s investment. (Ismail, 2010).

**Financial Management:** This refers to the decisions relating to investment, financing information system and financial reporting analysis. (Asuquo, 2103).

**Financing:** Financing decisions are decisions concerned with the method that are used to raise funds to meet the firm’s investment and operating needs. (Asuqua, 2012).

**Growth:** refers to percentage increase in sales and percentage increase in market share. (CBN, 2012).

**Investment:** This involves the decision of allocation of capital or commitment of funds to long term assets that would yield benefits in the future. (Effiong, 2013).

**Working Capital Management:** This involves the relationship between a firm short term assets and its short term liabilities. (Eljelly, 2004).
CHAPTER ONE
INTRODUCTION

1.0 Overview
This chapter comprises of background of the study and SMEs and financial management in Nigeria, statement of problem, general and specific objectives, research hypotheses, justification, scope of the study, limitations of the study.

1.1 Background to the study
This study examine the effect of financial managerial practices on the business efficiency of Small and medium enterprises (SMEs) contribute greatly to the economies of all countries, regardless of their level of development. About 80% of the labour force in Japan and 50% of workers in Germany are employed in (SME) sector (Abdullahi, 2007). With respect to developing countries, according to ILO (2011) the sector has made a significant contribution to the Gross Domestic Product of Uganda (20%), Kenya (19.5%) and Nigeria (24.5%). The term SMEs covers wide range of perceptions and measures, varying from country to country and between the sources reporting SMEs statistics. Some of the commonly use criteria in these categorization includes number of employees, total net assets sales and investment level. However, the most common definition used is employment, but, there is variation in defining the upper and lower limit of SME (Ayyagari, Beck & Demiguck & Demigunt, 2003). United States Small Business Administration (2004) asserts that small business with fewer than 500 employees make up nearly 97% of all US exporting firms, and their importance is growing. Between 1987 and 1997, the number of these small companies export tripled between 1992 and 1997 the value of the companys export dollars also tripled to $171.9 billion. companies with fewer than 20 employees have been the most successful exports. They are the past growing both in numbers of exports and in number of export dollars (Anon, 2004). According to Quingui (2004) the number of SMEs in China had exceeding eight million, which results in a larger percentage of the population being employed in entrepreneurial ventures. The industrial output and export volume of these SMEs make up 60% of Chinas total Gross Domestic Product (GDP). SMEs which make up 99% of all
enterprises in China are a vital force for the sustainable development of the Chinese economy.

According to a study of Canadian small firms; almost half of the firms in Canada that went bankrupt do so primarily because of their own deficiencies rather than externally generated problems. They do not develop a basic internal strength to survive. Overall weakness in management combined with lack of market for their product, cause these firms to fail. The main reasons for their failure is inexperience management. The managers of bankrupt firms do not have the experience, knowledge or vision to run their business (Baidwin, 2006) Umar (2006) stated that post world war Japan define small and medium enterprises as one either having capital not exceeding fifty million yen (Y50m) or having not more than 300 employees in manufacturing industry, and either having capital not greater than Y10m or having not more than 50 employees in commerce and service sectors. They further reported, an Indonesian agency for small and medium enterprises as defining small scale enterprises to mean all enterprises, household or cottage employing less than 10 full time workers and not using motive power or machinery, and medium sized industry as one employing between 10 – 50 workers and using motive power. From the point of view of quantitative measure, the Indian official version define small scale industry as comprising manufacturing enterprises with investment in plant and machinery not exceeding 750,000 rupees. In the definition, employment was emphasized, this reflecting Indians pre-occupation with problems of scarcity of capital and unemployment. The current Vietnam has not uniformly define which criteria a business has to fulfil to be viewed as an SME. The SMEs are understood to have the same definition given by the Vietnamese chamber of commerce and industry (VCCI, 2005). According to VCCI, SME is define as a business unit that has between 51 -200 employees. Cronje (2004) perceive small and medium enterprises in South Africa as any business with fewer than 200 employees, an annual turnover of less than 125million, capital assets of less than 122 million, and the owners are directly involved in the management of the business. Temtime & Pansive (2004) SMEs employed half of the working population and contribute 50% to Gross Domestic Product of South Africa (Gumeda, 2004; Mutezo, 2005; Rogerson, 2006).
According to the Ministry of Labour in Kenya, a micro enterprise has 0 to 9 employees, small enterprise has 10 – 49 employees and medium has 50 – 99 employees. Since 1986, the small business enterprise sector are perceived as a means of strengthening Kenya’s economy, as highlighted in the sessional paper No. 1 of 1986, the sessional paper No. 2 of 2005 on industrial transformation to the year 2020 and eight National Development Plan (1997-2001). United Nations conference on trade and Development UNCTAD (2004) regards Micro Enterprises in Uganda to be perceived as enterprises having fewer than five employees, including family members; working capital of less than ush2.5million; turnover value ush10million; small enterprises are define as having; up to a maximum of 50 employees: working capital of less than Ush50million, turnover value of Ush10-50million throughout each year of operation.

In Nigeria, the Central Bank CBN define a small scale industry as “one whose total assets in capital equipment, plant and working capital are less than 500,000 and employing fewer than 50 full time workers i.e., includes a factory or a non-factory establishment. It may or may not use motive power,” and medium sized industry as “one investing not less than N500,000 but not more than N500,000 operating with motive power in a factory employing not fewer than 50 nor more than 250. For an enterprise to quality as small and medium scale enterprise, Kazeem (2004) argued that the enterprises must have a maximum of N200 million assets base excluding land and working capital. Apart from the different perceptions and measures from country to country a number of literatures explain the effects of financial management on small and medium enterprises in Nigeria and many other countries of the world.

1.1.1 SMEs and Financial Management in Nigeria

One major drawback in Nigeria quest for industrial development over the past years has been the absence of a strong, vibrant and virile SME sector. Given a population of well over 150million people, vast productive and arable land, rich variety of mineral deposits as well as enormous human and other natural resources. Nigerian should have been a heaven for small and medium enterprises with maximum returns,
as it also has the location advantage as a marketing hub for the West and East African countries (Onugu, 2005).

Although there is no reliable data on precise indicators showing the evolution of SMEs in pre-independence Nigeria. Ekwem (2011) argued that SMEs before the introduction of government policies where characterised by slow growth, low level of management bookkeeping procedure. He further stressed that, these greatly affect there ability to achieve optimization and operational efficiency. SMEs needs a conducive business environment and regulations adequate basic infrastructure, service access to short and long term funding at reasonable rates equity and venture capital, advisory assistance and knowledge about opportunities. They typically suffer from weak entrepreneurial skills as well as deficiencies in accounting, production management and business planning Houser (2009). In recognition of the crucial role played by SMEs with respect to economic growth and development succeeding government in Nigeria had various initiatives aimed at promoting the wellbeing of SME in the country some of the institutions and opportunities created in the past 30 years includes; Nigeria Bank of Commerce and industry 2009, Small Scale Industries Credit Scheme 2004, small and medium industries investment scheme and small and medium enterprises development agency of Nigeria (SMEDAN). Despite all these institutions and programmes introduced to take care of financial and non financial needs of SMEs they are still facing quite a number of challenges. Ekwem (2011) argued that despite government intervention in SMEs they are still facing a number of challenges, they are suffering from weak entrepreneurial skills as well as deficiencies in accounting production management and business efficiency. Asuquo (2011) further stressed that financial management plays an important role and has a large area in every activity of SMEs. Obviously, a reasonable and logical financial management will help SMEs increase profitability and growth.

1.2 Statement of Problem

Small and Medium Enterprises (SMEs) play a vital role in the process of industrialisation, sustainable economic growth (Ariyo, 2005); encouragement of
entrepreneurship, employment generation (Ogujiuba 2004); reduction of poverty and contribution to Gross Domestic Products (GDP) of many countries (Taiwo, Ayodeji & Yusuf 2012). They perform such vital roles through innovation and the production of various goods and services which empower the process of economic development. For SMEs to carry out such important task, they needed credit facilities in terms of short and long term loans. The process of sourcing of funds as well as effective utilization and efficient management of the funds constitute major challenges of owner managers of SMEs. The challenges require the involvement of a form financial management skills. Proper financial management in SMEs is responsible for providing general leadership in all aspect of financial decision making like working capital management, budgeting and financial planning.

It has been noted that the failure to effectively discharge these broad financial management functions have contributed largely to global financial crisis (Osisioma, 2010). This research is therefore, out to bridge the gap between financial management skills and business efficiency of SMEs in Nigeria. This is because inefficient financial management may damage business efficiency and this will continuously affect the growth of small and medium enterprises. However, efficient, financial management is likely help SMEs to strengthen their business efficiency and, as a result, these difficulties can partly be overcome. However, to date there has not been any research on business efficiency of SMEs that has been conducted in Nigeria. Carrying out such research will enable finance providers to evaluate business efficiency and make decisions on extending finances to SMEs.

1.3 General Objectives
To establish the effect of Financial Management practices on the Business Efficiency of Small and Medium Enterprises SMEs in Nigeria.

1.3.1 Specific Objectives
i. To examine the effect of working capital management practice on business efficiency of SMEs in Nigeria.
ii. To determine the impact of investment decision on business efficiency on SMEs in Nigeria.

iii. To investigate the effect of financing decision on the business efficiency of SMEs in Nigeria.

iv. To determine the application of accounting information system on decision making has a significant impact on the business efficiency of SMEs in Nigeria.

v. To evaluate the effect financial reporting and analysis affects business efficiency of SMEs in Nigeria.

1.4 Research Hypotheses

The following hypotheses was used to guide the research work:

i. Working capital management has no significant effect on business efficiency of SMEs in Nigeria;

ii. Investment decision-making has no significant impact on business efficiency of SMEs in Nigeria;

iii. Financial decision-making has no significant effect on business efficiency of SMEs in Nigeria;

iv. Application of accounting information system in decision-making has no significant impact on business efficiency of SMEs in Nigeria; and

v. Application of Financial reporting and analysis in decision-making has no significant effect on business efficiency of SMEs in Nigeria;

1.5 Justification

Study on the relationship between financial management and business efficiency of SMEs will go a long way in boosting the performance of SMEs in Nigeria. This is specifically true because profitability is the most concerned goals of enterprise owners. In addition to that business efficiency is one of the major requirement of financial institution in granting of loans and other financial services. It will also be relevant to the following stakeholders; Policy makers and government: the recommendations of the study will be important to the policy makers and implementers like the government agencies that are changed with the responsibility
of drawing and developing cause for the SMEs. These could include the small and medium enterprises developing agency (SMEDAN). Business developing services (BDS)) and ministry of finance and economic planning.

SME owners and Researchers: The study will help in increasing knowledge on the factors that explain SMEs financial management and how it affect business efficiency in Nigeria. Scholars and Researchers: The study is vital to students and future researchers, as it contribute to literature concerning financial management with regard to SMEs and how it relate to business efficiency in various areas. Researchers: The study will contribute to operational definitions of these concepts which will help future researchers to adopt them, it will also highlight on related areas of research which eventually will contribute to knowledge development.

1.6 Scope of the Study
The study will be conducted in three areas of Kaduna State, namely; Kaduna North, South and Zaria district and it will have one category of respondents owners or representatives of owners. The content of the study will be limited to the main component of financial management which includes; investment financing, working capital, accounting information and financial reporting.

1.7 Limitation of the Study
The study anticipated some methodological limitations and non challant attitude of some business owners with regards to answering questions on filling questionnaires. Some way regard certain information as confidential, most especially those that relate to finance. This limitation was minimised by use of explanation and persuasions.
CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction
This study reviews relevant literatures on the effect of financial management on business efficiency of small and medium enterprises. This chapter will be divided into four main sections. The first section will be on important terminologies relevant to the study and the conceptual framework. The second section will cover secondary research in line with variables of study. Section three will cover the relevant theories on financial management. The fourth section is concerned with past empirical studies, critique and research gaps.

2.1 Theoretical Framework
A theory is a reasoned statement or group of statements, which are supported by evidence meant to explain some phenomenon. Ngumi (2003), a theory is a systematic explanation of the relationship among phenomenon. Theories provide generalise explanation to occurrence. Therefore, a researcher should be conversant with those theories applicable to his area of research (Kombo & Tromp, 2009, Smyth, 2004). A theoretical framework helps the researcher see clearly the variables of the study; provides a general framework for data analysis; and helps in the selection of applicable research design.

2.1.1 Theory of Financial Capital:
As the level of financial capital decreases, managers of the inefficient banks have growing incentive to bet the bank. This explanation is consistent with the moral hazard theory, maintaining that agency conflict between managers and shareholders might exacerbate prior to bankruptcy because owners with less capital to lose might have less incentive to make sure that banks is run efficiently. Faced with less monitoring from owners, managers of banks with lower equity might have increasing incentive to consume perks.
2.1.2 Theory of intellectual capital performance (ICP):
Recent theoretical views suggest investors, employees, suppliers, customers and other relevant stakeholders (such as unions, government) both contribute and receive benefits from a firm Turnbull (1997). Further, alternative theoretical views, such as resource-based theory, conceive firms as collections of physical attributes and intangible assets and capabilities. These contrasting views also provide different views of corporate performance. Advocates of resource-based theory, for example, suggest that corporate performance is a function of the firm. Further, value added (also called wealth creation) is considered as the appropriate means of conceptualizing corporate performance rather than mere financial returns to a firm’s owner.

2.1.3 Small and Medium Enterprises
SMEDAN (2001) classified them into micro, small and medium enterprises in terms of number of employees and assets. Micro enterprises are enterprises with less than 10 employees and assets less than N5m. On the other hand small enterprises have been between 10 – 49 employees and assets less than N50m while medium enterprises have between 50 to 199 employees and assets from N50 but less than N500m.

2.2 Challenges of SMEs in Nigeria
The fact that SMEs have not made the desired impact on the Nigerian economy in spite of all the efforts and support of succeeding administrations and governments gives a cause for concern. It underscores the belief that there exists fundamental issues or problems, which confront SMEs but which hitherto have either not been addressed at all or have not been wholesomely tackled. The incidence of inadequate working capital, which constrains productive capacities of the SMEs as well as absence of succession plans in the event of the death of the proprietor, leads in many cases to frequent early demise of SMEs. Moreover, the persistence of unstable macro-economic environment, arising mainly from fiscal policy excesses has often smothered many SMEs (Chibundu, 2006). Chibundu (2006) highlighted the following challenges confronting SMEs in Nigeria as poor management practices
and low entrepreneurial skill, poor implementation of policies, restricted market access, overbearing regulatory and operational environment, lack of infrastructural facilities, financial indiscipline, constrained access to money and capital markets, among others.

Many factors have been identified as being the possible causes or contributing factors to the premature death (a prominent feature of Nigerian SMEs). Key among these include insufficient capital, lack of focus, inadequate market research, over-concentration on one or two markets for finished products, lack of succession plans, inexperience, lack of proper book keeping, lack of proper records or lack of any records at all, inability to separate business and family or personal finances, lack of business strategy, inability to distinguish between revenue and profit, inability to procure the right plant and machinery, inability to engage or employ the right calibre staff, cut-throat competition, lack of official patronage of locally produced goods and services, dumping of foreign goods and over concentration of decision making on one (key) person, usually the owner (RAMP, 2010). Other challenges which SMEs face in Nigeria include irregular power supply and other infrastructural inadequacies (water, roads etc), unfavourable fiscal policies, multiple taxes, levies and rates, fuel crises or shortages, policy inconsistencies, reversals and shocks, uneasy access to funding, poor policy implementation, restricted market access, raw materials sourcing problems, competition with cheaper imported products, problems of inter-sectoral linkages given that most large scale firms source some of their raw material outside instead of sub-contracting to SMEs, insecurity of people and property, fragile ownership base, lack of requisite skill and experience, etc. (Onugu, 2005).

2.3 Financial Management in SMEs

Financial management is crucial for the continuity of small and medium enterprises (SMEs). The growing importance of this issue raises interesting questions whether companies are improving their abilities to have effective financial management and implementing changes that will enable them to analyze results, to interpret, to forecast future performance and improve their business decisions (Barker 2007). The competition in SMEs seems to call for an investigation towards the effectiveness of
financial management. Furthermore, business planning and strategies are depending on effective financial management. Therefore, this study on financial management covers the issue of accounting information usage and the use of other information for business decision. Shahwan & Al-Ain (2008) argued that users of financial report should be able to make decision about resource allocation and are capable to manage the resources. Business decision is relying on relevant information produced. Information should be of high quality. Besides, the information can be viewed in different dimensions, which are to monitor performance, to investigate relationship and to take advantage of trends. According to Xu, Nord, Nord and Lin (2005), information quality is information that is fit to be used and has four attributes which are accuracy, timeliness, completeness and consistency. Shahwan and Al-Ain (2008) noted that relevancy and reliability have been the qualitative characteristics to make accounting information useful. Nonetheless, findings from these studies indicate that SMEs are not relying on accounting information for decision-making. Recently, with the company’s development and growth, it is important for the managers of SMEs to understand and get involved in the accounting figures produced. Moreover, relevant accounting information could help users to make wise decisions (Shahwan & Al-Ain 2008). Accounting information is also viewed as relevant and very important to assist managers to reduce uncertainty in decision-making. This information can be obtained from proper financial statements which come from effective financial management. Damand (2007) argued that financial statements should be counted in, to enable managers to make decisions. From simple understanding on financial statements that show the value of the investments in balance sheets and the income received shown in the income statements will help the managers to make simple decision. Well managed resources will make the investors or bankers to consider committing some funds to the same management. Thus, it is very important for the management to keep the financial statement available. The must have qualities that should be given preferences by the managers are reliability and relevancy. Sometimes, the financial reports of the companies do not fulfilled this requirements thus making decision difficult. Again, Damand (2008) argued that if accounting information is more reflective on the economic reality and more transparent, the benefits are not only for the companies but for the society as a whole. However, most of the managers could
not rely on financial statements because the aim of financial statements is not clearly stated. As a result, effective financial management is critically needed.

2.4 Conceptual Review

2.4.1 Working Capital Management

According to Mead, Baker and Malott, working capital means current assets, it is another part of the capital which is needed for meeting day today requirement of the business concern. For example, payment to creditors salary paid to workers, purchase of raw materials etc., normally it consist of recurring in nature. It can be easily converted into cash. Hence, it is also known as short term capital. Working capital management therefore, refers to all aspect of the administration of both current assets and current liabilities.

2.4.2 Investment Decision

Oxford Dictionary revised edition 2013 define investment as putting money into an asset with the expectation of capital appreciation, dividend, and/or interest earnings. Most of or all forms of investment involve some form of risk, such as investment in equities, property, and fixed interest securities while are subjects, among other things, to inflation risk.

2.4.3 Financing Decision

According to Oxford Dictionary the word finance connotes management of money. According to Wheeler, financing is the activity which concerns with the acquisition and conversation of capital funds in meeting financial needs and overall objective of the business enterprise.

2.4.4 Accounting Information System (AIS)

Accounting information system is a system of collection, storage and processing of financial and accounting data that is used by decision makers. An accounting information system is generally a computer based method for tracking accounting activity in conjunction with information statistical reports can be used internally by management or externally by other interested parties including investors creditors and tax authorities.( Abdullahi 2013).
2.5 Theoretical Literature Review

A theory is a reasoned statement or group of statement, which are supported by evidence meant to explain some phenomena. Ngumi (2003), a theory is a systematic explanation of the relationship among phenomena. Theories provide generalise explanation to an occurrence. Therefore a researcher should be conversant with those theories applicable to his area of research (Kombo & Tromp, 2009, Smyth, 2004). According to Trochim (2006), Aquilar (2009), Tormo (2006). A theoretical framework guides research, determining which variable to measures, and which statistical relationship to look for in context of the problem under study.

2.5.1 Capital Structure Theory

Since Modigliani and Miller (1958) work on capital structure which has uptil today generated great interest among financial researchers. This study was also supported by Van Praag (2003) which postulated that financial capital includes debt and equity known as capital structure. Soghobt Mira (2002) point out that the most relevant capital structure of small and medium enterprises. SMEs is those related to static trade-off. Adverse selection and moral hazard, this supported the postulations of the agency theory. Andree and Kallber (2008 point out that the genesis of modern capital structure theory lies in the work of Migiliani & Miller (1958) in their famous position, often referred to as the “irreverence theorem” the theory suggest that under certain perfect market assumptions, such as absence of taxes, bankruptcy cost, agency cost and asymmetric information, the value of the firm is unaffected by how the firm is finance. Thus support the selection of the first independent variable working capital management. Scott (1972) & Kravs Litzenberger (1973) point out that theoretically 100% tax shield does not exist in reality because off distress cost, therefore, the optimization of capital structure involve a trade-off between the present value of the tax rebate associated with marginal increase in coverage and the present value of the cost of bankruptcy. In support of agency theory, Stiglitz & Weiss (1981) stated that agency problems such as asymmetric information and moral hazard can impact on the availability of credit and hence the capital structure of SMEs. Stiglitz and Weiss (1981) termed these phenomena as credit rationing.
Mwangi, Makau & Kosimbei (2014) examine the relationship between capital structure and the performances of non-financial companies in Nairobi Stock Exchange. The study is designed to investigate if the financial linkage (the mixture of equity finance and debt finances has a significant influence on the performances of quoted companies on the stock exchange of Kenya. In order to carry-out the study, the study hypothesizes that there is no significant relationship between financial leverage and performances of firms; there is no significant relationship between total current liabilities to total asset ratio and the profitability of firms; and there is no substantial relationship between current assets to total assets and firm performances.

The method of research employ is known as non-experimental research design known as explanatory research design. This kind of research tries to establish cause and effect based on historical data (Robson, 2002; Kerlinger & Lee, 2000). On the bases of this the study employed the following model in its investigation:

\[
ROA_{it} = \alpha + \beta_1 FINL_{it} + \beta_2 \frac{TCL}{TA_{it}} + \beta_3 \frac{TCA}{TA_{it}} + \beta_4 SIZE_{it} + \beta_5 GDPGR_{it} + \epsilon_{it}.
\]

\[
ROE_{it} = \beta + \alpha_1 FINL_{it} + \alpha_2 \frac{TCL}{TA_{it}} + \alpha_4 SIZE_{it} + \alpha_5 GDPGR_{it} + \mu_{it}.
\]

Where: FINL is financial leverage; TCL/TA total current liability to total assets; TCA/TA is total current asset/TA; SIZE is size of the company; GDPGR is GDP growth rates; and \( \alpha, \beta, \epsilon_{it}, \mu_{it} \) are the parameters and the error terms.

The sample studies composed of 44 non-financial companies listed on Nairobi Stock Exchange as at 31 December 2012. The financial companies were excluded because of differences in the presentation of income statement and balance sheet with the conventional firms. The data used covered the period of 2006 to 2002. The study established that increase in financial leverage reduces the viability of future earning of firms. The use of current liabilities to finance investment stimulates the level of profits. In Kenya, Maina and Kondongo (2013) examine debt equity ratio and the performances of companies quoted on the Nairobi Stock Exchange. The study uses all firms quoted on the Nairobi Stock Exchange for the period of 2002 to 2011. The
study established that leverage exerts a significant negative impact on firms performance in Kenya. Abdul (2012) investigated the impact of capital structure on the performance of firms in Pakistan. The study establishes that financial leverage have a negative effect on business performance in Pakistan with ROA, GM and Tobin’s Q. The negative relationship between leverage and ROE is not statistically significant. This means that there is a neutral relationship between financial leverage and business performance.

In another study of capital structure and financial performance of quoted firms in Pakistan, Jared and Akhtar (2012) established that financial leverage and financial performances are positively related. The study also found that firms growth and size are also positive related to the performance of firms quoted on Karachi Stock Exchange. The findings of the study are consistent with the agency theory. The agency theory states that managers do not run firms to maximize the shareholders interest, but they try to serve their personal interest. Debt finance help to restrain the managers from pursuit of self interest. The finance of project through debt makes managers to keep up to their responsibility and run the firms properly to pay interest due on debts. In Tehran, Saeedi and Mahmoodi (2011) investigated the effect of capital structure on listed companies in the stock exchange. The study established that market structure exerted a positive effect on financial performance measured using ROA and ROE as well as market value of shares. The effect was not statistically significant.

In Egypt, Ebaid (2009) examined the effect of capital structure on the performance of business firms. The dependent variable which measured business performances includes ROA, ROE and the gross profit margin. Capital structure was represented by short-term debt to asset ratio, long-term debt to asset ratio, and the sum of debt (both short-term and long-term debts) to assess ratio. The study uses multiple regression based on panel data in estimating the relationship between the dependent variable and the independent variables. The results show that financial leverage has no impact on financial performances. Adekunle (2009) investigated the impact of capital structure on the performance of business firms. The study uses debt ratio to serve as proxy for capital structure. ROA and ROE were used as proxy for firm
performances. The study employs ordinary least squares regression analysis as the research statistical method of analysis. The study shows that debt ratio as a measure of capital structure has a significant negative effect on the performances of business firms.

In Nigeria, Maritala (2012) investigated capital structure and firms’ performance in Nigerian business setting. The study conceives capital structure as the mixture of both debt and equity maintained by a business firm. The study admits that the modern theory of business capital structure emanated from Modigliani; and Miller (1958) theory. The theory assumes that there is perfect competition in the capital market. Under perfect competition, capital structure is irrelevant. Capital structure, firm value and performance relationship is also explained by Muritala (2012), He emphasized that obtaining a appropriate capital structure is a critical decision for the form. This decision is not only essential to get optimal income for the stakeholders but to remain highly competitive on the economic environment. The argument is that optimal structure does exist which balances risk with the tax saving of debts hence firms do not pay tax for debt financing and so debt finance avoid tax payment. Thus debt interest payment can be used as alternative cost for equity finance. The argument is that leverage is used to discipline managers to avoid wasting organizations resources lead to the possibility of bankruptcy. Thus the use of debt finance leads to firm becoming bankrupt by being unable to pay debts and its interest and this reduces the borrowing power of firms (Muritala, 2012). The conventional argument of Modigliani and Miller (1958) is that the benefit of debt financing is that it is tax free and the ideal capital structure of a firm is for it to be made wholly debt finance. Brigham and Gapenski (1996) have, however argued that the Modigliani and Miller model is possible in theory but not in practical terms. The reason is that when debt issue becomes too high bankruptcy cost becomes too large. Thus bankruptcy is associated with increasing debt finance for equity or when equity is traded off for debt. On the basis of this Brigham and Gapenski (1996) argued that the optimal capital structure is one in which the marginal cost of capital is equal to marginal benefit derived from tax-paying equity. Thus the task of management is to recognize when this optimal capital structure is attained and to maintain it overtime. When this
is done the weighted average cost of capital (WACC) is minimized and this will maximize the firm performances in terms of profit and the value of firms share prices. In theory, Muritala (2012) argued that the top management is charged with the duty of computing the optimal size of capital structure. In practice, Simerly and Mingfang (2000) have postulated that optimal capital structure does not exist. The reason is that management does not have any incentive to maximize firms performance as their remuneration is not tied to optimal capital structure or maximization of performance. The second reason is that managers do not take part in profit sharing (Muritala, 2012). There managers are liable to buying whatsoever they like while making their operating environment conducive as well as improving their remuneration. This explains why shareholders are concerned that managers do not waste resources and ensure that reasonable returns are made. This entails solving principal agency problem. This is the background to the theoretical framework of capital structure. The leverage theory demonstrates that high leverage firms are better for protecting equity shareholders. As leverage increases, bankruptcy costs are increased and this makes management to become more careful and avoid wasteful expenses and return excess cash to shareholders.

The research method used in the study entails the use of panel: data analysis based on pool regression and fixed effect methods based on ordinary least squares regression model. The model employed in the analysis can be employed using environment as:

\[
\text{ROA}_{it} = \beta_0 + \beta_1 DR_{it} + \beta_2 TURN_{it} + \beta_3 SIZE_{it} + \beta_4 AL_{it} + \beta_5 TANG_{it} + \beta_6 \text{GROW}_{it} + u_{it}. \tag{2.19}
\]

\[
\text{ROE}_{it} = \alpha_0 + \alpha_1 DR_{it} + \alpha_2 TURN_{it} + \alpha_3 SIZE_{it} + \alpha_4 AL_{it} + \alpha_5 TANG_{it} + \alpha_6 \text{GROW}_{it} + E_{it}. \tag{2.20}
\]

Where: \(\beta\) and \(\alpha\) are constants and slope coefficients; \(DR\), \(TURN\), \(SIZE\), \(AL\), \(TANG\), and \(GROW\) are debt ratio, turn-over, size of the firm, all liabilities and growth of GDP, respectively; \(u\) and \(E\) are error terms; and \(i\) and \(t\) are firm name and time, respectively. The result of the regression analysis shows that the debt ratio exerts a significant negative impact on firm’s financial performance. The study also shows that the firm size and age of existence have significant impact on performance of a firm. Berger and Patti (2002) investigated the impact of capital structure on the
performance of firms in the banking industry in the United States of America (USA). The theoretical background of the study is based on agency theory. The agency cost theory states that the separation of owners of the business from the professional managers may make managers not to perform their functions sufficiently well. Managers may engage in perequisites (getting certain privileges), selecting inputs or outputs that they prefer and not minimizing the shareholders value (Berger and Patti, 2002). The gain the professional managers earn is equal to the lost due to outside owners, the shareholders. It is argued that the agency cost can be minimized through adoption of leverage or low equity/asset ratio (Berger and Patti, 2002). Low equity-asset ratio or high leverage ratio has the potency to decrease agency cost by constraining the manager to act in the interest of shareholders. However, higher leverage beyond the optimal value can increase both agency cost and bankruptcy costs (Jensen and Mecklin, 1976). The agreement is that lower equity-asset ratio increases bankruptcy cost through threat of liquidation which increase the probability of losses of salaries, reputation and perquisites (Williams, 1987) and through the need to earn more cash flows to pay interest on debenture (Jensen, 1986). This high leverage reduces conflicts between owners (shareholders) and the agents (managers) through: (i) the choice of projects by suggesting opportunity cost of projects (Myers, 1979); (ii) the amount of risk (Jensen and Meckling, 1976); (iii) the requirements for enterprise liquidation (Harris Ravir, 1990); and (iv) the dividend payments (Stulz, 1990). The agency theory communicates that when leverage is high; the efficiency of managers is improved and the probability of liquidation is reduced. A further increase in leverage beyond the optimal will cause the cost of outside debt, the cost of bankruptcy, and other financial costs, etc. to increase significantly, these will increase conflict between bond holders and shareholders (Berger & Patti, 2002). Berger and Patti (2002) states that extant literature on the impact of capital structure and firm performance show mixed result as demonstrated by Harris and Raviv (1991), Titman (2000) and Myers (2001). The reasons he advanced are: (i) performance are measured in the form ratios computed from income statement and balance sheet. These measures do not reduce exogenous factors beyond management control. The study solves this problem by adopting profit as the measure of efficiency in line with Stigler (1976), (ii) Granger causality which states that high
leverage can cause improve firm performance and improved firm performance can lead to high leverage (iii) non-consideration of the proportion of shares that are held by inside members as opposed to outsider shareholders.

Beger and Patti (2002) stated how performance, reverse causality (Granger causality) and ownership structures are measured. The study classifies measures of firm performances into accounting financial ratios of (Cole, Ang, Cole and Lin 2000; Mehran, 1995), stock market returns (Saunders, Stock and Traulos, 1990; Cole and Mehran, 1998) and Tobin’s Q which is the integration of financial ratios and stock market returns (Mehran 1995; Himmelberg, Hubbarel & Palia, 1999). The study employed profit efficiency method which uses profit function. These methods take into account local prices and other exigencies factors. For this reason, the study takes it as being more reliable than the accounting financial ratios or the stock market returns. Berger and Patti (2002) explained the theories of reversed causality (Granger causality) from capital structure. These two hypotheses are propounded because of violation of Modigliani Miller perfect competition assumptions that taxes, bankruptcy, information asymmetry, etc. do not exist. The result is that less equity is required moving the capital structure to equilibrium level. The first hypothesis of the reverse efficiency theory is also known as efficiency-risk hypothesis. This theory states that, ceteris paribus, high efficiency firms reduce the expected cost of bankruptcy and financial distress (Beger and Patti). The hypothesis also postulates that profit efficiency is positively associated with expected high returns (Berger & Mester, 1997). Higher expected returns for more efficient firm can serve as a substitute for equity. Higher returns and high equity can serve as a guarantee in reducing bankruptcy or financial distress (Attman, 1968). As a result firms having higher returns and high profit can reduce equity debt ratio. Using the Attman (1968) Z-score analysis of solvency:

\[ Z = (\mu, + ECAP,) / \alpha \]

Where: \( \mu \) and \( \alpha \) are mean and standard deviation respectively, of the rate of returns on assets, ECAP, is the ratio of equity to assets. Based on the first hypothesis (efficiency risk hypothesis) firms with a higher efficiency (\( \mu \)) can afford to have
lower $ECAP_1/\alpha_1$ (equity capital debt ratio). The franchise – value hypothesis emphasize on the income effect of economic rent generated by profit in choosing leverage. Under this assumption, ceteris paribus, high efficient firms choose high equity debt ratio to guide against fall in the value of assets from falling. Higher profit efficiency can create economic rent if the profit will last for a long-term. All equity shareholders may hold more equity to prevent their rent from falling. Thus, the franchise-value hypothesis is the theory which states that higher profit is the source of rents and so shareholders held a lot of equity to prevent the loss from liquidation.

Berger and Patti (2002) analyzed the use of ownership structure variables. This study argues that both the ownership structure and the agency cost should be included in the study of agency costs. The reason is that the separation of ownership is what led to the incidence of agency costs. As stated earlier, higher efficiency firms choose high equity ratio to protect their rents (Berger & Patti, 2002). Firms with unique ratios also have high equity ratio to protect their economic rent (Titman, 1984; Titman and Wessels, 1988). Berger and Patti (2002) hold that the two hypotheses led to two distinct conclusions. The efficiency – risk hypothesis states that high profits serves as substitute for equity share in protecting firms from equity capital loss or financial risk of bankruptcy. Franchise-value hypothesis states that firms try to protect income from high profits by maintaining high equities. It is argued that without removing the element of ownership structure the estimation can lead to simultaneous equation bias and lead to misleading result. This method of analysis has been adopted by Mehran (1995) and McConna and Serves, 1995). The non-inclusion of ownership bias may bias the test of agency costs. The empirical model Berger and Patti (2002) employed hypothesized that agency costs increases leverage or decreases the equity-asset ratio reduces the agency cost of outside equity holders. The model can be stated as:

$$EFF_j = f_i(ECAP_i, Z_iL) + \epsilon_{ij}. $$

Where $EFF_j$ is the measure of firm’s efficiency or profit performance; $ECAP_i$ is the measure of firm’s equity to total assets. $ECAP$ is an inverse measure of leverage. The vector $Z_iL$ contains other variables that influence profit efficiency like measures of ownership structure, market concentration, and firm’s size, variance of earnings, the
economic environment and regulatory environment. The agency cost hypothesized that increase in leverage raises efficiency, that is, \( E(\text{DEFF}/\text{DECAP}) < 0 \). This means that higher equity-ratio or lower leverage reduces pressure on management from outside equity holders. The alternative hypothesis is that \( (\text{DEFF}/\text{DECAP}) = 0 \). When equity-capital ratio is high enough, further increase in equity ratio can reduce efficiency because the reduced agency costs from outside investors are offset by a higher agency cost of debt. The study specifics a quadratic function form of \( \text{EFF}_j = ECAP + ECAP^2 + E_{ii} \). The study uses this model to test both the efficiency-risk hypothesis and franchise-value hypothesis. Berger and Patti (2002) use annual time-series data from commercial banks in USA covering the period of 1990 to 1995. The condition for inclusion of a bank is that it must have existed throughout the duration of 4 years. The study employed two-stage-least-squared (2SLS) method of analysis in the study. The study establishes that high leverage reduces agency cost of outside equity holders. This is because the managers are concerned to work for the interest of equity holders. The alternative hypothesis that higher efficiency level lead to high-equity-asset ratio was not be proven. Amara and Aziz (2014) empirically investigate the impact of capital structure on firm performance in Karachi Stock Exchange using the food sector. The study conceived capital structure as an amalgamation of both internal and external source so financing a firm. The study draws some theoretical inference from Modigliani – Miller model which is based on perfect capital market in which the capital market is assumed to be efficient; investors are homogenous in their expectations; no taxes; no transaction cost. The Modigliani and Miller argued that the use of debt as a cheap source of finance is offset by increase in cost of equity.

Later Modigliani and Miller (1958) relax some of the assumptions. When these assumptions are removed, the irrelevance of capital structure model becomes the relevance of capital structure theory. Under the new setting, the value of the firm increases with the rate of increase in debt finance. In other words, as the equity-debt ratio reduces the value of the firm is increased. As the leverage increases, there is the benefit accruing to non-tax financed but the bankruptcy cost increases with leverage.
The optimal capital structure is one in which the marginal cost of tax reduction is equal to the marginal cost of financing distress.

The objective of the study is to establish if capital structure influences firm performance. This study is aimed at testing the hypothesis that capital structure of a firm determines the firm financial performance. The study adopts as dependent variables: return on assets (ROA) and earnings per share (EPS). The independent variables are capital structure which is measured as debt-equity ratio, long term debt to total asset ratio and short-term debt to short-term ratio. The study employed firm size, measured as total assets. Thus the models employed are:

\[
ROA_{it} = \alpha_i + \beta_1 STDTA_{it} + \beta_2 LTDTA_{it} + \beta_3 DE_{it} + \beta_4 TA_{it} + U_{it}.
\]

\[
EPS_{it} = \alpha_i + \beta_1 STDTA_{it} + \beta_2 LTDTA_{it} + \beta_3 DE_{it} + \beta_4 TA_{it} + U_{it}.
\]

Where: ROA, EPS, STDTA, LTDTA, DE and \( \mu \) are return on assets, earnings per share, short-term debts to total assets, long-term debt to total assets, debenture, total assets and error terms. The theoretical model of the study is based on Modigliani – Miller (1958) who postulated that under assumption of perfect competition, the compositions of firms’ capital structure into debt finance and equity finance has no influence on the performance of the firm. This theory is known as capital structural incentive theory, Latter Modigliani and Miller relaxed these assumptions and the theory, under these conditions is described as capital structural relevance theory of the firm value. Under the capital relevance theory, the more debt capital the firm has, the less taxes the firm pays. On the other side, the more debt finance or the higher the leverage, the more cost in terms of bankruptcy or liquidation. The opening cost of financing is one in which the cost of financing distress is equal to the benefits of foregoing taxes. The study collected data from the state bank of Pakistan covering the period of 2006 and 2012. The method of statistical analysis is known as panel corrected standard errors (PCSE).

The study establishes that the food processing sector in Pakistan is not operating at its optimal capital mix or leverage of debt-equity ratio as the result of the analysis shows that the debt ratio has negative significant impact on the firm’s financial
performance. The implication is that the cost of debt finance has overcome the tax benefits so that equity finance should be increased or debt finance should be reduced or both. Using the textiles industry in Pakistan, Memon, Bhutto and Abbas (2012) investigated the influence of capital structure on textile firms’ performance. The study is also based on investigating the relevance or irrelevance of capital structure of the firm based on Modigliani and Miller (1958). The study uses secondary data which were based on 141 firms in the textile industry. The data were obtained from income statements and the balance sheet analysis of selected companies. The study employed ROA as a dependent variable; drawing from Chakravarting (1986), Memoh, Bhutto & Abbas (2012) states that high values of ROA are indication of high performances. The independent variables are leverage, firm size, firm growth, tangibility, risk and tax. As a result, the empirical model used can be stated as:

$$\text{ROA} = \beta_0 + \beta_1 \text{Leverage} + \beta_2 \text{Size} + \beta_3 \text{Growth} + \beta_4 \text{Tangibility} + \beta_5 \text{Tax} + \mu_{it}$$

Based on the above model, the study tested the certain hypothesis. The first hypothesis is that capital structure has no influence on the financial performance of firms. In testing this hypothesis, capital structure is taken as independent variable and debt-equity ratio is used as a proxy for capital structure. The second hypothesis is that firm size has no influence on firm’s performance. The firm size can be measured on the basis of the assets of the firm. It is assumed that larger firms have lower risk of becoming bankrupt. The other hypotheses formulated are: (i) there is no relationship between fixed assets and its level of performance; there is no relationship between a firm growth and its performance; and there is association between firm’s risk and its performances; and there is no relationship between the tax a firm pays and its performance level. The tangible assets are computed as fixed assets divided by the total assets. A firm with high tangible assets has lower cost financial distress (Akintoye, 2008). A firm that has higher growth rates tends to earn more revenue and therefore perform better (Zeitun and Tran, 2007). The firm risk is measured in terms of standard deviations. Firms with higher standard of deviations of earning are expected to exhibit higher levels of earnings and exposed to liquidation. The amount of taxes is expected to have negative impact on income of the firm.
The study establishes that the textile firms in Pakistan are operating below their optimal capacity. The reason given is that capital structure has a negative impact on performance. The study uses three one measure of capital structures are of them shows that they are performance depressing. These findings show that there is increasing amount of indebtedness after the optimal level and this is why debt-equity ratio exhibits negative impact on performance.

**Entrepreneurship theory**

Economic entrepreneurship theories date back to the first half of 1700 with the of Richard Cantillon, who introduced the idea of entrepreneur as a risk takers. The classic neoclassical and Austrian Market Process schools of thought all pose explanations for entrepreneurship that focus, for the most part on economic conditions and the opportunities they create. Economic theories of entrepreneurship tend to receive significant criticism for failing to recognize the dynamic open nature of market system, ignoring the unique nature of entrepreneurial activity and downplaying the diverse contexts in which entrepreneurship occurs.

**Resource Based theories**

Resource base theories focus on the way individuals leverage different types of resources to get entrepreneurial effort off the ground. Access to capital improves the chances of getting a new venture off the ground but entrepreneurs often start ventures with little ready capital. Other types of resources entrepreneur might leverage include social network and the information they provide as well as human resources such as education. In some cases, the intangible elements of leadership the entrepreneurs add to the mix operate as resource that a business cannot replace.

**Psychological Theories**

Psychological theories of entrepreneurship focus on the individual and the mental or emotional elements that drive entrepreneurial individuals. A theory put forward by psychologist David McClelland, a Harvard emeritus professor, offers that entrepreneurs possess a need for achievement that drives their activity. Julian Rotter professor emeritus at the University of Connecticut put forward a locus of control
theory. Rotter's theory holds that people with a strong internal locus of control believe their actions can influence the external world and research suggests personality traits ranging from creativity and resilience to optimum drive entrepreneurial behaviour.

2.5.2 Pecking Order Theory of Financing

According to Myers (1984), the pecking order theory (POT) suggest that there is no well define optimal capital structure; instead the debt ratio is the result of hierarchical financing over time. Management has a preference to choose internal financing before external financing, when a firm is force to use external financing sources, managers select the least risky and demanding source first. When it is necessary to issue external sources, debt insurance is preferred to new equity. In this theory, firms with positive net present value investment which finance new investment first using internal funds, and in the absence of internal funds will finance them with safe debt then risky debt, then with equity but only if there is no other alternative. Thus, financing investments using internally generated funds may be the cheapest source, and the firms financial structure is the outcome of past cash flow and investment opportunities. The conflict between benefits of shareholders and creditors has consequence like increase of interest rate by creditors, addition of supervision cost and decrease of investment. So, this conflict demonstrates that high leverage to poor efficiency. Williams (1987), this theory supported the selection of independent variable investment decision, financial decision, financial reporting and dependent variable business efficiency. Effective financial management and what characters affect their capital structure are important for a firm to obtain better operational performance. A false decision about the capital structure may lead to financial distress and even to bankruptcy. There are numerous theories developed to analyze alternative capital structures. Among all these theories, the static trade off theory which derived by Modigliani and Miller (1963) was the earliest and most recognized which explains the formulation of capital structure. Their trade off theory assumed that there are optimal capital structures by trading off the benefits and cost of debt and equity. The main benefit of debt is tax deductibility of interest and the costs are bankruptcy cost (Kim, 1978) and agency cost (Jesen and Meckling, 1976; Myers, 1977). However, recent studies have shown a focus shift from the trade off theory to pecking order theory (Quan, 2002; Mazur, 2007). The pecking order theory
assumes that there is no target capital structure. The firms choose capitals according to the following preference order: internal finance, debt, equity. Myers and Majluf (1984) argued the existence of information asymmetry between managers (insiders) and investors (outsiders). They argued that managers have more inside information than investors and act in favor of old shareholders.

Using corporate data from Taiwan electronic firms, we analyzed the cross-sectional data of electronic firms of 2009 and examine whether they follow the financing pattern implied by the pecking order theory. Modigliani and Miller (1958) were the pioneers in the theoretically examining the effect of capital structure on the firm value. In the perfect capital market, the capital structure does not affect a firm’s value. It is the theory of capital structure irrelevance that a firm’s value depends on the ability of its assets to create value, and is irrelevant if the assets originate in internal capital or external capital. Modigliani and Miller (1963) took taxation under consideration and proposed that the firms should employ as much debt as possible. Companies have an advantage in using debt rather than using internal capital, as they can benefit from debt tax shields. This tax shield allows firms to pay lower tax than they should, when using debt capital instead of using only their own capital. The theory argues that the more debt is, the more a firm’s value is created.

Jensen and Meckling (1976) identified the existence of the agency problem. They proposed that there are two kinds of agency costs - agency costs of equity and debt. The conflicts between managers and shareholders leads to agency costs of equity, and the conflicts between shareholders and debt-holders leads to agency costs of debt. Usually, managers are interested in accomplishing their own targets which may differ from the firm value. The owners may try to monitor and control the managers’ behaviors. These monitoring and control actions results in agency costs of equity. When a lender provides money to a firm, the interest rate is based on the risk of the firm. Manager may tempt to transfer value from creditors to shareholders. These monitoring and control actions results in agency cost of debt. The trade-off theory indicates the exposure of the firm to bankruptcy and agency cost against tax benefits associated with debt use. Bankruptcy cost is a cost directly incurred when the perceived probability that the firm will default on financing is greater than zero. One
of the bankruptcy costs is liquidation cost, which represents the loss of value as a result of liquidating the net assets of the firm. Another bankruptcy cost is distress cost, which is the cost a firm incurs if stakeholders believe that the firm will discontinue. According to trade off theory, companies are expected to look for a target debt ratio (Jalilvand & Harris, 1984).

The pecking order theory suggests that firms have a particular preference order for capital used to finance their businesses (Myers and Majluf, 1984). Owing to the information asymmetries between the firm and potential investors, the firm will prefer retained earnings to debt, short-term debt over long-term debt and debt over equity. Myers and Majluf (1984) argued that if firms issue no new security but only use it’s retained earning to support the investment opportunities, the information asymmetric can be resolved. That implies that issuing equity becomes more expensive as asymmetric information insiders and outsiders increase. Firms which information asymmetry is large should issue debt to avoid selling under-priced securities. The capital structure decreasing events such as new stock offering leads to a firm’s stock price decline. An announcement of increasing capital structure events is received by the market as good news because financial intermediaries like investment bank can become insiders to monitor the firm’s performance. Managers may have inside information that is not known to the market. Insider investors have more information about the true distribution of firm returns than outsiders. Insider investors tend to limit the use of equity in order to retain control of the firm (Hutchinson, 1995). Moreover, the risk of the firm’s return is unknown to investors. They are forced to rely on noisy signals such as the firm’s level of capital structure to determine the risk of their investment and firm’s value may be under-priced by the market (Myers and Majluf, 1984). Transaction costs play an important role in a firm’s capital structure decision. Transaction costs associated with obtaining new external financing are higher than the costs of obtaining internal financing. Internal funds do not bear any transaction costs. Studies are consistent with the pecking order theory (Gaud et al., 2005; Mazur, 2007).
2.5.3 Technology Diffusion Theory

The study will also consider the theory of technology diffusion. Attwell (1992), the theory has been adopted by previous researches as a theoretical foundation to investigate the roles of managerial commitment and external accounting information system (AIS) so as to overcome lack of knowledge and resources that SMEs face in the implementation of AIS. Therefore, this could influence the effectiveness of AIS.

Thong (1996); Thong, 1999, 2001; deGuinea 2005. According to Attawell’s (1992) theory of technology diffusion assumptions which suggested that compares tend to delay technology adoption due to lack of knowledge on how to implement operate them AIS as an example this context. Ballantine (1998) found that lack of skilled personal leads to the absence of business and AIS strategies in SMEs. Ismail and King (2007) argued that managers lack of understanding of strategic accounting information inhibits SMEs from aligning their AIS capacity with AIS requirements. Similarly, Marriot and Marriots (2000) found that financial awareness among managers of SMEs in the United Kingdom varies considerable translating into ineffective AIS implementation in this circumstances, Scholars (Thong et al., 1996, Thong, 2001; Yap and Thong, 1997; deGuinea, 2005) argued that mediating entities, such as vendors, consultants and government agencies, could play a vital role in the diffusion of AIS, while business managers could provide the expertise in their areas of option, deGuinea (2005) a combination of advices from several external experts could provide relevant information for an effective AIS implementation. This theory supported the selection of independent variable accounting information system and financial reporting in all both independent and dependent variables are supported by the three theories. Diffusion theory provides tools, both quantitative and qualitative, for assessing the likely rate of diffusion of a technology, and additionally, identifies numerous factors that facilitate or hinder technology adoption and implementation. These factors include characteristics of the technology, characteristics of adopters, and the means by which adopters learn about and are persuaded to adopt the technology (Rogers 1983). It is not surprising then, that innovation diffusion is becoming an increasingly popular reference theory for empirical studies of information technologies (IT).
As a borrowed theory, innovation diffusion provides the advantage of a rich cumulative tradition. Yet, when borrowing theory, researchers must take care to ensure that the context to which the theory is being applied matches well with the context in which the theory was developed, or alternatively, to tailor the theory to account for contextual differences. Much of diffusion theory was developed in the context of adopters making voluntary decisions to accept or reject an innovation based on the benefits they expect to accrue from their own independent use of the technology. Yet, adoption of IT may be encouraged by management (Leonard-Barton and Deschamps 1988) or even mandated (Moore & Benbasat 1991). Adopters, rather than making a binary decision to adopt or reject, may choose differing levels of IT use (Bayer & Melone 1989). In addition, the adoption decision of individuals or organizations may depend on the dynamics of community-wide levels of adoption (i.e., whether "critical mass" has been established) because of network externalities (Katz & Shapiro 1986; Markus 1987). These sorts of complicating factors are quite common in the context of IT adoption; hence, the opportunities to apply classical diffusion "as is" may be rare indeed. No critical review exists that focuses specifically on the application of diffusion theory to the adoption of information technologies. This paper presents the results of a review and analysis of eighteen published empirical studies of IT adoption and diffusion from the period 1981 to 1991 with a focus on identifying instances where the adoption context closely matches the context in which classical diffusion theory was developed. To assist in this task, a framework is provided that defines four adoption contexts, one of which closely agrees with the assumptions of classical diffusion and three of which reflect one or more important divergences from classical diffusion assumptions. As would be expected, strong results were most likely to be found in instances where the adoption context was a good match with classical diffusion assumptions, or when additional variables suggested by the adoption context were incorporated into the analysis.

2.6 Conceptual Framework

A conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation (Kombo & Tromp,
A conceptual framework is a research tool intended to assist a researcher to develop awareness and understanding of the situation under scrutiny and to communicate it. Ngumi (2006) when clearly articulated a conceptual framework has potential usefulness as a tool to assist a researcher to make meaning of subsequent findings forms part of the agenda for negotiating to be scrutinized, tested, reviewed and reformed as a result of investigation. It further explains the possible connection between the variables (Smyth, 2007). A conceptual framework for the present study shows the effect of financial management on the business efficiency of small and medium enterprises in Nigeria. Figure 1.1 below conceptualizes financial management (working capital management, investment, financing, accounting information system and financial reporting) influence business efficiency of SMEs through profitability and growth. This is supported by the three theories of capital structure theory, pecking order theory of financing and technology diffusion theory.
Effect of Financial Management on the Business Efficiency of Small and Medium Enterprises in Nigeria

Fig. 2.1 Conceptual Framework
2.7 Empirical Literature Review

Empirical literature review is a direct search of published works, including periodicals and books that discusses theory and present empirical results that are relevant to the topic at hand (Zikmund et al., 2010). Literature review is a comprehensive survey of previous inquiries related to a search question. Although it can often be wide in scope, covering decades, perhaps even centuries of material, it should also be narrowly tailored, addressing on the scholarship that is directly related to the search question (Kaiteng & Miller, 2008). Through the use of a systematic approach to previous scholarship, literature review allows a researcher to place his or her research in to an intellectual and historical context. Ngumi (2007), in other words literature review helps the author declare why their research matters Kaitend & Miller (2008).

2.7.1 Financial Management

Abdullah(2009) conducted a study of the 26,998 SMEs in the nine census regions of the USA; namely, East North Central, East South Central, Middle Atlantic, Mountain, New England, Pacific, South Atlantic, West North Central and West South Central concerning financial management. This research discovered that out of 26,998 SMEs studied, only two per cent of the MSMEs were able to get funding from venture capital firms. In particular, Lownes-Jackson et al(2007) examined the financial obstacles faced by African American Entrepreneurs in the developing areas of the US economy. This study underscored eleven financial obstacles that affect the survival of the SMEs; namely, inability to obtain outside financing; insufficient capital; heavy operating expenses; poor money management; large losses due to crime; meeting the payroll; inability to obtain trade credit; insufficient profit; ability to meet financial obligations; health insurance costs and cost of workers’ compensation. Thevaruban (2009) examined small scale industries and its financial problems in Sri Lanka. He underscored that SMEs of small scale industries in Sri Lanka finds it extremely difficult to get outside credit because the cash inflow and savings of the SMEs in the small scale sector is significantly low (Ganesan, 2006; 2009). Hence, bank and non bank financial
institutions do not emphasise much on credit lending for the development of the SMEs in the small scale sector in Sri Lanka.

Berger and Udell (2006; 2009) study concluded that in recent decade there has been drastic reduction in banks providing credit to MSMEs. This has been the implications of banking crisis engrossing failures, capital shortfalls and regulatory difficulties in countries; namely, Japan, Korea the Scandinavian countries, the U.S and others. Further the banking crisis is followed by periods of recession and reduced economic growth hence this contributes to increasing interest rates on loans by the banks to the SMEs (Radelet and Sachs, 2007). Pettit and Singer (2009) study underscored that financing is the most difficult problems of the SMEs in USA. External finance is more expensive than internal finance (Watson et al., 2006; Datta, 2010). Due to lack of access to external finance (private placements and initial public offerings of varying sizes), SMEs rely on bank loans as compared to their larger counterparts (Berger et al., 2006; Bracker et al., 2007). Baldacchino (2006; 2010) highlighted that small island states such as Fiji as compared to its counterparts lack the investment capital that can be permeated in the development of SMEs. Building onto this study, Pandaram and Amosa (2010) examined opinions from family business entrepreneurs concerning the impact of family and business factors in the general operations of their businesses. Particularly, the business factors of great importance to family business entrepreneurs were corporate taxes, customer pricing demands, political stability and increasing costs of labour and materials. Notably, the family factors of significant importance to the family business entrepreneurs were succession planning and the risk of the firm being in-grown (Strauss, 2008; Fredrick and Kuratko, 2010).

Suwastika Naidu et al (2010) the study analysed the importance of nineteen financial obstacles facing owners/managers of SMEs. Financial obstacles of great concern to owners/managers of MSMEs are as follows: namely; inability to obtain external financing; inability to obtain internal financing; insufficient capital, start-up costs; expensive raw materials; high wholesale price; large losses due to scrap rate, sabotage, breakage and crime; decline in sales volume; bad debts and write offs; heavy equipment and maintenance costs; government tax, VAT and customs duty; payroll, rent, utilities; transportation and petrol costs; high
interest rates on loans; ability to meet financial obligation; insurance costs and delay in account receivables payment. Financial obstacles which are of less significance to the owners/managers are heavy advertising and promotional costs; and training and development costs.

SMEs in China as regards the financial management, they have nonstandard phenomenons, lack of effective information disclosure, increasing the difficulty of financial institution in auditing the financial condition of enterprise, can't understand enterprise’s real financial information. The asymmetry of financial information is easy to cause the game problem of “adverse selection” and ”moral hazard”, usually, financial institutions will not extend loans to such enterprise avoiding credit risk (TianranWU, 2010). The contributions of small business to development are generally acknowledged, however, entrepreneurs face many obstacles that limit their long term performance and invariably, their development and growth. Research on small business development has shown that the rate of failure in developing countries is higher than in the developed world (Arinaitwe, 2006). The reason for the increased failure rate is worth investigating. For instance, Oladejo (2007) argued that accounting skill is necessary for successful entrepreneurial and small business development in Nigeria. This is because the inability to install a proper accounting system would disallow business monitoring, reporting, and performance evaluation that are germane to the business survival. Accounting skills are the totality of skills ranging from record keeping, attention directing, financial management and reporting skills that are expected to promote effective decision, performance evaluation and business reporting of any business enterprise. Although studies could not find record keeping skill as positive factor, financial management skill has been found to be contributory to business development (Adeyeye, 2008).

2.7.2 Working Capital Management

In a study conducted in Belgium by Deloof (2006) on the effect of working capital management on profitability. A sample of 200 most important Belgium firms were picked and their financial statement was analysed and most firms have a large
amount of cash invested in working capital. It can therefore, be expected that the way in which capital is managed will have a significant impact on the profitability of the firms. Padachi (2006) investigated the relationship between profitability measured by return on assets and working capital management by taking 58 firms in Mauritius using panel data analysis for the period 2006-2010. The regression result showed that high investment in inventories and receivables in association with low profitability. Gill, et al (2010) also studied 88 America firms and found out that statistical significant relationship between cash conversion cycle and profitability. Regarding cash management practices, Grablowsky (2006) and Grablowsky and Rowell (2007) conducted a questionnaire survey concerned with cash management practices of 66 small enterprises from a number of industries located around Norfolk, Virginia. The results shows that 67 percent of respondents replied they did not do forcasting of cash flows. When asked how they determine the level of cash to be held by the business, less than 10 percent of enterprises reported using any types of quantitative techniques. The method most often employed was cash as a fixed ratio of projected expenses, forecasted sales or anticipated purchases. Evidence of cash management practices of 123 small enterprises across variety of industries in the Canadian provinces of Quebec and Gopal (2009). Generally, 53 percent of the sample business indicate that they prepared cash forecast, substantially higher than the 30 percent figure reported by Grablowsky (2006, 2010), respondents were also asked the basis for determining the level of their cash balances only 26 percent of respondents indicated that used formal techniques. Regarding account receivable management practices, Grablowsky (2006) and Rablowsky and Rowel (2007) found generally low standards. Approximately 95 percent of business that sold on credit tended to sell to anyone who wish to buy. Only 30 percent respondent subscribe to a regular credit reporting service. Most have no credit checking procedures and guidelines and only 52 percent enforce a late payment change. Thirty four percent of businesses had no formal procedure for aging accounts receivable. Olowe (2008) defines working capital as funds available that is used for running a business on a daily basis. He sees working capital as the sum of current assets minus current liabilities. This means that working capital consist of cash and other assets that keeps changing firms from cash to stock, to debtors, to cash again and from creditors and so on. This explains why
current assets are made up of cash, debtors, stock, creditors. Thus, working capital management entails the managing of cash, debtors and cash (current assets) and creditors (liabilities).

Kurfi (2009) explains that working capital can be financed through long-term funds like equity, and bond sales by a firm or short-term finance like trade creditors, bank overdraft or short-term borrowing from the commercial banks. The short-term means of financing is cheap but it should be used carefully as it entails certain level of risk of running out of cash. The shortage of cash can hamper the operation of the firm and frustrate customers of the enterprise. Some of them may have no choice but explore alternative purchasing source. To safeguard against the risk involved Olowe (2008) recommends the following: Liquidity ratios: The normal current ratio should be 2:1. The firm should finance its current assets by generating 50 percent of its current assets from its equity. The quick asset ratio should be 1:1. Permanent and fluctuating current assets: permanent current assets are more or less fixed and are synonyms of permanent assets. They are only capable of being depreciated. Fluctuating current assets are the other current assets, those assets that need to be merged with permanent assets. They are needed to support varying production levels (Olowe, 2008). Since some current assets are fixed, it is argued that part of the current assets be financed using equity finance which cannot be withdrawn. The degree to which current assets are financed should follow certain rules: (i) permanent current assets should be financed using long-term means of finance such as equity, bonds, etc. Fluctuating current assets may be financed with short-term source of finance such as bank loans and overdraft. The reason is that it is not parsimonious to finance permanent current assets with short-term funds as they cost more and the enterprise is susceptible to having liquidity problems.

The guiding principle dealing with working capital is to consider the trade-off between working capital and profitability. The amount of working capital kept by a firm is dependent on the nature of a company. Manufacturing companies require more working capital than service companies, for example. The size of a company also affects the amount of working capital that may be required. This explains why bigger firms require more working capital. It is also argued (see Olowe, 2008) that
working capital is an essential element of business. It is important that it is effectively managed to keep business competitive and to gain comparative advantage. This can be done by obtaining a suitable balance between working capital and profitability. The more money invested in working capital, the higher the cost of keeping working capital. This depresses the level of profit. On the other side of the argument, keeping less money in working capital makes the firm to be susceptible to stock-out problem. This can affect firm-customer relationship. The long-term effect is reduces the number of the firm’s customers. This can compromise the long-term survival of a business. It is essential that a balance between the two has to be struck. Based on the above observation, Ross, Westerfied and Jordan (2006) have argued that business should avoid the pitfalls of working capital overcapitalization and working capital overtrading. Overcapitalization is a strategy in working that entails excessive capital stock, debtors and cash and few creditors. The result is overstocking of working capital with excessive cost of stock. This reduces profitable level. The term overtrading happens when a firm is trying to support large trading activities with a long-term capital. A business that is overtrading can be run effectively and be making profit, such business are liable to running into liquidity problem. The typical features of overtrading are: a rapid growth in turnover; higher stock turnover and lower average collection; low liquidity ratios, liquid deficit, creditors debts are overdue bank overdraft or loans repayment exceeds repayment period; and proportion of total assets which are financed by credit increases.

Debt management is another aspect of working capital management. Debt management is aimed at achieving optimal level of debts so as to minimize cost of operations. The optimal, as Olowe (2008) has noted, is a compromise between two variables: Increase in sales and profit associates with extending credits; and (ii) the cost of credit which entails interests and administrative cost of giving debts and the cost of bad debts. In order to minimize the total cost of debts, Olowe (2008) has advised firms to establish credit policies incorporating the following points: Establish credit policies determining the period over which credits are granted and policies controlling credits; Establish policies limiting the amount of credits to be granted; Establish debt collection management. Ross, Westerfield and Jordan, (2006) and
Olowe (2008) have acknowledged certain factors that should be carefully considered when determining credit policies. These factors include: terms of credit given by competitors; the elasticity of demand for product to credit facility; the availability of finance to achieve operational target of production department of the firm; The additional costs associated with debt administrations; the saving on expenses involved in administering credit sales; the risk of bad debts; and the discount to be given for early payment. A credit policy involving all these factors is likely to be very effective in achieving the envisaged objectives. The procedure for giving credit to customers and controlling outstanding accounts of customers should consider certain factors. There must be laid down criteria for accepting new customers who can be granted credit facilities. This entails assessing current and past records of the customers. The information can be obtained from trade references, bank references, credit rating agencies, sales representative reports and financial statements. Credit limit should be set at a low limit but it can be upgraded based on performances. The newspaper views of the reputation of the customers are worth taking note of. The credit limit set for customers has to be reviewed to keep hem updates (Olome, 2008).

Inventory management is also concerned with stock management. Stoke management entails efficient management of stock to attain optimal stock. The extent of stock hold in inventory varies from one business to another. In manufacturing firms, stocks constitute a substantial portion of the working capital (Olome, 2008). As Olowe (2008) has noted the main objective of holding stock is to meet customers demand. If outputs are available in the store, customers demand are effectively met and they cannot go somewhere else to go and buy. However, if the output are not readily available, customers demand cannot be met and so they go somewhere else to buy and the firm stands to lose a significant number of its customers to rivals. Olowe (2008) has explained that in a manufacturing enterprise, stock consists of raw materials, work-in-progress, and finished products. As such stoke provides a link between production and sales department. A manufacturing concern needs to hold substantial stock to facilitate the production process.

Just like in the other areas of working capital management, Ross, Westerfield and Jordon (2006) have explained that there are associated costs of holding stock as well
as associated savings of money from holding stock. A balance has to be struck between the two to keep cost at the minimum. The inventory cost consist of: carrying or holding cost which include cost of capital invested in stock, storage cost charges, handling costs and staff cost maintenance and running cost audit stock taking insurance, and security costs; etc. This is the cost associated with ordering of stock. Inventory costs goods reception costs; and transportation cost, in cases where goods are produced internally procuring cost is made up of set-up and tooling costs, planning and contractions costs. Other costs associated with stock are stock-out costs which are associated with running out of stock. They include the loss of customers, the loss of future sales, the loss in terms of frequent production stoppages, and the costs associated with emergency an purchase which makes firms to buy stock at higher prices. Another element of stock cost is the actual cost of stock purchase based on the invoice received from the supplier (Olowe, 2008). The stock costs as listed above may be classified into two broad groups. Stock holding cost; and stock ordering cost (Ross, Westerfield and Jordon, 2006). The former increases as more stocks are held while the cost of the latter reduces as more stock are held. Therefore there is trade-off between the two. The balance is achieved at midway between the two which result to having optimal stock with minimum cost where there is no excessive stock and no shortage of stock. At the optimal stock level, the economic ordering quantity is usually computed.

Working capital also involves the managing of cash. Just like other elements of working capital like stock and debt, Olome (2008) defines cash management as efficient cash management to achieve an optimal level of cash where the cost of capitals is at the minimum. Cash is a fundamental input necessary to start and keep a business running. The motives for a business holding cash are three. These motives are the transaction motive, the speculative motive and the precautionary motives (Divivedi, 2010). A firm needs to hold cash in order to meet up with day-today operations of its business activities. Cash is needed, for instance, to pay wages, to buy raw materials, to pay creditors, and to settle operating expenses (Olowe, 2008).

The speculative motive stipulates that cash is needed to finance profitable investment as and when the need come-up. Such needs include buying production machines; buy
the stock of other companies, among others factors. In the case of precautionary motive, cash is needed to take care of unforeseen challenges in the future such as contingencies may be a penalty against a firm based on a suit pending between the company in a law court, paying for a dishonoured cheque, among others. There is need for a firm to keep emergency funds to meet the three motives of holding cash balances. It is also important to note that holding excessive cash has the tendency of reducing a firm’s profitability as it amount to trying down capital and foregoing interest rate that the fund could have earned from other alternative opportunities foregone. On the other hand, not keeping enough cash can lead to loss of gains from opportunities the firm would have used to make some profitable investments (Olome, 2008). The elements of cash management as stated by Ross, Westerfield and Jordan (2006) are: cash planning which is classified into cash inflows, and cash outflows so that the gap in cash requirements can be known and excessive cash can be detected managing the cash flows which entails the managing of collections and disbursement of cash; and determining the optimal cash balance which is a decision to decide on the cash balance that is efficient, where the total cost of cash is kept at the minimum (Olome, 2008).

2.7.3 Investment Decision

Capital budgeting has attracted researchers over the past several decades Mcmahon (2009) claimed the earliest study of capital budgeting of SMEs was reported by Soldotsky (2007). During (2006), Soldotsky in a study to assess the relationship between capital budgeting and investment decisions. He interviewed 126 owners of small manufacturing business in IOWA and the result were published in 2010. Soldotsky (2006) found there was considerable variation in the methods of calculating payback period and in determining payback standards. Many business that required payback periods were flexible according to circumstances such as the variability of cash, planned product changes and business outlook. In the smaller enterprises, approvals for capital outlays tended to be given as required, whereas larger concerns were more likely to have annual capital budgets. Only four firms attempted to calculate some variations of the average cost of capital for use as a hurdle rate for capital projects. Most businesses seemed unaware of the link between
their financing and investment decisions. On the positive side, it was quite clear that the evaluation of capital projects was heavily cash flow oriented.

Regarding capital selection techniques, there were several surveys by previous researchers such as Soldotsky (2006), Luoma (2009), Tylor Nelson investment services (1970), Hankinson (2009), Grablowsky and Burns (1980), Proctor and Canada (2007), and Block (2008). Study results shows around 58 percent employed accounting rate of return technique. Brigham (2008) suggested that capital budgeting might be more important to a smaller firm than its larger counterparts because of the lack of access to the public markets for funding. Capital budgeting has attracted researchers over the past several decades. McMahon et al. (2009) claimed the earliest study of capital budgeting of SMEs was reported by Soldofsky (2006). During 2009, Soldofsky interviewed 126 owners of small manufacturing businesses in Iowa and the results were published in 1964. Soldofsky (2006) found there was considerable variation in the methods of calculating payback period and in determining payback standards. In many businesses, required payback periods were flexible according to circumstances such as the variability of cash, planned product changes and business outlook. In the smaller enterprises, approvals for capital outlays tended to be given as required, whereas larger concerns were more likely to have annual capital budgets. Only four firms attempted to calculate some variation of the average cost of capital for use as a hurdle rate for capital projects. Most businesses seemed unaware of the link between their financing and investment decisions. On the positive side, it was quite clear that the evaluation of capital projects was heavily cash flow oriented.

Regarding capital project selection techniques, there were several surveys conducted by previous researchers such as Soldofsky (2006), Luoma (2007), Taylor Nelson Investment Services (1970), Hankinson (2007) Grablowsky and Burns (1980), Proctor and Canada (2009), and Block (2010). Soldofsky’s (2006) study results shows around 58 percent of respondents used payback period methods whereas only 4.1 percent employed accounting rate of return technique. Domination of payback period methods compared with other techniques in evaluating capital investment projects of SMEs was also found in the study of Louma (2010). Louma
(2011) conducted a survey of small and medium-sized manufacturing businesses in the United States and found that more than 22 percent of SMEs used formal methods of capital investment evaluation.

Thirty years after the Louma’s (1996) study, Block’s (2006) survey of 232 small businesses in the USA indicated payback method remains the dominant method of investment selection for small businesses, whereas large corporations widely incorporate discounted cash flow models in financial analysis of capital investment proposals (Proctor and Canada, 2006). This is not evidence of a lack of sophistication as much as it is a reflection of financial pressures put on the small business owner by financial institutions. The question to be answered is not always how profitable the project is, but how quickly a loan can be paid back. Nevertheless, more sophisticated methods using discounted cash flow (IRR and NPV) have increased in use over time.

The predominance of the payback period method can be attributed to its simplicity, emphasis on liquidity, and response to external financing pressures. While other more complicated methods are not as popular. Similarly, Grablowsky and Burns (2007) found that the level of understanding and use of more advanced capital budgeting policies and techniques were very low. For example only 4.6 and 13.8 percent of respondents in the Grablowsky and Burns (2008) survey indicated they use the net present value and internal rate of return methods respectively. In the UK, Corner (2006) found remarkable differences in methods used for assessing capital projects between smaller and larger enterprises. The percentage use of different methods depending upon business size illustrated by Corner (2007). Scott et al. (2008) examined the capital investment evaluation procedures of 35 small manufacturing enterprises in the USA and the following are some principal findings: Eighty-four percent of respondents indicated that some investments were necessary in the short-run, regardless of their profitability. Payback period was used to evaluate capital projects by 51 percent of respondents, while 30 percent reported use of some variation of accounting rate of return. Only 10 percent reported use of discount cash flow methods such as net present value (5 percent) and internal rate of return (2 percent). This finding is consistent with the Soldofsky (2006), Louma (2007), Corner (2008), and Grablowsky and Burns (2009) findings of a tendency in using simple and
complicated methods of capital investment project evaluation. Sixty-one percent of respondents indicated that they screened capital expenditures by comparing the expected rate of return on investment with the cost of capital or some cost of financing. Similarly, Block (2006) found that, of the 64 firms using discounted cash flow as the primary method of investment analysis, only 9 used a concept closely related to weighted average cost of capital as the discount or hurdle rate. The majority of firms used the cost of funding the specific project as the cut-off point. Others relied on such concepts as an arbitrarily determined cut-off point or historical rate of return. The reason for not using weighted average cost of capital is that smaller firms have difficulty in estimating the cost of equity capital. They were accustomed to relating cost to contractual obligations, and not other concepts such as opportunity cost related to retained earnings. Furthermore, smaller firms have less access to the public capital markets and fewer alternatives overall than larger firms and feel a less compelling need to measure the relative cost of each.

Saidu (2014) examines the problems and prospects of capital budgeting among firms operating in Nigeria. The study noted that capital budgeting is one of the most important decisions that is made by business enterprises in Nigeria (Kersyte as cited by Saidu, 2014). Its objective is to allocate resources to ensure firms earn optimum return from their resources. The study reviews previous works on capital budgeting or project appraisal techniques. The study finds that firms use combinations project appraisal techniques to reduce the defect that are inherent from employing a single method; the discounted cash flow method is highly popular among the methods that are used in Nigeria; the discounting method is susceptible to misapplication because of errors inherent in cash flow statement, discounting rates and risk adjustment methods; and to avoid the problems inherent from discounted cash flow is to supplement it with other methods. Akpan, Etuk and Essi (2009) sees capital appraisal as a method of making a good decision on investment decision which brings in a satisfactory returns and bring in a good rate of return. Akpan, Etuk and Essi (2009) sees investment appraisal to involve the selection of the most value investment from allays of investments, based on capital constraints. Saidu (2014) has noted that the use of cash budgeting in decision-making is a global revolution. Pike (2005) has
surveyed investment appraisal in advanced countries of United States of America (USA), United Kingdom (UK) and Canada based on the works of Jog and Srivastava (2015), Payne, Heat and Gale (2014) in Canada, Arnold and Hatzopulous (2009) in UK; Graham and Harvey (2010), Ryan and Ryan (2012) who studied in the USA all agreed that discount cash flow is more widely used than other methods. Drury and Tayles (2012), however, do emphasize that the application of discounted cash flow is not used correctly. In Nigeria business environment, Akinyemi (2012) studied the capital budgeting techniques and conclude that the payback method is generally more applied. Ayedotun (2015) studied 60 companies in Nigeria relating to the capital budgeting methods. 40 percent of the enterprises were quoted on the stock exchange. The study of methods capital budgeting shows that several investment appraisal were combined in the study with a significant percentage preferring the use of discounted cash flows (DCF). Falusi (2014) studied 20 companies that were quoted in the Nigerian Stock Exchange. The study established that the companies favoured net present value (NPV) over the payback period (PBP). Akinyomi (2012) has found that most business firms in Nigeria carryout investment appraisal before investments are undertaken.

Peloza (2009) investigates the challenges of measuring the financial effects of investment in corporate social performance (CSP). The study notes that whether it is desirable to undertake investment in CSP in order to enhance performance is determined by several factors. Such factors are the size of the enterprise, the economic conditions or situation and the regulatory or legal environment, the public requirements for setting up businesses. The study also attempted to establish the line of causality ranging from CSP being the rationale for the success of certain enterprises performances or whether enterprises performances the cause of CSP being introduced in enterprises. In other words, does CSP makes companies to make more profit or more profits make companies to undertake CSP? In investing in CSP, a lot of financial criteria are used for some reasons. In deciding to invest in CSP several options are used. For instance, investing in pollution control may be because of reducing energy use or foregoing support for local charity work. Second, CSP usually come under intensive scrutiny and the managers who are charge with the
responsibility of CSP must consider quantitative benefits of investing in CSP. Third, individuals responsible for budgeting approval are not usually favourably disposed to investing in CSP (Steger, 2006).

In order to investigate the impact of corporate social performance on profit earning, it is vital to define what social responsibility is. Wood (2008) conceives corporate social performance as a business organization’s understanding of the tenets of social responsibility or responsiveness and how such outcomes relate to the firm’s relationship. The issue of social responsibility is usually not taken for granted because of two major factors (Peloka, 2009). First, previous studies have evaluated their effect on profits, and second, the CSP is a potential driver for enhancing the value of a firm. The historical review of social responsibility has shown that it dates have to the period of the 1970s (Margolis, Elfenbein and Walsh, 2008). Orlitfzky (2007) has established that the impact of CSP on profit earning is subjective. The study establishes that the impact of CSP on profit is positive but its impact is minimal. Some researchers have even found negative relationship, some found no relationship. As Rouseau, Manning and Denyer (2008) have noted, differences in findings in the field of knowledge can hinder the accumulation of knowledge and the integration of findings. The study points out that the use of different methods does not constitute any significant problem. Rather what is important is to systematically review the findings in order to find out whether the apparent differences are substantial or semantic reflection of the different starting points or discipline assumptions or even differences in the phenomena being studied. In order to carry-out such reviews for the purpose of comparing findings of CSP on profit, Rousseau, Manning and Danyer (2008) insist on systematic reviews beyond the traditional method of reviewing literature by giving transparent, realizable process that are amenable to auditing and scrutiny. The previous writers provided macro analysis of profit based on returns on investment (ROI). The study emphasized the use of similar method in comparing notes. The study insists that there is a clear disconnection between investing in CSP and financial performances and this can cause problem. The study argues that some managers hold back in investment on CSP with the fear that it can reduce profit. The result is environmental harm. At the other extreme,
some managers are susceptible to over investing in CSP and this destroys the stakeholders’ value. These two measures cannot be compared. These two methods tend to portray that the methods of measuring CSP are not compatible. To be able to adopt a compatible method, the study includes methods that attempt to give quantitative measures for CSP and ROI. These methods include profit, share prices, ROA, ROI, etc. and they include methods or processes of making quantitative calculations.

The study includes 159 studies which are subdivided into 128 articles from academic and 31 practitioners’ literature. 63% of articles from academics reported positive relationship between CSP and financial performances; 15% negative relationship; the remainder about 22% report no significant relationship. The articles investigating CSP and financial performances from academic arena span from the earliest article in 1972 to latest articles in 2008. The most recent articles come from the practitioners. In the case of practitioners, 77% shows a positive relationship between CSP and performance; 10 percent shows neutral relationship or no significant effect; while the remaining 13 percent show negative relationship. (Data, 2010) The studies reviewed employed several methods or metrics to measure CSP and financial returns due to CSP. The study observed that 39 measures of CSP employed by 82 percent of the studies. 18% of the studies used pollution control; 16% used environmental, safety and health methods; 12% of the methods used third party audit; KLO index constitute 9% and magazine ranking made up of 9% as well. The measures of CSP and the environment involved were some of the reasons for the variations of findings, some negative, neutral and positive. The measures of variation of profit also vary across firms. There were 36 measures, about 91% of the methods used end state approach. End state approach are classified into market view-point for instance, market share price; internal financial accounting point of view such as ROA; and perpetual view point which qualitatively appraise an enterprise performance by the employment of either internal or external sources. Market view point is one of the methods employed. Dominant in this method is the share price. The share price was used for certain reasons. First, it provides a yardstick for firms to monitor their performances; it provides a means by which firms in different regions and sectors
can be compared. Third, share prices are readily available and this makes it possible for measuring performances, share price is used by Schnietz and Estein (2006) for instance. Mutual funds returns were used by Barnett & Salomon (2006).

Accounting point of view was often employed in the study. Accounting methods and returns on sales (ROS), returns on equity (ROE) and returns on assets (ROA). The accounting method may appear to improve the value of the firm in the short-run as they measure how a firm uses its asset to improve the firm’s value in the short-term. A firm investing in local charities, schools, improved environment, etc. may reduce ROA or ROE in the short-term. However, in the long-term, it can generate improved customer loyalty, commitment, goodwill and give a latent form of brand insurance. The end result is long-term maximization of financial gains for the enterprise. The firm can be able to maximize its long-term growth and development (Peloza, 2009). The third category of end state metrics is perpetual metric. Studies use interior metrics and external metrics but they are not capable of assisting the management to appraise their investments for some reasons. External metrics like fortune most admired ranks are mostly influenced by end state measures like share prices.

2.7.4 Financing Decision

Norton (2007) on the study of capital structure and small public firms in journal of business venturing. He provided empirical evidence on capital structure by conducting a survey of 400 small, high growth corporations. In his survey, respondents were asked to describe the underlying firm philosophy in making debt and equity decisions. The result of the study show that most small firms depend on family and relatives for expansion. The result of the study show that a life cycle of capital structure among small growing firms depend on age, size and economic development most firms appear to be initially dependent on relatives/friends and personal equity for expansion/working capital needs and overtime are able to rely on more heavily on traditional sources of bank debt for financial support. Since firm managers/owners will attempt to minimise the overall cost of capital, the firm is seen as having a rising level of debt as it becomes available (Peterson and Shulman, 2007).
Small companies frequently suffer from a particular financial problem — lack of a capital base. Small businesses are usually managed by their owners and available capital is limited to access to equity markets, and in the early stages of their existence owners find it difficult in building up revenue reserves if the owner-managers are to survive. A question concerns how small businesses determine sources of finance in such difficult circumstance. According to Brigham (2009), modern capital structure theory began in 1958, when Modigliani and Miller’s (2009) seminal article on capital structure was published. Since that point of time, researchers have attempted to explain how firms choose their capital structure. Myers (2006) stated: *How do firms choose their capital structure? The answer is we don’t know... we do not know how firms choose the debt, equity, or hybrid securities they issue.*

Though some theoretical work focuses on small business capital structure (Day et al. 2006; McConnell and Pettit, 1984; Pettit and Singer, 2007; and Walker, 2006), empirical work on small business and capital structure is minimal (Norton, 2007).

Literature of the 1980’s has attempted to explain small firm financing decisions by using modern financial theories. McConnell and Pettit (2009) suggested that small businesses generally have proportionally less debt than large firms because: (1) small firms generally have lower marginal tax rates than larger firms, thereby, less tax deduction benefit of debt, (2) small firms may have higher bankruptcy costs than large firms, and (3) small firms may find it more difficult to express their business health to creditors.

Another attempt to explain small firm financing behaviour relied on agency theory. Agency theory holds that investors who have equity or debt in a firm require costs to monitor the investment of their funds by management or the small business owner (agency costs). This view suggests that financing is based on the owner-manager being able to assess these agency costs for each type of financing, and then select the lowest cost method of financing the firm’s activities. One weakness of this explanation is that no one has yet been able to measure agency costs, even in large firms (Myers, 2008). In contrast, more recent theoretical and empirical work suggests that a strategic perspective may have promise in explaining the financing decisions. Barton and Gordon (2007) suggest that the following characteristics must be
accounted for in any explanation of firm financing decisions: behavior at the firm level; fact that the capital structure decision is made in an open systems context by top management, and decisions reflects multiple objectives and environmental factors, not all of which are financial in nature. The firm’s financing decision, then, appears to be a product of many internal and external factors, as well as managerial values and goals. The arguments of Barton and Gordon (2014) for the management choice perspective on large-firm financing decisions may have even more relevance and validity for small firms. First of all, because most small firms are not actively traded on a financial market as large, public firms are, they are unconcerned with the financial market’s assessment of their capital structure. As a result, modern financial leverage theory, which is based on the market’s assessment of total stock valuation, does not always apply. Second, as Levin and Travis (2007) pointed out the owners’ attitudes toward personal risk – not the capital structuring policies public companies use – determine what amounts of debt and equity are acceptable. In effect, the authors argue that small firms choose debt based on personal, managerial preference.

While the classic strategy paradigm is not explicitly theoretical in nature, it does identify key decision categories, which are affected by top managers, when they make strategic decisions. Based on dimensions of the strategy paradigm, Barton and Matthews (2006) suggested five propositions to explain how small firms determine their capital structure listed as follows: top management’s risk-taking propensity affects the firm’s capital structure; top management’s goal for the firm will affect the firm’s capital structure; top managers would prefer to finance firm needs from internally generated funds rather than from external creditors or even new stockholders; the risk propensity of top management and financial characteristics of the firm affect on the amount of debt lenders are willing to offer and on what terms; and financial characteristics moderate the ability of top management to select a capital structure for the firm. However, the authors mentioned above and Barton and Matthews (2015) have not provided empirical evidence to support their propositions. Conversely, Norton (2013) provided empirical evidence on capital structure selection by conducting a survey of 400 small, high-growth corporations. In his survey, respondents were asked to describe the underlying firm philosophy in making debt
and equity decisions. Other empirical evidence on capital structure was provided by Peterson and Shulman (2014). Peterson and Shulman (0) analyzed the empirical data collected for 1984 International Small Business Congress. Approximately 130 questions were asked in 4,000 interviews conducted in 12 countries including Brazil, Colombia, Spain, Kenya, Cameroon, Indonesia, USA, Canada, West Germany, United Kingdom, Netherlands, and Japan. The survey questionnaire contains information regarding the source of funds, including traditional debt, internal equity, friends/relatives, and trade suppliers. The actual percentage of each source that a firm employs varies depending on such factors as; age of firm; location of the firm; cost of the source; availability of the source; profitability of the firm; growth level of the firm, and information flows. The results of the study show that a life cycle of capital structure among small growing firms depend on age, size, and economic development. Most firms appear to be initially dependent on relatives/friends and personal equity for expansion/working capital needs and over time are able to rely on more heavily on traditional source of bank debt for financial support. Since firm managers/owners will attempt to minimize the overall cost of capital, the firm is seen as having a rising level of debt as it becomes available (Peterson & Shulman, 2007).

2.7.5 Accounting Information System

D’Amboise and Gasse (2007) studied the utilization of formal management techniques in 25 small shoe manufacturing and 26 small plastic manufacturers on Quebec-Canada and found that 88 percent of the business used cost accounting system. Regardin accounting standards, Dethomas and Fedenberger (2008), in a survey of over 360 small enterprises in Georgia, found that the standard of financial record keeping was very high. In addition to cheque and deposit receipts, around 92 percent of respondents had some of record keeping. Regarding the use of financial information, Dethomas and Frederengers (2009) study indicated that 96 percent of the respondents had financial statements prepared, the responsibility for evaluating and using the information was within the business itself and only four percent relied on an outside accountant services. For computer software applications in accounting, Raymond and Magnenat Thalman (1982) conducted a survey of 129 small manufacturing business, whose number of employees totalled between 20 and 250
and sales varied from $0.5 to $25 million, in 1982. Another survey of 464 small business was carried out by Raymond in 1985 in the province of Quebec. In the 1990’s Chen (1993) found that accounting still was the most important and widely software in the small business studied.

In the survey of 69 small enterprises across the USA, Farhooman and Hryck (2008) reported on the most important applications of computers and it was found out that accounting was rated as the highest percentage. Similarly, Palmer (2014) interviewed 36 small independent retail owner managers and found that 33 percent of the sample business used computerised accounting systems. Reviewing previous research results shows accounting and financial management applications dominated the use of computers in small and medium enterprises in the North America in 1980s and 1990s.

D’Amboise and Gasse (2004) studied the utilization of formal management techniques in 25 small shoe manufacturers and 26 small plastic manufacturers in Quebec, Canada and found that 88 percent of the businesses used a cost accounting system. Regarding accounting standards, DeThomas and Fredenberger (2009), in a survey of over 360 small enterprises in Georgia, found that the standards of financial record keeping was very high. In addition to cheque and deposit receipts, around 92 percent of respondents had some form of record keeping. Regarding the use of financial information, DeThomas and Fredenberger’s (2005) study indicated that 96 percent of the respondents had financial statements prepared, the responsibility for evaluating and using the information was within the business itself and only four percent relied on an outside accountant services. For computer software applications in accounting, Raymond and Magrenat-Thalmann (2010) conducted a survey of 129 small manufacturing businesses, whose number of employees totaled between 20 and 250 and sales varied from $0.5 to $25 million, in 1982. Another survey of 464 small businesses was carried out by Raymond in 1985 in the province of Quebec. In the 1990’s, Chen (1993) found that accounting still was the most important and widely software in the small business studied. In the USA, researchers conducted many surveys of the most important applications of computers in accounting. Cheney (2004) reports on a survey of 30 small and medium-sized businesses in a variety of
industries in Georgia. In his survey, the respondents were asked to indicate the most important applications of computer software in use the results revealed that the most important applications of computer software are in the areas such as payroll, accounts receivable, accounts payable and general ledger.

In the survey of 69 small enterprises across the USA, Farhooman and Hryck (2006) reported on the most important applications of computers, and it was found out that accounting was rated as the highest percentage. Similarly, Palmer (2005) interviewed 36 small independent retail owner-managers and found that 33 percent of the sample businesses used computerized accounting systems. Reviewing previous research results shows accounting and financial management applications dominated the use of computers in small and medium enterprises in the North America in 1980’s and 1990’s. In the UK the most significant studies of small enterprises were conducted by Bolton (2005). Additionally, there are several researchers who studied accounting systems such as Corner (2004), Murphy (2007 and 2009), Lovett (2010), Arnold-McCulloch and Lewis (2005, 2006) and Gorton (2014). According to McMahon et al. (2005) the inadequacy of financial record keeping system in small enterprises was well documented in the main Bolton Report (2013) and in various supplementary research reports. This situation reflected a poor appreciation of the significance of financial management amongst owner-managers who were often technically-or sales-oriented. Concerned with costing systems, Corner (2010) reported on the results of studies including 119 small enterprises, 62 medium-sized enterprises and 29 large enterprises in 1963. The study results showed the extent of use of costing systems in large enterprises was 82.1 percent, while in small and medium enterprises was 62.1 and 69.4 percent respectively. Awareness of use of costing systems was found to be very high in the study of Murphy (2014 and 2015) whereas the utilization of costing systems was lower. Murphy (2008) explained that smaller enterprises were often aware of the importance of sound costing systems but they lacked the time and expertise to install such systems. Lovett (2009) found that many businesses either had no costing system at all or relied on periodic attempts to estimate the cost of a product through a rough calculation of the labor and materials content plus a mark up for overhead and profit.
In Australia Peacock 2005, 2006, and 2008), Williams (2006), Holmes (2007) and Holmes and Nicholls (2008) are typical researchers who published results of studies of accounting information system practices. Peacock (2008) investigated the effects and causes of more 1,000 proprietary company failures in South Australia during ten years and found that 4.6 percent of failures had inadequate or no accounting records. In another study of company failures in South Australia, Peacock (2008) reviewed the bankruptcy reports of 418 unincorporated businesses for four years (from 1981 to 1985) and found that 50.5 percent of these used single entry systems, 32.8 percent used bank and taxation records whereas only 2.1 percent utilized double entry systems. In a more recent study, Peacock (2009) found a significant element in the failure of many of the businesses was inefficient or absence of accounting records. More than half of the businesses failed were found to have no records or only basic bank and taxation records. Peacock’s (2005, 2006, and 2008) findings are very important as examining the impact of accounting system practices on performance of SMEs. Williams (2006) evaluated the adequacy of accounting records for 10,570 failed and surviving small enterprises operating throughout Australia. The findings are compatible with Peacock’s (2006, 2007,2008) findings in that a significant proportion of owner-managers kept inadequate accounting records.

Holmes (2008) conducted a survey of accounting information requirements of 928 small enterprises operating in Sydney, Melbourne and Brisbane. Fifty-seven percent of respondents indicated they used the journal/ledger (double entry) systems. This finding is rather in contrast to Peacock’s (2007) findings of types of records maintained by failed enterprises, where only 2.1 percent of respondents were found to use double entry systems. In a more recent study, Holmes and Nicholls (2007) analyzed the use of accounting information by Australian small firms. The owner-managers were asked to indicate the accounting information prepared at least once a year by either business or an external accountant. The findings suggested that a significant difference exists between the internal and external preparation of accounting information. In order to check this hypothesis, tests of equality of proportion were carried out and the testing results supported the conclusions that statutory information is sought mainly from external accountants, whereas additional management information tends to be prepared within the business.
Financial reporting and analysis

Bookkeeping alone without preparing reports is likely not to be fundamental in aiding decision making unless proper reports are prepared and analyzed to attach a meaning so as to help decision makers. D’Amboise and Gasse (2006) studied the use of financial statement analysis by small manufacturers in Quebec, Canada and found that small manufacturers in shoe and plastic industries formally undertook the analyses based on financial statements and the findings revealed that manufacturing firms managerial decisions were largely based on the financial reports prepared. Lindecamp and Rice (2007) studied familiarity with financial statement analysis of 102 owner-managers of small retail stores in Mississippi. Some 73 percent of respondents reported that they analyzed their cost figures on a frequent or regular basis. Nearly 60 percent indicated that they did not maintain up-to-date figures on the contribution to profit of individual product or product lines. Nearly 50 percent seldom or never compared their concern’s performance with industry figures. Over 50 percent of respondents did not appear to understand the meaning of “debt/equity ratio” and 59 percent did not know the value of this ratio for their business. In their survey, DeThomas and Fredenberger (2006) found that 81 percent of the small enterprises regularly obtained summary financial information. Ninety-one percent of the summary information was in the form of traditional financial statements (balance sheets, profit and loss statements, fund statements), the remainder being bank reconciliation and operating summaries whereas no business was regularly receiving cash-flow information. The study further found that 61 percent of respondents felt the financial statements provided the information they required for planning and decision-making. Nevertheless, only 11 percent of respondents reported that they had used financial statement information formally as part of managerial evaluation, planning and decision-making, 2 percent of businesses utilized financial ratio analysis, and few made even simple historical comparisons.

Thomas and Evanson (2007) studied 398 small pharmacies (in Michigan, North Carolina, Nebraska, Rhode Island and Washington) to examine the extent to which financial ratios were used in a specific line of small retail business and tested for a relationship between use of financial ratios and business success. The study used
regression analysis to examine the relationship between financial ratio usage and SME profitability. However, they could not demonstrate any significant relationship between earnings-to-sales and the number of financial ratios used by the owner in operational decision-making. When efforts were made to include the effects of other managerial practices and variations in business environments, no association between use of individual ratios and total earnings or total to sales was found. They explained the lack of association between financial ratio usage and either survival or profitability, may also indicate that the level of sophistication in use of ratios has not reached a high enough level among pharmacies to make a discernible difference between those which use and those which do not use financial ratios. However, Thomas and Evanson (2005)’s study only examined the association between SME profitability and the number of financial ratios, while the relationship between SME profitability and the efficiency as the result of using the financial ratios was not studied. Palmer (2004) interviewed 36 small independent retail owners to determined if timely and accurate financial information is really all that important to small businesses and found that the more knowledgeable the owner-managers were about the financial position of these businesses, the more successful the businesses appeared to be. McMahon and Davies (2005) examined significant associations between financial reporting and analysis and achieved growth rates and financial performance and found the following: Enterprises that had more comprehensive reporting in terms of both the number of statements obtained and their frequency were more likely to employ financial analysis; there is apparently no statistically significant association between rates of growth in turnover and employment achieved by participating enterprises and their historical financial reporting practices; there appears no statistically significant association between achieved rates of growth in turnover, employment, and net profit and use of financial ratio analysis.

In Australia, Holmes (2006,2007), Williams (2008), Holmes and Nicholls (2009), and McMahon (2008, 2009) are considered key researchers who studied financial reporting and analysis. Holmes (2006) examined preparing the accounting statements of 60 small enterprises and found that they were both internally and externally prepared but taxation returns were mainly prepared by external accountants. Similar
results were also found from a study conducted by Holmes and Nicholls (2008). With only a minor change in percentage of internal and external taxation return preparation.

**Business efficiency**

**Profitability**

Profitability ratios are viewed as another variables to identify and measure financial characteristics of SMEs. According to Jaggi and Considine (1990), profitability is a crucial indicator for determining the financial position of the firm. The firm is considered financially weak when its profitability is sliding or the profitability is weak compared to other firms in the industry. In their study, they also used return on assets as the indicator to reflect profitability. Burns (1985) and Meric et al. (1997) measured profitability by three ratios: return on total assets, return on net assets, and return on equity. According to Burns (1985) return on total assets is the best measure of a firm’s efficient use of assets because it is independent of financing methods. While return on equity is a measure of the profit return to shareholders.

Profitability has generally been found to be lower for small enterprises than large in USA studies such as Anderson (1967), Gupta (1969), and the USA Small Business Administration (1984). Only Tamari (1980) and Walker and Petty (1978) found small enterprises to be more profitable than large enterprises. In the UK, only Bates (1971) found small enterprises to be less profitable than large enterprises. Both Bolton (1971) and Wilson (1979) found that small enterprises were more profitable than large. The Bolton (1971) also found that growth small enterprises were more profitable than either large enterprises or other small enterprises. In more recent, Davidson and Dutia (1991) also found smaller firms in their study tend to have lower profit margins than large firms. However, small firms did not have lower ROA ratios. Conversely, Osteryoung, Constand and Nast’s (1992) results of studying indicated that two profitability ratios, return on sales and return on net worth, are not different across the large and small firms.
Growth

Researchers in the literature found many factors influencing financial characteristics of SMEs in which growth and size are two of these factors. According to McMahon et al. (1993), the effects of growth are likely to manifest themselves in financial characteristics and performance of small enterprises. Weston and Brigham (1981) consider the financial implications of five stages of development: formation, rapid growth, growth to maturity, maturity, and decline, and found that major sources of finance at formation are the owners’ personal resources. However, according to McMahon et al. (1993) the major financial problems likely to arise at this stage are that these resources are insufficient and that the small enterprise is thereby under-capitalized. Growth beyond formation is likely to be financed by retained earnings, trade credit and bank borrowing. As a result, growth may have the following effects: growth may outstrip financial resources, leading to over-trading and liquidity crises; growth may also cause a financial gap where the small enterprise is forced to rely too much on short-term finance because of a lack of long-term finance. Further growth may require a stock market flotation in order to overcome the finance gap.

The effect of growth and size on financial management indicators and performance were examined by Elliott (1972). Size was found to affect performance in two ways. Below-average sized enterprises were found to have higher growth in cash flow and to have undertaken higher rates of capital spending than above-average enterprises. Growth affected on enterprise’s debt position, with both debt equity ratios and the proportion of non-equity financed assets being higher for slowly growing enterprises than for rapidly growing ones. Additionally, below-average growth enterprises had significantly higher rates of capital spending than above-average growth enterprises. In contrast, Chen and Balke (1979) reported that the size of enterprises did not seem to have a significant effect on most financial ratios. Only the current ratio was found to have significantly negative effects by different sizes of enterprise. When studying the effect of growth and size on financial characteristics, Gupta (1969) looked at variations in asset utilization, leverage, liquidity and profitability between manufacturing enterprises operating at different size levels and with different growth rates. Gupta’s (1969) findings are summarized as follows: activity ratios and leverage ratios decrease with an increase in the size of the enterprise but increase
with the growth of the enterprise. Liquidity ratios rise with an increase in the size of the enterprise but fall with growth rates. Larger enterprises tend to have higher profit margins on sales than small enterprises.

In contrast, Whittington’s (1971) conclusions regarding size and profitability, derived from regression analysis using cross-sectional data, are that the average profitability of enterprises is independent of their initial size during the period studied. These conclusions are largely in line with those of an earlier study by Samuel and Smyth (1968), and thus tend to confirm the law of proportionate effect which asserts that the profitability of an enterprise growing at a given rate during any specific period of time is independent of the initial size of the enterprise.

**Theoretical Perspectives**

The study will be based on capital structure theory and Myers’ Pecking Order Theory (1984). According to Myers (1984), the Pecking Order Theory (POT) suggests that there is no well-defined optimal capital structure; instead the debt ratio is the result of hierarchical financing over time. The foundation of POT is that firms have no defined debt-to-value ratio. Management has a preference to choose internal financing before external financing. When a firm is forced to use external financing sources, managers select the least risky and demanding source first. When it is necessary to issue external sources, debt issuance is preferred to new equity.

According to Van Praag (2003), financial capital includes debt and equity. This is known as capital structure. Sogorb Mira (2002) points out that the most relevant capital structure theories that explain the capital structure of small and medium enterprises (SMEs) are those related to static trade-off, adverse selection and moral hazard (agency theory). Andree and Kallberg (2008) point out that the genesis of modern capital structure theory lies in the work of Modigliani and Miller (1958) in their famous proposition I – often referred to as the “irrelevance theorem”. The theorem suggests that, under certain perfect market assumptions, such as absence of taxes, bankruptcy costs, agency costs and asymmetric information, the value of the firm is unaffected by how the firm is financed. This implies that the choice of capital structure does not affect a firm’s market value. It is the assets of a firm that determine the value of the firm and not the way by which these assets are financed. The initial perfect market assumptions, on which the 1958 theory of Modigliani and
Miller was based, were later reviewed in 1963 with the introduction of the tax benefits of debt. This is attributed to the fact that a perfect market does not exist in the real world. Since interest on debt is tax-deductible, thereby creating tax savings for the borrower, it becomes possible for firms to minimize their costs of capital and maximize shareholders’ wealth by using debt. This is known as the leverage effect of debt (Modigliani & Miller 1963). According to Miller and Modigliani (1963), a firm should have 100% debt in its capital structure. This way the firm can take absolute advantage of the tax shield.

Scott (1972) and Kraus and Litzenberger (1973) point out that theoretically, 100% tax shield does not exist in reality because of distress costs. Therefore, the optimization of capital structure involves a trade-off between the present value of the tax rebate associated with a marginal increase in leverage and the present value of the costs of bankruptcy. According to Stiglitz and Weiss (1981), agency problems such as asymmetric information and moral hazards can impact on the availability of credit and hence the capital structure of SMEs. Stiglitz and Weiss termed this phenomenon credit rationing. The study will also consider the theory of technology diffusion (Attawell, 1992). The theory has been adopted by previous researchers as a theoretical foundation to investigate the roles of managerial commitment and external AIS experts to overcome the lack of knowledge and resources that SMEs face in the implementation of AIS and, therefore, could influence the effectiveness of AIS (Thong et al., 1996; Thong, 1999, 2001; de Guinea et al., 2005. According to Attawell’s (1992) theory of technology diffusion, companies tend to delay technology adoption due to the lack of knowledge about how to implement and operate AIS. For example, Ballantine et al. (1998) found the lack of skilled personnel leads to the absence of business and AIS strategies in SMEs. Ismail and King (2007) argued the lack of managers understanding of strategic accounting information inhibits SMEs from aligning their AIS capacity with AIS requirements. Similarly, Marriot and Marriot (2000) found that financial awareness among managers of SMEs in the United Kingdom varies considerably which then leads to ineffective AIS implementation. In these circumstances, scholars (Thong et al., 1996, Thong, 2001; Yap and Thong, 1997; de Guinea et al., 2005) argued that mediating entities, such as vendors, consultants and government agencies, could play a vital role in the diffusion
of AIS. While business managers could provide the expertise in their areas of operation (de Guinea et al., 2005), a combination of advices from several external experts could provide relevant information for an effective AIS implementation. In addition to the above three external experts commonly found in the AIS literature, accounting firms could also play a major role in AIS implementation for SMEs (Davis, 1997; Mitchell et al., 2000; Breen et al., 2004; Berry et al., 2006) because accounting firms could advise SMEs in the areas of costing, expenditure, and cash flow to support monitoring and control. Meanwhile, consultants and vendors could help them choose the right technology to match the business information requirements (Yap et al., 1992; de Guinea et al., 2005). Consequently, the support of these external experts lowers the absence of both informational and technical knowledge regarding AIS implementation that SMEs may face.

Business efficiency
Profitability is one of the most important objectives of financial management because one goal of financial management is to maximize the owner’s wealth McMahon, 1995). Thus, profitability is very important in determining the success or failure of a business. At the establishment stage, a business may not be profitable because of investment and expenses for establishing the business. When the business becomes mature, profits have to be produced. Due to the importance of profitability, Edmister (2014) among other researchers have suggested that small firms need to concentrate on profitability. Jen (2013) found profitability to be a significant determinant of a small firm’s credit risk. Thomas and Evanson (2005) stress the aim of a business is not only the generation of sales, but also generation of profits. Profit is especially important because it is necessary for the survival of a business. Low profitability contributes to under-capitalization problems because it leads to fewer dollars as retained earnings and therefore to a reliance on external capital (Davidson and Dutia, 2006). One of the most difficult attributes of a firm to conceptualize and measure is profitability (Ross, Westerfield and Jaffe, 2008). In a general sense, accounting profits are the difference between revenues and costs. However, the problem with accounting-based measures of profitability is that they ignore risk. In the economic sense, a firm is profitable only if its profitability is greater than investors can achieve independently in the capital market.
Ross et al. (2014) suggest some methods to measure profitability including profit margin or return on sales, return on assets, and return on equity. Profit margins are computed by dividing profits by total operating revenue and thus express profits as a percentage of total operating revenue. Return on assets is the ratio of income to average total assets, both before tax and after tax, and measures managerial performance. Return on equity is defined as net income divided by average stockholders’ equity, and shows profit available for stockholders. Cohen (2015) stated measures of profitability are essential in any business. In text, he indicated many different ratios to measure profitability of the business. They included asset-earning power, return on the owner’s equity, net profit on sales, and return on investment. Asset earning power is determined by the ratio of earnings before interest and tax to total assets. It indicates how much operating profit each dollar of total assets earns. Return on the owner’s equity is computed by dividing net profit by average equity, and shows return that the business received in exchange for investment. Net profit on sales is determined by the ratio between net profit and net sales, and measures the difference between what the business takes in and what it spends in the process of doing business. Return on investment is simply computed by dividing net profit by total assets. This measure is very useful for measuring profitability. There are several different ways of calculating return on investment depending upon the purpose of measure:
1. *A measure of earning power in operating efficiency* (Cohen, 1989)

\[
\text{Rate of earning on total capital employed} = \frac{\text{Net income + Interest + Tax}}{\text{Total liabilities and capital}}
\]

2. *A measure of earning power of the borrowed invested capital* (Cohen, 1989)

\[
\text{Rate of earnings on invested capital} = \frac{\text{Net income + Income taxes}}{\text{Proprietary equity and fixed liabilities}}
\]

3. *A measure of the yield on the power’s investment* (Cohen, 1989)

\[
\text{Rate of earnings on proprietary capital} = \frac{\text{Net income}}{\text{Total capital including surplus reserves}}
\]

Burns (1985) used three ratios: return on total assets, return on net assets and return on equity to measure SME profitability while Hutchinson, Meric and Meric (2014) measured profitability by the following ratios: net profit after tax/sales, earnings before interest and tax/total assets, and net profit after tax/owners’ equity.

**Factors influencing profitability as a measure of business efficiency**

Considering the profitability measures presented by Westerfield and Jaffe (2007) and by Cohen (2013), the main factors influencing profitability include revenue, costs and capital. In general, revenue is determined or influenced by marketing, sales management and new product development, whereas cost and capital are mainly affected by financial management practices. In a way of analyzing factors affecting profitability, Burns (2005) found that profitability could be affected by many different economic factors. Lev (2006) found that variability of profit measures over time is affected by type of product, degree of competition, degree of capital intensity as well as firm size. The effect of size on SME profitability was also discussed by Gupta (2006), Whittington (2007), Bates (2010), Walker and Petty (2008), Tamari (2009), and Storey et al (2010). Kirchhoff and Kirchhoff (2009) examined family contributions to productivity and profitability in small businesses.
The evidence showed that family members are more productive than other employees. However, in his study family member’s productivity did not increase profitability. Results showed the opposite, as paid family labor increases, profitability decreases. As family member participation increases, wage and salary expense increase as a percentage of revenue, thereby causing profit as a percentage of sales to decline. McDonald (2010) provided new evidence on the determinants of profitability of Australian manufacturing firms by analyzing an unique firm level data-set of firm performance over the period 1984 – 93. Determinants of firm profitability were found to be generally consistent with previous Australian industry-level results and overseas studies. Firm profitability was found to be negatively affected by union density and by import penetration, and positively affected by industry concentration. In addition, there was a strong degree of persistence in firm profit margins over time. Real wage inflation was negatively related to profit margins, which suggests that firms do not immediately pass on increases in real wages by raising current prices. Firm market share was generally not found to be a significant determinant of profit margins, although this result is sensitive to the econometric method used.

In present Ugandan context, there are many factors affecting SME profitability. However, from the viewpoint of financial management, DuPont analysis is considered a standard model to analyze the factors affecting on SME profitability. According to Eisemann (2010), a virtue of DuPont analysis is its simplicity. Three fundamental ratios derive one summary ratio: return on equity (ROE). Their relationships are illustrated by the following equations: Return on equity = (Net profit margin) x (Total asset turnover) x (Leverage); Net income/equity = (Net income/sales) x (Sales/assets) x (Assets/equity. It is important to note that the ratios that determine ROE reflect three major performance dimensions of interest to all loan analysts: income statement management, or how much profit a company can generate per sales dollar; and two aspects of balance sheet management, how well assets can generate sales and the amount of solvency risk. The ratios also indicate that there are several paths that a business can use to gain a return for its owners: margin, volume, and leverage. All represent areas of financial management and are
affected by financial management practices. While DuPont analysis technically only includes the three ratios discussed above, the framework can be extended to incorporate most major financial ratios (Eisemann, 1997). It helps to think of the ratios as analogous to parts of a tree. The trunk is ROE and there are three major branches: profit margin, total asset turnover, and assets to equity.

2.8 Business Efficiency in SMEs

In general the efficiency analysis of a production or service unit refers to the comparison between the outputs and inputs used in the process of producing a product or services. For lucidity, the process is shown in figure 1.

Figure 2.2 The Efficiency Analysis Framework

Efficiency measurement is one aspect of a firm’s performance. Efficiency can be measured with respect to maximization of output, minimization of cost or maximization of profits. In general, efficiency is divided into two components called ‘technical efficiency’ and ‘allocative efficiency’ Kumbhakar and Lovell (2013). Efficiency measurement is one aspect of a firm’s performance. Efficiency can be measured with respect to maximization of output, minimization of cost or
maximization of profits. In general, efficiency is divided into two components called ‘technical efficiency’ and ‘allocative efficiency’ Kumbhakar and Lovell (2003).

2.9 Technical efficiency:
The first empirical decision analysis of efficiency is to choose efficiency to adopt. This study mainly deals with technical efficiency, which focuses on the physical relationship of level of input relative to level of output, so it requires only the input and output data without the prices (Bauer et al. 1998). A firm can be technically efficient if it either minimizes its inputs given its outputs or maximizes its outputs given its inputs. In general, the purpose of measuring technical efficiency is to determine whether a firm uses the best available technology in its production process and at the same time achieved the best possible profit at lower cost while maintaining quality and quantity.

2.9.1 Allocative efficiency:
Allocative efficiency is due to the proportional reduction in costs after the firms achieved their optimal combination of inputs (Hassan 2005). Therefore, it is more concern with the price of the factors of productions which cannot be control by the management as the increase in costs might be due to regulatory policies of the governement and other markets factors. Allocative efficiency is not computed on the availability or unavailability of all input and output prices but rather based on the uncertainties of market price changes and governmental policy change.

2.9.2 Economic efficiency:
Economic efficiency is a broader concept than technical efficiency; it involves optimally choosing the levels and mixes of inputs and outputs based on reactions to market prices. This is a tool that must be considered in an organization inorder to retained or sustained existence and production. Thus, when price data are available, economic efficiency can be calculated. A firm can be economically efficient if it has chosen and mixed its input and output levels to optimize an economic goal, usually cost minimization or profit maximization. This is done through the combination of technical efficiency and economic efficiency popularly called value engineering analysis. Economic efficiency requires both technical and allocative
efficiency in order to evolved a production system that will give way to effective production, with reduction in cost, increase in profit margin and retention of product quantity and quality.

2.10 Parametric methods:

The three main parametric (or econometric) methodologies used by researches to examine financial institutions include the stochastic frontier analysis, the thick frontier analysis, and the distribution free analysis. In general, the parametric approaches specify a functional form for the cost, profit, or production relationship among inputs, outputs and environmental factors, and allow for random error.

2.11 Stochastic frontier approach (SFA):

Sometimes also referred to as the econometric frontier approach- specifies a functional relationship between the cost, profit, or production relationship among inputs, outputs, and environmental factors, and allows for random error. SFA posits a composed error model where inefficiencies are assumed to follow an asymmetric distribution, usually the half-normal, while random errors follow a symmetric distribution, usually the standard normal error. The logic is that the inefficiencies must have a truncated distribution because inefficiencies cannot be negative. Both the inefficiencies and the errors are assumed to be orthogonal to the input, output, or environmental variables specified in the estimating equation. The estimated inefficiencies for any firm is taken as the conditional mean or mode of the distribution of the inefficiency term, given the observation of the composed error term. The half-normal assumption for the distribution of inefficiencies is relatively inflexible and presumes that most firms are clustered near full efficiency. In practice, however, other distributions may be more appropriate Greene (1990). Some financial institution studies have found that specifying the more general truncated normal distribution for inefficiency yields minor, but statistically significant different results from the special case of the half-normal distribution (Berger and DeYoung 1996). A similar result using life insurance data occurred when a gamma distribution, which is also more flexible than the half-normal, distribution was used (Yuengert 1993). However, this method of allowing for flexibility in the assumed distribution of
inefficiency may make it difficult to separate inefficiency from random error in a composed-error framework, since the truncated normal and gamma distributions may be close to the symmetric normal distribution assumed for the random error.

**2.12 Distribution-free approach (DFA):**

Also specifies a functional form for the frontier, but separates the inefficiencies from random error in a different way. Unlike SFA, DFA makes no strong assumptions regarding the specific distributions of the inefficiencies or random errors. Instead, DFA assumes that the efficiency of each firm is stable over time, whereas random error tends to average out to zero over time. The estimate of inefficiency for each firm in a panel data set is then determined as the difference between its average residual and the average residual of the firm on the frontier, with some truncation performed to account for the failure of the random error to average out to zero fully. With DFA, inefficiencies can follow almost any distribution, even one that is fairly close to symmetric, as long as the inefficiencies are nonnegative. However, if efficiency is shifting over time due to technical change, regulatory reform, the interest rate cycle, or other influences, then DFA describes the average deviation of each firm from the best efficiency at any one point in time.

**2.13 Thick frontier approach (TFA):**

Specifies a functional form and assumes that deviations from predicted performance values within the highest and lowest performance quartiles of observations (stratified by size class) represent random error, while deviations in predicted performance between the highest and lowest quartiles represent inefficiencies. This approach imposes no distributional assumptions on either inefficiency or random error except to assume that inefficiencies differ between the highest and lowest quartiles and that random error exists within these quartiles. TFA itself does not provide exact point estimates of efficiency for individual firms but is intended instead to provide an estimate of the general level of overall efficiency. The TFA reduces the effect of extreme points in the data, as can DFA when the extreme average residuals are truncated.
2.14 Non-Parametric methods:

The non-parametric techniques used in the banking sector efficiency literature includes technique such as Data Envelopment Analysis (DEA). In general, a non-parametric technique does not require the specification of an a priori functional form and therefore is the most favored approach.

2.15 Data envelopment analysis (DEA):

Data envelopment analysis (DEA) is wieldy used for the measurement of the relative performance of the banks and it becomes an accepted approach for identifying the inefficiency decision making units (DMUs) in the industry. DEA technique was introduced by Charnes et al. (1978). It is linear programming technique in which the set of frontier observations are DMUs for which no other DMU produces as much or more of every output (given input) or uses as little or less of every input (given output). In other words, DEA is commonly used to evaluate the efficiency of a number of producers or DMUs. The production process for each producer is to take a set of inputs and produce a set of outputs. Each production has a varying level of inputs and gives a varying level of outputs. The ratio of outputs to inputs is a commonly used measure of efficiency (Berger and Humphrey 1997). DEA was first applied in the banking sector applied in the banking by Sherman and Gold (1985) to evaluate the operating efficiency of bank branches. Berger and Humphrey (1997) reviewed 122 frontier studies of financial institutions and among these studies 69 used non-parametric techniques for the frontier estimation. Further more out of these non-parametric studies, 62 used DEA technique in their analysis. This study will use DEA technique due to it’s, the principal advantage. The DEA methods, as a non-parametric technique, permits analysis of small sizes, especially useful when the sample size is limited, as it is for Yemen’s banks. Other parametric methods require large sample sizes in order to obtain a better or more degrees of freedom for valid results. Compared to commonly used performance measurements, such as ratio and regression analysis, DEA focuses on the outliers; specifically, DEA identifies units that achieve the best results. Therefore, DEA allows for the examination of best performance and their best practices and gives the efficiency score for each firm. This is important for this particular study where banks are aggregated (due to the
small sample size). And hence it is important to know how each different bank performs. Regressions used in econometric efficiency analysis utilize a single optimization. Hence, the DEA solution is unique for each DMU under investigation, which allows a direct comparison to be made against a peer or a combination of peers.

2.16 The previous literatures on efficiency:

In GCC, study on technical efficiency was done by Limam (2001), for the year 1999. He utilizes two methods in his analysis. The first method consisted of constructing a non-parametric linear frontier using linear programming (DEA). The second method consisted of estimating a parametric frontier using a correcting ordinary least square (COLS). Intermediation approach employed to define two outputs (all types of loans provided by banks as well as investments and deposits made by banks) and three inputs (fixed assets, the number of bank employees, and financial capital incorporating deposits, borrowings, and any liabilities not classified under deposits or borrowings) in his study.

Isik and Hassan (2002) investigates input and output efficiency in Turkish banking with a non-parametric approach along with a parametric approach. They estimate the efficiency of Turkish banks over the 1988-2006 periods. Their results suggest that the heterogeneous characteristics of banks have significant impact on efficiency. The results suggest that different banking characteristics do influence differences in terms of bank efficiency. Besides that, cost and profit efficiency were found to decline over time. The main source of inefficiency is found to be resulted from technical inefficiency due to diseconomies of scale. Casu and Molyneux (2003) utilized the non-parametric DEA approach to investigate whether the efficiency grade of the European banking system has influenced over other banks. They used the Tobit regression model approach in order to analyze the influence of various countries' specific and environmental factors relating to bank efficiency to assess the determinants of the efficiency of European banking. They utilize the intermediation approach to specify two outputs (total loans and other
earning assets) and two inputs (total costs and total customers and short-term funding) for their study.

Ataullah et al. (2004) studied technical efficiency and the impact of financial liberalization towards the banking system in India and Pakistan. Using the DEA and utilizing data from all the commercial banks in India and Pakistan from 1988 to 1998, they found that the overall efficiency of the banking industry improved due to financial liberalization. The improvement became significant after 1995 to 1996. Besides that, efficiency in Indian banking improved significantly in both pure technical efficiency and scale efficiency. On the other hand, the increased in the overall efficiency of the commercial banks in Pakistan was due to the increased in scale efficiency.

Havrylchyk (2006) estimated the cost, allocative, technical, pure technical and scale efficiency of the Polish banking industry between 1997-2001 by Data Envelopment Analysis and found a good results. He performs a number of tests to investigate whether domestic and foreign banks come from the same population. According to him, foreign banks were significantly more cost efficient as compared to domestic banks and the period under consideration, efficiency of banks on average deteriorated.

In the transitions economies, the analysis of the determinants of the commercial banks performance in term of technical efficiency had been carried out by Grigorian and Manole (2006) using data from 17 transition countries for 1995 to 1998. They employ the DEA model in estimating efficiency scores of the commercial banks. In the later stage, the Tobit regression analysis is utilized to determine the effect of macroeconomic variables, legal and regulatory environments factors on bank efficiency. The results show that foreign ownership increase bank efficiency in the transition economies. Moffat (2008) estimated the technical efficiency and pure technical efficiency, using the Data Envelopment Analysis technique. Three Approaches employed to choose the input and output. The results showed the overall average efficiency score under the three approaches during the sample period for financial institutions is 0.62. This figure lies below scores found in
other studies. The government needs to support some institutions, especially those owned by the public sector, by creating an environment that is conducive to effective use of scarce resources. Alsrhan (2009) estimated the technical efficiency in banking industry of GLUF between 2000-2007, using the Data Envelopment Analysis technique. Intermediation approach employed to choose the input (Deposits, Capital, General administration expenses) and output (investment, Total operating income). The results showed an improvement in the average efficiency scores for the GCC banking sector. Also found that the banking sector in Qatar, Bahrain and the UAE were more efficient than their counterparts in Kuwait, Saudi Arabia, and Oman.

Nor Hayati et al. (2010) examined the efficiency of the Islamic banking sector in the world covering 25 countries during period of 2003-2009 by using the non-parametric Data Envelopment Analysis (DEA) method. The empirical findings suggest that during the period of study, pure technical efficiency outweighs scale efficiency in the world Islamic banking sector implying that the Islamic banks have been managerially efficient in exploiting their resources to the fullest extent. During the period of the study they found that pure technical inefficiency has greater influence in determining the total technical inefficiency of the world Islamic banking sector. They suggested that banks from the high world Islamic banking countries were the leaders by dominating the most efficiency frontier of the period of study. In Saudi, study on the technical efficiency was done by Assaf, Barros and Matousek (2011). They use Data Envelopment Analysis, by utilizing the intermediation approach and data from nine banks in Saudi from 1999 to 2007. Off-balance sheet activities and total customer loans were taken as the input and total employees, fixed assets and total deposits as output. The results clearly indicate that the average efficiency score of Saudi banks has increased since 1999 to reach an average efficiency level of 90.21% in 2007. In that year several banks operated at a high efficiency level such as Fransi, SAAB, Jazira, and Hollandi. The lowest performing banks include Riyad and Samba. Their average technical efficiency was 86.71% and 88.84% respectively in 2007. On average Saudi banks are nearly 9.79% away from their frontier -maximum efficiency.
The researcher will study the technical efficiency because, the DEA approach was originally developed to measure technical efficiency in the public and not-for-profit sectors (Favero and Papi, 1995), as prices of inputs and outputs in these sectors were not available or reliable. The DEA model has been extended to cover profit making sectors, such as commercial banks, in order to analyze economic efficiency. Under public ownership, profit maximization or cost minimization (thus fulfilling the condition of economic efficiency) may not be the main objective of an enterprise. On the other hand, profit maximization is the ultimate objective of private enterprises, such as banks. As mentioned before, financial institution in Yemen fall into two distinct classes, that is private ownership and state (or public) ownership, and hence, the managers of these two distinct classes may follow different agendas and economic goals. Therefore, it seems reasonable to assess technical efficiency rather than economic efficiency by applying the DAE approach.

2.17 Internationalization of operations;

There exist a number of theories seeking to explain independent variables and their relationship with efficiency. Among them are the theory of industrial organization (e.g., Hymer, 1976; Kindleberger, 1969; Caves, 1971), and the eclectic theory of international production (e.g., Dunning, 1977; Dunning, 1980). The advantage due to the presence of scale and scope of efficiency resulting from international operationalization is the major reasons implicit in these theories. Therefore, a finding of greater efficiency for banks with an international presence augmented with the size of the organization might suggest that multi-nationalization enhances the efficiency due to the exploitation of scope or economies of scale or new techniques and concepts, ‘Exported’ from abroad. The theory of industrial organization Hymer (1976), Kindleberger (1969) and Caves (1971) has also been employed to explain multinationalization of banks (e.g., Brimmer and Dahl (1975), Grubel (1977), Fieleke (1977), Allen and Giddy (1979), Khoury (1980), Goldberg and Saunders (1981), and Giddy (1983). This strand of literature primarily identifies bank’s home country customers which may explain the pattern of growth of foreign offices of banks.
The eclectic theory of international production (Dunning, 1977) was extended by Gray and Gray (1981) to explain multinational banking. Multinationalization of a bank in this theory is contingent upon its ownership advantages, location advantages and internalization advantages (Rugman,1981). Cho (1985) claims to provide some empirical support for this theory by evaluating the branch operations of U.S. banks in Korea and Singapore. Therefore, with these two theories, it can be justified that the inter relationships between the proposed variable (internationalization of operation) with the efficiency of the banks under study. There are two main themes about the relationship between bank and performance. The so-called divisibility theory hold that there will be no such operational advantage accruing to large banks, if the technology is divisible, that is, small-scale banks can produce financial services at costs per unit output comparable to those of large banks. The position suggested a no (or a negative) association between size and efficiency. Alternatively, the shakeout theory posits that smaller banks may not be able obtain enough capital and management ability to successfully operate updates, thus suggesting a positive relation between size and performance.

2.18 Determinants of the Technical Efficiency:

The identification of the factors that explain differences in efficiency is essential for improving the results of banks although, unfortunately, there is no theory supply a theoretical model of the determinants of efficiency Lovell (1993). Moreover, for financial institutions, few analyses on efficiency have been informative in indentifying exogenous determinants of efficiency because of lack of detailed data (Berger and Humphrey 1997). In addition to this, the poor knowledge of basic determinants of banking efficiency in developing countries worsens the situation (Olson and Zoubi 2011). Thus, this study will investigate the determinant variables that have impact on the efficiency.

2.19 Size:

In the banking literature, it is argued that bank size should be strongly associated with efficiency. The advocates hypothesise their arguments focusing on different aspects of banking production. Large banks might have more professional and more
perspective management team and/or might be more cost conscious due to greater pressure from owners concerning bottom line profits (Evanoff & Israilevich, 1991). Berger et al. (1993) direct his attention to point that the positive relation contended between efficiency and size might be obscure in the sense that, which of the factors leads to which is yet to be straightforward. Larger firms might become efficient simply by virtue of their ability to achieve optimal output, i.e. large banks may have higher profits for a given set of price primarily because they were able to gain size over a period of decades, an achievement that small banks cannot realize in the short run. Alternatively, the possibility may be that, more efficient firms compete more effectively and become large. The existing literature demonstrates that, there is arguments that bank size should be strongly associated with efficiency (Reda and Isik 2006).

The existing literature demonstrates differences in the relationship between size and efficiency. Most of the studies used asset size, but no consistent results emerge of its relationship with efficiency (Berger & Mester, 1997, and Avkiran 1999). Bauer et al. (1993) reported that inefficiency increased with size. Ihsan and Read (2006) found larger banks are more efficient, i.e., as banks tend to increase their asset size, they become more efficient. Also, Abdul Majid et al. (2003) found that size had positive relationship with the efficiency of the banks. However, Chen et al (2005) found that large banks and small banks were most efficient. This is contradictory to the US experience where the average cost curve has a flat U-shape indicating the efficiency of medium-sized banks.

But unfortunately, Isik and Hassan (2002) shows that, there exists a negative relationship between bank size and efficiency. Both small and medium banks have significantly higher costs, technical and scale efficiency more than large banks. It appears that small banks are also more profit efficient than large banks. These results support the numerous studies such as Hermalin and Wallace (1994), Kaparakis et al. (1994), DeYoung and Nolle (1998), and Berger and Mester (1997), who reported that efficiency measures demonstrate no potential scale biases favoring larger banks.
Berger and Mester 1997 studied the relationship between size and efficiency. It finding mention the small banks show the greatest level of efficiency. The study recommended that, the empirical results of this study should not be taken too seriously unless it is confirmed by future research. Based upon these observations, the researcher would like to consider size as one of the independent variable in the proposed study. To justify the selection of the variable for the study it can be mentioned that the mixed and inconsistent finding from the previous research and the recommendation settings have motivated the researcher to include size as a major variable in the proposed research.

2.20 Profitability:

A class of financial metrics that are used to assess a business's ability to generate earnings as compared to its expenses and other relevant costs incurred during a specific period of time. For most of these ratios, having a higher value relative to a competitor's ratio or the same ratio from a previous period is indicative that the company is doing well. The profitability ratio is proxies by the return to average equity and return on assets. There should be a positive relationship between return to average equity and return on assets with bank efficiency as more efficient banks should exhibit greater profit earnings (Mester, 1993). This is due to the fact that ROA and ROE is a measure of performance, hence, the banks will eventually experienced an increase in efficiency level as a result of an increase in performance.

According to Yildrim (2002) efficiency measures increase steadily from the lowest profitability to the highest and variation in this efficiency dimension falls constantly from the lowest to the highest profitability. Efficiency measures also increase from the lowest profitability to the highest. Because of this, profitability is an important variable to measure efficiency. There have been numerous studies in the past years between profitability and efficiency. Most of the studies showed positive relationship between the variables (Wahab, 2009; Sufian, 2009 and Pasiouras, 2008). All these researchers found out that profitability significantly influences efficiency. But unfortunately, there have been reported mixed findings by several other researchers over the years such as, Ataullah (2006) and Casu & Girardone (2004) found that
profitability negatively affected efficiency. These mixed and inconsistent findings have given rise to the need to test the variable for another time for further verification.

Profitability has been studied in many countries of the world in the last few years. In the Indian and Malaysian context Sufian (2009) and Ataullah & Lee (2006) studied profitability. In European context Pasiouras (2008), Yildrim (2002) and Casu & Gilardone (2004) conducted studies in determining profitability. While particularly in the Middle East context Magheyereh (2003), Ahmad (2000) and Abdulwahab (2009) studied profitability. But, to the best of this researcher’s knowledge, not too many studies have been conducted in Yemen. Based upon these observations, the researcher would like to consider profitability as one of the independent variable in the proposed study. To justify the selection of the variable for the study it can be mentioned that the importance of the variable in measuring efficiency, mixed and inconsistent findings from the previous research and different country settings have motivated the researcher to include profitability as a major variable in the proposed research.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter focuses on the type of research design and methodology to be use to fulfil the aims and objectives of the research. Section 3.2 discusses the research design and justify the chosen design, section 3.3 to 3.7 describe the target population, sampling and sampling technique and the sample size, data collection methods, pilot study, data analysis and presentation. Zikmund, Babin, Carr and Griffin (2010) describe a research methodology as a part that must explain technical procedures in a manner appropriate for the audience, it achieve this by addressing the research and sample design used for the study, the data collection and field work conducted for the study and the analysis done to the collected data. Dawson (2009) states that research methodology is the philosophy or general principle which guides the research.

3.2 Research Design

This study is set out to carry-impact assessment and it will assess the impact or effect of working capital management, investment decision-making, financial decision-making, accounting information system and financial reporting and analysis on the business efficiency of SMEs in Nigeria. This is in line with Cooper and Schindler (2008) define research design as the plan and structure of investigation so conceived as to obtain answers to research questions. It includes an outline of what the investigation which do from this study which use descriptive survey research. In order to assess the impact, the study adopts causation and effect approach using regression analysis. The study adopts business efficiency of the SMEs in Nigeria as the dependent variable and working capital management, investment decision-making, financial decision-making, accounting information system and financial reporting as independent variable. The method of regression research design that will be used in the ordinary least squares (OLS) regression model. The method has a lot of attractive qualities or properties. As Greene (2012) asserts, it is best, linear, unbiased and efficient (BLUE). This means that the method has minimum variances among all class of linear estimators and it is unbiased in the sense that its estimates of coefficients are true parameters of the population parameters. Secondary, the
method is also efficient. This advantage is obtain at a cost. The cost is that the data is assumed to be normally distributed.

### 3.2.1 Research Philosophy

A research philosophy is a belief about the way data about a phenomena should be collected and analysed. According to Mackenzie and Knipe (2006). Research philosophy is the approach to understand and write the knowledge that is gained by conducting the research. Two major research philosophy have been identified, namely, positivist philosophy often characterised by objective hypotheses testing and phenomenology often characterised by subjective constructed interpretation (Acumen 2009). However, according to Mackenzie and knipe (2006) based on existing literature, three types of research philosophies are used in research papers now. These are positivism, interpretative also known as Anti-positivism and positivist philosophy.

Each of these philosophies represents a model, that is known as paradigm for research and according to Mackenzie and knipe (2006). Positivism is the oldest and most widely used philosophy in research papers. The philosophical direction for any research is therefore important for a number of reasons as it helps to clarify the research design, it helps to recognise which design will work and which will fail and it help the research identify and create new design that maybe outside of his experiences (Easter by-smith, Thorpe and Lowe, 2007).

Positivist philosophy is a scientific method that is based on rationale and empire of the research. In this philosophy, various concepts are used. These concepts are quantification, hypotheses and objective measure (Burke, 2007) and according to Mackenzie and knipe (2006) positivism paradigm is most commonly aligned with quantitative method, of data collection and analysis. Dash (2005) noted that positivism which emphasis Objectivist approach to studying social phenomena given importance to research methods focusing on quantitative analysis, surveys experiments and we like. Despite its major contribution to knowledge in the social sciences, positivistic philosophy has many limitations and constrained. Firstly, positivist approaches generally rely on we need to abstract data that can misconstrue
the nature of social actions. Secondly, there is lack of acknowledgement of the subjective status meanings and finally, positivism assumes that social reality can be discovered in each society independently. Interpretative (Anti positivism) paradigm is used to understand the world of human experiences and in this paradigm: the researcher recognizes the impact on research of their background and experiences (Burke, 2007). The Anti-positivist believe that reality is multi-layered and complex (Cohen, Manion and Morrison, 2000) and a single phenomenon are having multiple interpretations. They emphasised that verification of a phenomenon is adopted when the level of understanding is such that the concern is to probe in to the various unexplored dimensions of a phenomenon rather than establish specific relationship among the components as it happen in the case positivism (Dash, 2015).

3.3 Target Population

Lavrakas (2008) defines a population as any finite or infinite collection of individual elements. Kombo & Tromp (2006) define a population as a group of individuals, objects or items from which samples are taken for measurement. Cooper and Schindler (2008) observe that a population is the total collection of elements about which one makes inferences. Kothari (2006) defines population as the researcher’s universe. The target population in this study involves 452 registered small and medium enterprises in Kaduna North, Kaduna South and Zaria (Directory of business establishments, Kaduna State, 2010).

3.4 Sampling Frame

Borg, Gall and Gall (1999) define a sample as a subgroup carefully selected so as to be representative of the whole population with the relevant characteristics and sampling as the process of selecting a number of individuals in such a way that they represent the large group from which they were selected. While sampling frame is the total number of all the population intended to be studied out of which the sample will be selected as representative of total population (Burns, 1994). The sampling frame for the study consist of all the registered small and medium enterprises in Kaduna State Nigeria that are in the data base of the Ministry of Commerce and Industry.
3.5 Sample and Sampling Technique

Lavrakas (2008) describe a sample in a survey research context as a subject of elements drawn from a larger population. Kombo and Tromp (2009) and Kathari (2004) also describe sample as a collection of units choosen from the universe to represent it. The study will use cluster sampling technique to identify the sample units cluster sampling is of benefit to the researcher if the population is spread across large geographical area (Burns, 1994). The efficiency of cluster sampling depends on the number and size of the clusters used. At one extreme, taking one large group such as school at random, although more conclusions is likely to provide an unsatisfactory sample because of increase sampling error. The error is greatest when the clusters are large and homogenous with respect to the variable under study. The term homogenous refers to groups whose members are very similar in this case small and medium enterprises; with respect to the characteristics one is studying (Burns, 1994). Simple random sampling has the least bias and often the most generalizability (Sekaran, 2003).

3.6 Sample size

A sample size is the number of observations used for calculating , estimates of a given population (smith 2014) Also , Suresh and Chandrashekara (2012) define sample size as the total number subject who are required for the final study analysis. Sample size as an effect on how the sample findings accurately represent the population and sample size influence the quality and accuracy of empirical research (Burn and Bush ,2009; Dattalo 2010) . In general sample size depends on the nature of the analysis to be performed , the desired precision of the estimates one wishes to achieve , the kind and number of comparison that was made , the number of variables that have to be examined simultaneously (Mugo 2002) The sample was selected based on Sloven’s formula. The sample is selected based on companies captured by Kaduna State Business Directorate, 2010. The numbers of companies listed in the Directorate are four hundred and fifty two (452). On the basis of this Sloven’s formula is applies as:

\[ n = \frac{N}{1 + Ne^2} \]
\[ n = \text{sample size} \]

\[ N = \text{total population} \]

\[ e = \text{error margin} \]

\[ n = \frac{N}{(1 + Ne^2)} = \frac{452}{[1 + 452(0.05)^2]} = 212 \]

The sample size was taken from the population using a simple random sampling method; this sampling method was used because using it allows every item in the population to be chosen with equal probability, a sample of 130 respondents was selected and the list of the companies as indicated in the business directorate was used as a source of generating random sample.

Table 3.1 Sampling

<table>
<thead>
<tr>
<th>S/N</th>
<th>LOCATION</th>
<th>RESPONDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kaduna North</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>Kaduna South</td>
<td>60</td>
</tr>
<tr>
<td>3</td>
<td>Zaria</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>130</strong></td>
</tr>
</tbody>
</table>

3.7 Data Collection Instruments

The study used questionnaire to obtain data for analysis which was analysed to come up with results. Schawab (2005) define questionnaire as measuring instruments that ask individuals to answer. Set of questions or respondent to a set of statement. Mugenda and Mugenda (2003) and Kathari (2004) agree that questionnaires have various merits; there is low cost even when the universe is large and widely spread geographically; it is free from the bias of the interviewer; answers are in respondents own words; respondents have adequate time to give well thought out answers; respondents who are not easily approachable can also be reached conveniently; large
sample can be made use of and thus the results can be made more dependable and reliable. The questionnaire to determine the extent of financial management was adopted from Gul (1991) the questionnaire have 79 options distributed under the following construct: working capital management; investment decision-making, financing decision-making; accounting information system; and financial reporting and analysis. The questionnaire to determine the extent of financial management was adopted from Meric (1997), it has 30 items with the appropriate corresponding constructs relating the determinants of profitability and growth items. Questionnaires reflect these response modes and scoring systems; strongly agree (SA) with rating of 4; agree (A) with rating of 3; disagree (DA) with rating of 2; and strongly disagree (SDA) with the rating of 1.

3.8 Pilot Study

To ascertain the validity and reliability of questionnaire, interview and observation schedules a pre-test and pilot survey was conducted. A pilot survey will be performed on small and medium enterprises, namely Kaduna North, Kaduna South and Zaria selected at random. The purpose of pilot testing is to establish the accuracy and appropriateness of the research design and instrumentation and provide proxy data for selection of profitability sample (Saunders, Lewis and Thornhill, 2007).

Reliability was tested by use of twenty four questionnaire which will be piloted with randomly selected SMEs. The role of the thumb suggested that 5% to 10% of the target sample should constitute the pilot test (Cooper and Schilder, 2011, (Veswell, 2003, Gall and Borg, 2007).

Reliability of the Instrument

Cronbach’s alpha is a reliability test of whether all items within the instrument measure the same thing. The reliability of any research questionnaire is best measured by the Cronbach’s alpha statistic. It is designed as a measure of internal consistency of a research instrument. The Cronbach’s alpha statistic is measured on the same scale as the Pearson’s product-moment correlation coefficient and typically varies between 0 and 1. The closer the alpha is to 1.00, the greater the reliability of items in the research instrument. The formula that determines Cronbach’s alpha is
fairly simple and makes use of the number of variables or question items in the scale 
\((N)\), variances \((S^2)\) and the average pairwise covariances between pairs of items 
\(\bar{S}_{ij}\).

\[
\alpha = \frac{N^2\bar{S}_{ij}}{\sum S_{ij} + \sum S^2}
\]

Based on the formula of alpha, a rule of thumb that applies to most situations for the 
interpretation of reliability by alpha which is mostly acceptable is as follows:

<table>
<thead>
<tr>
<th>Ranges of Alpha</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\alpha \geq 0.9)</td>
<td>Excellent</td>
</tr>
<tr>
<td>(0.8 \leq \alpha &lt; 0.9)</td>
<td>Good</td>
</tr>
<tr>
<td>(0.7 \leq \alpha &lt; 0.8)</td>
<td>Acceptable</td>
</tr>
<tr>
<td>(0.6 \leq \alpha &lt; 0.7)</td>
<td>Questionable</td>
</tr>
<tr>
<td>(0.5 \leq \alpha &lt; 0.6)</td>
<td>Poor</td>
</tr>
<tr>
<td>(\alpha &lt; 0.5)</td>
<td>Unacceptable</td>
</tr>
</tbody>
</table>

3.9 Data Processing and Analysis

The data to be used for this analysis is the survey data and it will be processed using 
statistical package for social sciences (SPSS) version 19.0. The regression analysis 
will be used as means of expressing the association between the independent 
variables (working capital management, investment decision-making, financial
decision-making, accounting information system, and financial reporting and analysis) and the dependent variable of business efficiency of SMEs in Nigeria.

3.9.1 Statistical Tools and their Justification

The statistical tools that was used for data analysis and presentation of results were regression analysis based on OLS and tables. As stated earlier, the regression results was carried out to estimate the coefficients of the independent variables, their related standard errors and their t ratios. This is important to establish the significance of the independent variable in explaining the dependent variable of business efficiency of SMEs in Nigeria. are hereby presented. In addition to the above the F ratio or F-statistic and adjusted R square shall be presented to provide information on the significance of the overall impact of the model and its explanatory power.

3.9.2 The OLS Regression Model

This study employs the OLS regression model. As stated above, the OLS model is made up of independent variables of working capital management (WKGCAPL), investment decision making (INVSTMT), financial decision-making (FINDM), accounting information system (AIS), and financial reporting and analysis (FINREPAN) and the dependent variable of business efficiency of SMEs in Nigeria (BUSEFF). Thus the study has used the following model:

\[ BUSEFF = a_0 + a_1WKGCAPL + a_2INVSTMT + a_3FINDM + a_4AIS + a_5FINREPAN + e \]

Where: e is the error term for other variables not included in this model.

The a priori assumptions of this model are: \( a_1, a_2, a_3, a_4, \) and \( a_5 \) are greater than zero.
CHAPTER FOUR
RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction
The purpose of this study is to know the effect of financial management on the business efficiency of Small and Medium Enterprises in Nigeria. This chapter presents findings on the following five areas: Working Capital Management; Investment Decision; Financial Decision; Accounting Information System; and Financial Reporting and Analysis. Responses to these study areas are organized around specific questions asked. Findings for each question are corroborated with the empirical and theoretical literature reviewed in chapter two. At the end of each study question, the findings are briefly discussed and inferences drawn. Summary descriptive statistics, Regression and Correlation Analyses, Analysis of Variance (ANOVA), student t-test and chi-square test are presented for each study variable. At the end of each variable, a model is fitted. An integrated model that takes into account all the variables of the study is fitted and discussed at the end of the chapter.

4.2 Response rate
A sample of 130 questionnaires was sent out to the various respondents and the response rate was 100%.

4.3 Cronbach’s Alpha Test
Cronbach’s alpha coefficients were used to check on the reliability among multiple measures and the internal consistency of the variables of the study. Cronbach’s alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. It is computed in terms of inter-correlation among the items measuring the concept. The Cronbach’s Alpha coefficient is a value that ranges between zero and one, the closer the value is to 1, the higher the internal consistency. If the Cronbach’s alpha is above 0.7 the instrument is reliable.
Table 4.1 Reliability Test Results

<table>
<thead>
<tr>
<th>Section</th>
<th>Cronbach's Alpha</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Capital Management</td>
<td>0.812</td>
<td>Reliable</td>
</tr>
<tr>
<td>Investment Decision</td>
<td>0.809</td>
<td>Reliable</td>
</tr>
<tr>
<td>Financial Decision</td>
<td>0.780</td>
<td>Reliable</td>
</tr>
<tr>
<td>Accounting Information System</td>
<td>0.725</td>
<td>Reliable</td>
</tr>
<tr>
<td>Financial Reporting and Analysis</td>
<td>0.711</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Table 4.1 shows that the Cronbach’s Alpha coefficient of the various section is greater than 0.7 ranging between 0.711 to 0.812, this implies all the independent variable used in the analysis are reliable and therefore the instrument (questionnaire) used in the research is reliable.

4.3.1 Multicollinearity Test

Multicollinearity test was conducted among the six study variables using tolerance and variance inflation factor (VIF) statistics of predictor variables. The findings of the multicollinearity test are presented in Table 4.1. These findings show that the study independent variables; Working Capital Management; Investment Decision; Financial Decision; Accounting Information System; and Financial Reporting and Analysis have a high tolerance. VIF values for study variables range between 1.291 and 2.776; this indicates that the beta values of the regression equation of five independent variables would be stable with low standard errors. The results presented in Table 2.2 show that there was no multicollinearity among the variables in the study data.
Table 4.2 Multicolinearity

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
</tr>
<tr>
<td>Working Capital Management</td>
<td>.608</td>
<td>1.224</td>
</tr>
<tr>
<td>Investment Decision</td>
<td>.691</td>
<td>1.765</td>
</tr>
<tr>
<td>Financial Decision</td>
<td>.772</td>
<td>1.291</td>
</tr>
<tr>
<td>Accounting Information System</td>
<td>.348</td>
<td>2.102</td>
</tr>
<tr>
<td>Financial Reporting and Analysis</td>
<td>.314</td>
<td>2.776</td>
</tr>
</tbody>
</table>

4.3.2 Background of the firms

Table 4.2 shows the distribution of the firms’ background which are; ownership, number of employees, sector of business, educational qualification of owner and the person that handle the finance of the business. The frequency and percentage of each category of the backgrounds are displayed in the table, graphical presentation of the frequencies are also displayed in the charts below.

4.4 Research Findings and Results

This section presents descriptive analyses based on the findings and results obtained from the study. Results from each of the statements or questions used in collecting data have been corroborated with the literature reviewed in chapter two. Inferences have been drawn on the study findings obtained at the end of each question. Frequency and percentages, chi-square test, regression and correlation analyses, t-tests and ANOVA have been used to interpret the results obtained and draw conclusions on the study. Regression models for each of the variables and an integrated one have been fitted.

4.4.1 Working Capital Management

The first objective of this study investigated whether working capital management affect business efficiency of small and medium enterprises in Nigeria. The arrears covered under these includes cash management, receivable management, and inventory management.
4.4.2 Cash Management

Table 4.3 shows responses to questions on whether the firm has cash management policies. The findings indicated that 112 firms have cash management policies which is 86.3% of the respondents while 18 companies answered no which represent 13.7%.

Table 4.3 Cash Management Policy

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>112</td>
<td>86.3</td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>13.7</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.4 Influence of Cash Management Policy on Business Efficiency

Table 4.4 shows responses to the question on the influence of cash management policy on the business efficiency. The findings indicate that 107 firms agreed that cash management policy have positive impact on the business efficiency of their firms which represent 82.1% while on 5 firms indicated that it was negative impact this represent 0.42% while 18 firms did not respond to the question representing 13.7%.

Table 4.4 Influence of Cash Management Policy on Business Efficiency

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>107</td>
<td>82.1</td>
</tr>
<tr>
<td>Negatively</td>
<td>5</td>
<td>04.2</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.5 Average Financial Liquidity Ratio
Table 4.5 shows the average financial liquidity ratio of the firms that responded to the questions. In 2009 the average financial liquidity was 0.62, 2010 the average liquidity ratio was 0.68, 2011, 0.65, 2012, 0.93 and 2013, 1.21 respectively. This has shown that the average financial liquidity of the various firms asked was higher in 2013.

**Table 4.5 Average Financial Liquidity Ratio**

<table>
<thead>
<tr>
<th>Year</th>
<th>Average liquidity ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0.62</td>
</tr>
<tr>
<td>2010</td>
<td>0.68</td>
</tr>
<tr>
<td>2011</td>
<td>0.65</td>
</tr>
<tr>
<td>2012</td>
<td>0.93</td>
</tr>
<tr>
<td>2013</td>
<td>1.21</td>
</tr>
</tbody>
</table>

The findings concur with the assertion of Howorth and Westhead (2003), that small companies focus only on working capital management where they expect to improve marginal returns. It also concur with the findings of Ross et al, (2008) who agreed that cash balance policy ensures the determination of the optimal cash to hold by considering the trade off between the opportunity cost of holding too much cash and trading cost of holding too little. The findings however, is inconsistent with the findings of Grablowsky (1978) and Grablowsky and Rowel (1980) who establish that small firms rarely pay attention to setting up cash balance policy. In another development Boudaoui and Bounie (2012) agrees with the findings of this research. The argued that despite various payment innovations, today, cash is still heavily used to pay for low-value purchases. They confirm that higher cash holdings lead to greater use of cash in payment.

**4.4.4 Deductions/Inferences**

Findings from this research had revealed that majority of respondents 86.3% stating the existence of cash management policies, and 82.1% of respondents stating the
positive effect on the policy on business efficiency of their firms. Kurfi (2003) explains that working capital can be financed through long term funds like equity and bond sales by a firm or short term finance like trade creditors, bank overdraft from commercial banks. Shortage of cash can hamper the operation of the firm and frustrate customers of the enterprises.

In conclusion, cash management policy could play a significant role in the operation of small and medium enterprises. This is specifically true because prudent cash budgeting and investment could enhance the efficiency of the firms.

4.4.5 Inferential Analysis

To test the hypothesis of the study that cash management is not associated with business efficiency in Nigeria. Person’s Chi-Square test ($\chi^2$) is a statistical test applied to sets of categorical data to evaluate how likely it is that any observed difference between set arose by chance. It is suitable for unpaired data from large samples. It is a null hypothesis stating that the frequency distribution of certain event observed in a sample is consistent with a particular theoretical distribution.

The above analysis has shown that the calculated value of chi-square 0.000 is less than 0.05 level of significance, we therefore, reject $H_0$ and conclude that cash management has a significant effect on business efficiency. This is agreement with the analysis carried out by Ekem (2011) to find out how SME sector has developed in Nigeria, the same method was used by Olusola (2010) in a research to determine the performance of accounting skills in SMEs.

These findings corroborate with the study on working capital management practice of small firms in the Ashanti region of Ghana by Kwane (2007) who established that setting up of cash balance policy ensure prudent cash budgeting and investment of surplus cash. It also agrees with the findings by Kotot (2003) who established that cash budgeting is useful in planning for shortage and surplus of cash and has an effect on the financial performance of the firms and Waweru (2003) who established that most business studied had a set of minimum cash balance level which guarded them against running out of cash. This findings however, negate the findings of Nyabwanga whose results suggests that on the average of the SSEs hardly have
policy that determine the appropriate amount of cash to hold. From the proceeding discussion it can be deduced that the business efficiency of SMEs is linked to the quality of policies regarding the management of their liquidity. Instituting policies which guard against running out of cash contribute positively to financial performance as has been established that cash budgeting is useful in planning for shortage and surplus of cash and has an effect on the financial performance of the firm.

**Hypothesis**

The null hypothesis that cash management is not associated with business efficiency in Nigeria is tested using chi-square at 5% level of significance

<table>
<thead>
<tr>
<th>Table 4.6 Chi-Square Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value</strong></td>
</tr>
<tr>
<td>Pearson Chi-Square</td>
</tr>
<tr>
<td>Continuity Correction&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
</tr>
<tr>
<td>N of Valid Cases</td>
</tr>
</tbody>
</table>

<sup>a</sup> 1 cells (25.0%) have expected count less than 5. The minimum expected count is 1.52.
<br>
<br>
<br>

<sup>b</sup> Computed only for a 2x2 table

Table 4.6 presents the result of the chi-square statistic, the p-value of the chi-square (0.000) is less than 0.05 (level of significance), we therefore reject H<sub>0</sub> and conclude that cash management has a significant effect on business efficiency in Nigeria

**4.4.6 Receivable Management**

Table 4.7 shows responses to questions on whether the firm has receive management policies. The findings indicate that 100 firms has receivable management policies which is 77.3% of the responses, while 30 companies answered no which represent 22.7%.
Table 4.7  Does your firm have specific measures for managing receivables?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>100</td>
<td>77.3</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>22.7</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.7 shows that 77% of the firms have specific measures for managing receivables while the remaining 23% did not have it.

Figure 4.3.1  Does the firm have specific measures for managing receivables?

Table 4.8 Influence of Receivable Management Policy on Business Efficiency

Table 4.8 shows responses to the question on the influence of cash management policy on the business efficiency. The findings indicate that 90 firms agreed that receivable management policy have positive impact on the business efficiency of their firms which represent 69.2% while only 5 firms indicated that it has negative impact while 30 firms did not respond to the question representing 22.7%.
Table 4.8 If yes, how has this enhance business efficiency in your firm?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>90</td>
<td>69.2</td>
</tr>
<tr>
<td>Negatively</td>
<td>10</td>
<td>08.1</td>
</tr>
<tr>
<td>Nil</td>
<td>30</td>
<td>22.7</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.8 shows that out of the respondents that say yes to the assertion in Table 4.8, 69% of the total respondents report that it influence the business efficiency of their firm positively while 8% report the influence to be negatively.

![Bar Chart](image)

**Figure 4.3.2: Influence of having Receivable Management Policy on Business Efficiency**

Table 4.9 Question on How Receivable Management Affect Business Efficiency

Table 4.9 shows that 11 firms influence their firms greatly representing 0.8 percentage of the responses while 19 firms indicate that it has affected them mildly representing 14.1% and 100 firms did not respond representing 77.3%.
Table 4.9  If no, how did this affect business efficiency in your firm?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatly</td>
<td>11</td>
<td>08.6</td>
</tr>
<tr>
<td>Mildly</td>
<td>19</td>
<td>14.1</td>
</tr>
<tr>
<td>Nil</td>
<td>100</td>
<td>77.3</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.9 shows that out of the respondents that say no to the assertion in Table 4.9, 9% of the total respondents report that it affected the business efficiency of their firm greatly while 14% report the effect to be mildly.

Figure 4.3.3: Impact of lack of Receivable Management Policy on Business Efficiency

Table 4.10 Total Naira Value of Receivables

Table 4.10 shows that out of the 130 firms that responded to the question the total Naira Value of receivables of the firms was N532,912 in 2009, N1,010,007 in 2010, N1,623,821 in 2011 and N2,039,012 in 2012 and N2,983,029 in 2013 respectively.
Table 4.10 Please indicate the total Naira value of your receivables for the years shown

<table>
<thead>
<tr>
<th>Year</th>
<th>Total amount of receivables</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>532,912</td>
</tr>
<tr>
<td>2010</td>
<td>1,010,007</td>
</tr>
<tr>
<td>2011</td>
<td>1,623,821</td>
</tr>
<tr>
<td>2012</td>
<td>2,039,012</td>
</tr>
<tr>
<td>2013</td>
<td>2,983,029</td>
</tr>
</tbody>
</table>

Figure 4.3.4  Total Naira value of receivables for the years shown

4.4.7 Receivable Management

The result show that 77.3% of the respondent have specific measures of measuring receivables while only 22.7% of the respondents indicate lack of this policies in their firms. The study is in agreement with the findings of Kennedy (2014) that many firms employ the use of receivables in enhancing the performance of firms. In the same vein the results is also in agreement with the findings of Deloof (2003) where he affirm that firms can improve their profitability by reducing the number of day
accounts receivable are outstanding and reducing inventories. Also agreed with the findings of this research the management as account receivable prove that it is paramount to the survival of every business. Credit policy in most firm either purely verbal or non-existent.

But, it was in disagreement with the views of Nwidobie (2011) that debtors management identifies appropriate credit policy i.e credit terms which will attract customers, such that any impact on cash flows and the cash conversion cycle will be offset by increase revenue and hence return on capital. It is however, in agreement with the empirical findings of Njabwanga et al, (2012), which revealed that selling products on credit was averagely practice for SSEs in Kissi South District which suggest that the low use of credit sales can be attributed to lack of sound credit policies since majority (56. SSEs represent 60% of SSEs seem not credit guidelines for their credit customers.

4.4.8 Deductions/Inferences

Results of the study shows that 77.3% of the respondent have putting in place account receivable policy in their firms. This has therefore, clearly indicated that many Small Enterprise owners has recognized the importance of putting in place a sound policy for tracking there debtors. This has clearly agree with the studies carried out by Kennedy (2014) in which he concludes that many firms employ the use of sound credit policies to increase their performance. The results has also shown that 69.2% of the respondents agreed that the policy had impacted positively in increasing their business efficiency. And this is in agreement with assertion of Kelly & McGowen, (2010): Lo Yeung + Cheng, (2009); Zietlow et al, (2007) who averred that the main objectives of Account Receivable Management is to minimize the lapses between completion of sales and receipt of payment. In conclusion therefore, account receivable management is an important factor in business transaction. This specifically true because it gives the debtor and the creditor enough time in transaction.
4.4.9 Receivable Management (Inferential)

Table 4.3.1 below shows that the calculated value of Chi-square 0.001 is less than 0.05 (level of significance), we therefore reject $H_0$ and concludes that receivable management has a significant effect on business efficiency. Among those who previously use the tool include Lazaridis and Damitrios (2005) in their study on the relationship between working capital management and profitability of listed companies in the Athens Stock Exchange and also Juan and Martinez (2002) in their study titled Effects of Working Capital Management on SME Profitability. The method was also used by Ekem 2010 to find the development of SMEs in Nigeria.

The assertion concur with the findings of Grablowsky (1976) and Rablowsky (1980) approximately 95 percent of businesses that sold on credit tendered to sell to anyone who wish to buy only 30% of respondent subscribe to a regular credit reporting services. Most had no credit checking procedure and guidelines and only 52 percent enforce late payment changes. Thirty-four percent of business had no formal procedure for aging accounts receivable.

The findings also concur with the findings of Dencic-Mihalov (2008) – investigation was carried on how public companies listed at the regulated market in the republic of Serbia manage their accounts receivables during recession in order to explore the relationship between account receivable and profitability. The result showed a positive to no significant relationship. Another study carried out by Kennedy (2014) found that inventory turn-over in days has negative relationship with return on equity which means that companies financial performance can be increased by reducing inventory in days. Account receivable is found to be significant positive association with return on equities, indicating that time period payment is increased with return equities, indicating that if time period is increase then overall firms financial performance also improves.

**Hypothesis**

The null hypothesis that receivables management is not associated with business efficiency in Nigeria is tested using chi-square at 5% level of significance.
Table 4.11 Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asynp. Sig</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>12.116</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>10.227</td>
<td>1</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>10.529</td>
<td>1</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td></td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>12.023</td>
<td>1</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N of Valid Cases 130

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.85.

b. Computed only for a 2x2 table

Table 4.11. presents the result of the chi-square statistic, the p-value of the chi-square (0.001) is less than 0.05 (level of significance), we therefore reject H₀ and conclude that receivables management has a significant effect on business efficiency in Nigeria.

4.5 Inventory Management Policies

Table 4.12 shows the responses to the question on the use of cash management policies. The findings indicated that 105 firms have inventory management policies in their firms representing 81.1% while 25 firms indicated that, they don’t have inventory management policies representing 18.9%.
Table 4.12  Are there inventory management policies in your firm?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>105</td>
<td>81.1</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>18.9</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.12 shows that 81% of the firms have inventory management policies while the remaining 19% did not have it.

Figure 4.3.5  Are there inventory management policies in your firm?

Table 4.13 Influence of Inventory Management

Table 4.13 shows the responses to the question on the effect of inventory management on business efficiency of the firms. The findings indicated that 95 firms representing 72.7% of the respondents indicated that the inventory policy had impacted positively in their firms while 10 firms representing 18.9% of the respondents had indicated negative impact. Also, 25 firms representing 18.9% of firms did not respond.
Table 4.13  If yes, how has this affected the business efficiency in your firm?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>95</td>
<td>72.7</td>
</tr>
<tr>
<td>Negatively</td>
<td>10</td>
<td>08.4</td>
</tr>
<tr>
<td>Nil</td>
<td>25</td>
<td>18.9</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.13 shows that out of the respondents that say yes to the assertion in Table 4.3.3 72% of the total respondents report that it influence the business efficiency of their firm positively while 9% report the influence to be negatively.

![Figure 4.3.6: Effect of Inventory Management on Business efficiency](image)

Table 4.14 Effect of Inventory Management on Business Efficiency

Table 4.14 shows the responses to the question on the effect of inventory management on the business efficiency. The findings had indicated that 6 firms had shown that the policy great influence on their business efficiency representing 04.3%
while 25 firms agreed that it had mild influence on their business efficiency which represent 14.6% and 105 firms does not respond to the question.

Table 4.14 If no, how did this affected the business efficiency in your firm?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatly</td>
<td>6</td>
<td>04.3</td>
</tr>
<tr>
<td>Mildly</td>
<td>19</td>
<td>14.6</td>
</tr>
<tr>
<td>Nil</td>
<td>105</td>
<td>81.1</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.15 shows that out of the respondents that say no to the assertion in Table 4.15.10, 4% of the total respondents report that it affected the business efficiency of their firm greatly while 15% report the effect to be mildly.

Figure 4.3.7: Impact of lack of Inventory Management on Business efficiency

Table 4.15 Indicate the Opening and Closing Stock Value of Firms within the last five years
Table 4.15 shows the average opening and closing stock of the various firms contacted for the period of five years. In the year 2009 the average opening stock was N52,120,223 while the closing stock was N6,298,321 in the year 2010 the average opening stock was N7,122,932 and the closing stock was N8,954,231 in the year 2011 the average opening stock was N9,018,762 and the closing stock was N10,987,541 and in the year 2012 the average opening stock was N12,229,272 and the closing stock was N14,986,349 and in the year 2013 the average opening stock was N15,098,276 and the average closing stock was N17,234,765.

Table 4.15 Please indicate the opening and closing stock value of your firm during the last five years shows below

<table>
<thead>
<tr>
<th>Year</th>
<th>Average amount of opening stock (₦)</th>
<th>Average amount of closing stock (₦)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>52120223</td>
<td>6298321</td>
</tr>
<tr>
<td>2010</td>
<td>7122932</td>
<td>8954231</td>
</tr>
<tr>
<td>2011</td>
<td>9018762</td>
<td>10987541</td>
</tr>
<tr>
<td>2012</td>
<td>12229272</td>
<td>14986349</td>
</tr>
<tr>
<td>2013</td>
<td>15098276</td>
<td>17234765</td>
</tr>
</tbody>
</table>
Table 4.16 shows the number of times firms record maximum reorder stock level during the period of the years 2009, 2010, 2011, 2012, and 2013 respectively, in 2009 the average number of reorder stock level was 51, in 2010 it was 32, in 2011 it was 27, in 2012 it was 33, and in 2013 it was 17.

The result is in agreement with the findings of D’Amboise and Gasse (1980) whose studied the utilization of management techniques in small shoe and plastic manufacturing industries in Canada and found 64 percent of shoe and 65.4 of plastic business employed formal inventory control system while Grablesky and Rowell (1980) found that most of the respondents had in excess of 30 percent of their capital invested in inventory, the general standard of inventory management was poor. Only six percent of business in their survey used a quantitative technique such as order quantity for optimizing inventory and 54 percent had systems which were unable to provide information on inventory turnover.

The findings was also in agreement with the result from Ng’anga (2013) reveals that, delays in procurement of goods, frequent stock outs and uncertain change of prices
where some of the effects of long bureaucratic procurement procedure. According to the study inadequate and untimely dispatch of funds has an effect on inventory control. The study also revealed that unavailability of stationaries/store records, lack of specific time or date for both posting store records, lack of adequate qualified and well trained staff hinders effective performance. Another study carried out by Oballa, Waiganjo and Wachiuri (2015) was also in agreement with this findings. The study revealed that inventory investment and inventory records accuracy have a positive influence on organizational performance.

4.5.1 Inferential analysis

To test the hypothesis of the study that inventory management is not associated with business efficiency in Nigeria. The above analysis has shown that the calculate value of Chi-square 0.000 is less than 0.05 level of significance, we therefore, reject \( H_0 \) and conclude that inventory management has a significant effect on business efficiency.

To find the effects of working capital management practice on the financial performance of SMEs in Kissi District Kenya Nyabwanga (2012). The same method was used, it was similarly used by Kwame (2007) to determine the inventory levels of SSEs. Also Dimitrios (2005) use similar method to determine the levels of inventory in SMEs.

Table 4.16 How many times did your firm record maximum reorder stock level during the last five years?

<table>
<thead>
<tr>
<th>Year</th>
<th>Average number of reorder stock level</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>51</td>
</tr>
<tr>
<td>2010</td>
<td>32</td>
</tr>
<tr>
<td>2011</td>
<td>27</td>
</tr>
<tr>
<td>2012</td>
<td>33</td>
</tr>
<tr>
<td>2013</td>
<td>17</td>
</tr>
</tbody>
</table>
The above findings is in line with the views of Deloof (2003) that maintain optimal inventory levels reduces the cost of possible interruption or loss of business due to the scarcity of products, reduces supply costs and protects against price fluctuations. This was further strengthened by the observations of Long, Malitz and Ravid, (1993); Deloof and Jegers, (1996) who observed that firms may have an optimal level of working capital that maximizes their value, and that large inventory and a generous trade credit policy may lead to high sales. The findings also concurred with the observation of Peter and Rajan (1997). That suppliers may have significant cost advantage over financial institutions in providing credit to their customers; it can also be an inexpensive source of credit for customers. Firms owners should therefore, keep their inventory to an optimum level since mismanagement of inventory will lead to trying up excess capital at the expense of profitable operations Lazadis and Dimitrios (2005).

4.5.2 Deduction/Inferences

A close observation on the findings of this study reveals that a majority 81.1 of the respondents do achieve optimum in the management of inventory and 72.7% which
also form the majority of respondent affirmed that achieving optimum results impact on their firms efficiency which could be seen in the trend of the purchase and stock levels.

**Conclusion**

The findings above indicates the need to manage stock inventory act an optimum level so as to avoid unnecessary cost involve in its management such as holding too much stock or holding too little as observed by Alvill (2006) and also asserted by Ross et al, (2008) that approaches of determining inventory levels therefore, reduces the cost of possible interruptions or loss of business due to the scarcity of products, reduces supply cost and protects against price fluctuations.

**Hypothesis**

The null hypothesis that inventory management is not associated with business efficiency in Nigeria is tested using chi-square at 5% level of significance

**Table 4.17 Chi-Square Tests**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Df</th>
<th>Asynp. Sig</th>
<th>Exact Sig .</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>51.486a</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correctionb</td>
<td>47.721</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>44.404</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>51. 090</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

106
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 5.58.

Table 4.17 presents the result of the chi-square statistic, the p-value of the chi-square (0.000) is less than 0.05 (level of significance), we therefore reject $H_0$ and conclude that inventory management has a significant effect on business efficiency in Nigeria.

### 4.4 Regression Analysis between Working Capital Management and Business efficiency in SMEs in Nigeria

**Partial Regression Plot**

**Dependent Variable: business efficiency of SMEs**

![Scatter Diagram of working capital management and business efficiency of SMEs](image)

**Figure 4.4: Scatter Diagram of working capital management and business efficiency of SMEs**
The analysis in Table 4.18 shows that the correlation between working capital management and business efficiency in small and medium enterprises in Nigeria is 0.598, implying a linear relationship between working capital management and business efficiency. The coefficient of determination R-Square is 0.358 indicating that 35.8% of the variation in business efficiency is explained by working capital management.

Table 4.19 ANOVA\textsuperscript{a}

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2.716</td>
<td>1</td>
<td>2.716</td>
<td>71.237</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>4.880</td>
<td>128</td>
<td>.038</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.595</td>
<td>129</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{a} Dependent Variable: business efficiency of SMEs

Table 4.20 Coefficients\textsuperscript{a}

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.390</td>
<td>.032</td>
<td>12.117</td>
<td>.000</td>
</tr>
<tr>
<td>Working Capital</td>
<td>.312</td>
<td>.037</td>
<td>.598</td>
<td>.000</td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
<td>8.440</td>
<td>.000</td>
</tr>
</tbody>
</table>

\textsuperscript{a} Dependent Variable: business efficiency of SMEs
The result presented in Table 4.22 show that the linear relationship between working capital management and business efficiency in small and medium enterprises in Nigeria is $y = 0.390 + 0.312*x_1$. Where $y$ is business efficiency in small and medium enterprises in Nigeria and $x_1$ is working capital management. The p-value of the slope of the model (0.000) is less than 0.05 we therefore reject $H_{01}$ and conclude that working capital management has a significant effect in the business efficiency of small and medium enterprises in Nigeria.

4.5.3 Investment decision

The second objective of this study investigated the effect of investment decision on the business efficiency of small and medium enterprises in Nigeria. Frequencies and percentage distribution of the findings on the independent variable. Investment decision are presented. Some inferential analysis on the Effect of Investment Decision on the Business Efficiency of Small and Medium Enterprises in Nigeria were presented.

4.5.4 Capital Budgeting

Table 4.21 shows responses to the question on whether the firm does prepare budget. The findings indicted that, 127 firms do prepare budget representing 97.3% while only 3 firms does not prepare budget representing 02.7% of the response.

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>127</td>
<td>97.3</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>02.7</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.23 shows that 97% of the firms prepare budget while the remaining 3% did not do it.
Figure 4.4.1 Does firms prepare budget?

Table 4.22 Indicate how preparation of budget could help firms to achieve their goals

Table 4.22 shows response to the question on how preparation of budget could help the firm to achieve its goals. The findings indicated that 120 firms agreed that the preparation of budget had helped the firm in achieving their goals positively, representing 92.1% while 7 firms indicated negative response representing 02.7%.

Table 4.22 If yes, how does this help your firm in achieving your goals?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>120</td>
<td>92.1</td>
</tr>
<tr>
<td>Negatively</td>
<td>7</td>
<td>05.2</td>
</tr>
<tr>
<td>Nil</td>
<td>3</td>
<td>02.7</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4.22 shows that out of the respondents that say yes to the assertion in Table 4.22.1, 92% of the total respondents report that it influence the business efficiency of their firm positively while 5% report the influence to be negatively.

![Bar chart showing influence of budgeting on business efficiency](chart.png)

**Figure 4.4.2** How does budget preparation help firms in achieving goals?

Table 4.25 Average amount budgeted by firms for the years 2009, 2010, 2011, 2012 and 2013

Table 4.23 shows responses to the question on the amount budgeted by firms. In 2009 an average of N5,170,018 was budgeted, in 2010 an average of N4,120,945 was budgeted, in 2011 the sum of N6,403,924 was budgeted and in 2012 an average of the sum of N8,110,920 was budgeted and in the year 2013 an average of N10,293,100 was budgeted.
Table 4.23 How much was budgeted for the following years

<table>
<thead>
<tr>
<th>Year</th>
<th>Average amount budgeted (₦)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>5170018</td>
</tr>
<tr>
<td>2010</td>
<td>4120943</td>
</tr>
<tr>
<td>2011</td>
<td>6403924</td>
</tr>
<tr>
<td>2012</td>
<td>8110920</td>
</tr>
<tr>
<td>2013</td>
<td>10293100</td>
</tr>
</tbody>
</table>

Figure 4.4.3 Average amount budgeted

The findings agree with the study carried out by Saidu (2014) examines the problems and prospects of capital budgeting among firms operating in Nigeria. The study noted that capital budgeting is one of the most important decisions that is made by business enterprises in Nigeria (Keryste as cited by Saidu, 2014) its objectives is to allocate resources to ensure firms optimum return from their resources. The study reviews previous works on capital budgeting or project appraisal techniques. The study finds that firms use combination project appraisal techniques to reduce the defects that are inherent from employing a single method. The study also concurred
with the study of Akinyemi (2012) whom studied the capital budgeting techniques and conclude that the payback method is generally more applied.

Ayedotun (1980) studied 60 companies in Nigeria relating to the capital budgeting methods. 40 percent of the enterprises were quoted on the stock exchange. The study of methods capital budgeting shows that several investment appraisal were combined in the study with the significant percentage preferring the use of Discount cash flows. The findings of Denyer (2008) the study point out that, the use of different methods does not constitute any significant problem. Rather what is important is to systematically review the findings in order to find out whether the apparent differences are substantial semantic reflection of the different starting points or discipline assumptions or even difference in phenomenon being studied.

**Deductions/Inferences**

This finding indicates that 92.1 percent of the respondents affirmed that they prepare budget and has affected the performance of their firm positively. This suggests that, these firms recognized the importance of budgeting for efficient and effective performance of their firms.

**Conclusion**

The adoption of capital budgeting as a policy has proven beyond any reasonable doubt that it help the firm to plan and execute plans for the efficient and effective running of the firm. Inferential Analysis to test the hypothesis of the study that investment decision (cash budgeting is not associated with business efficiency in Nigeria. The above analysis has shown that the calculated value of Chi-square 0.000 is less than 0.005 level of significance, we therefore reject $H_0$ and concluded that investment decision (Cash budgeting) has a significant effect on business efficiency. This is in agreement with the analysis carried out by Myer and Majlut (1984) whom carried out a research on the significance of capital structure on the performance of business enterprises. A similar method was also used by Morgan and Tang (1992) on the Effects of Investment Appraisal on capital budgeting on the general performance of business enterprises. In the same vain Muritala, 2012, also used the same method.
to determine the effect of debt and equity financing in the efficient functioning of business firms. He further stressed that, it minimizes the problem of waste of resources through unprofitable projects and minimizes agency cost.

**Hypothesis**

The null hypothesis that Capital Budgeting is not associated with business efficiency in Nigeria is tested using chi-square at 5% level of significance

**Table 4.24 Chi-Square Tests**

<table>
<thead>
<tr>
<th>Sig.</th>
<th>Value</th>
<th>Df</th>
<th>Asynp. Sig</th>
<th>Exact Sig .</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>36.850</td>
<td>1</td>
<td></td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>24.745</td>
<td>1</td>
<td></td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>16.326</td>
<td>1</td>
<td></td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>36.567</td>
<td>1</td>
<td></td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is .23.

Table 4.24 presents the result of the chi-square statistic, the p-value of the chi-square (0.000) is less than 0.05 (level of significance), we therefore reject $H_0$ and conclude that Capital Budgeting has a significant effect on business efficiency in Nigeria.
4.5.5: Managing Networking Capital Policy

Table 4.25 shows responses to the question on whether the firm has policy on managing networking capital policy. The findings indicated that 113 firms have adopted the policy representing 87.3% of the responses while 17 firms representing 12.7% of the responses did not adopt the policy.

Table 4.25  Does your enterprise have any policy for managing networking capital?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>113</td>
<td>87.3</td>
</tr>
<tr>
<td>No</td>
<td>17</td>
<td>12.7</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.26 shows that 87% of the firms have any policy for managing networking while the remaining 13% did not have it.

![Bar chart showing the frequency of firms with and without networking capital policy](image)

Figure 4.4.4  Does enterprise have any policy for managing networking capital?

4.5.6: Effect of networking capital policy on business efficiency
Table 4.27 show responses to the question on how the policy of networking capital affect the business efficiency of the firm. The findings have indicated that 105 firms representing 81.1 percent of the responses had positively benefitted from the policy while 8 firms representing 06.2% of the responses had negative influence on the policy while 17 firms did not respond to the question representing 12.7% of the total responses.

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>105</td>
<td>81.1</td>
</tr>
<tr>
<td>Negatively</td>
<td>8</td>
<td>06.2</td>
</tr>
<tr>
<td>Nil</td>
<td>17</td>
<td>12.7</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.27 If yes, how does this help in the efficiency your firm?

Table 4.4.6 shows that out of the respondents that say yes to the assertion in Table 4.3.1.5, 81% of the total respondents report that it influence the business efficiency of their firm positively while 6% report the influence to be negatively
4.5.7: Extent of Effect on Efficiency

Table 4.28 shows responses to the question for those that have not adopted the policy. The findings indicated that, no firm was affected greatly representing 00.0% while 3 firms were affected mildly representing 02.7% and 127 did not respond representing 97.3%.

Table 4.28  If no, how does this affected the efficiency of your enterprise?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatly</td>
<td>0</td>
<td>00.0</td>
</tr>
<tr>
<td>Mildly</td>
<td>3</td>
<td>02.7</td>
</tr>
<tr>
<td>Nil</td>
<td>127</td>
<td>97.3</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.28 shows that out of the respondents that say no to the assertion in Table 4.28, none of the total respondents report that it affected the business efficiency of their firm greatly while 3% report the effect to be mildly.
**Figure 4.4.6  Effect of lack of networking capital on the efficiency firms**

**Hypothesis**

The null hypothesis that management of networking capital is not associated with business efficiency in Nigeria is tested using chi-square at 5% level of significance.

**Table 4.29 Chi-Square Tests**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asynp. Sig</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>38.254</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>35.109</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>33.872</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>37.960</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.09.

Table 4.29 presents the result of the chi-square statistic, the p-value of the chi-square (0.000) is less than 0.05 (level of significance), we therefore reject H₀ and conclude that management of networking capital has a significant effect on business efficiency in Nigeria.

**4.5.8: Policy on Investment Analysis**

Shows responses on the question on whether the firm has policy on investment analysis. The findings indicated that, 105 firms have policies on investment analysis.
which represent 81.1% of the total response while 25 firms does not have such policies representing 18.9% of the total responses.

Table 4.30  Does your firm have any policy on investment analysis?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>105</td>
<td>81.1</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>18.9</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.30 shows that 81% of the firms have policy on investment analysis while the remaining 19% did not have it.

Figure 4.4.7  Does firms have any policy on investment analysis?

4.5.9: Effect of the Policy on Business Efficiency

Table 4.31 shows responses on the question on whether the firm has policy on investment analysis affected the efficiency of the firm. The findings has shown that 95 firms indicated that the policy had affected their firms positively representing
72.7% of the total response, while 10 firms indicated that it had affected them negatively representing 08.4% of the total responses.

**Table 4.31**  If yes, how has this affected the business efficiency in your firm?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>95</td>
<td>72.7</td>
</tr>
<tr>
<td>Negatively</td>
<td>10</td>
<td>08.4</td>
</tr>
<tr>
<td>Nil</td>
<td>25</td>
<td>18.9</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.31 shows that out of the respondents that say yes to the assertion in Table 4.3.2.9, 73% of the total respondents report that it influence the business efficiency of their firm positively while 8% report the influence to be negatively.

![Figure 4.4.8: Effect of the Policy on Business Efficiency](image)

**4.5.9: Effect on those that did not ascribe to the Policy**

Table 4.5.1 shows the effect on those to that did not ascribe to the policy. The findings had indicated that 6 firms that have not subscribe to the policy had affected
them greatly representing 04.3% while 19 firms mildly representing 14.6% and 10.5 refused to respond to the question representing 81.1%.

**Table 4.32** If no, how did this affected the business efficiency in your firm?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatly</td>
<td>6</td>
<td>04.3</td>
</tr>
<tr>
<td>Mildly</td>
<td>19</td>
<td>14.6</td>
</tr>
<tr>
<td>Nil</td>
<td>105</td>
<td>81.1</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.32 shows that out of the respondents that say no to the assertion in Table 4.5.1, 4% of the total respondents report that it affected the business efficiency of their firm greatly while 15% report the effect to be mildly.

**Figure 4.4.9: Effect of lack of the Policy on Business Efficiency**

The findings concurred with the assertion of Fazzari et al, (2000) whom investigated the effect of financing constraint on the investment to cash flow could affect investment because of imperfections of the capital market. It also agrees with the
findings Amisi (2013) that examine the relationship between financial literacy and performance of SMEs. The study attested that firms that have poor financial literacy performed poorly in terms of performance.

It also agree with the findings of Kemuma (2014) the findings reveal that the amount of new investment significantly determines the firms financial performance. It follows then that more innovative compares with respect to the introduction of new products, services, branches and technologies are likely to experience higher profitability as compared to the less innovative. The study is also in agreement with the findings of Wang (2002) analysed a sample of Japanese and Taiwanes firms, emphasized that the way the working capital is managed has a significant impact on the profitability of firms and increase in profitability by reducing number of days account receivables and reducing inventories. A shorter cash conversion cycle and net trade cycle is related to better performance of the firms.

**Deductions/Inferences**

Findings from the research had revealed that majority of the respondents that is 87.3% have policy on investment analysis, while only 0.43% of the respondents have indicate that, the policy had impacted on their business greatly.

**Conclusion**

In conclusion therefore, the investment policy does not play a significant role in the operation of most of the enterprise interviewed. This is specifically true because most of the respondents refused to comment on the role of investment analysis on the business performance of their enterprises.
4.6 Regression Analysis between Investment decision and Business efficiency in SMEs in Nigeria

![Graph showing scatter plot of investment decision and business efficiency of SMEs]

**Figure 4.5: Scatter Diagram of investment decision and business efficiency of SMEs**

**Table 4.33 Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.662*</td>
<td>.438</td>
<td>.434</td>
<td>.18255</td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), Investment Decision  
 b. Dependent Variable: business efficiency of SMEs*

The analysis in Table 4.33 shows that the correlation between investment decision and business efficiency in small and medium enterprises in Nigeria is 0.662,
implying a linear relationship between investment decision and business efficiency. The coefficient of determination R-Square is 0.438 indicating that 43.8% of the variation in business efficiency is explained by investment decision.

Table 4.34 ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3.330</td>
<td>1</td>
<td>3.330</td>
<td>99.926</td>
<td>.000</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>4.265</td>
<td>128</td>
<td>.033</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.595</td>
<td>129</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: business efficiency of SMEs
b. Predictors: (Constant), Investment Decision

Table 4.34 shows that the p-value of the ANOVA of this regression model (0.000) is less than 0.05 we therefore conclude that the model is significant and therefore fit for use

Table 4.35 Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.346</td>
<td>.032</td>
<td>10.925</td>
<td>.000</td>
</tr>
<tr>
<td>1</td>
<td>Investment Decision</td>
<td>.383</td>
<td>.038</td>
<td>.662</td>
</tr>
</tbody>
</table>

a. Dependent Variable: business efficiency of SMEs

\[ y = 0.346 + 0.383 \times x_2 \]

The result presented in Table 4.35 show that the linear relationship between investment decision and business efficiency in small and medium enterprises in Nigeria is \( y = 0.346 + 0.383 \times x_2 \). Where \( y \) is business efficiency in small and medium enterprises in Nigeria and \( x_2 \) is investment decision. The p-value of the slope of the model (0.000) is less than 0.05 we therefore reject \( H_0 \) and conclude that investment decision has a significant effect in the business efficiency of small and medium enterprises in Nigeria.
4.7 Financial Decision

The third objective of this study investigated whether financial decision affect business efficiency of small and medium enterprises in Nigeria. The areas covered under these includes; knowledge of various sources of funds, calculating the cost of capital and selecting the optimal capital structure.

Table 4.36 Knowledge of Various Sources of Funds

Table 4.36 shows responses to the questions on whether the enterprises have any policy for calculating cost of capital. The findings indicated that 113 firms have policies of calculating cost of capital representing 87.3 percent of the responses while 17 enterprises answered no, representing 12.7 percent of the responses.

4.7.1 Knowledge of Various Sources of Fund

Table 4.36 Does your enterprise have any policy for calculating cost of capital?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>113</td>
<td>87.3</td>
</tr>
<tr>
<td>No</td>
<td>17</td>
<td>12.7</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.36 shows that 87% of the firms have any policy for managing networking while the remaining 13% did not have it.
Figure 4.5.1  Does enterprise have any policy for calculating cost of capital?

Table 4.37: Influence of Calculating Cost of Capital on Business Efficiency

Table 4.37 shows responses to the question on influence of calculating cost of capital on business efficiency of firms. The findings indicate that 105 firms agreed that cost of capital have great influence on business efficiency. This represent 81.1% while, only 8 firms representing 06.2% indicate negative responses. And only 17 firms representing 12.7% did not respond.

Table 4.37  If yes, how does this help in the efficiency your firm?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>105</td>
<td>81.1</td>
</tr>
<tr>
<td>Negatively</td>
<td>8</td>
<td>06.2</td>
</tr>
<tr>
<td>Nil</td>
<td>17</td>
<td>12.7</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.37 shows that out of the respondents that say yes to the assertion in Table 4.37, 81% of the total respondents report that it influence the business efficiency of their firm positively while 6% report the influence to be negatively.
Table 4.38 shows responses to the question on the firms that does not calculate cost of capital. None of the firms indicated that this has affected them in any way. While 3% of the firms indicated that it has affected them mildly.

Table 4.38  

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatly</td>
<td>0</td>
<td>00.0</td>
</tr>
<tr>
<td>Mildly</td>
<td>3</td>
<td>02.7</td>
</tr>
<tr>
<td>Nil</td>
<td>127</td>
<td>97.3</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.38 shows that out of the respondents that say no to the assertion in Table 4.38, none of the total respondents report that it affected the business efficiency of their firm greatly while 3% report the effect to be mildly.
Table 4.38 Average Cost of Capital

Table 4.39 shows the average cost of capital of the firms that responded. In 2009 the average cost of capital was 5372218, in 2010 it was 7282983 while in 2011 it was 9524100 in 2012 it was 10120973 and in 2013 it was 12309348. This shows the average cost of capital was higher in 2013.

Table 4.39 please indicate the cost of capital of your firm for the following years

<table>
<thead>
<tr>
<th>Year</th>
<th>Average cost of capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>5372218</td>
</tr>
<tr>
<td>2010</td>
<td>7282983</td>
</tr>
<tr>
<td>2011</td>
<td>9524100</td>
</tr>
<tr>
<td>2012</td>
<td>10120973</td>
</tr>
<tr>
<td>2013</td>
<td>12309348</td>
</tr>
</tbody>
</table>
The findings agreed with the assertion of Khadka (2006) who assert that the cost of capital signifies what a firm has to pay. For the capital used to finance new investments. In auxiliary a careful approximation of a firm’s specific capital. Structure and cost of capital is essential in a specific investment decision which lead to a discrepancy between accretion and erosion of shareholder value.

The findings is however, in consistent with the findings of Tashfeen and Liton (2010) they find strong negative correlation is emerging between the cost of capital and the firms respective market returns. Pherm et al, (2012) in their study investigated cost of capital and performance of the companies. The result shows that there is no significant relationship between the ratio of the book value to the market value and weighted average cost of capital.

**Deductions/Inferences**

Findings from this research had revealed that majority of the respondents 87.3% had policy of calculating cost of capital. And that, 81.1% of the respondent had indicated that the policy had a significant impact on the efficiency of their firms.
Conclusion

In conclusion therefore, the policy on calculating the cost of capital played a significant role in the efficiency of small and medium enterprises. It has also indicated that, cost of capital also determine the level of profitability of the enterprise. It is also one of the strong variable in decision making of the enterprise.

Hypothesis

The null hypothesis that knowledge of various sources of fund is not associated with business efficiency in Nigeria is tested using chi-square at 5% level of significance

Table 4.40 Chi-Square Tests

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>16.686*</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>13.167</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>11.595</td>
<td>1</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td>.001</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>16.558</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 1.52.
b. Computed only for a 2x2 table

Table 4.40 presents the result of the chi-square statistic, the p-value of the chi-square (0.000) is less than 0.05 (level of significance), we therefore reject H₀ and conclude that knowledge of various sources of fund has a significant effect on business efficiency in Nigeria

4.7.2 Calculating Debt to Equity Ratio

Table 4.41 shows responses to the question on whether the firm have policy on calculating debt to equity ratio. The findings indicated that 90 firms has indicated their firms employ the policy of calculating Debt to Equity ratio representing 69.6% while 40 firms says no representing 30.4%.
Table 4.41  Does your firm ever consider debt to equity ratio?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>90</td>
<td>69.6</td>
</tr>
<tr>
<td>No</td>
<td>40</td>
<td>30.4</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.41 shows that 70% of the firms have consider debt to equity ratio while the remaining 30% did not do it.

Figure 4.5.5  Does the firms ever consider debt to equity ratio?

Table 4.42 If yes, how does this enhance the efficiency of your firm?

Table 4.42 shows the responses to the question on how calculating debt to equity ratio enhance the efficiency of their firms, 87 firms indicated that calculating debt to equity ratio have positive impact on the efficiency of their firms representing 67.5% while 3 firms indicated that the policy had a negative impact representing 02.1% and 40 firms does not respond representing 30.4%.
Table 4.42  If yes, how does this enhance the efficiency of your firm?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>87</td>
<td>67.5</td>
</tr>
<tr>
<td>Negatively</td>
<td>3</td>
<td>02.1</td>
</tr>
<tr>
<td>Nil</td>
<td>40</td>
<td>30.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>130</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.42 shows that out of the respondents that say yes to the assertion in Table 4.5.2, 68% of the total respondents report that it influence the business efficiency of their firm positively while 2% report the influence to be negatively.

![Bar Chart](image)

**Figure 4.5.6**  how does consideration of debt to equity ratio enhance the efficiency of firms

Table 4.43 shows responses to the question for firms that doesn’t use the policy on their enterprises. 11 firms have indicated that, it affect them greatly representing 08.3% while, 42 firms indicated that, it affect them mildly representing 32.1% and 90 firms did not respond representing 69.6%.
Table 4.43 If no, how does this affected the efficiency of your firm?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatly</td>
<td>11</td>
<td>08.3</td>
</tr>
<tr>
<td>Mildly</td>
<td>42</td>
<td>32.1</td>
</tr>
<tr>
<td>Nil</td>
<td>90</td>
<td>69.6</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.43 shows that out of the respondents that say no to the assertion in Table 4.43, 8% of the total respondents report that it affected the business efficiency of their firm greatly while 32% report the effect to be mildly.

Figure 4.5.7 how does no considering of debt to equity ratio enhance the efficiency of firms

Table 4.44 shows the result for the average debt to equity ratio. In the year 2009 the average debt to equity ratio was 1.9, 2010 – 1.3, 2011 – 1.7, 2012 – 0.8, 2013 – 0.6
<table>
<thead>
<tr>
<th>Year</th>
<th>Debt to Equity ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1.9</td>
</tr>
<tr>
<td>2010</td>
<td>1.3</td>
</tr>
<tr>
<td>2011</td>
<td>1.7</td>
</tr>
<tr>
<td>2012</td>
<td>0.8</td>
</tr>
<tr>
<td>2013</td>
<td>0.6</td>
</tr>
</tbody>
</table>

**Table 4.44**  kindly indicate the debt to equity ratio for the following

**Figure 4.5.8  Debt to equity ratio**

The findings agree with the findings of Fatoki (2011) investigated the impact of human, social and financial capital on the performance of small and medium enterprises (SMEs) the results indicate that there is a significant positive relationship between human, social and financial capital and the performance of SMEs Mohammed and Qamar (2011) studied the relationship between firm performance and cost of Equity capital firm performance was taken as independent variable, while return on asset was taken as proxy to measure the firm performance. The findings
concurred with the findings of this research showing a significant relationship between cost of capital and firm performance.

Chinemere & Anthony (2012) examined the impact of capital structure on financial performance of Nigerian firms. The results shows that a firms capital structure surrogated by the debt ratio has a significant negative impact on financial measures.

Deductions/Inference

Findings from this research had revealed that majority of the respondents 69.6% stating the existence of the policy on debt to equity ratio. While 30.3% of the responses do not have that as a policy. While, 67.5% of the respondents agreed that the policy has positive impact on the efficiency of the firm. This has also agreed with the findings of Said (2012) who investigated the impact of calculating the debt equity ration on the financial performance of SMEs. He found out that, most firms that uses such as a policy are mostly successful than those firms that are using the traditional methods.

Conclusion

The findings have indicated that, it is very important for firms to use debt equity ratio in determining the type of investment they are to undergo to avoid wastages and losses and also to enhance its profitability.

Hypothesis

The null hypothesis that calculating the cost of capitalis not associated with business efficiency in Nigeria is tested using chi-square at 5% level of significance
Table 4.45 Chi-Square Tests

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Df</th>
<th>Asynp. Sig</th>
<th>Exact Sig.</th>
<th>Exact Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>26.918</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>23.565</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>21.712</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td></td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>26.711</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.23.

Table 4.45 presents the result of the chi-square statistic, the p-value of the chi-square (0.000) is less than 0.05 (level of significance), we therefore reject $H_0$ and conclude that calculating the cost of capital has a significant effect on business efficiency in Nigeria.

Table 4.45 shows responses to the question on whether the firm has any policy on business expansion. The findings have indicated that 112 firms had shown that they have such policies representing 86.1% of the total response. While 18 firms indicated that they don’t have such policies representing 13.9%.
4.7.3 Selecting the optimal capital structure

Table 4.46 Does your enterprise have any specific policies for business expansion?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>112</td>
<td>86.1</td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>13.9</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.46 shows that 86% of the firms have specific policies for business expansion while the remaining 14% did not have it.

Table 4.5.9 Does the enterprise have any specific policies for business expansion?

Table 4.47 Impact of the Policy on Business Efficiency

Table 4.47 shows responses to the question on the impact of the policy to business efficiency. The findings has indicated that 101 firms indicated that, the policy has affected their firms positively representing 77.7%, while 11 firms indicate that it
affected them negatively, representing 08.4% and 18 firms did not respond, representing 13.9.

Table 4.47 If yes, how does these policies impacted on the efficiency of your business?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>101</td>
<td>77.7</td>
</tr>
<tr>
<td>Negatively</td>
<td>11</td>
<td>08.4</td>
</tr>
<tr>
<td>Nil</td>
<td>18</td>
<td>13.9</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.47 shows that out of the respondents that say yes to the assertion in Table 4.47, 78% of the total respondents report that it influence the business efficiency of their firm positively while 8% report the influence to be negatively.

Figure 4.6  Impacted of policies on the efficiency of business

Table 4.47 shows responses to the question on the impact of lack of use selecting optimal capital structure of the firm. The findings indicated that, 4 firms representing 03.3% indicated that lack of this policy affected them greatly. While 14 firms,
representing 10.6% has indicated that, it affect them mildly. And 112 firms representing 86.1% did not respond.

Table 4.48  If no, how has this affected the efficiency of your business?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatly</td>
<td>4</td>
<td>03.3</td>
</tr>
<tr>
<td>Mildly</td>
<td>14</td>
<td>10.6</td>
</tr>
<tr>
<td>Nil</td>
<td>112</td>
<td>86.1</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.48 shows that out of the respondents that say no to the assertion in Table 4.48 3% of the total respondents report that it affected the business efficiency of their firm greatly while 11% report the effect to be mildly.

Figure 4.6.1  Impacted of no policies on the efficiency of business

The study corroborate with the study “Effects of working capital management practices on the financial performance of SMEs in Kissi District Kenya by Nyabwanga, Patric Martin Simayo (2012) were the found that majority of SMEs that
are having policies of business expansion are more profitable than other firms. It is also in agreement with the findings of Kwame 2007 which established that majority of SMEs have policies of business expansion. Also stressed by Lazaridis and Dimitrios (2005) that enhancing the effective performance of the SMEs is determined by the policies of business expansion.

**Deduction/Inference**

The findings indicate that 86.1% of the respondents have business expansion as a policy in their firms, as a result of which majority of the firms interviewed have such policies. This has indicated that greater percentage of the respondent agree that it has impacted on their business efficiency positively.

**Conclusion**

The setting up of expansion policy is paramount to enterprises that are aspiring to grow. It serve as a guide to enterprises to avoid tying down up excess capital in idle stock at the expense of business ventures.

**Hypothesis**

The null hypothesis that selecting the optimal capital structure is not associated with business efficiency in Nigeria is tested using chi-square at 5% level of significance.
Table 4.49 Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asynp. Sig</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>46.107(^a)</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction(^b)</td>
<td>41.835</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>36.278</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>45.752</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.23.

Table 4.49 presents the result of the chi-square statistic, the p-value of the chi-square (0.000) is less than 0.05 (level of significance), we therefore reject \( H_0 \) and conclude that selecting the optimal capital structure has a significant effect on business efficiency in Nigeria.
4.7.4 Regression Analysis between Financial Decision and Business efficiency in SMEs in Nigeria

Partial Regression Plot

Dependent Variable: business efficiency of SMEs

![Scatter Diagram of financial decision and business efficiency of SMEs](image)

**Figure 4.6.2: Scatter Diagram of financial decision and business efficiency of SMEs**

**Table 4.50 Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.373*</td>
<td>.139</td>
<td>.132</td>
<td>.22606</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Financial Decision
b. Dependent Variable: business efficiency of SMEs

The analysis in Table 4.50 shows that the correlation between financial decision and business efficiency in small and medium enterprises in Nigeria is 0.373, implying a linear relationship between financial decision and business efficiency. The coefficient
of determination R-Square is 0.139 indicating that 13.9% of the variation in business efficiency is explained by financial decision.

**Table 4.51 ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.054</td>
<td>1</td>
<td>1.054</td>
<td>20.629</td>
<td>.000b</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>128</td>
<td>.051</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.595</td>
<td>129</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: business efficiency of SMEs
b. Predictors: (Constant), Financial Decision

Table 4.51.16 shows that the p-value of the ANOVA of this regression model (0.000) is less than 0.05 we therefore conclude that the model is significant and therefore fit for use.

**Table 4.52 Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.484</td>
<td>.036</td>
<td>13.546</td>
<td>.000</td>
</tr>
<tr>
<td>1</td>
<td>Financial Decision</td>
<td>.279</td>
<td>.061</td>
<td>.373</td>
</tr>
</tbody>
</table>

a. Dependent Variable: business efficiency of SMEs

\[ y = 0.484 + 0.279 \times x_3 \]

The result presented in Table 4.52.17 show that the linear relationship between financial decision and business efficiency in small and medium enterprises in Nigeria is \( y = 0.484 + 0.279 \times x_3 \). Where \( y \) is business efficiency in small and medium enterprises in Nigeria and \( x_3 \) is financial decision. The p-value of the slope of the model (0.000) is less than 0.05 we therefore reject \( H_{03} \) and conclude that financial
decision has a significant effect in the business efficiency of small and medium enterprises in Nigeria.

4.7.5 Accounting information system

The fourth objective of this study investigated the effect of accounting information system on the business efficiency of small and medium enterprises in Nigeria. The areas covered under this includes; system of collecting information, storage of information processing of information. Table 4.53: Does your enterprise use computer in keeping and processing financial information?

The Table shows responses to the question on whether the firms uses computer in keeping and processing of financial information. The findings indicated that 89 firms representing 68.1% use computer in keeping and processing of information. While 40 firms doesn’t use computer in keeping and processing of information representing 31.9%.

Table 4.53 Does your enterprise use computer in keeping and processing financial transactions?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>89</td>
<td>68.1</td>
</tr>
<tr>
<td>No</td>
<td>41</td>
<td>31.9</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.53. shows that 68% of the firms use computer in keeping and processing financial transactions while the remaining 32% did not use it.
Figure 4.6.3  Does enterprise use computer in keeping and processing financial transactions?

Table 4.53 If yes, how does it impacted on the business efficiency of the firm?

The Table shows responses to the question to the impact of use of computer in keeping and processing of information 85 firms indicated that, it has impacted them positively representing 65.7% here only 4 firms representing 02.4% indicated negative impact.

Table 4.54  If yes, how does these impacted on the business efficiency of your enterprise?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>85</td>
<td>65.7</td>
</tr>
<tr>
<td>Negatively</td>
<td>4</td>
<td>02.4</td>
</tr>
<tr>
<td>Nil</td>
<td>41</td>
<td>31.9</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4.54 shows that out of the respondents that say yes to the assertion in Table 4.54, 66% of the total respondents report that it influence the business efficiency of their firm positively while 3% report the influence to be negatively.

Figure 4.6.4  Impact of using computer in keeping and processing financial transactions on business efficiency of enterprise

Table 4.54  If no, how does this affected the efficiency of your enterprise?

The Table shows responses to the question on the Effect to the firms that are not using computer in keeping and process of information. The findings indicated that, 23 firms representing 18.3% has indicate that it has affected them greatly while, 18 firms representing 13.6% agreed that it affected them mildly. 89 firms did not respond representing 68.1%.
Table 4.55  If no, how does this affected the efficiency of your enterprise?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatly</td>
<td>23</td>
<td>18.3</td>
</tr>
<tr>
<td>Mildly</td>
<td>18</td>
<td>13.6</td>
</tr>
<tr>
<td>Nil</td>
<td>89</td>
<td>68.1</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.55 shows that out of the respondents that say no to the assertion in Table 4.55, 18% of the total respondents report that it affected the business efficiency of their firm greatly while 14% report the effect to be mildly

Figure 4.6.5  Impact of not using computer in keeping and processing financial transactions on business efficiency of enterprise

The findings of this study corroborate with the findings of Ismail (2007), Ismail and King (2005), and Saira et al (2010) discovered that the use of AIS will be more efficient in the system implementation is new information system with the SMEs performance. It also agrees with the findings of Grande et al (2011) asserting the use of AIS proves to have positive impact on the performance. This study also concurred
with the findings of Hunton (2002) study, which investigated the relationship between automated accounting information system and organizational effectiveness; showed that there is a strong relationship between accounting information system and organizational effectiveness.

**Deductions/Inferences**

Findings from this research had revealed that majority of the respondents 68.1% has indicated the use of computer in keeping and processing of information and that respondents has indicated that, the use of computer in keeping and processing of information had played a significant role in the efficiency of their firms.

**Conclusion**

In conclusion, system of collection of information remain a veritable tool for the owners of business in enhancing efficiency in their operation. Mogadam (2010) revealed that AIS is interdisciplinary in nature and seems to be integrated into accounting information system SAira et al (2010) found that SMEs are still having in effective information management, poor system control most decision making on adhoc basis inspite having use AIS.

**Hypothesis**

The null hypothesis that system of collecting information is not associated with business efficiency in Nigeria is tested using chi-square at 5% level of significance

**Table 4.56 Chi-Square Tests**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asynp. Sig</th>
<th>Exact Sig .</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>31.106</td>
<td>1</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>28.266</td>
<td>1</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>29.350</td>
<td>1</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>
Table 4.56 presents the result of the chi-square statistic, the p-value of the chi-square (0.000) is less than 0.05 (level of significance), we therefore reject $H_0$ and conclude that system of collecting information has a significant effect on business efficiency in Nigeria.

### 4.7.6 Storage of Information

Table 4.57 Does your enterprise have system of storing financial information?

The Table shows responses to the question on whether the firms has system of storing information. The findings indicated that 85 firms representing 65.5% of the total responses agreed that they have, while, 45 firms representing 34.5% indicated that they do not have.

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>85</td>
<td>65.5</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>34.5</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.6.8 shows that 66% of the firms have cash system of storing financial information while the remaining 34% did not have it.
Figure 4.6.5 Does enterprise have system of storing financial information?

Table 4.58 If yes, how does this enhance the efficiency of your enterprise?

The Table shows responses to the question on storing on information enhances the Efficiency of their firms. The findings indicated that 81 firms representing 62.1% agreed that it enhances their efficiency positively. While, 4 firms representing 03.4% indicated that it impacted negatively on their firms.

Table 4.58 If yes, how does this enhances the efficiency of your enterprise?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>81</td>
<td>62.1</td>
</tr>
<tr>
<td>Negatively</td>
<td>4</td>
<td>03.4</td>
</tr>
<tr>
<td>Nil</td>
<td>45</td>
<td>34.5</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.58 shows that out of the respondents that say yes to the assertion in Table 4.58, 62% of the total respondents report that it influence the business efficiency of their firm positively while 3% report the influence to be negatively
Figure 4.6.6  Impact of storing financial information on business efficiency

Table 4.59  If no, how does this affected the business efficiency of your enterprise?

The Table shows responses to the question on the impact of not using the policy on storing information. The findings indicated that 21 firms representing 16.3% agreed that lack of storing information affected the firm greatly. While 24 firms representing 18.2% agreed that it has affected them mildly and 85 firms representing 65.5% did not respond.

Table 4.59  If no, how does this affected the business efficiency of your enterprise?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatly</td>
<td>21</td>
<td>16.3</td>
</tr>
<tr>
<td>Mildly</td>
<td>24</td>
<td>18.2</td>
</tr>
<tr>
<td>Nil</td>
<td>85</td>
<td>65.5</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4.59 shows that out of the respondents that say no to the assertion in Table 4.7, 16% of the total respondents report that it affected the business efficiency of their firm greatly while 18% report the effect to be mildly

![Bar Chart]

**Figure 4.6.7 Impact of not storing financial information on business efficiency**

The study concurred with the study carried out by Apulu and Latham (2011) found that the competitiveness of SMEs will be increased through adopting information and Communication Technology, Mathrirajan, and Krisshnaswamy (2010) summed up that those SMEs which have Technological Innovation have a higher growth compared to the SMEs which are not creative in the sales turnover, investment and job. It also agreed with the study carried out by Hussain et al (2002) found that there us a relationship among owner commitment, information technology and information system. The study also agreed with the findings of the study conducted by Boulianne (2007) stated that match between type of strategy and AIS is associated with higher performance in Canadian SMEs. The results on the study show that, Managers who employ this strategy are more successful.

**Deduction/Inferences**

The findings indicated that, greater percentage of the respondents 65.5% agreed that their enterprises have system of storing financial information. It has also shown that
many of the respondents, that is 62.1% agreed that the policy has positively impacted in their operation.

**Conclusion**

The performance of SMEs is mostly aligned with the types of policies adopted by the enterprise. This could greatly lead to the creation of employment and wealth creation of employment and wealth creation by business start ups, survival and sustainability (Sandberg, Vinberg, & Pan, 2002).

**Hypothesis**

The null hypothesis that storage of information is not associated with business efficiency in Nigeria is tested using chi-square at 5% level of significance

**Table 4.60 Chi-Square Tests**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asynp. Sig</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>33.353a</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correctionb</td>
<td>30.706</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>38.841</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td>.000</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>33.096</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.65.

Table 4.60 presents the result of the chi-square statistic, the p-value of the chi-square (0.000) is less than 0.05 (level of significance), we therefore reject $H_0$ and conclude that storage of information has a significant effect on business efficiency in Nigeria.
4.7.7 Processing of Information

Table 4.61 shows responses to the question of whether the enterprises have system of processing financial information. The findings indicated 77 firms agreed that they do have system of processing financial information representing 59.6% while 53 firms indicated that they don’t have such representing 40.4% of the total responses.

**Table 4.61 Does your enterprise have system of processing of financial information?**

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>77</td>
<td>59.6</td>
</tr>
<tr>
<td>No</td>
<td>53</td>
<td>40.4</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.61 shows that 60% of the firms have system of processing of financial information while the remaining 40% did not have it.

![Figure 4.6.8 Does enterprise have system of processing of financial information?](image-url)
Table 4.62 If yes, how does it impacted on the business efficiency of your enterprise?

The Table shows responses to the question on how system of processing information affect the efficiency of the enterprises representing 52.2% agreed that the policy impacted on their enterprises positively, while 6 firms representing 04.4% indicated that it affected their firms negatively.

Table 4.62 If yes, how does it impacted on the business efficiency of your enterprise?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>71</td>
<td>55.2</td>
</tr>
<tr>
<td>Negatively</td>
<td>6</td>
<td>04.4</td>
</tr>
<tr>
<td>Nil</td>
<td>53</td>
<td>40.4</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.63 shows that out of the respondents that say yes to the assertion in Table 4.7.2, 55% of the total respondents report that it influence the business efficiency of their firm positively while 4% report the influence to be negatively
Figure 4.6.9 Effect of system of processing of financial information on business performance

Table 4.63.11 If no, how has it affected the business efficiency of your enterprise?

The Table shows responses to the question on the impact those firms that did not adopt the policy for processing of information. The findings indicated that 28.3% of the respondents agreed that it affected them greatly while 12.1% of the respondents agreed that it affected them mildly.

**Table 4.63 If no, how has it affected the business efficiency of your enterprise?**

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatly</td>
<td>37</td>
<td>28.3</td>
</tr>
<tr>
<td>Mildly</td>
<td>16</td>
<td>12.1</td>
</tr>
<tr>
<td>Nil</td>
<td>77</td>
<td>59.6</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.63 shows that out of the respondents that say no to the assertion in Table 4.63 28% of the total respondents report that it affected the business efficiency of their firm greatly while 12% report the effect to be mildly
Figure 4.6.9 Effect of not having system of processing of financial information on business performance

The findings corroborate with the studies carried out by Galbraith (1973) the result has shown a significant relationship between processing of information and performance of SMEs. In another survey carried out by De.Thomas and Fredenberger 91985) found that the standards financial record keeping and processing very high. The study also concurred with the findings of the study of Cheney (1983) reports on a survey of 30 small and medium sized businesses in a variety of industries. The result revealed that most important applications of computer software are in high areas as payroll, account receivables, account payable and general ledger.

Deductions/Inferences

The findings of the study reveals a majority of the respondents have system of processing of financial information 59.6% the findings concurred with the findings of Gitman (2009) who stated that most of the successful SMEs have put in place internal machinery in processing information.
Conclusion

The findings indicates the importance of having a policy that will guide the managers of small and medium enterprise in managing and processing financial information. This concurred with the findings of Copeland (1989) who made reference to the significance of processing financial information in small and medium enterprises.

Hypothesis

The null hypothesis that processing of information is not associated with business efficiency in Nigeria is tested using chi-square at 5% level of significance.

Table 4.64 Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asynp. Sig</th>
<th>Exact Sig .</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>11.200(^a)</td>
<td>1</td>
<td>.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction(^b)</td>
<td>9.664</td>
<td>1</td>
<td>.002</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>11.148</td>
<td>1</td>
<td>.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td>.001</td>
<td>.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>11.114</td>
<td>1</td>
<td>.001</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a). 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.97.

Table 4.64 presents the result of the chi-square statistic, the p-value of the chi-square (0.002) is less than 0.05 (level of significance), we therefore reject H\(_0\) and conclude that processing of information has a significant effect on business efficiency in Nigeria.
4.8 Regression Analysis between Accounting information system and Business efficiency in SMEs in Nigeria

**Partial Regression Plot**

**Dependent Variable: business efficiency of SMEs**

![Graph showing the relationship between Accounting Information System and business efficiency of SMEs](image)

Figure 4.7: Scatter Diagram of accounting information system and business efficiency of SMEs

**Table 4.65 Model Summary**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.763*</td>
<td>.582</td>
<td>.579</td>
<td>.15752</td>
</tr>
</tbody>
</table>

- a. Predictors: (Constant), Accounting Information System
- b. Dependent Variable: business efficiency of SMEs

The analysis in Table 4.65 shows that the correlation between accounting information system and business efficiency in small and medium enterprises in
Nigeria is 0.793, implying a linear relationship between working capital management and business efficiency. The coefficient of determination R-Square is 0.582 indicating that 58.2% of the variation in business efficiency is explained by accounting information system.

**Table 4.66 ANOVA**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>4.419</td>
<td>1</td>
<td>4.419</td>
<td>178.109</td>
<td>.000&quot;</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>128</td>
<td>.025</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.595</td>
<td>129</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: business efficiency of SMEs  
b. Predictors: (Constant), Accounting Information System

Table 4.66 shows that the p-value of the ANOVA of this regression model (0.000) is less than 0.05 we therefore conclude that the model is significant and therefore fit for use.

**Table 4.67 Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.183</td>
<td>.035</td>
<td>5.169</td>
<td>.000</td>
</tr>
<tr>
<td>1 Accounting Information System</td>
<td>.709</td>
<td>.053</td>
<td>.763</td>
<td>13.346</td>
</tr>
</tbody>
</table>

a. Dependent Variable: business efficiency of SMEs

y = 0.183 + 0.709*x₄

The result presented in Table 4.67.15 show that the linear relationship between accounting information system and business efficiency in small and medium enterprises in Nigeria is \( y = 0.183 + 0.709x_4 \). Where \( y \) is business efficiency in small and medium enterprises in Nigeria and \( x_4 \) is accounting information system. The p-value of the slope of the model (0.000) is less than 0.05 we therefore reject \( H_{04} \) and conclude that accounting information system has a significant effect in the business efficiency of small and medium enterprises in Nigeria.
4.8.1 Financial Reporting and Analysis

The fifth objective of this study investigated the effect of financial reporting on the business efficiency of small and medium enterprises in Nigeria. The areas covered under this includes, income statement, balance sheet, and cash flow report. Frequency and percentage distribution of the findings on the independent variable, financial reporting and analysis are presented. Some inferential analysis were presented.

4.8.2 Income Statement

The table shows responses to the question on whether the enterprise calculate its revenue and expenses? The findings indicated that 102 firms representing 78.1% of the respondents indicated that they do calculate revenue and expenses in their businesses, while 28 representing 21.9% of the respondents indicated that they don’t calculate revenue and expenses.

Table 4.68 Does your enterprise calculate it revenue and expenses?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>102</td>
<td>78.1</td>
</tr>
<tr>
<td>No</td>
<td>28</td>
<td>21.9</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.68 shows that 78% of the firms calculate their revenue and expenses while the remaining 22% did not calculate it.
**Table 4.69: If yes, how does it impacted business efficiency of your enterprise?**

The table shows responses to the question on the impact of calculating revenue and expenses on the business efficiency of SMEs. The findings indicated that 98 firms representing 75.7% of the responses agreed that, the policy impacted on their enterprises positively and only 4 firms representing 03.4% indicated that the policy impacted on their enterprises negatively.

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>98</td>
<td>75.7</td>
</tr>
<tr>
<td>Negatively</td>
<td>4</td>
<td>03.4</td>
</tr>
<tr>
<td>Nil</td>
<td>28</td>
<td>21.9</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4.69 shows that out of the respondents that say yes to the assertion in Table 4.69, 76% of the total respondents report that it influence the business efficiency of their firm positively while 3% report the influence to be negatively

![Figure 4.7.2](image)

**Figure 4.7.2  Impact of calculating revenue and expenses on business efficiency**

Table 4.70: Kindly indicate your firms record of revenue and expenditure for the following years;

The table shows responses to the question on the enterprises record of revenues and average expenditure is 1.47, in the year 2010, the average revenue was 1.55 and the average expenditure was 1.34, in the year 2011, the average revenue was 1.79 and the average expenditure was 1.21, while in the year 2012 the average expenditure 1.80 and the average expenditure was 1.65 and lastly, the average revenue for the year 2013 was 2.44 and the average expenditure was 1.94.
Table 4.70  Kindly indicate your firm’s record of revenue and expenditure for the following years

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Revenue (in million₦)</th>
<th>Average Expenditure (in million₦)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1.23</td>
<td>1.47</td>
</tr>
<tr>
<td>2010</td>
<td>1.55</td>
<td>1.34</td>
</tr>
<tr>
<td>2011</td>
<td>1.79</td>
<td>1.21</td>
</tr>
<tr>
<td>2012</td>
<td>1.80</td>
<td>1.65</td>
</tr>
<tr>
<td>2013</td>
<td>2.44</td>
<td>1.94</td>
</tr>
</tbody>
</table>

**Figure 4.7.3  firm’s record of revenue and expenditure**

**Hypothesis**

The null hypothesis that income statement is not associated with business efficiency in Nigeria is tested using chi-square at 5% level of significance
Table 4.71 Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asynp. Sig</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>26.918a</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correctionb</td>
<td>23.565</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>21.712</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>26.711</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.23.

Table 4.71 presents the result of the chi-square statistic, the p-value of the chi-square (0.000) is less than 0.05 (level of significance), we therefore reject $H_0$ and conclude that income statement has a significant effect on business efficiency in Nigeria.

4.8.3 Balance Sheet

Table 4.3.5.5: Does your enterprise consider the calculation of the profit and losses in you incur in your business? The Table shows responses to the question on whether the enterprise calculate profit and losses they incur. Findings of this study had shown that 97 firms representing 74.3% of the responded have indicated that, they do have policies of calculating profit and loss in their enterprise, while 33 firms representing 25.7% of the respondents indicated that they don’t.
Table 4.72  Does your enterprise consider the calculation of the profit and losses you incur in your business?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>97</td>
<td>74.3</td>
</tr>
<tr>
<td>No</td>
<td>33</td>
<td>25.7</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.72 shows that 74% of the firms consider the calculation of the profit and losses they incur in their business while the remaining 26% did not have it.

Figure 4.7.5  Does enterprise consider the calculation of the profit and losses you incur in your business?

Table 4.8.3: If yes, how does this impacted on the business efficiency of your firm.

The Table show responses to the question on the impact on the policy of calculating profit and loss. The findings indicated that 91 firms representing 69.9% agreed that
the policy impacted on the positively. While 6 firms indicated that, it affect them negatively and 33 firms representing 25.7% did not respond to the question.

**Table 4.73** If yes, how does this impacted on the efficiency of your business?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positively</td>
<td>91</td>
<td>69.9</td>
</tr>
<tr>
<td>Negatively</td>
<td>6</td>
<td>04.4</td>
</tr>
<tr>
<td>Nil</td>
<td>33</td>
<td>25.7</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.73 shows that out of the respondents that say yes to the assertion in Table 4.73, 70% of the total respondents report that it influence the business efficiency of their firm positively while 4% report the influence to be negatively.

**Figure 4.7.6** Impact of calculation of the profit and losses

Table 4.8.4: Kindly indicate the profit and losses you incurred in the following years.

The Table show responses to the question on the average profit and losses incurred by enterprises within the range of the period between 2009 to 2013. The findings
indicated that, in 2009 the average profit was 0.98 million and the average losses was 0.31 million, in 2010 the average profit was 0.99 million while the average losses was 0.32 million. In the year 2011 the average profit was 1.27 million and the average losses was 0.40 million in the year 2012 the average profit was 1.67 million while the average losses was 0.64 million in the year 2013 the average profit was 1.81 and the average losses was 0.81.

Table 4.74  kindly indicate the profit and losses you incurred in the following years

<table>
<thead>
<tr>
<th>Year</th>
<th>Average Profit (in million N)</th>
<th>Average Losses (in million N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0.98</td>
<td>0.31</td>
</tr>
<tr>
<td>2010</td>
<td>0.99</td>
<td>0.32</td>
</tr>
<tr>
<td>2011</td>
<td>1.27</td>
<td>0.40</td>
</tr>
<tr>
<td>2012</td>
<td>1.67</td>
<td>0.64</td>
</tr>
<tr>
<td>2013</td>
<td>1.81</td>
<td>0.81</td>
</tr>
</tbody>
</table>

Figure 4.7.7  the profit and losses you incurred

Hypothesis
The null hypothesis that balance sheet is not associated with business efficiency in Nigeria is tested using chi-square at 5% level of significance.

**Table 4.75 Chi-Square Tests**

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Df</th>
<th>Asynp. Sig</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>38.254</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correctionb</td>
<td>35.109</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>33.872</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>37.960</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.09.

Table 4.74 presents the result of the chi-square statistic, the p-value of the chi-square (0.000) is less than 0.05 (level of significance), we therefore reject $H_0$ and conclude that balance sheet has a significant effect on business efficiency in Nigeria.

**4.8.4 Cash Flow Report**

**Table 4.76 Does your enterprise keep record of cash flow?**

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>118</td>
<td>91.1</td>
</tr>
<tr>
<td>No</td>
<td>12</td>
<td>08.9</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 4.76 shows that 91% of the firms keep record of cash flow while the remaining 9% did not have it.

![Bar graph](image)

**Figure 4.7.9** Does enterprise keep record of cash flow?

<table>
<thead>
<tr>
<th>Table 4.77</th>
<th>If yes, how has these impacted on the efficiency of your business?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>Frequency</td>
</tr>
<tr>
<td>Positively</td>
<td>90</td>
</tr>
<tr>
<td>Negatively</td>
<td>28</td>
</tr>
<tr>
<td>Nil</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
</tr>
</tbody>
</table>

Table 4.77 shows that out of the respondents that say yes to the assertion in Table 4.76, 70% of the total respondents report that it influence the business efficiency of their firm positively while 22% report the influence to be negatively.
Table 4.76: If no, how does this affected the efficiency of your business?

The table shows responses to the question for the respondents that does not have any policy on cash flow. The findings indicated that 8 firms representing 05.7% agreed that it impacted them greatly, while 4 firms representing 03.2% indicated that it impacted them partially. And 118 firms representing 91.1% did not respond.

The findings concurred with the findings of D’Amboise and Gasse (1980) in the study of use of financial statement by small manufacturers. The findings revealed that manufacturing firms, managerial decisions were largely based on the financial reports prepared. It also agree with findings of Lindercamp and Rice who studied familiarity with financial analysis of owner managers greater percentage of the respondents indicated that they always compare their records and are always successful. While others that does not compare their previous records are not always very successful. It is also in agreement with the findings of McMahon and Davies (1994) examine significant association between financial reporting and analysis achieved growth rates and financial performance.
Deduction/Inferences

The findings of the study reveals that the majority of the respondents represent 74.3% keep records of profit and loss accounts. This concurred with the findings of Palmer (1994) found that the more knowledge the owner manager were about the financial position of his business the more successful the business appeared to be.

Conclusion

The findings indicate the importance of financial reporting to the success and efficiency of enterprises. Proper record keeping helps the enterprise to have historical evidence on where they are coming from and where they are going.

Table 4.78  If no, how does this affected the efficiency of your business?

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatly</td>
<td>8</td>
<td>05.7</td>
</tr>
<tr>
<td>Mildly</td>
<td>4</td>
<td>03.2</td>
</tr>
<tr>
<td>Nil</td>
<td>118</td>
<td>91.1</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.78 shows that out of the respondents that say no to the assertion in Table 4..77, 6% of the total respondents report that it affected the business efficiency of their firm greatly while 3% report the effect to be mildly
Figure 4.8.1 Impact of not keeping record of cash flow on business efficiency

Hypothesis

The null hypothesis that cash flow report is not associated with business efficiency in Nigeria is tested using chi-square at 5% level of significance

Table 4.79 Chi-Square Tests

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
<th>Df</th>
<th>Asynp. Sig</th>
<th>Exact Sig .</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>.541</td>
<td>1</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Continuity Correction</td>
<td>.148</td>
<td>1</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>.510</td>
<td>1</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.537</td>
<td>1</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>130</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.95.

Table 4.79 presents the result of the chi-square statistic; the p-value of the chi-square (0.701) is greater than 0.05 (level of significance), we therefore do not reject $H_0$ and conclude that cash flow report capital has no significant effect on business efficiency in Nigeria.

4.8.5 Regression Analysis between Financial Reporting and Analysis and Business efficiency in SMEs in Nigeria

![Partial Regression Plot](image)

**Figure 4.8.2:** Scatter Diagram of financial reporting and analysis and business efficiency of SMEs
The analysis in Table 4.80 shows that the correlation between financial reporting and analysis and business efficiency in small and medium enterprises in Nigeria is 0.552, implying a linear relationship between working capital management and business efficiency. The coefficient of determination R-Square is 0.305 indicating that 30.5% of the variation in business efficiency is explained by financial reporting and analysis.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R</th>
<th>Std Error Of Square</th>
<th>The Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.552a</td>
<td>.305</td>
<td>.300</td>
<td>.20307</td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Financial Reporting and Analysis
b. Dependent Variable: business efficiency of SMEs

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2.317</td>
<td>1</td>
<td>2.317</td>
<td>56.184</td>
<td>.000b</td>
</tr>
<tr>
<td>1. Residual</td>
<td>5.279</td>
<td>128</td>
<td>.041</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.595</td>
<td>129</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: business efficiency of SMEs
b. Predictors: (Constant), Financial Reporting and Analysis
Table 4.81 shows that the p-value of the ANOVA of this regression model (0.000) is less than 0.05 we therefore conclude that the model is significant and therefore fit for use

Table 4.82. Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>standardized co efficient</th>
<th>T</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.378</td>
<td>.037</td>
<td>10.290</td>
<td>.000</td>
</tr>
<tr>
<td>Financial reporting</td>
<td>.444</td>
<td>.059</td>
<td>.552</td>
<td>7.496</td>
</tr>
<tr>
<td>And analysis</td>
<td>.444</td>
<td>.059</td>
<td>.552</td>
<td>7.496</td>
</tr>
</tbody>
</table>

a. Dependent Variable: business efficiency of SMEs

\[ y = 0.378 + 0.444^* x_5 \]

The result presented in Table 4.3.5.15 shows that the linear relationship between financial reporting and analysis and business efficiency in small and medium enterprises in Nigeria is \( y = 0.378 + 0.444^* x_5 \). Where y is business efficiency in small and medium enterprises in Nigeria and \( x_5 \) is financial reporting and analysis. The p-value of the slope of the model (0.000) is less than 0.05 we therefore reject \( H_{05} \) and conclude that financial reporting and analysis has a significant effect in the business efficiency of small and medium enterprises in Nigeria.
4.8.2 Multiple Regression Analysis between the independent variables and Business efficiency in SMEs in Nigeria

Figure 4.8.2: Scatter Diagram of the independent variables and business efficiency of SMEs
TABLE 4.83 Model Summary\(^b\)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R</th>
<th>Std Error Of Square</th>
<th>The Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.902(^a)</td>
<td>.814</td>
<td>.807</td>
<td>.10673</td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Predictors: (Constant), Financial Reporting and Analysis, Financial Decision, Working Capital Management, Investment Decision, Accounting Information System

\(^b\) Dependent Variable: business efficiency of SMEs

The analysis in Table 4.83 shows that the coefficient of determination R-Square is 0.814 indicating that 81.4\% of the variation in business efficiency is explained by the independent variables.

TABLE 4.84 ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>6.183</td>
<td>5</td>
<td>1.237</td>
<td>108.544</td>
<td>.000(^b)</td>
</tr>
<tr>
<td>1. Residual</td>
<td>1.413</td>
<td>124</td>
<td>.011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.595</td>
<td>129</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) Dependent Variable: business efficiency of SMEs

\(^b\) Predictors: (Constant), Financial Reporting and Analysis, Financial Decision, Working Capital Management, Investment Decision, Accounting Information System
Table 4.84 shows that the p-value of the ANOVA of this regression model (0.000) is less than 0.05 we therefore conclude that the model is significant and therefore fit for use. Regression of coefficients results in Table 4.85 shows that there is a positive and significant relationship between business efficiency of SMEs (dependent variable) and Working capital Management, Financial Decision, Accounting information System, Financial Reporting and analysis (explanatory variables). From the finding, the overall model obtained is expressed as:

\[ Y = 13.650 + 1.472X_1 + 0.938X_2 + 0.537X_3 + 0.089X_4 \]

These were supported by beta coefficients of 1.472, 0.938, 0.537 and 0.089 respectively. These results show that a change in either of the variables will definitely lead to a positive change in business efficiency of SMEs.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>13.650</td>
<td>1.420</td>
<td></td>
<td>9.612</td>
</tr>
<tr>
<td>Working capital Management</td>
<td>1.472</td>
<td>.241</td>
<td>.476</td>
<td>6.101</td>
</tr>
<tr>
<td>Financial Decision</td>
<td>.938</td>
<td>.209</td>
<td>.409</td>
<td>4.491</td>
</tr>
<tr>
<td>Accounting information System</td>
<td>.537</td>
<td>.575</td>
<td>.116</td>
<td>2.934</td>
</tr>
<tr>
<td>Financial Reporting and analysis</td>
<td>.089</td>
<td>.166</td>
<td>.066</td>
<td>1.536</td>
</tr>
</tbody>
</table>

a. Dependent Variable: business efficiency of SMEs

In addition to that, the hypotheses:

- **H₀₁**: Working capital Management does not have an effect business efficiency of SMEs (H₀: β₁ = 0 vs H₁: β₁ ≠ 0)
- **H₀₂**: Financial Decision does not have an effect on business efficiency of SMEs (H₀: β₂ = 0 vs H₁: β₂ ≠ 0)
H$_{03}$: Accounting information System does not have an effect on business efficiency of SMEs ($H_0: \beta_3 = 0$ vs $H_1: \beta_3 \neq 0$)

$H_{04}$: Financial Reporting and analysis does not have an effect on business efficiency of SMEs ($H_0: \beta_4 = 0$ vs $H_1: \beta_4 \neq 0$)

were tested and the results also indicates all the hypotheses were rejected. The table below show the summery of the hypotheses rejected.

Table 4.86: Overall Regression Coefficients

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>t- value</th>
<th>Sig value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_0: \beta_1 = 0$</td>
<td>.476</td>
<td>.000</td>
<td>Reject $H_0$</td>
</tr>
<tr>
<td>$H_1: \beta_1 \neq 0$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$H_0: \beta_2 = 0$</td>
<td>.409</td>
<td>.000</td>
<td>Reject $H_0$</td>
</tr>
<tr>
<td>$H_1: \beta_2 \neq 0$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$H_0: \beta_3 = 0$</td>
<td>.116</td>
<td>.025</td>
<td>Reject $H_0$</td>
</tr>
<tr>
<td>$H_1: \beta_3 \neq 0$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$H_0: \beta_4 = 0$</td>
<td>.066</td>
<td>.033</td>
<td>Reject $H_0$</td>
</tr>
<tr>
<td>$H_1: \beta_4 \neq 0$</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result is in agreement with the findings of Abdullahi, (2006) who found out that most of the smes that uses modern financial management polices happen performs better than smes that uses the traditional methods. It is also in agreement with the findings of Butt,(2010) that found out that most firms that failed had lack of Financial management as one of their major causes of their failure.
Fig. 4.9 Revised Conceptual Framework
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the findings of the study it describes the influence of Working Capital Management, Investment Decisions, Finance Decisions, Accounting Information System and Financial Reporting and analysis on the business efficiency of small and medium enterprises in Nigeria. The study examined theoretical and empirical how variables are considered in analyzing the effect of financial management skills on the business efficiency of SMEs in Nigeria. This chapter captures the summary of findings from while conclusions were drawn and recommendations made.

5.2 Summary of Findings

This section summarizes the findings of the study on the basis of the specific research objectives of the study, the purpose of this study was to investigate the effect of financial management practices on the business efficiency of smes in Nigeria. The response rate by each respondent was 100% that all the 130 manufacturing and service SMEs issued with the collection tools responded positively. The response ratio is quite reasonable compared with other studies in the same area. Out of these 130 firms studied, majority of the firms are partnerships with 38.1% followed by limited liability company with 31.8% and then followed by sole proprietorship with 30.1%. The respondents is equally categorized into number of employees, 1-9 employees 25.3%, 10-49 employees – 4.2%, 50-250 employees – 18.7%, 250 employees and above – 14.8%. The respondents were equally subdivided into manufacturing and service sectors. 46.4% were from the manufacturing sector, while, 53.6% from the service sector. With regard to the educational qualification of the respondents. 7.2% of the owners had GCE/Grade II certificates, 8.1% had NCE certificates, 17.7% has National Diploma Certificates, 33.5% has Higher National Diploma, 30.3% has B.Sc Certificates and 3.2% has other certificates.
On the issue of handling the finances of the enterprises. 16.3% financial manager, 16.6% by the accountant, 17.2% by the cash officer, 27.7% by the manager, and 28.2% by the owner of the business.

5.3 Recommendations

With regard to the findings and conclusions as earlier discussed in this study, the researcher gives the following recommendations based on respective objectives and hypothesis. The government of Nigeria through its agencies in charge of promoting the development of small and medium enterprises like small and medium enterprises development agencies SMEDAN should come out and put efforts to support the youth since they are the majority in owning and managing SMEs in Nigeria. In the same regard SMEDAN should organize trainings to SMEs owners on how to manage their businesses successfully so as to became full going concerns and survive for long period. Government agencies that are charged with the responsibilities of promoting the activities, the SMEs should provide a platform for training the SMEs owners on how to adopt and implement working capital management practices particular cash management since cash is the life brood of every business so as to ensure long term survival of the SMEs as the current status of working capital management among SMEs is low in some areas in Nigeria. The SMEs owners need to be sensitized on the importance of budgeting such that cash budgets are prepared, implemented and actually followed so as to minimize cash shortages. The Nigerian Information and Communication Agency (NCC) should be charge with the responsibility of creating more awareness to SMEs owners to the relevance and advantages of using ICT and computers as well as computer assisted software to enable SMEs handle cash, receivables accurately and be able to make timely and accurate decisions. The SMEs owners should be advised to strengthen and put up policies regarding debtors on how to collect receivables be able to know when to write off bad debts so as to minimize losses that occur as a results of non-payment. Similarly, efforts should be put by SME owners to ensure that inventory management is improved through setting re-order levels both for minimum and maximum such
that the businesses does not run out of stock as well not to ties too much capital in stock which affects the working capital. i. Nigerian Investment Promotion Commission (NIPC) should put trainings to SMEs owners on how to invest their funds. This is more importantly concerns on how to choose and evaluate investments in which to invest in. For example more sensitization needs to be done on how to use investment analysis techniques. Like pay back period, NPV, return on investment, so as to maximize their wealth. Similarly, SMEs owners themselves needs to pick interest and seek professional help on how to choose the best portfolio to invest their funds so as to obtain higher returns on investment. The Central Bank of Nigeria should provide a favourable platform for SMEs to access financing that can enable them to run their business at a reasonable cost of financing. This is because currently the access to bank loans is difficult by SMEs and they end up using only internally generated funds. The interest rates should be favourable, similarly, the requirements to accessing such funding should also be reasonable not to push SMEs away. The Nigerian Securities and Exchange Commission should also think about a ways on how moderate SMEs can raise funds through the stock exchange by floating their shares in a moderate market. SMEDAN should sensitize the SMEs owners on the relevance of book keeping, financial reporting and analysis as well maintaining proper books of analysis. Trainings should be organize for SMEs owners to help them understand why they should keep updated books so as to know their levels of performance on whether they are making profits or losses as well as know how to control cost through looking at the previous data. The SMEs owners should be informed on the relevance of using accounting packages with computer so as to make recording of transactions easier as well as to have timely reporting which would enhance decision making based on accurate and reliable information. Similarly, SMEs owners should try as much as possible to have formal accounting systems, employ accountants who are knowledgeable so as to help them in setting up accounting systems and improve their operations. The SMEs owners should try to maximize and put to use their assets so as to obtain higher returns on assets. This will in the long run lead to increase sales if the assets are put to use. The owners of SMEs should also make sure that they set mission statements so as keep them focused, they should also put in place key performance indicators and have these reviewed
regularly in order to know the progress on whether they are being achieved or not. The owners of SMEs should have sales team in place so as to market the products and services of the business to increase sales. The SMEs owners should also make sure that business plans are prepared to act as a roadmap on how to move the business to the next level. The government, more specifically the ECOWAS should sensitize the SMEs owners on the opportunities that are available within the ECOWAS sub region to enable them to discover new market within the neighbouring countries.

5.3.1 There is relationship between Working Capital Management and Business Efficiency of SMEs

The study showed that the greater percentage of SMEs that responded has cash management policies in their enterprises, representing 112 firms which is 86.3% of the responses. A significant majority of the respondents 82.1% of the responses indicated that cash management policy have positive impact on their business efficiency. The findings resonate with the literature reviewed that cash balance policy ensures the determination of the optimal cash to hold by considering the trade-off between the opportunity cost of holding too much cash and trading cost of holding too little (Ross et al, 2008). This has shown that cash management policy play a very significant role in the business efficiency of SMEs. This was also established by Kotout (2003) that cash budgeting is useful in playing for shortage and surplus of cash in effect on the financial performance of SMEs.

With regard to receivable management the findings indicated that greater percentage of the respondents 77.3% indicated that their firms has receivable management policies. The study agrees with the findings of Kennedy (2014) that many firms employ the use of receivables in enhancing the performance of their firms. Greater percentage of the respondents, 69.2% had shown that, receivable management policy had greatly enhance the business. Efficiently of their firms. This was further enhance by the study by Kenneth 2014 who found that inventory over in days has negative relationship with the return on equity which means that companies performance can be increase by reducing inventory in days. Account receivable is found to be significant positive association with the business efficiency of SMEs.
With regard to inventory management, significant percentages of the respondents 81.1% has indicated that their enterprises have inventory management policies in their firms. This was prove by Ng’anga (2013) reveals that, delays in procurement of goods frequent stocks and uncertain change of prices where some of the effects of long bureaucratic procurement procedure. The finding also shows that only 04.3% of the respondents indicated that the policy has impacted on the business efficiency of their firs, while greater number have not responded. This has clearly shown that, inventory management has no significant effect on the business efficiently of SMEs.

To test the objective hypothesis, the null hypothesis working capital management shows that the correlation between working capital management and business efficiency of small and medium enterprises in Nigeria is 0.598, implying a linear relationship between working capital management and business efficiency. The coefficient of determination R-square is 0.358 indicating that 35.8% of the variation in business efficiency is explained by working capital management.

The linear relationship between working capital management and business efficiency in small and medium enterprises in Nigeria is \( y = 0.390 + 0.312x_1 \) where \( y \) is business efficiency in small and medium enterprises in Nigeria and \( x_1 \) is working capital management. The p-value of the slope of the model (0.000) is less than 0.05 we therefore, reject \( H_0 \), and conclude that working capital management has a significant effect in the business efficiency of small and medium enterprises in Nigeria. Therefore, its strongly recommended that the Nigerian Government should encourage all unregistered smes to register in order to enable them to benefit from training numerous training programmes on financial management.

5.3.2 There is relationship between Investment Decision and Business Efficiency of SMEs

The study showed that large number of respondents 97.3% prepare budget. A significant proportion of the respondent 92.1% indicated that preparation of budget had positively help their firms to achieve their objectives. This had strongly agree with the findings of Amisi (2013) that examine the relationship between financial
literacy and performance of SMEs. The study affected that, firms that have poor financial literacy performed poorly in terms of performance.

When asked, whether they are managing networking capital, the findings showed 87.3% of the responses agreed that they have policies of managing networking capital. And, when asked on the impact of the policy on business efficiency. 0.00% did not respond which 0.27% agreed that it had impacted on their business efficiency mildly, while greater percent 97.3% did not respond.

On investment analysis, greater percent of the respondent, 81.1% agreed that their firms have policy on investment analysis. Another significant percent 72.7% indicated that the policy had impacted on their business efficiency positively This is in agreement with Wang (2002) analyze a sample of Taiwanees firms, emphasized that the way the working capital is managed has a significant impact on the profitability of firms and increasing profitability by reducing number of days account receivables and reducing inventories. The correlation between investment decision and business efficiency in small and medium enterprises in Nigeria is 0.662, implying a linear relationship between investment decision and business efficiency. The coefficient of determination is 0.438 indicating that 43.8% of the variation in business efficiency is explain by investment decision. The P-value of the ANOVA of this regression model (0.000) is less than 0.05 we therefore, conclude that the model is significant and therefore fit for use.

The linear relationship between investment decision and business efficiency in SMEs in Nigeria, is $y = 0.346 + 0.383X_2$ where y is business efficiency in SMEs in Nigeria and $X_2$ is investment decision. The p-value of the slope of the model (0.000) is less than 0.05 we therefore reject $H_0$ and conclude that investment decision has a significant effect in the business efficiency of SMEs in Nigeria. With this therefore, its strongly recommended that SMEDAN should focus its attention on training smes that are not register on the importance of taken good investment decision.
5.3.3 There is a relationship between Financing Decision and Business Efficiency of SMEs

The study indicated that the bulk of the respondent indicated that, they have policy of calculating cost of capital. The equally agreed that, calculating cost of capital has positively impacted in the business efficiency of their firms. A large number of respondent clearly indicated that, the policy has positive impact on their businesses with 81.1% of the response. When asked on the policy of Debt to Equity ration 69.6% agreed that they do calculate debt to equity ratio. They further agreed that, the policy has a positive impact on their business efficiency with 67.5%. A significant majority 86.1% equally agreed that, their firm do have policies for business expansion with 77.7% agree that the policy have positive impact to business efficiency of their firms.

In analyzing the regression between financing decision and business efficiency the scatter plot indicated the correlation between financial decision and business efficiency in SMEs in Nigeria, 0.373, implying a linear relationship between financing decision and business efficiency. The coefficient determination R-square is 0.139 that 13.9% of the variation in business efficiency is explained by financial decision. The p-value of the ANOVA of this regression model (0.000) is less than 0.05 we therefore conclude that the model is significant. The linear relation between financial decision and business efficiency in small and medium enterprises in Nigeria is y=0.484+0.279**3 where y is business efficiency in SMEs and x3 is financial decision. The P-value of the slope of the model (0.000) is less than 0.05 we therefore, reject H0 and conclude that financial decision has a significant effect in the business efficiency of SMEs in Nigeria. With this therefore, its recommended that businesses that are yet to invibe the culture of taking modern financial decision to quickly realise its importance.

5.3.4 There is a relationship between Accounting Information System and business efficiency of SMEs

The study indicated that greater percent of the respondents 68.1% have an organized systems of collecting financial information. This in agreement with the findings of D’Amboise and Gasse (1980) studied utilization of financial management
techniques, they found out that 88% of the businesses utilizes accounting information system. Similarly, when asked on the impact of the policy on the business efficiency of their firms 65.7% of the response indicated that the policy has positively impacted on the business efficiency of their firms. This has agreed with the findings of Williams (1986) also found out that most of the businesses that failed had lower usage of Accounting Information System. When asked on whether they have system of storing information 65.5% of the respondent agree that they have. While, 62.1% of the respondent agreed that it positively impacted on the efficiency of their businesses.

Similarly, the respondents were asked on whether there firms have system of processing information 59.6% of the respondent agreed that, they do have. Equally, the 55.2% agreed that the policy have positively impacted on the business efficiency of their firms.

In testing the hypothesis, regression analysis was used to prove whether Accounting Information System has impact on the efficiency of SMEs in Nigeria. The correlation between Accounting Information System and business efficiency of SMEs, in Nigeria is 0.795, implying a linear relationship between working capital management and business efficiency. The coefficient of determination R-square is 0.582 indicating that 58.2% of the variation in business efficiency by accounting information system. The p-value of ANOVA of this regression model (0.000) is less than 0.05 we therefore, conclude that the model is significant. The result shows that the linear relationship between Accounting Information System and business efficiency in SMEs in Nigeria is y=0.1837+0.709**4 where y is business efficiency in Nigeria and X_4 is accounting information system. The p-value of the slope of the model (0.000) is less than 0.05. we therefore, reject H_0 and conclude that accounting information system has a significant effect on the business efficiency of SMEs in Nigeria. With this findings therefore, Government agency like Nigerian Communication Commission should develop a new policy in targeting smes that are yet to realise the importance of accounting information and analysis.
5.3.5 There is a relationship between Financial Reporting and Analysis and business efficiency of SMEs

The study established at a significant percent of the respondent prepare and calculate its revenue and expenditure, 78.1 percent of the respondent agreed that they firms prepare and calculate their revenue and expenditure. They equally agreed that a large that the policy has positive impact on the business efficiency of their firms, represented with 75.7% of the response. This is in line with the studies carried out by Kazooba (2006) similarly, research carried out by Lindecamp and Rice (1983). However, some of the previous studies clearly shows that most of the SMEs were keeping records regarding their financing transactions for example Homes (1986) found out that they does prepare both internal and externally transactions. Palmer (1994) found out that accurate financial information is really the most important aspect of SMEs and that, most of the firms are more knowledgeable about their financial positions. De.Thomas and Fredenberger (1985) found that 81 percent of SMEs regularly obtained summary financial information. Ninety percent of the traditional information. Ninety percent of the information was in the form of financial statement (Balance Sheet, profit and loss statement) when asked whether the firms prepare and calculate profit and losses, 74.3% of the firms agreed that they do prepare. And when asked on the impact of the policy on the business efficiency of the firms 69.9% agreed that it has impacted on the business efficiency of their firms.

Similarly, 91.1% of the respondents agreed that they does keep record of cash flow, and 69.6% greed that is has positive impact on the business efficiency of their firms. The correlation between financial reporting, analysis and business efficiency in SMEs in Nigeria is 0.553, implying a linear relationship. The coefficient of determination R-square 0.305 indicating that 30.5% of the variation in business efficiency is explained by financial reporting and analysis. The p-value of the ANOVA of this regression model (0.000) is less than 0.05. We therefore, conclude that the model is significant $y = 0.378 + 0.444x_5$ the linear relationship between financial reporting analysis and business efficiency in SMEs in Nigeria is $y=0.378+0.444x_5$ where y is business efficiency, $X_5$ is financial reporting and
analysis. The p-value of the slope of the model (0.000) is less than 0.05 we therefore, reject H0 and conclude that financial Reporting and analysis has a significant effect in the business efficiency of SMEs in Nigeria.

In conclusion therefore, the linear relationship between the independent variables and business efficiency in SMEs in Nigeria is $y=0.031+0.177*x_1+0.138*x_2+0.177*x_3+0.427*x_4+0.021*x_5$. The p-value of the coefficient in the model are less than 0.05, except for financial reporting and analysis have a significant effect in the business efficiency of SMEs in Nigeria. The result of this findings had clearly shown that there is no relationship between financial reporting and business efficiency of smes.

5.4 Conclusion

Use and application of financial management regarding working capital management investment decisions, financing decision, accounting information and financial reporting are though very high in some firms but, still higher in others. Despite its level of significance in terms of input, output and level of profitability in many SMEs, the extent of financial management skills with regard to financial reporting and analysis, accounting information system and financing significantly differ among SMEs owners with highest level of education. However, there was no significant difference as regard to other construct of financial management investment decisions and working capital management. It does not differ significantly among SMEs owners between the age group.

The extent of financial management is regarded to investment and financing differed significantly according to the years spent in present business. For other construct like working capital management accounting information system and financial reporting and analysis, there is no significant difference among SMEs with regard to the number of years in present business.

The extent of financial management is significantly correlated with all construct of on business efficiency and therefore, any change in financial management practice automatically leads to a change in business efficiency of SMEs.
Thus an improvement in working capital management, financing decision, accounting information system, financial reporting and analysis leads to an increase in profitability and growth of SMEs. This is because financial management accounts for a greater percent variations in level of business efficiency in Nigeria. Thus the null hypothesis was rejected since there exist a significant relationship between the extent of financial management skills and the level of business efficiency.

5.5 Recommendations

5.6 Areas of Future Research

An association between financial management skills and business efficiency in small and medium enterprises is clearly established, the direction of relationship and causation can not be termed without further research. The study does not show whether the relationship is positive or negative.

It will also serve as an area for further research to determine the movement between the small and medium enterprises. The conditions and the factors that determine such movements. Researchers could also explores in areas of risk financial management.
REFERENCES


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APPENDISES
Table 4.2.3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>Sole Proprietorship</td>
<td>39</td>
<td>30.1</td>
</tr>
<tr>
<td></td>
<td>Partnership</td>
<td>50</td>
<td>38.1</td>
</tr>
<tr>
<td></td>
<td>Limited liability</td>
<td>41</td>
<td>31.8</td>
</tr>
<tr>
<td></td>
<td>Company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of employees</td>
<td>1-9 employees</td>
<td>33</td>
<td>25.3</td>
</tr>
<tr>
<td></td>
<td>10-49 employees</td>
<td>54</td>
<td>41.2</td>
</tr>
<tr>
<td></td>
<td>50-250 employees</td>
<td>24</td>
<td>18.7</td>
</tr>
<tr>
<td></td>
<td>250 employees &amp; above</td>
<td>19</td>
<td>14.8</td>
</tr>
<tr>
<td>Sector of business</td>
<td>Manufacturing</td>
<td>60</td>
<td>46.4</td>
</tr>
<tr>
<td></td>
<td>Services</td>
<td>70</td>
<td>53.6</td>
</tr>
<tr>
<td>Educational Qualification of</td>
<td>GCE/Grade II</td>
<td>9</td>
<td>7.2</td>
</tr>
<tr>
<td>owner</td>
<td>NCE</td>
<td>11</td>
<td>8.1</td>
</tr>
<tr>
<td></td>
<td>ND</td>
<td>23</td>
<td>17.7</td>
</tr>
<tr>
<td></td>
<td>HND</td>
<td>44</td>
<td>33.5</td>
</tr>
<tr>
<td></td>
<td>B.Sc</td>
<td>39</td>
<td>30.3</td>
</tr>
<tr>
<td></td>
<td>Other Qualifications</td>
<td>4</td>
<td>3.2</td>
</tr>
<tr>
<td>Who handle the finances of the</td>
<td>Financial manager</td>
<td>21</td>
<td>16.3</td>
</tr>
<tr>
<td>business?</td>
<td>Accountant</td>
<td>22</td>
<td>16.6</td>
</tr>
<tr>
<td></td>
<td>Cash officer</td>
<td>22</td>
<td>17.2</td>
</tr>
<tr>
<td>Role</td>
<td>N</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>----</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>Manager</td>
<td>28</td>
<td>21.7</td>
<td></td>
</tr>
<tr>
<td>Owner of business</td>
<td>37</td>
<td>28.2</td>
<td></td>
</tr>
</tbody>
</table>

**QUESTIONNAIRE TO DETERMINE EXTENT OF FINANCIAL MANAGEMENT IN SMALL AND MEDIUM ENTERPRISES**
SECTION A

DEMOGRAPHIC DATA

Please indicate your considered response by placing a tick ( √ ) in the appropriate box and/or making brief comment in spaces provided.

1. Name of the organization

2. Location

3. Year of establishment

4. Ownership
   (a) Sole proprietorship
   (b) Partnership
   (c) Limited Liability Company

5. Number of employers
   (a) 1 – 9
   (b) 10 – 49
   (c) 50 – 250
   (d) 250 and above

6. The sector of your business you are in:
   (a) Manufacturing
   (b) Service

7. Educational qualification of owner:
8. Number of employees and their educational qualifications: (Specify their number in the box)

(a) GCE/Grade II

(b) NCE

(c) ND

(d) HND

(e) B.Sc

(f) Other qualifications

9. Estimated sales volume per annual in N……………………………………………………………

10. Who handle the finances of the business

(a) Financial manager

(b) Accountant

(c) Cash officer

(d) Manager

(e) Owner of the business
Questionnaire

Effects of Financial Management Skills on Business Efficiency of SMEs in Nigeria

SECTION A: Working Capital Management

1i. Are there cash management policies in your firm?
   (a) Yes ☐
   (b) No ☐

1ii. If yes, how did these influence the Business Efficiency of your firm?

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________


1iii. Kindly indicate your firm’s average financial (liquidity ratio) for the years listed below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Liquidity Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>2010</td>
</tr>
<tr>
<td>2010</td>
<td>2011</td>
</tr>
</tbody>
</table>
2i. Does your firm have specific measures for managing receivables?
   (a) Yes □
   (b) No □

ii. If yes, how has these enhanced business efficiency in your firm?

iii. If No, how did these affect business efficiency of your firm?

iv. Please indicate the total Naira value of your receivables for the years shown below?

<table>
<thead>
<tr>
<th>Year</th>
<th>Total amount of Receivable</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>□□□□□□□□□□□□□□□□□□□□□□</td>
</tr>
<tr>
<td>2010</td>
<td>□□□□□□□□□□□□□□□□□□□□□□</td>
</tr>
<tr>
<td>2011</td>
<td>□□□□□□□□□□□□□□□□□□□□□□</td>
</tr>
</tbody>
</table>

| 211  | □□□□□□□□□□□□□□□□□□□□□□|
3i. Are there inventory management policies in your firm?
   (a) Yes □
   (b) No □

ii. If yes, how have these affected the business efficiency of your firm?
    _______________________________________________________________
    _______________________________________________________________
    _______________________________________________________________

iii. If No, how did these affected the business efficiency of your enterprise?
     _______________________________________________________________
     _______________________________________________________________
     _______________________________________________________________

iv. Kindly indicate the opening and closing stock values of your firm during the last five years shown below?

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount of Opening Stock (₦)</th>
<th>Amount of Closing Stock (₦)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2013

v. How many times did your firm record maximum reorder stock levels during the last five (5) years indicate below:

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of Reorder Stock Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
</tr>
</tbody>
</table>

Section B: Investment Decision

i. Does your enterprise prepare budget?

(a) Yes □

(b) No □

ii. If yes, how does this help your firm in achieving your goals?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

iii. How much was budgeted for the following years:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount budgeted (₦)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2i. Does your enterprise have any specific policy of managing net working capital?

(a) Yes □

(b) No □

ii. If yes, how does these help in the efficiency of your firm?

______________________________________________________________

______________________________________________________________

______________________________________________________________

iii. If No, how have these affected the business efficiency of your firm?

______________________________________________________________

______________________________________________________________

3i. Does your firm have any policy on investment analysis?

(a) Yes □

(b) No □

ii. If yes, how does this affected the efficiency of your firm?
iii. If No, how have these affected the business efficiency of your enterprise?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Section C: Financial Decision

1. Does your enterprise have any policy for calculating cost of capital?

   (a) Yes □

   (b) No □

ii. If yes, how does this help in the efficiency of your business?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

iii. If No, how does these affected the efficiency of your enterprise?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

iv. Please, indicate the cost of capital of your firm for the following years
<table>
<thead>
<tr>
<th>Year</th>
<th>Cost of Capital (₦)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
</tr>
</tbody>
</table>

2i. Does your firm ever consider debt to equity ratio?

(a) Yes [ ]

(b) No [ ]

ii. If yes, how does this enhances the efficiency of your firm?

________________________________________________________________________

________________________________________________________________________

iii. If No, how does these affected the efficiency of your firm?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

iv. Kindly indicate the debt to equity ratio of your firm for the following years

<table>
<thead>
<tr>
<th>Year</th>
<th>Debt to Equity ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Does your enterprise have any specific policies for business expansion?

(a) Yes ☐
(b) No ☐

If yes, how does these policies impacted on the efficiency of your business?
____________________________________________________________
____________________________________________________________
____________________________________________________________

If No, how has these affected the efficiency of your business enterprise?
____________________________________________________________
____________________________________________________________
____________________________________________________________

Section D: Accounting Information System

Does your enterprise use computer in keeping and processing financial transactions?

(a) Yes ☐
(b) No ☐

ii. If yes, how does it impacted on the business efficiency of your enterprise?

______________________________________________________________

______________________________________________________________

______________________________________________________________

iii. If No, how does these affected the efficiency of your enterprise?

______________________________________________________________

______________________________________________________________

______________________________________________________________

2i. Does your enterprise have a system of storing financial information?

(a) Yes ☐

(b) No ☐

ii. If yes, how does this enhances the efficiency of your enterprise?

______________________________________________________________

______________________________________________________________

______________________________________________________________

iii. If No, how has these affected the business efficiency of your enterprise?

________________________________________________________________
3i. Does your enterprise has system of processing of financial information?
   (a) Yes  
   (b) No  

ii. If yes, how does it impacted on the business efficiency of your enterprise?
    ________________________________________________________________
    ________________________________________________________________
    ________________________________________________________________

iii. If No, how has it affected the business efficiency of your enterprise?
    ________________________________________________________________
    ________________________________________________________________
    ________________________________________________________________

Section F: Financial Reporting and Analysis

1i. Does your enterprise calculate its revenue and expenses?
   (a) Yes  
   (b) No  

ii. If yes, how does it impacted on the business efficiency of your enterprise?
    ________________________________________________________________
iii. If yes, kindly indicate your firms records of Revenue and Expenditure for the following years

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (₦)</th>
<th>Expenditure (₦)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2i. Does your enterprise consider the calculation of the profit and losses you incur in your business?

(a) Yes [ ]

(b) No [ ]

ii. If yes, how does this impacted on the efficiency of your business?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
iii. Kindly indicate the profit and losses you incurred in the following years

<table>
<thead>
<tr>
<th>Year</th>
<th>Profit (₦)</th>
<th>Losses (₦)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3i. Does your enterprise keep records of cash flow?

(a) Yes □

(b) No □

ii. If yes, how has these impacted on the efficiency of your business?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

iii. If No, how does it affected efficiency of your business?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________