THE EFFECTS OF WORKING CAPITAL MANAGEMENT ON FINANCIAL PERFORMANCE OF SELECTED SME’s IN THE MANUFACTURING SECTOR OF GHANA

BY

KARBO LANGTERTAA

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AUGUST 2019
DECLARATION

I hereby affirm that this thesis is a product of my original research and that no part of it has been presented for another degree in any university. However, all sources of borrowed materials have been duly acknowledged.

Signature...........................................
Date ...................................................

LANGTERTAA KARBO

I declare that I have examined this thesis in fulfillment with the laid down guidelines regarding supervision of research thesis.

Signature ...........................................

Date 8 August, 2019
Date ...................................................

AMIN KARIMU (PhD)
DEDICATION

First and foremost, this work is dedicated to God almighty, for giving us the knowledge from the beginning to the end of this study. I also dedicate this work to my parents and family for their moral and financial support and to all those who made this study possible.
ACKNOWLEDGEMENT

I am first of all grateful to the Almighty God who gave me the strength and the opportunity to finish my thesis. To my supervisor, Dr. Amin Karimu, I want to offer my genuine gratitude, who, despite his busy schedules, spent time editing and guiding my project. I also thank my family for the huge contribution and assistance to the project. Lastly, my appreciation goes out to all who have contributed in multiple ways, God bless you all.
ABREVIATIONS AND ACRONYMS

- SMEs – Small Medium Enterprise
- ROA – Return on Asset
- CCC – Cash Convention Cycle
- ICP – Inventory Collection Period
- ACP – Accounts Collection Period
- APP – Accounts Payable Period
ABSTRACT

The manufacturing firms under the SME sector has and continue to contribute significantly to the national GDP. One challenges faced with SME’s especially in the manufacturing industry is poor finance management coupled with poor working capital management. Firms can’t carry on with their business without working capital even though they have a healthy turnover. Therefore, Firm’s that lack the ability to identify significant working capital management practises will continue to cause poor performance to the firm. The broad aim of this research was to define the effects of working capital management on the financial performance of SME’s in the manufacturing sector with an objectives; To examine the effect of working capital management on the financial performance of selected SMEs in the manufacturing sector of Ghana and to evaluate the short-term financing choices available to the firms and recommending a financing method to optimize working capital management. The research assignment requires in-depth review and analysis hence, the use of primary data or data from direct source via a well-structured surveys. Yamane’s (2009) sampling method was used to determine the sample size. The study data was analysed for descriptive and inferential statistics purpose. Descriptive statistics such as graphs, charts, tables and mean, percentage, minimum, maximum analysis were used for the presentation of data. A linear correlation model was used to analyse the quantitative data and was tested to explain the relationship between working capital management and firm’s performance of SMEs.

The study results of the analysis indicated that the dependent variables are significant and have an effect on ROA of SMEs. The study concludes that managers need to be focused and adopt to the paradigm shift of effectively managing working capital management. The study recommended that, in view of the recent happenings in the financial sector it will be prudent if firms adopt a policy of entrusting management of working capital to highly skilled and trained personnel’s.
# TABLE OF CONTENTS

DECLARATION ............................................................................................................................. ii

DEDICATION ............................................................................................................................... iii

ACKNOWLEDGEMENT ............................................................................................................. iv

ABREVIATIONS AND ACRONYMS .......................................................................................... v

ABSTRACT ............................................................................................................................... vi

LIST OF TABLES ....................................................................................................................... xii

LIST OF FIGURES ................................................................................................................... xiii

CHAPTER ONE .......................................................................................................................... 1

INTRODUCTION ...................................................................................................................... 1

1.0 Introduction ...................................................................................................................... 1

1.1 Background ..................................................................................................................... 1

1.2 Problem statement ........................................................................................................ 4

1.3 Research Objectives .................................................................................................... 6

1.4 Research questions ...................................................................................................... 6

1.5 Hypothesis .................................................................................................................... 6

1.10 Brief Methodology ..................................................................................................... 7

1.6 Justification/relevance of the study .......................................................................... 8

1.7 Scope of the study ...................................................................................................... 9
LIST OF TABLES

Table 4.1 Gender of respondents  ................................................................. 38

Table 4.2 Source of short term finance .......................................................... 50

Table 4.3 Descriptive Statistics ..................................................................... 51

Table 4.4 Correlation Matrix ......................................................................... 53
LIST OF FIGURES

Figure 4.1 Position of respondents ................................................................. 38
Figure 4.2 Age of respondent ................................................................. 39
Figure 4.3 Academic qualification ............................................................. 40
Figure 4.4 Respondents level of experience .............................................. 41
Figure 4.5 Nature of business ................................................................. 42
Figure 4.6 Approaches of working capital management ......................... 43
Figure 4.7 Debtors management ............................................................... 44
Figure 4.8 Inventory management ............................................................ 45
Figure 4.9 response to provision for bad debt. .......................................... 46
Figure 4.9 (Creditors management) .......................................................... 47
Figure 4.10 (cash management) ............................................................... 48
CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter provides the background of the study, problem statement, research objectives as well as research questions. The chapter also contains the significance of the study, scope, and limitation of the study, and a chapter disposition that spells out how the study will be organized into various chapters.

1.1 Background

Working Capital Management (WCM) refers to short-term corporate financial activities that a company performs to monitor and utilise its current assets and current liabilities so that it can maximise the efficiency of its financial operations. This practice is essential with regard to its undeviating effect on a firm’s liquidity (Chiou, J. R et al. 2006), profitability (Deloof MR, 2003), shareholders market value (Abuzayed B, 2012) and requires careful consideration (Jose et al., 1996). CFA Institute (2019) reinforced this claim by stating that “this aspect of finance is a critical one because many short-term activities have effects on long-term financial decisions; hence if done effectively, the company will stay solvent and remain in business. If done improperly, the results can be disastrous for the company.” Smith K.V (1978) noted that “WCM is even of principal
significance to the firms that are operating in emerging markets because of the fact that the failure rate among the companies is very high due to poor working capital management practice”.

According to (CFA Institute, 2019), “Effective working capital management includes several aspects of short-term finance: maintaining sufficient levels of cash, converting short-term assets into cash, and monitoring outgoing payments to sellers, employees, and others.” Therefore, possessing an efficient short-term financial plan permits a firm to strategies in advance with the assurance that its short-term concerns are being held appropriately; hence, examining working capital management operations are needed so that informed decision will be made.

Deloof M.R (2003) asserts that “the goal of WCM is to maintain an optimal balance between the components of working capital (cash, receivables, inventory, and payables). He further stated that WCM creates value and provides an important source of competitive advantage for firms”. CFA Institute (2019) argues in line with Deloof M.R (2003) that “the goal of effective working capital management is to ensure that a company has adequate ready access to the funds necessary for day-to-day operating expenses”. CFA Institute (2019: Harris A, 2005 and Mekonnen M, 2011) noted that “achieving this goal requires a balancing of concerns. Insufficient access to cash could ultimately lead to a severe restructuring of a company by selling off assets, reorganization via bankruptcy proceedings, or final liquidation of the company”. On the other hand, excessive investment in cash and liquid assets may not be the best use of company resources (CFA Institute, 2019). It reduces profit (Harris A, 2005). “Hence, the importance of maintaining an appropriate level of working capital and its contribution to business survival is a concept that should be understood by every company” (Harris A, 2005).
Working capital needs are affected by both external and internal factors. There are several internal factors that influence working capital needs include the size of the firm and growth rate, organisational structure, the sophistication of working capital management and borrowing and investing positions or activities or capacities. External factors that influence working capital needs include banking services, interest rates, new technologies and new products, the economy and competitors (CFA Institute, 2019).

Working capital management is a critical activity in manufacturing firms because working capital represents a significant investment in their overall operations. “Usually, the current assets of a typical manufacturing firm account for over half of its total assets” (Lu R, 2013). “This compelled some researchers to maintain that the management of short-term assets and liabilities is more important than the management of long-term investment and finance of manufacturing companies” (Ned, CH & William, LS., 1995). However, “manufacturing companies are subject to working capital challenges because supplier and production expenses frequently require payment several months before goods are sold to customers. Working capital is thus near the top of the list among business challenges currently faced by manufacturing companies. The only issue ranked as a more serious concern — escalating costs — is also directly related to working capital and cash flow”, (Bush, Stephen. (n.d.))

Manufacturing companies are playing a key role in the economic improvement of Ghana. In the last three decades, manufacturing industry has made an important contribution to the national income. In spite of their contribution, manufacturing firms in Ghana are still in a developing stage. They need more short and long-term investment and finance for expansion. The capital market is still in a nascent stage relative to those of advanced countries. Therefore, the flow of additional capital is slow. Managers of these firms, as a result, are confronted with the challenge of managing
the available limited capital. Hence, the study seeks to investigate the current working capital management practices of some selected manufacturing SMEs in Ghana and analyse how those practices influence the firms’ financial performance.

1.2 Problem statement

Working capital is often expected to fall in the remit of finance, the stakeholders involved throughout the Procure-to-Pay, Forecast-to-Fulfil and the Order-to-Cash processes results in every part of the business having an impact on working capital performance. Due to the cross-functional nature and complexity of these processes, addressing operational issues which are negatively impacting working capital (PWC, 2017) becomes a major hurdle to manufacturing organisations.

Generally, “1000 companies lose about $2 billion per year due to poor working capital management. The recent financial and economic crisis has shown how important it is for firms to maintain a healthy cash position. The risk of becoming illiquid always increases in times of credit constraints and economic downturn. However, companies are still unable to properly assess their cash needs” according to (Frankfurt Business Media, 2012: cited in Hassan O.H et al, 2017).

The already nascent Ghanaian capital market (so that SMEs have unmet financial needs) is a worry to most manufacturing SMEs. But when you add the new challenges created by the recent developments in the financial sector, both locally and internationally, working capital management is arguably the topmost hurdle that financial executives in the manufacturing sector of Ghana have to deal with.
Firstly, financial reforms continue to impact underwriting: financial reforms has put firm capital requirements on banks and increased examination on credit decisions. For SME’s that tend to depend heavily on bank credit, these strict credit necessities have become a huge impediment. Also, the lack of lending capacity of financial institutions tightens purse strings. The smaller number of banks in the country (resulting from the recent collapse of banks and increment in the minimum capital requirement) may imply that demand for debit capital may outstrip the lending capacity of banks so that a rise in competition for those funds will definitely lead to an increase in interest rates. This way, SMEs, especially those with weaker credit qualities may find that, they have fewer traditional decisions for refinancing their debt in the coming years. Moreover, SME’s have limited access to finance due to the high level of market volatility and perceived risk.

Lack of or inadequate; funding (working capital) is often cited by many entrepreneurs in Ghana as the key cause for their business failures. This condition creates the expectation that, the higher performance could be as a result of the availability working capital. But the problem is that it is not certain on how the components of working capital affect financial performance. This is because the various components of working capital (including inventory, receivable, payable and cash) may have different effects on the firm’s financial performance. Also, while the working capital management literature has largely documented the association between working capital management and firm’s financial performance in developed countries, the subject is not largely explored in the context of Ghana. Even those that did, there is no consensus on the subject matter; hence, this research is an effort to contribute towards the paradigm shift of working capital management and review literature on working capital management in the Ghanaian manufacturing industry.
1.3 Research Objectives

1. To examine the effect of working capital management on the financial performance of selected SMEs in the manufacturing sector of Ghana.

2. To evaluate short-term funding decisions accessible to the firms and recommending financing method to optimize working capital management.

1.4 Research questions

1. How does working capital management influence firm’s financial performance?
2. What are the short-term financing choices that are available to the selected firms?
3. What financing method is most suitable to optimise working capital management in the selected firms?

1.5 Hypothesis

1. H1: Working capital management leads to higher financial performance.
1.10 Brief Methodology

The research aims to add to a very significant element of financial management, known in Ghana as working capital management. The study will adopt a quantitative approach, which is often the most efficient and cost-effective research technique (Gerhardt, 2004). According to Gerhardt, “This technique emphasizes objective measurements and statistical, mathematical, or numerical analysis of information gathered through polls, questionnaires, and surveys, or manipulating pre-existing statistical data using computational methods”. This will be a main approach to developing an assessment structure and meeting the study goal decisively.

Since the study involved gathering respondents' views, perspectives or opinions on the effect of working capital management on financial performance, the research used survey methods using questionnaires, private interviews with participants, and perusal of previous documents and publications (financial statements, annual reports, newspapers, and other internet resources) This technique was chosen because the study technique is efficient in obtaining views, attitudes and descriptions as well as in obtaining interactions of cause and impact. Small and medium-sized businesses were selected through judgmental sampling to try to obtain a fair representation of the population.

This stage will provide the foundation and direction for the entire study.
1.6 Justification/relevance of the study

The significance of the study will be multi-dimensional – contributing to literature and theory; and implications for policy and practice.

First and foremost, the findings and recommendations resulting from this study will significantly contribute to new areas in the growing body of evidence and literature on working capital management. The study will assess the existing working capital management policies and practices of the selected manufacturing SMEs and the extent to which they have relied on these practices to achieve their short-term financial goals. The study will draw out strengths and weaknesses that will serve as a basis for further discourse.

Furthermore, its contribution to contemporary WCM practices, particularly in the context of the underdeveloped and volatile capital market of the country will be far-reaching. This will increase or improve knowledge not only in WCM practices but also in best WCM practices.

Also, the challenges around the implementation of short-term financial management practices, the future implications and the overall institutional arrangement for the provision, management, and sustainability of these practices will be discussed and addressed in a practical and effective short-term financial management framework to be proposed. This will have implications for policy and strategy review with respect to WCM practices such as the management of accounts receivable, inventory, and accounts payable. The relevant financial management committees, executives, and professionals will be best placed to trigger discussions on policy review to incorporate the new findings.
1.7 Scope of the study

The study will emphasize on working capital management (WCM) in selected manufacturing SMEs in Ghana. The areas to be considered include components of working capital and their relevance. Also, the approaches/strategies to WCM that are available to and used by; manufacturing firms and the challenges that confront the effective implementation of these strategies will be discussed and solutions proposed. In addition, both inner and external factors manipulating the requirements of working capital will be researched. Moreover, an assessment regarding the link between working capital management and the financial performance of manufacturing SMEs will be carried out. Finally, the study will propose the methods that manufacturing firms can use to optimise the effectiveness of their working capital management activities amidst the underdeveloped local capital market.

1.8 Limitations to the study

The researcher acknowledges that for social science studies, it is appropriate to collect as much data as possible and analyse same in order to optimise the accuracy and reliability of the findings; however, because of the time limit, only limited sources/data will be considered. This implies that, in terms of generalisation, the findings may not adequately represent the entire population. Also, a particular concern often cited for SMEs in Ghana is their inability to keep proper records; hence, the researcher is likely to encounter issues of missing data. These limitations notwithstanding, the study will proceed with little or no effect on the credibility, reliability, and validity of the outcomes.
The limitations will be constantly assessed and reviewed with alternative plans developed to provide options in case they turn to major risks prior to or during the study.

1.9 Chapter disposition

This research will be divided into five sections. The indicative chapters and material are as follows: chapter one offers a general overview, covering the context of the study; problem statement; research goals, research issues; study meaning; study scope; study justification and organisation. Chapter two will present a review of appropriate literature on the subject, covering the conceptual framework of the theoretical structure; empirical literature on the study; and overall critical analysis of the strengths, gaps/weaknesses and unique elements of the relevant literature. Chapter three will cover profile of case study and research methodology. Chapter four presents the findings, analysis, and interpretation which will cover in-depth analysis based on emerging themes aligned with the objectives and drawing from literature to support the findings and Conclusion. Finally, the summary and conclusion and recommendations of the study will be presented in chapter five.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction.

The section focuses and makes available summarized information on the studies undertaken by research scholars.

2.2 Working Capital Management

“Working capital management is the administration of current assets and current liabilities according to (Machiraju, 1999). Effective working capital is vital due to the fact that organizations who struggle to pay its creditors can be technically considered as insolvent.

Moreover, “Effective working capital management ensures that the organization maximizes the benefits of net current assets by having an optimum level to meet the requirements of working capital. In addition, the management of working capital is concerned with the choices of a company that determine the working capital structure of the company. It relates to the use of current assets, namely: cash, accounts receivable and inventory, and present liabilities: outstanding expenses, account payable .etc”. (VanHorne and Wachowicz 2008).

Working capital management is an organization’s ability to efficiently control current assets and current liabilities and their relationship between them with a view of maximizing returns on its assets while minimizing the payment of its liabilities (Adelman and Marks, 2007).
2.3 Concept to Working Capital Management

Manufacturing firms require a competent finance team or staff to handle daily matters that may include working capital decision-making. Such as current assets regularly being transformed to other current assets, for example, inventory into sales and sales into credit sales.

Working capital concept is vital to operations of a business, especially operations in manufacturing sector to the level that its omission can hinder the progress and survival of such operation and the nation’s GDP at the long run. For managers to maximize the productivity of the firm, there should be balance of working capital practice in the firm. The working capital should neither be too much nor too small for a company’s operation, it should just be moderately adequate. Having the right balance of working capital relative to business operations is a major factor that underpin the firm’s success.

With the recent collapse and recession in the financial institution, firms and organizations now focus on effective and efficient managing working capital. Effective working capital management ensures firm’s solvency and ability to settle its creditors.

A Firm may be very profitable but when a significant portion of its revenue is tied up in receivable, the firm will resort to borrowing or take more credit to finance its inventory. Therefore, in a scenario where firms may be in need of cash to buy stock for sales and they will be having to incur a cost (interest) if an overdraft is taken to finance inventory. Hence, a firm’s effectiveness and liquidity should be carefully managed by managers if the firm is to ensure going-concern.
Sales are the lifeblood of a firm and for sales to happen, investment in stocks is essential. “Appropriate buying of inventory, which is goods that have a reasonable chance for good sales to take place will improve profitability and liquidity. Goods that are fast-moving will have a shorter cash operating cycle”. (Padachi, 2006). quick cash conversion ensures that, a firm can purchase more inventory for resale. According to Rafuse (1996), a large portion of businesses fail due to not managing working capital items well, this may be due to high inventory days and debtors days and, hence a long cash operating cycle.

Guthman and Dougall (1948) explained working capital as “an excess of current assets over current liabilities”. This view was elaborated by Gladson (1951) when he defined working capital as “the excess of current assets of a business (cash, accounts receivables, inventories) over current items owed to employees and others (such as salaries and wages payables, accounts payables, taxes owed to government)”. In accounting current is to mean short term mostly within a year. Key working capital routines as described by Howorth and Westhead are “stock turnover, stock levels, stock reorder levels, customer credit periods, customer discount policy, bad debts, doubtful debts, customer credit risk, payment period to creditors, and finance of working capital and use of cash budgeting”. It is not enough for companies to just have good policies on the management of working capital, firms must also ensure that these policies are followed strictly throughout the company’s structures.

**2.4 Empirical Review**

The section presents the empirical review on the effect of working capital management on the performance of SME’S financially.
Runyora (2012) studied “the relationship between Working Capital Management and Profitability of the Oil Industry in Kenya. During the period between 2007 and 2011, a sample of 30 Oil Companies was considered. Regression analysis was used to determine the relationship between WCM and profitability. The Chi-Square test, a non-parametric test was used to test the goodness of fit, test the significance of the association between the two attributes”. The study established that most of the Oil firm’s profits were attributable to WCM. “A well-designed and implemented management of working capital is anticipated to make a positive contribution to the development of the value of the firm”. Akinlo (2012). “The outcome displays that reducing cash convention cycle enhances the profitability of the firms”. Akinlo (2012).

According to Manoj and Keshar Malhotra (2007) “research performed on the working capital performance of firms in India. They employed the methodology that was developed by Anand and Gupta (2003) on companies with at least three years of publicly available records over the period of 2001 to 2002 to 2003 to 2004 for each company and industry. During the period of study, there was a Compound Annual Growth rate of 26.3 % in the net sales and 1.6 % in the three-year average cash operating margin. The length of the operating cycle and cash conversion cycle had reduced by 10.2 % and 12.7 % respectively on a compounded annual basis. The paper found very little evidence on the positive relationship between working capital management and profitability”.

Koperunthevi (2010) studied “Working Capital Management and Firms’ Performance. Her study identified that the working capital management very much influences on the profitability of manufacturing companies and increase of the cash conversion cycle leads to less profitability. The current ratio and Quick ratio are positively related to profitability”. Almazari (2013), examined “the relationship between WCM and firms profitability of Saudi Cement Manufacturing companies. A sample of eight out of the thirteen cement companies was used and data collected
for a five year period (2008-2012). Linear regression was used to analyse the data. The study found out that there is a high degree of association between WCM and profitability”.

Alipour (2011), “while taking a sample of 1063 businesses from the Tehran stock exchange, investigated on working capital management and corporate profitability. Multiple regressions and the correlation of Pearson were used to test the theory”. He evaluated that, firm's sale and profit are heavily impacted by management of working capital. A business may be unable to pay its debts on time due to inefficient working capital management. The findings indicate an important connection between a company's management of working capital and profitability.

With an evidential study in Malaysia by Mohamad and Noriza (2010) whereby they “did their study by taking secondary data from Bloomberg’s 72 listed companies for 5 years from 2003-2007 to derive the relationship empirically between Working capital management and profitability. Study was done to check effects of working capital components (such as CCC, CATA (Current Asset over Total Assets Ratio) ratio, debt to asset ratio, CR and current liabilities over total asset ratio) on firm’s performance and profitability measured by Tobin’s Q ratio, return on invested capital and ROA (Return on Assets). Correlation and Multiple Regression results showed a significant negative relation between working capital components and company’ perform analysis of WCM of Nigerian firms shows that a well designed and implemented working capital management is expected to contribute positively to the creation of firm’s”.

Negy (2009) finds out that “it is obligatory for the individuals to clearly understand those measures which drive the profitability of a firm to make good investment decisions. Profitability analysis is a key sign to 30 know the firm’s performance and returns on assets (ROA) is one of the measures to assess the firm’s profitability. Hansen and Wernerfelt (1989), Roquebert, Philips and Westfall
(1996) and Spanos, Zaralis and Lioukas (2004) all took a return on assets (ROA) to measure firm’s profitability while making an analysis about those factors which influence firm’s profitability”.

According to Afza and Nazir (2007), who investigated “the relative relationship between the aggressive/conservative working capital policies and profitability as well as the risk of companies. The empirical results found the negative relationship between working capital policies and profitability”. Additionally, Weinraub and Sue (1998) in their study “looked at ten diverse industry groups over an extended time period to examine the relative relationship between aggressive and conservative working capital practices”. On the other hand, Nazir (2009) “used Tobin’s Q as a dependent variable and the ratio (current assets/total assets) as an independent variable, and also utilized control variables in order to achieve an opposite analysis of working capital management on the profitability of companies”.

Furthermore, according to Sharma and Kumar (2011) who carried out a survey “to determine the effect of WCM on the profitability of Indian firms. A sample of 263 non-financial firms listed on the Bombay Stock Exchange was used. Data was collected for the period 2002 to 2008. The data were analyzed using multiple regressions. The study found a positive relation between WCM and firms Profitability, although the relationship between CCC and ROA was not statistically significant. The study also found that accounts receivables are also positively related to ROA and that accounts payables are negatively related to ROA. The results also imply that Indian firms can increase profitability by increasing the Cash Conversion Cycle”.

16
2.5 Components of Working Capital and profitability

2.5.1 Cash conversion cycle and profitability of SMEs

The Cash Conversion Cycle (CCC) is “the standard measure for working capital management. It is the period between when cash leaves a firm and when cash is received by the firm. Thus, it is a measure of how quickly current assets are converted into cash.” Houston and Brigham (2007) asserted that, “Cash conversion cycle represents the length of time that funds are tied up in working capital. Also, it reflects the time span between disbursement and collection of cash. It is measured by estimating the inventory conversion period (ICP) and the receivable conversion period (RCP), less the payables conversion period (PCP).” Mathematically, it is (ICP + RCP) – PCP.

The “significance of efficient cash management practices in improving business financial performance is via reducing the time cash is tied up in the cash operating cycle, this improves a business’s profitability and market value” According to Ross et al (2008) . Also, according to Deloof (2003) “firms that reduce their inventories, accounts receivable are able to speed up their cash conversion cycle in both large and SME firms”

Furthermore, Teruel & Solano (2007) “tested the effects of working capital management on SME profitability by using 8,872 small and medium-sized enterprises of period 1993-2002. They were able to demonstrate that managers can create value to firms and shareholders by reducing the number of days in inventory and accounts receivable. They found out that shortening the cash conversion cycle also improves the firms’ profitability”.

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According to Reheman (2007), he opined that “there is a strong negative relationship between working capital ratios mentioned above and profitability of firms after he investigated the impact of working capital management on profitability of 94 Pakistan firms listed on Islamabad Stock Exchange for the period of 1999-2004. He studied the impact of the different variables of working capital management including average collection period, inventory turnover in days, and average payment period and cash conversion cycle on the net operating profitability of firms”.

Furthermore, it was noted that cash conversion cycle if reduced can generate a positive value for the shareholders. Lazaridis and Tryfonidis (2006) findings reveal that “managers can create profits for their companies by handling correctly the cash conversion cycle and keeping each component of working capital to an optimal level. This result is from a study on the working capital performance of 131 companies listed in the Athens Stock Exchange (ASE) for the period of 2001-2004”.

2.5.2 Inventory Holding Period and profitability of SME’s

According to Kotler & Keller (2007) “inventory management refers to all activities involved in developing and managing the inventory levels of raw materials, semi-finished materials, work-in-progress and finished goods so that adequate supplies are available and the costs of over or under stocks are low”.

Atrill (2009) suggested some “techniques be employed in order to manage inventories. The techniques are by Forecasting future demand: realistic forecast of trends in demands of goods and services as well as related prices of inventories must be ensured by management”. According to
Swaminathan (2001), who discovered that “adjusting raw materials and finished goods as a component of inventory is faster than the inventory as a whole in order to reach reasonable levels. Having ideal stock level prevents loss of business arising from scarcity of products. Also, it protect against price fluctuations. Setting the right inventory holding period is the main goal of inventory management”.

According to (Lazaridis and Dimitrios, 2005), “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”.

Singh (2008) found out that “firms with poor inventory management can cause serious problems which destroy the long-term profitability and firms’ survival chances and also firms with well-thought inventory management can reduce the inventory to an optimal level which has no negative effect on production and sales”.

2.5.3 Accounts Receivable Period and profitability of SMEs

Account receivable is inevitable in every business, especially when dealing with the manufacturing SME’s especially in Ghana. According to (Frimpong, 2013) “When a company sells goods or services on credit, it records this as a receivable in the ledgers and the balance sheet. Companies get it cash within a given period that it gives the customer, this is called the credit period”. “Provision of trade credit is normally used by businesses as a marketing strategy to expand or maintain sales” (Pandey, 2004).

“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 SMEs’ value is optimized” (Ross et al., 2008). Thus, by collecting cash fast, it could enhance the life-blood of the firm which is working capital.

Michalski (2007) observed in his study that, “an increase in the level of accounts receivables in a firm increases both the net working capital and the costs of holding and managing accounts receivables and both may lead to a decrease in the value of the firm”. Lazaridis and Dimitrios (2005) found out that “firms which pursue increased levels of accounts receivables to an optimal level increase their profitability resulting from increased sales and market share”. A study by Juan and Martinez (2002) emphasized that “firms can create value by reducing their number of days of accounts receivable, as also confirmed by the findings of Deloof (2003) who established that the length of receivables collection period has a negative effect on a firm’s performance”. Also 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 the firms”.

2.5.4 Accounts Payable Period (APP) and Profitability of SME’s

Several firms, “especially retail and manufacturing buy goods on credit and record it as a liability that has to be paid. Account payable is the liability that comes from credit sales and is posted as a sum receivable by the seller and account payable from the buyer” Deloof (2003).

Arnold (2008 pp.479-482) says that “buying good on credit and then selling them on credit to customers is a cheaper form of finance than an organization taking a bank overdraft to finance
credit sales. Goods purchased on credit usually will be paid at a future date, this credit period is
given by the seller”. Also by an assertion that, “Delaying payments to suppliers allows companies
to assess the quality of the products that were bought and can be an inexpensive and flexible source
of financing. But we should bear in mind that late payment can have a very high implicit cost
whenever early payment discounts are available. Since money is also locked up in working capital,
the greater the investment in current assets, the lower the risk but also the lower the profitability
obtained” made by (Falope and Ajilore, 2009).

Wilson, et al (1997) found “strong evidence of a financing demand for trade credit. He found out
those small firms that pay trade credit liabilities late appear to do so when they reach their limit on
short-term bank finance”. Wilson further explained that, “if the imposition of statutory interest
significantly reduces the trade credit offered to smaller firms, this may lead to severe liquidity
problems and increased failure rates unless alternative finance is readily available. Several
solutions have been put forward: to analyze historical occurrences where how much time was taken
to pay creditors. Another method would be to take trade payable outstanding as at now divide it
by credit sales and multiply it by the number of days.”

periods and found that managers can increase the profitability of firms by reducing the days in
accounts receivable and inventories”. According to his study, firms could obtain more credit from
suppliers when payments are made on schedule.
2.6 Working Capital

“Working capital Policy are areas such as level of cash that should be held and the credit terms that should be agreed with debtors and creditors” (Frimpong, 2013). “The working capital policy provides a guideline for the firm to manage the current assets and current liabilities with the main objective of reducing default risk” according to (Afza and Nazir, 2007). “The adopted policy chosen by the firms will influence investment level in working capital” according to (Afrifa, 2016; Garcia-Teruel and Martinez-Solano, 2007) and also, the decision to implement any of these policies will have a consequential effect on both liquidity and profitability of the firm.

According to (Watson and Head, 2010) “The policies are categorized into three: aggressive, conservative and moderate policies to determining the appropriate level and mix of the investment in current assets and the financing of the current assets” An aggressive policy is when a firm bases its financing on short term sources. In this approach, the firm finances a part of the permanent assets with short term financing thus, when a company is using low levels of cash and various current assets to support certain level of sales activity and this will lead to an increase in profitability but riskier. Conservative policy, on the other hand, means a certain amount of activity will be supported by a large cash balance; this may include relaxing credit terms to your debtors. Though there will be enough cash to reduce liquidity risk, profitability will decrease. A moderate policy is a policy that falls between aggressive and conservative policies.
2.6.1 Aggressive policy

“The higher the risk the higher the interest” this is a popular principle in investment. This method of investing comes with its pros and cons which business tycoons have to strategically make a decision on, and aggressive working capital policy is no exception. With this approach, “organizations strategically fund their working capital through short term debt. Funds such as overdraft can be called upon when needed and the interest will be paid only when an overdraft is taken, unlike long-term debt where interest has to be paid for the entire loaned amount for the year. This policy ensures that the finance department of the organization be proactive in the management of working capital, as stocks need to be sold hastily and receivables need to be collected on a timely manner In order to, settle short term debts on time this reduces investment in inventory and accounts receivable” according to (Deloof, 2003). The risk of this policy is very high.

A business that trails aggressive working capital policies do not generally give a lengthy credit period. It's usually about a period of one month. “A reduction in inventory period may enhance the efficiency of a company due to the multiple expenses connected with inventory holding, including expenses of warehouse storage, insurance, spoilage, theft, etc”. (Tauringana and Afrifa, 2013). “A decrease in the accounts receivable investment may also improve the efficiency of a company because it will boost the cash flow accessible to the company, which can be used to finance daily activities, thus preventing the need for costly internal financing” (Autukaite and Molay, 2011). Delaying payments to providers as a consequence of indulging in WCM's aggressive strategy can also enhance firm efficiency, and for these kinds of businesses, just in time manufacturing will be in place. But it should be observed that it is a high-risk approach that provides the business with a high return. (Arnold, 2008 p.536) Accordingly, “companies that adopt an aggressive strategy will
achieve greater profitability from greater danger and reduced working capital” (Nwankwo and Osho, 2010). “This strategy would have a positive impact on the company's profitability by decreasing the percentage of its total assets in the form of net present assets” (Garcia-Teruel and Martinez-Solano, 2007).

According to (Garcia-Teruel and Martinez-Solano, 2007) “usually aggressive working capital suites of a company with elevated revenues or development, this is because they will be prepared to handle the fun cash flow problems.”

### 2.6.2 Conservative policy

When a firm’s large portion of funds obtained are from long-term sources, it can be concluded that the firm is following the conservative financial policy. “This approach is characterized by the management of large amounts of cash, accounts receivable, Inventories, and uses permanent capital to finance all permanent asset requirements to meet some or all of the seasonal demands. Thus, under this plan, the firm finances its permanent assets and also a part of temporary current assets with long-term financing”. (Arnold, 2008 p.538). For example, “investment in receivable accounts can enhance efficiency because it serves as a product differentiation strategy, strengthens the long-term connection between supplier and customer, enables clients space to pay, decreases the information asymmetry between customer and seller, serves as an efficient cost reduction, decreases transaction costs and encourages clients to purchase goods at low demand” according to (Nadiri, Investment in receivables).
2.6.3 Moderate working capital policy

Moderate Working Capital Policy refers to the moderate level of Working Capital maintenance according to a moderate level of sales, according to (Deloof, 2003). Thus, a change in Working Capital is equivalent to sales.

2.7 Conceptual Framework

Profitability issue occurs when an incompetent business manages current liability via its existing assets. This might threaten the company's going-concern. Thus, by understanding and managing autonomous variables efficiently: the business could maximize its economic performance (profitability-ROA) by working capital management (present assets and liabilities) and also enhance liquidity. This conceptual framework demonstrates the variables that are autonomous and dependent and was created from empirical data analysis. The aim of the research is to determine how working capital management affects financial performance.

As part of this studies, the financial performance is evaluated by profitability. Working capital management is split into cash management, commercial loan management and inventory management and is evaluated by the use of a 5-point Lickert scale to measure profitability.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the approaches to be employed to provide answers to the research objective as stated in chapter one and also, to determine the effects of working capital management on the financial performance of SME’s in the manufacturing industry. This chapter presents the research design, the techniques for collecting information and analyzing information used in this research. It also defines the sampling technique used and the ethical information collection factors.

3.2 Research Design

According to (Mugenda and Mugenda, 2003) “Research design refers to the method used to carry out research”. The study employed the quantitative method of research analysis. “This method was employed due to its precision to providing a specific answer to a research studies and also, portraying an accurate profile of persons, events or situation” according to (Robson, 2002).

In view of the above, this study was conducted with descriptive method with the aid of statistical package for social sciences (SPSS v20). Descriptive research is “where a quantitative data is gathered and analysed in order to describe a phenomenon in its current trend, current events and linkages between different factors at the current time” according to (Robson, 2002). The current
study focuses on assessing the influence of working capital management practices on financial performance among SME’s in the manufacturing sector hence the use of descriptive analysis.

3.3 Sources of Data

The research assignment requires in-depth review and analysis hence, the use of primary data or data from direct source. Primary data was collected directly from the source, who were mostly general managers, accountants, inventory/logistics managers and finance managers of various SMEs. Primary data will be employed using survey as a method for data collection. To conduct the surveys, sets of structured questionnaires was done for the respondents across the SME’s.

Natural source of data provided current and a realistic view about the study as data collected by third parties may not be a reliable and so the reliability and accuracy of the data go down. The approach also ensured high reliability of gathered data because these are collected by the concerned and reliable parties.

Data collected in one location may not be suitable for the other one due variable environmental factor.

3.4 Study Area

The study was conducted within the Greater Accra region, Tema town to be precise. Tema town is a town found in Accra, County. It covers an area of approximately 166 square kilometers of land.
north of the harbour. Aside controlling Ghanaian imports and exports, it serves as traffic junction trade with transit cargo intended from Mali, Niger and Burkina Faso. “The Tema ports handles 80% of Ghana's import and export cargo, including the country's chief export. Tema is influx with industries and it is the engine of grow in the manufacturing sector” Tema metropolis, (2010). First, the choice of Accra was made because of Accra being Ghana's commercial capital is also Ghana's most business-driven component with a healthy combination of trading and manufacturing firms.

3.5 Target population

A population is defined as “the total collection of elements the researcher wishes to make inferences” (Cooper and Schindler, 2006). According to the United Nations’ (2008) “International Standard Industrial Classification (ISIC) of economic activities, manufacturing enterprises involve industrial groups or business types such as:

- Manufacture of food products: vegetable and animal oils and fats, dairy products, bakery products, cocoa, chocolate and sugar confectionery;
- Manufacture of textiles;
- Manufacture of leather, luggage, handbags and footwear;
- Manufacture of wood and products of wood and cork;
- Manufacture of paper and paper products, publishing, printing;
- Manufacture of chemicals and chemical products”.

28
The complete population for this research was discovered to be 150 based on the above criteria. The research focused on 150 SMEs. For the comfort of the researcher, these SMEs were arranged as follows into four classifications: General Trade; Wholesale, Retail, Stores & Shops; Printing and publishing press and Factories; Workshops and Contractors.

This number was obtained from the SME Awards (SMEGA)

Table 3.1 list of the targeted population.

<table>
<thead>
<tr>
<th>Strata/ category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factories, Workshops, and Contractors</td>
<td>15</td>
</tr>
<tr>
<td>Wholesale, retail, Retail, Stores &amp; shops</td>
<td>46</td>
</tr>
<tr>
<td>General trade</td>
<td>65</td>
</tr>
<tr>
<td>Publishing &amp; printing press</td>
<td>24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>150</strong></td>
</tr>
</tbody>
</table>

Source: Researcher

3.5 Sampling procedures and Sample size

3.6.1 Sampling procedures.

According to (Sekaran, 2003), “Sampling is the process of selecting a sufficient number of cases from the population, so that a study of the sample and an understanding of its properties or characteristics would enable the researcher to generalize such properties or characteristics to the
population as a whole”. The snowballing technique was used first and foremost because respondents in the trading and manufacturing industry who deal directly with inventory and trade receivables were aware of other players in the industry since they viewed them as their direct competitors.

The targeted population was in the study area of the SME’s. Stratified sampling technique was what was used to divide the data into strata after which random sampling was used to choose a sample from each stratum through balloting. Yamane’s (2009) sampling method was used to determine the sample size. A proportion of sample size was computed. Also, the study was specific in whom and where data was to be collected. In this approach, the selected people are those whom the researcher believed are likely to have the required information.

\[
n = \frac{N}{1+N(e)^2}
\]

\[
= \frac{150}{1+150(0.05)^2}
\]

\[
= 109
\]

Where \(N\) denote the population (which in this case is 150), \(e\) denotes the error of margin (5 percent is used).

The sample size used was 109 respondents of selected SME’s firm of which 14 respondents are from Factories, Workshops, and Contractors, 35 from General Trade, 42 from Wholesale, Retail, Stores & Shops and 18 from publishing and printing press. The purposive method of sampling was also used during the data collection. The primary consideration of this method was using the
judgment of the researcher as to who can provide the best information to achieve the objectives of the study (Kumar, 2005).

3.7 Data collection procedures.

Before actual data collection exercise took place, the researcher undertook preliminary survey within the Tema area and the businesses to familiarize with the study area while inquiring about the number of employees and the area occupied. The researcher then sent letters to the SME’s Awards organization two weeks in advance to enable them to prepare and inform the respective SME’s. The researcher was called impromptu to take the survey because the SME’s was preparing and will be busy during an audit process. The researcher distributed the questionnaires in the morning and collected them in the evening. However, during that period the researcher was available for any consultation or clarification. The researcher used questionnaires to collect data from the respondents.

3.8 Data collection instruments

3.8.1 Questionnaires

Questionnaires were used because they are easy to administer. When developing the questionnaire items, the fixed choice and closed-ended formats were used. These were used in order to guide the respondents to answer questions according to the requirements of the research.
3.9 Administration of data collection Instrument.

Since the researcher was prompted impromptu, the questionnaires were self-administered and collected on the same day against the original plan of dropping it by the respondents and collecting it three days after. During the period the researcher was available for any consultation or clarification.

3.10 Data analysis methods.

Quantitative data was taken and analysis conducted using inferential statistics and descriptive statistics to convert raw data into a form that enabled understanding and interpretation in relation to the research questions. Descriptive statistical techniques used included Minimum, Maximum, Mean and Standard deviation to effectively evaluate profitable and best short-term financing choices available to the SME’s. While in seeking to establish the relationship between SMEs financial performance and working capital management practices, inferential statistical tool which is the correlation techniques was used. This technique explained the association between the dependent variable and the independent variables by the analysis of the Pearson correlation coefficient.

Data were presented using frequency tables and charts. The researcher ensured that key information was captured from documented sources for the period under study. The data collected were analyzed through the use of regression analysis and correlation analysis using the statistical package for social science (SPSS) in order to calculate descriptive summaries effectively and accurately.
3.11 Ethical consideration

Kombo and Tromp (2006), this study dealt with people as respondents and ensured observation of their rights, the confidentiality of their information and respect to their opinion.
CHAPTER FOUR

DATA ANALYSIS, PRESENTATION OF RESULTS

4.1 Introduction

The fourth chapter presents analysis and explain the findings gathered during the study as set out in the research methodology. Tables and charts have been used to analyze the data and out of that, trends have been established, patterns have been discovered and meanings have been given to the data collected. This has made it possible for the research questions of the study to be answered. One hundred and nine SME operators were selected as the sample size from a population of 150 operators. However, at the time the study was conducted, nine respondents were not able to meet deadline for submission, five were on study leave and two forgot to fill the questionnaire. This reduced the sample size to ninety-three (93) respondents, this did not affect the reliability and validity of the research work.

4.2 Gender of the respondents

In determining the gender of respondents, the study conducted an in-depth analysis which revealed that 79.6% of the respondents were male while 20.4% of the respondents were female. The analyses in Figure 4.2 depicts further that 74 (79.6%) were males, while 19 (20.4%) were females, with this statistic, it can be opined that, the males dominated the SME manufacturing sectors in relation to their female colleagues. This also indicates the in balance of gender in the SME manufacturing industry.
Table 4.1 Gender of respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>74</td>
<td>79.6</td>
</tr>
<tr>
<td>Female</td>
<td>19</td>
<td>20.4</td>
</tr>
</tbody>
</table>

Source: Survey of data

4.3 Position in organization

Furthermore, the study also finds out the position of the respondents in the firm. According to the analyses derived from the findings, 51.6% of the respondents were Accountants and Finance managers, 22.6% of the respondents were top managers, and 6.5% of the respondents were senior employees while 19.4% of the participants were owners. This is illustrated in the diagram below:

Figure 4.1 Age of respondents

Source: Survey of data
4.4 Age of respondents

Table 4.2 illustrates the age groups of the participants. With respect to the findings, 48.4% of the participants were in age range between 25-29 years, 23.7% of the participants were in the age range between 20-24 years, 15.1% of the participants were aged below 20 years, and 12.9% of the participants were aged above 30 years. Thus, the analyses implied that majority of the SME entrepreneurs were young.

Figure 4.2 Age of respondents

Source: Survey of data
4.5 Academic Qualification

With reference to the respondents academic qualification, the figures in Table 4.3 illustrates that, 27% had master’s degree, 50% had degree qualification, and 12% had diploma qualification, while 11% had senior certificate qualification. This means that, more than half of employees in the sector are skilled and has the technical know-how of the research topic. This is as shown in the figure below:

Figure 4.3 Academic qualification

Source: Survey of data
Thus, the figure above indicates that most SME entrepreneurs have at least obtained some basic education. However, their educational level was relatively high compared to their few counterparts who had obtained diploma and senior certificate.

4.7 Experience at the enterprise

The research attempted to determine the respondents’ experience in years. The findings indicate that most participants had experience varying from 3-5 years with 52.7%, with participants having less than 3 years representing 24.7%, those with more than 5 years of experience representing around 22.6%. Overall, there was a wealth of knowledge needed by the staff engaged in working capital management for this research. This is as shown in the following figure:

Figure 4.4 Respondents level of experience

Source: Survey of data
4.8 Type of business

Regarding the type of company, the results indicated that the companies operated as sole proprietors, partnered with other peers, and structured as cooperatives to create and manage their companies together. Most of the companies, however, were sole owned as shown in Figure 4.4. Of the 93 entrepreneurs, the sole proprietors formed the majority of carriers with a frequency of 42 (45.2 percent).

Figure 4.5 Nature of business

Source: Survey of data
4.9 Working capital management approaches.

With the intentions of the researcher to discover how much of an investment does the respondents engaged in on the study area. From the results, the researcher focused to establish the effect of working capital approaches on profitability of SMEs of manufacturing firms in Ghana County. The findings showed that 34.4% of the respondents applies the conservative approach to managing working capital in the firm. Thus, 32 respondents, focuses on minimizing risk and maintaining higher level of working capital because of seasonal fluctuation in the manufacturing sector in Ghana. Another significant response was that 28% of the respondents represented by a frequency of 26 respondents believe their firm do not apply any working capital strategy. The researcher found out that, this group of respondents’ firms focused less or not at all on strategies of working capital but do operate to make profit. 19.4% (frequency of 18) of the respondents focused on matching approach to managing working capital. This means, under this approach respondents believed their firm take a moderate risk. They opined that, the variable working capitals of their firms are financed with short term funding whereas, their fixed asset are sourced with long term financing approach which they believe leads to moderate returns. Some respondents made up of 18.3% (frequency of 17) also focused on the aggressive approach practice. This group of respondents asserted that, the firms relies more on short term financing. The respondents explained that, their firm largely focused on maximizing profit irrespective of what it takes (despite the knowledge that, this enhances their financial risk and possibility of bankruptcy). They opined that, their main source of funding is via accessing an overdraft.
4.10 Accounts Receivable Period (Debtors Management)

Sales on credit are inevitable in every business in the world today. The account receivables were examined in line with the credit period offered by SMS entrepreneurs to their customers. The replies from respondents were coded with the motive of computing the percentages of the respondents and also to establish the effect of accounts receivable period on performance of SMEs. Out of the 93 respondents, this was affirmed by 24 (25.6%) who said their debtors often paid them within 31 to 90 days, 18 (19.4%) also opined that their debtors often paid them within 1 to 30 days, 51 (54.8%) opined that their debtors often paid them within 91 to 120 days, representing that customers purchased on credit several times thus they paid period a bit late. This means from the

Source: Survey of data
statistics that, all respondents offers credit to their clients and also, they opined that, they associated the delay in payment by their customers to the Bank of Ghana minimum capital increment operation being performed during the study periods. The respondents additionally reviled and strongly emphasis that, accounts receivable period has materially impacted on their financial performance. The varied time durations are presented in

**Figure 4.7 Debtors management**

![Debtors management graph](image)

Source: Survey of data

**4.11 Inventory Holding Period (inventory management)**

In identifying how the respondents thought about the time it takes for inventory to be converted to cash (inventory holding period) of the firm, the following percentages were computed by the researcher; The researcher found that 36 (38.7%) of the respondents thought the movement of
inventory directly into cash is very fast, on the contrary, 32 (34.4%) of them thought that the level at which inventory moves to direct cash is not fast, while another 25 (26.9%) also believed that, their inventory move fast into cash. The researcher found out that, majority of the respondents who thought their inventory moved very fast raised a concern to the research question that, customers pay in instalment of the inventory.

**Figure 4.8 Inventory management**

[Bar chart showing the distribution of respondents' views on inventory management]

Source: Survey of data
4.12 Provision of bad debt.

The findings as shown in Figure 4.9 below indicate the extent to which firms in the manufacturing industry makes provision for bad debts. The researcher believes there will be no room for argument for firms to make provision for bad debt given the delay in debt collection by their customers. The researcher intended to find out whether the respondents makes provision for bad debt, from the findings, 43 (46%) make provision for bad debt whiles 50 (53.8%) do not make provision for bad debt. The researcher learned that, respondents who do not make provision for bad debt assessed that, all their customers will pay which majority admitted that is not the case always, but they do not see the relevance of doubting their customer to pay back and more often too the amount in question is small to doubt they cannot pay back.
4.13 Accounts payable period (Creditors Management)

The respondent’s responses were coded with the aim of computing the percentages of the results to establish the method for payment of debt. Most of the respondents (35.5 %) responded that, creditors should be paid on time in order to build trust and be able to again purchase on credit another time. Also, a significant number of respondents, approximately 26.9% responded that the accounts payable period has an impact on profitability of SME’s. Hence the delay of payment to
maximize profit. Another 37.6% of the respondents thought that firms should pay before deadline to enjoy some level of discount.

**Figure 4.9 (Creditors management)**

![Bar chart](chart.png)

Source: Survey of data

**4.14 Cash convention cycle (Cash management)**

The researcher focused on learning the extent to which the respondents have adequate cash flow to cover expenses to meet daily operations. Based on the questionnaire conducted the most 58 (62.4%) affirmed that, often, there is not adequate available cash to meet daily operations whiles, other respondents 35 (37.6%) believe to have had adequate level of cash to meet daily operations, these results are reported in figure 4.10.
4.15 Sources of short term financing

The study as presented in table 4.2 shows the most preferred sources of short-term financing in manufacturing industry. In this instance, the researcher adopted “majority carries the vote” syndrome. Therefore, the researcher outlined three most effective sources of financing in the short-term and enquired from the respondents how they finance their working capital and from the findings, 56 (60.2%) often fund their working capital by reducing trade receivables, 22 (23.7%)
indicated that they shift their activities to reducing inventory in their warehouse, while 15 (16.1%) have to depend on loan or an overdraft to meet short term financing in the firm. This suggest that reducing trade receivables is the preferred source of short-term capital by the sampled firms.

**Table 4.2  Source of short term finance**

<table>
<thead>
<tr>
<th>Source</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans</td>
<td>15</td>
<td>16.1</td>
</tr>
<tr>
<td>Reducing trade receivables</td>
<td>56</td>
<td>60.2</td>
</tr>
<tr>
<td>Reduction of inventory in warehouse</td>
<td>22</td>
<td>23.7</td>
</tr>
</tbody>
</table>

Source: Survey of data

4.16 Inferential Statistics

4.16.1 Descriptive Analysis

**Table 4.3** shows descriptive statistics for 93 respondents in relation to their working capital management and financial performance of their firms. Descriptive analysis shows the mean, standard deviations, minimum and maximum of the different variables used in the study.
Table 4.3 Descriptive Analysis (N=93)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>APP</td>
<td>36.2</td>
<td>44.19</td>
<td>13</td>
<td>36</td>
</tr>
<tr>
<td>ACP</td>
<td>44.5</td>
<td>36.02</td>
<td>32</td>
<td>78</td>
</tr>
<tr>
<td>ICP</td>
<td>15.23</td>
<td>26.21</td>
<td>14</td>
<td>59</td>
</tr>
<tr>
<td>CCC</td>
<td>34.11</td>
<td>18.13</td>
<td>17</td>
<td>44</td>
</tr>
</tbody>
</table>

Note: Source: Survey of data

CCC - Cash convention cycle

ICP - Inventory Convention Period

ACP - Account Collection period

APP - Account payable period

It can be deduced from the descriptive analysis that credit period granted to their credit customers, on the average is about 44.5 days meaning the surveyed firms collected payment against their operations after an average of 44.5 days with a standard deviation of 36.02 days. The standard deviation indicates the extent of variance of the individual credit periods granted by the firms to their respective customers from the mean mark. The minimum time that the surveyed firms takes to receive payments was 32 days while the same would stretch to a maximum of 78 days.
On inventory conversion period in days, the firms took, on average, 15.23 days to deplete their stock but this could be as short as 14 days and as long as 59 days. The descriptive table also indicates that per the response from the respondents, the firms normally pays their creditors suppliers in an average period of 36.2 days. It has a standard deviation of 44.19 days, the minimum being 13 days with a maximum of 36 days. Furthermore, cash conversion cycle was used to determine the efficiency of working capital management showed a mean of 34.11 days and a standard deviation of 18.13 days with the minimum being 17 days and a maximum of 44 days.

4.16.2 Correlation Analysis

The research aimed to institute the association between the working capital management and financial performance of firms’ in the manufacturing sector in Ghana. Pearson Correlation analysis was used. The correlation analysis enabled the testing of the study’s hypothesis in chapter one of this research paper that, working capital management significantly and positively associated with financial performance of firms.
Table 4.4 Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>CCC</th>
<th>APP</th>
<th>INV. CP</th>
<th>ACP</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCC</td>
<td>0.854*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>APP</td>
<td>-0.850*</td>
<td>0.125*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INV.CP</td>
<td>0.723***</td>
<td>0.132</td>
<td>0.651</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ACP</td>
<td>-0.944*</td>
<td>0.752</td>
<td>0.666</td>
<td>0.476</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: *** indicates the Correlation is significant at the 0.01 level (2-tailed); **. Correlation is significant at the 0.05 level (2-tailed). *. Correlation is significant at the 0.10 level (2-tailed).

Source: Survey of data

The results of the Pearson’s correlation coefficient (as illustrated in Table 4.6) depicts negative but high linear relationships between firms’ financial performance and creditor management (-0.850) and positive relation with inventory (0.723). The correlation coefficients between ROA and average payable period is only significant at the 10 percent level, whereas that between ROA and inventory is significant even at the 1 percent level.

In respective to Creditors management, the negative correlation means that there is negative association among creditors management and profitability of the firm’s, this is as the results of a significant negative coefficient of (p = 0.061) between average payable period and profitability that was established by the study. This implies that, higher level of APP is associated with lesser level of ROA and vice versa. Thus, as APP increases, ROA will reduce as suggested by the significant negative correlation.
Furthermore, based on the above results in relation to Inventory management in days on Profitability. The above results depict that, firms’ financial performance is positively associated with the inventory management (turn over days), which is important at the conventional significance level. With an objective stating, there is no significant association between effective management and performance of the firm’s. The null-hypothesis is rejected meaning an increase in inventory holding period leads to increase in ROA. Thus, firms that rapidly convert their inventory into cash will aim at stocking more inventory to meet demand which will increase their profitability. Therefore, firms should aim at having more stocks to meet demand via strategic marketing and policies implementation.

Furthermore, the findings from the correlation analysis showed a significant negative co-efficient (-0.944) between debtor’s management and profitability. This implies that firm’s with long span of collecting periods are also likely to be less productive. Henceforth, management must exhibit strategic and strict measures in collecting payment from their debtors at a shortest possible time. Lastly, the focus of the researcher in relation to Cash management as a component of working capital management, was established with the correlation statistics table above. With a hypothesis that, late cash conversion management has a negative correlation on firms performance. The study established a positive coefficient which is significant at the 10 percent level. Thus, the null hypothesis is rejected. This means that if firms reduce their cash conversion management, the probability that it can improve its productivity and financial performance is high.
SUMMARY

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.

5.1 Introduction

The fifth chapter focuses on the summary of the study, the conclusions of the study, recommendations of the study and suggestions for further study. The summary highlights the salient findings per objectives. Conclusions and recommendation were based on the summary of the findings.

5.2 Summary of the findings.

This segment provides summary of key findings obtained when the data collected was subjected to statistical analysis. The study adopted primary approach. The study examined the association between working capital management and financial performance of SME’s, in the manufacturing industry, Ghana County.

The results depicts negative but high linear relationships between firms’ financial performance and: creditor management and positive relation on inventory management. The study provided indication that an increase in inventory management is associated with higher profitability of sampled SMEs, the reverse is true in the case of creditor management. This indicates that companies are likely to improve on their profitability level by increasing their inventory level. In other words, the correlation analysis established that there was a significant positive linear
relationship of ROA and cash management and also a negative relationship with debtor’s management. The positive correlation means that SMEs with better cash management are also more profitable. Thus a decrease in debt collection periods is associated with higher profit levels.

Additionally, it was evident that, firms do not pay attention to provision of bad debt which has a negative association on ROA. The finding from the study revealed that the proffered short-term financing source among the sampled SMEs is through reducing trade receivable.

### 5.2.1 Provision for bad debt

Out of the findings of the study, the extent to which firms in the manufacturing industry makes provision for bad debts. The researcher learned that, majority of the respondents (managers) do not make provision for bad debt.

### 5.2.2 Cash management and financial Performance

Based on the analysed survey on impact of cash management on SME performance, the study established that, the firms minimize the amount of cash holdings thus, the firms increases their profitability by spending cash slowly to have extra cash for profitable investment. The correlation model used in the research that, cash management has a positive and substantial effect on financial performance of SME’s.
5.2.3 Trade credit management and financial performance

Using descriptive statistics, the study reviled that the firms had weak credit policies to its customers. Further, using linear correlation, creditors management is inversely associated with ROA. The study recognised that the trade credit management are one of the major predictors in financial performance of SME’s.

5.2.4 Trade debit management and financial performance.

With the Use of descriptive statistics, the study reviled that the firms had strong debit policies to its clients. Furthermore, due to the association of debit management and ROA from the linear correlation, strategic time period and collection approach should be applied to debtor’s management facilities. The study reviled that trade debit management was one of the major predictors of financial performance of SME’s.

5.2.5 Inventory management and firm’s financial Performance.

Again, using descriptive statistics, the study established that firm’s maintains an ideal level of stocks. The surveyed SME’s inventories are quickly converted into cash which enhances financial performance. Furthermore, using correlation analysis, it was found out from the study that inventory management was a major predictor of financial performance of SME’s.
5.3 Conclusion

In view of this, the following conclusions were drawn.

1. It can be concluded that, managers need to focus on efficient cash collection and its disbursement.

2. The firms make more credit sales compare to cash sales and this could be because of it being in the manufacturing industry which could be rare in other sectors. Selling products or services on credit is a common trend for SME’s especially in Ghana and given the difficult marketing environment and also, under conditions of a strong competitive market.

3. Also, majority of the managers in the surveyed firms had little or no skills concerning bad debts.

Finally, it was evident that the surveyed firm’s had a very feeble financial position which is because they seriously relied on credit facility to finance their activities.

The study concludes that managers need to be focused and adopt to the paradigm shift of effectively managing working capital management to enhance financial performance to improve their relevance and contribution to the economy.
5.6 Recommendations

With the findings exploited above, the study recommends that, Firms should adopt an effective and efficient system and procedures to keep track of inventory, therefore, the company need to hold more stocks with a strategic motive of quick sales. The study also recommend that, training on working capital management should be conducted for SME managers to enhance their skills. In view of recent happenings in the financial sector it will be prudent if the government and the bank of Ghana assist SME’s via a rigorous working capital policies and also firms should adopt a policy of entrusting management of working capital to highly skilled and trained personnel’s. Most importantly, the risk of bad debts can be minimized when the creditworthiness of new clientss is carefully assessed before credit is granted and if the creditworthiness of existing customers is reviewed on a regular basis.

5.4 Suggestions for Further Research

This study is focused at determining the impact of working capital management on the financial performance of Small and Medium Enterprises in the manufacturing sector in Ghana. Base on the study, the same study could be carried out in other counties to compare with the outcome of this research. Again, the study further recommends that for future studies, researchers should conduct a research on how working capital affect firm’s liquidity.
Furthermore, this study can be replicated in the commercial and services industry to establish mechanisms in which working capital management can be optimized in a bid to increasing the firm’s financial performance.

5.5 Limitations of the Study

The research work was limited to SME’s in Ghana. One major challenge the researcher faced was budget constraint. This disadvantaged the study in an area of collecting data in time.

Furthermore, some of the challenges faced by the study was respondent’s unwillingness to disclose sensitive and confidential information about their firm. The researcher assured the respondents of data privacy. The researcher also pursued after an introductory letter from SMEGA for data collection which was presented to the selected firms. The study was able to run smoothly.


Afza T and Nazir M S. (2007) is it better to be Aggressive or Conservative in Managing


Ross, S. A., Westerfield, R. W., Jaffe, J., and Jordan, B. D. Modern financial management. 8th ed. McGraw-


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APPENDIX

QUESTIONNAIRE FOR STAFF

Dear Respondent,

This questionnaire is intended only for academic purposes. It is for a study under the topic “Working Capital Management and its effect on financial performance of Small business Enterprises”. I would therefore appreciate it, if you could take part of your time to complete the questions for me.

Thank you for your cooperation.

1. Age Range
   - □ Below 20 years
   - □ 20 yrs-24 yrs
   - □ 25yrs-29yrs
   - □ 30yrs and above

2. Sex
   - □ Male
   - □ Female

3. Highest Level of education
   - □ Senior high school
   - □ College degree
   - □ Polytechnic degree
○ Masters degree  ○ Doctorate degree

4. For how long have you been working in this firm?

○ Less than 3yrs  ○ 3-5yrs  ○ above 5yrs

5. What is your position at work?

Please, type (write) your position in the space provided below.

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6. Provide the range of your company's annual sales for the past three years? Please select one.

○ GH₵ 0.5 million - GH₵ 2million  ○ GH₵4.1million - GH₵6million

○ GH₵2.1million - GH₵4million  ○ GH₵6.1million - GH₵8million

Other, specify …………………

7. How many employees do you have in your company? Choose one.
8. How old is the company?

- 1-3 years
- 4-6 years
- 7-10 years
- 11-14 years
- 15 years and above

Other, specify .........................
9. What are the types product(s) your company provide?

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10. Is management aware of working capital management practice?

Yes  ○  No  ○  not sure  ○

11. Who is responsible for setting management policy for working capital (if there is one) in your firm?

○ Board Directors  ○ President (CEO/MD)

○ Vice president/Finance/Accountant  ○ Treasure

○ Controller

12. What policy does management of your firm practice for its working capital?
13. How would you describe the policy of the management of working capital in your firm?

- Formal Policy
- Informal policy
- No policy

14. How often is the management policy reviewed?

- Monthly
- Quarterly
- Semi-annually
- Annually
- Whenever necessary
15. How are your shortfalls in working capital financed?

- Business Loans
- Cutting down trade receivables
- Lowering inventory levels
- Others

16. How quick is your inventory converted to sales directly for cash or non-credit sales?

- Fast
- Very fast
- Not fast

17. What is the firm’s highest credit allowable days?

- 1-30 days
- 31-90 days
- 91-120 days
- Others

18. On average, how long does it take to receive money from debtors?

- 1-30 days
- 31-90 days
- 91-120 days
19. What is the longest period of debtors default?

- [ ] 1-30 days
- [ ] 31-90 days
- [ ] 91-120 days

Others………………………………………………………………

20. which of the following measures do you find most useful, when monitoring the payment behaviour of the firms credit customers,?

*Please rank in order of their importance to you. Number the most important 1, important 2, and not very important 3.*

- [ ] Account receivable turnover
- [ ] Collection Period
- [ ] Aging schedule

Other ……………………………………………………………
21. What criteria do you utilize in evaluating proposed changes in the credit terms of your company?

Please Rank in order of their importance to you. Number the most important 1, the next 2, the next 3, and the least 4. If any of the options has no importance at all to you, please leave blank.

1. Effect on firm sales
2. Effect on level of accounts receivable
3. Effect on level of firm profits
4. Effect on return on investment

22. Is provision for bad debt made?

- Yes
- No

23. Is cash discount given to debtors who pay for credit sales before the due date?

- Yes
- No
24. What are the security measures demand before credit is offered?

- [ ] Bank Statements
- [ ] Letter from the bank
- [ ] Postdated Cheques

Others: ........................................................................................................................................

25. Rate the efficiency of the activities of your operations

- [ ] Very
- [ ] Not Very

26. Arrange the modes of financing your firm uses the most.

- [ ] Cash Credits
- [ ] Trade Credits
- [ ] Loans
- [ ] Bank Guarantee

27. What are the credit control strategy and policy of your firm

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28. What are your debt collection procedure?

29. Do you have an adequate cash flow to cover liabilities/expenses to meet your daily expenses?
   Yes ☐ No ☐

30. Are you able to cover your daily expenses?
   Yes ☐ No ☐

31. How are you able to cover your financial obligations?

   ☐

   ☐