# EFFECTS OF WORKING CAPITAL MANAGEMENT ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES IN NIGERIA

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## Effects of Working Capital Management on the Performance of Small and Medium Enterprises in Nigeria

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## DECLARATION

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

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#### **DEDICATION**

This Thesis is dedicated to my father late Alhaji Umar Mshelia (May God Almighty reward him with Aljannat firdaus) and my mother Fatima Alhaji Umar (May God Almighty continue to give her good health).

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#### LIST OF ABBREVIATIONS AND ACRONYMS

- ANOVA Analysis of VarianceAPM Accounts Payable Management
- **ARM** Accounts Receivable Management
- ASE Asian Stock Exchange
- CATAR Current Asset to Total Asset Ratio
- **CBN** Central Bank of Nigeria
- CCC Cash Conversion Cycle
- CCE Cash Conversion Efficiency
- **CLTAR** Current Liability to Total Assets Ratio
- CM Cash Management
- **DMBs** Deposit Money Banks
- **DOW** Days Operating Cycle
- **DWC** Days Working Capital
- **EFInA** Enhancing Financial Innovation & Access
- **ELAN** Equipment Leasing Association of Nigeria
- **EOQ** Economic Order Quantity
- **FI** Financial Intervention
- **FM** Financial Management
- **FMI** Federal Ministry of Industries

FP	Financial Performance
GDP	Gross Domestic Product
GEM	Global Entrepreneurship Monitor
GI	Government Intervention
IFC	International Finance Corporation
IM	Inventory Management
IT	Information Technology
KSE	Karachi Stock Exchange
MFBs	Microfinance Banks
MS-DOS	Microsoft Disk Operating System
MSMEs	Micro and Small Medium Enterprises
MRP	Material Requirement Planning
NAPEP	National Poverty Eradication Program
NBCI	Nigerian Bank for Commerce and Industry
NERFUND	National Economic Reconstruction Fund
NIDB	Nigerian Industrial Development Bank
NPAT	Net Profit after Tax
NPM	Net Profit Margin
NTC	Net Trading Cycle
NWC	Net Working Capital

PCS	Personal Computers
PIC-	Perpetual Inventory Control
PM	Payable Management
RM	Receivable Management
ROA	Return on Assets
ROCE	Return on Capital Employed
ROE	Return on Equity
ROIC	Return on Invested Capital
SICC	Small Industry Credit Commission
SICF	Small Industries Credit Fund
SMEDAN	Small and Medium Enterprises Development Agency of Nigeria
SMEIES-	Small and Medium Enterprises Investment Scheme
SMEs	Small and Medium Enterprises
SSE	Small Scale Enterprise
TSE	Tehran Stock Exchange
USA	United States of America
USD	United States Dollar
WB	World Bank
WCM	Working Capital Management

#### **OPERATIONAL DEFINITION OF TERMS**

#### **Financial Management**

Felitiliki (2011), averred that financial management is the study of fund management or the process of planning, directing and coordinating the activities involve in the sourcing and application of funds by individuals, groups or business concern in order to achieve its particular objective which is to maximize returns that associate with minimizing financial risks simultaneously.

#### **Working Capital Management**

Harris (2005), cited in Yusuf (2012) defined working capital management as the ability of the organization to fund into the short term assets and short term liabilities, and it involves planning and controlling current assets and current liabilities in a manner that eliminate the risk of inability to meet short term obligations on one hand and avoids excessive investment in these assets on the other.

#### **Working Capital**

According to Erik (2012), Working capital is usually defined in terms of net working capital. Net working capital is the difference between current assets and current liabilities. This means that by for example, shortening the time collecting receivables, deferring payments keeping minimal inventory, a company can reduce its net working capital and that working capital also encompasses cash management for example, how to invest in idle cash funds without losing out on liquidity.

#### **The Gross Concept**

It is the totality of the current assets of the business which includes account receivable, cash, short-dated securities, bill receivable and stock. The gross concept advocates that a firm should possess working capital just adequate and sufficient to meet the firm's operating cycle it ensures that excess investment in cash is avoided, since excess investment in cash result in excess liquidity resulting in loss of income or profit.

#### The Net Concept

This emphasis continuous liquidity of the firm, the concept advocates a finance of the working capital by a permanent sources of funds e.g. shares, debenture, long term debt, preference share capital retained earnings, etc, the net concept advocate the efficient mix of long term and short term sources of financing working capital.

#### **Inventory and Inventory Management**

Inventory means Tangible property which is held for sale, in the ordinary course of business or, in the process of production (WIP) for sale or for consumption in the production of goods and services which will be used for sale in the ordinary course of business, while its management refers to an optimum investment in inventories striking a balance between adequate stock and that too by keeping investment at minimum level. It is also known as optimum level of inventory Parang (2009).

#### Cash and cash management

Cash means liquid assets that a business owns and it includes cheques, money orders and bank drafts. Management of cash therefore means efficient collection and disbursement of cash and any temporary investment of cash. Maintaining optimum level of cash in an organization is called cash management Parang (2009).

#### **Receivables and Receivable Management**

Sales on credit are inevitable necessity in the business world today. No business can exist without selling the products on credit. According to Joshi, (2000) and Meyer et al (1992) in Pieterson (2012) accounts receivables consist of the credit a business grants its customers when selling goods or services which take the form of either trade credit which the company extends to other companies or consumer credit, which the company extends to its ultimate consumers and so the effectiveness of company's credit policies can have a significant impact on its total performance.

#### Accounts Payable and Accounts payable Management

Gitman (2009) and Birt *et al.*, (2011) averred that, Accounts Payables are the major unsecured short-term financing for businesses and results from transactions in which merchandise (inventory) is purchased. The suppliers might give credit terms together with allowing discount to the purchasers and that Accounts Payable Management objective is to pay creditors as slowly as possible without damaging its credit rating. Accounts Payable and accruals are the two major spontaneous liability sources of shortterm financing for a typical firm.

#### Cash Conversion Cycle

Gitman (2009) in Felitiki (2011) explains that a cash budget is a forecast of the future cash inflows and outflows of the business and how cash has been used for business operational activities. But the "cash conversion cycle" is the duration of time that cash is tied up in accounts receivables and inventory. In fact, the Cash Conversion Cycle (CCC) is concerned with the amount of time a firm's resources are tied up.

#### **Profit and Profitability**

Profit literally means the excess of income over expenditure just as stated by Cicea and Hincu (2009) that profit is the net balance after deducting all expenses from revenue. If however expenses are higher than revenue, it means loss has occurred. Profitability on the other hand as defined by Kaplan and Atkinson A.A. (1989) is a measure of profit relative to the assets employed. For instance,

#### Return on Asset or Return on Investment (ROA or ROI)

The return on asset ratio (ROA) or return on investments (ROI) indicates the business's effectiveness in generating profits from its available assets and is literally used to assess the profit-earning performance of the business's assets. It relates the net profit after tax in income statement to the assets in the business's balance sheet. A high ratio on return on asset shows effective management and good opportunities for future business growth and therefore, ROA reflects "Operating Decisions" over buying, selling, expense control and asset management which should always be examined in conjunction with the gross

profit margin and net profit margins (Brealey et al., 2006; Gitman, 2009; Hatten, 2008; Oliver & English, 2007).

#### **Return on Equity (ROE)**

Return on Equity measures the return the business earned on its owner's investment in the business Hatten (2008). According to Oliver and English (2007) the return on owner's equity is like the interest rate on a bank saving account. It represents the interest rate earned by the owner's investment in the business.

#### **Small and Medium Enterprises**

Small and medium scale enterprise have been defined in various ways by various people and government agency just as it has been worked on in various ways by different nation and the most comprehensive study of small firms in the United Kingdom was that carried out by the Bolton Committee (1971) cited in James (2011) which defined "small firms" "as one with not more than 200 employees". In Nigeria, small and medium scale business has been variously defined by various organizations, bodies and in various forms Anderson, (1982) and Adeleke, (2003) both cited in James (2011) for instance, defined small business as "those having investments (i.e. capital, land, building and equipment up to N60, 000 (Pre-SAP value) and employing no more than fifty persons".

#### ABSTRACT

Small and Medium Enterprises (SMEs) play a great role in providing employment and contribute towards the Gross Domestic Product (GDP) of Nigeria and any other Nation the world over. To achieve this feat, there is a need to properly manage the available financial resources. Working Capital Management which is one of the components of Financial Management is expected to play a role in this process. This study therefore examined the Effect of Working Capital Management on the performance of small and medium enterprises (SMEs) in Nigeria. The study was anchored on the research objectives which include establishing whether cash management, inventory management, accounts payable management and accounts receivable management affects the performance of SMEs in Nigeria and to what extent. It also examined whether financial institution intervention (moderating variable) have influence on the relationship between working capital management and performance of SMEs in Nigeria. The study used descriptive research survey and targeted 250 Small and Medium Enterprises (SMEs) in both Kaduna North and South Local Government Areas. Data were collected by the use of questionnaires and interview guides. The interview guides were used to supplement additional information, especially questions that needed follow ups. Data collected was analyzed using SPSS software. In order to examine the effect which Working Capital Management has on the Performance of the SMEs in the study area, Regression Models were then used. The results of the study indicated that all the components of Working Capital Management (cash management, inventory management, accounts payable management and accounts receivable management) affect the performance of Small and Medium Enterprises positively. Accounts payable policies were most prominent with correlation coefficient of 89.60% elements of working capital management affecting the performance of small and medium enterprises in Nigeria. The study also recommends that SMEs should among other things strive to shorten the cash conversion cycle, utilize the value of relationship with suppliers and develop strong alliance, seek knowledge on stock optimization techniques, introduce more and elaborate credit terms, Government at all levels to be more involved in financing micro-enterprises and financial institution such as commercial banks should also be ready to provide loan facilities to SMEs with less stringent conditionality.

#### CHAPTER ONE

#### INTRODUCTION

#### 1.1 Background of the Study

The focus of this study was to investigate the effect of working capital management (WCM) on the performance of Small and Medium Enterprises (SMEs) in Nigeria. For this purpose therefore, two local government areas in Kaduna state were selected

This chapter discusses the general background of working capital management and its contribution on the growth of the small and medium enterprises. It explores the impact from the global as well as the international perspective to regional level and finally looked at the Nigerian context. In addition to review of the background and literature, other sections of this chapter include; statement of the problem, the scope of the study, justification, objectives and the limitation of this study.

#### **1.1.1 General overview**

Alayemi and Adebayo (2008) assert that in the past, working capital strategies has been the responsibility designated to those managers in accounting and finance departments. However, today's economy is changing those roles and many managers who traditionally were not part of this process are being called upon to take pro-active steps in reducing the risk associated with working capital. Chowdhury and Amin (2007), Deloof (2003) cited in Muhammad and Syed (2012) stated that working capital management refers to all management decisions and actions that ordinarily influence the size and effectiveness of the working capital, and that it is aimed at maintaining an optimal balance of each of the working capital component (cash, receivables, inventory and payables).

According to Mustafa (2011), efficient working capital management involves planning and controlling current assets and current liabilities in a manner that eliminate the risk of inability to meet short term obligations on one hand and avoids excessive investment in these assets on the other. Sunday *et al.*, (2012) observed that, a company's ultimate long-term success is based upon all departments within the organization coming together to fulfill its business purpose or mission and that traditionally, focus had been on the study of long-term financial decisions, particularly investment, dividends or company valuation decisions. Short-term assets and liabilities are thus, important components of total assets and needs to be carefully analyzed. Ali, and Ali (2012) observed that, firm's financial management (FM) policies compose of very important decisions including working capital management. Singh and Asress (2010) observed that firms which have adequate working capital in relation to their operational size do performed better than those firms which have less than the required working capital in relation to their operational size.

#### **1.1.2 Importance of Working Capital Management**

Working capital management(WCM) as observed by many scholars/researchers has been paramount in impacting on the performance of SMEs in the area of profitability, sales(turnover), return on investment (ROI), return on equity (ROE) etc., which they in turn contribute towards the economic development of nations the world over. Anup and Muntasir (2007), Padachi (2006) and Kotut (2003) and Peel and Wilson (1996) cited in Nyabwanga et al (2012), observed that WC is pivotal to the health and performance of small firm and generally helps a business concern to gain vitality and life strength, hence, their views that firm should employ the use of efficient WCM practices as a strategy of improving their value and that, smaller firms should adopt formal working capital management routines in order to reduce the probability of business closure, as well as to enhance business performance.

#### 1.1.3 Contributions to Nation's Economic Development

Researches by numbers of scholars have pointed to the fact that efficient working capital management have contributed to the growth of SMEs. For instance, Atril (2006) averred

that, working capital management is very important component of corporate finance because it directly affects liquidity, profitability and growth of a business and is important to financial health of business of all sizes as the amount invested in working capital are often higher in proportion to the total assets employed and hence generate growth of Gross Domestic Product (GDP) of nations and also generate employment and these are noticeable at international, regional and national levels as outlined below.

#### **1.1.4 International / Regional Levels**

Ovia (2001) cited in James (2011) stated that, available empirical studies have shown that, the small and medium scale enterprises generate at least 60% of the United States of America (USA) Gross Domestic Product (GDP), that the SMEs constitute the major breakthrough in several emerging sectors, most breakthroughs in (IT) in the U.S.A were propelled by SMEs. For instance Microsoft Disk Operating System (MS Dos) that enabled about 80% of the world PCS to operate was developed in 1980 by Bill Gates and Paul Allen when their company was a small scale enterprise. Das and Dey (2005) also stated that, in India, Information Technology (IT) industry exported about 6 billion software's and related services in year 2000 that, empirical evidences shows that SMEs contribute 40% of India's gross domestic product. In Ghana, Abor and Quartey (2010) stated that empirical evidences have shown that SMEs provides 85% of the manufacturing employment and contributes 70% of Ghana's GDP and accounts for 92% of business in Ghana.

Researches by other scholars have also produced evidences indicating the effects which working capital management has on performances of SMEs with regard to profit, turnover, return on equity, firm size and return on assets. For instance, Hayajneh and Yassine (2011) investigated the relationship between working capital management efficiency and profitability through applying on 53 Jordian manufacturing firms listed on the Aman Stock Exchange (AEM) from 2000 to 2006. The study found positive association between size of sales and growth of sales and profitability. Lotfinia, Mousavi

and Jari (2012), Sampling of Tehran Stock Exchange (TSE) 80 firms from 2005- 2009 with available annual data and tested their hypothesis with the use of stepwise regression analysis. The research results showed that there is positive relationship between working capital management and firm size.

#### **1.1.5 Nigerian Perspective**

Samson, Mary, Yemisi and Erekpitan (2012) observed that, management of current asset and liabilities is particularly important in the case of small and medium companies and that, most of these companies' assets are in the form of current assets while current liabilities are one of the main sources of external financing in view of their difficulties in obtaining funding in the long term capital market and the financing constraint that they face. Nwidobie (2012), observed that, Nigerian firms as others the world over, utilize working capital for smooth operation. They plan for and manage their inventories, cash, receivables and payables, to ensure that requirements in these items are met. Raw materials are needed for production; finished goods inventory to meet customer demand and sales and profit objectives of firms. Cash is necessary to meet the liquidity needs of Nigerian firms. Nwidobie (2012) further observed that, considering the low per-capita income and disposable income of Nigerian consumers, Nigerian firms offer trade credit to customers, creating accounts receivables. These firms also take advantage of trade credit from other firms, creating accounts payables.

As observed by some scholars/researchers like Abor and Quartey (2010), and Das and Dey (2005), SMEs play great role in providing employment and contribute towards Nations GDP, the achievement of this economic growth agenda through significant role of SMEs in Nigeria however, has not been realized as observed by Murtala, Awojala and Bako (2012). Similarly Onugu (2005) observed that SMEs in Nigeria have performed below expectation mainly due to management problem related to finance. This observation was also corroborated by the study of James (2011) who stated that several

firms in Nigeria fail in little time after they are started due to poor financial management especially working capital.

Empirical evidence from researches on Nigerian firms have shown the effects which WCM has on SMEs performance especially with regard to profit, sales, return on assets (ROA) and return on equity (ROE) among which are, Ajao and Adebayo in their study "working capital management as a financial strategy", investigated the working capital management of Nestle Nigeria plc from 2005-2009. The relationship between working capital and profit before tax was examined through regression model between working capital and profit before tax. It was discovered that there is a negative relationship between working capital and profit before tax. Owolabi, Sunday, Ajao and Nkechinyere (2012) on effective working management study of selected manufacturing company of Nigeria ex-facto research involving a trend of five years financial statements of 5 manufacturing companies. Based on the ratio calculated, for the company's overtime, it was observed that some of the companies actually had longer collection period and shorter payment period.

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

Emery, Finnerty and Stowe, (2004) cited in Owolabi, Sunday, Chituru (2012) averred that an ideal business needs sufficient resources to keep it going and ensure that such resources are maximally utilized to enhance its profitability. However, some managers use wrong methods for working capital decisions as such the working capital mix are not effectively managed and this results in either under/over capitalization or worst still liquidation of their organization. Related to this, earlier studies including those of Huctchison *et al.*, (2009), Kamalavalli (2009) and Azam and Haider (2010) have produced mixed results of positive and negative regarding the effects which working capital management has on the performance on SMEs.

In Nigeria, most of the studies carried out revealed that working capital has affected the SMEs negatively. This is evidenced in the studies of Egbide (2009), Falope and Ajilore (2009), Nwidobie (2012), James (2011) and Onugu (2005) who revealed that, all components of working capital affect profitability at varying level of significance, and that cost of capital exceeds return on investment, SMEs perform below expectation, and that most businesses fail within 2 years after start while strongest fail within 6 years living few survivors all due to problems related to finance especially working capital. For instance, Zhang stated that by 2013, the banking sector was in crisis. Widespread insider abuse and inappropriate related-party lending were identified. The bursting of the lending bubble caused 10 banks to fail, which has directly affected SMEs lending, and Nigeria's All-Share Index to slump by 70 percent. The government was forced into emergency measures to prevent a systemic collapse. Nigeria implemented new banking regulations and fired eight chief executives of the country's 24 banks (2013). There is therefore the need for SMEs to properly manage their resources especially working capital so as to enhance their performance and growth.

These problems as mentioned above coupled with the fact that there has not been any prior research on the effects of working capital management on the performance of SMEs in Kaduna North and South local governments; prompted this study as a modest contribution to bridge the gap in the effects of working capital management on the performance of SMEs in Nigeria.

#### **1.3 Objective**

This section outlined the general objectives as well as the specific objective of this research. Therefore, in this section and other part of this work where the word working capital management is mentioned, refers to cash management, inventory management, accounts payable management and accounts receivable management and where financial performance has been used refers to profitability, return on assets, return on equity, and sales volume.

#### **1.4 The General Objectives**

The main objective of the study was to establish whether working capital management affects performance of Small and Medium Enterprises in Nigeria

#### **1.5 The Specific Objectives**

- 1. To determine the effect of Working Capital Management (Cash) on the performance of Small and Medium Enterprises (SMEs) in Nigeria.
- 2. To determine the effects of Working Capital Management (Inventory) towards the performance of Small and Medium Enterprises(SMEs) in Nigeria
- To determine the effect of working capital Working Capital Management (Accounts Payable) on the performance of Small and Medium Enterprises (SMEs) in Nigeria
- To establish the effects that Working Capital Management (Accounts Receivable) has on the performance of Small and Medium Enterprises (SMEs) in Nigeria.
- To determine the influence of Financial Intervention on the relationship between Working Capital Management and performance of SMEs in Nigeria.

#### **1.6 Research Questions**

- 1. To what extent does working capital management (Cash) affect the performance of Small and Medium Enterprises in Nigeria?
- 2. What is the effect of Working capital Management (Inventory) on the performance of Small and Medium Enterprises in Nigeria?
- 3. How does Working Capital Management (Accounts Payable) affect the performance of Small and Medium Enterprises in Nigeria?
- 4. To what extent does Working Capital Management (Accounts Receivable) affect the performance of Small and Medium Enterprises in Nigeria?

5. What influence can Financial Intervention have on the relationship between Working Capital Management and performance of Small and Medium Enterprises in Nigeria?

#### **1.7 Justification of the Study**

The finding of this study would have multi-dimensional benefits in the sense that many stakeholders would find its usefulness. It is common knowledge that every business outfit is concern with making profit by providing goods and services so as to satisfy the needs of its customer. Lakshan (2009), averred that understanding how SMEs achieve high performance has significant implications for SMEs owners/managers, SMEs employees and the economy in which the SMEs operates. If firms perform at optimum level, it can facilitate growth. It also generates profit and hence yields employment and subsequent contribution to the general development of the local and national economy. The findings of researchers like Das and Dey (2005), Hashim (2005), Abor and Quartey (2010), and Duru and Kehinde (2010) attested to this when they stated that SMEs provide a greater portion of the workforce in many societies.

Despite some studies and efforts that have been done about working capital management and small and medium scale enterprises in Nigeria, including some policies like the (SMEIES) introduced in 1999 which took effect in 2000 (CBN, 2003) whereby banks reserves 10% of their profit before tax as the needed finance capital to SMEs, little research work have been carried out on the working capital management and performance of SMEs particularly in the area of study. This study therefore, gave more insight on the significance of WCM especially with regard to performance on the return on assets of the SMEs. Apart from the owner/managers of SMEs, their employees and Government, the study could also be significant to other stakeholders like the creditors, other providers of loans, prospective investors in SME business and the academia who would want to make further research on working capital management.
# **1.8 Scope of the Study**

The study paid much attention to the small and medium enterprises in urban and Semiurban area since most of these places have higher concentration of entrepreneurial activities. Specifically, the research covered Kaduna North and South local government. These areas also have entrepreneurs comprising manufacturing, trade and services activities and was managed within the limit of the study. Findings of this study were then inferred to other populations in Nigeria.

# **1.9 Limitation of the Study**

In a study of this nature, there are bound to be some challenges which were not possible to foresee when making the proposal. The only solution was to assume that some challenges may occur and self-adjusting mechanisms were made. Problems such as apathy on the part of the officials of organization who did not wish to provide the required information because doing so may appear divulging confidential information of their organizations. With regard to this study limitations like incomplete, inaccurate or non-existing financial records and absence of schedule officers in some cases were envisaged and encountered.

Other limitations envisaged were inadequate files and data from the collapsed or non performing SMEs and reluctance in providing information by owners and managers of the SMEs. For these and other limitations possible solutions were therefore proffered. Limitations were mitigated through calling back in the case of officers who were not on sight during previous call. Incomplete financial records were carefully sieved which gave a clear picture of the firm's financial transaction. Information from the internet regarding financial data including collapsed and failed SMEs was used. Confidence was also built through making assurances to SMEs owners of the confidentiality of any information given by them.

## **CHAPTER TWO**

# LITERATURE REVIEW

This chapter reviewed writings/literature of scholars/researchers on working capital management particularly as it affects the performances of small and medium enterprises. It also discussed the related theories as a basis of working capital management. A conceptual framework was developed to explain the research gap in working capital management. In this chapter both theoretical and empirical aspect of independent variables relating them to the dependent variables as a cause and effect phenomena were explored.

## 2.1 Theoretical Literature Review

Theories as defined by Gill and Johnson (2002) cited in Mark Saunders, Philip Lewis and Adrian Thornhill (2009) are a formulation regarding the cause and effect relationships between two or more variables which may or may not have been tested. Sutton and Staw (1995), Whetten (1989) in Saunders *et al.*, (2009) contends that if the presence of theory is to be guaranteed, the researcher must ensure that what is passing as good theory include a plausible, coherent explanation for why relationship should be expected in the data. Sharp et al (2002) in Saunders *et al.*, (2009) posits that there exist two major reasons for reviewing literature. The first one is that the preliminary search helps to generate and refine research ideas and the second often referred to as critical review or critical literature review is part of the research project.

Project assessment criteria, Gill and Johnson (2002) in Mark Saunders et al., (2009) averred, usually require one to demonstrate awareness of the current state of knowledge in subject, its limitations, and how the research fits in this wider context for, in the words of Jankowicz (2005), there is little point in trying to reinventing the wheel, the work that you do is not done in vacuum, but builds on the ideas of other people who have studied the field before you. This requires you describe what has been published, and to marshal the information in a relevant and critical way. In this study three theories which relates

to the working capital as identified by some Scholars/Researchers was discussed. Adamu, Onwe and Caroline (2008) and Rehn (2012) identified Separation Dimension and Risk-Trade off as the working capital management theories.

#### 2.2 The Risk – Trade off Theory (Myers 1984)

Working capital decisions provide a classic example of the risk-return nature of financial decision making. Increasing a firm's net working capital, current assets less current liabilities, reduces the risk of a firm not being able to pay its bills on time. This at the same time reduces the overall profitability of the firm. Working capital management involves the risk-return trade-off: not taking additional risk unless compensated with additional returns Nwidobie (2012). This theory is in line with independent variables one and three (cash and accounts payable) since lack of meeting financial obligation on the part of firms threaten their relationship with creditor and paying off all creditors will affect the cash position negatively as it tends to reduce profit. Therefore managers have to strike a balance between these two positions as implied by Nwidobie (2012).

Adamu, Onwe and Caroline (2008) averred that, all the decisions of the financial manager are assumed to be geared towards the maximization of shareholders wealth, and working capital decisions are no exception. Accordingly, they stated, risk return trade-off characterizes each of the working capital decision and that, there are two types of risks inherent in working capital management (WMC), namely: liquidity risk and risk of opportunity loss. Liquidity risk is the non-availability of cash to pay a liability that fall due. It may happen only on certain days. Even so they averred, it can cause not only a loss of reputation but also make the work condition unfavorable for getting the best terms on transaction with the trade creditors.

Deloof (2003) in Malik, Waseem, and Kifayat, (2012) averred that, Working capital management is an important factor of financial management. Firms may have optimal level of inventory. Large inventory and free trade credit policy as he observed, make it

possible to increase sales volume. Moreover large inventory stock reduces the risk of a stock out. Findings of this study show that firms having a large amount of cash invested in working capital also have extensive amounts of short term payables as a source of financing. Moreover delaying payments to suppliers allows a firm to evaluate the superiority of the products bought, and can be an economical and elastic source of financing for the firm. In managing accounts payable, delaying payments to suppliers can be used for flexible and inexpensive source of financing a firm, but late payments can also be very costly if the firm is offered discount for early payment.

There exists many theories about trade credit, and many researchers have been made to show if theories are right. For example Petersen and Rajan (1997) in Lakshan (2009) found that firms use trade credit more when credit from financial institutions is not available. Investments in customer credit in the form of accounts receivables and inventories of goods or materials are long-term resource commitments. Minimization of these investments relative to the level and pattern of a firm's operation is crucial in the total management of operating funds. The key to a successful management of customers credit and inventories according to Helfert (2003) cited in Nwidobie (2012) is a clear understanding of the economies of trade-offs involved in it. Credit terms are a function of the competitive environment as well as of a careful assessment of the nature and credit worthiness of the customers.

Involved in the above, Nwidobie (2012) averred, is the decision on whether extended credit terms, and the resulting rise in receivables outstanding are compensated for by the contribution from any incremental sales gained. Similarly, extending normal credit to marginal customers need to be carefully assessed in terms of risk of delayed payments or default, compared with contribution from sales gained. To forestall adverse effects of credit on firm operators, working capital efficiency require constant updating of credit performance, and developing sound criteria for credit extension. Efficiency in credit

management ensures that a firm is able to pay its bills on time and carry sufficient stocks McMenamm (1999) cited in Nwidobie (2012).

The other risk involved in WCM Adamu, Onwe and Caroline (2008) pointed out, is the risk of opportunity loss, that is, the risk of having two little inventory to maintain production and sales or the risk of not granting adequate credit for realizing the achievable level of sales. In other words, it is the risk of not being able to produce more or sell more or both and, therefore, not being able to earn the potential profit, because there were not enough funds to support higher inventory and book debts. Nwidobie (2012) stated that, Investment in inventory is a function of the cost of holding such inventory, storage, obsolescence, opportunity cost of investments in inventory, rate of return on other equivalent-risk investment opportunities. He further observed that the higher the cost of holding inventory, the lower will be the level of inventory a firm will hold and that, discounts on bulk purchases also determine the amount of inventory held in a firm. Benefits of holding inventory are reduction in stock-outs for production and sales with its attendant costs.

The components of working capital a firm invests in and its level of investments is a function of firm's operating factors. Investment in accounts receivable, is determined by the firm's credit policy. The longer the credit period given to a customer, the higher will be its investments in accounts receivables Brealey and Myers (2006). Brealey and Myers (2006) further pointed out that, to forestall adverse effects of credit on firm operators, working capital efficiency require constant updating of credit performance, and developing sound criteria for credit terms deliberately, making interest pay off more favorable; cautioning of the risk of affecting the company's credit standing if delays beyond the credit terms granted, become habitual. Sound management of suppliers' credit, thus requires current up-to-date information on accounts and aging of payables to ensure proper payments.

Nwidobie (2012) averred that, Working capital components are controllable by firm management. Empirical studies reveal that investments in firm's working capital have attendant costs and benefits. Firms reduce investments in inventories of raw materials to accumulate cash, with the risk of running out of inventories and production halt. Reduction in the amount tied up in receivables, by reducing credit to customers result in their patronizing the firm's competitors. Cost of firm's investments in receivables is the interest that would have been earned if customers had paid up quickly or interest paid on finance borrowed to acquire the current assets. The firm also forgoes interest of investing such in marketable securities.

The cost of holding inventory he further stated is the storage, insurance costs, and risks of spoilage, obsolescence and the opportunity of cost of capital. These costs encourage firms to hold current assets to a minimum. Carrying costs discourages large investments in inventories; and low level of inventories make it more likely that the firm's will face shortage costs. Running out of inventory will result in production shut down. Holding a small finished goods inventory will result in inability of the firm fulfilling orders. Holding little cash will require the firm selling securities to meet up its cash, and incurring capital market trading costs. Minimization of accounts receivables, restrict credit sales and loss of customers. These according to Brealey *et al.*, (2006) suggest the need for striking a balance between the cost and benefits of current assets; finding the level of current assets that minimizes the sum of carrying costs and shortage costs.

Findings by Lazaridis and Tryfonidis (2006) from their study of firms listed on the Athens Stock Exchange between 2001 and 2006, showed a statistically strong relationship between profitability and behavior in a working capital component: cash conversion cycle. Eljelly (2004) cited in Onwumere, Ibe and Ugbam (2012) observed from his study of 929 companies in Saudi Arabia that the size of working capital variables has significant effect on profitability at the industry level. From their study of 8,872 small to medium size enterprises in Spain from 1996-2002, Garcia- Teruel and

Martnez-Solano (2007) concluded that reduction in inventories and shortening of cash conversion cycle improve corporate profitability. To Mathuva (2009) there exists a significant relationship between account collection period, inventory conversion period and average payment period; and profitability as evidenced from findings of his study of 30 firms listed on the Nairobi Stock Exchange from 1993-2008 countering an earlier conclusion by Kamath (1989) cited in Michael Nwidobie (2012) of the existence of a reverse relationship between cash conversion cycle and profitability.

Findings from the Turkish firms by Samiloglu and Demirgunes (2008) showed that accounts receivables period, inventory period and leverage significantly and negatively affect corporate profitability. Similar conclusions were drawn by Raheman and Nasr (2007) from their study of 94 firms listed on the Karachi Stock Exchange from 1999-2004. Hayajneh and Yassine (2011) concluded that firm size, sales growth and current ratio (working capital components) affect corporate profitability from their study of 53 Jordanian manufacturing firms listed on the Amman Exchange from 2000-2006. Barine (2012) observed that firms are going concerns requiring working capital for its day-to-day operations. Though current, their investments should be considered a long-term commitment to ensure proper planning and commitment of resources, unless the firm is characterized by significant seasonal or cyclical fluctuations. This central importance of working capital to the operational efficiency thus require firm's to put much emphasis on adequate planning, co-ordination and control of its working capital to reduce associated costs and increase revenues.

## 2.3 Fisher Separation Theorem (Fisher 1930)

According to Hochstein (2001) in Erik (2012), the idea of the Fisher separation theorem is 'given perfect and complete capital markets, the production decision (investment) is seen as governed solely by an objective market criterion (maximizing wealth), with no regard to the individuals subjective preferences that enter into the consumption decision'.

What this means, is that companies should avoid confusion between an investment and financing the investment. Fisher's separation theory has to do with working capital because a company should separate how; much it invest in working capital versus how they will finance working capital Rehn (2012). Hochstein (2001) in Rehn (2012) presented the discussion of this theory on the difference between the investment and financing of working capital by defining terms such as gross working capital and net working capital. He also introduced the working capital in the balance sheet, gave an in depth into the financing of working capital and company investment in general. This theory is line with any of the variable as it encompasses investment in accounts receivable, cash, accounts payable, inventory and financial intervention.

#### 2.3.1 Working Capital in the Balance Sheet

The two most important terms when discussing working capital are gross working capital and net working capital. The investment that is needed for receivables inventories and cash is generally called working capital or gross working capital. A certain part of the investment in working capital is financed by short-term financing (current liabilities) – meaning payables, current maturities etc. The difference between the current assets and current liabilities is the net working capital. Net working capital (NWC) indicates how much a company has to invest of its long-term capital to finance its working capital. Net working capital may also be negative, in which case the company has more current liabilities than assets.

According to Fishers separation theorem, gross working capital is the investment and net working capital the financing of the working capital. In reality, though a company has to attend to both these factors when optimizing working capital and maximizing profitability and liquidity (Brealey, Myers & Allen 2006). Strischek (2001) in Rehn (2012) averred that, the efficient management of the balance sheet items can decrease a company's Net Working Capital (NWC). As an example, by more aggressively collecting receivables, a company does not have to rely as much on long-term financing (which may be costly) to finance its operations. Ideally from a lenders point of view the

current liabilities should cover most of the financing for current assets, and the shareholders equity the rest.

The more a company ties its assets in working capital, the more illiquid it is. In other words, the effective management of working capital allows the company to invest in future growth, pay back short-term financing and reduce financing costs. The issue lies in the optimization of the working capital; the company cannot reduce its working capital to a bare minimum without it compromising future growth and sales Erik (2012). A certain level of receivables (giving customers credit) and inventories is needed to satisfy customer needs. An optimal level of working capital could be seen as one where a balance is attained between risk and efficiency (Filbeck & Krueger 2005).

Adamu *et al.*, (2008) averred that, determination of appropriate level of investment in current assets is the first and foremost responsibility of a working capital management even though the amount of investment in any current assets ordinarily varies from day-to-day, the average amount or level over a period of time can be used in determining the fluctuating and permanent investment in current assets. This distinction they further stated is of great importance in devising appropriate financing strategies and that the type of current assets to be held is equally an important decision variable. For instance, the inventory of a dealer in construction equipment, the dealer must decide how many bulldozers to keep in stock as well as whether to stock bulldozer or dump trucks.

From the viewpoint of the financial managers, all the decisions as to particular items add up to an average level of inventory for a given item and these averages, for all items, add up to the total average inventory investment of the firm. Also Adamu *et al.*, (2008) observed that investment in receivables and marketable securities also pose a similar choice. The result is that there are a very large number of alternative levels of investment in each type of current assets. Therefore in principle, current assets investment is a problem of evaluating a large number of mutually exclusive investment opportunities.

#### **2.3.2 Financing Working Capital**

A company's resources are usually invested in capital investments, such as machinery, plants and equipment, and in short-term investments, i.e. working capital. How a company finances these investments depends on the capital structure of the company Erik (2012). A company's net working capital has to be financed in one way or the other. The networking capital therefore represents the excess of current asset over current liabilities and vice versa. If it is the latter case, the WC has to be financed with short term loan in which case cost is increased.

The cost of assets that a company purchases over time is called a company's cumulative capital requirement (Brealey, Myers, & Allen (2006). The cumulative capital requirement usually grows irregularly, having to do with the cyclical nature of most business (year to year or month to month). This capital requirement can be financed with either long-term or short-term financing. In case long-term financing is not enough to cover the capital requirement, the firm must obtain short-term financing for its operations. In case the long-term financing is more than the cumulative capital requirement, the company has a surplus of cash. This determines if the company is short-term borrower or lender (Brealey, Myers & Allen, 2006).

Another important dimension of working capital management is determining the mix of finance for working capital which may be a combination of spontaneous, short-term and long-term sources. Spontaneous sources of financing consist of trade credit and other instance. As the firm makes purchase of raw materials and supplies, trade credit is often made available spontaneously as per trade usage from the firm's suppliers. In addition to trade credit, wages and salaries payables, accrued interest and accrued taxes also provide the firm with valuable source of spontaneous financing. Bills payable, short-term bank loans, inter-corporate loans, commercial papers are the most common examples of short-term sources of working capital finance. Term loans, debenture, equity and retained earning constitute long-term sources of working capital finance.

### 2.3.3 Inter-relatedness, Volatility and Reversibility

Linked to the financing dimension of this theory Adamu *et al.*, (2008) stated are the inter-relatedness, volatility and reversibility characteristic of working capital decision, the financial manager they averred cannot simply decide that the investment in inventory for example, will be so much and stop there. The desired level of inventory is itself, a changing quantity. For example, the desired level for a period when its sales are very high would not be the same desired level for a period when its sales are very low. Furthermore, they point out, no decision regarding inventory and sales could be made without considering the implication for accounts receivables. Moreover, any business decision that results in increased sales and collections for the firm is likely to mean that lower average cash balances will be needed or that a new cash management system will be desirable.

Thus, all the current assets decisions are inter related Adamu *et al.*, (2008) added and aptly illustrated their point by considering some of the units between current assets and current liabilities. If sales increase, purchases must increase to maintain a constant level of inventory. Also growing sales will usually require greater inventory investment and purchases unless the firm purchases on cash terms and increase in purchases will lead to an increase in accounts payable. Thus, an increase in inventory will be financed spontaneously with trade credit. The amount of trade-credit financing will depend on decision regarding payments; inventory decisions are thus linked to trade-credit decisions.

The inventory and accounts receivable they argued commonly provide collateral for loans. Thus, for firms that are unable to obtain unsecured financing, the nature and quality of these current assets affects the availability and terms of short-term financing. The working capital managers thus have to pay attention to the interrelated nature of current assets and current liabilities and take into account major interactions that influence the working capital investment and financing decisions. Another significant feature of the working capital management and which account for the volatility and reversibility Adamu *et al.*, (2008) averred is that the amount of money invested in current assets can change rapidly and so does the financing required. They also demonstrated this point by stating that the level of investment in current assets is influenced by a variety of factors which may be as erratic as labor unrest or flooding of the plant.

Seasonal and cyclical fluctuations in demands are a common cause of rapid changes in investment in current assets and current liabilities, which mean that the cash flow related to these, could be readily reversed. Suppose we have taken a loan of N10.000 at 20% p.a. interest payable quarterly, we will continue to pay N500 per quarter so long as we do not repay N10.000. At any time we choose to repay N10.000, the quarterly cash flow of N500 stops. This type of transaction is described as reversible. The current assets and current liabilities will be treated as reversible in our decision.

# 2.4 Pecking Order Theory

The Pecking Order Theory takes into consideration the information asymmetry which indicates that managers know more about the firm's value than potential investors Myers and Majluf, (1984) in Padachi (2006). The information asymmetry affects the choice between internal and external financing. Based on this concept, the Pecking Order Theory suggests that firms tend to rely on internal source of funds to be financed, and prefer issuing debt to equity if external financing is required Myers and Majluf, (1984) in Kessevin (2006). The theory is line with variables two; three, four and five since it involves sourcing of fund either externally or internally.

According to Nakamura *et al.*, (2007), that order is based on the consideration that "resources generated internally do not have transaction costs and on the fact that issuing new bonds tend to sign a positive information about the company, while issuing new stocks tend, on the contrary, to sign a negative information". The information

asymmetry decreases the price of new bonds to be issued and, consequently, increases the transaction costs in the capital markets derived from lack of cash (Myers and Majluf, 1984). From this point of view, companies do not pursue a specific objective for the debt level and they use external funds only when internal funds are not enough (Graham and Harvey, 2001).

External source of funds are less desirable because the information asymmetry between managers and investors implies that external source of funds are underpriced in relation to the asymmetry level (Myers and Majluf, 1984). This theory, according to Chen (2004), explain the company's choice to keep an amount of reserve in cash or other forms of financial slacks to avoid the problem of lack of resources and the need of external sources. From this point of view, cash is similar to "negative debt", getting external resources when there is lack of cash and paying debt when there is excess of cash. Thus, the company chooses a more passive cash management policy, waiting to liquidate an existent debt in any time with no cost Koshio, (2005).

Financial slack is a result of large holdings cash or marketable securities, or the ability to issue default-risk free debt, beyond what is needed to meet current operating and debt servicing needs (Myers and Majluf, 1984; Brealey, Myers and Allen, 2008; McMahon, 2006). To have a fast access to debt market, companies chooses a conservative financing, in a way that potential investors see them as a safe investment. According McMahon (2006), financial slack, in adequate levels, allow the company to pursue positive net present value investment opportunities without issuing risky securities. The conventional rationale for holding financial slack - cash, liquid assets, or unused borrowing power – is that the companies do not want to have to issue stock on short notice in order to pursue a valuable investment opportunity (Myers and Majluf, 1984. Brealey, Myers and Allen 2008) suggested that the Pecking Order Theory explains the reason why more profitable companies usually ask less for borrowing money – not

because they don't have lower levels of debt targets but because they don't need external source of funds.

## 2.5 The Economic Order Quantity (EOQ) Model

The firm's enhanced flexibility is the main advantage of large inventory. The downside of large inventory comprises several aspects. Besides the apparent cost of handling and storage, there is also the relative cost of Capital tie-up and the threat of obsolescence. In this regard, the decision maker's task is to strike a balance between the above mentioned benefits and costs of inventory in order to find the optimal inventory size Mensah (2011).

The EOQ model is a simple concept used in determining a company's optimal inventory level and order size is introduced. An understanding of the EOQ model will therefore facilitate the comprehension of the cash management model as well as the basic issue of working capital management Mensah (2011). Van Horne, (1995) cited in Mensah (2011) argued that, the EOQ model can be applied to all kinds of inventory, i.e. raw materials; work in progress as well as finished goods and that, in order to ensure the applicability of the EOQ model, several assumptions must be taken into consideration. The usage of the stored product is assumed to be steady, ordering costs are assumed to be constant, for any order size and the carrying costs of inventory (storage, handling per unit of inventory, per unit of time).

Mensah (2011) averred that, the EOQ model is a very simple approach and it certainly has strict limitations as many more related costs could be imagined, but it exemplifies the tradeoff between the risk of running out of inventory and the profits earned by keeping the level of inventory low and thus minimizing its costs and therefore, the basics of the EOQ model can be applied to all current assets.

# 2.6 Financial Performance of Small and Medium Scale Enterprises

In order to understand the financial performance of SMEs it is pertinent to understand what is meant by financial Management and working capital management as put forward by scholar/researchers which as defined by Feletiliki (2011), FM is the study of fund management and the directing of these funds in order to achieve its particular objective. The particular objective of financial management (FM) is to maximize returns that associate with minimizing financial risks simultaneously. The business dictionary defined financial management as the planning, directing, monitoring, organizing and controlling of resources of an organization.

Ogilvie (1999) in Kehinde and Abiola (2005) averred that financial management is the process of planning, directing and coordinating the activities involve in the sourcing and application of funds by individuals, groups or business concern. Among these activities as identified by Kehinde and Abiola (2005), include financial decisions like the best way to finance a firm so as to ensure maximum returns to its owners, investment decisions such as the selection of most profitable investment portfolio that would reduce risk to the barest minimum the risk of finance and ensure maximum return to the business, deciding dividend policy of the firm and working capital management including cash, debtors, creditors, stock, short-term loans and accruals to ensure financial control.

Working capital management which is one of the key functions of financial management is particularly important to firms of all size. Mustapha (2011) observed that working capital management is one of the most imperative and crucial aspect of short-term financial matters of an organization. He further added that firms of all size demonstrate sensitivity of their profit performance to efficient management of their working capital. Lazaridis and Tryfonidis (2006),Filbeck and Krueger (2005) pointed out that, efficient working capital management tries to maintain a balance between liquidity and profitability within the realm of business operations and that the impact of efficiency of working capital management on corporate profitability have been a central focus of most empirical research for quite a number of years.

There has been some work previously done on the relationship between working capital and its influence on the profitability of companies as observed by Mustapha Afeef (2011) who further stated that many researchers have recognized the effect of a sensible management of corporate performance.

For instance, Mustapha (2011) averred that, Shin and Soenan (1998) were probably among the pioneers to relate efficiency of working capital management and corporate profitability. In their research efficiency of working capital management and corporate profitability, they analyzed whether the cash conversion cycle (using net trade cycle), had some potential impact on the profitability of a sample of firms listed on the U.S. stock exchange during the period 1974-1994. They found that a reasonable reduction in the Cash Conversion Cycle could lead to an increase in the firms Profitability.

# 2.7 Theories of Entrepreneurship

An entrepreneur as described by the small Business Association puts together a business and accepts the associated risk to make a profit. While this definition serves as a simple but accurate description of entrepreneurs, it fails to explain the phenomena of entrepreneurship itself. A number of theories exist, but all of them fall into one of five main categories.

# 2.7.1 Economic theories

Economic entrepreneurship theories date back to the first half of the 1700s with the work of Richard Cantillon, who introduced the idea of entrepreneur as 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 systems, ignoring the unique nature of entrepreneurial activity and downplaying the diverse contexts in which entrepreneurship occurs.

## 2.7.2 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 entrepreneur adds to the mix operate as resource that a business cannot replace.

## 2.7.3 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 most entrepreneurs possess trait. A final approach, though unsupported by research, suggests personality traits ranging from creativity and resilience to optimism drive entrepreneurial behavior.

### 2.7.4 Sociological/Anthropological Theories

The sociological theory centers its explanation for entrepreneurship on the various social contexts that enable the opportunities entrepreneurs leverage. Paul D. Reynolds, a George Washington University research professor, singles out four contexts: social networks, a desire for a meaningful life, ethnic identification and social-political

environment factors. The anthropological model approaches the question of entrepreneurship by placing it within the context of culture and examining how cultural forces, such as social attitudes, shape both the perception of entrepreneurship and the behaviors of entrepreneurs.

#### 2.7.5 Opportunity-Based Theory

Prolific management author, Peter Drucker put forward an opportunity-base theory. Drucker contends that entrepreneurs excel at seeing and taking advantage of possibilities created by social, technological, and cultural changes. For example, where a business that caters to senior citizens might view a sudden influx of younger residents to a neighborhood as a potential death stroke, an entrepreneur might see it as a chance to open a new club.

#### 2.8 The Conceptual Framework

Conceptual framework as explained by Kombo and Tromp (2009) is an abstract or a general idea inferred or derived from specific instances. In his contribution to the discourse on concept, Symth (2004) cited in Mark Saunders et al (2009) advanced that, concept unlike theory; does not need to be discussed to be understood. Kombo and Tromp (2009) thus said, a conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. Symth (2004) in Saunders *et al.*, (2009) therefore elaborated concept to mean a research tool intended to assist a researcher to develop awareness and understanding of the situation under scrutiny and to communicate it. He further stated that when clearly articulated, a conceptual framework has a potential usefulness as a tool to assist a researcher to make meaning of subsequent findings. He then concluded by saying it forms part of the agenda for negotiation and it explains the possible connection between the variables.

A conceptual framework for this study indicated the effects of working capital management on the financial performance of small and medium enterprises in Nigeria as

shown in figure 2.1 below. The figure visualizes that working capital management comprising of cash management, inventory management, accounts payable management and accounts receivable management and intervening variable such as Government policies and Financial Institutions activities all influences on performances of SMEs and measured by volume of profit, firm size, turnover, return on equity and return on assets which are the dependent variables. An efficient and effective working capital management will produce the benefit of avoiding the followings: - carrying cost of inventory, stock outs, inability to meet customer's obligations and unnecessary bad debts.



# Moderating Variable (specific objective)

**Figure: 2.1: Conceptual Framework** 

#### 2.8.1 Cash Management

Cash means liquid assets that a business owns. It includes cheques, money orders and bank drafts. Management of cash therefore means efficient collection and disbursement of cash and any temporary investment of cash. Maintaining optimum level of cash in an organization is called cash management Parang (2009). Parang (2009) further averred that, the objective of cash management is to meet cash disbursement as per payment schedule, meet cash collection as per schedule and minimize funds locked up as cash balance by maintaining optimum cash balance while, motives of holding cash are transaction, speculative and precautionary motives.

In his own submission, Pandey (2004) in Nyabwanga *et al.*, (2012) averred that, Cash Management is the process of planning and controlling cash flows into and out of the business, cash flows within the business, and cash balances held by a business at a point in time. Abel (2008) that, argues cash is crucial in every business in terms of enhancing its survival and prosperity. The term cash refers to the most liquid of assets, including demand deposits, money market accounts and currency holdings. The key elements of cash management are cash forecasting, balances management, administration of cash receipts and disbursements, and internal control (i.e. bank reconciliation) Gilman, (2009).

Good cash management can have a major impact on overall working capital management. It is objectively used to manage and determine the optimal level of cash required for the business operation and invested in marketable securities, which is suitable for the nature of the business operation cycle Gitman, (2009). Zietlow *et al.*, (2007) and Gitman (2009) explain that "cash management" involves planning for cash inflows and outflows, and determining the optimal balances of cash and near-cash accounts such as marketable securities. Marketable securities are short-term interest-earning financial claims that can be quickly converted to cash without any significant loss of value.

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Efficient cash management involves the determination of the optimal cash to hold by considering the trade-off between the opportunity cost of holding too much cash and the trading cost of holding too little (Ross et al., 2008) and as stressed by Atrill (2006), there is need for careful planning and monitoring of cash flows over time so as to determine the optimal cash to hold. A study by Kwame (2007) established that the setting up of a cash balance policy ensures prudent cash budgeting and investment of surplus cash. This finding agree with the findings by Kotut (2003) in Nyabwanga *et al.*, (2012) 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.

A Popular measure of WCM is the cash conversion cycle, (CCC) i.e. the time lag between the expenditure for the purchases of raw materials and the collection of sales of finished goods. The longer this time lag, the larger the investment in working capital. A longer cash conversion cycle increases profitability because it leads to higher sales. However, corporate profitability also decreases with cash conversion cycle, if the costs of higher investment in working capital rise faster than the benefits of holding more inventories and/or granting more trade credit to customers Deloof, (2000) cited in Lakshan (2009).

The flow of cash in business firm may be described as a circular movement as it changes its form from one item to another and then return its original form. This goes on a continuum basis in a firm as shown in figure 4.2 below. For a manufacturing firm it start with cash to purchase, manufacturing, sales, receivable, and collection then, back to cash. For a trading business, it starts from cash, purchase, sales, receivables, collection and then, back to cash.



Figure 2.2 Cash Conversion Cycle: Source: Adopted from bhm 645-noun

## 2.8.2 Inventory Management

Inventory means Tangible property which is held for sale, in the ordinary course of business or, in the process of production (WIP) for sale or for consumption in the production of goods and services which will be used for sale in the ordinary course of business, while its management refers to an optimum investment in inventories striking a balance between adequate stock and that too by keeping investment at minimum level (Optimum level of inventory) Parang N.D. (2009). The objective of Inventory management is to turn over inventory as quickly as possible without losing sales from stock-outs. It is an important aspect of working capital management because inventories themselves do not earn any revenue. Holding either too little or too much inventory incurs costs. Inventory is generally made up of three elements such as raw materials, work-in-progress (WIP) and finished goods Arnold, (2008; Cinnamon and Gitman, 2009).

Material requirement planning (MRP) and perpetual inventory control (PIC) system are key techniques of inventory management. Most of the companies take cash discounts, but their annual cost of working capital funds is high that ranges between 15- 20% Pandy and Perera, (1997) in Lakshan (2009). Firms may have an optimal level of working capital that maximizes their value. On the one hand, large inventory and a generous trade credit policy may lead to high sales. Larger inventory reduces the risk of a stock-out. Trade credit may stimulate sales because it allows customers to assess product quality before paying Long, Malitz and Ravid,(1993) in Limin Lai (2012); Deloof and Jegers, (1996) in B. Bahagiand B- Khamrui (2012). Suppliers may have significant cost advantages over financial institutions in providing credit to their customers; it can also be an inexpensive source of credit for customers Petersen and Rajan, (1997) in Lakshan (2009).

Efficient inventory management practices should answer the questions: how much should be ordered? And when should it be ordered? These questions relate to the problem of determining the economic order quantity and the problem can be answered by the analysis of the costs of maintaining certain levels of inventory as there are costs involved in holding too much stock and there are also costs involved in holding too little, hence the need to put in place an effective stock management system to ensure reliable sales forecasts to be used in stock ordering purposes Atrill, (2006). Ross et al. (2008), observed that, the Economic Order Quantity model as one of the approaches of determining the optimal inventory level takes into account the inventory carrying costs, inventory shortage costs and total costs helps in the determination of the appropriate inventory levels to hold. They further stated that, maintaining optimal inventory levels reduces the cost of possible interruptions in the production process or of loss of business due to the scarcity of products, reduces supply costs and protects against price fluctuations. Singh (2008) observed that the level of Inventory had a profound influence on the management of working capital and stressed on the need to prudently handle the Inventory.

Deloof (2003) cited in Kulkanya (2012) observed that the inventory conversion period has a negative effect on a business's performance. For instance, shortening the inventory conversion period could increase stock out costs of inventory which results in losing sales opportunities and leads to poor performance. Managers of firms should therefore keep their inventory to an optimum level since mismanagement of inventory will lead to tying up excess capital at the expense of profitable operations Lazaridis and Dimitrios, (2005). Investment in inventory is a function of the cost of holding such inventory, storage, obsolescence, opportunities. The higher the cost of holding inventory, the lower will be the level of inventory a firm will hold. Discounts on bulk purchases also determine the amount of inventory held in a firm. Benefits of holding inventory are reduction in stock-outs for production and sales with its attendant costs Nwidobie (2012).

Pandey (2005) noted that excessive working capital results in unnecessary accumulation of inventories leading to inventory mishandling, wastage and theft; higher incidence of bad debts; complacency of management inefficiency; increasing speculative profit from accumulated inventories and consequent loss of profits. Inadequate working capital, he added, stagnate growth from investment capital inadequacies, increased operating inefficiencies; increased inefficiencies in the utilization of fixed assets, making operating plans implementation difficult reducing profitability.

#### 2.8.3 Accounts Receivable Management

Sales on credit are almost inevitable necessity in the business world today. No business can exist without selling the products on credit. According to Joshi, (2000) in Feletiliki (2011), accounts receivables consist of the credit a business grants its customers when selling goods or services which take the form of either trade credit which the company extends to other companies or consumer credit, which the company extends to its ultimate consumers who have not yet made payment and so the effectiveness of

company's credit policies can have a significant impact on its total performance. They further pointed out the main objective of its management is minimize the time-lapse between completion of sales and receipts of payment and also to increase profit by expanding sales to attract new customers and retain old ones. By constantly increasing its sales and profit, they further stated, business carves out a bigger niche in the market and elevates its status among competitors. Machiraju (2005) also argue that receivables arise out of delivery of goods or rendering of services on credit. Receivables represent claims against others for future receipt of money, goods or services whose value depends upon the volume of credit sales and the policy for collecting such credits.

Deloof (2003) in Kulkanya (2012) observed that Corporations can have a best possible amount of working capital that leads to their value maximization. He further added that on the other hand, maintaining a huge inventory, readily granting credit to customers, and being willing to wait a longer time to receive payment may result in higher sales. In determining an optimal credit extension policy, Meyer *et al* (1992) cited in Feletiliki (2012) observe that a company's financial managers must consider a number of major controllable variables that can be used to alter the level of receivables which include credit standards, credit terms and collection effort. Credit standards are the criteria a company uses to screen applicants in order to determine which of its customers should be offered credit and how much. The process of setting credit standards allows the firms to exercise some degree of control over the "quality" of accounts accepted. The quality of credit extended to customers is a multidimensional concept involving the time a customer takes to repay credit obligation, given that it is repaid and the probability that a customer will fail to repay the credit extended to them.

In establishing credit standards, Van Horn (2000) cited in Feletiliki (2011), suggests a means of categorizing customers for the purpose of approving or refusing credit to them. This will enable the firm to avoid investigating the credit worthiness of customers who fall into the refused category. As a basis for credit extension to those who qualify, he

suggests the comparison between the expected cost of credit extension and expected profit to be forgone in the absence of credit.

A business should have a rational for collection of receivables. Collection policy can be tight policy which ensures better collection, fewer instances of bad debt but high collection costs. It may, however, antagonize the customers and some of them may switch to competitors. Meyer et al (1992) and Joshi (2000) cited in Feletiliki (2011) assert that, a liberal collection policy will have opposite effect and that the collection effort consist of the methods a business employs in attempting to collect payment of past-due accounts. Some commonly used methods they further stated include sending notice or letters informing the customers of the past-due status of the account and requesting payment, telephones and/or visiting the customers in an effort to obtain payment, employing a collection agency and taking legal action against the customers.

The literature related to credit policy is quite extensive. Srinivasan (1999) in Feletiliki (2011) argued that it is essential for companies to spell out clearly and precisely the credit policy directions in writing in the general interest of the organization. The credit policy will be an adjunct to the company's marketing policy and should serve to reinforce such a policy. The decision made out of these options is based on the lowest cost. This technique is appropriate for a firm which relies to a larger extent on information obtained from experience with its own customers. One significant revelation by Western and Copeland (1989) cited in Feletiliki (2011) in the management of accounts receivable is the consequence of persistent inflation on accounts receivable. In inflationary period, when interest rates are high and financing requirement becomes large, buyers may delay their payment beyond the normal credit period. These in turn cause the selling firm's investment in account receivables to rise, increasing their financing requirement. The outcome of such a situation is the important role credit and collection policies assume in the broad spectrum of receivable management.

Pandey (2004) cited in Anita (2012) and Ross et al (2008) averred that, provision of trade credit is normally used by businesses as a marketing strategy to expand or maintain sales and that efficient receivables management augmented by a shortened creditor's collection period, low levels of bad debts and a sound credit policy often improves the businesses' ability to attract new customers and accordingly increase financial performance hence the need for a sound credit policy that will ensure that SSEs' value is optimized. Costs of cash discounts, losses of bad debts, costs of managing credit and credit collections constitute the carrying costs associated with granting a credit which increase when the amount of receivables granted are increased and lost sales resulting from not granting credit constitute the opportunity cost which decrease when the amounts of receivables are increased

Firms that are efficient in receivables management should determine their optimal credit which minimizes the total costs of granting credit Ross *et al.*, (2008). As observed by Michalski (2007) in his study, an increase in the level of accounts receivables in a firm increases receivables and both lead to a decrease in the value of the firm.

## 2.8.4 Accounts Payable Management

Accounts payable are one of the major sources of unsecured short-term financing and so utilizing the value of relationship with payee is a sound objective that should be highlighted as important as having the optimal level of inventories as a consequence, strong alliance between company and its suppliers strategically improve production lines and strengthen credit record for future expansion Gitman (2009); Hill & Sartoris, (1992) cited in Feletiliki (2011). Gitman (2009) and Birt *et al.*, (2011) and Copeland (1989) cited in Feletiliki (2011) averred that Accounts Payable Management objective is to pay creditors as slowly as possible without damaging its credit rating. Accounts Payable and accruals are the two major spontaneous liability sources of short-term financing for a typical firm and major unsecured short-term financing for business. They result from transactions in which merchandise (inventory) is purchased.

The suppliers might give credit terms together with allowing discount to the purchaser and so, firms must have policies concerning those who authorize purchasing, and how purchasing is geared to demand which can lead to proper management of accounts payable. Belt (1979) cited in Pieterson (2012) observed that accounts payable are more deferrable in that the average payment can be extended by managerial decision. However, this deferability is limited to an unknown extent; eventually, supplier will refuse to seal firms that excessively delay payment.

#### 2.8.5 Financial Intervention

For a business concern to keep on going, it needs fund to operate. The importance of finance for a business venture therefore, need not be overemphasized, just as Abel (2008) argues that cash is crucial in any business in terms of survival and prosperity. If a business is starved of funds, it can lead to serious problem and eventual collapse. The importance of the financial institutions and other fund providers then come into play in this matter. Amit Bouri *et al.*, (2011) assert that, access to finance is necessary to create an economic environment that enables firms to grow and prosper. Increased access to finance for SMEs they observed, can improve economic conditions in developing countries by fostering innovation, macro-economic resilience, and GDP growth.

Many studies indicate finance as one of the driving factors of an enabling economic environment. For instance the WB and the IFC (2011) rank economies according to their ease of doing business; in this framework, the ability for business to get credit is an The important criterion. Global Entrepreneurship Monitor GEM (2010)Entrepreneurship Framework Condition also highlights entrepreneurial finance, defined as the availability of financial resources for SMEs in the form of debt and equity, as one of the key factors for stimulating and supporting entrepreneurial activity. Thorsten Beck (2011) averred that access to finance helps all firms to grow and prosper. He also observed that, the Investment Climate Surveys of the World Bank show that access to finance improves firm performance. It not only facilitates market entry, growth of companies and risk reduction but also promotes innovation and entrepreneurial activity. Klepper *et al.*, (2011) also stated that, firms with greater access to capital are more able to exploit growth and investment opportunities.

There are various traditional sources of financing for SMEs ranging from bank loans, bank overdrafts, own funds savings, loans, from family or friends and equity funding. Stanley (2013) observed that globally commercial banks which remain the biggest source of funds to SMEs have in most cases shield away because of perceived risks and uncertainties. Citing Nigeria as example, he stated that the fragile economic environment and absence of requisite infrastructure has rendered SME practice costly and inefficient, thereby worsening their credit competitiveness stating further that occasioned by the unfriendly interest charged by financial institutions, among other factors, Nigerian SMEs have moved to explore financing options that will enable them stay in business, in the absence of bank credit.

Terungwa (2012) averred that, firms depend on a variety of sourcing of financing both internal and external. According to Valverde et al. (2005) bank credit play a crucial role in providing external financing to SMEs. But in Nigeria context, this crucial source of finance for SMEs is apparently non-functional (Kadri, 2012). This is evident in the ratio of loans to SMEs to commercial banks<sup>\*\*</sup> total credit, which shows that a meager 0.16% of commercial banks<sup>\*\*</sup> total credit was granted to SMEs in the last quarter of 2011 (CBN, 2011).

# 2.9 Sources of Finance

Today, in many countries the world over, there are various sources through which firms seek for financial intervention either by way of borrowing or savings from earnings. According to EFInA (2012) survey, there are currently 21 DMBs in Nigeria, with varying strategies and focus. DMB lending in Nigeria currently amounts to approximately 35% of GDP of which 5% applies to the MSME sector equaling about N

468 billion (USD 3 billion) GEM (2010). In Nigeria (and elsewhere globally) DMB typically classify MSMEs as part of the retail segment and are therefore viewed as inherently risky given that they lack formal financial histories and often do not have the required collateral. Although it is inevitable that all banks will have some exposure to small businesses, not all explicitly provide targeted services to meet the special needs of the different sub-segments. In addition to bank loan facilities and government grants other sources of funds which SMEs can resort include;- Bootstrapping, Microfinance Banks and Equipment Leasing.

## 2.10 Empirical Literature Review

The empirical literature review deals with the search for material on a subject matter under study, as defined by Zikmund (2000)cited in Mark Saunders *et a.,l* (2009), Empirical literature review is a direct search of published works, including periodicals, and books that discusses theory and presents empirical results that are relevant to the topic at hand. This also means gathering of all relevant information from the different sources, analyze and comment on the findings just as in the words of Jankowicz (2005) "there is little point in reinventing the wheel" the work that you do is not done in a vacuum, but ideas of other people who have studied the field before you. This requires you describe what has been published, and to marshal the information in a relevant and critical way".

# 2.10.1 Effects of Cash Management on Performance of Small and Medium Enterprises (SMEs).

In a study on retail firms by Moss and Stine (1993) "Cash conversion cycle and firm size: Managerial finance, cited in Bhuto, Naiz, Ghulam, Mujeeb and Shah (2011) in their study 'Relationship of cash conversion cycle with firm Size" showed that the firm size has a significant negative relationship with CCC i.e. larger the size of the firm shorter the CCC and vice versa. They also found a significant positive relationship length of the CCC and current and quick ratios. A significant negative relationship

between the profitability and length of CCC was found in empirical studies conducted to examine the liquidity profitability tradeoff (Lazaridis and Tryfondis 2006; Uyar 2009; Sen and Oruc, 2009). Another study on 22 thousand public limited firms by Hutchison et al. (2007) showed a positive relation between shorter CCC and higher profitability. The Cash Conversion Cycle was also found to be positively linked with the Return on Assets ratio. A study conducted by Khan, Hijazi, and Kamal (2006) on Pakistani listed companies found that firm's profitability is negatively related to day's inventory outstanding, day's payable outstanding and CCC. Shah and Sana (2006) found a significant negative relation between CCC and gross. This finding implies that if cash conversion cycle is reduced profit will also increased as found out by (Awolabi & Alayemi 2012).

Lazaridis and Tryfonidis (2006) investigated the "Relationship of Corporate Profitability and Working Capital Management" for firms listed at Athens Stock Exchange. They reported that there is statistically significant relationship between profitability measured by gross operating profit and the Cash Conversion Cycle. Furthermore, Managers can create profit by correctly handling the individual components of working capital to an optimal level. Raheman, Afza, Qayyum and Bodla (2010) observed that the cash conversion cycle and net trade cycle offer easy and useful way of checking working capital management efficiency. For value creation of shareholders, firms must try to keep these numbers of days to minimum level.

Pedro and Pedro (2007) were probably the first to make an experimental analysis about the Effects of WCM on the Profitability of Small and Medium Enterprises or SMEs. In their research, "Effects of Working Capital Management on SME Profitability", they took a sample of 8,872 small and medium-sized Spanish firms for the period 1996-2002 for the purpose of constructing an empirical relationship between WCM and profitability. Their correlation analyses displayed a very significant negative relationship between the Return on Assets and the number of day's accounts receivable, number of day's inventory and the number of days accounts payable. The correlation between the cash conversion cycle and the profitability variable was negative as well as statistically significant. The authors, thus, held that shortening the (CCC) would lead to an increase in profitability.

Uyar (2009) carried out a "Research on the relationship between cash conversion cycle with firm size and profitability" of 166 firms listed on the Istanbul Stock Exchange (ISE) for the year 2007. Firm size measured by total assets and sales revenue, and profitability is measured by return on assets and return on equity. The paper showed that Retail/wholesale industry has shorter CCC than manufacturing industries. Another importance of the study is that the textile industry has the longest CCC. There is a significant negative correlation between the length of CCC and the firm size. Hence, smaller firms have longer CCC. Lastly, significant negative correlation between the length of CCC and the profitability was found.

Raheman and Nasr (2007) studied the ''Effect of different variables of working capital management'' including average collection period, inventory turnover in days, average payment period, cash conversion cycle, and current ratio on the net operating profitability of Pakistani firms. They selected a sample of 94 Pakistani firms listed on Karachi Stock Exchange for a period of six years from 1999 - 2004 and found a strong negative relationship between variables of working capital management and profitability of the firm. They found that as the cash conversion cycle increases, it leads to decreasing profitability of the firm and managers can create positive value for the shareholders by reducing the cash conversion cycle to a possible minimum level.

Karaduman *et al.*, (2011) studied the relationship of WCM and profitability by taking data of five years of non financial companies listed at Istanbul Stock Exchange. A balanced panel sample of 127 companies was analyzed which gives total of 635 observations. CCC was used as a measure of WCM and for profitability ROA acted as a

measure. The result showed that efficient management of CCC will give greater returns. Lyroudi and Lazaridis, (2000) cited in Shahidi (2011) made a unique study of the Greek Food Industry to determine the relationship between the Cash Conversion Cycle and the traditional liquidity indicators, i.e., the Current Ratio and the Quick Ratio. The results portrayed a significant positive association between the modern and traditional liquidity signifiers. The Cash Conversion Cycle was also found to be positively linked with the Return on Assets ratio.

Karaduman *et al.* (2011) investigated the relationship between working capital management and company's profitability in Estanbol Stock Exchange for a period of 2005-2009. They use return of assets as criterion for profitability evaluating and cash conversion cycle for evaluation of working capital management. Results show that decrease in cash cycle has positive effect on return of assets. Mohammad and Noriza (2010) used Bloomberg's database of 172 listed companies randomly selected from Bursa Malaysia main board for five year period from 2003 to 2007. Applying correlations and multiple regression analysis, they found that current assets to total asset ratio shows positive significant relationship with Tobin Q, ROA and ROI. Cash conversion cycle, current asset to current liabilities ratio and current liabilities to total assets ratio illustrate negative significant relations with Tobin Q, ROA and ROIC.

Ganesan (2007) selected telecommunication equipment industry to study the effectiveness of working capital management. The sample included for his research paper included 443 annual financial statements of 349 telecommunication equipment companies covering the period 2001 to 2007. The statistical tests used included correlation, regression analyses and Analysis of variance (ANOVA). The results showed that days of the working capital negatively affects the profitability of these firms but in reality it does not affect the transportability of firms in telecommunication equipment industry. Raheman and Nasr (2007) performed an analysis on 94 firms listed at KSE, based on a time span of 6 years from 1999 to 2004. They have taken different working

capital ratios such as Net Operating Profitability, Debt ratio, current assets to total assets ratio, cash conversion cycle, average collection period, inventory turnover, average payment period, current ratio and natural logarithm of sales. They suggested that profitability and working capital management are negatively related to each other.

Afza and Nazir (2008) reviewed their pervious study to estimate the impact of different types of working capital management policies on financial performance of firms in different sectors. For this they used a sample of 263 non-financial firms belonging to 17 different sectors listed at KSE from1998 to 2003. The secondary data was collected from the financial reports of selected companies and also from the publications of State Bank of Pakistan. There are two types of working capital management policies namely aggressive working capital management policy and conservative working capital management policy.

Owolabi and Alayemi (2012) investigated the ''Effect of financial strategy on liquidity of which Nestle Nigeria Plc.,was selected for a period of five years from 2004-2009.The effect of different variables of working capital management including current ratio and collection days on Gross profit movement co-efficient was used for analysis. The results showed that there is a negative correlation (-0.67) between current ratio and profitability. This means that as current ratio reduces, profitability of the firm will increase. On the other hand the collection days was regressed against ROCE, this showed that there is negative correlation between (0.43) collection days and ROCE. This indicates that as collection days are reduced there will be increase in profitability. The firm should be aggressive in the management of its working capital to improve profitability.

# 2.10.2 Effect of Inventory Management on Performance of Small and Medium Enterprises (SMEs).

Christopher and Kamalavalli (2011) investigated the ''Influence of the Management of Working Capital on the profitability of Indian Corporate Hospitals'' by taking a sample

of 14 out of the fifty one listed corporate hospitals in India using panel data analysis for the period 1996-97 to 2005-06. The results of their analysis depicted that Inventory Turnover ratio, Debtors Turnover ratio and Working Capital Turnover were positively related with the Return on Investment, a variable used for the measurement of a firm's profitability. Azam and Haider (2011) investigated the'' impact of Working Capital management on firms' performance'' for non- financial institutes listed in Karachi Stock Exchange (KSE-30) Index''. Panel data was analyzed by applying Canonical correlation for the time period of 2001 to 2010. It was found that inventory turnover in days has negative relationship with Return on Assets and Return on Equity which means that companies performance can be increased by reducing inventory in days.

Another attempt to explore ''The Relationship between the variables of Working Capital Management and Profitability'' was made by (Haitham & Maryam 2010). Their analysis was based on a sample containing 2123 Japanese non-financial firms listed in the Tokyo Stock Exchange for the period from 1990 to 2004. The authors, after analyzing the results, suggested that Japanese firms should focus on shortening their Receivable Collection Period, Inventory Conversion Period and Cash Conversion Cycle to enhance profitability. Lengthening the Payable Deferral Period could also add to profitability, they argued. However, they deemed the over lengthening of the Payable Deferral Period to be equally risky as it could harm the firm's credibility and credit reputation in the long run.

Samiloglo and Demirgũneş (2008) conducted a study to examine the ''Relationship between Working Capital Management and Profitability''. Applying multiple regression analyses over a sample of manufacturing firms listed in Istanbul stock exchange for the period of 1998-2007, they found that the accounts receivable cycle, the inventory conversion period have negative impact on profitability, which means the shorter cycle of these variables cause increase in profitability. Mathuva (2009) studied the ''Impact of Working Capital Management on the Performance of firms''. He took almost 30 listed
firms as a sample and all these companies were listed in Nairobi stock exchange and the data was taken from 1993 to 2008. There were certain findings of his research by analyzing the fixed effects regression models. Firstly, there is a negative relationship between the time when the cash is collected from the customers and the firm's productivity. This depicts, firms that are more profitable enjoys less time period for the collection of cash from the customers as compared to ones which are less profitable.

Nwidobie (2012) investigated "working capital efficiency and corporate profitability of 22 quoted firms on the Nigerian Stock Exchange" and results show that costs of working capital inventory inclusive exceed returns on working capital investments thus affecting their profitability. To redress this anomaly and improve net returns and corporate profitability from the use of working capital, quoted firms in Nigeria should optimize working capital investments to avoid over investment with its attendant inventory costs, lost returns on excess cash holdings and receivables; and under investment with its attendant stock-out, illiquidity and bad debts costs.

# 2.10.3 Effect of Accounts Receivable Management on the Financial Performance of Small and Medium Enterprises (SMEs)

Firms that are efficient in receivables management should determine their optimal credit which minimizes the total costs of granting credit (Ross *et al.*, 2008). As observed by Michalski (2007) in his study, an increase in the level of accounts receivables in a firm increases receivables and both lead to a decrease in the value of the firm. A study by Juan and Martinez (2002) emphasized that firms can create value by reducing their number of days of accounts receivable, thus confirmed the finding of Deloof (2003) who established that the length of receivables collection period has a negative effect on a firm's performance. A study by Sushma and Bhupesh (2007) also affirmed that, putting in place a sound credit policy ensures proper debt collection procedures and is pivotal in improving efficiency in receivables management hence the performance of firms.

Lazaridis and Tryfonidis (2006) conducted a cross sectional study by using a sample of 131 firms listed on the Athens Stock Exchange for the period of 2001 - 2004 and found statistically significant relationship between profitability, measured through gross operating profit, and the cash conversion cycle and its components (accounts receivables, accounts payables, and inventory). Adediran, Bosun-Fakunle and Imuzeze (2012) investigated the ''Impact of Working Capital Management on Profitability of SMEs in Nigeria''. The data for the study were from 30 SMEs covering the single period of 2009 and collected from secondary sources (financial statement) and was analyzed using the multiple regression analysis. Results which are robust to the presence of endogeneity demonstrate that managers can create value by reducing their firm's number of day's accounts receivable and also that shortening cash conversion cycle improves profitability.

# 2.10.4 Effects of Accounts Payable Management on the Financial Performance of Small and Medium Enterprises (SMEs)

According to empirical research that has been done, most of them identified the importance of working capital Management for the survival and growth of the business enterprises.

Azam and Haider (2011) investigated the ''Impact of Working Capital Management on firms' performance'' for non- financial institutes listed in Karachi Stock Exchange (KSE-30) Index. Panel data have been analyzed by applying Canonical correlation for the time period of 2001 to 2010. APP is found to be significant positive association with ROA and ROE indicating that if time period of supplier's payment is increased then overall firm's performance also improves. CCC and NTC shows significant negative relation ROA and ROE showing that firms' performance can be increased with short size of both of them.

Another attempt to explore the 'Relationship between the variables of Working Capital Management and Profitability'' was made by Haitham and Maryam (2005) in their study. Their analysis was based on a sample containing 2123 Japanese non-financial firms listed in the Tokyo Stock Exchange for the period from 1990 to 2004. The authors, after analyzing the results, suggested that Japanese firms should focus on shortening their Receivable Collection Period, Inventory Conversion Period and Cash Conversion Cycle to enhance profitability. Lengthening the Payable Deferral Period could also add to profitability, they argued. However, they deemed the over lengthening of the Payable Deferral Period to be equally risky as it could harm the firm's credibility and credit reputation in the long run.

The study of Mohamad and Saad (2010) was based on secondary data of 172 firms of Malaysia. They evaluated the" impact of various components of working capital on profitability and market value of the firms". The study covered a time span of five years from 2003 to 2007. For this purpose they used different working capital components namely cash conversion cycles (CCC), debt ratio (DR), current assets to total assets ratio (CATAR), current liabilities to total assets ratio (CLTAR) and current ratio (CR),. To see the effect of these working capital components on financial performance they used Tobin's Q (TQ), return on invested capital (ROIC) and return on assets (ROA) as a measurement of financial performance of the selected firms. To deduce the results they used correlations and multiple regression analysis. The results showed that there exists an inverse relationship between different working capital components and performance of firms.

James investigated ''effective working capital management'' using Standard working capital ratios to measure the effectiveness of working capital in the selected firms. The firms selected show signs of overtrading and illiquidity, concerns was on profit maximization without taken cognizance of payment of creditors. The firms exhibit low debt recovery over credit payment. It is recommended that for SMEs to survive within Nigeria economy they must design a standard credit policy and ensure good financial

report and control system. They must give adequate cognizance to the management of their working capital to ensure continuity, growth and solvency.

# **2.10.5** Effects of Financial Institutions Interventions on the Performance of Small and Medium Enterprises (SMEs)

Empirical studies abounds indicating the effect which financial Institutions or other source of finance have on the performances of SMEs in various countries. According to Ruiz, Love and Pearce (2012), during 2001 and 2002, a substantial microfinance initiative was implemented in Thailand: Thailand's Million Baht Village Fund Program. This intervention consisted of injecting funds into all 77,000 Thai villages. The initial funds distributed were significant, corresponding to about 1.5 percent of Thai GDP in 2001. Each transfer was used to form an independent village bank for lending within the village. Importantly, every village, regardless of its characteristics, was eligible to receive the program. This program as mentioned above is among the largest government microfinance initiatives of its kind.

Ruiz *et al.*, (2012) further reported that, Kaboski and Townsend (forthcoming) evaluated the impact that Thailand's Million Baht Village Fund Program had on economic outputs of Thai villages using the IV approach. As each village received the same amount of money, regardless of the population of the village, smaller villages received a relatively more intense injection of credit. Due to the nature of the intervention, the expansion of credit in villages by the Thai Fund Program could be correlated with the number of households in a village during the program years. Using these interactions of number of households and the program years as instruments for the amount of credit received, the authors assessed the impact of this program. Their findings suggest that the Million Baht Village Fund injection of microcredit in villages did increase the overall credit in the economy. Households borrowed more, consumed more, and increased their earnings.

A short-term effect of increasing future incomes and making business and market labor more important sources of income was also found. The increased borrowing and shortlived consumption response, despite no decline in interest rates, point to a relaxation of credit constraints. The increased labor income and especially wage rates indicate important spillover effects that may have also affected non-borrowers. Other source of financial intervention SMEs is "angel" investors. Similar to venture capitalists, angel funds are investors for high-potential start-up investments, commonly structured as semiformal networks of high net worth individuals who decide to invest in projects of aspiring entrepreneurs based on their own assessments. To evaluate the impact of angel funds in U.S. start-up firms, Kerr, Lerner, and Schoar (2010) obtained information on prospective ventures from a large angel investment group. Using a regression discontinuity approach to evaluate the effect of angel funding on the performance of high-growth start-up firms, the authors compared firms that fall just above and just below the funding criteria of the angel group. The evaluation found a strong, positive effect of angel funding on the survival and growth of ventures.

In U.K., after receiving investment support from Impetus Trust, St Giles Trust, a charity which provides access to housing, training and jobs for ex-offenders, teamed up with Social Finance, a UK based institution which designs financial structures to create the first Social Impact Bond EFInA (2012). The Bond was launched in 2010, and has been designed to reduce re-offending amongst male prisoners leaving HMP Peterborough who have served a sentence of less than 12 months. Social Finance raised GBP 5 million from 17 social investors to fund this work, which is new money into the sector. The investors are mostly charitable trusts and foundations, some of which are the giving vehicles of high net worth individuals or private banks.

If the initiative were to reduce re-offending by 7.5%, or more, investors will receive a share of the long term savings to the Government from the Ministry of Justice. If the Social Impact Bond delivers a drop in re-offending beyond this threshold, investors will receive an increasing return the greater the success at achieving the social outcome, up to a maximum of 13%. However, if reoffending isn't reduced by at least 7.5% the

investors will receive no recompense at all. Returns are to be decided by comparing the number of reconvictions for the One Service cohort compared to a similar group of short sentenced male prisoners across the UK. The scheme is currently in its second year of operation (out of 6), and a judgment on success can only be made after year 4. It is however showing positive results so far.

Aliyu (2013) examined the ''impact of government interventions on Small Scale enterprise in Mubi North local government Area of Nigeria''. The study has become imperative because of an increasing inability of Small Scale enterprises to live up to expected target as the engine for economic growth and development, despite government encouragement in this direction. The study focused its empirical verification on three key areas which are very fundamental to the study, viz: perception of SSEs operators about government interventions the relevance of these interventions to them, and the accessibility of these interventions. Data were collected through interviews and questionnaire. Percentage and Chi - square techniques were used to describe and analyzed the results obtained from the field. However, the available data indicates that government intervention schemes/programmes aimed at elevating the SSEs to the expected targets in the area, lacks the awareness of the SSEs operators. Again, the available data shows that accessibility to the intervention by SSEs operators is not easy. As a result SSEs operators do not feel the relevance of these interventions.

## 2.11 Performance

The accomplishment of a given task measured against preset known standards of accuracy, cost, completeness, and speed. In a contract, performance is deemed to be the fulfillment of an obligation, in a manner that releases the performer from all liabilities under the contract (James, 2014). With regard to the performance which is the dependent variable of working capital management of this study, it includes profits, return on investment, return on asset, return on equity, sales volume, among others.

### **2.12 Critique of the Existing Literature**

The findings from the literatures so far reviewed showed a mixture of positive and negative relationship/association between the components of the working capital management and the various performance indicators (profitability, return on assets, return on equity, growth in sales and firm size) of firms from different countries. For instance, while the researches carried out by Deloof (2003) cited in Kulkanya (2012), Christopher and Kamallavi (2009), Azam and Haider (2011) Shin and Soenen (1998) cited in Abdul Rahemann, Afza, Qayyum and Rodla (2010) , who all investigated the effects of working capital management on profitability, return on assets(ROA), growth in Sales, firm Size and return on equity (ROA) of firms in Belgium, Athens, United States of America, Pakistan and India respectively, showed positive impact on the financial performances of firms, researches conducted by Scholars like Raheman and Nasr (2007), Azam and Haider(2011), Falope and Ajilore (2009), (2012) Nwidobie and James (2011), on Pakistan, India and Nigerian firms all revealed negative relationship between working capital management and indicators of corporate performance.

From the reviewed literature and their findings however, it was noticed that most of the researches were conducted using the variables which were tested severally against single dependent variable at different times and results were inferred to the general performance of SMEs. A point in case here are the research conducted by Raheman and Nasr (2007) Deloof (2003) in Kulkanya (2012) effects of WCM on profitability, effects of WCM on Sale, effects of WCM on ROA, Azam and Haider(2011) effects of inventory turnover days on ROA and ROE. Besides, most of these researches were conducted in the developed economies while only few of such researches have so far been carried out in the developing economies particularly the African countries.

The Small and Medium Enterprises abysmal performance in Nigeria observed by James (2012) has also shown lack of government support and commitment to encourage the SMEs. The managers themselves appears to lack the proper training and skill to

efficiently and effectively manage their resource as observed by Emery *et al.*, (2004) that some managers use poorly constructed model for financial decision which consequently affect their performance negatively. This study therefore, addressed this gap by looking at the effects of all the components of working capital management namely; - cash, accounts payable, accounts receivable and inventory (independent variables) at the same time and testing them with multiple (dependent variables) including profitability, growth in sales, return on assets and return on equity which are some of the performance indicator unlike most previous research which treated these variables in isolated cases.

#### 2.13 Summary

Working capital management as put forward by many scholars is aimed at enhancing the financial position of any business organization. It is considered as the life wire of any business and so, its proper management is critical for the survival of the business. From the literature reviewed, it has been noticed that most of the components of the working capital namely; cash, inventory, receivables and payables can contribute positively to the financial performance indicators (profitability, return on assets, return on equity, sales and firm size) of an organization. However, if the management is not properly handled the performance of their firm fail below expectation which leads to the collapse of business.

#### 2.14 Research Gap

In Nigeria, most of the studies carried out revealed that working capital has affected the SMEs negatively. This is evidenced in the studies of Egbide (2009), Falope and Ajilore (2009), Nwidobie (2012), Kehinde (2011) and Onugu (2005) who revealed that, all components of working capital affect profitability at varying level of significance, and that cost of capital exceeds return on investment, SMEs perform below expectation, and that most businesses fail within 2 years after start while strongest fail within 6 years living few survivors all due to problems related to finance especially working capital.

There is therefore the need for SMEs to properly manage their resources especially working capital so as to enhance their performance and growth. These problems as mentioned above coupled with the fact that there has not been any prior research on the effects of working capital management on the performance of SMEs in Kaduna North and South local governments; this study is therefore, a modest contribution to bridge the gap in the effects of working capital management on the performance of SMEs in Nigeria.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

## **3.1 Introduction**

This chapter focused on the target area, research design, target population, data collection and processing and methods of analyzing such data. The instruments for data collection and procedures for data collection were also explored. Also discussed were validity and reliability tests. Saunders, Lewis and Thornhill (2009) described methodology as the theory of how research should be undertaken including the theoretical and philosophical assumptions upon which research is based and the implication of these for the methods or methods adopted.

#### **3.2 Research Design**

The study used descriptive research design as it enables researchers to analyse the relationships among a large number of variables. The choice of this method is informed by the fact that SMEs and Sample of the study are scattered in different locations. In addition, survey in research provides a quick and accurate means of accessing information about the population and more appropriate where there is a lack of secondary data as observed by (Oso and Onen 2005).

Saunders, Lewis and Thornhill (2009) defined research design as the general plan of how one will go about answering the research question(s) and that it contains a clear objectives, derived from your research question specifying the sources which you intend to collect data, and consider the constraints that will inevitably have access to data, time, location and money as well as discussing ethical issues. Crucially they added, it should reflect the fact that you have thought carefully about why you are employing your particular research design. It should for example, be perfectly legitimate for your assessor to ask you why you chose to conduct your research in a particular organization, why you chose to talk to particular group of staff rather than another, and why you chose the particular department.

## **3.3 Target Population**

Saunder, Lewis and Thornhill (2009) defined population as the full set of cases from which a sample is taken. They further stated that in sampling, the term population is not used in its normal sense, as the full set of cases need not necessarily be people. Polit and Beck (2003) in Saunders *et al.*, (2009) viewed population as the aggregate or totality of those conforming to a set of specifications. The target population of the study consist the owners and the senior financial management of the sampled small and medium enterprises (SMEs) for both trading, manufacturing and services operating within Kaduna North and South local government areas. The main reason for choosing this population is due to their involvement in the decisions making process in the operation of their respective enterprise which directly affect the performance of their respective organization by monitoring through departmental budgets and other action plans.

Today there are numerous formal and informal SMEs in both Kaduna South and North Local government areas who have registered with the ministry of trade commerce and industry with over 5872 management employees and roughly 20% which is 1170 of them are in the senior management level of the 93 sampled SMEs out of the 250 registered SMEs in the study areas. Table3.1 below shows the distribution of the target population for the two local government areas

Local Government	SME <sub>S</sub>	Senior Managers
Kaduna North	125	585
Kaduna South	125	585
Total	250	1170

Table 3.1 taget population(SME<sub>s</sub> and Senior Managers )

# **3.4 Sampling Frame**

The sampling frame of this research included registered SMEs which were in existence as at 1<sup>st</sup>January 2014 as contained in the Register of Business Premises in the Ministry of Commerce, Trade and Industries Kaduna State Nigeria. Employee's data are usually separated between the different grades of employees. Accompanied in the details are normally the addresses and year of commencement of business. As stated in the target population, the concentration of this study was mainly on the management level. The information obtained from the study will portray how the working capital management affects the performance of SMEs in Kaduna and Northern States and could be a representation of numerous other SMEs in the whole of Nigeria. The results do not justify that the whole of Nigeria's SMEs have similar information, but it's a representation of the expected results in other SMEs across Nigeria.

Saunders *et al.*, (2009) refers to sampling frame as complete list or set of all the cases from which a probability sample is drawn. They further stated that occasionally, it may be possible to collect and analyze data from every possible case or group and this is termed 'censuses. Polit and Beck (2003) in Saunders (2009) described sampling frame as a list that contains the names of all elements from which the sample is chosen. The sample frame for both the Senior Managers and the SMEs are as indicated in tables 3.1 and 3.2 below. The formula that the study employed to calculate the sample size n was: n = N\*X / (X + N - 1), where,

 $X = Z_{\alpha/2}^{2} * p^{*}(1-p) / MOE^{2}$ , and  $Z_{\alpha/2}$  is the critical value of the Normal distribution at  $\alpha/2$  (e.g. for a confidence level of 95%,  $\alpha$  is 0.05 and the critical value is 1.96), MOE is the margin of error, p is the sample proportion, and N is the population size. The study also employed a margin of error of 5%, confidence level of 95%, and a sample proportion of 80%. As illustrated in tables 3.2 and 3.3 below.

AreaTarget PopulationPercentageSampleKaduna North58518105.3Kaduna South58518105.3Total1170211 (Approximate)

 Table 3.2 Sample frame (Target population for Senior Financial Managers)

 Table 3.3 Sample frame (Target population for Sampled SMEs)

Area	<b>Target Population</b>	Percentage	Sample
Kaduna North	125	37	46.25
Kaduna South	125	37	46.25
Total	250		93 (Approximate)

# 3.5 Sample and Sampling Technique

Saunders *et al.*, (2009) refers to sample as a subgroup or part of larger population, stressing also that sampling provides a valid alternative to a census when it would be impracticable for one to survey the entire population, budget and time constraints prevents one from surveying the entire population, and when one have collected all the data but need the results quickly. This emphasis is in agreement with the assertions of Polit and Beck (2003) in Saunders *et al.*, (2009) when they averred that it is more practicable and less costly to collect data from sample than from the entire population, pointing out however, that the inherent risk of sampling is that, it might not adequately reflect the population's behaviors, traits, symptoms or belief.

Other researchers like Henry (1995), in Saunders *et al.*, (2009) argue that using sampling makes possible higher overall accuracy than a census, stating further that the smaller number cases for which you need to collect data means that more time can be spent

designing and piloting the means of collecting these data. Collecting data from fewer cases also means that you can collect information that is more detailed. In addition, if one is employing people to collect the data like say interviewers, one can afford higherquality staff. More time can also be devoted to obtaining data from more difficult reach cases and that once data have been collected, proportionally more time can be devoted to checking and testing the data for accuracy prior to analysis.

Saunders *et al.*, (2009) identified two types of sampling techniques to include probability or representative sampling and non probability or judgmental sampling. With probability samples they said, the chances or probability, of each case being selected from the population is known and is usually equal for all cases. This means that it is possible to answer research questions and to achieve objectives that require one to estimate statistically the characteristics of the population from the sample. Consequently, they added that, probability sampling is often associated with survey and experimental research strategies. Non-probability sampling, Saunders *et al.*, (2009) averred that, the probability of each case being selected from the total population is not known and it is impossible to answer research question or to address objectives that require one to make statistical inferences about the characteristics of the population.

For the purpose of this study, a stratified random sampling was used. The choice of this technique was informed by the fact that the population of the study is heterogeneous. Biyi (2005) refers to stratified random sampling as one in which the population is first divided into two or more groups called strata and then random selection is made within each stratum. Saunders *et al.*, (2009) averred that stratified random sampling is a modification of random sampling in which you divide the population into two or more relevant and significant strata based on one or a number of attributes and that in effect, your sampling frame is divided into a number of subsets. Base on this, they further said a random sample (simple or systematic) is then drawn from each of the strata. Oso and Onen (2005) stated that stratification ensures that the sample accurately reflect the

population on the basis of the criteria used for stratification where as the random sampling ensured that each member of the target population had an equal and independent chance of being selected.

#### **3. 6 Data Collection Instruments**

Saunders *et al.*, (2009) described data as facts, opinion, and statistics that have been collected together and recorded for reference or for analysis. The data can be either primary or secondary. The data to collect was from the primary and secondary sources. Most of the information from these sources were gathered through the use of questioners which as defined by Saunders *et al.*, (2009) as all data collection techniques in which each person is asked to respond to the same set of questions in a predetermined order. The questioner included both open and close ended. Secondary data that were used included sources such as websites and published materials relating to working capital as well as other relevant materials that were related to working capital management of SMEs and financial records of the SMEs. It is worth mentioning here that Government agencies such as the SMEDAN, CBN and NAPEP and other relevant/agencies were of immense help in providing information on the operations of SMEs in Nigeria

#### **3.7 Data Collection Procedures.**

Primary source data was collected by administering of the questioners to SME senior managers of the SMEs who were considered in the sampling to obtain the qualitative data, while the secondary data from their records for the quantitative data. In addition published materials as well as other relevant materials with regard to working capital management were used. Saunders *et al.* (2009) defined primary data as data collected specifically for research project being undertaken most especially where limited appropriate secondary data are available. Secondary data on the other hand are data that have been collected for some other purposes. DeVaus (2009) defined questionnaire as a general term including all data collection techniques in which each person is asked to respond to the same questions in a predetermined order and that it includes structured

interviews and telephone questionnaires as well as those in which the questions are answered without an interviewer being present.

#### **3.8 Pilot Testing**

Pilot testing in a research is in most cases concern with testing the workability, validity and reliability of the questionnaire. Biyi (2005) refers to pilot test as a preliminary study being carried out on a smaller scale than envisaged one. Polit and Beck (2003) in Saunders (2009) stated that a pilot study or test is a small version or trial run done in preparation for a major study. Saunders *et al.*, (2009) on their part, refers to pilot test as a small scale study to test questioner, checklist, or observation to minimize the likelihood of respondents having problems in answering the question and of data recording problems as well as to allow some assessment of the questions validity and reliability of the data that will be collected. They however, observed that for any research, there is the temptation to skip the pilot testing.

In order to avoid the above temptation, Bells (2005), advised that, however pressed for time one is, the best should be done to give the questioner a trial run, as without a trial run one would have no way of knowing whether the questionnaire will succeed. Also, in line with Bell's (2005) advice, Saunders *et al.*, (2009) averred that, occasionally, one may be extremely pushed for time and in such instances it is better to pilot test the questioner using friends or family than not at all to provide some idea of the questionnaire's face validity: that is whether the questionnaire appears to make sense.

The validity of the questionnaire was enhanced after a pilot test of a sample of 10% of respondents. Principal components analysis was generated from SPSS and the result were discussed by the researcher and the supervisors and their proposed changes were evaluated and considered for adjusting a questionnaire. Items that did not reach the threshold were either re-written or dropped from the questionnaires. To test reliability of the questionnaire, 45 questionnaires were piloted and the responses input statistical

software and the result of the reliability test produced. The researcher determine Cronbach's Alpha or reliability coefficient which estimate the internal consistencies of data in measuring a given construct. This is in conformity with the views of Fink (2003) in Saunders *et al.*, (2009) and Dillman (2007) who stated that for most students, questionnaire, the minimum number for pilot is 10 although, large surveys between 100 and 200 responses is usual.

#### **3.9 Data Analysis and Presentation**

The research used both qualitative and quantitative tools for analyzing data. This means that the research was carried out by employing data collection techniques including questioners and interviews as advocated by Curran and Blackborn (2001) in Saunders *et al.*, (2009) where they averred that a single study may use qualitative and quantitative techniques and procedures as well as primary and secondary data. Saunders et al (2009) referred quantitative to predominantly use as a synonym for any data collection technique such as questionnaire or data procedure such as graphs or statistics that generates or uses numerical data. In contrast they further stated that qualitative is predominantly used as a synonym for any data collection technique such as interview or data analysis procedure such as categorizing data that generates or use non numerical data. Therefore, qualitative can refer to data other than words, such as pictures or video clips.

The descriptive statistics including Multiple Regressions Analysis which indicates the impact of working Capital Management on Performance was used. The working capital management which are independent variables included Cash management, Inventory management, Account Payable Management and Account Receivable Management while the dependent variables are Profit, Sales, Market Share, Return on Asset and Return on Equity with Financial Institution as the Intervening Variable. Saunders et al (2009) states that multiple regression analysis is the process of calculating a coefficient of multiple determination or simple regression coefficient and regression equation using two or more variables. The regression analysis can therefore be used to predict the

values of a dependent variable given the values of two or more independent variables as for instance in the prediction of the amount of sales for a specified expenditure and number of sales staff.

The model for these tools were therefore represented by  $FP = \beta_0 + \beta_1 CM + \beta_2 IM + \beta_3 RM + \beta_4 PM + \beta_5 FI + e$ . Where,  $\beta_0$ ,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ , are  $\beta_5$  are coefficients, cm = cash management, rm = receivable management im=inventory management, pm = payable management, fi = financial intervention, FP is Financial Performance and e = Error variable for regression.

# **CHAPTER FOUR**

### **RESEARCH FINDINGS AND DISCUSSIONS**

## **4.1 Introduction**

The objective of this study was to establish whether working capital management affects the performance of small and medium enterprises (SMEs) in Nigeria. Base on this objective therefore, this chapter presents the findings covering four components of WCM which are also referred to as the independent variables in this study. In addition, an intervening variable (Financial Institution) which moderate or influence the relationship between the independent and dependent variables was also found and presented. In order to interpret the results of the finding and draw conclusions, Descriptive statistic and Pearson correlation which examine the relationship between the dependent and independent variables were used. The organization of responses were done around each question and were compared with the empirical and theoretical literature as reviewed in chapter two and at the end of each research question, the findings were briefly discussed and inferences were drawn. At the end also, multiple regression analysis were used to compare the collective effect of the four dependent and intervening variables on the performance of the small and medium enterprises (SMEs).

#### **4.2 Preliminary Results**

## 4.2.1 Response Rate

Questionnaires were distributed to respondents in the area of study and a response rate was calculated on the basis of questionnaire collected out of the total number collected. A total of 211 questionnaires were distributed to the two out of the total local government councils in Kaduna State, however, 186 were duly completed and returned. This represents 88% of the total questionnaires distributed amongst the two local government areas. The rate also falls in line with Neuman (2005) who suggest a response rate of between 10 and 50 % for postal questionnaire surveys and up to 90%

for face to face interviews. It is also in consonance with Saunders et al (2009) of business with response rate varied from 41 to 100 percent. The response rate of 88% achieved for this study therefore, provide adequate basis for analyzing and arriving at meaningful conclusion and recommendation. The response rate is as presented in table 4.1 and figure 4.1 below.

# Table 4.1 Response Rate

Details	Frequency	Percentage	
Distributed questionnaire	211	100	
Duly filled and returned	186	88	
Questionnaire			



# **Figure 4.1 Response Rate by Local Government**

Figure 4.1 above clearly shows that majority of those who responded were from Kaduna North Local Government. Table 4.2 below also shows the percentage distribution of responses received from each of the two local governments.

# Table 4.2 Response by Local Government Areas

Local Government	No. of Responses	Percentage	
Kaduna North	97	52	
Kaduna South	89	48	
Total	186	100	

# 4.2.2 Responds by Category

Figure 4.2 below depicts the distribution of responses from the two local government areas by category including middle management, senior management and top executives.



# Figure 4.2 Response by category

# 4.2.3 Form of ownership

In the questionnaire, respondents were asked the type of owner of their register firm. Out of the targeted 93 firms 64.52% were owned by Sole Proprietors, 22.58% were owned by Partnerships while 12.9% were registered companies with shareholders. This results as depicted in table 4.3 SMEs in Nigeria whereby majority of firm are owned by sole proprietor's shows lack of succession planning. For the registered companies they are mainly micro which depicts another lack of succession planning and hence stagnant growth. This finding is in agreement with the assertion of Kehinde (2011) who established that most firms in Nigeria fail within two years after they are started mainly due to problems related to finance. 3

## **Table 4.3 ownership**

	Frequency	Percentage
Sole proprietor	60	64.92
Partnership	21	22.58
Registered company	12	12.90
TOTAL	93	100.00

# 4.2.4 Number of Shareholders

The study examined the profile of Shareholders including the period they had been shareholders of the company. Table 4. 4 showed that 68.82% have been shareholders for 2-5 years, 20.48% stated they have been shareholders for 6-10 years while 10% stated that they have been shareholders for 11-15 years. These results indicate lack of apathy by investors towards investing in company more especially when these companies are none performing which are mainly problems related to finance especially working capital. This is agreement with the assertion by Emery, Finerty and Stowe (2004) that, and ideal business needs sufficient resource to keep going and ensure maximum utilization to enhance its profitability. Some managers however, use wrong methods for wcm decision and so the wc mix are not effectively managed and this result in either under or over capitalization or worst still liquidation.

Year	Frequency	Percentage
2-5	103	37
6-10	97	35
11-15	79	28
TOTAL	279	100

Table 4.4 Number of Shareholder and Years of Holding

#### **4.3 Research Findings and Results.**

In this section, the descriptive analysis which is based on the findings of this study is presented. Results are obtained from each statement or questions rose for the purpose of data collection and have been corroborated with the reviewed literature in chapter two and conclusions drawn on the findings obtained at the end of each question/hypothesis. Descriptive and Regression, Analysis were then used to interpret the results obtained for the purpose of drawing conclusion on this study. Regression models have also been fitted for each of the variables.

## 4.4 Analysis of Study Variables

### 4.4.1 Working Capital Management (Cash)

Cash means liquid assets that a business owns. It includes cheques, money orders and bank drafts. Management of cash therefore means efficient collection and disbursement of cash and any temporary investment of cash. Maintaining optimum level of cash in an organization is called cash management Parang N.D. (2009). Pandey (2004) cited in Nyabwanga *et al.*, (2012) averred that, Cash Management is the process of planning and controlling cash flows into and out of the business, cash flows within the business, and cash balances held by a business at a point in time.

In this segment, the analysis sought to determine how working capital management (cash) affects the performance of small and medium enterprises in (SMEs) Nigeria. The analysis particularly focused on cash management policy, cash conversion cycle and achievement of optimum results in cash management.

## **Cash Balance Policy**

The analysis in this segment sought to find out whether the firm has cash balance policy and how it has affected the performance of the Small and Medium Enterprises (SMEs) in Nigeria. The research on the cash balance policy revealed that 65.7% of SMEs as contained on table 4.5 stated that they have the policy as a strategy that assist them to manage their cash position while 64 respondents representing 34.3% stated not having the policy in place. As a result of this policy also, 98.36% of the respondents stated that it has affected the performances of their firm positively which is indicative on the financial statement that shows a profit and income accrued on invested surplus cash amounting to 80,644.20,123.053.30, 131,338.23, 139,451.70 and 128,846.16 naira respectively for the periods 2008-2012.

S/N Details	Answer	freq	Percentage	
1(i) Does your firm have cas	sh No	64	34.3	
balance policy?	Yes	122	65.7	
(ii)How has this policy affe	ect the Positively	120	98.4	
performance of your fin	rm? Negatively	2	1.6	
(iii) Kindly provide avera	age net profit			
as per years below:-	N			
2008	80,644.20			
2009	123,053.30			
2010	131,338.23			
2011	139,451.70			
2012	128,846.16			

 Table 4.5 Responses on Cash Management Policy

This finding concurs with the views of Ross *et al.*, (2008) who averred 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 the trading cost of holding too little. This assertion was also stressed by Atrill (2006) who averred that there is need for careful planning and monitoring of cash flows over time so as to determine the optimal cash to hold which was further echoed by the view of Nwidobie(2012) that probability of profitable returns on cash investments in treasury bills, fixed and savings, reduces the amount of cash held by a firm. The finding corroborate that of Waweru (2003) in Nyabwanga *et al.*, (2012) who established that most businesses studied had a set of minimum cash balance level which guarded them against running out of cash. This finding is however inconsistent with a finding by Kwame (2007) who established that small firms rarely pay attention to setting up a cash balance policy but simply consider cash-balance as the result of differences in cash inflows and outflows without any guidelines.

#### **Deduction/Inferences**

This finding with a majority of 65.7% of the respondents stating the existence of cash balance policy and 98.36% of respondents stating positive effects of such policy on their firms coupled with financial statement showing positive results with an average net profit of 80,644.20, 123,053.30, 131,338.23, 139,451.70 and 128,846.16 naira respectively for the five year periods under review, suggests that managers of the SMEs recognize the importance of instituting cash balance policy as critical for guiding the management of their cash resources. The institution of cash balance policy allows the SMEs to manage and determine the optimal cash required for the business. This inference is in full support of the study by Kwame (2007) which established that the setting up of a cash balance policy ensures prudent cash budgeting and investment of surplus cash and that of Kotut (2003) cited in Nyabwanga *et al.*, (2012) 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 firm.

# **Cash Conversion Cycle**

In this segment the analysis sought to determine whether cash conversion cycle is being monitored and how it affects the performance of the SMEs. The research reveals on table 4.6 below that 65.7% monitor their cash conversion cycle and also a majority (97.5%) of the respondents stated that monitoring of cash conversion cycle (CCC) impact positively on the performance of their firms and this is reflective on the financial statement which shows a continuous gross profit 175,372.5, 202,431.40, 325,088.90, 327,686.60 and 329,549.00 naira throughout the period under review (2008-2012).

S/N	Details	Answer	Freq.	Percentage
2(i)	Is the cash conversion cycle	No	64	34.3
	(CCC) of your firm being monitored?	Yes	122	65.7
( <b>ii</b> )	What effect does longer and shorter	positively	119	97.5
	Conversion cycle have on the	negatively	3	2.5
	Performance of your firm?			
(iii)	How much has been the average gross	6		
	Profit for the periods?		N	
	2008	175,3	372.50	
	2009	202,4	431.40	
	2010	325,0	)88.90	
	2011	327,6	586.60	
	2012	329,5	549.00	

Tal	ble	4.6	Respons	e on	Cash	Conve	rsion	Cycl	le
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The findings as reflected on table 4.6 above agrees with the assertion of Peel *et al.*, (1996) in Lakshan (2009) that Small firms need to particularly control and monitor their working capital because they are generally associated with a higher proportion of current assets relative to large firms, less liquidity, volatile cash flows, and a reliance on short term debt. They further stated that a popular measure of WCM is the cash conversion

cycle, i.e. the time lag between the expenditure for the purchases of raw materials and the collection of sales of finished goods.

Deloof (2003) cited in Lakshan (2009) also averred that longer cash conversion cycle increases profitability because it leads to higher sales. This assertion is reflective of the findings on the financial statement of the SMEs which showed increasing net and gross profit for the periods 2008 to 2012. Deloof however, cautioned that, corporate profitability also decreases with cash conversion cycle, if the costs of higher investment in working capital rise faster than the benefits of holding more inventories and/or granting more trade credit to customers. It also concurred with the investigation by Shin and Soenen (1998) in Mustapha (2011) on the relation between a measure of the cash conversion cycle and corporate profitability whose result indicates that managers can create value for their shareholders by reducing the cash conversion cycle to a reasonable minimum.

# **Deduction/Inference**

It is obvious from this findings that, just like the discussion under cash management policy in the preceding sections, a majority of 65.7% and 97.5% of the respondents who affirmed the monitoring of CCC, its positive impact on performance and the gross profit of 175,372.50, 202,431.40, 325,088.90, 327,686.60 and 329,549.00 naira respectively for the years under review, suggested that Managers of small and medium enterprises (SMEs) in Nigeria recognize that developing a monitoring system is vital in the management process of available cash resources. This concurred with the assertion by Ross *et al.*, (2008) that reducing the time cash is tied up in the operating cycle improves a business's profitability and market value furthers the significance of efficient cash management practices in improving business performance.

## **Optimum Cash Management**

In this section, the analysis sought to examine whether Optimum Cash Management is being achieved and how it affects the performance of the SMEs. On these questions, the study revealed on table 4.7 that 52.9% of the respondents stated that they achieved optimum cash management while 47.1% confirmed that they do not achieve optimum result in managing their cash. The research also reveals that majority (52.9%) of respondents indicated achievement of optimum result positively impact on performance hence survival of the firm. The results also reveal that for the period under review the total income derived from invested surplus cash stood at 28,323.50, 30,420.00, 37,306.00, 41,159.10 and 38,069.20 for the periods 2008 to 2012 respectively.

S/N	Details		Answer	Freq.	Percentage
3 (i)	Is optimality in	cash	No	88	47.1
	Management b achieved?	eing	Yes	98	52.9
(ii)	What impact do	bes it have on	Positively	93	94.9
	your min s performance?		Negatively	5	5.1
(iii)	Please state the income derived surplus cash in the periods				
	2008	28,323.50			
	2009	30,420.00			
	2010	37,306 .00			
	2011	41,159. 10			
	2012	38,068. 20			

**Table 4.7 Response on achievement of Optimum Results** 

This finding agrees with the study by Kwame (2007) which established that the setting up of a cash balance policy ensures prudent cash budgeting and investment of surplus cash. It also agrees with the findings by Kotut (2003) in Nyabwanga *et al.*, (2012) 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.

#### **Deduction/Inferences**

From the result of this analysis which indicates majority of 52.9% and 94.9% of respondents stating that their firm do achieve optimum cash management and that it has positive impact on their firm's performance, in addition to realizing an average income of 28,323.50, 30,420.00, 37,306, 41,159.10 and 38068.20 for the periods 2008-2012 respectively on invested surplus cash, it is therefore evident that managers of SMEs in Nigeria recognize that the achievement of optimum cash management is critical in spurring enhanced and continued performance of SMEs. This inference dovetailed with the assertion of Parang (2009) that, the objective of cash management is to meet cash disbursement as per payment schedule, meet cash collection as per schedule and minimize funds locked up as cash balance by maintaining optimum cash balance.

# 4.4.2 Working Capital Management (Inventory)

Inventory means Tangible property which is held for sale, in the ordinary course of business or, in the process of production (WIP) for sale or for consumption in the production of goods and services which will be used for sale in the ordinary course of business while, its management refers to an optimum investment in inventories striking a balance between adequate stock and that too by keeping investment at minimum level (Optimum level of inventory) Parang (2009). In this segment, the analysis sought to investigate if working capital management (Inventory) affects the performance of small and medium enterprises in (SMEs) Nigeria. The analysis particularly focused on Inventory management policy, Economic Order Quantity and achievement of Optimum results in Inventory management.

## **Inventory Management Policy**

The analysis in this segment sought to find out whether the firm has Inventory Management Policy and how it has affected the Performance of the Small and Medium Enterprises (SMEs) in Nigeria. Table 4.8 shows that 67.6% of the respondents have inventory management policy for their firms while 32.4% of the respondents stated that they do not have inventory management policy in their firm. As a result of the existence of inventory management policy, majority of the respondents which is 96.03% stated that it has affected the performance of their firm positively, while only 3.97% stated that the policy affected them negatively. The results also indicated that return on equity for the owners of the business for five periods 2008-2012 is 31.37%, 39.52%, 58.48%, 49.49% and 43.47% respectively.

S/N	Details	Answer	Freq.	Percentage	
1 (i)	Does your firm have	No	60	32.40	
	inventory management policy?	Yes	126	67.60	
(ii)	If yes how has it impacted	Positively	121	96.03	
	on your firm's performance?	Negatively	5	3.97	
(iii)	Please provide return on				
	equity (ROE) for the periods:-				
	2008	31.37%			
	2009	39.52%			
	2010	58.48%			
	2011	49.22%			
	2012	43.47%			

 Table 4.8 Response on Inventory Management Policy

This study corroborate with the study "Effects of Working Capital Management Practices on the financial performance of SMEs in Kissi District Kenya" by Nyabwanga, Ojero, Alphone and Patrick, (2012) where they found out that majority of the SSEs often prepared inventory budgets and reviewed their inventory levels which they added that their findings suggest that preparation of inventory budgets and review of inventory levels are regularly carried out by SSEs' owner managers/managers and are in agreement with findings of Kwame (2007) which established that majority of small businesses always review their inventory levels and prepare inventory budgets and which as stressed by Lazaridis and Dimitrios (2005) that enhancing the management of inventory thus enable businesses to avoid tying up excess capital in idle stock at the expense of profitable ventures.

#### **Deduction/inference**

This findings which indicates that 67.6% of the respondents have inventory management policy for their firms and as a result of which a majority 96.03% of the respondents affirmed that, the existence of this policy, has affected the performance of their firm positively and with return on equity (ROE) of 31.37%, 39.52%, 58.48%, 49.22% and 43.47% for the years 2008-2012, suggests that managers of the SMEs recognize the importance of establishing and implementing inventory management policy for efficient and effective performance in their firms and is in conformity with the assertion by Lazaridis and Dimitrios (2005) that enhancing the management of inventory enable businesses to avoid tying up excess capital in idle stock at the expense of profitable ventures.

## **Economic Order Quantity (EOQ)**

The purpose for analyzing this variable is to find out if the firms apply the EOQ when ordering for goods and how it has affected the Performance of the Small and Medium Enterprises (SMEs) in Nigeria. A cursory look at table 4.9 shows that only 33.33% of the respondent applies the EOQ in ordering for goods while the majority constituting 66.67% does not. On the other hand however, the findings showed that 95.16% stated that the application of the EOQ in ordering for goods impacts on their business

positively. The results also showed that the average amount of goods purchased during the period 2008 to 2012 is 313,748.50, 384,634.50, 481,396.50, 494,191.10 and 460,856.50 naira respectively.

S/N	Details	Answer	Freq.	Percentage
2 (i)	Does your firm apply the	No	124	66.67
	economic order quantity (EOQ) when ordering for goods?	Yes	62	33.33
(ii)	What effect does EOQ have on	Positiv	ely 59	95.16
	the performance of your firm?	Negati	vely 3	4.84
(iii)	Kindly provide the amount of goods and services purchased /			
	rendered for the periods:-		N	
	2008		313,748.50	
	2009		384,634.50	
	2010		481,396.50	
	2011	494,191.10		
	2012		460,856.50	

Table 4.9 Responses on the Application of Economic Order Quantity (EOQ)

The findings as indicated on table 4.9 above which portrays majority of respondents not applying the EOQ in ordering for goods concurred with the findings of Nyabwanga *et al.*, (2012) where, in their research it was found that although, the SSEs regularly reviewed inventory levels and prepare inventory budgets, the ability to apply theories of inventory management in inventory budgeting is very limited with a substantial number of SSEs indicated that they determined their inventory levels based on owner-manager's/manager's experience. It also agrees with the study by Kwame (2007) who established similar results that up to 90% of small businesses relied on manager's experience in their management of working capital.

The majority respondents who do not apply the EOQ ordering for goods however contrast the view of Atrill (2006) that, efficient inventory management practices should answer the questions: how much should be ordered? And when should it be ordered? These questions relate to the problem of determining the economic order quantity and the problem can be answered by the analysis of the costs of maintaining certain levels of inventory as there are costs involved in holding too much stock and there are also costs involved in holding too little, hence the need to put in place an effective stock management system to ensure reliable sales forecasts to be used in stock ordering purposes. This observation was further corroborated by Ross *et al.*, (2008) who stated that the Economic Order Quantity model as one of the approaches of determining the optimal inventory level takes into account the inventory carrying costs, inventory shortage costs and total costs helps in the determination of the appropriate inventory levels to hold.

#### **Deduction/Inferences**

From the results obtained majority of the respondents 67.7% stated that they do not apply the Economic Order Quantity (EOQ) while ordering for goods while only 33.33% stated that they apply EOQ when ordering for goods suggesting that majority of managers have limited ability in inventory budgeting processes and therefore apply the rule of thumb in ordering for their goods just as Nyabwanga *et al.*, (2012) in their research found out that although, the SSEs regularly reviewed inventory levels and prepare inventory budgets, the ability to apply theories of inventory management in inventory budgeting is very limited with a substantial number of SSEs indicated that they determined their inventory levels based on owner-manager's/manager's experience. The 33.33% of the respondents who apply the use of EOQ suggests that they recognize the importance or advantage of its application in the management of inventory of their firms.

#### **Optimum Inventory Management**

The analysis in this segment sought to find out whether the firms achieve optimum inventory management and how it has affected the Performance of the Small and Medium Enterprises (SMEs) in Nigeria. The result on table 4.10 reveals that majority of the respondents representing 67.6% stated that they do achieve optimum level in inventory management while 32.4% said they do not, suggesting that majority of the SMEs in the study areas do attain optimum level in the management of inventory. This finding also indicates that 94.44% of those who apply the EOQ model affirmed that they do achieve optimum management of inventory.

S/N	Details	Answer	Freq.	Percentage	
3 (i)	Is optimum inventory	No	60	32.40	
	management being achieved?	Yes	126	67.60	
(ii)	What has been the impact of	Positively	119	94.44	
	optimum result achievement?	Negatively	7	5.56	
(iii)	Please provide the net inventory				
	for the period	N			
	2008	18,039.20			
	2009	19,303.90			
	2010	17,846.46			
	2011	16,677.52			
	2012	14,256.80			

 Table 4.10 Response on Optimum achievement on Inventory Management

The above finding is in line with the view of Deloof (2003) in Malik, Ulah, and Kafayati (2012) that maintaining optimal inventory levels reduces the cost of possible interruptions or of loss of business due to the scarcity of products, reduces supply costs and protects against price fluctuations. This was further strengthened by the observation of Long, Malitz and Ravid, (1993) cited in Limin Lai (2012) 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 finding also

concurred with the observation of Peter and Rajan (1997) cited in Pedro and Pedro (2005) that suppliers may have significant cost advantages over financial institutions in providing credit to their customers; it can also be an inexpensive source of credit for customers. Managers of firms should therefore keep their inventory to an optimum level since mismanagement of inventory will lead to tying up excess capital at the expense of profitable operations Lazaridis and Dimitrios, (2005). Findings by Kwame (2007) established that majority of small businesses always review their inventory levels and prepare inventory budgets and which is further supported by assertion of Lazaridis and Dimitrios (2005) that this process enhances the management of inventory and enable businesses to avoid tying up excess capital in idle stock at the expense of profitable venture.

## **Deduction / Inference**

A close observation on the findings of this study reveals that a majority 67.6% of the respondents do achieve optimum in the management of inventory and that 95.16% which also forms the majority of respondents affirmed that achieving optimum results have positive impact on their firm's performance which could be seen in the trend of the purchases and stock levels which hovers less than 10% plus or minus throughout the five year period. It is therefore evident from this finding that the Operators of the SMEs recognizes the importance and need to manage inventory to an optimal level for improved performance just as Lazaridis and Dimitrios, (2005) pointed out that, Managers of firms should keep their inventory to an optimum level since mismanagement of inventory will lead to tying up excess capital at the expense of profitable operations.

## **4.4.3Working Capital Management (Account Payable Management)**

Gitman (2009), Hills and Satoris (1992) cited in Pierterson (2012) averred that accounts payable are one of the major sources of unsecured short-term financing and that utilizing the value of relationship with payee is a sound objective that should be highlighted as important as having the optimal level of inventories. The purpose of analysis in this section is to investigate if working capital management (Accounts payable) affects the performance of small and medium enterprises (SMEs) in Nigeria. The analysis specifically paid attention to Accounts Payable Management Policy, Accounts Payable Period and Achievement of Optimum Results in the Management of Accounts Payable.

## **Accounts Payable Management Policy**

The analysis in this section sought to find out whether the firm has Accounts Payable Management Policy and how it has affected the Performance of the Small and Medium Enterprises (SMEs) in Nigeria. Table 4.11 revealed 53.9% of the respondents have accounts payable management policy while 43.1% answered the opposite indicating that majority of the SMEs in research area do have the policy in managing their accounts payable. Majority 89% of the respondents also agreed that the policy impacted positively on the performance of their firms while only 11% of them answered the opposite. As a result of this policy therefore, among the expenditure paid include salaries and wages amounting to 103,107.00, 112, 231.60, 118,389.50, 122,591.60 and 119, 978.50 respective for the periods 2008 to 2012

S/N	Details	Answer	Freq.	Percentage		
1(i)	Does your firm have account	No	86	46.1		
	payable period policy?	Yes	100	53.9		
(ii)	If yes, what has been the effect	Positively	89	89.0		
	on the performance of your firm	n? Negatively	11	11.0		
(iii)	<ul> <li>Please indicate the amount of salaries and wages paid for the periods:-</li> </ul>					
	2008 10	103,107.00				
	2009 11	12,231.60				
	2010 11	18,389.50				
	2011 12	122,591.60				
	2012 1	19,978.50				

**Table 4.11 Response on Accounts Payable Management Policy**
The finding on table 4.11 concurred with the view of Gitman (2009) that the suppliers might give credit terms together with allowing discount to the purchasers and that estimate of credit risk associated with the buyer will indicate what credit policy is to be adopted. This risk may be with reference to buyer's financial standing or with reference to the nature of the business the buyer is in. Cash discount influences the effective length of credit he further stated. The view as expressed above concurred with that of Western and Copeland (1989) cited in Pieterson (2012) who made reference to trade credit as the largest category of short-term credit, representing about one-third of the current liabilities of non-financial corporation and that firms must have policies concerning those who authorize purchasing, and how purchasing is geared to demand, which leads to proper management of Accounts Payable.

The result of this analysis also concurred with the findings of Hill, Sartoris and Ferguson (1983) cited in Anup and Muntasari (2007) which revealed that the vast majority of firms generally take the discount. In deciding whether to take the discount, the primary criterion of most firms is the amount of the discount. This makes good financial sense, since the amount of discount (along with the delay period from the discount date to the due date) determines the cost of skipping as a source of financing. The other financing strategy in connection with accounts payable is the stretching of payables beyond the due date. Hill, Sartoris and Ferguson's (1983) in Anup and Muntasari (2007) research revealed three important factors that are considered by firms in deciding whether to use this strategy; the value of using the funds (that is the cost of the funds relative to other funding sources), the effects on relationships with suppliers and the impact on the firm's credit rating.

# **Deduction / Inferences**

The findings of this study reveals a majority53.9% of the respondents stated that they have accounts payable management policy with yet majority 89% affirming that the policy have affected the performance of their firm positively suggesting that Managers

of the SMEs in Nigeria recognized the imperatives of putting in place policy(ies) that enhances the management of their accounts payable. This finding concurred with the view of Gitman (2009) who stated that the suppliers might give credit terms together with allowing discount to the purchasers and that estimate of credit risk associated with the buyer will indicate what credit policy is to be adopted. This risk may be with reference to buyer's financial standing or with reference to the nature of the business the buyer is in. Cash discount influences the effective length of credit he further stated. Authorize purchasing, and how purchasing is geared to demand. This can lead to proper management of accounts payable they further opined.

### **Periodicity of Accounts Payable Management**

The analysis in this section sought to find out whether Accounts Payable Management Period is being monitored by the Small and Medium Enterprises (SMEs) and how it has affected their Performances. Table 4.12 reveals that 63.2% of the respondents do monitor their accounts payable management while 36.8% do not indicating that a majority of the SMEs in Kaduna North and South Local Governments monitored the period and the volume of obligations including the period when it will fall due. As a result of implementation of monitoring system 92.37% of respondents said it has impacted positively on their performance. The results also showed that as result of monitoring the Accounts Payable Period, the corporate tax paid for the years 2008 to 2012 amounted to 92,892.00, 51,989.50, 88,115.80, 104,526.50 and 93,136.50 naira respectively

S/N	Details	Answer	Freq.	Percentage
2 (i)	Is the periodicity of the accounts	No	68	36.80
	payable being monitored?	Yes	118	63.20
(ii)	What effect does longer/shorter	positively	109	92.37
	accounts payable days have on your firm's performance?	Negatively	9	7.63
(iii)	) Kindly provide the amount of corporate tax paid for the periods:	_		
		N		
	2008	92,892.00		
	2009	51,989.50		
	2010	88,115.80		
	2011	104,526.50		
	2012	93,136.50		

 Table 4.12 Responses on Monitoring Accounts Payable Period

The results of the finding as indicated in table 4.12 above agrees with the empirical findings of Azam and Haider (2011) who investigated the impact of Working Capital management on firms' performance for non- financial institutes listed in Karachi Stock Exchange (KSE-30) Index. Panel data have been analyzed by applying Canonical correlation for the time period of 2001 to 2010. APP is found to be significant positive association with ROA and ROE indicating that if time period of supplier's payment is increased then overall firm's performance also improves. CCC and NTC shows significant negative relation ROA and ROE showing that firms' performance can be increased with short size of both of them. The results of this analysis and findings of Haida *et al.*, (2011) re-enforces the views of Helfert (2003) in Nwidobie (2012) who averred that sound management of suppliers' credit, requires current up-to-date information on accounts and aging of payables to ensure proper payments. To forestall adverse effects of credit on firm operators, he added, working capital efficiency require

constant updating of credit performance, and developing sound criteria for credit extension.

# **Deduction/Inferences**

A close observation of the results shows that a majority 63.2%% of the respondents stated that they do monitor the periods of accounts payable and which 92.37% agreed that its monitoring has impacted positively on performance also an indication that Managers of the SMEs have recognize the importance of instituting monitoring systems in the management of their Accounts payable. This inference supports the view of Helfert (2003) cited in Nwidobie (2012) who averred that sound management of suppliers' credit, requires current up-to-date information on accounts and aging of payables to ensure proper payments. To forestall adverse effects of credit on firm operators, he further added that, working capital efficiency require constant updating of credit performance, and developing sound criteria for credit extension.

### **Optimum Management of Accounts Payable**

The purpose of this analysis is to investigate if Optimum Accounts Payable Management is being achieved by the Small and Medium Enterprises (SMEs) and how it has affected their Performances. Table 4.13 reveals that only 43.2% of respondents achieve the optimum in the management of accounts payable management while 56.8% doesn't indicating that majority of SMEs do not achieve optimum management of their payables. With regard to the effects of achieving optimum results, 88.75% of the respondents stated that it has impacted positively on the performance while 11.25% said the effect was negative. The result also indicated that for the period under review the discount received was 33,500.00, 21,909.10, 36,181.80, 42,950and 48,636.40 naira for the years 2008 to 2012.

S/N	Details	Answer	Freq.	Percentage	
3 (i)	Is optimality in accounts payable	No	106	56.80	being
achieve	ed	Yes	80		
43.20					
(ii)	What effect does it have on the	Positively	71	88.75	
	performance on of your firm?	Negatively	9	11.25	
(iii)	Please state the discount received				
	for the periods:-	=]	N=		
	2008	33,5	00.00		
	2009	21,9	09.10		
	2010	36,1	81.80		
	2011	42,9	50.90		
	2012	48,6	36.40		

Table 4.13 Responses on achievement of Optimum Accounts Payable Management

The above findings with the majority of respondents affirming positive impact of optimum achievement reflect the view expressed by Hill and Sartoris (1992) cited in Anita (2012) who argued that utilizing the value of relationship with payee is a sound objective that should be highlighted as important as having the optimal level of inventories and as a consequence, strong alliance between company and its suppliers strategically improve production lines and strengthen credit record for future expansion.

The findings also concurred with the empirical findings of Lakshan (2009) who investigated the effects of working capital management on sampled Srilankan firm and which revealed a positive relationship between gross profit ratio and accounts payable and also that of Hill, Sartoris and Ferguson (1983) cited in Pieterson (2012) which revealed that the vast majority of firms generally take the discount for credit purchase and also their views that, efficiency in working capital management requires a firm to make use of credit terms extended to it, balancing such with favorable trade-offs for early payments from customers with discounts negates these findings.

## **Deductions/Inferences**

Analysis of whether optimum management of payables by the SMEs are achieved reveals that 43.20% of the respondents affirmed that they achieve optimum management of account payable while majority 56.8% stated non achievement of optimum result suggesting that not majority of the managers of the SMEs recognizes the advantage such as discount and built confidence by suppliers which is derived from making early payments. It is noteworthy however that of the 43.20% of respondents who revealed that they do achieve optimum management of account payable, 88.75% affirmed that achieving optimum management of accounts payable have impacted positively on the performance of their firm suggesting that they recognize the importance of achieving optimum management of accounts payable. This inference dovetailed with the assertion of Lamberson (1995) cited in Nazir and Talat (2009) that working capital management has become one of the most important issues in organization where many financial executives are struggling to identify the basic working capital drivers and an important level of working capital. Consequently, companies can minimize risk and improve the overall performance by understanding the role and drivers of working capital management.

## 4.4.4 Working Capital Management (Account Receivable Management)

According to Joshi, (2000) and Meyer *et al.*, (1992) cited in Anita (2012) noted that accounts receivables consist of the credit a business grants its customers when selling goods or services which take the form of either trade credit which the company extends to other companies or consumer credit, which the company extends to its ultimate consumers and so the effectiveness of company's credit policies can have a significant impact on its total performance. Machiraju (2005) also argue that receivables arise out of delivery of goods or rendering of services on credit. Receivables represent claims against others for future receipt of money, goods or services whose value depends upon the volume of credit sales and the policy for collecting such credits. The purpose of

analysis in this section was to investigate if working capital management (Accounts Receivable) affects the performance of small and medium enterprises (SMEs) in Nigeria. The analysis specifically dwelt on Accounts Receivable Management Policy, Accounts Receivable Period and Achievement of Optimum Results in the Management of Accounts Receivable.

### **Accounts Receivable Management Policy**

The analysis in this section sought to find out whether the firm has Accounts Receivable Management Policy and how it has impacted on the Performance of the Small and Medium Enterprises (SMEs) in Nigeria. Table 4.14 shows that 40.2% of the respondents have Account Receivable Management policy while 59.8% said they do not have the policy in place. The analysis also shows that 72.0% stated that the policy have impacted positively on their performance while, 28.0% said the impact on their performance was negative. The result also indicates that Return on Asset for the periods 2001to2012 is 33.36%, 33.37%, 33.77%, 33.87% and 33.87% respectively.

S/N	Details	Answer	Freq.	Percentage
1(i)	Does your firm have accounts	No	111	59.8%
	receivable management policy?	Yes	75	40.2%
(ii)	What has been its impact on your	Positively	54	72.0%
	performance?	Negatively	21	28.0%
(iii)	Please indicate the return on assets for the period for the periods:-			
	2008	33.3	36%	
	2009	33.3	33%	
	2010	33.7	7%	
	2011	33.8	37%	
	2012	34.9	91%	

 Table 4.14 Response on Accounts Receivable Management Policy

The finding suggest that the SMEs averagely have the account receivable management policy and does not fully represent the view of Nwidobie (2011) that, debtor 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 increased revenue and hence return on capital. It is however in agreement with the empirical finding of Nyabwanga *et al.*,(2012), which revealed that selling products on credit was averagely practiced for SSEs in Kisii South District which also suggest that the low use of credit sales can be attributed to lack of sound credit policies since majority (56 SSEs representing 60% of all SSEs) seem not to set credit guidelines for their credit customers. The results is also in agreement with the study of Laziridis and Dimitrios (2005) established that pursuing reduced receivables account causes diminished financial performance for firms hence the suggestion by Juan and Martinez (2002) for firms to keep an eye on the debtors' repayment period with a view to make it minimal.

### **Deductions/Inferences**

Results of this study shows that a majority 59.8% of the respondents stated that they do not have accounts receivable management policy and suggesting that managers of SMEs do not recognized the imperatives of instituting policies that guide them in tracking their debtors and this is in tandem with the empirical finding of Nyabwanga et al (2012) which revealed that selling products on credit was averagely practiced for SSEs in Kisii South District since majority of all SSEs seem not to set credit guidelines for their credit customers. It is however worthy to note that of those who stated having the policy in place, a majority 72% of the respondent agreed that the policy have impacted positively on the performance of their firm also suggesting that they recognize the importance of accounts receivable management policy and this is in agreement with the assertion of Zietlow *et al.*,(2007) who averred that the main objective of Account receivables management is to minimize the time-lapse between completion of sales and receipt of payment. In order to significantly increase sales for a business, the customers should be

given credit transaction policy. At the same time, the cash budget must show that credit sales create trenched cash flow otherwise it would create cash flow problems if they delay the receipt of cash to meet its financial obligations.

### **Account Receivable Period**

The purpose of this analysis in this section sought to examine if the firms monitor their Accounts Receivable Management Period and how it has impacted on the Performance of the Small and Medium Enterprises (SMEs) in Nigeria. Table 4.15 as presented below indicates that 32.4% of the respondents stated that they monitor the period within which investment of receivable remains while 67.6% stated that they do not monitor the period of the investment in accounts receivable. The results of the analysis also indicates that 93.33% affirmed that monitoring of receivable period has impacted positively on their performance while, only 6.6% said it impacted negatively on their performance. The analysis also showed that for the period under consideration, the average sales volume is, 496,851.34, 248,202.85, 743,352.50, 568,803.18, 377,000.00 naira for 2001-2012.

S/N	Details	Answer	Freq.	Percentage
2 (i)	Is the periodicity of accounts	No	126	67.60%
	receivable period being monitored?	Yes	60	32.40%
(ii)Wh	hat has been its effect on shorter/ long	ger Positively	56	93.33%
	Period.	Negatively	4	6.67%
(iii)	Kindly indicate the sales volume			
	for the periods:-	N		
	2008	496,851.34		
	2009	248,202.85		
	2010	743,352.50		
	2011	568,803.18		
	2012	377,000.00		

Table 4.15 Response on Monitoring of Accounts Receivable Period

The results as contained on table 4.15 concurred with the empirical studies of Deloof (2000), and Shin and Soenen (1998) both cited in Lakshan (2009) which established that managers can increase corporate profitability by reducing the number of days accounts receivable and inventories and that managers can create value for their shareholders by reducing the cash conversion cycle to a reasonable minimum and thus re-enforcing the argument by Peel and Wilson (1996) in Lakshan (2009) that smaller firms should adopt formal working capital management routines in order to reduce the probability of business closure, as well as to enhance business performance. The results also reflect the views of Nwidobie (2012) that reduction in money tied up in receivables, by reducing credit to customers result in their patronizing the firm's competitors, cost of firm's investments in receivables is the interest that would have been earned if customers had paid up quickly or interest paid on finance borrowed to acquire the current assets and that the firm also forgoes interest of investing such in marketable securities Nwidobie (2012)

### **Deductions/Inference**

A close examination of the results of this research reveals that a majority 67.6% of the respondents stated that they do not monitor the accounts receivables while only 32.4% affirmed that they do monitor their accounts receivables suggesting that majority of the managers of the SMEs do not recognize the importance of instituting sound monitoring system for tracking their debtors and so they are likely to incur cost of investment. This inference is supported by the view expressed by Nwidobie (2012) who argued that, cost of firm's investments in receivables is the interest that would have been earned if customers had paid up quickly or interest paid on finance borrowed to acquire the current assets and that the firm also forgoes interest of investing such in marketable securities. The results also shows that of the number of respondents who stated that they do monitor the periodicity of debtors, 93.33% affirmed that it affects their performance positively and this is an indication that managers in this category of respondents recognize the importance of tracking their debtors for increased performance in terms of profit and growth in sales.

#### **Optimum Management of Account Receivable**

The objective of this analysis is to investigate if Optimum Accounts Receivable Management is being achieved by the Small and Medium Enterprises (SMEs) and how it has affected their Performances. Table 4.16 showed that 40.2% of respondents stated that they achieved optimum management of their accounts receivable while 59.8% stated a no answer to the question and this could be attributed to the reasons adduced in the questions paused in the policy and monitoring section of this variable. The results also indicated that 77.33% of the respondents also stated that the achievement of Optimum results have impacted positively on their Performance while 22.67% said had a negative impact on their Performance. The results indicated that cost of tracking the debt for the periods 2001to2012 was 28,235 30, 256, 65,810, 35,780 and 43,425

S/N	Details	Answer	Freq.	Percentage	
3 (i)	Is optimum accounts receivable	No	111	59.80%	
	management being released?	Yes	75	40.20%	
(ii)	What has been its effect on the	positiv	ely 58	77.33%	
	performance of your firm?	Negati	velY 17	22.67%	
(iii)	Please indicate the debt tracking				
	cost for the periods:-	N			
	2008	28,235			
	2009	30,810			
	2010	25,665			
	2011	35,780			
	2012	43,425			

Table 4.16 Response on Optimum Accounts Receivable Management

Table 4.16 showed that 40.2% of respondents stated that they achieved optimum management of their accounts receivable while 59.8% stated a no answer to the question and this could be attributed to the reasons adduced in the questions paused in the policy and monitoring section of this variable. This result concurred with the empirical findings in the studies by Lazaridis and Dimitrios (2005); Juan and Martinez (2002) in Nyabwanga *et al.*, (2012) Sushma and Bhupesh (2007) who found out that firms who pursue increase in their accounts receivables to an optimal level increase their profitability resulting from increase sales and market share, that firms can create value by reducing their number of days of accounts receivable and that, putting in place a sound credit policy ensures proper debt collection procedures and is pivotal in improving efficiency in receivables management hence the performance which all showed the significance of accounts receivable to performance are in agreement with the findings of this study.

The findings however contrast the views expressed by Pandey (2004) cited in Nyabwanga *et al.*, (2012) that provision of trade credit is normally used by business as a marketing strategy to expand or maintain sales. It is also in contrast to the views of Ross *et al.*, (2008) that efficient receivables augmented by a shortened creditors collection period, low levels of bad debts and a sound credit policy often improves the businesses ability to attract new customers and accordingly increase financial performance hence the need for a sound credit policy that will ensure that SSEs value is optimized. It is also at variance with the empirical study of the fortune 500s financial management practices, conducted by Gilbert and Reichert (1995) cited in Arunkumar and Radha (2013) in which they found out that account receivable management models are used in 59% of these firms to improve WCM projects.

### **Deductions / Inference**

The results of this study revealed that a majority 59.8% of the respondents stated that they do not achieve optimum management of accounts receivable suggesting that Operators of SMEs do not recognize the importance of efficient and effective management of their accounts receivable. The results however revealed that a majority 77.33% of respondents who stated achievement of optimum results affirmed that it has impacted positively on their performance suggesting that Operators of SMEs recognizes the importance of achieving optimum accounts receivable management. This finding is in agreement with the study by Lazaridis and Dimitrios (2005) which established that firms who pursue increase in their accounts receivables to an optimal level increase their profitability resulting from increase sales and market share.

### **4.4.5 Financial Intervention influence**

For a business concern to keep on going, it needs fund to operate. The importance of finance for a business venture therefore, need not be overemphasized, just as Abel (2008) argues that cash is crucial in any business in terms of survival and prosperity. If a business is starved of funds, it can lead to serious problem and eventual collapse. The importance of the financial institutions and other fund providers then come into play in

this matter. Amit *et al.*, (2011) assert that, access to finance is necessary to create an economic environment that enables firms to grow and prosper. Increased access to finance for SMEs they observed, can improve economic conditions in developing countries by fostering innovation, macro-economic resilience, and GDP growth. In this segment, the analysis sought to investigate if financial Institution intervention has influence the relationship between working capital management and the performance of small and medium enterprises in (SMEs) Nigeria. The analysis specifically focused on External Funding Policy and Grant from Government and other Financial Institutions.

## **External Funding Policy**

The purpose of this study was to examine if the firm has an external funding policy and how it has influenced the relationship between working capital management and performance of SMEs in Nigeria. Table 4.17 reveals that 47.1% of the respondents stated that they have an external funding policy while 52.9% of the respondents stated that they don't have indicating that majority of them might not have been aware of external sources of funding. The analysis also showed that 92, 05% of the respondents affirmed that the policy has influenced the relationship between working capital and performance of their firms positively while 7.95% stated the opposite. The analysis also showed that the total average assets of the firms for the period under review is 241,753.68, 369,240.473, 88,911.01, 411,892.13 and 356.095.23 naira for the 2008 to2012 respectively.

S/N	Details	Answer	Freq.	Percentage
1(i)	Does your firm have external	No	98	52.90
	funding policy?	Yes	88	47.10
(ii)	If yes how has this intervention influence the relationship between	Positively	81	92.05
	the working capital and performance of your firm?	Negatively	7	7.95
(iii)	Indicate the amount total assets of			
	your firm for the periods:-	N		
	2008	241,753.68		
	2009	369,240.47		
	2010	388,911.01		
	2011	411,892.13		
	2012	356.095.23		

**Table 4.17 Response on External Funding Policy** 

This finding on table 4.17 above in which majority of the respondents stated that they do not have external funding policy could be that there are not aware of such arrangement and have other sources concurred with the study of Oniovosa (2013) where it was found that many of the SMEs were not aware of the credit scheme available and that those who were aware complained about the high interest rate and short repayment period. Result is further corroborated with the assertion of Kesseven (2012) that Finance has been cited as one of the main barriers to SMEs' growth, and many governments have attempted partial solutions through the creation of specific financing schemes by pursuing the various traditional sources of financing for SMEs ranging from bank loans overdrafts, own funds/savings, loans from family or friends, and equity funding. However, nontraditional sources of finance also exist that entrepreneurs can use in the financing of their businesses; these have been described by many researchers as bootstrapping finance. that firms depend on a variety of sourcing of financing both internal and external and that bank loan and credit is major alternative for SMEs however remain valid considering the fact that there is a fast growth in the number of privately owned small and medium-sized companies worldwide, however, this category of business is plagued by several issues that deter this growth and that a key challenge for most SMEs is the problem of financing, all small firms live under tight liquidity constraints, therefore making finance a major problem for them (Small and Medium Enterprises (SMEs)).

### **Deductions/Inferences**

in the number of privately owned small and medium-sized companies worldwide. The above findings with a majority of 52.9% of the respondents stating that they do not have external funding policy, suggest that majority of them might not have been aware of external sources of funding. This inference is in agreement with the finding of Oniovosa (2013) where it was found that many of the SMEs were not aware of the credit scheme available and that those who were aware complained about the high interest rate and short repayment period. It is gratifying however to note from the finding that a majority 92.05% of those who affirmed that they do have the policy said it has positively influenced the relationship between working capital management and performance suggesting that external source of funding SMEs is crucial in the development, growth and sustenance of SMEs. This inference corroborated the assertion of Terungwa (2012) that firms depend on a variety of sourcing of financing both internal and external and that bank loan and credit is major alternative for SMEs however remains valid considering the fact that there is a fast growth

## **Grant from Government and other Financial Institutions**

The aim of this analysis was to find out whether the firms receive grant from Government and other Financial Institutions. Table 4.18 shows that 30.7% of the respondents receive grants/loan from financial institutions while 69.3% stated the opposite that is they did not receive any financial support from any financial or government Institutions indicating that majority of the SMEs might have been depending on internal sources of financing and probably not aware of external sources. The results also show that the 78.96% of those who received the grant stated that it has

impacted positively on their performance positively while 21.05% stated that it negatively impacted on their performance. The findings also indicated that for the periods 2008-2012, the yearly average grant received amounted to 350, 000, 550,000, 480,000, 450,000 and 650,000 naira respectively.

Answer	Freq.	Percentage
No	50	56.82
? Yes	38	48.18
e Positivel	y 30	78.95
ng Negative	ly 8	21.05
r firm?		
$\mathbf{N}$		
350,000		
550,000		
480,000		
450,000		
650,000		
	Answer           No           ?         Yes           e         Positivelying           ng         Negative           r         firm?           No         350,000           550,000         480,000           450,000         650,000	Answer         Freq.           No         50           ?         Yes         38           e         Positively         30           ng         Negatively         8           r firm?         No         50           No         50,000         480,000           450,000         650,000

Table 4.18 Response on Grant from Government and other Financial Institutions

This finding is consistent with the study of Ogujiuba et al., (2004) cited in Oniovosa (2013) who argued that despite what the funding requirement maybe, SMEs often prioritize the source of financing from internal (cash flow or entrepreneur's own capital) to external, according to relative availability and (opportunity) cost. This is because for most firms, the internal funds are always insufficient to undertake the required level of transactions for profitable projects hence the call for external finance to fill the finance gap. This finding is also in tandem with the empirical finding of Oniovosa (2013) that most SMEs in Nigeria are observed to get funding from personal savings, informal lending schemes known as "esusu", savings collectors, and moneylenders, rotating savings and credit associations and family members and which was further confirmed in a survey by United States Agency for International Development (USAID) demand

survey;(2005) where 24 percent of the respondents agreed to use informal finance services in a research "Review of Government Interventions that promote access to credit for Micro, Small and Medium Enterprises in Nigeria" conducted by Kelly, Lightfoot, Jakubec and Little (2012).

### **Deduction / inference**

A cursory look at the analysis shows that a majority 56.82% of the respondents stated that they do not receive grant from either government or other financial Institution suggesting that they have all along been dependent on internal source for financing their business transactions. The finding re- echoed the empirical findings of Oniovosa (2013) that most SMEs in Nigeria are observed to get funding from personal savings, informal lending schemes known as "esusu", savings collectors, and moneylenders, rotating savings and credit associations and family members. The finding further revealed that of the respondents who stated that they receive grant, a majority 78.95% of them affirmed that it has positively influenced the relationship between working capital and performance of their firm.

#### 4.5 Regression Analysis

### 4.5.1 Analysis of Cash Management

Regression analysis as stated by some scholars is a mathematical/statistical measure of the average relationship between two or more variables. It is therefore a statistical tool that attempt to establish whether or not there exist relationships between variables. The objective of this analysis is to find out if there exists a relationship between Cash Management policy (independent variable) and performance (dependent variable) and to this extent, the linear regression analysis which shows the relationship between the dependent variable which is performance and independent variable which is cash management policy was used. The choice of this tool (Linear Regression) is informed by the fact that it has been used by some researchers in similar study. For instance, the study on the effects of working capital management practices on financial performance of SMEs in Kissi District, Kenya, by Nyabwanga *et al.*, (2012), Determining cash balance management practices of SACCOs in Nakuru district by Waweru (2003) cited in Nyabwanga *et al.*, (2012) and also a research carried out by Kwame (2007), on changes in working capital management practices of SMEs in Ashanti Region of Ghana. For this variable, the regression model is summarized in Table 4.15

## **Cash Management Policy**

To establish the relationship between cash management policy and average income from invested surplus income, regression analysis was done. From the finding an R- square value of 0.773 was recorded indicating that 77.3% of average income from invested surplus income was explained by Analysis for cash management policy. On the other hand, the value of R 0.879 indicates that there was strong linear relationship between profitability and cash management policy. The model summery table 4.19 shows the finding.

 Table 4.19: Model Summary for Analysis for achievement of optimum results cash

 management

Model	R	R	Adjusted	Std. Error	Durbin-
		Square	R Square	of the Estimate	Watson
1	0.879	0.773	.766	1.46235	1.214

a. Predictors: (Constant), Analysis for cash management policy

The F-statistics presented in table 4.20 indicated that the overall model was significant, that is, the independent variable, Analysis for policy in cash management result showed

a good joint explanatory for average income from invested surplus income with F-value of 101.5854. P- Value =0.000 < 0.05 also indicates that the model was fit.

	Sum of	df	Mean	F	Sig.
	Squares		Square		
Regression	125.458	1	125.458	101.6	$.000^{b}$
Residual	228.376	185	1.235		
otal	353.834	186			
R	egression esidual otal	Sum of Squares egression 125.458 esidual 228.376 otal 353.834	Sum of         df           Squares	Sum of         df         Mean           Squares         Square           egression         125.458         1         125.458           esidual         228.376         185         1.235           otal         353.834         186         186	Sum of         df         Mean         F           Squares         Square         Square           egression         125.458         1         125.458         101.6           esidual         228.376         185         1.235         101.6           otal         353.834         186         101.6         101.6

Table 4.20: ANOVA. Analysis for cash management policy results

a. Dependent Variable: average income from invested surplus income

b. Predictors: (Constant), cash management policy

From the regression coefficient table 4.20, there was positive and significant relationship between Analysis for cash management policy and average income from invested surplus income. The model is given as  $Y=25986.85+3022.830X_2$ . The regression coefficient of 3022.830 indicates that an increase in Analysis for cash management policy results in cash management by 1unit leads to an increase in average income from invested surplus income by 3022.830 units.

Table 4.21: Coefficient.	Analysis for	achievement	of optimum 1	esults cash
management				

Т	Unstandardized		Standardize		Sig.	
	Coefficients		d			
			Coefficients			
	В	Std.	Beta			
		Error				
(Constant)	25986.85	3136.337		8.286	.041	
Cash management policy	3022.830	945.641	.896	3.197	.000	
a. Dependent Variable: average income from invested surplus income						

These results indicate that an improvement in the quality of liquidity management policies leads to an improvement of performance of the SMEs. These findings corroborate with the study "Working capital management practices of small firms in the Ashanti region of Ghana" by Kwame (2007) who established that the setting up of a cash balance policy ensures prudent cash budgeting and investment of surplus cash. It also agrees with the findings by Kotut (2003) and Waweru (2003) cited in Nyabwanga et al (2012) 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 that most businesses studied had a set of minimum cash balance level which guarded them against running out of cash. This findings however negates the findings of Nyabwanga et al (2012) whose results suggest that on the average, majority of the SSEs hardly have policy that determine the appropriate amount of cash to hold.

From the preceding discussions it can be deduced that, the performance of SMEs is linked to the quality of policies regarding the management of their liquidity. Institution of policies which guard against running out of cash contribute positively to financial performance as has been established by Kotut (2003) cited in Nyabwanga *et al.*, (2012) 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 firm.

### Cash Conversion Cycle( CCC)

The purpose of this analysis is to examine if there is a relationship between cash conversion cycle and the performance of SMEs in Nigeria. To carry out this analysis the linear regression which is a statistical tool was used. This tool has been used by previous researchers who had earlier undertaken similar studies. Among such researchers include, Shin,and Soenen, (1998) cited in Lakshan (2009) 'Efficiency of Working Capital Management and Corporate Profitability', Lakshan (2009) Working Capital Management and Performance of Small and Medium Size Enterprises and Lyroudi and Lazaridis, (2000) in Ali (2011) who made a unique study of the Greek Food Industry to

determine the relationship between the Cash Conversion Cycle and the traditional liquidity indicators among others. For this variable, therefore, the regression model is summarized in Table 4.20, 4.21 and 4.22.

In their discourse on the subject of the cash conversion cycle, Gitman (2009) in Feletiliki (2011) explains that a cash budget is a forecast of the future cash inflows and outflows of the business and how cash has been used for business operational activities. But the "cash conversion cycle" is the duration of time that cash is tied up in accounts receivables and inventory. In fact, the Cash Conversion Cycle (CCC) is concerned with the length of time a firm's resources are tied up in the course of business transaction. To establish the relationship between the Analysis of cash conversion cycle and average net profit regression analysis was done. From the finding an R- square value of .803 was recorded indicating that 80.3 % of average net profit was explained by Analysis of cash conversion cycle. On the other hand, the value of R 0.803 indicates that there was strong linear relationship between Analyses of cash conversion cycle performance of SMEs in Nigeria. The model summary table 4.22 shows the finding.

		R-Square	Adjusted R	Std. Error of the
			Square	Estimate
1	.0.896 <sup>a</sup>	.0.803	.796	1.36239

 Table 4.22: Model Summary for Analysis of cash conversion cycle

tors: (Constant), Analysis of cash conversion cycle

The F-statistics presented in table 4.23 indicated that the overall model was significant, that is, the independent variable, Analysis of cash conversion cycle was a good joint explanatory for average net profit with F-value of 65.086. P- Value =0.040 < 0.05 also indicates that the model was fit.

Model	Sum of	df	Mean	F	Sig.
	Squares		Square		
Regressi	on 125.458	1	125.458	101.6	$.000^{b}$
Residual	228.376	185	1.235		
Total	353.834	186			

 Table 4.23: ANOVA. Analysis of cash conversion cycle

a. Dependent Variable: average net profit

b. Predictors: (Constant), Analysis of cash conversion cycle

From the regression coefficient table 4.24, there was positive and significant relationship between Analysis of cash conversion cycle and average net profit. The model is given as  $Y=141943.04+43360.82X_2$ . The regression coefficient of 43360.82 indicates that an increase in Analysis of cash conversion cycle by 1unit leads to an increase in average net profit by 43360.82 units.

**Table 4.24 Regression Coefficient** 

Model	Unstandardized		Standardize	t	Sig.
	Coefficients		d		
			Coefficients		
	В	Std. Error	Beta		
(Constant)	141943.4	17847.4		3.45	.140
Analysis of cash					
conversion cycle	43360.82	12391.225	.896	3.499	.040
a. Dependent Varia	ble: average	net profit			

These findings concurred with the investigation by Shin and Soenen (1998) cited in Lakshan A.M.I (2009) on the relationship between a measure of the cash conversion cycle and corporate profitability whose result indicates that managers can create value for their shareholders by reducing the cash conversion cycle to a reasonable minimum,

Lyroudi & Lazaridis,(2000) cited in Shahidi (2011) who made a unique study of the Greek Food Industry to determine the relationship between the Cash Conversion Cycle and the traditional liquidity indicators, i.e., the Current Ratio and the Quick Ratio. The results of their study portrayed a significant positive association between the modern and traditional liquidity signifiers. The Cash Conversion Cycle was also found to be positively linked with the Return on Assets ratio.

Another researcher Deloof (2003) cited in Malik Muhammad, Waseem, and Kafayati (2012) used a sample of 1009 large Belgian non-financial firms for a period of 1992-1996. He used correlation and regression analysis and found a significant negative relation between gross operating income and the collection period of accounts receivable, average days in inventories and accounts payable of Belgian firms. These results suggest that managers can create value for shareholders by reducing collection period of accounts receivable and average days in inventories to a reasonable minimum. From the findings of this study as compared with other previous studies, it can be inferred that the cash conversion cycle should be closely monitored by the SMEs so as not to unnecessarily tie up cash in the transaction process so as to increase performance as found out by, Lyroudi and Lazaridis, (2000) cited in Shahidi (2011) that the Cash Conversion Cycle was found to be positively linked with the Return on Assets.

### **Optimum Results in cash management**

Cash management is said to be optimum when the cash to hold is efficiently determined by considering the trade-off between the opportunity cost of holding too much cash and the trading cost of holding too little as observed by Ross *et al.*, (2008). Cash management therefore need careful planning and monitoring for optimum results just as averred by Atrill (2006) that there is need for careful planning and monitoring of cash flow over time so as to determine the optimal cash to hold. The purpose of this analysis is to determine if there is a relationship between achievement of optimum cash management and performance of SMEs in Nigeria. To carry out this investigation, the study sought to use linear regression. This statistical tool has been used by other researchers like Mohammad and Noriza (2010) who worked on creating the relationship between Working Capital Management (WCM) and performance of firms chose the Malaysian listed companies, Ross, Westerfield, Jaffle, Jordan,(2008), on "Modern Financial Management and Shin, Soenen (1998) cited in Lakshan (2009) Efficiency of Working Capital Management and Corporate Profitability. To establish the relationship between the Analysis for achievement of optimum results cash in management and average income from invested surplus income regression analysis was done. From the finding an R- square value of 0.773 was recorded indicating that 77.3% of average income from invested surplus income was explained by Analysis for achievement of optimum results in cash management. On the other hand, the value of R 0.879 indicates that there was strong linear relationship between profitability and Analysis for achievement of optimum results in cash management. The model summary table 4.25 shows the finding.

 Table 4.25: Model Summary for Analysis for achievement of optimum results cash

 management

		R-Square	Adjusted R	Std. Error of the	
			Square	Estimate	
1	0.879	0.773	.766	1.46235	

tors: (Constant), Analysis for achievement of optimum results cash management The F-statistics presented in table 4.26 indicated that the overall model was significant, that is, the independent variable, Analysis for achievement of optimum results in cash management was a good joint explanatory for average income from invested surplus of income with F-value of 101.5854. P- Value =0.000<0.05 also indicates that the model was fit.

Model	Sum of		Mean	F	Sig.
	Squares		Square		
Regression	125.458	1	125.458	101.6	.000 <sup>b</sup>
Residual	228.376	185	1.235		
Total	353.834	186			

 Table 4.26: ANOVA. Analysis for achievement of optimum results cash

 management

a. Dependent Variable: average income from invested surplus income

b. Predictors: (Constant), Analysis for achievement of optimum results cash management

From the regression coefficient table, there was positive and significant relationship between Analysis for achievement of optimum results in cash management and average income from invested surplus income. The model is given as  $Y=25986.85+3022.830X_2$ . The regression coefficient of 3022.830 indicates that an increase in Analysis for achievement of optimum results in cash management by 1unit leads to an increase in average income from invested surplus income by 3022.830 units.

Model	Unstandardized		Standardized	t	Sig.			
	Coe	fficients	Coefficients					
	В	Std. Error	Beta					
(Constant)	25986.8	3136.337		8.286	.021			
Analysis for	3022.83	945.641	.896	3.197	.000			
achievement of								
optimum results cash								
management								
a. Dependent Variable	a. Dependent Variable: average income from invested surplus income							

 Table 4.27: Regression Coefficient. Analysis for achievement of optimum

 results cash management

These findings are in line with the assertions of Ross *et al.*, (2008) that efficient cash management involves the determination of the optimal cash to hold by considering the trade-off between the opportunity cost of holding too much cash and the trading cost of holding too little and supported by the argument of Atrill (2006), that there is need for careful planning and monitoring of cash flows over time so as to determine the optimal cash to hold. The finding is also strengthened by the study of Kwame (2007) who established that the setting up of a cash balance policy ensures prudent cash budgeting and investment of surplus cash and that of Kotut (2003) cited in Nyabwanga *et al.*, (2012) 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.

The achievement of optimum cash management is very critical to the firms performance as it avoids the unnecessary tying of up of cash at the expense of profitable investments. From the foregoing discussion of optimum management of cash, it can be inferred that SMEs need to determine optimum cash to hold, through ensuring cash budgeting and investment of surplus cash as establish from the findings of Kotut (2003) cited in Nyabwanga *et al.*, (2012) that cash budgeting is useful in planning for shortages and surplus of cash and has effect on the financial performance of the firms.

### 4.5.4 Analysis of Inventory Management

## **Inventory Management Policy**

The purpose of this analysis is to determine if there exists a relationship between Inventory Management Policy (independent variable) and Performance (dependent variable). In order to carry out this analysis, the linear regression method was applied. The choice of this tool is due to the fact it was used by some researchers like Samiloglo and Demirgũneş (2008) who conducted a study to examine the relationship between working capital management and profitability on a sample of manufacturing firms listed in Istanbul stock exchange for the period of 1998-2007. To establish the relationship between the Analysis of inventory management policy and Return on Equity regression analysis was done. From the finding an R- square value of 0.276 was recorded indicating that 27.6% of Return on Equity was explained by Analysis of inventory management policy. On the other hand, the value of R 0.526 indicates that there was strong linear relationship between profitability and Analysis of inventory management policy. The model summary table 4.28 shows the finding.

	R	-Square	Adjusted R	Std. Error of the	
			Square	Estimate	
1	0.526	0.276	.254	1.36215	

 Table 4.28: Model Summary for Analysis of inventory management policy

tors: (Constant), Analysis of inventory management policy

The F-statistics presented in table 4.29 indicated that the overall model was significant, that is, the independent variable, Analysis of inventory management policy was a good joint explanatory for Return on Equity with F-value of 25.2638. P- Value =0.000 < 0.05 also indicates that the model was fit.

 Table 4.29: ANOVA. Analysis of inventory management policy

Model	Sum of	df	Mean	F	Sig.
	Squares		Square		
Regression	135.458	1	125.458	25.26	$.000^{b}$
Residual	428.376	185	2.3155		
Total	563.834	186			

a. Dependent Variable: Return on Equity

b. Predictors: (Constant), Analysis of inventory management policy

From the regression coefficient Table 4.30, there was positive and significant relationship between Analysis of inventory management policy and Return on Equity. The model is given as  $Y=34.242+3.39X_2$ . The regression coefficient of 3.39 indicates that an increase in Analysis of inventory management policy by 1unit leads to an increase in Return on Equity by 3.39 units.

Model	Unstandardized		Standardiz	t	Sig.				
	Coef	ficients	ed						
			Coefficien						
			ts						
	В	Std.	Beta						
		Error							
(Constant)	34.242	10.506		1.07	.041				
Analysis of inventory	3.39	3.168	.896	3.259	.000				
management policy									
a. Dependent Variable:	a. Dependent Variable: Return on Equity								

 Table 4.30: Coefficient. Analysis of inventory management policy

The results indicate that an improvement in policy regarding inventory management leads to an improvement of performance of the SMEs. This study corroborate with the study "Effects of Working Capital Management Practices on the financial performance of SMEs in Kissi District Kenya" by Nyabwang, Patrick, and Simeyo (2012) where they found out that majority of the SSEs often prepared inventory budgets and reviewed their inventory levels and that their findings suggest that preparation of inventory budgets and review of inventory levels are regularly carried out by SSEs' owner managers/managers and are in agreement with findings of Kwame (2007) which established that majority of small businesses always review their inventory levels and prepare inventory budgets and also as stressed by Lazaridis and Dimitrios (2005) that enhancing the management of inventory enable businesses to avoid tying up excess capital in idle stock at the expense of profitable ventures.

From the findings of this study and the discussions that followed, it can be inferred that the institution of efficient and effective policies enhances the performance of SMEs just as stressed by Lazaridis and Dimitrios (2005) that enhancing the management of inventory level enables business to avoid tying up excess capital in idle stock at the expense of profitable ventures.

### **Economic Order Quantity (EOQ)**

The objective of this analysis is to investigate whether there is relationship between Economic Order Quantity and performance of SMEs in Nigeria. In order to do this linear regression which is a statistical tool was used. The regression model has been used in a similar research by other scholars like, Kwame (2007) Nyabwanga *et al.*, (2012) in their studies on the "Effects of Working Capital Management Practices on the financial performance of SMEs in Kissi District Kenya" and Working capital management practices of Small firms in the Ashanti region of Ghana respectively. Regression analysis between the Analysis of Economic Order Quantity and Purchases was done. From the finding an R- square value of 0.701 was recorded indicating that 70.1% of Purchases was explained by Analysis of Economic Order Quantity. Besides that, the value of R 0.838 indicates that there was strong linear relationship between profitability and Analysis of Economic Order Quantity. The model summary table 4.31 shows the finding.

		R-Square	Adjusted R	Std. Error of the
			Square	Estimate
1	0.838	0.701	.698	0.76215

 Table 4.31: Model Summary for Analysis of Economic Order Quantity

tors: (Constant), Analysis of Economic Order Quantity

The F-statistics presented in table 4.32 indicated that the overall model was significant, that is, the independent variable, Analysis of Economic Order Quantity was a good joint explanatory for Purchases with F-value of 25.2638. P- Value =0.000<0.05 also indicates that the model was fit.

Model	Sum of	df	Mean	F	Sig.
	Squares		Square		
Regression	135.457	1	135.457	196.7	.000 <sup>b</sup>
Residual	127.376	185	0.68851		
Total	262.833	186			

Table 4.32: ANOVA. Analysis of Economic Order Quantity

a. Dependent Variable: average income from invested surplus income

b. Predictors: (Constant), Analysis for achievement of optimum results cash management

The regression coefficient table 4.34, showed a positive and significant relationship between Analysis of Economic Order Quantity and Purchases. The model is given as  $Y=34.242+40377.26X_2$ . The regression coefficient of 40377.26 indicates that an increase in the application of Economic Order Quantity by 1unit leads to an increase in Purchases by 40377.26 units.

Model	Unstan	dardized	Standardize	t	Sig.
	Coefficients		d		
			Coefficients		
	В	Std.	Beta		
		Error			
(Constant)	305833	50435.1		2.65	.07
(Constant)		8		5	3
Analysis of Economic	40377.	15206.7	.838	6.06	.00
Order Quantity	2	8		4	0

Table 4.33: Coefficient. Analysis of Economic Order Quantity

a. Dependent Variable: Purchases

The results indicate that the application of Economic Order Quantity in the management of inventory by the SMEs leads to an improvement of performance. This finding also reinforces the establishment by Deloof (2003) cited in Lakshan (2009) which showed that, the way working capital is managed has significant effect on the overall performance of businesses. The results however negates the findings by Nyabwanga *et al.*, (2012) that majority of SSEs determined their inventory levels based on managers experience, that majority of the SSEs do not stock enough quantities of stock and do not determine appropriate re-order points and this also concurred with the study "Working capital management practices of small firms in the Ashanti region of Ghana" by Kwame (2007) which established similar results that up to 90% of small businesses relied on manager's experience in their management of working capital.

In the management of inventory the application of the re-order quantity which answers the question of how much should be ordered and when should it be ordered is critical since it relates to the problem of determining the economic order quantity and the problem can be answered by the analysis of the costs of maintaining certain levels of inventory as there are costs involved in holding too much stock and there are also costs involved in holding too little, hence the need to put in place an effective stock management system to ensure reliable sales forecasts to be used in stock ordering purposes as pointed out by Atrill, (2006). From the findings and discussions that followed, it can be inferred that quantity when properly applied avoid the over or under stocking of inventory which consequently improve the performance of the SMEs.

### **Optimum Inventory management.**

The purpose of this analysis is to find out if there exist relationship between achievement of Optimum results and performance of SMEs in Nigeria. The linear regression model which is a mathematical measure of the average relationship between two or more variables was applied. The choice of this tool was informed by the fact that it has been used previously by researchers like Deloof M (2003) cited in Lakshan

(2009) in his study titled "Does Working Capital Management Affect Profitability of Belgian Firms?" Lazaridis (2005).their research on "The relationship between working capital management and profitability of listed companies in the Athens Stock Exchange and Waweru (2003) cited in Nyabwanga et al (2012) in his research "Determining cash balance management practices of SACCOs in Nakuru District, Kenya. For this variable therefore, the regression model is summarized in Table 4.34 below.

Model	Unstandardiz	zed Coefficien	ts Standardized Coefficients T		Sig.
	В	Std. Error	Beta		
(Constar	nt) 20281.730	1225.087	2.	.759	.070
Year	1019.038	369.378	847 10	6.555	.000

 Table 4.34
 Table of regression Coefficients analysis

a. Dependent Variable: Net Inventory.

Using the summary presented in Table 4.36, a linear regression model was fitted as follows Y=20281.730 +1019.038X1. The analysis in table 4.20 shows that the value of the coefficient of determination (R2) and correlation coefficient indicates strength of relationship between the achievement of optimum result in inventory management and performance of SMEs in Nigeria. The results of the linear regression shows that the R2=0.717 implying that the change in performance of SMEs can be explained by the achievement of optimum results in the previous operations. The value of R which is 0.847 is an indication that there is a strong linear relationship between achievement of optimum results and performance of SMEs in Nigeria. The p-value (0.000) of the slope of the regression model is less than 0.05 which also implies that achieving optimum results in inventory management have a significant effect on the performance of SMEs and Medium Enterprises in Nigeria. The results indicate that the achievement of optimum results in previous operations in the management of sMEs leads to further improvement of performance.

The findings in this analysis concurred with the findings by (Deloof, 2003) in Lakshan (2009) that, maintaining optimal inventory levels reduces the cost of possible interruptions or of loss of business due to the scarcity of products, reduces supply costs and protects against price fluctuations. The inventory conversion period has a negative effect on a business's performance. For instance, shortening the inventory conversion period could increase stock out costs of inventory which results in losing sales opportunities and leads to poor performance and also agreeing with the suggestion by Lazaridis and Dimitrios, (2005) that, Managers of firms should keep their inventory to an optimum level since.

From the findings in this analysis of Optimum Results in inventory management, which shows a positive and strong relationship with performance, it can be concluded that the achievement of optimum result at all times by SMEs Nigeria is imperative as it reduces cost of possible interruptions or of loss of business due to the scarcity of products, reduces supply costs and protects against price fluctuations without which there would be a negative effect on a business's performance.

#### 4.5.5 Analysis of Accounts Payable Management

#### **Accounts Payable Management Policy**

Accounts Payable as explained by some Scholars like Gitman (2009), Hills and Satoris (1992) cited in Anita (2012) are one of the major sources of unsecured short-term financing and so there is the need for policies governing its administration. The objective of this analysis is to find out if there exist a relationship between Accounts Payable Management Policy and Performance of Small and Medium Enterprises (SMEs) in Nigeria. In order to conduct this analysis the linear regression which indicates the relationship between two or more variables was used.

The choice of this tool(linear regression) was informed by the fact it has been used in similar research by some Scholars including the study of Binti Mohamad and Mohd Saad (2010) who evaluated the impact of various components of working capital on

profitability and market value of the firms based on secondary data of 172 Malaysian firms and Azam M. Haider S.I. (2011) who investigated the impact of Working Capital management on firms' performance for non- financial institutes listed in Karachi Stock Exchange (KSE-30) Index.

To establish the relationship between the Analysis of accounts payable management policy and Salaries and wages regression analysis was done. From the finding an R-square value of 0.802 was recorded indicating that 80.2% of Salaries and wages were explained by Analysis of accounts payable management policy. On the other hand, the value of R 0.895 indicates that there was strong linear relationship between profitability and Analysis of accounts payable management policy. The model summery table 4.35 shows the finding.

		R-Square	Adjusted R	Std. Error of the
			Square	Estimate
1	0.895	0.802	.798	1.56215

 Table 4.35: Model Summary for Analysis of accounts payable management policy

tors: (Constant), Analysis of accounts payable management policy

The F-statistics presented in table 4.36 indicated that the overall model was significant, that is, the independent variable, Analysis of accounts payable management policy was a good joint explanatory for Salaries and wages with F-value of 133.739. P- Value =0.000<0.05 also indicates that the model was fit.

Model	Sum of	df	Mean	F	Sig.
	Squares		Square		
Regression	135.457	1	135.457	133.7	.000 <sup>b</sup>
Residual	187.376	185	1.0128		
Total	262.833	186			

Table 4.36: ANOVA. Analysis of accounts payable management policy

a. Dependent Variable: Salaries and wages

b. Predictors: (Constant), Analysis of accounts payable management policy Using the summary presented in Table 4.37, a linear regression model of the form,  $Y = \alpha$ +  $\beta Xi$  was fitted as follows: Y=102028.740+4410.300X1 The p-value (0.040) of the slope of the regression model is less than 0.05 which also implies that Accounts Payable Management Policy have a significant effect on the performance of SMEs in Nigeria.

### Table 4.37 Table of regression analysis of accounts payable management policy

Model		Unstandardized		Standardized	Т	Sig.	
		Coefficients		Coefficients			
		В	Std. Error	Beta			
1	(Constant)	102028.740	4202.637		24.277	.000	
	year	4410.300	1267.143	895	3.481	.040	
a. Dependent Variable: Salaries and wages paid.							

This result indicates that increase in quality of policy formulation with regard to Accounts Payable Management leads to an increase in Performance of the Small and Medium Enterprises (SMEs) in Nigeria. The results is consistent with findings of Azam M. Haider S.I. (2011) where accounts payable is found to have a significantly positive association with ROA and ROE indicating that if time period of supplier's payment is increased then overall firm's performance also improves. This also re-enforces the views of Western and Copeland (1989) cited in Anita (2012) that firms must have policies
concerning those who authorize purchasing, and how purchasing is geared to demand which can lead to proper management of accounts payable.

## **Periodicity of Accounts Payable Management**

The purpose of this analysis is to determine if there exist relationship between the Periodicity of Accounts Payable Management and Performance of Small and Medium Enterprises (SMEs) in Nigeria. The tool to be used in this analysis would be the linear regression as it has previously been used by some researchers in similar study among which include; Azam and Haider (2011) who investigated the "impact of Working Capital management on firms' performance for non- financial institutes listed in Karachi Stock Exchange (KSE-30) Index" and Haitham and Maryam (2010) in their study titled "Cash conversion cycle and firm's performance of Japanese firms". To establish the relationship between the Analysis of periodicity of accounts payable management and corporate tax regression analysis was done. From the finding an R- square value of 0.802 was recorded indicating that 80.2% of corporate tax was explained by Analysis of periodicity of accounts payable management. On the other hand, the value of R 0.895 indicates that there was strong linear relationship between profitability and Analysis of periodicity of accounts payable management. The model summery table 4.38 shows the finding.

		R-Square	Adjusted R	Std. Error of the
			Square	Estimate
1	0.895	0.802	.798	1.56215

 Table 4.38: Model Summary for Analysis of periodicity of accounts payable

 management

tors: (Constant), Analysis of periodicity of accounts payable management

The F-statistics presented in table 4.39 indicated that the overall model was significant, that is, the independent variable, Analysis of periodicity of accounts payable

management was a good joint explanatory for Corporate tax with F-value of 33.739. P-Value =0.000<0.05 also indicates that the model was fit for the data.

	1 0		1 0	0	
Model	Sum of	df	Mean	F	Sig.
	Squares		Square		
Regression	135.457	1	135.457	33.74	$.000^{b}$
Residual	187.376	185	1.0128		
Total	262.833	186			

 Table 4.39: ANOVA. Analysis of periodicity of accounts payable management

a. Dependent Variable: Corporate tax

b. Predictors: (Constant), Analysis of periodicity of accounts payable management

From the regression coefficient table 4.40, there was positive and significant relationship between Analysis of periodicity of accounts payable management and corporate tax. The model is given as  $Y=1234\ 023+5303.6X_2$ . The regression coefficient of 5303.6 indicates that an increase in monitoring the periodicity of accounts payable management by 1unit leads to an increase in corporate tax payment by 5303.6 units.

Model	Unstan	dardized	Standard	t	Sig.
	Coefficients		ized		
			Coefficie		
			nts		
	В	Std.	Beta		
		Error			
(Constant)	70224.2	435.189		2.6	.077
Analysis of periodicity of accounts payable	5303.6	206.782	.419	0.799	.000
management					
a. Dependent Variable: C	Corporate ta	Х			

Table 4.40: Coefficient. Analysis of periodicity of accounts payable management

These results imply that an increase in the accounts payable days leads to an increase in performance of the SMEs in terms profit, sales and other performance indicator. The result is consistent with findings of Haider *et al.*, (2011) in which they found that that Accounts Payable Period (APP) is found to have significant positive association with Return on Assets (ROA) and Return on Equity (ROE) indicating that if time period of supplier's payment is increased then overall firm's performance also improves and that of Haitham and Maryam (2009) whose results, suggest that Lengthening the Payable Deferral Period could also add to profitability.

Mathuva (2009) studied the impact of working capital management on the performance. He took almost 30 listed firms as a sample and all these companies were listed in Nairobi stock exchange and the data was taken from 1993 to 2008. Among the assumptions of the research was the association between the average payment period and profitability and was found out to be positive. These findings and suggestion reenforces the argument by Helfert and Scott (2003) cited in Nwidobie (2011) that efficiency in credit management ensures that a firm is able to pay its bills on time and carry sufficient stocks and that trade credit from suppliers and accounts payable they further added helps offset receivables and inventories.

From the preceding discussions it can be deduced that, the performance of SMEs is linked to the ways and manner period of Accounts Payable is managed by the SMEs. Lengthening the period of Accounts Payable days could lead to an increase in firms profitability and hence performance as established by Mathuva(2009), Haider *et al.*, (2011) and Haitham *et al.*,(2009) in their various researches. Helfert, (2003) in Nwidobie (2011) also suggested the exceeding of normal credit terms deliberately, making interest pay off more favorable; cautioning however, of the risk of affecting the company's credit standing if delays beyond the credit terms granted, become habitual.

### **Optimum Accounts Payable Management**

The objective of this analysis is to investigate if there is relationship between Optimum Accounts Payable Management and Performance of SMEs in Nigeria. The analysis was done through the use of linear regression. The choice of this tool is born from the fact that it has previously been used by some researchers like Lakshan (2009) who investigated the "effects of working capital management on sampled Srilankan firm" Hill, Sartoris and Ferguson (1983) cited in Anita (2012) "Cash and Working Capital Management". Again To establish the relationship between the Analysis optimum Accounts Payable Management and Discount Received regression analysis was done. From the finding an R- square value of 0.641 was recorded indicating that 64.1% of Discount Received was explained by Analysis of optimum Accounts Payable Management. On the other hand, the value of R 0.801 indicates that there was strong linear relationship between profitability and Analysis in optimum Accounts Payable Management. The model summery table 4.38 shows the finding.

 Table 4.41: Model Summary for Analysis optimum Accounts Payable Management

		R-Square	Adjusted R	Std. Error of the
			Square	Estimate
1	0.801	0.641	.766	1.46235

tors: (Constant), Analysis optimum Accounts Payable Management

The F-statistics presented in table 42 indicated that the overall model was significant, that is, the independent variable, Analysis optimum Accounts Payable Management was a good joint explanatory for Discount Received with F-value of 42.056. P- Value =0.000<0.05 also indicates that the model was fit.

Model	Sum of	df	Mean	F	Sig.
	Squares		Square		
Regression	125.458	1	125.458	42.06	.000 <sup>b</sup>
Residual	428.376	185	3.673		
Total	553.834	186			

Table 4.42: ANOVA. Analysis optimum Accounts Payable Management

a. Dependent Variable: Discount Received

b. Predictors: (Constant), Analysis optimum Accounts Payable Management From the regression coefficient table 4.43, there was positive and significant relationship between Analysis optimum Accounts Payable Management and Discount Received. The model is given as Y=21241.26+2217.289X<sub>2</sub>. The regression coefficient of 2217.289 indicates that an increase in Analysis optimum Accounts Payable Management by 1unit leads to an increase in Discount Received by 2217.289 units.

Table 4.43: Regression Coefficient. Analysis optimum Accounts PayableManagement

Model	Unstar	ndardized	Standardi	t	Sig.
	Coef	ficients	zed		
			Coefficie		
			nts		
	В	Std. Error	Beta		
(Constant)	21241.26	136.337		6.286	.041
Analysis optimum	2217.289	645.641	.596	2.197	.000
Accounts Payable					
Management					

a. Dependent Variable: Discount Received

These results imply that an optimum achievement in the accounts payable management furthers the performance of the SMEs in terms profit, sales and other performance indicator. These results concurred with the empirical findings of Lakshan (2009) who investigated the effects of working capital management on sampled Srilankan firm and which revealed a positive relationship between gross profit ratio and accounts payable and also that of Hill, Sartoris and Ferguson (1983) in Anita (2012) which revealed that the vast majority of firms generally take the discount for credit purchase and also expressing the view that, efficiency in working capital management requires a firm to make use of credit terms extended to it, balancing such with favorable trade-offs for early payments from customers with discounts.

From the results so obtained and the discussions that followed, it is obvious that there exist strong relationship between Optimum Achievement in managing Accounts payable and Performance of SMEs as evidenced in the researches of Lakshan (2009) and Hill *et al.*, (1983) in Anita (2012). It can then be inferred that Optimum Achievements in Accounts Payable Management furthers the Performance of SMEs in Nigeria.

# 4.5.6 Analysis of Accounts Receivable Management

# **Accounts Receivable Management Policy**

Accounts receivables consist of the credit a business grants its customers when selling goods or services which take the form of either trade credit which the company extends to other companies or consumer credit, which the company extends to its ultimate consumers and therefore, the effectiveness of a company's credit policies can have a significant impact on its total performance. The purpose of this analysis is to examine if there is a relationship between Accounts Receivable Management Policy and Performance of SMEs Nigeria.

The analysis was done using linear regression which is one of the statistical tools used for analyzing statistical data. This tool has been chosen because it had been used in previous and similar research by some scholars like Nyabwanga et al (2012) in their study "Effects of Working Capital Management in Kissi District, Kenya, Nwidobie (2011) Working capital management efficiency and corporate profitability: Evidence from quoted firms in Nigeria and the study "Effects of Working Capital Management on sampled Srilankan firms" by Lakshan (2009). To establish the relationship between the Analysis of Accounts Receivable Management and Return on Assets, regression analysis was done. From the finding an R- square value of 0.807 was recorded indicating that 80.7% of Return Assets was explained by Analysis of Accounts Receivable Management. On the other hand, the value of R 0.889 indicates that there was strong linear relationship between profitability and Analysis of Accounts Receivable Management .The model summery table 4.44 shows the finding.

Table 4.44: Model Summary for Analysis of Accounts Receivable ManagementPolicy

		R-Square	Adjusted R	Std. Error of the
			Square	Estimate
1	0.889	0.807	.796	1.66235

tors: (Constant), Analysis of Accounts Receivable Management

The F-statistics presented in table 4.45 indicated that the overall model was significant, that is, the independent variable, Analysis of Accounts Receivable Management was a good joint explanatory for Return on Assets with F-value of 9.556. P- Value =0.000<0.05 also indicates that the model was fit.

Sum of Df F Model Mean Sig. Squares Square 1  $.000^{b}$ Regression 125.459 9.56 125.458 Residual 2428.376 185 13.126 Total 2553.834 186

 Table 4.45: ANOVA. Analysis of Accounts Receivable Management

a. Dependent Variable: Return Assets

b. Predictors: (Constant), Analysis of Accounts Receivable Management

From the regression coefficient table 4.46, there was positive and significant relationship between Analysis of Accounts Receivable Management and Return on Assets. The model is given as  $Y=32.756 + 0.364X_2$ . The regression coefficient of 0.364 indicates that an increase in Analysis of Accounts Receivable Management by 1unit leads to an increase in Return Assets by 0.364 units.

Model	Unstandardized		Standardi	t	Sig.
	Coefficients		zed		
			Coefficie		
			nts		
	В	Std.	Beta		
		Error			
(Constant)	32.756	.340		4.286	.041
Analysis of Accounts	0.364	.103	.899	2.797	.000
Receivable Management					

Table 4.46: Regression Coefficient. Analysis of Accounts Receivable Management

a. Dependent Variable: Return Assets

These results imply that a positive change in the accounts receivable management policy furthers the performance of the SMEs in terms of profit, sales and other performance indicators. These results concurred with the empirical findings of Lakshan (2009) who investigated the effects of working capital management on sampled Srilankan firm and which revealed a positive relationship between gross profit ratio and accounts payable and the empirical finding of Nyabwanga *et al.*, (2012), which revealed that selling products on credit was averagely practiced for SSEs in Kisii which also concurred with the views of Nwidobie (2011) that, debtor 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 increased revenue and hence return on capital. Pandy and Perera, (1997) cited in Lakshan (2009) also have done a study on

working capital management practices on Srilankan Firms and identified that most companies in Sri Lanka have informal working capital policy.

From the results so obtained and the discussions that followed, it is obvious that there exist strong relationship between Accounts Receivable Management Policy and Performance of SMEs as evidenced in the values obtained for the coefficient of determination and correlation coefficient. Appropriate policies for debtor's management need to be identified as to attract customers just as argued by Nwidobie (2011) that, debtor 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 increased revenue and hence return on capital. It can therefore, be inferred that Accounts Payable Management Policy furthers the Performance of SMEs in Nigeria through instituting appropriate credit terms which attract customers, establishing credit standards, deciding upon appropriate collection policies and also promptly and regularly follow up accounts receivable collection processes.

# **Periodicity of Accounts Receivable Management**

The purpose of this analysis is to determine if there exist a relationship between periods of Accounts Receivable Management and Performance of SMEs in Nigeria. The linear regression was used to analyze this variable. This tool of analyzing statistical data has been use previously by other researcher/scholars, including Deloof (2000) Peel and Wilson (1996), Pandy and Perera (1997) all cited in Lakshan (2009) in their studies "Does Working Capital Management Affect Profitability of Belgian Firms?", "Working Capital and Financial Management Practices in the Small Firm Sector" and Working Capital Management in Sri Lanka respectively.

To establish the relationship between the Analysis of periodicity of accounts Receivable management and Sales volume regression analysis was done. From the finding an R-square value of 0.004 was recorded indicating that 0.04% of Sales volume was

explained by Analysis of periodicity of accounts Receivable management. On the other hand, the value of R 0.066 indicates that there was no linear relationship between sales volume and Analysis of periodicity of accounts Receivable management. The model summery table 4.47 shows the finding.

 Table 4.47: Model Summary for Analysis of periodicity of accounts Receivable

 management

		R-Square	Adjusted R	Std. Error of the
			Square	Estimate
1	0.066	0.309	.004	1.115

tors: (Constant), Analysis of periodicity of accounts Receivable management The F-statistics presented in table 4.48 indicated that the overall model was significant, that is, the independent variable, Analysis of Government Financial Institution Grant was a good joint explanatory for Sales volume with F-value of 8.653. P- Value =0.892<0.05 also indicates that the model was not good for the study.

 Table 4.48: ANOVA. Analysis of periodicity of accounts Receivable management

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	122.458	1	122.459	8.653	.892 <sup>b</sup>
Residual	528.376	185	12.46		
Total	653.834	186			

a. Dependent Variable: Sales volume

b. Predictors: (Constant), Analysis of periodicity of accounts Receivable management

From the regression coefficient table, there was positive and but insignificant relationship between Analysis of Government Financial Institution Grant and Sales volume. The model is given as  $Y=124.27+3.01X_2$ . The regression coefficient of 3.01 indicates that an increase in Analysis of Government Financial Institution Grant by 1unit leads to an increase in Sales volume by 3.01 units.

Model	Unstandardized		Standardized	t	Sig.
	Coe	efficients	Coefficients		
	В	Std.	Beta		
		Error			
(Constant)	124.27	.340		1.286	001
Analysis of periodicity	3.01	.101	.899	12.797	.892
of accounts Receivable					
management					

Table 4.49Table of regression analysis

a. Dependent Variable: Sales volume

This result even though weak but positive implying that a slight reduction in accounts receivable days leads to slight increase in performance and this dovetailed with the empirical findings of Dellof (2000) cited in Lakshan (2009) that managers can increase corporate profitability by reducing the number of days accounts receivable and inventories and Shin and Soenen (1998) cited in Mustapha (2011) whose results indicates that managers can create value for their shareholders by reducing the cash conversion cycle to a reasonable minimum thus re-enforcing the argument by Peel and Wilson (1996) in Lakshan (2009) and Pandy and Perera(1997) cited in Zahra and Azam (2012) that smaller firms should adopt formal working capital management routines in order to reduce the probability of business closure, as well as to enhance business performance and that most companies in Sri Lanka have informal working capital policy as a means of enhancing their performances.

The findings from this variable indicate that the relationship between the two variables for the coefficient of determination and the correlation coefficient though positive is very weak it can thus be inferred that mechanisms which are put in place by the SMEs in managing the receivables are either weak or not vigorously being monitored in such a way that bulk collections of receivables are made as and when due.

## **Optimum Accounts Receivable Management**

The purpose of this analysis is to find out if there is relationship between Optimum Accounts Receivable Management and Performance of SMEs in Nigeria. In order to conduct this analysis, the linear regression which is a tool use in analyzing statistical data was adapted. This choice of tool was informed by the fact that it has been used by researchers in similar studies. Among those who previously used this tool include Lazaridis and Dimitrios (2005) in their study titled "the relationship between working capital management and profitability of listed companies in the Athens stock exchange"; Juan and Martinez (2002) cited in Nyabwanga *et al.*, (2011) in their study titled "Effects of working capital management on SME profitability" and Sushma and Bhupesh (2007) Effect of Working Capital Management Policies on Corporate performance an Empirical Study.

To establish the relationship between the Analysis of optimum accounts receivable management and Debt tracking was done. From the finding an R- square value of 0.633 was recorded indicating that 63.3% of Debt tracking was explained by Analysis of optimum accounts receivable management. On the other hand, the value of R 0.796 indicates that there was strong linear relationship between of Debt tracking and Analysis of optimum accounts receivable management. The model summery table 4.46 shows the finding.

		R-Square	Adjusted R	Std. Error of the	
			Square	Estimate	
1	0.796	0.633	.598	1.16213	

 Table 4.50: Model Summary for Analysis of optimum accounts receivable

 management

tors: (Constant), Debt tracking

The F-statistics presented in table 4.51 indicated that the overall model was significant, that is, the independent variable, Analysis of optimum accounts receivable management was a good joint explanatory for Debt tracking with F-value of 31.55. P- Value =0.000<0.05 also indicates that the model was fit.

Model Sum of Df Mean F Sig. Squares Square  $.000^{b}$ Regression 185.352 1 185.352 31.55 Residual 185 1087.376 6.42 Total 1162.728 186

Table 4.51: ANOVA. Analysis of optimum accounts receivable management

a. Dependent Variable: Debt tracking

b. Predictors: (Constant), Analysis of optimum accounts receivable management

From the regression coefficient table, there was positive and significant relationship between Analysis of optimum accounts receivable management and Debt tracking. The model is given as  $Y=0.795 +10.3456X_2$ . The regression coefficient of 10.3456 indicates that an increase in Analysis of optimum accounts receivable management by 1unit leads to an increase in Sales Volume by10.3456 units.

Model	Unstan	dardized	Standard	t	Sig.
	Coeff	ficients	ized		
			Coeffici		
			ents		
	В	Std.	Beta		
		Error			
(Constant)	0.795	435.189		2.645	.077
Analysis of optimum	10.3456	206.782	.838	6.064	.000
accounts receivable					
management					

# Table 4.52: Coefficient. Analysis of optimum accounts receivable management

a. Dependent Variable: Debt tracking

This result as contained on Table 4.49 implies that an Optimum achievement in accounts receivable managements leads to increase in performance and this concurred with the empirical findings in the studies by Lazaridis and Dimitrios (2005); Juan and Martinez (2002) Sushma and Bhupesh (2007) who found out that firms who pursue increase in their accounts receivables to an optimal level increase their profitability resulting from increase sales and market share, that firms can create value by reducing their number of days of accounts receivable and that, putting in place a sound credit policy ensures proper debt collection procedures and is pivotal in improving efficiency in receivables management hence the performance which all showed the significance of accounts receivable to performance are in agreement with the findings of this study.

The findings also concurred with the study of Lazaridis and Tryfonidis (2006) who conducted a cross sectional study by using a sample of 131 firms listed on the Athens Stock Exchange for the period of 2001 - 2004 and found statistically significant relationship between profitability, measured through gross operating profit, and working capital and its components (accounts receivables, accounts payables, and inventory)

found out that firms who pursue increase in their accounts receivables to an optimal level increase their profitability resulting from increase sales and market share and that of Mathuva (2009) on a sample of 30 firms listed in Nairobi stock exchange on data taken from 1993 to 2008 which depicts that, firms that are more profitable enjoys less time period for the collection of cash from the customers as compared to ones which are less profitable.

From the findings above and discussions that followed, it can be deduced that achievement of optimal results is critical for the firms performance and hence continued growth and survival as established and argued by some scholars that firms who pursue increase in their accounts receivables to an optimal level increase their profitability resulting from increase sales and market share, that firms can create value by reducing their number of days of accounts receivable and that, putting in place a sound credit policy ensures proper debt collection procedures and is pivotal in improving efficiency in receivables management

# 4.5.7 Analysis of financial Institution intervention External Funding Policy

Small and Medium Enterprises (SMEs) are critical in the economic development of any nation all over the world, hence the need to source for fund for their operations. The objective of this analysis was to examine if external funding policy has influence on Working Capital for the Performance of SMEs in Nigeria. To carry out this analysis, the linear regression is therefore chosen for this purpose. This tool has previously been used by some scholars like Oniovosa (2013) in his study titled Strategic Effect of Sources of Fund on the Performance an Analysis of SMEs in Delta State, Nigeria. Hughes' (1997) cited in Kesseven (2012) study of the financial structure of large and small U.K. businesses and Bhaird and Lucey (2011) "An empirical investigation of the financial growth lifecycle". For this variable, the regression model is summarized in Table 4.49 below. The relationship between the Analysis of External Funding Policy and Total

assets was established. From the finding an R- square value of 0.42 was recorded indicating that 42.0% of Total assets were explained by Analysis of External Funding Policy. On the other hand, the value of R 0.650 indicates that there was strong linear relationship between Total assets and Analysis of External Funding Policy .The model summery table 4.53 shows the finding.

	Г	t-Square	Adjusted R	Std. Error of the
			Square	Estimate
1	0.650	0.420	.598	1.16213

Table 4.53: Model Summary for Analysis of External Funding Policy

tors: (Constant), accounts receivable

The F-statistics presented in table 4.54 indicated that the overall model was significant, that is, the independent variable, Analysis of External funding was a good joint explanatory for accounts receivable with F-value of 41.55. P- Value =0.000 < 0.05 also indicates that the model was fit.

Sum of F Model df Mean Sig. Squares Square  $.000^{b}$ Regression 165.352 165.352 41.55 Residual 7.42 1089.376 185 Total 1164.728 186

Table 4.54: ANOVA. Analysis of External Funding Policy

a. Dependent Variable: Total assets

b. Predictors: (Constant), Analysis of optimum accounts receivable management

From the regression coefficient table, there was positive and significant relationship between Analysis of External Funding Policy and Total assets. The model is given as  $Y=342.2+234.21X_2$ . The regression coefficient of 234.21 indicates that an increase

in Analysis of External Funding Policy by 1unit leads to an increase in Total assets by 234.21 units.

Model	Unstandardized		Standardiz	t	Sig.
	Coef	fficients	ed		
			Coefficien		
			ts		
	В	Std.	Beta		
		Error			
(Constant)	32.35	435.189		2.645	.077
Analysis of optimum	234.21	6.782	.838	6.064	.000
accounts receivable					
management					

 Table 4.55: Coefficient. Analysis of optimum accounts receivable

 management

a. Dependent Variable: Total assets

The results of the linear regression shows that R2= 0.423 indicating that the change in performance of the SMEs can be explained by influence which the external funding policy as a moderating factor has on the independent variable. The value of R which is 0.795 indicates that there is a positive strong relationship between the external funding policy as moderator and the independent variable (working capital management) which affect the dependent variable (Performance of SMES in Nigeria). The p-value (0.021) of the slope of the regression model is less than 0.05 which means that the variable is statistically significant as a moderating factor between the independent variables and Performance of Small and Medium Enterprises in Nigeria.

The results of the finding agreed with the finding Oniovosa (2013) which indicated the need for local governments to be more actively involved in financing micro-enterprises especially women-owned enterprises which nature of businesses were mostly rural

based. The Local government was to be mostly concerned in view of the federal and state governments<sup>\*\*</sup> other overwhelming economic problems. This was also the view of Akinyi (2009), who opined that government cannot reach out with the informal subsectors, but the federal government can grant micro-credit loans to MSEs through the Micro-Finance Banks. It also concurred with Hughes' (1997) study of the financial structure of large and small U.K. businesses cited in Kesseven et al (2012) which found that small businesses tend to rely more on short-term debt in comparison with large businesses.

These results show that small businesses have a higher proportion of debt as trade credit, which is attributed to the fact that small firms face greater problems in attracting long-term debt than large businesses. The result also conforms to the study of Bhaird and Lucey (2011) in which an analysis of the respondents' capital structure across age groups indicates distinct changes in the sources of finance employed by firms over time. They found that the financing choices are consistent with Myers's pecking-order hypothesis, and the importance of profitability in financing SMEs is emphasized. Contrary to conventional wisdom, the respondents in the youngest age category report a relatively high use of debt financing. This high use is explained by the provision of the firm owners' personal assets to secure the firm debt. From the results obtained and the discussions on its implication, it can be inferred that policies regarding the financing decision by the SMEs is critical to their performances. The need to get external financing option is paramount in view of their limited resource, hence the need for them to develop policies that will enable them to secure loans from the financial Institutions even with their (financial Institutions) reluctance and hesitance.

#### **Analysis of Government Financial Institution Grant**

The funding of Small and Medium Enterprises is one of the major concerns for all countries both developed and developing Nations. It is no longer news that this sector of any economy is the largest employer of labor just as reported by" (Ojukwu, 2006),

according to the SBA Report (2000), the American economy which is arguably the largest economy of the world depends largely on the success of SMEs for "innovation, productivity, job growth and stability", according to the report, SMEs represent about 99% of all employers, employ 51% of private-sector workers, employ 38% of workers in high-tech occupations, provide about 75% of new jobs of the private sector output and represent 96% of all goods exporters". There is therefore the need for Governments at all level to intervene in their funding.

The purpose of this analysis is to determine if external Government has influence on Working Capital for the Performance of SMEs in Nigeria. To do this the linear regression which is a statistical tool was used. This choice is informed by the fact that it has been used in similar studies by some researcher including; Oniovosa (2013) in his study titled Strategic Effect of Sources of Fund on the Performance Analysis of SMEs in Delta State, Nigeria and Lakshan (2009) in his Research on the Working Capital Management and Performance of Small and Medium Enterprises in Srilanka. To establish the relationship between the Analysis of Government Financial Institution Grant and Grant received regression analysis was done. From the finding an R- square value of 0.309 was recorded indicating that 30.9% of Grant received was explained by Analysis of Government Financial Institution Grant. On the other hand, the value of R 0.556 indicates that there was strong linear relationship between profitability and Analysis of Government Financial Institution Grant. The model summery table 4.57 shows the finding.

Table 4.56: Model Summary	for Analysis of	Government	Financial	Institution
Grant				

		R-Square	Adjusted R	Std. Error of the
			Square	Estimate
1	0.556	0.309	.306	1.46235

tors: (Constant), Analysis of Government Financial Institution Grant

The F-statistics presented in table 4.58 indicated that the overall model was significant, that is, the independent variable, Analysis of Government Financial Institution Grant was a good joint explanatory for Grant received with F-value of 10.64 P- Value =0.000<0.05 also indicates that the model was fit.

	•				
Model	Sum of	df	Mean	F	Sig.
	Squares		Square		
Regression	145.458	1	145.459	10.64	$.000^{b}$
Residual	2528.376	185	13.66		
Total	2653.834	186			

 Table 4.57: ANOVA. Analysis of Government Financial Institution Grant

a. Dependent Variable: Grant received

b. Predictors: (Constant), Analysis of Government Financial Institution Grant From the regression coefficient table, there was positive and significant relationship between Analysis of Government Financial Institution Grant and Grant received. The model is given as  $Y=3124.23+43.21X_2$ . The regression coefficient of 43.21 indicates that an increase in Analysis of Government Financial Institution Grant by 1 unit leads to an increase in Grant received by 43.21 units.

Table 4.58:	regression	Analysis.	Analysis	of Governi	ment F	inancial
Institution	Grant					

Model	Unstandardized		Standardiz	t	Sig
	Coefficients		ed		
			Coefficien		
			ts		
	В	Std.	Beta		
		Error			
(Constant)	3124.23	.340		4.28	.021
Analysis of	43.21	.103	.899	2.797	.000
Government Financial					
Institution Grant					

a. Dependent Variable: Grant received

The result concurred with some Empirical Studies which indicates the influence Government Financial Institution Grant has on the Working Capital Managements and its effect on the Performance on SMEs. For instance, the Study by Kelly, Lightfoot, Jakubec and Little (2012) "Review of Government Interventions that promote access to credit for Micro, Small and Medium Enterprises in Nigeria The Bank of Industry (BOI) was established in 2001 with its mandate to provide financial assistance for the establishment of large, medium and small projects; as well as expansion, diversification and modernization of existing enterprises; and rehabilitation of ailing industries. The BOI is involved in a wide range of activities which include medium and long term finance to industry, equity financing, management of dedicated funds on behalf of public and private sector agencies and donors, the BOI has made notable progress over the last 5 years in consolidating their position and expanding the value of loans of which over 114 billion naira was disbursed thus creating over one million job between 2005 and 2010.

Another research carried out by Kaboski and Townsend in World Bank Report (2012) also conforms to this finding and indicated how Government Grant influences SMEs in Thailands million Baht Village Fund Program during 2001-2002 in which a substantial microfinance initiative was implemented. This intervention consisted of injecting funds into all 77,000 Thai villages and the initial funds distributed were significant, corresponding to about 1.5 percent of Thai GDP in 2001. Each transfer was used to form an independent village bank for lending within the village. Importantly, every village, regardless of its characteristics, was eligible to receive the program. Due to the nature of the intervention, the expansion of credit in villages by the Thai Fund Program could be correlated with the number of households in a village during the program years. Using these interactions of number of households and the program years as instruments for the amount of credit received, the authors assessed the impact of this program.

Their findings suggest that the Million Baht Village Fund injection of microcredit in villages did increase the overall credit in the economy. Households borrowed more, consumed more, and increased their earnings. A short-term effect of increasing future incomes and making business and market labor more important sources of income was also found. The increased borrowing and short-lived consumption response, despite no decline in interest rates, point to a relaxation of credit constraints. The increased labor income and especially wage rates indicate important spillover effects that may have also affected non-borrowers.

In agreement with this finding is also the research carried out by Oniovosa (2013) in which it was found that the Government of Nigeria recognizing the indispensable role of private sector enterprises, introduced a number of monetary, fiscal, and industrial policy measures, for the exploitation of established and potential benefits of Micro, Small and Medium enterprises including: - Setting up and funding industrial zones as a means of reducing overhead costs, to provide SMEs services which include technical appraisals for loans applications, entrepreneurship training, management of product development, production planning and control, Provision of local finance through government agencies including the Central Bank of Nigeria (CBN), the Federal Ministry of Industries, (FMIs) and the Nigerian Industrial Development Bank (NIDB), which was established in 1964 to provide credit and other facilities to industrial enterprises in the small, medium and large scale category. Decree number 2 of 1986 was also promulgated establishing the National Economic Reconstruction Fund (NERFUND) with the main objective of providing soft, medium-to long-term loans to wholly Nigerian-owned SMEs in manufacturing and agro-allied enterprises, mining and quarrying.

From the results of the analysis and evidences obtained from previous studies indicates the essence of Government financial Intervention to the SMEs through promulgations of policies and in other ways giving some grants in form of loans. It can therefore, be inferred that the Intervention of Governments at all levels in the development of SMEs is very paramount since they are the largest contributor to the economic development of any nation through employment and the overall GDP of any nation both developed and developing countries of the world.

## 4.5.8 Multivariate Regression Analysis

This section presents the results on the combined effects of all the independent variables which are: Cash management, inventory Management, Account Payable Management, Account Receivable Management and Financial institution as a moderator on the dependent variable that is Performances of SMEs in Nigeria. A multiple linear regression model was used to test the significance of the influence of the independent variables on the dependent variable. Therefore the overall model for the study was;  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 e$ 

where:

Y = Performances of SMEs in Kenya

X<sub>1</sub>= Inventory Management

 $X_2 = Cash management$ 

 $X_3$  = Account Payable Management

 $X_4$  = Account Receivable Management

 $Z_{=}$  Financial institution Intervention

Table 4.60 shows the analysis of the fitness of the model used in the study. The results indicate that the overall model was satisfactory as it was supported by coefficient of determination also known as the R-square of 0. 575. This means that all the independent variables explain 57.5% of the variations in the dependent variable.

R-Square	Adjusted R	Std. Error of the
	Square	Estimate
		)2

 Table 4.59: Overall Model Fitness without moderator

tors: (Constant), Account Payable Management, Cash management inventory Management, Account Receivable Management

Table 4.61 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant. This was supported by an F statistic of 37.95 and the reported p value (0.000) which was less than the conventional probability of 0.05 significance level. These results suggest that the independent variables are good predictors of performances of SMEs in Nigeria.

Mode	1	Sum of	df	Mean	F	Sig.
		Squares		Square		
	Regression	131.896	4	63.224	37.95	$.000^{b}$
	Residual	191.538	182	1.6232		
	Total	444.434	186			

 Table 4.60: Overall ANOVA. Without moderator

a. Dependent Variable: Performances of SMEs in Kenya

b. Predictors: (Constant) Account Payable Management, Cash management inventory Management, Account Receivable Management

Regression of coefficients results in Table 4.61 shows that there was positive and significant relationship between performance of SMEs in Nigeria (dependent variable) and Account Payable Management, Cash management, inventory Management, Account Receivable Management (explanatory variables). From the finding, the overall model obtained is expressed as:

Y=6.650+1.872X<sub>1</sub>+ 1.638 X<sub>2</sub>+0.536 X<sub>3</sub>+1.678X<sub>4</sub>

These were supported by beta coefficients of 1.872, 1.638, 0.536 and 1.678 respectively. This result shows that a change in either of the variables will definitely lead to a positive change in performances of SMEs in Nigeria.

5					
Model	Unstanda	rdized	S.Coeffi	t	Sig.
	Coefficie	nts			
	В	Std. Error	Beta		
(Constant)	6.650	1.420		9.61	.000
Cash management	1.872	.241	.476	6.10	.000
Account Payable	1.638	.209	.409	4.49	.000
Management					
Account Receivable	.536	.575	.116	2.93	.002
Management					
Inventory Management	1.678	1.23	.213	1.65	.001

 Table 4.61: Overall Regression Coefficients without moderator

a. Dependent Variable: Performance of SMEs in Nigeria

Table 4.62 shows the analysis of the fitness of the model used in the study. The results indicate that the overall model was satisfactory as it is supported by coefficient of determination also known as the R-square of 0. 612. This means that all the independent variables explain 61.2% of the variations in the dependent variable.

 Table 4.62: Overall Model Fitness with moderator

		R-Square	Adjusted R	Std. Error of the
			Square	Estimate
1	.782 <sup>a</sup>	.612	.602	1.13802

tors: (Constant), Account Payable Management, Cash management inventory Management, Account Receivable Management

Table 4.63 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant. This was supported by an F statistic of 38.31 and the reported p value (0.000) which was less than the conventional

probability of 0.05 significance level. These results suggest that the independent variables are good predictors of performances of SMEs in Kenya.

Model		Sum of	df	Mean	F	Sig.
		Squares		Square		
	Regression	152.896	4	38.224	38.31	$.000^{b}$
	Residual	181.538	182	0.998		
	Total	434.434	186			

 Table 4.63: Analysis of Variance (ANOVA) with moderator

a. Dependent Variable: Performances of SMEs in Kenya

b. Predictors: (Constant) Account Payable Management, Cash management

inventory Management, Account Receivable Management

Regression of coefficients results in Table 4.64 shows that there is a positive and significant relationship between performances of SMEs in Nigeria (dependent variable) and Account Payable Management, Cash management inventory Management, Account Receivable Management (explanatory variables). From the finding, the overall model in the presence of moderator is expressed as:

 $Y{=}7.450{+}2.972X_1{*}Z{+}\ 1.537\ X_2{*}Z{+}3.432\ X_3{*}Z{+}1.487X_4{*}Z$ 

Result shows that a change in either of the variables will definitely lead to a positive change in performances of SMEs in Nigeria.

Model U	Unstandardized Coefficients		S.Coef	t	Sig.
В	3	Std. Error	Beta		
(Constant) 7	.450	1.220		4.50	.000
Cash management 2	972	.341	.376	8.71	.000
Account Payable 1	.537	.109	.459	14.1	.000
Management					
Account Receivable 3	.432	.505	.116	6.79	.000
Management					
Inventory Management 1	.478	1.23	.113	1.65	.001

## Table 4.64: Overall Regression Coefficients with moderator

a. Dependent Variable: Performance of SMEs in Nigeria

From the two models obtained above, it was worth noting that in the presence of moderator, the model is more superior to in the case of no moderator. This is supported by that fact R- Square value in case of model 2 where the moderator is present was greater than that in model 1 where there is no moderator. The finding suggests that financial institution as Government regulation leads better performance in SMEs in Nigeria.

From the table 4. 63 and 4.64 all the hypothesis were rejected as summarized in the table 4.65 based on t-values and f-values.

S/NO	Hypothesis	Test	Test	Test	Decision
		statistics	statistic	statistic	
			value	value with	
			without	moderator	
			moderator		
H1	$H_0: \beta_1 = 0$	t-test	6.10	8.71	Reject H <sub>0</sub>
	$H_1:\beta_1\neq 0$				
H2	$H_0:\beta_2=0$	t-test	4.49	14.1	Reject H <sub>0</sub>
	$H_1:\beta_2\neq 0$				
H3	$H_0:\beta_3=0$	t-test	2.93	6.79	Reject H <sub>0</sub>
	$H_1:\beta_3\neq 0$				
H4	$H_0:\beta_4=0$	t-test	1.35	1.65	Reject H <sub>0</sub>
	$H_1: \beta_4 \neq 0$				
H5	$H_0:\beta_1=\beta_2=\beta_3=\beta_4$	F-test	37.95	38.31	Reject H <sub>0</sub>
	$H_1$ : at least one				
	$eta{\neq}0$				

 Table 4.65 Hypothesis to be tested and rejected

# 4.6 Revised Conceptual Framework

With the revised model for all predictor variable it is observed that all the independent variables contribute positively towards SMEs performance .The conceptual frame work model was therefore revised in a hierarchical order based on the weight of contribution by each variable

# Independent Variables Moderating Variable (specific objective)

**Revised Conceptual Framework** 

# **CHAPTER FIVE**

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

# **5.1Introduction**

This chapter summarizes the findings of the study which purpose was to investigate the effect of working capital management on the performance of Small and Medium Enterprises in Nigeria. It explained the effects of cash management, inventory management, accounts receivable management and accounts payable management on the performance of SMEs in Nigeria and particularly in Kaduna North and South Local Government areas of Kaduna State Nigeria in ensuring that these resources are efficiently and effectively managed for the growth of the SMEs. Conclusions were also drawn base on the findings and recommendations as to how working capital can be effectively and efficiently managed for growth and prosperity of the SMEs. Final conclusions were made by proposing areas for furtherance of the research.

## 5.2 Summary of Findings

In this section, the summary of the findings of the study were based on the specific research objectives of the study.

# **5.2.1Does Working Capital Management (Cash) affect the performance of Small and Medium Enterprises in Nigeria?**

Finding of the study showed that 65.7% of the respondents stated that their firm has cash balance policy of which 98.36% of them stated that it has affected their performance positively. Analysis of the cash conversion cycle (CCC) shows that 65.6% is being monitored as a result 97.5% affirmed it has impacted positively on their performance. The result also reveals that 52.9% of them agree that optimum cash management is being achieved in their firm and has impacted positively on their performance. Financial statement cash balance policy also showed positive results with an average of 80,644.20,

123,053.30, 131,338.23, 139451.70 and 128,846.16 naira for the period 2008 and 2012. Other sub variables under cash management also showed a positive result suggesting that managers of the SMEs recognizes the importance of instituting cash balance policy, monitoring and achievement of optimum results as critical for managing their cash resources

The results therefore, reflects the views and empirical findings of researchers like, Peel and Wilson (1996) Shin and Soenen (1998) both cited in Lakshan (2009) who argued that Smaller firms should adopt formal working capital management (cash inclusive) routines in order to reduce the probability of business closure, as well as to enhance business performance and that the managing director plays a major role in formulating formal or informal policy and whose finding Shin and Soenen(1998) showed that reducing the cash conversion cycle to a reasonable extent increases firms' profitability.

The inferential analysis of the study shows that R2, R of cash management policy are, 0.773, 0.879, respectively for cash management policy while cash conversion cycle have 0.803, 0.896 and 0.040 and that of Achievement result shows that the R2=0.803, R=0.896,.These results are indications that there is positive linear correlation between the cash management and performance of SME. This positive linear relationship between cash management and performance apart from being strong indicates that cash management was statistically significant in explaining the change in the performance of Small and Medium Enterprises in Nigeria.

# **5.2.2Does Working Capital Management (Inventory) affect the Performance of Small and Medium Enterprises in Nigeria?**

The descriptive analysis of this variable showed that 67.6% of respondents have inventory management policy and that it has impacted positively on their performance. With regard to application of EOQ only 33.33% stated that they use it while ordering for goods and that it has affected their performance positively as stated by majority of those respondents who use to apply it in ordering for goods and also 67% of respondents

stated that they achieve results which impacted positively on their firms performances. Other findings also indicated that 28,323.5, 30420, 37306, 41,159.10, 38,068.20 as income derived from the investment of surplus cash. Other sub variables also showed like the application of EOQ and the achievement of optimum result also showed a positive results.

These findings dovetailed with the views expressed by earlier scholars like, Long, Malitz and Ravid, (1993) in Limin Lai (2012); Deloof and Jegers, (1996) in B-Bagahi and B. Kamarui (2012) who stated 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. Larger inventory reduces the risk of a stock-out. The finding also agree with the suggestions of Lazaridis and Dimitrios (2005) that managers of firms should keep their inventory to an optimum level since mismanagement of inventory will lead to tying up excess capital at the expense of profitable operations. The inferential analysis shows that value of R = 0.526, 838,and 0.896, R2=0.276,0.717 and 0.701 for inventory management policy, application of EOQ and achievement of optimum results. These results imply that the change in performance of the SMEs can be explained by inventory management policy, application EOQ and achievement of Optimum results. It also implies that there is strong linear relationship between Performance of SMEs and Cash Management and that inventory management plays a significant role in the performance of SMEs in Nigeria.

This above results also re-echoed the argument of Smith, (1980); and Blinder and Manccini, (1991) both cited in Talat Afza Mian Sajid Nazir (2011) Singh (2008) and the findings of Christopher and Kamalavalli (2011) that, Working capital management (inventory inclusive) is important because of its effects on the firm's profitability, risk, and consequently its value and whose results of their analysis depicted that inventory turnover ratio among other components of working capital positively related with the Return on Investment respectively.

# **5.2.3** Can Working Capital Management (Accounts Payable) affect the performance of Small and Medium Enterprises in Nigeria?

In this analysis, a majority of the respondents which represents 53.9% and 63.2% for accounts payable policy and accounts payable monitoring respectively stated a yes answer while 43.2% answered yes to achieving optimum level of managing accounts payable. The results of the analysis also showed that 89%, 92.37%, 88.75% stated that policy, monitoring and achievement of optimum results with regard to accounts payable management impact positively on their performance. The results also showed that the sum of 576298.20 naira was paid out as salaries and wages for the periods 2008-2012. Other variables under accounts payable management also indicated that the SMEs were able to meet up with their obligations. These results falls in line with the view expressed by Helfert and Scott (2003) cited in Nwidobie (2012) that efficiency in credit management ensures that a firm is able to pay its bills on time and carry sufficient stocks and that trade credit from suppliers and accounts payable they further added helps offset receivables and inventories and it also concurred with the findings of N. Hill, W. Sartoris and D. Ferguson (1983) cited in Chowdhury and Amin (2007) which revealed that the vast majority of firms generally take the discount.

The analyzed data shows that the value of the correlation R 0.801,0.895,0.838 andR2=0.641,0.802,0.701 for policy, monitoring and achievement of optimum results with regard to Accounts Payable Management implying that the change in performance of the SMEs can be explained by Accounts Payable Management Policy, Monitoring of Account Payable Period and Achievement of Optimum results in Accounts Payable Management. It also implies that there is linear relationship between Performance of SMEs and Accounts Payable Management and Accounts Payable Management plays a significant role in the Performance of SMEs in Nigeria.

# **5.2.4** Can Working Capital Management (Accounts Receivable) affect the performance of Small and Medium Enterprises in Nigeria?

The study of this component of working capital revealed that less than 50% of the respondents which is 40.2% and 32.4% for accounts receivable policy and accounts receivable monitoring respectively stated the yes answer while 40.2% answered yes to achieving optimum level of managing accounts receivable. Other findings under the descriptive analysis on this variables also showed that return on asset for the period 2008-2012 were 33.36%,33.33%,33.77%,33.87%, and 34.91% with other sub variables like monitoring, and achievement of optimum also showing positive results

The results also reveals that majority of respondents who have accounts receivable management policy stated that the policy have impacted positively on performance of their SMEs. The result however revealed low response on monitoring indicating that only few of the SMEs monitor the management of their accounts receivables which falls in line with the empirical evidence of Nyabwaga et al (2012), which revealed that selling products on credit was averagely practiced for SSEs in Kisii South District which also suggest that the low use of credit sales can be attributed to the lack of sound credit policies since majority (56 SSEs representing 60% of all SSEs) seem not to set credit guidelines for their credit customers. The inferential analysis of data in this study also showed the R0.796,0.0660.889 and R2=0.633,0.301, 0.807 for policy, monitoring and achievement of optimum results with regard to Accounts Receivable Management implying that the change in performance of the SMEs can be explained by Accounts Receivable Management Policy, Monitoring of Account Receivable Period and Achievement of Optimum results in Accounts Receivable Management.

The results of this study indicate that there is linear relationship between Performance of SMEs and Accounts Receivable Management and that Accounts Receivable Management Plays a significant role in the Performance of SMEs in Nigeria. This finding concurred with an empirical study by Lazaridis and Tryfonidis (2006); who

found statistically significant relationship between profitability, measured through gross operating profit, and the cash conversion cycle and accounts payables, among other components of working capital management.

# **5.2.5** Can Financial Institution Intervention affect the relationship between Working Capital Management and Performance of Small and Medium Enterprises in Nigeria?

An analysis of data on the moderating variable showed that less than 52.9% of the respondents stated that they have external financial policy the same goes to the responses on the question of whether they receive grant from government and other financial institutions and the percentage of the yes respondents for the external finance policy was 47.1%. The result also shows that 92.05% respondents stated that the policy have impacted positive on the performance of their firm and also the sum of 2,480,000 naira was received as the amount for grant from the government. This suggests lack of awareness or other stringent conditions attached to the quest for loan from banks comparing the amount received and the numerous SMEs in the two local governments.

The findings concurred with the views expressed by Oniovosa (2013) Valerie et al. (2005) and (2012) Akande (2010)that the continuous decrease in commercial banks and merchant bank loans to small scale enterprises can be attributed to the lack of collateral from the SMEs to secure the loans and the high lending rate from the banks and that, bank credit play a crucial role in providing external financing to SMEs, but in Nigeria context, this crucial source of finance for SMEs is apparently non functional. The analysis on the inferential statistics reveals that the value of R = 6500.420, and 0.556, 0.309 for External funding policy, Grant from Government and other financial Institution respectively implying that the change in performance of the SMEs can be explained by influence of relationship between the independent variable and the moderating variable, that there is strong relationship between the moderating variable

and the independent variable and that the influence of moderating variable on the independent variable is significant on the performance of SMEs in Nigeria.

The results are also in conformity with many studies which indicate finance as one of the driving factors of an enabling economic environment. For instance the WB and the IFC (2011) rank economies according to their ease of doing business; in this framework, the ability for business to get credit is an important criterion. The Global Entrepreneurship Monitor GEM (2010) Entrepreneurship Framework Condition also highlights entrepreneurial finance, defined as the availability of financial resources for SMEs in the form of debt and equity, as one of the key factors for stimulating and supporting entrepreneurial activity.

# **5.3 Conclusion**

On the basis of the findings presented in chapter four and the summaries contained in section 5.2 of this thesis, the study concludes thus:-

Working Capital Management which comprises the management of cash, inventory, accounts payable and accounts receivable is pivotal in the growth and sustenance of business enterprises and hence the need for firms to have efficient and effective system of managing these components of the working capital. Cash is a liquid asset like cheques, money orders and bank drafts that a business owns. Its management therefore involves efficient collection and disbursement of cash and any temporary investment. Thus, maintaining optimum level of cash in an organization is called cash management, key elements involved in this activity are cash forecasting, balances management, administration of cash receipts and disbursements, and internal control (i.e. bank reconciliation.

Efficient cash management involves the determination of the optimal cash to hold by considering the trade-off between the opportunity cost of holding too much cash and the
trading cost of holding too little which together with other elements of Working Capital lead to the growth, sustenance and prosperity of SMEs. Of equal importance to the health of SMEs is the management of Inventory which is a tangible property comprising of raw materials, work-in-progress (WIP) and finished goods held for sale, in the ordinary course of business or, in the process of production (WIP) for sale. Holding either too little or too much inventory incurs costs hence the need to strike a balance between adequate stock and that too by keeping investment at minimum level (Optimum level of inventory). Inventory management objective is to turn over inventory as quickly as possible without losing sales from stock-outs.

Larger inventory reduces the risk of a stock-out therefore, to maintain optimum level of inventory, the pertinent issue for efficient inventory management practices should answer the questions: how much should be ordered and when should it be ordered? These questions relate to the problem of determining the economic order quantity (EOQ), and the problem can be answered by the analysis of the costs of maintaining certain levels of inventory as there are costs involved in holding too much stock and there are also costs involved in holding too little, hence the need to put in place an effective stock management system to ensure reliable sales forecasts to be used in stock ordering purposes.

It has been argued by scholars like Lazaridis and Dimitrios (2005) that, Managers of firms should keep their inventory to an optimum level since mismanagement of inventory will lead to tying up excess capital at the expense of profitable operations. In this regard, many studies on inventory management have 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 day's accounts receivable and reducing inventories is paramount.

Accounts payable is one of the major sources of unsecured short-term financing resulting from transactions in which merchandise is purchased. There is therefore, the need to utilize the value of relationship with payee as a sound objective that should be highlighted as important as having the optimal level of inventories. This also calls for a strong alliance between company and its suppliers which strategically improve production lines and strengthen credit record for future expansion.

Current liabilities being accounts payable are one of main sources of external finance for SMEs in view of their difficulties in obtaining funding in the long-term capital markets and the financing constraints that they face hence, efficient and effective working capital management is particularly important for them. Accounts receivables consist of the credit a business grants its customers when selling goods or services which take the form of either trade credit which the company extends to other companies or consumer credit, which the company extends to its ultimate consumers and so the effectiveness of company's credit policies can have a significant impact on its total performance.

The primary objective of investment in trade debtor is to increase profit by expanding sales to attract new customers and retain old customers. By constantly increasing its sales and profit the business carves out a bigger niche in the market and elevates its status among competitors. In determining an optimal credit extension scholars have argued that, company's financial managers must consider a number of major controllable variables that can be used to alter the level of receivables which include credit standards, credit terms and collection effort. Efficient receivables management augmented by a shortened creditor's collection period, low levels of bad debts and a sound credit policy often improves the businesses' ability to attract new customers and accordingly increase financial performance hence the need for a sound credit policy that will ensure that MSEs' value is optimized.

For a business concern to keep on going, it needs fund to operate. The continued existence of a going concern is dependent on the funds available to it. The importance of finance for a business venture therefore, need not be overemphasized, as it is crucial to any business for survival and prosperity. If a business is starved of funds, it can lead to serious problem and eventual collapse. The importance of the financial institutions and other fund providers then come into play in this matter. Access to finance Scholars argued is necessary to create an economic environment that enables firms to grow and prosper. Increased access to finance can improve economic conditions and foster innovation, macro-economic resilience, and GDP growth.

There are various traditional sources of financing for SMEs ranging from bank loans, bank overdrafts, own funds savings, loans, from family or friends and equity finance. Globally though, commercial banks which remain the biggest source of funds to SMEs have in most cases shield away because of perceived risks and uncertainties. In Nigeria for instance, the fragile economic environment and absence of requisite infrastructure has rendered SME practice costly and inefficient, thereby worsening their credit competitiveness occasioned by the unfriendly interest charged by financial institutions, among other factors, Nigerian SMEs have moved to explore financing options that will enable them stay in business, in the absence of bank credit.

#### **5.4 Recommendations**

On the basis of the findings of this study, and for efficient and effective management of working capital by the Small and Medium Enterprises in Nigeria, the study recommend thus:-

An observation of analysis and test carried out using statistical tool all indicate a positive results of correlation, correlation coefficient and P-value which means that there is linear correlation between cash management and performance of SMEs, change in performance can be explained by cash management and that cash is very significant or crucial in the performance of SMEs. In this regard, therefore, the cash balance policies

including investment of surplus, borrowing, disbursement and credit transactions instituted should continue to be monitored.

For the SMEs that do not have such policies and monitoring system they should introduce them for efficient and effective management of their cash. In any business, if the cash flow positions remain positive, there is no cause for alarm. What the business need do is to hold on to the existing policies and efforts but make adjustment when the need arise. If however, there exist a sign which may result to adverse effect, options such as shortening the operating cycle by increasing the efficiency of Operating Cycle's components and reduce the cash committed to them, shortening account receivable collection days but maintain the same level of sales which requires the adoption of more aggressive collection of account receivables and tighter control of inventory level, make effort to increase the profit margin through increasing price, reducing cost of sales and operating expenses and engage in short-term borrowing of cash to finance temporary increases in working capital could be considered.

Descriptive analysis of this study showed that a vast majority of the respondents (67%) indicate that they have instituted inventory management policies and monitoring system. It is therefore, recommended that these policies should continue to be monitored for continued positive results. The SMEs should seek knowledge on the use of stock optimization techniques so as to be able to determine right quantities of stock to hold at any given time. They should also continue to optimize inventory so as to avoid over investment with its attendant inventory costs, lost returns on excess cash holdings and receivables; and under investment with its attendant stock-out, large inventory and a generous trade credit policy may however lead to high sales. Maintaining optimal inventory levels also reduces the cost of possible interruptions in the production process or of loss of business due to the scarcity of products, reduces supply costs and protects against price fluctuations. The SMEs can also adopt the Just-in-Time method which is an approach to managing inventory that strives to minimize inventory of raw materials

and WIP by receiving raw materials inventory as it is required. This has the advantage of enhancing and monitoring the availability of the inventory level in the business and also helps to reduce the amount of carrying costs tied up in stock that in turn may increase the cash flow of operating activities in the business.

Base on the findings from the analyzed data which showed that 53.9% of the respondents have accounts payable management policy and also indicating that majority of the SMEs in research area do have the policy in managing their accounts payable coupled with the results which showed positive R and R2, the study recommended that these policies should continue to be monitored for continued positive results and in addition to this, information on accounts payables should continue to be updated as a reminder to ensure prompt payments for bills when due thus, eliminating additional financial costs. The SMEs should utilize the value of relationship with suppliers and develop strong alliance which strategically improve production lines and strengthen credit record for future expansion. The negotiation of discounts, target market and system should also be taken into account in order to improve their cash flows. They should also develop policies concerning those who authorize purchasing and how purchasing is geared to demand which can enhance proper management of accounts payable. Since Account Payables analysis is more complex than that of Accounts Receivables because it relates to both cost of sales and to expenses, to analyze it more accurately, the management accounting team should look at the inventory purchases instead of cost of sales and expenses excluding salaries and wages.

Analysis of the results of this study shows that not a majority of the respondents which represents 40.2 and 32.4% for accounts receivable policy and accounts receivable monitoring respectively stated the yes answer while 40.2% answered yes to achieving optimum level of managing accounts receivable indicating that only few of the SMEs monitor the management of their accounts receivables. This institution of the policies

for granting of credit to customers can be done by introducing more and elaborate credit terms, establishing credit standards and deciding upon appropriate collection policies. Under the collections process accounts receivable should be followed up promptly and regularly. Alternative payment options are recommended to be simple and costless such as issuing of cheques or electronic funds and adoption of the aggressive policy of debtors' collection process to also include the five main credits selection techniques as standards for both small and medium enterprises such as character, capacity, capital, collateral and conditions of debtors as suggested by Gitman (2009).

In view of the above therefore, there is the need for local governments to be more actively involved in financing micro-enterprises especially women-owned enterprises whose nature of businesses were mostly rural based in view of the fact that the federal and state governments" are confronted with other overwhelming economic problems as opined by Emma and Akamoibi (2009), who averred that government cannot reach out with the informal sub-sectors, but the federal government can grant micro-credit loans to MSEs through the various enterprise support network and structures which have been instituted by Governments to encourage the development of SMEs. For instance in Nigeria there is the central bank of Nigeria (CBN), the Federal Ministry of Industries, (FMIs) and the Nigerian Industrial Development Bank (NIDB), which was established in 1964 to provide credit and other facilities to industrial enterprises in the small, medium and large scale category.

In 1971, the Small Industries Development Program was set up to provide technical and financial support to the SMEs which, according to Ike (2006) this later led to the establishment of the Small Industries Credit commission (SICC), and the associated Small Industries Credit Fund (SICF). Decree number 2 of 1986 established the National Economic Reconstruction Fund (NERFUND), with the main objective of providing soft, medium-to long-term loans to wholly Nigerian-owned SMEs in manufacturing and agro-allied enterprises, mining and quarrying. All of these Ministries and Agencies should be

strengthened and given the full powers/mandate and also be fully funded to enable them deliver the necessary services to the SMEs. There should be an awareness campaign by the relevant authorities, a sort of reach out to the SMEs on the need to take advantage of grants being set aside purposely for disbursement to them for their sustainable growth and development.

#### **5.5 Scope for further research**

On the basis of findings as presented in chapter four and the summary made in chapter five, which has emphasized the importance of the various components of working capital management (cash, inventory, accounts receivable and accounts payable) for the performance of SMEs in Nigeria, it is recommended that after a period of say five (5) years a similar study be carried out again in same area and probably depending on the availability of resources, another one or two local government councils could be included to re-appraise this study. It is also recommended that, more variables particularly the dependent variables could be expanded to include growth in market share, gross profit and number of employees.

The research has identified that the working capital management has several effects on the performance of SMEs. Working capital management as shown from the study can increase the performance of SMEs in the areas of return on asset, profit, and return on equity among other performance indicators.

Further studies should be conducted in later years to review the influence of working capital management towards the performance of SMEs with regards to the shifts and dynamics of the growth of the financial markets. Financial markets in the next few years could see the growth of more SMEs and the advancement of the current SMEs. The government should however, curb the rising cases of inflation and non-performing loans to ensure that the existing SMEs do not fail and collapse. The financial management

should ensure that they retain and maintain their clean working capital management and increase it to ensure they augment their performance.

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## **APPENDICES**

# Appendix 1

## Schedule of Work and Cost Plan for the Research Work

ACTIVITY	Jan	Apr-	Nov 2014 –	Feb –		COST
	2013-	Oct	Jan 2015	Apr 2015		
	Feb	2014				
	2014					
Development						50,000
of research						
proposal						
Defense of						30,000
proposal	-					
Correction of						15,000
proposal		►				
Collection						105,000
and analysis						
of data						
Summary						55,000
conclusion						
and						
recommendat						
ion						
Project						50,000
Defense				-	┝──▶	
Graduation						30,000
TOTAL						 335,000
COST						

## SCHEDULE OF WORK AND COST PLAN FOR THE RESEARCH WORK

### Appendix 2

#### Letter of Introduction

Dear Prospective Respondent,

I am a student of Jomo Kenyatta University of Agriculture and Technology (JKUAT), Nairobi Kenya, conducting a research to assess the effects of working capital management on the financial performance of Small and Medium Enterprises (SMEs) in Kaduna North and South Local Government areas in Kaduna State Nigeria. I therefore, wish to humbly request you to kindly complete this questionnaire.

The completion of this questionnaire however, indicates that you have understood the information provided about this research project and that you have been given the opportunity to ask any question and/or clarify certain points. Completing this questionnaire means that you have consented to participate which is purely voluntary. You are however assured of the confidentiality of any information you would provide towards the completion of this research.

In view of the above you are therefore please requested to complete the attached questionnaire.

Thank you

# Appendix 3

# **Research Questionnaire**

# **Background information**

(i)	Name of the organization
(ii)	Office Address
(iii)	Town
(iv)	Company Registration No. with:-
	CAC
	MOTIKS
(v)	Year of establishment
(vi)	Type of Legal Entity (tick in the appropriate box)
a.	Sole proprietorship
b.	Partnership
c.	Registered company
(vii)	Number of shareholders (company and partnership) only (tick where appropriate)
	2-5 6-10 11-15 6-20
(viii)	Number of years of service in this organization
	Below 5 5-10 10-15 15-20 20-25
(ix)	Number of employees in the organization (please state)
a.	Junior

b.	Middle	
c.	Senior managers	
d.	Top executives	

### PART A

### **CASH MANAGEMENT**

1.	(i) Does your firm have a cash balance policy?	Yes	No	
(ii) Ho	w have this policy impacted on the overall performance	of your firm?		

(iii) Kindly provide your firms Net Profit Margin for the five (5) years period

(2008-2012) as per the format below

Year	2008	2009	2010	2011	2012
Net Profit					
Margin					

2. (i) Is the Cash Conversion Cycle (CCC) of your firm being monitored?

Yes No

(ii) What effect does longer and shorter cash conversion cycle have on the

Performance of your firm?

.....

.....

(iii) How much have been the gross profit for the period 2008-2012?

(Please provide the figure on the table below).

Year	2008	2009	2010	2011	2012
Gross profit					

3. (i) Is optimality in cash management being achieved? Yes No

(ii) What impact does it have on your firm's performance?(iii) Places state the income during defined from the found for the

(iii) Please state the income derived from invested surplus fund for the period 2008-2012 on the format provided below

Year	2008	2009	2010	2011	2012
Income from invested					
surplus fund					

### PART B

#### **INVENTORY MANAGEMENT**

1. (i) Does your firm have Inventory Management Policy? Yes

No

(i) If yes how has it impacted on your firm's performance?

.....

.....

(ii) Please provide the Ratio of Return on Equity for the periods 2008-2012 on the table provided below.

Year	2008	2009	2010	2011	2012
ROE					

2. (i) Does your firm apply the Economic Order Quantity (EOQ) model when

ordering for goods? Yes No

(ii) What effect does the EOQ have on your performance?

.....

.....

(iii) Kindly provide the Amount of goods Purchased during the years 2008-2012 on the format set out below.

Year	2008	2009	2010	2011	2012
Purchases					

(i) Is optimum inventory management being achieved?	Yes	No	
(ii) What has been its impact on your firm's performance?			

.....

180

(iii) Please provide the net inventory cost for the period 2008-2012 on the format indicate below

Year	2008	2009	2010	2011	2012
Net Inventory					
cost					

### PART C

### ACCOUNTS PAYABLE MANAGEMENT

1.	(i)	Does your firm	have Accounts	Payable N	Management poli	cy?
	· ·	2		2	<u> </u>	~

(ii) What have been its effects on performance?

No

.....

.....

(iii) Please indicate the amount of Salaries and Wages for the period 2008-1012 on the table provided below.

Year	2008	2009	2010	2011	2012
Salaries and					
Wages					

2. (i) Is the Periodicity of Account Payable being monitored? Yes No

(ii) What effect does longer or shorter account payable days have on your firm's

Performance?

Yes

.....

.....

(iii) Kindly state the amount of paid Corporate Tax for the period 2008-2012 on the table provided below

Year	2008	2009	2010	2011	2012
Corporate					
Tax					

3. (i) Is optimality in Accounts payable management being achieved?

Yes No

(ii) What effects does it have on your organization's performance?

.....

(iii) Please state the discount received for the period 2008-2012 as indicated on format below

Year	2008	2009	2010	2011	2012
Discount					
received					

#### PART D

#### ACCOUNTS RECEIVABLE MANAGEMENT

1. (i) Does your firm have Account Receivable Management Policy?

Yes No

(ii) What has been its impact on performance?

.....

.....

(iii) Please indicate the Ratio of Return on Assets for the period 2008-2012 on the format provided below

Year	2008	2009	2010	2011	2012
Return on					
Assets					

2. (i) Is the Periodicity of Accounts Receivable being monitored?

Yes No

(ii) What have been the effects of longer or shorter Accounts Receivable days on the performance of your firm?

.....

.....

(iii) Kindly indicate the Sales figure/volume of the firm for the years 2008-2012

Year	2008	2009	2010	2011	2012
Sales Volume					

3 (i) Is optimum Accounts Receivable Management being achieved?

Yes No

(ii) What has been its impact on your firm's performance?

-----

.....

(iii) Please indicate the debt tracking cost for 2008-2012 on format provided

below

Year	2008	2009	2010	2011	2012
Debt tracking cost					

No

### PART E

### FINANCIAL INSTITUTION INTERVENTION

1. (i) Does your Firm have external funding Policy? Yes

(ii) If yes how has this intervention influence the relationship between the working capital management and performance of your organization?

.....

.....

(iii) Indicate the amount of Total Assets for the period 2008-2012 on the table provided below.

Year	2008	2009	2010	2011	2012
<b>Total Assets</b>					

2. (i) Do you receive grant from government financial institution?

Yes No

(ii) How have it impacted on the performance of your organization

.....

(iii) Please state the amount of grant received from government financial Institutions for the period 2008-2012 on format shown below

Year	2008	2009	2010	2011	2012
Grant received from					
govt. financial					
Institution.					
Capital Invested					

# Appendix 4

## The two Local Governments and their Population

LOCAL GOVERNMENT	HEADQUATER	POPULATION
Kaduna North	Doka	357,694
Kaduna South	Makera	402,390

Source: - <u>www.wikkipedia.com</u> (2006 population Census)

### Appendix 5

### Map of Kaduna State; Nigeria



Source: - Oladigbolu KK, Rafindadi AL, Mahmud-Ajeigbe AF, Chinda D, Pam V, Samaila E. Outcome of cataract surgery in rural areas of Kaduna State, Nigeria. Ann Afr Med [serial online] 2014 [cited 2015 May 28]; 13:25-9. Available from: <u>http://www.annalsafrmed.org/text.asp?2014/13/1/25/126943</u>