ASHESI UNIVERSITY COLLEGE

WORKING CAPITAL MANAGEMENT IN TRADING AND MANUFACTURING FIRMS IN ACCRA AND ITS EFFECT ON LIQUIDITY AND PROFITABILITY – *A Focus on Inventory and Trade Receivables*

FLORENCE AMOABA ADU

2013

ASHESI UNIVERSITY COLLEGE

WORKING CAPITAL MANAGEMENT IN TRADING AND MANUFACTURING FIRMS IN ACCRA AND ITS EFFECT ON LIQUIDITY AND PROFITABILITY – *A Focus on Inventory and Trade Receivables*

By

FLORENCE AMOABA ADU

Thesis submitted to the Department of Business Administration,

Ashesi University College

In partial fulfillment of Bachelor of Science degree in Business Administration

APRIL 2013

DECLARATION

I hereby declare that this is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature:**.....**

Candidate's Name:……

Date: **.....**

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by Ashesi University College.

Supervisor's Signature:…….

Supervisor's Name:……..

Date:**.....**

ACKNOWLEDGEMENTS

I want to use this platform to say a very hearty thank you to God Almighty for bringing me this far. All Glory is to His name.

I am also heartily thankful to my supervisor, Mr. Anthony Essel -Anderson, for his love, care, support, encouragement and funny jokes which were stress reliefs for me during the course of this project. Thank you for being there to give me all the information and help I needed to understand this subject area better.

I would also like to thank my entire family especially Mr. and Mrs. Adu for providing all the necessary resources for my smooth stay in Ashesi and for a successful project. I am grateful for your involvement in my life and the encouragement and guidance you gave me to complete my tertiary education and to produce a successful project. God Richly Bless You.

Warm regards and blessings to Maxwell Nketsiah and Prince Benneh who helped me to believe and bring this project to a great end.

Thank You All

ABSTRACT

Even though, the SME sector plays a major role in the development of the Ghanaian economy, yet they are faced with huge challenges including inadequate financing and poor working capital management. Working capital management is expected to enhance the profitability and liquidity of enterprises. The aim of this study is to explore the working capital management practices of SMEs using inventory and trade credit as factors. The study was qualitative (descriptive) using structured questionnaires and interviews to gather data from thirty (30) participants, and also quantitative, using accounting ratios as a measure of liquidity and profitability. The five C's were used as a standard practice for trade receivables management. Formal record keeping on inventory, stock take, the use of cash and sales budgets, the application of inventory management tools and order cycle delivery time were discussed as practices for managing inventory. Dependent variables; gross profit ratio, operating profit margin and return on total assets were used as measures of profitability, whiles current ratio, quick/acid test ratio, cash ratio and net working capital were used as measures for liquidity for a three year period.

The findings showed that SMEs make a good attempt at managing working capital well through the adoption of effective inventory and trade receivables management practices. The firms selected show signs of stable profitability and adequate liquidity. The firms exhibited a high recovery on debt and also recorded high levels of inventory which increased their current assets relative to current liabilities.

Chapter 1

1.1 Introduction and Background

In order for Ghanaian companies to guarantee and enjoy financial stability and sustainability under prevailing economic conditions such as high interest rates, high inflation and the constant and consistent depreciation of the Ghana cedi as against major currencies such as the dollar, successful management of current assets is one of the key things to be considered in keeping businesses financially stable and independent. Current assets management in the business context in Ghana has not been thoroughly researched. However, in developed countries such as the United States such researches are widespread. The empirical evidence from such researches have proven that, decisions pertaining to the management of current assets, especially in small and medium-sized companies, are mostly short-term, not analyzing the performance of previous periods (Arbidane & Zelgalve, 2012). This is because current assets are assets with maturities of less than one accounting year (Kuhlemeyer, 2004). In view of this, their impact is felt more instantly on a company and therefore worthy of close attention.

In continuation, a company's investment in current assets is as crucial as its investment in any other asset. This is because current assets fuel the engine of growth (Assets, Liabilities & Equity - An Intro (Part II), 2009) in a company as they occupy a significant portion of total assets used in revenue generation. Characteristically, current assets occupy more than half the total assets of a business firm. Given that they represent such a large investment, their investment tends to be somewhat unstable or unpredictable and hence need to be closely monitored (Working Capital Management, Chapter III, page 104). Also, in certain

instances, current assets represent, on an average, three-fourths of all total assets. For trading concerns alone, it is recorded to account for about 83 percent of total investments (Agrawal, 2003). In a typical manufacturing firm, current assets exceed one-half of total assets (Kuhlemeyer, 2004). In addition, current assets are cash and other resources such as short-term investments (government and marketable securities), receivables, inventories and pre-paid expenses that companies reasonably expect to convert to cash or use up within one-year or less (Kimmel, Weygandt, & Kieso, 2007). This means that current assets are all of a company's assets that can be easily liquidated or converted to cash to be used to pay off current liabilities within a span of a year or less. Therefore businesses ought to be knowledgeable about the proportions of assets they invest in and most imperatively, as is the focus of this paper, the practices adopted in managing these assets, since liquidity has a direct impact on profitability levels of businesses. With this in mind, businesses will be able to make right decisions pertaining to investments in both fixed and current assets, and develop and adopt effective ways of managing them to ensure that they make the most out of their investments.

Irrespective of the angle from which working capital is analyzed or defined, current assets are recognized as an essential part of it. According to Kuhlemeyer (2004) working capital management is the administration of a firm's current assets and the financing needed to support such assets. Working capital management can also be explained as the management of the net of current assets and current liabilities of a firm with the objective of reaching the right balance between profitability and liquidity (Armah, 2013). The aim of managing inventory (stock), trade receivables (debtors), cash, trade payables (creditors), is to obtain the right

balance of all the current assets and current liabilities at any given time so that they achieve the objectives of working capital management in the form of profitability and liquidity. This means that, working capital management seeks to minimize the risk of insolvency while maximizing the return on assets. Another very crucial goal of effective working capital management is ensuring sufficient cash flow to fund operations whiles reducing debt. However, generally, management of working capital means management of current assets (Working Capital Management(Finance)).

Working capital plays the same role in the business as the role of the heart in the human body. Just like the heart receives blood and circulates it in the human body, in the same manner, working capital funds are generated and then circulated in the business. As and when this circulation stops, the business becomes lifeless. Thus, prudent management of working capital is necessary for the success of a business. Working capital then can be said to be the amount of funds a company must have to finance or carry out its daily operations (Working Capital Management, Chapter III, page 96). It can also be regarded as the proportion of a company's total capital that is employed in short term operations (Working Capital Management, Chapter III, page 96).

There are two known concepts of working capital. These are the Financial Concept and the Accounting Concept (Working Capital Management, Chapter III, page 104). The Financial Concept is known as the 'Gross Concept' and the Accounting concept is also known as the 'Net Concept'. Gross Working Capital which can also be referred to as circulating or current capital, is the total of all current assets a business holds. Conversely, the Accounting Concept which is the 'Net

concept' is the difference between current assets and current liabilities (Gitmen, L. J.) , or as C.W. Gestenbergh ordinarily defines it, it is the excess of current assets over current liabilities, meaning, what is left after current liabilities are deducted from current assets. Net working capital can either be negative or positive. Positive net working capital will arise when current assets exceed current liabilities, and negative working capital will arise when current liabilities are in excess of current assets (Working Capital Management(Finance)). Both of these concepts are not to be regarded as mutually exclusive or independent of each other, as each is relevant in specific situations. In measuring the size and extent to which current assets are being used, the gross concept is applied. Whereas in assessing the liquidity position of a firm, the net concept becomes applicable and thus favourable (Working Capital Management(Finance)).

Liquidity and Profitability are two major and vital aspects of every business' life. No firm can thrive if it is not liquid enough or with no liquidity at all, because cash is needed daily for business operations. A firm may survive however, even without making profits (Working Capital Management, Chapter III, page 96). Liquidity refers to the ability of a company to meet short-term obligations quickly. Short term obligations imply obligations which mature within one accounting year. In the working capital management context, liquidity means having enough cash or ready access to cash to meet all payment obligations when these fall due (Working Capital Management , 2013). Thus, a firm is described as liquid when it can easily convert its assets to cash in order to honour its currently maturing obligations, that is, pay off its debt to the suppliers of credit, services and goods. Liquidity is very crucial to any firm if it is to continue in business, because a company that cannot

pay its creditors on time can be declared bankrupt (Meaning and Importance of Liquidity page 1).

The level of current assets is a key factor in a company's liquidity position. The greater the extent to which current assets exceed current liabilities, the more solvent or liquid a company is likely to be, depending on the nature of its current assets. Adequate liquidity in a firm can only be determined if proper and effective working capital management in the form of current assets management practices are adopted.

Profit maximization is unquestionably the basic aim of every business venture. Profitability is imperative for any firm that is profit–oriented or concerned with maximizing profits. One of the objectives of working capital management is to increase the profitability of a company and to ensure that it has sufficient liquidity to meet short-term obligations as they fall due and so continue in business (Pass and Pike 1984). Pass and Pike (1984) also emphasized that the two main objectives of working capital management are to increase profitability and to ensure that it has sufficient liquidity to meet short-term obligations.

For this reason, it is necessary, if not mandatory, for a firm to maintain a certain level of equilibrium between liquidity and profitability while running its daily operations (Niresh, 2012). This can be achieved primarily through the proper management of current assets as well as current liabilities.

Working capital management is important for all businesses. However, businesses that deal directly and as a result invest heavily in current assets need to particularly pay attention to this field. Firms that fall into the category that deal directly with current assets in the form of inventory and trade receivables include trading and

manufacturing firms. As a result of this nature of such businesses (trading and manufacturing), their investments in current assets especially in the form of inventory and trade receivables tends to be very extensive and thus make up the bulk of their investments. With this fact stated out, their improper management can lock up huge capital investments and profits which will stifle the business and its prospects.

It is in this light that this paper examines the manner in which trading and manufacturing SMEs based in Accra manage working capital, focusing on two major current assets. They are; inventory and trade receivables. Also, the impact of these practices will be ascertained using liquidity and profitability as measures of performance.

1.2 Problem Statement

In trying to find out what existing gap lies in this research area, the question to be answered is; why study working capital management for small and medium-sized (SMEs) firms rather than large firms that are presumed to have more impact on an economy due to their size and expertise?

The choice of small and medium scale enterprises for this study is based first of all on the following propositions (Kayanula & Quartey, 2000).

a) Large Scale Firms

i. Have not been an engine of growth and a good provider of employment;

ii. Already receive enormous support through general trade, finance, tax policy and direct subsides.

b) Small and Medium Scale Enterprises

i. Mobilize funds which otherwise would have been idle;
ii. Have been recognized as a seed-bed for indigenous entrepreneurship;
iii. Are labour-intensive, employing more labour per unit of capital than large enterprises;
iv. Promote indigenous technological know-how;
v. Are able to compete (but behind protective barriers);
vi. Use mainly local resources, thus have less foreign exchange requirements;
vii. Cater for the needs of the poor and;
viii. Adapt easily to customer requirements (flexible specialization), (Kayanula & Quartey, 2000).

Furthermore, due to their flexible nature, SMEs are able to withstand unfavorable economic conditions and are able to adopt more easily to market conditions given their broadly skilled technologies. Also, they are labour intensive than larger firms and therefore, have lower capital costs associated with job creation (Anheier & Seibel, 1987; Liedholm & Mead, 1987; Schmitz, 1995). SMEs perform useful roles in ensuring income stability, growth and employment. Since SMEs are labour intensive, they are more likely to succeed in smaller urban areas and rural areas, where they can contribute to the more even distribution of economic activity in a region and can help to slow the flow of migration to large cities (Bidzakin, 2009). As a result of their regional dispersion and their labour intensity, it is argued that small and medium-scale production units can promote a more equitable distribution of income than large firms. They also improve the efficiency of domestic markets and make productive use of scarce resources, thus, facilitating long term economic growth (Bidzakin, 2009).

In developing countries like Ghana, these enterprises have been recognized as the engine through which growth objectives can be achieved. They are potential sources of employment in many developing countries. It is estimated that SMEs employ 22% of the total adult population in developing countries (Daniels & Ngwira, 1992; Daniels & Fisseha, 1993; Fisseha, 1992; Fisseha & McPherson, 1991; Gallagher & Robson, 1995).

It is remarkable to note that SMEs make better use of scarce resources than large firms. Research in Ghana and many other countries have shown that capital productivity is often higher in SMEs than in large firms (Steel, 1977). This is not far-fetched, as SMEs are labour intensive with very small amount of capital invested. Thus, they tend to witness high capital productivity, which is an economically sound investment. It has therefore been said that promoting the SME sector in developing countries will create more employment opportunities, lead to a more equitable distribution of income, and will ensure increased productivity with better technology (Steel & Webster, 1990).

SMEs represent over 90 percent of private businesses and contribute to more than 50% of employment and of GDP in most African countries (UNIDO, 1999). Small enterprises in Ghana are said to be a quality attribute of the production landscape and have been noted to provide about 85 percent of manufacturing employment of Ghana (Steel and Webster, 1991; Aryeetey, 2001). SMEs are also believed to contribute about 70 percent of Ghana's GDP and account for about 92% of businesses in Ghana. In other African countries such as the Republic of South Africa, it is estimated that 91 percent of the formal business entities are Small, Medium and Micro Enterprises (SMMEs) (Hassbroeck, 1996; Berry *et al*., 2002).

They also contribute between 52 and 57% to GDP and provide about 61% of employment (CSS, 1998; Ntsika, 1999; Gumede, 2000; Berry *et al*., 2002). More generally, the development of SMEs is seen as accelerating the achievement of wider economic and socio-economic objectives, including poverty alleviation (Cook & Nixson, 2000). According to an OECD report, SMEs produce about 25% of OECD exports and 35% of Asia'a exports (OECD, 1997). Thus, SMEs have come to fit into the description of acting as proficient and prolific job creators, the seeds of big businesses and the fuel of national economic engines (Quartey & Abor, 2010). Even in the developed industrial economies, it is the SME sector rather than the multinationals that is the largest employer of workers (Millinuex, 1997). For example in the U.K., in the year 1979 the total number of SMEs was only 2.4 million. By the year 1999 the number had grown to 3.67 million (Burns, 2001). Now, collectively, SMEs account for over 99 percent of the total number of firms in the U.K. and generate over a quarter of UK GDP (Burns, 2001).

With these spelt out clearly, the important role SMEs play in all economies cannot be over emphasized. All these point to the fact that SMEs play a crucial role in development especially for developing economies like Ghana, which from the records of the Registrar General has 90 percent of firms registered as SMEs (Mensah, 2004). In view of the critical role SMEs play, there is the need for them to survive and one of the sure ways is to properly manage their working capital. This is the aspect that is very important to SMEs because according to Atrill (2006), there is evidence that many SMEs are not very good at managing their working and this has been cited as a major cause of their high failure rate compared with that of

large businesses. Essentially, this study will look at how SMEs manage their working capital to survive.

1.3 Research Questions

- What are the inventory and trade receivables practices that trading and manufacturing SMEs in Accra are employing to manage working capital?
- How are these practices affecting their performance in terms of liquidity and profitability?

1.4 Objectives of the research

The objectives of the study are to -

- Explore how trading and manufacturing SMEs in Accra manage inventory and trade receivables.
- Examine the impact of accounts receivables and inventories management practices on the liquidity and profitability of these SMEs.

1.5 Theoretical framework

1.5.1 Working Capital Management

According to (Weinraub & Vischer, 1998), the majority of finance books discuss working capital from the point of view of the trade-off between risk and return in alternate working capital management practices. They classify three different categories of working capital management: aggressive, moderate (or matching) and conservative. Aggressive management is when working capital

investment and financing is characterized by high risk and high returns. Moderate or matching policy on the other hand entails lower risk and returns, and finally conservative strategies have the lowest risk/return ratios (Rehn E. , 2012). In order to effectively manage working capital, the company needs to direct its attention to four different short-term assets, namely, accounts receivables, inventories, cash and short-term securities (Brealey, Myers, & Allen, 2006).

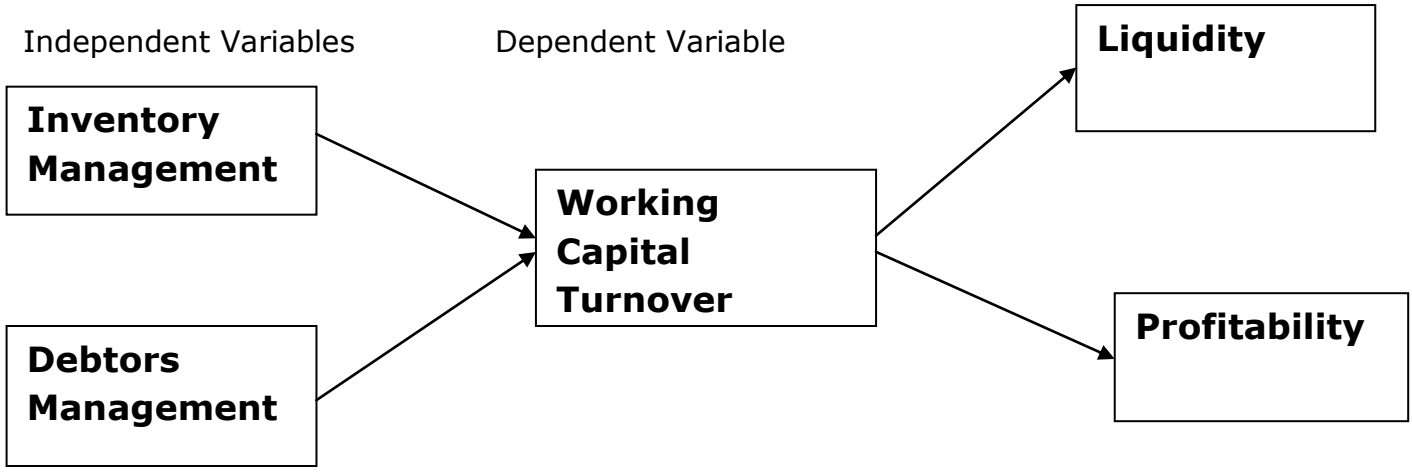
1.5.2 Accounts Receivables Management

Accounts receivables accrue as a result of goods sold on credit. Depending on the terms of payment or credit allowable days as per the company policy, cash may be received either in weeks or months, even days. A company can manage its accounts receivable properly by credit management, meaning that decisions regarding terms of sale, credit analysis and decisions, and collection policy have to be made. By, for instance, improving the efficiency of collection, the company can gain significant advantage in working capital. Brealey; Myers; & Allen (2006) mention that a too aggressive collection, though can affect a company's revenue positively, can create a conflict between sales and collection. A company can also adopt factoring to shorten its cash cycle. Factoring means that the company sells its receivables to a factor, which usually holds a percentage of the payment sum as interest. Factoring may be broadly defined as the relationship created by an agreement between the seller of goods/services and a financial institution called the factor whereby the latter purchases the receivables of the former and also controls and administers the receivables of the former (Management of Financial Services).

1.5.3 Inventory Management

Inventory is another important current asset. Depending on the industry, a company's inventory may consist of work-in-progress, raw materials or finished goods. These are the three forms in which inventory is presented. Managing and optimizing inventory levels require balancing between sales and tied-up capital. In a situation where inventory levels are too low, the company might miss out on sales when demand arises or might be able to deliver goods on time. On the other hand, too much inventory ties up capital that can be used elsewhere more effectively. The trend has been to lower inventory levels in the past decades (Brealey, Myers, & Allen, 2006, p. 821). For example, 30 years ago, U.S. companies had approximately 12 percent of total assets tied up in inventory, whereas today the percentage is around six (Brealey, Myers, & Allen, 2006, p. 821). A concept that is frequently used for inventory management is just-in-time approach. The just-in-time means that inventories are kept to a bare minimum and optimizing the supply chain processes to serve so that the inventories never run-out (Brealey, Myers, & Allen, 2006, p. 821).

1.5.4 Theoretical framework



1.5.5 Theoretical Relationship Between various Current Assets and Profitability

Table 1

CURRENT ASSETS	EXCESS	SHORTAGE
CASH	As non earning assets reduces profitability.	Causes liquidity crisis by lagging in payments, disruption of operations, ultimately affecting the overall turnover and profits.
TRADE RECEIVABLES	Cost of Collection efforts, Default risks, low profitability	Lower turnover, lower profitability
INVENTORY	Opportunity cost of funds, price declines, carrying costs adversely affect profits	Interrupted production schedules, limited supplies, lower turnover and profits

1.6 Relevance of study

In trying to understand the significance of this study, the focus will be on why there is the need to particularly study working capital management for SMEs as there are several constraints that SMEs encounter, including poor working capital management practices (Atrill, 2006). The other several factors that impede SME development include lack of access to appropriate technology, limited access to international markets, the existence of laws, regulations and rules that obstruct the development of the sector, poor working capital management practices, weak institutional capacity, lack of management skills and training, and most importantly and predominantly, difficulty in accessing finance (Quartey & Abor, 2010).

Of all the above mentioned obstacles that SMEs encounter, access to finance is the most predominant. Recent research around the developing world of which Ghana belongs, provides evidence that SMEs face greater financing obstacles than large firms (Beck, Demirgüç-Kunt & Maksimovic 2005; Beck & Demirgüç-Kunt 2006; and Beck, Demirgüç-Kunt, Laeven Maksimovic 2006). Cross-country evidence also points to the fact that small and medium enterprises are more constrained in their operations and growth than large enterprises and access to financial services features highly amongst the constraints (Ayyagari, Demirgüç-Kunt and Maksimovic, 2006). Furthermore, Levy (1993) found that there is limited access to financial resources available to smaller enterprises compared to larger organisations. Moreover, a large portion of the SME sector does not have access to adequate and appropriate forms of credit and equity, or in fact to financial services more generally (Parker *et al.*, 1995). The constraint of difficulty and lack of access to finance can be mentioned therefore as one of the major reasons why failure rate amongst small businesses is higher as compared to large businesses (Padachi, 2006). According to IFC(2009), the most prominent reasons that arise out of SME difficulty in obtaining commercial bank financing, especially long term loans include, lack of collateral, difficulty in proving credit worthiness, small cash flows, inadequate credit history high risk premiums, underdeveloped bank-borrower relationships and high transaction costs. The emphasis placed on long term loans by the IFC research reveals the nature of the financing that SMEs are mostly constrained by. With this constraint being a major nightmare for SMEs than large firms, there is the greater need for SMEs to be financially strengthened internally and to be self-reliant in order to sustain themselves. This will enable them not only

to hedge against the difficulty of accessing finance but also to considerably reduce reliance on external financing from institutions such as banks and other financial organizations.

As mentioned earlier, working capital management is the concern of all firms. However, it is the small firms that need to look at the issue more closely. This is because, SMEs are not only constrained by lack of access to finance through banks and others financial institutions, they are also heavily constrained by very limited access to long term capital markets. SMEs are characterized by their relatively small size and therefore do not meet the requirements to have access to capital markets. The capital market (securities market) is the market for securities, where companies and the government can raise long-term funds. The capital market includes the stock market and the bonds market. The bond market is where investors go to trade (buy and sell) debt securities, prominently bonds. The stock market is a place where investors go to trade (buy and sell) equity securities like common stocks and derivatives (options, futures etc). Stocks are traded on stock exchanges (Investopedia, 2010).

Large firms have a higher privilege and opportunity to use the general public, through the issue of shares or bonds, as a means to gain finance. Small firms on the other hand, due to their size and capacity usually do not meet the requirements to access this form of finance, which is a guaranteed way of raising huge and long-term finance. With this fact laid out, working capital management is critical and of particular importance to small firms as these firms tend to rely more heavily on owner financing, trade credit, and short term bank loans to finance their needed

investment in cash, receivables and inventories (Chittenden et al, 1998; Saccurato, 1994).

In addition, working capital management is an area more important to SMEs because most of these companies' assets are in the form of current assets. Although such firms can minimize their investments in fixed assets by renting or leasing plant or equipment, they cannot avoid investments in current assets such as cash receivables and inventory. The study undertaken by (Peel *et al*., 2000) revealed that small firms tend to have a relatively high proportion of current assets, less liquidity, exhibit volatile cash flows, and a high reliance on short-term debt. Also, current liabilities such as bank loans are one of their main sources of finance due to their difficulty in obtaining funding in the long-term capital markets and the financing constraints they face (Samson *et al*).

Given their vulnerability to a fluctuation in the level of working capital, they cannot afford to be scarce on cash. For small and growing businesses, an efficient working capital management is a vital component of success and survival; i.e both profitability and liquidity (Peel and Wilson, 1996). They further assert 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 study of Grablowsky (1976) and others have showed a significant relationship between various success measures and the employment of formal working capital policies and procedures.

Finally, essentially, large firms due to their capacity may have the resources to employ large finance and accounting teams of experts to manage their working capital properly. Small firms may not have this advantage, which is why there is the

need for them to manage the little resources available to them through proper working capital management in order to grow their business and facilitate expansion.

1.7 Outline of Dissertation

This study will be divided into five chapters or parts;

Chapter One: Introduction

This chapter will introduce the thesis topic by providing a general insight into the background of the research. It will further go on to discuss the problem statement, research questions and objectives, relevance of study and the theoretical/conceptual framework surrounding the research. It will also provide an outline to the other chapters of the study.

Chapter Two: Literature Review

This chapter will analyze critically, organize and highlight the contributions made by a body of research done by others in this area of study or dissertation. However, the focus will be on one aspect of working capital, which is, current assets in the form of inventory and trade receivables.

Chapter Three: Methodology

The methodology will focus on the different methods used in gathering data, the sampling techniques, the data type(s) that will better help understand the problem and the relevant operational variables. I will also discuss the data analyzing tools that will be employed to analyze and understand the data gathered.

Chapter Four: Presentation of Data (Findings and Discussions)

Chapter four will present the findings of the primary data collected, in relation to the objectives of this research. It will then go on to discuss, analyze and investigate the data gathered. Graphs and tables will aid the visual representation of the findings where necessary.

Chapter Five (Conclusions)

The last chapter of the study will discuss the implications and limitations of the findings. Recommendations concerning the area of study will be made for industry players. This chapter will also include a summary conclusion of the important findings that explains the research problem. The findings and discussions in chapter four will form the basis for recommendations and conclusions of the study. Thus discussion of the findings in view of the literature that will have been reviewed about whether or not working capital management affects SME liquidity and profitability will be looked at.

Chapter 2: LITERATURE REVIEW

2.0 Introduction

This chapter will discuss various researches done by people in the area of study and will be broken down into these areas;

- Description of SMEs
- Financial Management
- Working Capital Management
- Inventory Management
- Trade Receivables Management
- Relationship between working capital management, liquidity and profitability.

2.1 Description of SMEs

The definition of SMEs and what they constitute generally cuts across several areas and sometimes depends on the existing situation of SMEs in the country. UNIDO defines SMEs according to the number of employees, by giving different classifications for industrialized and developed countries (Elaian, 1996). The Bolton Committee formulated an "economic" definition and "statistical" definition for small firms. Under the "economic" definition, a firm is said to be small if; it has a relatively small share of their market place, it is managed by owners or part owners in a personalized way, and not through the medium of a formalized management structure and it is independent, in the sense of not forming part of a large enterprise. Under the "statistical" definition, the Committee proposed these criteria. They are, the size of the small firm sector and its contribution to GDP, employment, exports, etc, the extent to which the small firm sector's economic contribution has

changed over time and applying the statistical definition in a cross-country comparison of the small firms' economic contribution (Bolton, 1971).

Different countries have defined SMEs in different ways, depending on several factors such as the size of an economy and prevailing policies governing the makeup of businesses. Therefore, in an attempt to come up with a definition for Small and Medium-Sized Enterprises, several variables and criteria have been applied. As a result, there is no single, uniformly acceptable, definition of a small firm (Storey, 1994) as there are many definitions for SMEs as there are authors on the topic. Firms differ in their levels of capitalization, sales and employment. Hence, definitions that employ measures of size (number of employees, turnover, profitability, net worth, etc.) when applied to one sector could lead to all firms being classified as small, while the same size definition when applied to a different sector could lead to a different result. This holds for different countries and economies as well. It is in this light that SMEs are defined to cover or encompass numerous areas in order that they can be applied and made relevant to diverse and specific situations. The various areas that are being used to gain a close definition and description for SMEs includes; the total number of employees in a firm, the firm's total worth, relative size of a firm within an industry, annual sales or receipts of a firm, value of a firm within an industry and the net worth of a firm (Cochran, 1981). In developed countries like Australia, the Wiltshire Committee (1971) defined SMEs as " a business in which one or two persons are required to make all the critical management decisions: finance, accounting, personnel, purchasing, processing or service, marketing, selling, without the aid of internal specialists and with specific knowledge in only one or two functional areas''. The 1985 UK

companies act defines SMEs with reference to financial disclosure as companies employing fifty or less employees.

2.2 The Ghanaian Stance

Even though small scale enterprises have been variably defined, in Ghana, the most commonly used criterion is the number of employees that make up a firm (Kayanula and Quartey, 2000). In employing this definition, uncertainty, arises due to the different opinions and cut-off points used by the various official sources. The Ghana Statistical Service (GSS) in its industrial statistics regards firms with less than ten employees as small-scale enterprises and their equals with more than ten employees as medium and large-sized enterprises. However, the GSS in its national accounts, deemed companies with up to nine employees as SMEs.

The value of fixed assets in a firm has been used as another standard for defining SMEs as well. Yet, the National Board for Small Scale Industries (NBSSI) in Ghana uses both the "fixed asset and number of employees" criteria. Its definition of a small-scale enterprise is a firm with not more than 9 workers, which additionally has plant and machinery (excluding land, buildings and vehicles) not exceeding 10 million Ghanaian cedis. The Ghana Enterprise Development Commission (GEDC), nonetheless, uses a 10 million Ghanaian cedis upper limit definition for plant and machinery. It is important to caution that the process of valuing fixed assets poses a problem. Secondly, the incessant depreciation of the Ghanaian cedi as against major trading currencies such as the United States Dollars and the Great British Pound often makes such definitions unacceptable or outdated (Kayanula and Quartey, 2000).

In defining small-scale enterprises in Ghana, other authors like Steel and Webster (1991), and Osei *et al* (1993) used an employment cut-off point of 30 employees. Osei *et al* (1993), however, classified small-scale enterprises into three categories. These are: (i) micro - employing less than 6 people; (ii) very small - employing 6-9 people; (iii) small - between 10 and 29 employees. A more recent definition is the one given by the Regional Project on Enterprise Development Ghana manufacturing survey paper. The survey report classified firms into: (i) micro enterprise, less than 5 employees; (ii) small enterprise, 5-29 employees; (iii) medium enterprise, 30 – 99 employees; (iv) large enterprise, 100 and more employees (Teal, 2002). This study adopted the latter and more recent definition by the Regional Project on Enterprise Development Ghana.

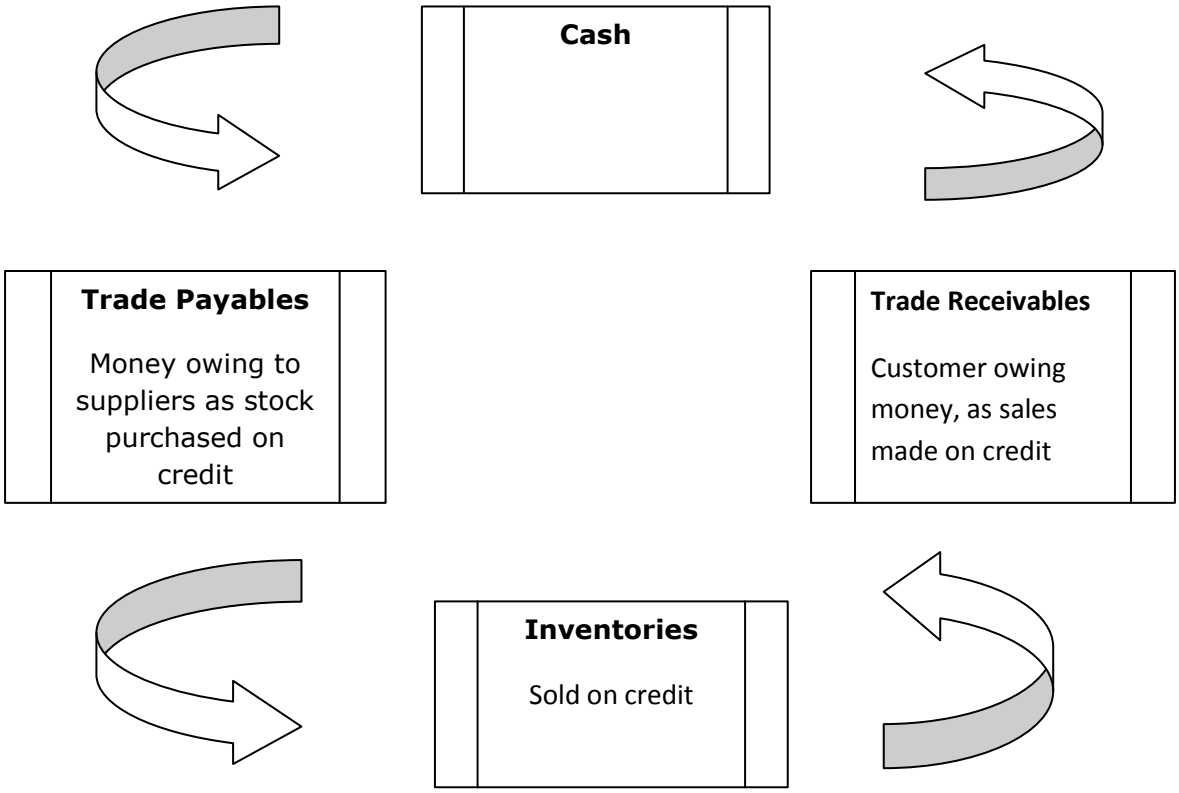
2.3 Working Capital Management

A significant number of studies have been done on working capital, although from different perspectives and in different situations and environments.

Working capital functions as the capital available for conducting the day—to-day operations of the business and consists of current assets and liabilities. Current assets consist of inventories, trade receivables, cash and short term investments, and current liabilities consist of trade payables, bank loans or overdrafts. Working capital can be viewed entirely but interest is usually focused on the individual components such as inventories or trade receivables. Working capital in actual fact is the net current assets of a business, and can either be positive or negative. Positive working capital refers to current assets being greater than current liabilities. Negative working capital refers to current assets are less than current

liabilities. Working capital management is the administration of current assets and current liabilities. Effective management of working capital ensures that the organization is maximizing the benefits from net current assets by having an optimum level to meet working capital demands. It is difficult trying to achieve and maintain an optimum level of working capital for businesses. For example having a large volume of inventories will have two effects, firstly, there will never be shortages therefore always meeting the demands of customers. Secondly, it implies that cash has been spent on acquiring the inventories, which is not generating any returns (i.e. inventories is a non – productive assets). Also, there are additional costs in holding inventories (i.e. rent on warehouse space, insurance). The important aspect of working capital is to keep the levels of inventories, trade receivables, cash etc at a level which ensures customer satisfaction but at the same time keeps costs at the minimum.

Working Capital Cycle: the working capital cycle measures the time between paying for goods being supplied to the buyer and the final receipt of cash from the sale of these goods. It is advantageous to keep the cycle as short as possible as it increases the effectiveness of working capital. The diagram below shows how the cycle operates or works.



The shorter the cycle, the better it is for the company as it means:

a) Inventories are moving through the organization rapidly.

b) Trade receivables are being collected quickly.

c) The organization is taking the maximum credit possible from suppliers.

The shorter the cycle, the lower the company's reliance on external supplies of finance like bank overdrafts which is costly.

Excessive working capital means too much money is invested in inventories and trade receivables. This represents lost interest or excessive interest paid and lost opportunities the funds could be invested elsewhere and earn a higher return).

The longer the working capital cycle, the more capital is required to finance it.

The control of working capital is to ensure that the company has enough cash in its bank. This will save on bank interest and charges on overdrafts. The company also needs to ensure that the levels of inventories and trade receivables are not too high as this implies that funds are tied up in assets with no returns (known as opportunity cost). The working capital cycle therefore should be kept to a minimum to ensure efficient and cost effective management.

The table below shows how the activities of businesses have an impact on cash flow.

TRADE PROCESS	EFFECTS ON CASH
Inventories are purchased on credit which creates trade payables.	Inventories bought on credit temporarily help with cash flow as there is no immediate cash to pay for these inventories.
The sale of inventories is made on credit which creates trade receivables	This means that there is no cash inflow even though inventory has been sold. The cash for the sold inventory will be received later.
Trade payables need to be paid, and the cash is collected from the trade receivables.	The cash has to be collected from the trade receivables and then paid to the trade payables otherwise there is a cash flow problem.

2.3.1 Overtrading

When a company is rapidly trading large volumes of goods, it may also in addition be generating large amounts of credit sales, and as a result accrue high volumes of trade receivables. It will also be purchasing large amounts of inventories on credit to maintain production at the same rate as sales and therefore have large amounts

of trade payables. This will extend the working capital cycle which will have an adverse effect on cash flow. If the company does not have enough working capital, it will find it difficult to continue as there would be insufficient funds to meet all costs as they fall due.

Overtrading takes place when a business has scarce finance for working capital to sustain its level of trading activities. The company is growing at a fast rate and is trying to take on more business than its financial resources can take. This means that the company is under -capitalized. Overtrading usually occurs in new businesses that have just begun to trade and who are suddenly beginning to experience quick growth in sales. In such a situation, it is very easy for such companies to concentrate and place high importance on sales growth and abandon the management of working capital.

Indicators of Overtrading	**Remedies for Overtrading**
• Fast sales growth • Increasing trade payables • Increasing trade receivables • Fall in cash balances and increasing overdraft.	Short-term solutions • Speeding up collection from customers. • Slowing down payment to suppliers. • Maintaining lower inventory levels. Long term solutions • Increase the capital by equity or long-term debt.

Overtrading may result in insolvency which means a company has severe cash flow problems, and that a company even though it may be thriving and may look very profitable, is failing to meet its liabilities due to cash shortages.

2.3.2 Overcapitalization

Overcapitalization is the situation where a company has large volumes of inventories, trade receivables and cash balances but very few trade payables. The funds that are tied up could be invested in other profitable ventures elsewhere. This is an effective way of putting working capital to good use.

	Manufacturing/ Trading	**Retail**	**Service**
Inventories	High volume of work-in-progress and finished goods.	Goods for re-sale only and usually low volume.	None or very little inventories.
Trade Receivables	High levels of trade receivables, as they tend to be dependent on a few customers.	Very low levels as most goods are bought in cash.	Usually low levels as services are paid for immediately.
Trade payables	Low to medium levels of trade payables.	Very high levels of trade payables due to huge purchases of inventory.	Low levels of payables.

2.4 Definition and Concept of Working Capital

The term working capital originated from an old Yankee peddler, who would load up his wagon with goods and then go off to sell his goods (Brigham and Gapenski, 1996). The merchandise was called working capital because it was what was actually sold to reap the profits. The wagon and horse were the fixed assets. The peddler owned the horse and wagon so, they are financed with equity capital. However, he borrowed the funds to buy the merchandise. These borrowings were called working capital loan.

The concept of working capital was first evolved by Marx (1867). Marx used the term 'variable capital' meaning expenditure for payrolls advanced to workers before they completed the goods they worked on. He differentiated this with 'constant capital', which he regarded as nothing but 'dead labor', that is, expenditure for raw materials and other instruments of production produced by labor. This 'variable capital' was the wage fund which remains blocked in terms of financial management, in work-in-process along with other operating expenses until it is released through sale of finished goods. Although Marx did not mention that workers also gave credit to the firm by accepting periodical payment of wages which funded a portion of work-in-process, the concept of working capital, as we understand today, was embedded in his 'variable capital'.

The working capital of a business enterprise can be said to be a portion of its total financial resources which is put to a variable operative purpose (Brigham and Gapenski, 1996).

With the evolution of the concept came a controversy about the definition of working capital. Guthman and Dougall (1948) defined working capital as excess of

current asses 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). This concept of working capital, as has been commonly understood by the accountants, more particularly understood as net working capital to distinguish it from gross working capital which represents total current assets (Sen and Oruc, 2009). Walker (1964) holds that this concept is useful to groups interested in determining the amount and nature of assets that may be used to pay current liabilities. These interested groups, as suggested by Walker, mostly composed of creditors, particularly the supply creditors who may be concerned to know the 'margin of safety' available to them when the realization of current assets be delayed for some reasons.

2.5 Working Capital Management in SMEs

A number of researches have been done concerning the factors influencing working capital management.

Filbeck and Krueger (2005) analyzed the significance of efficient working capital management by evaluating the working capital management policies of 32 non-financial industries in the US. From their findings, significant differences exist among industries in working capital practices overtime and these working capital practices, change appreciably within industries overtime.

Suk et al., (1992) explain that there is evident difference between Japanese and American firms in working capital management. Soenen (1993) investigates the relationship between the net trade cycle as a measure of working capital and return

on investment in the US firms. The results of chi-square test indicated a negative relationship between the length of net trade cycle and return on assets. Furthermore, this inverse relationship was found different across industries depending on the type of industry. A significant relationship for about half of the industries studied indicated that results might vary from industry to industry. In order to validate the results of Soenen (1993) on a large sample and with a longer time period, Jose et al. (1996) examined the relationship between aggressive working capital management and profitability of the US firms using Cash Conversion Cycle (CCC) as a measure of working capital management, where a shorter CCC represents the aggressiveness of working capital management. The results indicated a significant negative relationship between the CCC and profitability, indicating that more aggressive working capital management is associated with higher profitability. Smith and Begemann (1997) examine the relation between liquidity and profitability of South-African firms. Their results also proved that the firms' size has an impact on the amount of working capital management. Weinraub and Visscher (1998) discuss the issue of aggressive and conservative working capital management policies by using quarterly data

for the period 1984-1993 of the US firms. Their study considered 10 diverse industry groups to examine the relative relationship between their aggressive/conservative working capital policies. Their study concluded that the industries had distinctive and significantly different working capital management policies. Moreover, the relative nature of the working capital management policies exhibited remarkable stability over the 10-year study period. The study also showed a high and significant negative correlation between industry asset and

liability policies and found that when relatively aggressive working capital asset policies are followed, they are balanced by relatively conservative working capital financial policies.

Shin and Soenen (1998) concluded that reducing the level of current assets to a reasonable extent increases a firm's profitability. Similarly, Deloof (2003) analyzed a sample of large Belgian firms for the period 1992-1996 and the results confirmed that Belgian firms can improve their profitability by reducing the number of days accounts receivable are outstanding and reducing inventories. Lyroudi and Lazaridis (2000) use food industry Greek to examined the cash conversion cycle (CCC) as a liquidity indicator of the firms and tries to determine its relationship with the current and the quick ratios, with its component variables, and investigates the implications of the CCC in terms of profitability and firm size. The results of their study indicate that there is a significant positive relationship between the cash conversion cycle and the traditional liquidity measures of current and quick ratios. The cash conversion cycle also positively related to the return on assets and the net profit margin but had no linear relationship with the leverage ratios. Conversely, the current and quick ratios had negative relationship with the debt to equity ratio, and a positive one with the times interest earned ratio. Finally, there is no difference between the liquidity ratios of large and small firms. Teruel and Solano (2005) suggested that managers can create value by reducing their firms' number of days' accounts receivable and inventories and also shortening the CCC also improves the firms' profitability.

2.6 Working Capital Management, Profitability & Liquidity

Jose et al (1996) showed that day-to-day management of a firm's short term assets and liabilities plays an important role in the success of the firm. Firms with glowing long term prospects and healthy bottom lines do not remain solvent without good liquidity management. Walt (2009) is of the view that profitability is more important because profit can usually be turned into a liquid asset, and that liquidity is also important but does not mean that the company is profitable. Don (2009), while acknowledging the relative importance of both, submits that liquidity is more important because it has to do with the immediate survival of the company. Profitability tells whether the business is sustainable while liquidity tells if the business has enough cash to pay its obligations. He cited the examples of two computer companies, Gateway and Dell. According to him, Gateway survived years of losses because it was very liquid. Despite years of losses, it functioned because it had enough "liquid" to survive. Dell survived for many years because it was profitable (until recently) even though it had billions of dollars in debt. Therefore, he submits that both are important, and that neither measure alone can give a true picture of any company's ability to continue. However, he states that at some point, if a company does not gain profitability, it will fail.

For Ali Uyar (2009), in addition to profitability, liquidity management is vital for ongoing concern. Schilling (1996) suggests optimum liquidity position, which is minimum level of liquidity necessary to support a given level of business activity. He says it is critical to deploy resources between working capital and capital investment, because the return on investment is usually less than the return on working capital investment. Therefore, deploying resources on working capital as

much as to maintain optimum liquidity position is necessary. Then he sets up the relationship between conversion cycle and minimum liquidity required such that if the cycle lengthens, the minimum liquidity required increases, and vice versa.

2.7 Inventory Management

Efficient inventory management practices should consider two things; quantity to be ordered and time or period of order. Thus the questions: how much should be ordered? And when should it be ordered? are critical questions to be answered rightly in order to have proper control of inventory. 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 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.

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 (Deloof, 2003). Managers of

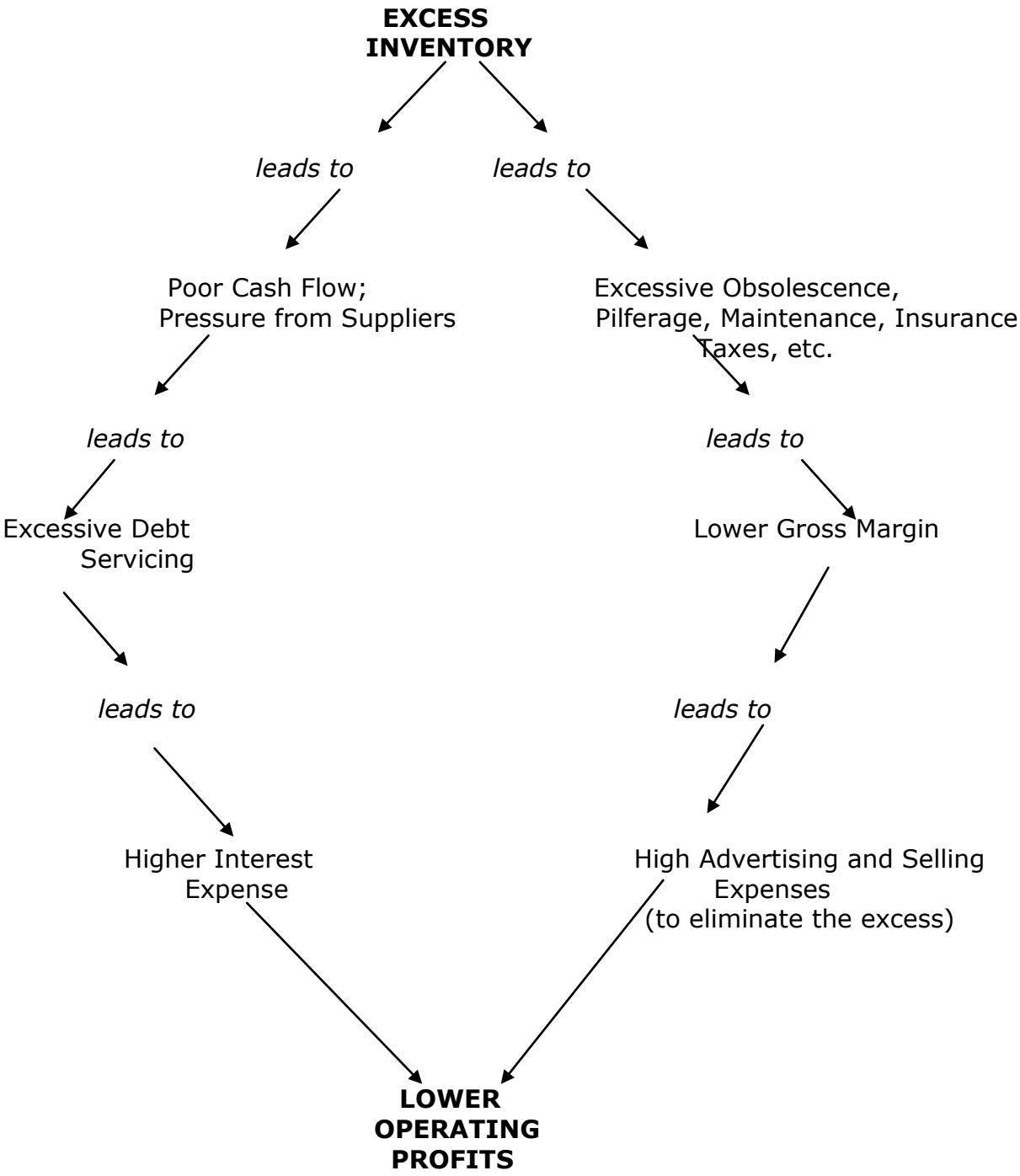
firms should therefore keep their inventory to an optimum level since mismanagement of inventory will lead to tying up excess capital at the expense of profitable operations (Lazaridis and Dimitrios, 2005).

From the view of Brackus (2000), material control or in this case, inventory control or management, is concerned with two components of Accounting. They are; the value of the property and physical property. Brackus (2000) explains inventory control as one of the strategies accepted or implemented in managing inventory and these include internal checks made up of repeated, period, spot and or any other type of control instituted by management to carry out activities intended to guarantee effective and efficient inventory management procedure. Ensuring that warehouses are highly secured, that keys are kept in good custody, limiting access to premises and using techniques such as coding of materials to minimize pilfering, separation of approved items all make up the other forms that inventory control could include. There exists a highly significant positive relationship between the period taken to convert inventories into sales (the inventory conversion period) and profitability.

Excessive stock and stock out pose huge problems for businesses. First of all, in the event of stock outs customers are compelled to go in for substitutes or even worse direct competitors and the business may lose out on customers in the long run. Also, stock-outs causes customers to lose interest in the product(s) and causes a decline in customer loyalty for the product and eventually demand. Excessive stock on the other hand may undergo problems such as expiration in the event where supply exceeds demand. In an article by the Retail Owners Institute,

"The Diamond of Doom" is used to explain or illustrates in simplest form the problems created by carrying too much inventory.

"The Diamond of Doom"



Cause: *High inventory causes inventory obsolescence, pilferage, maintenance, insurance, and taxes.*

Effect: ***This results in lower gross margin.***

Consider the expenses that are incurred as a result of purchasing, holding, and selling merchandise in your business. They may include freight, storage costs, insurance expenses, external or internal theft, obsolescence, spoilage and taxes. Studies have shown that the annual additional cost of holding excess inventory can be 25 percent to 32 percent. This cost of holding excess inventory could be avoided by investing in an inventory management system that would last the throughout the life of the business, and pay for itself in a year's time.

Cause: *lower gross margin causes pressure to get sales volume up, bringing on higher selling and advertising expenses.*

Effect: *This results in lower operating profits.*

When a business holds more inventory than it needs, the income statement suffers in two ways – a lower gross margin and increased operating expenses. Both of these lower operating profit. If a business carries excess level of inventory, it will incur additional and probably unplanned selling and advertising expenses in order to sell the excess merchandise. Also, it may incur additional costs out of reducing prices to clear goods. These added expenses will lower operating profits. For instance, if you are spending 4 percent of your sales on advertising costs for which 25 percent is devoted to moving out excess inventory, the saved one percent of your sales volume (25 percent of 4 percent) becomes increased profits.

Cause: *High inventory causes poor cash flow; thus pressure from suppliers.*

Effect: *This results in excessive debt servicing.*

With every sales transaction, cash is generated, which drives the system. Cash is used to purchase inventory and pay expenses. When inventory is sold it is converted to either cash or receivables, which eventually turns to cash. The faster this cycle turns, the more efficient and expedient is the use of the business' investment.

However, when inventory is too high, excess cash is tied up in inventory – cash that could be used to pay up suppliers. When suppliers do not receive payments on a timely basis, there will be the pressure to pay or have supply terminated. As you try to make an attempt to keep them satisfied, the business will end up approaching banks and financial institutions to apply for loans.

If the banker loans money to the business, the banker will want to improve the business' inventory control to squeeze out the excess cash out of the inventory. This problem may appear temporary, but it may not be. The loan is a short-run solution; it will not eliminate the long-run problem.

Cause: *Excessive debt servicing causes increased interest expense.*

Effect: *This results in lower operating profits.*

The need to borrow to pay off your suppliers, rather than generating those funds internally is evidently costly. Interest expense is higher than it needs to be. When the prime lending rate goes up even one-quarter of one percent, the interest you pay on that inventory-related loan increases. So if a business has more inventory than necessary, you pay more interest, which increases as the prime rate increases. This higher interest expense draws on your cash supply – cash that could

have been reinvested in new inventory. Sales therefore are inhibited, and growth is restricted as profits are reduced.

As an SME owner, one of the most basic goals is to boost profit margins. As emphasized earlier, good inventory management is a profound factor and is thus essential in generate top-notch profits. In the same way, conversely, bad inventory management can dwindle profits.

2.8 The Relationship between Trade Receivables, Liquidity and Profitability

According to Brealey; Myers; & Allen, 2006, to effectively manage working capital, the company needs to direct its attention to four different short-term assets and this includes inventory and accounts receivables. The other two are cash and short term-securities.

When a company sells goods on credit, it accumulates accounts receivables. Depending on the payment policies of a company, it may receive cash early enough from trade debtors. This may take weeks or months. Meaning, decisions relating to terms of sale, credit analysis and decision and collection policy have to be made. In selecting the right policy or practice for trade receivables, Brealey; Myers; & Allen, 2006 point out that a too aggressive collection, can affect the company's sales, and create a conflict between sales and collection. They also propose that companies adopt the technique of 'factoring', to shorten their cash cycle. Factoring means that a company sells its receivables to a factor, which usually holds a percentage of the payable sum of interest. This is one technique they proposed for companies to receive cash from trade receivables effectively and within time. Mathuva (2009)

examined the influence of working capital management components on corporate profitability by using a sample of 30 firms listed on the Nairobi Stock Exchange (NSE) for the periods 1993 to 2008. He used Pearson and Spearman"s correlations, the pooled ordinary least square (OLS), and the fixed effects regression models to conduct data analysis. The key findings of his study were that: i) there exists a highly significant negative relationship between the time it takes for firms to collect cash from their customers' collection period and profitability there exists a highly significant positive relationship between the period taken to convert inventories into sales (the inventory conversion period) and profitability.

2.9 Working Capital Management, Liquidity and Profitability

The management of current assets and current liabilities and the inter relationship that exists between them may be termed as working capital management. (Von Horne, 1973). Most often, business failures have been attributed to lack of working capital. In the critical analysis, it is the mismanagement of working capital that could have transformed an otherwise successful business into an unsuccessful one (Agrawal, 1983). The proper management of working capital is very important for the success of an enterprise and that is why it has become a basic and broad measure of judging the performance of a firm To know how working capital management can affect liquidity and profitability, there is the need for one to observe or note the company's cash flows. Shin & Soenen (1998) affirm in their study that, a longer cash cycle may be an indication of a company's rise in sales and that the company can compete based on having lenient credit policies or high inventories. This is in

accordance with what Brealey; Myers; & Allen stated on the effect too aggressive policies can have on a company's sales. According to (Atrill, 2006) working capital management is one of the most essential parts of corporate finance because it directly affects the liquidity, profitability and growth of a business and is important to the financial health of businesses of all sizes as the amounts invested in working capital are often high in proportion to the total assets employed. (Lamberson, 1995) states that, it involves the planning and controlling of current assets and liabilities in a manner that eliminates the risk of inability to meet short-term obligations and avoid excessive investments in these assets. This management of short-term assets is as important as the management of long-term financial assets, since it directly contributes to the maximization of a business's profitability, liquidity and total performance. Consequently, (Lamberson, 1995) puts out that businesses can minimize risk and improve the overall performance by understanding the role and drivers of working capital. As further established by (Peel and Wilson,1997; Padachi, 2006; Kotut, 2003) proficient management of working capital is critical to the wellbeing and performance of small firms, thus, their view that firms should adopt the exercising or utilization of efficient working capital management practices as a strategy for adding on to their value. The analysis on working capital management is focused on three main make-ups: cash management practices, receivables management practices and inventory management practices. In a study conducted by Chakraborty (2008) on Indian pharmaceutical companies, the relationship between working capital and profitability was examined. He pointed out that there were two distinct schools of thought on the relationship between working capital and profitability. According to one school of thought, working capital is not a

factor of improving profitability and there may be a negative relationship between them, while according to the other school of thought, investment in working capital plays a vital role to improve corporate profitability, and unless there is a minimum level of investment of working capital, output and sales cannot be maintained, specifically, the inadequacy of working capital would keep fixed asset inoperative

Chapter 3: METHODOLOGY

3.1 Introduction

In the quest to discover how the various practices trading and manufacturing SMEs adopt in managing inventory and trade receivables affects their performance in terms of liquidity and profitability, there is the need to find appropriate and suitable data which upon analysis will inform conclusions. There is the need for SMEs to focus on other ways of sustaining themselves financially other than external financing as it is mostly unreliable and inadequate. They need to do this by strengthening internal mechanisms such as adopting effective inventory control methods for businesses that deal directly with inventory. The previous chapter opened a way to identify literary works of people in relation to working capital, inventory management, trade receivables management and its link with liquidity and profitability. This chapter however moves a step further by showing the ways in which the relevant data and its collection methods have helped prove that indeed working capital management is necessary for SMEs. This discussion covers the types of data to be collected, the mode of data collection and data analysis, the rationale behind the selection of the research sample selected the questionnaire design and the possible limitations and strengths of the research. These are imperative to the research because it gives a breakdown of the various research methods and strategies that will be implemented in conducting the research and justifies how these selected methods are going to aid in filling the existing gap of the problem.

3.2 Research Design

This research employed both quantitative and qualitative methods of research analysis and mainly used primary data in addition to secondary data. Quantitative research because it generates statistics through the use of methods such as structured questionnaires and interviews. Also, this type of research reaches people in a much quicker way than qualitative research.

Under the qualitative method of research, descriptive analysis was used. Descriptive analysis was done by examining the various forms of practices that SMEs used in managing inventory and trade receivables. This was obtained from responses from the structured questionnaires and interviews.

Data collected was primary since data which was collected directly from the source, who were mostly general managers, owners, accountants, inventory/logistics managers and trade receivables managers of various SMEs as they were the most likely people to retrieve the kind of information needed from. Secondary data was used since it deals with refined data, information from the financial statements of SMEs that keep records. In addition, secondary data will be used because this paper or research will analyze the financial performance of the SMEs in terms of their liquidity and profitability positions. The method of data collection was the use of structured questionnaires and interviews. The use of structured questionnaires was important because they served as point of reference for the respondents as well as a good tool for collecting adequate primary quantitative data. Furthermore, apart from the fact that they were relatively easier to administer and analyse, most people are familiar with the concept of questionnaires. Also, respondents were more

truthful in answering sensitive questions, such as whether they find it difficult to repay loans or not, and it also prevents me from being bias towards such questions in the use of interviews. Finally, the structured questionnaires was less costly to administer than one-on-one personal interviews.

The use of interviews was to vary the research designs adopted and to also have a one-on-one encounter with respondents and basically had the same questions as the structured questionnaires. The use of questionnaires and interviews was important because they would serve as point of reference for the respondents as well as a good tool for collecting both adequate primary qualitative and quantitative data.

3.3 Sampling Technique/Method

This study used the non-probability method of data sampling, using techniques like the snowball sampling method to find the information to be gathered. 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. For example, the owner of a cold store will have an idea of the presence of other cold stores in the immediate vicinity or nearby due to competition or the concentration of similar companies in the same area. Also, respondents had friends and relatives that were in the same line of business as them. Furthermore, this sampling method was faster since most of the people were given the questionnaires were referrals from people who have personal contact with the people that needed to be handed the questionnaire. The sample size used was 30 respondents from Accra. The purposive method of sampling was

also used during the data collection. The primary consideration of this method was using the judgement of the researcher as to who can provide the best information to achieve the objectives of the study (Kumar, 2005) aside the referrals. Also, the study was specific in whom and where data was to be collected. In this approach, I selected people who in my opinion are likely to have the required information and will be willing to share it in the institutions I will visit.

In addition, purposive sampling was also adopted as specific SMEs who dealt directly with inventory and trade receivables were selected. Purposive sampling is the direct opposite of random sampling where respondents are selected randomly, however, with purposive sampling, information can only be acquired from certain respondents, in this case, non-service SMEs but those who trade and produce goods as well as give credit.

- **Rationale behind the selection of Location**

Firstly, the choice of Accra was made because, Accra being the commercial capital city of Ghana is the most business concentrated part of Ghana with a good mix of trading and manufacturing companies as well. Secondly, the rationale behind the choice of location was influenced by the researcher's proximity to the selected sample as compared to conducting the research outside the Greater Accra Region.

- **Rationale behind the selection of trading and manufacturing firms**

The selected type of sample focused on trading and manufacturing firms because these firms mostly deal directly with inventory at almost every stage of production (raw materials, work-in-progress, finished goods) as compared to sectors such as

the service industry. As part of their business, these firms also offer flexible payment plans for customers though credit sales. Trading and manufacturing firms therefore most often than not have trade receivables and inventory forming a significant portion of their current assets. Since the main focus of working capital for this research is current assets in the form of inventory and trade receivables, the choice of trading and manufacturing firms fits into the research. This narrowed the research to only what was relevant to the topic. In view of the fact that trading and manufacturing firms deal mainly with these, any practices adopted in managing these two items has direct impact on liquidity and eventually profitability whether negatively or positively, as these two function as major forms of current assets for these firms. Thus, the general idea was that there is a higher tendency for these two areas of assets to affect their working capital immensely, if not handled well. Also, one of the major characteristics of SMEs in developing countries in terms of activity is that, they are mostly engaged in retailing, trading, or manufacturing (Fisher and Reuber, 2000). Ghana being a developing country falls into this category and truly has majority of its SMEs engaging in this nature of business.

3.4 Research Instruments or Data Collection Tools/ Instruments

As discussed earlier, structured questionnaires and interviews were used as instruments to find out from the sampled respondents, their methods of managing inventory and trade receivables. More questionnaires were chosen because it helped me reach a large number of people quickly as compared to interviews.

Research Instruments Used:

1. Structured questionnaires were filled by either one or all of these respondents; owners, general managers, accountants, inventory/logistics managers, trade receivables managers. Interviews were also answered by these persons.

2. Interviews of the same category of people, that is, owners, accountants, general managers, inventory managers, trade receivables management.

3. The second step to gathering data was to obtain copies of financial statements in the form of income statements, statement of financial position and cash flow statements over a period of three years. This was done mostly by word of mouth or through formal letters from head of business administration of Ashesi University College. This was necessary to obtain an accurate measure of the impact of the practices in terms of liquidity and profitability as one year may not be enough to measure this. The period of three years was chosen because the majority of the SMEs hardly kept or prepared financial statements and the few that did began averagely three years ago.

3.5 Data Analysis

Data from the structured questionnaire was analyzed using SPSS Data and Microsoft Excel. The data was summarized using these tools; tables, bar charts and pie charts. These tools summarized data pertaining to the various practices the SMEs adopted in managing inventory and trade receivables. The financial

statements were used to calculate accounting ratios such the current ratio to measure liquidity and gross profit margin and net profit margin to measure profitability. These ratios informed the research pertaining to the impact of the practices adopted by these SMEs.

3.6 Limitations of the Study

- Accessibility of sensitive data: Access to data in the form of financial statements was the greatest limitation to this study. Apart from the fact that some of the SMEs genuinely did not prepare financial statements, those who had such information were unwilling to give it out in order not to disclose certain confidential information. This made analysis of the level of impact very difficult and thus had to find alternative ways to measure and analyze the impact.
- Bureaucracy: The second biggest limitation was bureaucracy. Certain SMEs required letters from the academic institution of the researcher before information was given. After the letter is delivered, the person could decide whether or not to give the information. Also, for certain SMEs, information required came from different persons in different departments thus delaying the entire process of data collection for days depending on the availability of the persons.
- Non-availability of resourceful persons to give information. For certain firms, certain information such as inventory management or working capital and information from financial statements was exclusive to only the Managing Director or owner who mostly were not available. This also, delayed the process of data gathering.

- Another very pertinent limitation was time constraint. This was a very pressing issue as some respondents delayed the data gathering process. Following a well developed and comprehensive time schedule for the study was crucial to reduce the effect of this constraint on the study.
- Certain SMEs required my presence before they answered any questions or give any information. This was in order that they gain a deeper insight into the question they were answering. This made some part of the data gathering turn out to be more like a one-on-one interview. Also, this can be ascribed to the length of the questionnaire.

Chapter 4: Data Presentation and Discussion

4.1 Introduction

This chapter will discuss and explain the findings gathered from selected trading and manufacturing SMEs centered in Accra. In order to achieve the main objective of this research which is to explore a number of practices that trading and manufacturing SMEs adopt in managing inventory and trade receivables, the following specific objectives and research questions had to be answered:

Specific objectives:

- To find out the practices, techniques and policies if any that trading and manufacturing SMEs in Accra are employing to manage inventory and trade receivables to improve working capital.
- To analyze how these practices, techniques and policies if any affect their performance using liquidity and profitability as a measure.

Research questions:

- What are the various means by which trading and manufacturing SMEs in Accra manage inventory and trade receivables?
- What impact do these approaches have on the liquidity and profitability of these SMEs?

The first part of this chapter presents descriptive analysis to discuss the data obtained on the practices used by the SMEs taken from the structured questionnaires and interviews. This analysis will be aided by the use of descriptive statistics such as tables and graphs. The second part however, covers and measures the impact of these practices through the use of

quantitative analysis in the form of accounting ratios to measure liquidity and profitability.

4.2.1 Findings on the Credit Management of the Selected SMEs

Out of a sample of 30 SMEs, a total of 24 respondents were obtained from questionnaires and 6 from interviews. The number of questionnaires represents 80% of the total SMEs who responded and 20% from interviews. This study adopted the most recent definition for SMEs from the Regional Project on Enterprise Development Ghana manufacturing survey paper. Thus, using this definition as a point of reference, 62.5% of the SME respondents fell in the category of small enterprises, which employ between 5 to 29 employees, and the remaining 37.5% represented medium-sized firms, who employ between 30 to 99 employees. No respondent SMEs fell into the category of a micro enterprise, which is defined as having employees with less than 5 employees. The trading sector had 22 respondents making up 73.33% of the two sectors selected, whiles the manufacturing sector had only 8 respondents, representing 26.67%. Generally, respondents were somewhat reluctant in giving out certain information such as financial statements since they deemed these as very confidential or personal to their firm. Also, certain information such as whether they resort to the use of loans to manage working capital and the level of difficulty in paying these loans if they did was confined to top level management only. Some SMEs were not willing to give out any kind of information whatsoever and for that reason did not respond. In view of all this, the sample size of 30 was achieved even though some information required was not given out or responded to.

4.2.2 Accounts Receivables Management: the Five c's of Credit

Under the management of working capital and current assets management are best practices or the adoption of certain practices or criteria that are deemed as the norm and would bring about an expected outcome. For this reason, under the trade receivables management or account receivables management is the practice or criteria used for managing debtors. This popular practice amongst many firms is known as the Five Cs of credit. These are;

- Character: The applicant's record of meeting past obligations.
- Capacity: The applicant's ability to repay the requested credit.
- Capital: The applicant's debt relative to equity.
- Collateral: The amount of assets the applicant has available for use in securing the credit.
- Conditions: Current general and industry-specific economic conditions.

The study will look at whether the selected SMEs have adopted these in managing their trade receivables.

Formal record keeping on trade receivables/Assigned personnel: All respondent SMEs representing a hundred percent kept formal records of their trade receivables and assigned particular personnel to manage trade credit. These persons were either solely assigned to credit management or had this role as an additional duty to other tasks, mostly stock management as these two go hand-in-hands. This connotes that, to a large extent, these SMEs had a decentralized way of managing their businesses and recognized the essence of hiring particular personnel to fit certain job areas. This also relays the information that, stock

management and debtors management issues were not the sole responsibilities of owners, as different personnel were put in charge of these areas. With the exception of four SMEs who had human resource and marketing personnel, the others concentrated on inventory and debtors management and for that matter had the bulk of these personnel in the accounts department. This is because the owners of the respondent SMEs viewed the sale of inventory as their core business and thus concentrated more on strengthening the management of these areas than other areas such as marketing which they perceived did not directly affect their business as they already had a ready market for their goods. It was also obtained that these four SMEs that considered other areas other than those directly related to their core business fell in the medium-size category of SMEs, which had more employees from 30 to 99. From this, the observation was that, size (in terms of number of employees) is a function of how these firms approach other aspects of their businesses.

The fact that all the selected SMEs employed and kept specific personnel for these areas is a good indication of their commitment to managing their these two critical areas of their business in managing their working capital and maximizing profits. In addition to this, 85% of the these SMEs had specific qualifications they looked out for in employing personnel, with the most popular responses being that, for persons to be eligible for employment, they should have taken courses or related courses in inventory and debtors management (40%), 20% required a minimum of an HND qualification, 25% required a minimum of a degree, professional qualification such as CIMA(Chartered Institute of Marketing Ghana) and ACCA constituted 5% and lastly, mostly family and friends made up 10%. Also,

here the observation was that, the smaller the firm, the lesser the qualification they needed. Firms that fell in the medium category mostly required a minimum of a degree as well as professional qualifications to employ personnel for these areas, with the lowest qualification being an HND. The informal way of recruiting personnel, that is, recruiting based on relationships which represented 10% mostly occurred in the small firms with size ranging from between 10 – 15 employees. Proper inventory and debtors management is also highly dependent on the quality (knowledge and experience) of personnel. The majority of these SMEs recognize and apply this.

Taking formal records could be in several ways, but the most known ways are the manual method and the use of technology, that is, the use of computers. Records will include the name and contact of the customer, residential and postal address of the customer, a photograph of the customer, the customer's banker(s) or financial institution with which the customer keeps account(s), amount of goods purchased on credit (both in quantity and monetary terms), the credit period given, the mode of payment, amount of discount given (if any). With record-keeping being the most important criteria to be met in effectively managing debtors, all selected SMEs used this practice, meaning that, they were aware of the importance of keeping records on their credit and its effects on their performance. Since these SMEs know and apply this most basic and important practice of properly and formerly keeping records of trade receivables, the assumption is that, they follow through with other practices to keep their monies from being locked up in trade receivables which from responses formed bulk of total sales for most of the respondent SMEs. For this reason, the questionnaires and interviews tested the

various practices generally used and applied by companies in properly and effectively manage their trade receivables. This includes but is not limited to:

- A specific Receivables Turnover Days (RTDs)
- A criteria(specified or systematic way) for choosing whom to offer credit
- A particular category of customers who are offered credit
- Provision for bad debt
- Any cash discount to stimulate early payment
- Regular meetings to discuss issues related to debt(credit) and its recovery

Category of Customers offered Credit

Table 1: Category of Customers Offered Credit

	Frequency	Valid Percent (%)
Regular customers	5	16.67
Customers who buy in bulk	6	20
Customers with good accounts	13	43.33
Key accounts customers and distributors	3	10
Customers who usually pay in cash	1	3.3
Others	2	6.67
Total	30	100

Source: Field data

Table 1 shows the category of customers that respondent SMEs answered they offer credit to. From the table above, 43.33% of the SMEs looked at the strength of the accounts of customers in order to ascertain whether they were credit worthy. This was the most applied criterion that the study obtained because SMEs above everything else deemed credit worthiness highly above every other factor to be considered before giving out credit. This is a good practice that enables SMEs to manage and keep sound working capital because the assurance of

payment is given and thus the lesser the likelihood of debt going bad. Thirteen SMEs representing 20% of the total respondents answered to offering credit to only customers who usually buy in bulk. This represented the second highest category used to give credit because these businesses wanted to maintain such customers whose purchases were significant due to the large quantities they buy. By allowing them access to credit, they are stimulated to always buy in those quantities. Also, this will serve as an incentive for customers to buy more in bulk. Five respondents (16.67%) answered that they gave credit to only those who were regular customers. This represents the third highest category of clients offered credit. This was a way to increase and maintain customer loyalty amongst regular customers. Three SMEs making up 10% of total respondents give credit to key accounts customers and distributors and another 3.3% (1 respondent) give to customers who usually pay in cash. The presumption is that credit granted to persons that usually pay cash for goods will rank high. However, the results did not necessarily show this relationship as selected SMEs preferred to look at the strength of customers' accounts as the highest criteria. These selected categories are represented graphically below;

Figure 1: Category of Customers offered Credit

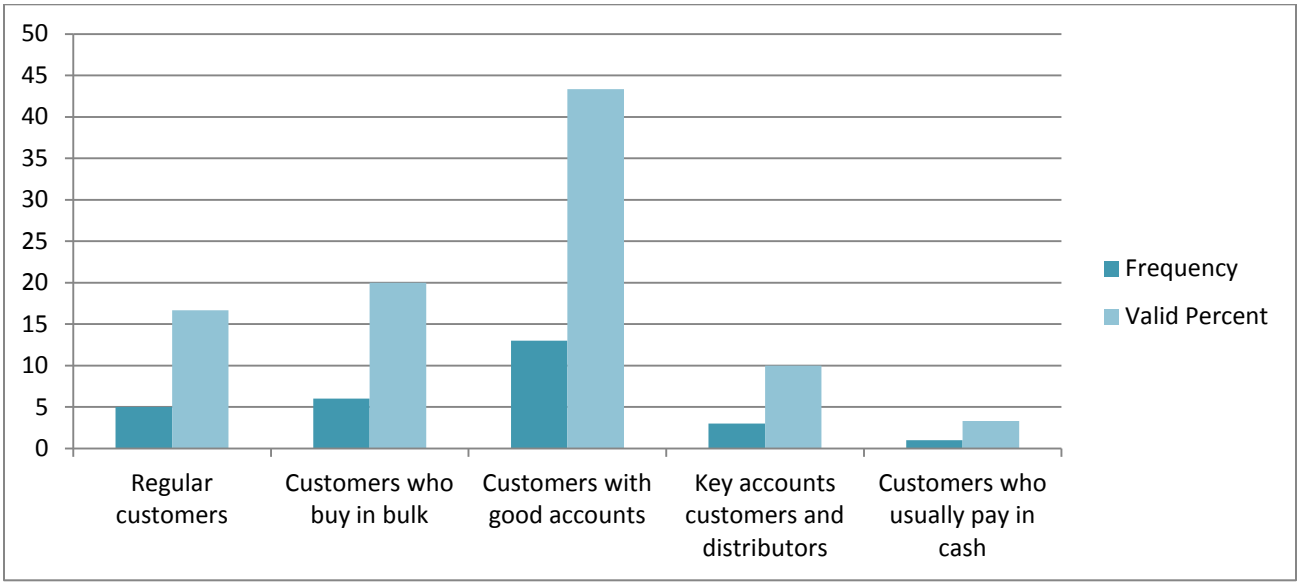


Figure1 : Category of Customers Offered Credit Source: Field data

Security Required/Used for Credit

Table 2: **Security Required for Credit**

	Frequency	Valid Percent (%)
Post-dated Cheques	11	36.67
Bank statements	12	40
Bank guarantee	3	10
Others	4	13.33
Total	30	100

Source: Field data

The delicate nature of credit management requires that businesses receive assurance of debt recovery. Requirements for assurance vary from business to business, but the most common criteria used by the selected SMEs are; post-dated

cheques, Bank statements and Bank guarantee. These forms of securities are vital in assuring that debt does not go bad.

In table 2 above, it can be observed that 40% of all credit given to customers is backed by bank statements. Bank statements reveal the frequency with which money goes in and out of accounts, account balances and any other information such as the number or frequency with which cheques are returned. The 'strength' and 'vigorousness' of the account informs the businesses about the customer's ability to pay back. This security seemed appropriate for SMEs who automatically. Thus, the bank statements criteria is a way in which the selecetd SMEs are able to study and examine how active their customers' accounts are in terms of receipts and payments of cash. It also helps in identifying errors such as frequently returned or dishonored cheques as this will influence their decision making as to whom to offer credit to.

Another frequently required security used by the selected SMEs to ascertain whom to offer credit, is the use of post-dated cheques. Post- dated cheques are cheques written in advance for a period of time. This period could be in months or weeks and can only be presented on the due date not before. The use of post-dated cheques represents 36.67% of all the other securities required by the selected SMEs in offering credit. It also means that 36.67% of all credit given to customers is backed by this kind of security. To add to this, selected SMEs that required bank statements eventually required post-dated cheques after credit has been approved. This is because after examination of these statements and the customer is found credit worthy, the use of post-dated cheques is the next most appropriate way of

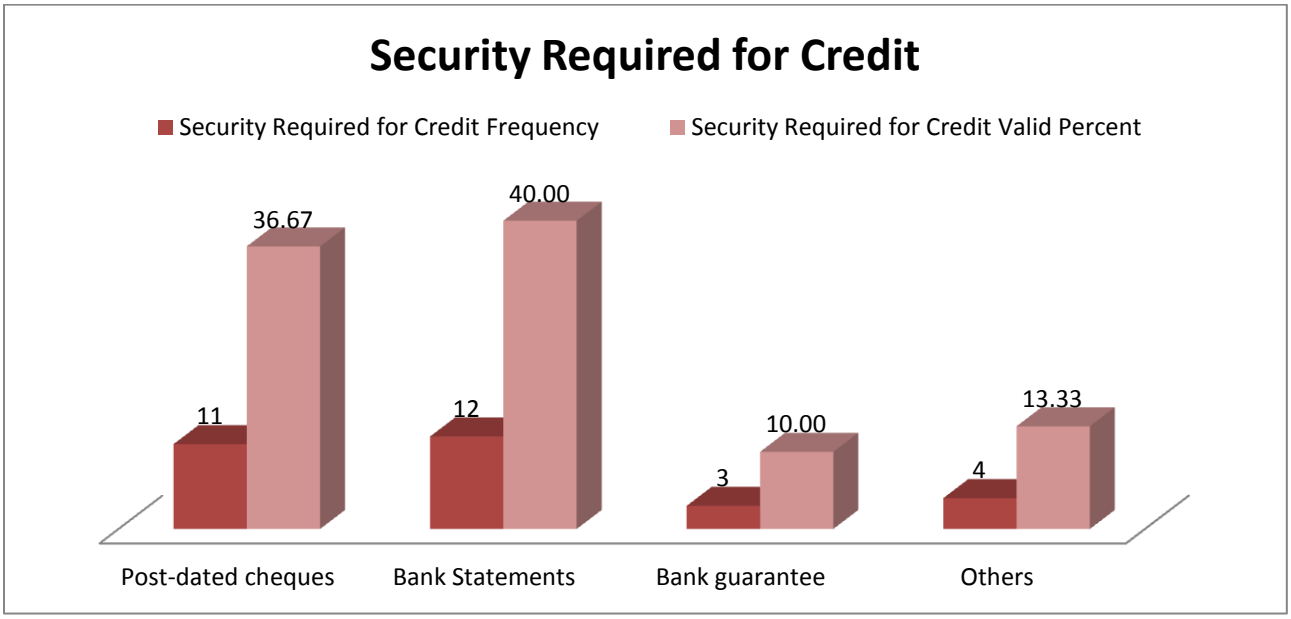
payment, where creditors have control over the mode of payment. Thus, these two go hand-in-hand Post-dated cheques go hand-in-hand as the bank statements is required just to ascertain that there is enough cash flow in the customer's accounts to cater for payments.

A bank's guarantee is another assurance that is used by the selected SMEs to recover debt effectively. A bank guarantee is a note or letter from a bank that gives assurance to creditors that they will stand in the stead of their customers(debtors) in case of debt payment. 10% of the selected SMEs use bank guarantees as a form of security to recover debt and offer credit. This means that, 10% of all credit given to customers is backed by this kind of security. The selected SMEs who adopted this criteria were more confident in the assurance that banks gave than bank statements which they believed can change at any time. However, to a large extent, most of the selected SMEs did not restrict themselves to one particular security and mostly applied all or at least two of the above mentioned in order to cater for the variety of customers who may not be able to meet certain particular criteria. This flexibility catered for the needs of different customers.

Apart from the above mentioned securities, the 'others' option revealed that 13.33% of the selected SMEs did not necessarily restrict themselves to the use of securities to back payment. These SMEs regarded customers they had good and long standing relationships with, key accounts customers and distributors as well as customers who buy in bulk as enough assurance that they will definitely recover their monies. These relationships as obtained from the 'others' option were mostly confined to business terms but there few instances that respondents admitted to

giving credit beyond business, that is, to family and friends allowed or approved by the managing director or owner. These discussions are represented graphically below;

Figure 2: Security Required for Credit



Source: Field Data

In studying the kind of security which is required or sought in order for credit to be administered, the use of 'capacity' was adopted by the selected SMEs. Capacity looks at the customer's ability to repay the requested credit. The demand for either of the above mentioned, that is, post-dated cheques, bank statements, bank guarantee and others is a way in which the SMEs use capacity to find out if customers have the means of paying back. By getting a hold on these a correct assessment of customers' capacity can be ascertained.

The practice or criteria of 'Collateral' fits in here as well. Even though collateral required for credit by the selected SMEs was not in the form of assets, the use of securities such as bank statements by the SMEs is enough to serve as collateral, unless the amount of credit required or given cannot be covered by these securities. Even though the definition for collateral says the applicant must provide some form of asset as a form of security, the selected SMEs due to the nature of the goods they sold, regarded these as sufficient enough to qualify as collateral. For example, if a person is purchasing 150 bags of rice on credit, the collateral cannot be a car or house. Furthermore, 'capacity' covers the amount of income that customers earn which the bank statements cover.

Receivables Turnover Days

The third most important criterion that was used as a check to discover whether SMEs properly manage their credit was to find out if the selected SMEs had specific Receivables Turnover Days (RTD) which is an important aspect of managing trade credit. Receivables Turnover Days is basically the period of time given customers to pay back their debt. From the table below, the highest or maximum number of RTDs was three weeks, occupying 43.33% of the total response. This implies that for this percentage (the majority) of the selected SMEs considered and estimated a period of 21 days to be appropriate enough for customers to pay and to retrieve their debt. Seven respondents gave credit for only two weeks, that is, 23.33% of the selected SMEs, all other things being equal retrieved cash within two weeks. Four respondents gave respondents a period of one week, the shortest credit period obtained from the study. This means that 13.33% of the respondent

SMEs retrieved cash earliest, within a week. 5 respondents gave customers a whole month to pay back. This is 16.67% of selected SMEs who offer credit beyond three weeks being the majority. Finally, there was only one respondent that offered credit for two months. This is shown in the table below:

Table 3: Credit Allowable Days

	Frequency	Valid Percent (%)
One week	4	13.33
Two weeks	7	23.33
Three weeks	13	43.33
A month	5	16.67
Two months	1	3.33
Total	30	100

Source: Field Data

Respondent SMEs had about 85% of their goods sold on credit and the remaining 15% on cash basis only. Also, majority of these SMEs were characterized by customers who purchased in bulk and for that matter paying outright cash at a goal was a challenge. For this reason, the selected SMEs made provision for trade credit in large quantities. Thus, this influenced their decision to make policies to keep RTDs at the barest minimum and at the same time making payment terms such as mode of payment flexible enough for customers in order to outwit competitors and recover cash early enough. In view of the fact that majority of sales are credit sales, these SMEs recognize that the implication for improper or ineffective collection methods or practices would lock up revenue and capital in large amounts and would cause a decline in profits substantially.

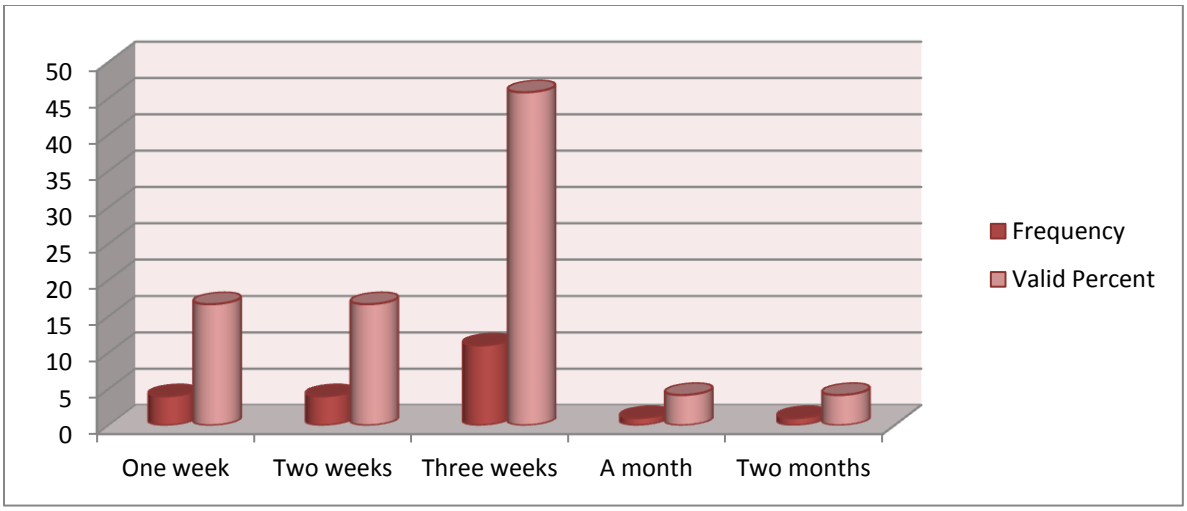


Figure 3: Credit allowable days Source: Field Data

The use of RTDs does not fall into the criteria of the five C's, but falls into another accounts receivables management practice known as 'changing credit standards or terms' (Gitman, 2009). Under this, we have a firm's credit terms, which specify the repayment terms required of all of its credit customers.

Credit terms are composed of three parts:

- The cash discount
- The cash discount period
- The credit period

The use of the credit period is the most commonly applied practice of the selected SMEs. This is because the collection period determines how quickly cash is received after credit is offered.

Average Receipt Period from Debtors

As a result of the specifically assigned RTDs, as well as the kind of securities used to back credit purchases, most of these SMEs were able to recover debt easily and most importantly, early enough to realize profit from credit sales quickly. For this reason, generally, in rating the attitude of customers towards paying debt, 50% of respondents agreed that customers were 'loyal' in paying their debt where loyal means paying right on time. 12.5% of customers are very loyal, where 'very loyal' is defined as payment before the credit period. 25% of customers were not loyal in paying their debt on time, where 'not loyal' is defined as customers who pay after the credit period. 4.17% of customers were 'not at all loyal' this means that, they never recover their debt from such customers, that is, customers who never pay back.

From the graph below the highest average receipt period of debt fell between a period of one week and three weeks, with 40% of customers usually paying within three weeks and 30% of debtors paid within two weeks. However, 20% of all respondent SMEs had customers paying within one week and 10% paid within a month. This is presented graphically below; from the graph presented below, the majority of customers well-paid within the three- week period that was the highest RTDs obtained from respondent SMEs followed closely by the other periods to one month. The credit period applied to every one of the customers offered credit with no special exceptions of an extended period given to certain persons. This means that the credit period is mostly not dependent on other factors such as the bulk of purchase and therefore applies to any eligible debtor. This

means that debt recovery for the selected SMEs were somewhat on time and relatively easy as customers showed loyalty.

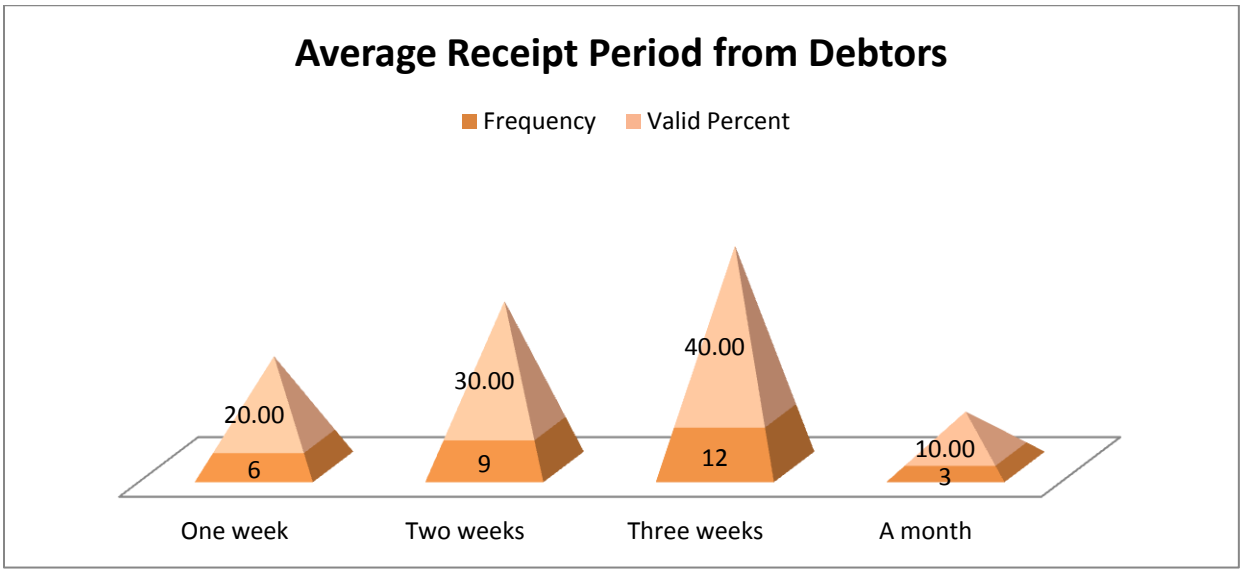


Figure 4: Average receipt period from debtors Source: Field Data

Period of Default by Debtors

As a result of the stringent ways in which the selected SMEs collected debt, the highest period of default was a month. With three weeks being the period that most SMEs offered credit for, a default period of a month, that is, one week after the average RTD is a good indication that customers did not default for long as this could be much worse. Response from the selected SMEs suggests that 50%of all debtors had their highest period of default being a month. This implies that for this percentage of SMEs cash or debt from defaulters is received mostly within a month. On the other hand, 20% paid within two months, implying that this percentage of the SMEs received cash from defaulters mostly after a month, specifically two months. 16.67% paid within three months, 6.67% paid within six months and

3.33% within a year. A year was the highest period of default by debtors, however, since it occupied the lowest percentage of the default periods, there is a good indication that customers make an attempt to remain loyal. All records of the customer's character will inform future decision as to whether the customer will deserve to receive credit in the near future. Thus the use of 'Character' from records that have been kept is critical in predicting the payment period of debtors.

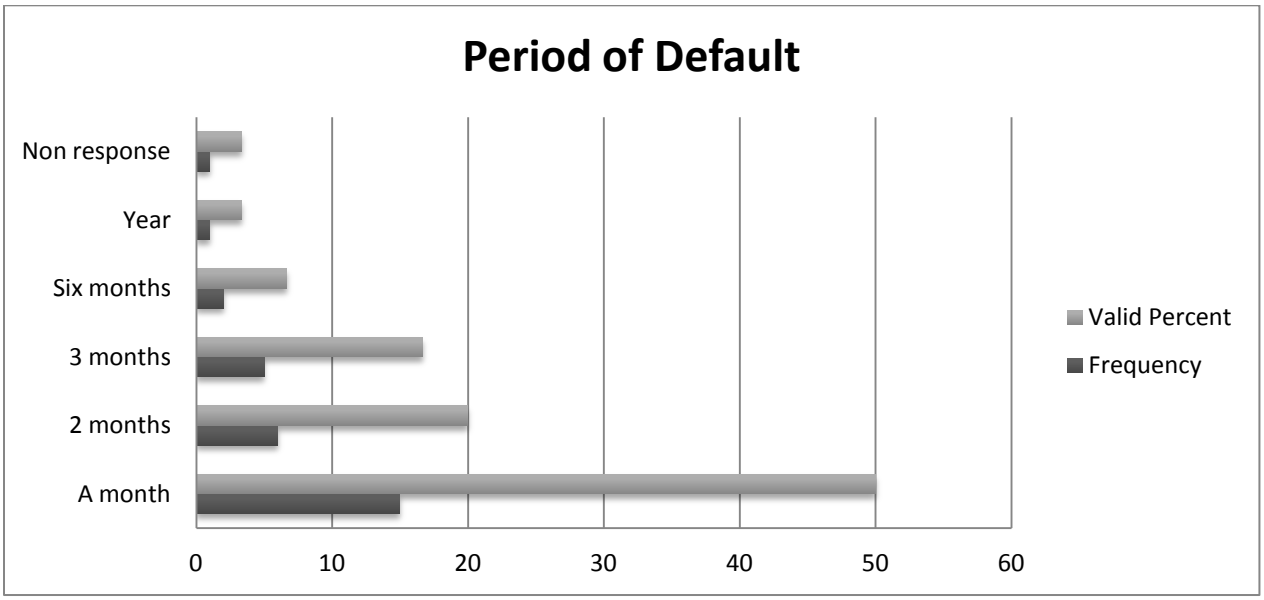


Figure 5: Period of Default by Debtors Source: Field Data

Provision for bad debt

In order to hedge against loss suffered as a result of bad debt, also known as irrecoverable debt, the norm for most companies as an accounting practice is to make provision for this kind of debt which is impossible to overlook. A bad debt is a debt that is not collectible and therefore worthless to the creditor. This occurs after all attempts have been made to collect the debt. This debt once considered to be

bad, is written off as an expense in a company's financial statement. Companies that do make credit sales as is the case of the respondent SMEs will estimate the amount of sales they expect to lose to bad debt, which is found in the allowance for doubtful accounts. Debtors with a history of bad debts will see their credit rating decline, which makes it difficult for them to further access any additional form of credit. Respondent SMEs use this history as a basis for granting further credit of not.

Due to the fact that majority of these SMEs offer credit in order for them to increase their sales, and since this forms the bulk of their sales, there is the need for them to make provision for instances where certain debt may turn out to be irrecoverable after several interventions. 77% of respondents acknowledged that they made provision for bad debt, and the remaining 23% were confident of the loyalty of their customers and thus did not deem it necessary to make such a provision. This minority stated that the methods they adopted in offering customers credit were rather stringent and thus they hardly encountered any bad debt and do not expect to in the near future. I think this is a rather complacent manner to deal with debt-related issues as one cannot predict the paying behavior of customers at every point in time. Some of the stringent methods referred to here are the inspection and location of customers' shops in order to ascertain the likelihood of the goods they buy to move fast in terms of sales or not. Others include the request and inspection of bank statements of the customers and the use of post dated cheques.

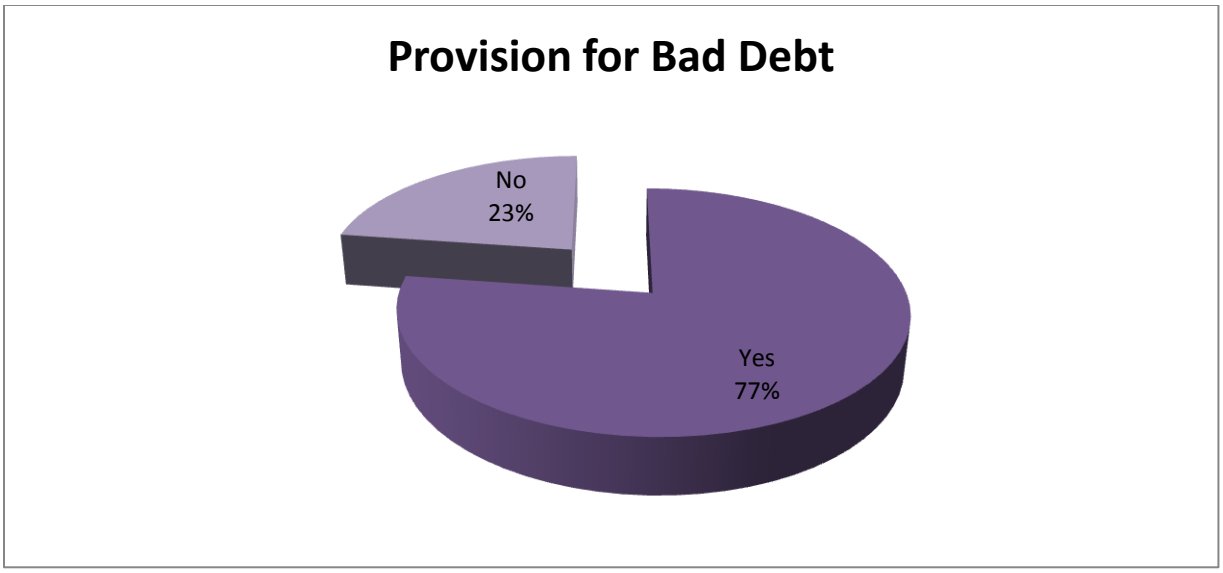


Figure 6: Provision for Bad Debt **Source: Field Data**

Even though making provision for bad debt is does not fall under the practice of the five C's, it is crucial to debt management. This is because, it is a rigorous accounting practice that enables accountant to take into account debtors that may default. This provision helps companies to realize their profits by not allowing monies to be locked up in bad debt. However, in making provision for bad debt, there is the need to look at character, which is the first 'C' of accounts receivables management. This is because; the accountant or personnel managing trade receivables needs to study the trend of the payment behaviors of customers over a period(s) in order to have knowledge concerning the past and current paying behavior of customers. This informs decisions and policies concerning the percentage or amount of bad debt to make provision for. The higher clients' loyalty to paying debt, the lower the provision that should be made, and the lower customer's loyalty in paying debt, the higher the provision made.

However, the general idea is that, businesses do not become too optimistic when making provision for bad debt and underestimate figures. In the same way stringent measures such as looking at character should be used to keep this figure as low as possible.

Behaviour of Customers towards Paying Debt

When asked to rate the behavior of customers towards paying their debt, 54% of respondents said customers were loyal, where 'loyal' was defined as customers paying right on time. This was followed by 27% of respondents saying customers were not loyal, where 'not loyal' was defined as customer who paid after the credit period. However, 14% of customers said customers were very loyal, where 'very loyal' was defined as customers who paid before the credit period, and 5% said customers were not at all loyal, where 'not at all loyal' was defined as customers who never paid back. This indicates that the majority of customers were loyal in paying their debt and the minority ended up as bad debt. This is represented in the pie chart below;

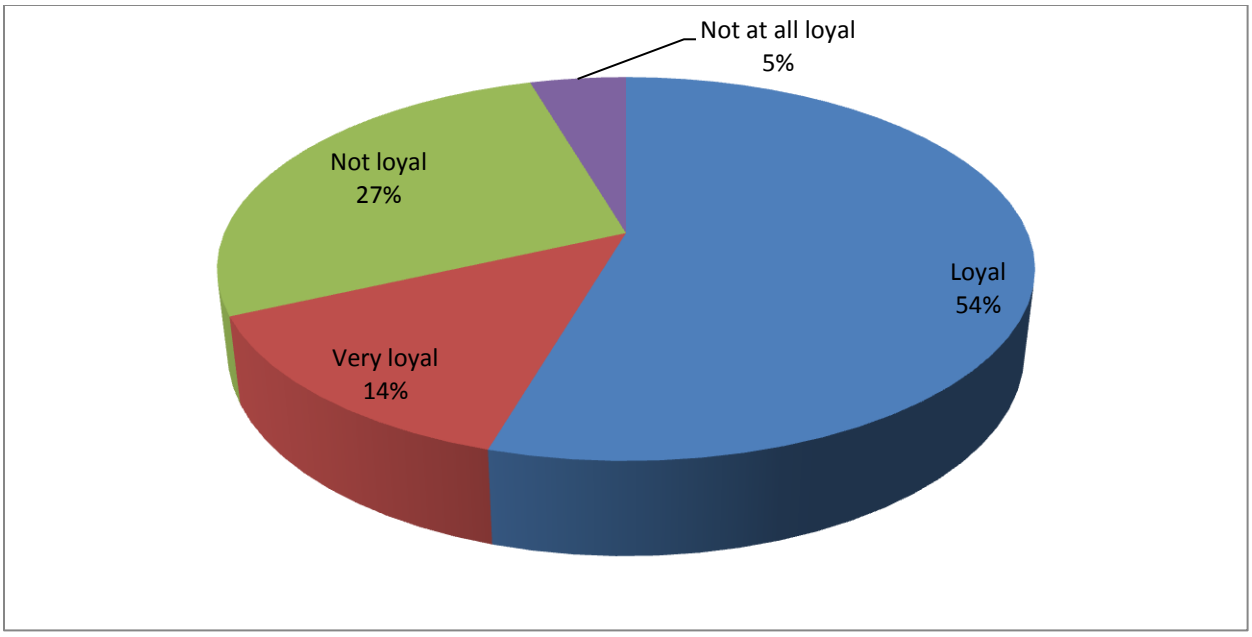


Figure 7 Source: Field Data

4.2.3 Inventory Management Practices of Selected SMEs

Inventory is one of the most expensive and important assets of many companies, representing as much as 50% of total invested capital. Managers have long recognized that good inventory control is crucial and thus affects a firm's performance notably. All SMEs used the method of stock taking as an effective means of managing inventory. This represents a 100% answered 'yes' from all questionnaires and interviews. 'Stock taking' was the most popular and known way in which the selected SMEs knew how to keep track of stock levels.

From the interviews, it was retrieved that the reason why most SMEs mostly and in some cases always used this method is as a result of its simplicity, where simplicity was defined in relation to the use of more complex models such as the

Economic Order Quantity Model (EOQ), Quantity Discount Model (QDM), the ABC classification or ABC Warehousing inventory model, FIFO(First In First Out), sensitivity analysis, time interval inventory model and one bin/two bin inventory model. On the other hand, the use of models such as stock take, safety stock, re-order levels or points, which were perceived to be less complicated in applying in practicality were the most applied. The interpretation here is that, to a large extent, the respondent SMEs were not conversant with the use of these models. Only 30% of the respondents were aware of the existence of these models. This is because most of the respondents were persons or professionals who have taken courses or related courses in accounting, supply chain, operations management and thus have some background knowledge in these areas. However, this 30% even with their knowledge did not apply these models in dealing with inventory issues. This is because the majority did not find it very practical and thought it was a little complex to use. Also, they were not conversant in their use as they had not undergone training in the use of these models, all they had was theory. Stock taking seemed like the most basic practice to apply, and the fact that all these respondents said they kept stock is an indication that the selected SMEs are aware of the importance of taking stock to their working capital and stock-out.

In trying to investigate if selected SMEs had any form of inventory management tool they applied. The following results were obtained;

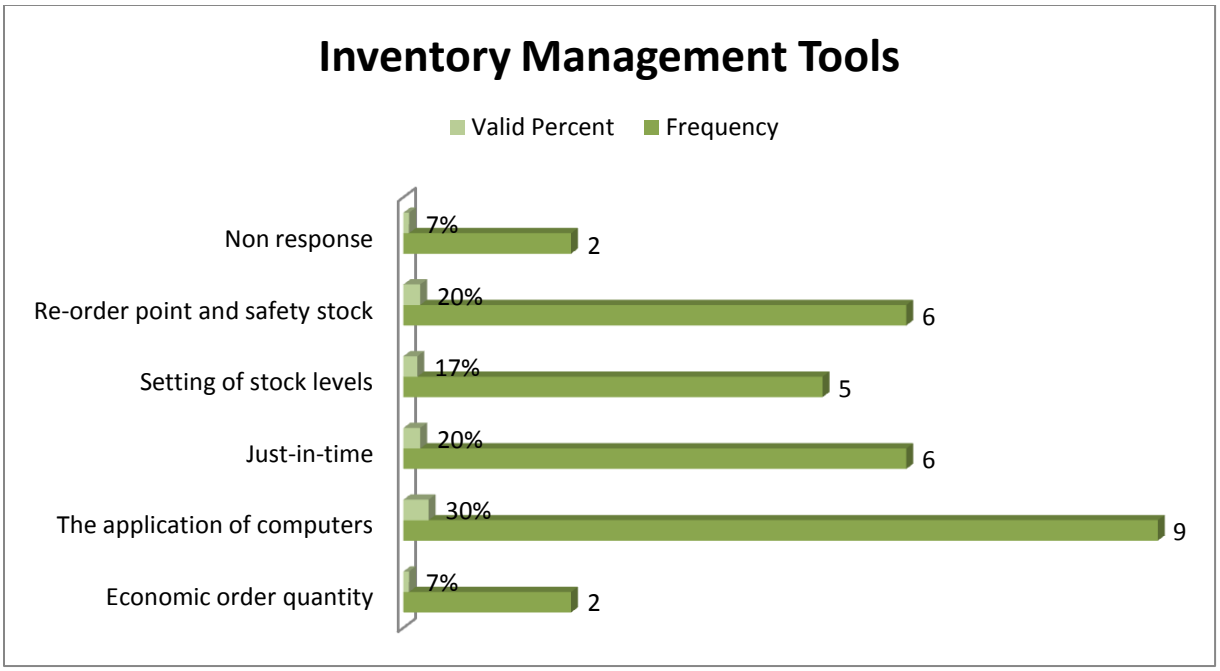


Figure 8 Source; Field Data

The minority applied the economic order quantity as an inventory management tool. This is because, most SMEs were not conversant with the use of this model and deemed it too technical. The economic order quantity model considers usage in units per period, order cost per order, carrying cost per unit per period and order quantity in units. This requires the use of a software of which most inventory managers did not have training for. From the graph above, the majority of SMEs representing 30% used computers as a means of checking inventory. The application of computers was just an alternative to manual record keeping. This means that basically SMEs kept records on inventory and inventory levels at each point in time. The use of computers was also for analysis as some SMEs adopted the use of certain software to help them better manage inventory. The use of computers for most of these SMEs seemed the 'right and modern' thing to do and move from the cumbersome nature of manual record keeping. Other computerized

systems are the Computerized Systems for Resource Control. An example is MRP(Manufacturing Resource Planning) systems which is used to determine what to order, when to order, and what priorities to assign to ordering materials. MRP uses EOQ concepts to determine how much to order using computer software.

40% of respondents used the just-in-time approach and re-order point and safety stock approach, that is, 20% used the former and another 20%, the latter. The just-in-time inventory management system minimizes the inventory investment by having goods arrive exactly at the time they are in demand or being ordered. For a just-in-time system to work, extensive coordination must exist between the firm, its suppliers, and shipping companies to ensure that materials arrive on time. Also, the goods must be of near perfect quality and consistency given the absence of safety stock.

The re-order point determined when a company should place its orders. This is because, demand for certain inventory is dependent on seasons. The re-order point introduces the concept of safety stock. Safety stock functions like the reserve stock system, where an amount of stock is kept in excess in order to cater for excess demand or expectation of future price increase and demand. Safety stock is therefore held to reduce the chances of a stock out. The two main decisions that need to be made with regard to ordering are the optimal order quantity and optimal time to place an order known as the reorder point. A significant number of SMEs were conversant with the use of these tools. 17% of respondents set various stock levels using information such as estimated or forecasted demand.

One of the ways to effectively meet demand is to set specific order cycle delivery times. An order cycle delivery time is the time between placing one set of order and the next. 60% of respondents had a specific order cycle delivery time and the other 40% did not. This latter category ascribed their lack of a specific order cycle delivery time on the change in seasons. Others placed orders as and when inventory is available especially when this kind of inventory is scarce.

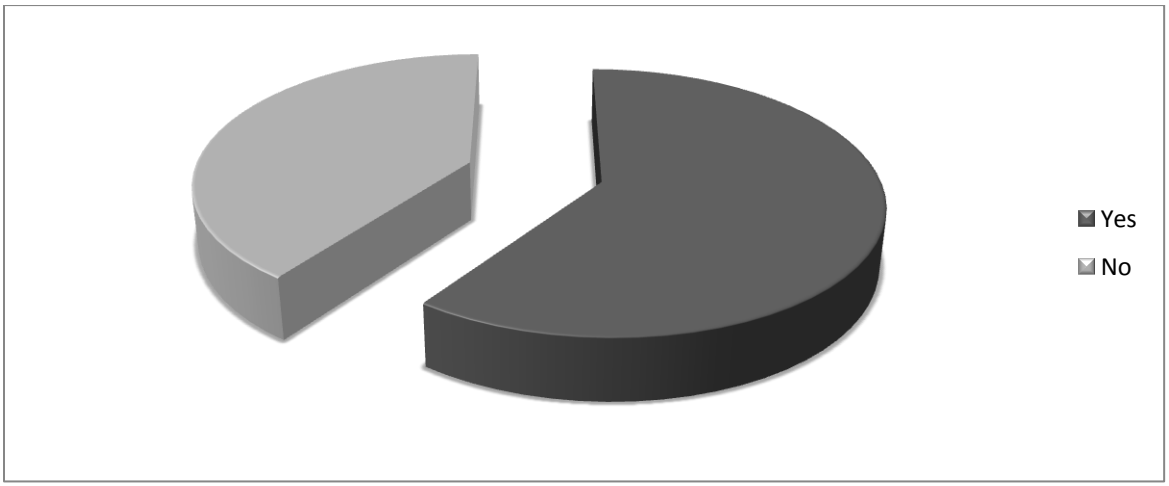


Figure 9: Specific Order Cycle Delivery Time Source: Field Data

Sales Budget

A sales budget forecasts demand and in accordance makes provision for the ordering of right quantities and levels of inventory. The use of a sales budget enables businesses therefore to avoid the cost of holding excessive stock and being out of stock frequently. The total responses indicated that 96% made a sales budget and the remaining 4% did not deem it necessary.

Cash Budget

The cash budget on the other hand allocates the amount of money that is allotted to various purchases that have to be made. The cash budget allows

businesses to work within a specific allotted amount of cash. For this reason, all businesses who adopt this practice may well be managing their their most liquid current asset that is cash effectively and thus stabilizing the amount of working capital they have in the firm at every point in time. 87% of respondents prepared a cash budget and the other 12.5% did not.

4.2.4 Analysis on Liquidity and Profitability

Liquidity and profitability are two important measures of the performance of a business. This is because liquidity looks at how easily a business can convert its assets to cash to meet short-term obligations. Profitability on the other hand is the basic aim of every company that is into business to make profits. Liquidity is directly related to working capital as working capital has to do with the amount of funds used to run a business on a daily basis. The measure of liquidity and profitability are done with accounting ratios. The ratios used in measuring liquidity are;

- Current Ratio or Working Capital Ratio
- Cash Ratio
- Quick Ratio/ Acid Test Ratio
- Net Working Capital
- Cash Return on Assets

The results obtained from these ratios are very critical in determining the liquidity position of the selected SMEs. Out of the 30 respondent SMEs, only three financial statements were obtained. This is because, most respondent SMEs were

reluctant to give out such vital information about their businesses especially since they were all private businesses. For this reason, the measure of profitability and liquidity was a challenge. Furthermore, out of the three SMEs that gave out their confidential financial statements, one belonged to the small-size category and the other two belonged to the medium sized category according to the definition adopted by this study. The small firm had employees from "16 – 20". The first medium-sized firm had employees from "51 – 55" and the second had employees "above 60". As mentioned earlier, 62.5% of the respondent SMEs fell in the small category and 37.5% were in the medium category. This is because, the small-sized enterprises were easier to locate and had less bureaucracy in giving feedback.

In order to measure the impact of the inventory and trade receivables practices on the liquidity and profitability of all the selected SMEs. The results from the ratios were used to generalize for all other respondent SMEs in their respective categories, that is, small and medium. The computation of the ratios for the small firm will cover a period of three years, from 2009 to 2011, and the computation for that of the small firm will cover the years 2010 to 2012.

4.2.5 Liquidity and Profitability Ratios for Respondent SMEs (small category)

Table 5: Liquidity Ratios

LIQUIDITY RATIOS	**2009**	**2010**	**2011**
Current Ratio			
Total Current Assets	0.86	1.25	1.11
Total Current Liabilities			

Cash Ratio			
Cash and Cash equivalents	0.09	0.37	0.62
Total liabilities			
Quick Ratio/Acid Test Ratio	0.33	0.50	0.83
Current assets - Inventory			
Current Liabilities			
Net Working Capital	- 547.00	876.00	906.00
Current assets - Current liabilities			

The Current Ratio is the most commonly used measure of liquidity of a firm. The current ratio weighs current assets of a company against the current liabilities. It basically measures how much of current assets can cover up or make up for the current liabilities or currently maturing obligations a firm has. It is also known as the working capital ratio. Potential creditors use this ratio in determining whether or not to make short-term loans. This ratio also gives a sense of the efficiency of a company's operating cycle or its ability to turn its product into cash.

Current ratio for the selected SME increased from 0.86 in 2009 to 1.25 in 2010. This is as a result of an increase in its cash and cash equivalents (the most liquid form of current assets) from GH¢342 in 2009 to GH¢ 1,280 in 2010. This implies that in 2010, the company had more cash-in hand than the previous year. In 2011, the following year, the company's current ratio declined to 1.11 from the previous 1.25 in 2010. This represents negative change of 12.6%. This occurred even though the company's cash and cash equivalent increased to GH¢4,901 from GH¢1,280 in 2010. With liquidity, the higher the ratio, the more liquid a company is said to be with anything less than 1 indicating that a company may have problems

meeting its current obligations. Thus, for the first year, a liquidity ratio of 0.86 indicates a weakness in its ability to meet its currently maturing obligations, that is, its current assets are not enough to cover up or make up for its current liabilities. However, this improved in the following year, with current ration picking up to 1.25 which is an acceptable ratio. Even though this decreased to 1.11 in 2011, the company still maintained a stable liquidity ratio, that is, keeping it above one.

Table 5: Current Assets

CURRENT ASSETS	**2009**	**2010**	**2011**
Cash & Cash Equivalents	342.00	1,280.00	4,901.00
Trade & Other Receivables	990.00	453.00	1,725.00
Inventories	2,111.00	2,620.00	2,235.00
	3,443.00	**4,353.00**	**8,861.00**

CURRENT LIABILITIES	2009	2010	2011
Trade & Other Payables	**3,990.00**	**3,477.00**	**7,955.00**

From the tables above, throughout the three year period, the observation is that inventory and cash and cash equivalents make up the bulk of all current assets, particularly inventory followed closely by cash and cash equivalents. This implies that over the three year period, the company possessed enough current assets to meet current liabilities. Inventory increased substantially by 24.11% over

2009 and 2010 and declined in 2011 by 14.7%. With the exception of 2009, current assets were greater than current liabilities.

The second ratio used as a measure for liquidity is the Quick ratio or the acid test ratio. The quick ratio for year 2009 was 0.33, and was less than one for the following years 2010 and 2011. In 2010, the liquidity ratio was 0.50 and 0.83 in 2011. This implies using this test; the company was not able to meet its short term obligations quickly with inventory excluded.

Net Working Capital which is the most basic measure of working capital basically looks at the difference between current assets and current liabilities. If current assets exceed current liabilities there is positive working capital. However, if current liabilities exceed current assets there is negative working capital. The company experienced negative working capital of (GH¢547) in 2009, and thereafter had positive working capital of GH¢876 and GH¢906 in 2010 and 2011 respectively.

The cash ratio is the also another measure used to ascertain the liquidity position of a firm. It looks at the proportion of cash and cash equivalents to that of total liabilities. For this ratio it measures the immediate amount of cash available to satisfy short-term liabilities. A cash ratio of 0.5:1 or higher is preferred. Cash ratio is the most conservative look at a company's liquidity since it is taking into consideration only the cash and cash equivalents. Year 2009 had the lowest cash ratio of 0.09; however this increased to 0.37 in 2010 and the highest was 0.62 in 2011. This is not surprising as year 2011 had the highest amount of cash and cash equivalents of GH¢4,901 as compared to the other years.

Overall, the company attempted to maintain a steady liquidity position over the years and somewhat succeeded. The company keep enough funds to pay for its obligations that were short term in nature.

PROFITABILITY

The ratios that measure profitability include;

- The Net profit margin
- The Gross Profit Margin
- Operating Profit Margin
- Return on Assets
- Cash return on assets

Table 6: Profitability Ratios

PROFITABILITY RATIOS	**2009**	**2010**	**2011**
Gross Profit Margin	0.01	0.02	0.03
Gross Profit			
Revenue or Sales			
Net Profit Margin			
Net Profit	0.00	0.00	0.00
Operating Profit Margin			
Earnings Before Interest and Taxes	0.00	0.01	0.01
Net Sales			
Return on Assets			
Net Income	0.03	0.02	0.02
Total Assets			
Cash Return on Assets			
Cash Flow from Operating Activities	0.09	-0.06	0.38
Total Assets			

The gross profit margin looks at cost of goods sold as a percentage of sales. This ratio looks at how well a company controls the cost of its inventory and the manufacturing of its products and subsequently passes on the costs to its customers. The larger the gross profit margin, the better for the company. The higher the gross margin, the more of a premium a company charges for its goods and services. The company's gross profit margin increased over the three year period with each year increasing by 1%. Thus, from the table above, gross profit margin increased by 1% in 2009 to 2% in 2010 and 3% in 2011.

Net profit margin for all the three years was zero. Net profit margin measures profitability after consideration of all expenses including taxes, interest, and depreciation. This implies that, the company did not record any form of profit after tax over these years.

Return on Assets is also an important profitability ratio because it measures the efficiency with which the company is managing its investment in assets and using them to generate profit. It principally measures the amount of profit earned relative to the firm's level of investment in total assets. The return on assets ratio is related to the asset management category of financial ratio. For 2009, return on assets was 3% and declined to 2% in 2010 and then remained at 2% in 2011 also.

4.2.6 Liquidity and profitability ratios (medium category)

Table 7: Liquidity Ratios

Current Ratio	**2010**	**2011**	**2012**
Total Current Assets		2.29	1.70

	1.48		
Total Current Liabilities			
Cash Ratio			
Cash and Cash equivalents	0.15	0.35	0.31
Total liabilities			
Quick Ratio/Acid Test Ratio			
Current assets - Inventory	0.40	1.33	0.99
Current Liabilities			
Net Working Capital			
Current assets - Current liabilities	1,576,055.00	2,738,005.00	3,756,213.00

From the above table, it can be observed that SMEs that were in the medium category seemed to record higher liquidity ratios, with liquidity ratios exceeding 1 for all the three years. This means that they have enough current assets to make up for current liabilities and are thus likely not to go bankrupt and meet their obligations. However, the cash ratio which should be 0.5:1 or higher seemed to rather be on the low, with all three years recording less than 0.5. This implies that there was insufficient cash and cash equivalents to cover total liabilities. With the exception of year 2011, which had a quick ratio higher than 1, the other years had quick ratios less than one which indicates poor liquidity for these years meaning with no inventory liquidity levels were much lower. Nevertheless, the business had high levels of net working capital implying that its current assets heavily exceeded current liabilities.

Table 8: Profitability Ratios

Gross Profit Margin	0.32	0.37	0.38

Gross Profit			
Revenue or Sales			
Net Profit Margin			
Net Profit	0.08	0.13	0.14
Revenue or Sales			
Operating Profit Margin			
Earnings Before Interest and Taxes	0.11	0.18	0.19
Net Sales			
Return on Assets			
Net Income	0.14	0.33	0.23
Total Assets			
Cash Return on Assets			
Cash Flow from Operating Activities	0.02	0.24	0.26
Total Assets			

From the above table, the business reaped high gross profit margins, with gross profit exceeding 30% for all the three years. However, net profit, which is profit after tax and other expenses have been deducted dwindled with the highest being 14% in 2012. Operating profit margin also grew significantly from 11% to 19% in 2012. Return on assets also grew significantly, with 33% in 2011. This means that the firm efficiently used its assets in generating revenue and profits. Cash return on assets was significant for years 2011 and 2012.

Table 9: Liquidity Ratios

Current Ratio			
Total Current Assets	2.12	1.98	21.89
Total Current Liabilities			
Cash Ratio			

Cash and Cash equivalents	0.29	0.15	1.56
Total liabilities			
Quick Ratio/Acid Test Ratio			
Current assets - Inventory	1.03	0.94	12.10
Current Liabilities			
Net Working Capital			
Current assets - Current liabilities	15,927,003.00	22,290,031.00	47,526,639.00

From the above table, using the current ratio, for all three years was above 1 with 2012 recording the highest. However, the business did not have enough cash and cash equivalents to make up for total liabilities as cash ratios for 2010 and 2011 were less than 0.5. This was as a result of high inventory levels recorded for those years, meaning most of the current assets were made up of inventory. The year 2012 still recorded a high liquidity ratio even with high inventory levels. From the results from the quick ratio, current assets were enough to cover up for current liabilities with the exception of 2011 which had almost a 1 liquidity ratio.

Table 10: Profitability Ratios

Gross Profit Margin	0.56	0.34
Gross Profit		
Revenue or Sales		
Net Profit Margin		
Net Profit	0.05	0.10
Revenue or Sales		
Operating Profit Margin		
Earnings Before Interest and Taxes	0.06	0.11
Net Sales		

Return on Assets		
Net Income	0.09	0.11
Total Assets		
Cash Return on Assets		
Cash Flow from Operating Activities	0.06	0.00
Total Assets		

Chapter 5: Conclusions

The majority of the selected SMEs had good knowledge about inventory practices and trade receivables practices and applied these very tactfully. This is evident in the discussions and findings. Excessive stock or stock out, cause a lot of problems to businesses either by piling avoidable costs or causing customer disaffection and switching. Holding stock entails incurring some cost which when managed well can ensure the profitability of businesses. The high proposition of respondents said they used some stock management techniques. Again, the respondents use of such factors as the RTDs, average receipt period, category of customers offered credit and the kind of security used as back up indicates that these SMEs are not totally ignorant on the tactics of proper management of working capital and this was evident in their levels of profitability and liquidity.

BIBLIOGRAPHY

Abel, M. (n.d.). The Impact of Working Capital Management on Cash Holdings - A Quantitative Study of Swedish Manufacturing SMEs.

Acheampong, G. (n.d.). Innovation Among Rural Small and Medium Scale Enterprises.

Agrawal, N. (2003). *Management of Working Capital.* New Delhi: Sterling Publishers Pvl Ltd.

Agyapong, D. (December 2010). Micro, Small and Medium Enterprises' Activities, Income Level and Poverty Reduction in Ghana – A Synthesis of Related Literature. *International Journal of Business and Management* .

AGYEI-MENSAH, B. K. (January 2012). Working Capital Management Practices of small Firms in the Ashanti Region of Ghana. *International Journal of Academic Research in Business and Social Sciences* , 569 - 571.

Al-Mwalla, M. (2012). The Impact of Working Capital Management Policies on Firm's Profitability and Value: The Case of Jordan. *International Research Journal of Finance and Economics* .

Ana Paula Silva, C. M. (March 2012). Financial and Strategic Factors Associated with the Profitability and. *International Journal of Economics and Finance and Growth of SME in Portugal* .

Anheier, H., & Seibel, H. (1987). Business Behaviour and Strategies in Informal Sector Economies, Verlag Breitenbech. *Small Scale Industries and Economic Development in Ghana* .

Arbidane, I., & Zelgalve, E. (2012). Current Assets Structure And Exploration Of Business In Latvia. *European Integration Studies* , 185.

Armah, W. (2013, April 18). *Financing Working Capital*. Retrieved April 19, 2013, from Warmah: http://warmah.com/articles/financing%20working%20capital.html

Assets, Liabilities & Equity - An Intro (Part II). (2009). Retrieved March 11, 2013, from AccountingBase: http://www.accountingbase.com/IntroALE2.html

Atrill, P. (2006). *Management Accounting for Decision Makers.* Prentice Hall.

Bidzakin, K. J. (2009). Assessing Performance of Micro and Small Scale Agribusinesses In Northern Ghana: Non-Financial and Stochastic Frontier Analysis. 18 -19.

Bowen, M. (2009). Management of Business Challenges among Small and Micro Enterprises in Nairobi-Kenya. *KCA JOURNAL OF BUSINESS MANAGEMENT* .

Brealey, R. M. (2006). *Working Capital Management.* New York: McGrawHill.

Brealey, R., Myers, S., & Allen, F. (2006). *Working Capital Management.* New York: McGraw Hill.

Chapter 2: Literature Review. (n.d.). 7-19.

Chapter 5 - Working Capital Analysis (p80 - 82). (n.d.). Retrieved December 20, 2012, from http://shodhganga.inflibnet.ac.in/bitstream/10603/705/13/14_chapter5.pdf

CHAPTER III, Concepts and Approaches of Working Capital Management. (n.d.). Retrieved 12 02, 2012, from http://14.139.116.29/bitstream/10603/5234/11/11_chapter%203.pdf

Chittenden, F. P. (1998). Financial Management and Working Capital Practices in UK SMEs. *Manchester, Manchester Business School* .

Cook, P., & Nixson, F. (2000). Finance and Small and Medium-Sized Enterprise Development. *Finance and Development Research Programme Working Paper Series* .

Dr. Muhammad AZAM, S. I. (SEPTEMBER 2011). Impact of Working Capital Management on Firms' Performance:Evidence from Non-Financial Institutions of KSE-30 index. *INTERDISCIPLINARY JOURNAL OF CONTEMPORARY RESEARCH IN BUSINESS* .

Dr. Muhammad AZAM, S. I. (SEPTEMBER 2011). Impact of Working Capital Management on Firms' Performance:Evidence from Non-Financial Institutions of KSE-30 index. *INTERDISCIPLINARY JOURNAL OF CONTEMPORARY RESEARCH IN BUSINESS* .

DTI. (2001). A Government Action Plan for Small Business: Making the U.K. the best place in the world to start and grow business. *Small Business Service* .

Finau, F. K. (2011). THE IMPACT OF WORKING CAPITAL MANAGEMENT DYNAMICS ON PERFORMANCE OF TONGAN ENTERPRISES IN NEW ZEALAND.

Fisher, E., & Reuber, R. (2000). Industrial Clusters and SMEs Promotion in Developing Countries. *Common Trade and Enterprise Paper* .

Hassbroeck, D. (1996). Entrepreneurship Training for the Infoormal Sector in South Africa, in Educating Entrepreneurs in Modernising Economics.

I, L. A. (n.d.). *Working Capital Management and Performance of Small and Medium Sized Enterprises.* Retrieved 10 28, 2012, from 192.248.17.88/mgt/images/stories/research/ircmf/2009/Acconting%20&%20Management%20Information%20System/5%20WORKING%20CAPITALACT108.pdf

Investopedia. (2010, January 29). *What is the difference between the bond market and the stock market*. Retrieved April 20, 2013, from Investopedia: http://www.investopedia.com/ask/answers/09/difference-between-bond-stock-market.asp

Joshua Abor, N. B. (2006). Small Business Financing Initiatives in Ghana. *Problems and Perspectives in Management / Volume 4, Issue 3* .

Joshua Abor, P. Q. (2010). Issues in SME Development in Ghana and South Africa. *International Research Journal of Finance and Economics* .

Kappel, E. K. (May 2008). Business Constraints and Growth Potential of Micro and Small Manufacturing Enterprises in Uganda. *GIGA Working Papers* .

Kayanula, D., & Quartey, P. (2000). *The Policy Environment for Promoting Small and Medium-Sized Enterprises in Ghana and Malawi.* Retrieved April 19, 2013, from http://www.man.ac.uk/idpm

Kimmel, W. K. (2007). *Financial Accounting:Business Decision Making, 4th Edition.*

Kimmel, W. K. (2007). *Financial Accounting:Tools for Business Decision Making, 4th Edition.*

Kuhlemeyer, G. A. (2004). *Overview of Working Capital Management.* Waukesha, WI: Pearson Education llmited.

Kumar, D. T. (November, 2011). RELATIONSHIP BETWEEN WORKING CAPITAL AND PROFITABILITY - - A STATISTICAL APPROACH. *IJRFM* .

Lamberson, M. (n.d.). Financial Analysis and Working Capital Management Techniques used by Small Manufacturers: Survey and Analysis.

Levy, B., Berry, A., & Nugent, J. (1999). Supporting the Export Activities of Small and medium enterprise Fulfilling Export Potential of Small and medium firms. *International Research Journal of Finance and Economics* .

Liedholm, C., & Mead, D. (1987). Small Scale Industries in Developing Countries: Empirical Evidence and Policy Implications. *International Development Paper* , 9.

Management of Financial Services. (n.d.). *Lesson 13: Factoring - Theoretical Framework.* Retrieved April 20, 2013, from http://psnacet.edu.in/courses/MBA/Financial%20services/5.pdf

Managing Costs and Working Capital in A Down Economy. (n.d.). Retrieved April 18, 2013, from Protiviti: Risk and Business Consulting Internal Audit: http://www.protiviti.com/en-US/Pages/Managing-Costs-and-Working-Capital-in-a-Down-Economy.aspx

Meaning and Importance of Liquidity page 1. (n.d.). Retrieved 10 25, 2012, from Financial Accounting-Short term liquidity: http://www.accounting-ebook.com/15/1.pdf

Mensah, S. (2004). A Review of SME financing schemes in Ghana. *UNIDO Regional Workshop of Financing SMEs* .

Millinuex, A. W. (1997). The Funding of Non-Financial Corporations (NFCs) in the EU (1971-1993): Evidence of Convergence. *Mimeo, Department of Economics, University of Birmingham* , 218.

Nasr, A. R. (March 2007). Working Capital Management And Profitability – Case Of Pakistani Firms. *International Review of Business Research Papers* .

Niranjan Mandal, D. B. (n.d.). IMPACT OF WORKING CAPITAL MANAGEMENT ON LIQUIDITY PROFITABILITY AND NON-INSURABLE RISK AND UNCERTAINTY BEARING:A CASE STUDY OF OILAND NATURAL GAS COMMISSION (ONGC).

Niresh, A. J. (2012, October). *TRADE-OFF BETWEEN LIQUIDITY & PROFITABILITY:A STUDY OF SELECTED MANUFACTURING FIRMS IN SRI LANKA.* Retrieved December 20, 2012, from ResearchersWorld.com - Journal of Arts, Science & Commerce: http://www.researchersworld.com/vol3/issue4/vol3_issue4_2/Paper_05.pdf

Nurbani Binti Hassan, J. A. (2011). Financial Constraints and Opportunities of Micro Enterprises Entrepreneurs: A Theoretical Framework. *2010 International Conference on Business and Economics* .

Nyabwanga Robert Nyamao1*, O. P. (9 May, 2012). Effect of working capital management practices on financial performance: A study of small scale enterprises in Kisii South District, Kenya. *African Journal of Business Management* .

Owolabi, S. A., Obiakor, R. T., & Okwu, A. T. (2011, September). *British Journal of Economics, Finance and Management Sciences.* Retrieved December 21, 2012, from Investigating Liquidity-Profitability Relationship in Business Organizations: A Study of Selected Quoted Companies in Nigeria: http://www.ajournal.co.uk/EFpdfs/EFvolume1%282%29/EFVol.1%20%282%29%20Article%202.pdf

Padachi, K. (October 2006). Trends in Working Capital Management and its Impact on Firms' Performance: An Analysis of Mauritian Small Manufacturing Firms . *International Review of Business Research Papers* .

Padachi, K. (2006). Trends in Working Capital Management and its Impact on Firms' Performance: An Analysis of Mauritian Small Manufacturing Firms. *International Review of Business Research Papers* , 46.

Parker, R., Riopelle, R., & W.F., S. (1995). Small Enterprse Adjusting to Liberalization to Liberalisation in Five African Countries. *World Bank Discussion Paper: African Technical Department Series* .

Pedro Juan García-Teruel, P. M.-S. (n.d.). *Effects of Working Capital Management on SME Profitability.*

Piriyakul, B. W. (December 2010). Antecedents of PLS path model for competitive advantage and financial performance of SMEs in Thailand. *African Journal of Marketing Management* .

PWNA Kumari, W. K. (n.d.). Working Capital Management issues faced by SMEs in Sri Lanka. 185.

Quartey, D. K. (May 2000). The Policy Environment For Promoting Small and Medium-sized Enterprises in Ghana and Malawi. Peter Quartey. *Finance and Development Research Programme* .

Quartey, P., & Abor, J. (2010). Issues in SME Development in Ghana and South Africa. *International Research Journal of Finance and Economics* , 218.

QUAYYUM, S. T. (January-June, 2011). Effects of Working Capital Management and Liquidity: Evidence from the Cement Industry of Bangladesh. *Journal 40 of Business and Technology* .

QUAYYUM, S. T. (January-June, 2011). Effects of Working Capital Management and Liquidity: Evidence from the Cement Industry of Bangladesh. *Journal of Business and Technology* .

Ramamoorthy, V. (1978). *Working Capital Management.* Institute for Financial Management and Research.

Rehn, E. (2012). Effects of Working Capital Management on Company Profitability. *Hanken: An industry-wise study of Finnish and Swedish public companies* , 10-11.

Rehn, E. (2012). Effects of Working Capital on Company Profitability. *Hanken* .

Samson, A. A., Josiah, M., Bosun - Fakunle, Y., & Erekpitan, I. O. (2012). *The Impact of Working Capital Management on the Profitability of Small and Medium-Scale Enterprises in Nigeria.* Retrieved December 21, 2012, from Research Journal on Business Management: http://www.scialert.net/qredirect.php?doi=rjbm.2012.61.69&linkid=pdf

Schmitz, H. (1995). Collective Efficiency: Growth Path for Small Scale Industry. *The Journal of Development Studies, Vol. 31* , 529 -566.

SEN, M. (October, 2009). Relationship between Efficiency Level of Working Capital Management and Return on Total Assets in Ise. *International Journal of Business Management* .

Smith, K. (1974). *Management of Working Capital, p5.* New York: West Publishing Co.

Sonia Ban˜ os-Caballero, P. J.-T.-S. (2009). Working capital management in SMEs. *Accounting and Finance* .

Steel, W. (1977). Small Scale Employment and Production in Developing Countries: Evidence from Ghana.

Steel, W., & Webster, L. (1990). Ghana's Small Enterprise Sector: Survey of Adjustment Response & Constraints. *World Bank, Industry and Energy Dept* .

Sunday, K. J. (September, 2011). Effective Working Capital Management in Small and Medium Scale Enterprises (SMEs). *International Journal of Business and Management* .

UNIDO. (1999). *SMEs in Africa Survive against all Odds.* Retrieved 10 12, 2012, from http://www.unido.org/doc/view?document_id=3927&language_code=en.

Wattanapruttipaisan, T. (December 2003). FOUR PROPOSALS FOR IMPROVED FINANCING OF SME.

Weinraub, H. J., & Vischer. (1998). Industry Practice relating to Aggressive Conservative Working Capital Policies . *Journal of Financial and Strategic Decisions* .

Working Capital Management. (n.d.). Retrieved April 18, 2013, from http://www.ediindia.org/doc/SpecialPDF/chp-14.pdf

Working Capital Management . (2013). Retrieved April 18, 2013, from Kaplan Financial Knowledge Bank: http://kfknowledgebank.kaplan.co.uk/KFKB/Wiki%20Pages/Working%20capital%20management.aspx

Working Capital Management(Finance). (n.d.). Retrieved April 18, 2013, from http://zadcomputers.co.in/zad/mdu/studymaterial/mba/working%20capital%20management.pdf

Working Capital Management, Chapter III, page 104. (n.d.). Retrieved 10 25, 2012, from http://shodhganga.inflibnet.ac.in/bitstream/10603/1165/9/09_chapter%203.pdf

Working Capital Management, Chapter III, page 105. (n.d.). Retrieved 10 25, 2012

Working Capital Management, Chapter III, page 96. (n.d.). Retrieved 10 25, 2012, from http://shodhganga.inflibnet.ac.in/bitstream/10603/1165/9/09_chapter%203.pdf

World Bank. (1992). *Malawi: Financial Sector Study.* Washington D.C.

Zeph-Yun, C., & Kee, C. H. (1986). Finance and Performance of Small manufacturing firms in Singapore l:. *International Small Business Journa* , 4:25-35.

(n.d.). Retrieved 10 25, 2012, from http://shodhganga.inflibnet.ac.in/bitstream/10603/1165/9/09_chapter%203.pdf

APPENDIX

Appendix 1;

Ashesi University College
Department of Business Administration
Survey on Inventory and Trade Receivables (Debtors) Management Practices

Background
Working Capital Management is essential for all businesses that want to ensure stability in their liquidity and profitability. Two very crucial components of working capital that affect liquidity and profitability include inventory and trade receivables. Therefore, the practices adopted in managing these two are critical in ensuring business success especially for businesses that deal directly with these. This is an academic project, and any information you provide will be used solely for this purpose.

Assumption: Inventory in this case refers to finished goods.

*please provide specific information in the space provided beside the question if you choose the option 'others'

Section A: Inventory Management

1. What is the number of your employees?
   1 - 5 ☐ 6 – 10 ☐ 11 – 15 ☐ 16 – 20 ☐ Others……
2. Do you have a formal record keeping on inventory?
   Yes ☐ No ☐
3. Do you have a person responsible for financial record-keeping?
   Yes ☐ No ☐
4. Do you prepare a budget for sales?
   Yes ☐ No ☐
5. Do you have a budget for cash?
   Yes ☐ No ☐
6. Do you carry out stock taking?
   Yes ☐ No ☐
7. If Yes, how often?
   Quarterly ☐ Weekly ☐ Monthly ☐ Daily ☐ Twice a Year ☐ Twice a month ☐
8. How useful have you seen it to be over the years?
   Useful ☐ Very useful ☐ Not useful ☐
9. Why? Give reasons……..
10. What is the minimum amount of stock that you keep? (Answer can be given in cedis or quantity)
    ……..
11. What is the maximum amount of stock that you keep for your products?
    ……

12. How often do you re-order stock within a month?
Once ☐ Twice ☐ Thrice ☐ Four times ☐

Others(e.g every week , month, quarter) Please specify
……

13. What influences stock re-ordering quantities or levels?

☐ Expectation of future price increase ☐ Peak Seasons ☐ Demand ☐ Based on orders only

Others ……

14. How are estimated sales levels periodically determined for sales projections and inventory management?
……..

15. Does the Company have meetings with the owner, manager or accountant concerning inventory issues such as stock levels, fast moving goods and other issues concerning inventory?
Yes ☐ No ☐

16. If yes, how often?
Once a week ☐ Twice a week ☐ Monthly ☐ Twice a month ☐ Every Quarter ☐

17. What are the most frequent issues that arise?
Expiration of goods ☐ Warehouse issues ☐ Frequent shortage of inventory ☐ Damaged inventory goods ☐ Others

……..

18. What inventory management tool(s) do you apply?
Economic Order Quantity ☐ Application of computers to inventory management ☐ Just-in-time management ☐ Setting of various stock levels ☐ Re-order point and safety stock ☐
……..

19. Which approach to inventory control do you use or adopt?
Manual counting ☐ Reserve stock system ☐ Others ☐
……..

20. Do you face regular inventory short falls?
Yes ☐ No ☐

21. Do you take records of the rate of product(s) usage?
Yes ☐ No ☐

22. Do you know the rate of product(s) usage or sale? E.g. how many bags of a product get consumed or sold within a week or month?
Yes ☐ No ☐

23. Do you have a specific order cycle delivery time for every product or inventory i.e. the period between placing one set of order and the next?
Yes ☐ No ☐

If yes, what is this period?

After a week ☐ After 2 weeks ☐ After 3 weeks ☐ After a month ☐ After 2 months ☐ Others ☐
……`

24. What influences this chosen period?
Shelf life of product(s) ☐ Demand ☐ Based on orders by customers ☐ Others ☐
……

25. If the order cycle is extended, are the reserve stock quantities increased?
Yes ☐ No ☐

26. Does using an effective system reduce the number of sales lost from being out of stock of merchandise in popular demand?
Yes ☐ No ☐

27. Does the system or method adopted aid in the location of slow selling articles and help indicate changes in customer preferences?
Yes ☐ No ☐

28. Does the size of your enterprise and the number of employees determine the factors in devising an effective stock control plan?
Yes ☐ No ☐

Section B: Trade Receivables Management Practices

29. Do you have a formal record keeping on debtors?
Yes ☐ No ☐

30. What is the firm's maximum credit allowable days?
One week ☐ Two weeks ☐ Three weeks ☐ A month ☐ Others……

31. How long does it take, on the average, to receive money from debtors?
One week ☐ Two weeks ☐ Three weeks ☐ A month ☐ Others……

32. What is the longest period of default by debtors?
One week ☐ Two weeks ☐ Three weeks ☐ A month ☐ Others……..

33. Do you make provision for bad debt (irrecoverable debt)?
Yes ☐ No ☐

34. Do you offer any cash discount to debtors who pay before the credit allowable days?
Yes ☐ No ☐

35. If Yes, what percentage or amount of discount are they entitled to?
……

36. What category of customers, if any, do you offer credit to?

Regular Customers ☐ Customers who buy in bulk ☐ Customers with good accounts ☐
Others ……..

37. What security is required to offer credi?
☐ Bank Statements (i.e. customers with good accounts) ☐ Bank Guarantee
☐ Post dated Cheques ☐ Others……..

38. Does the Company have meetings with the owner, manager or accountant concerning debtor's issues such as bad debt or increase in credit customers?
    Yes ☐ No ☐

Section C: General Working Capital Management Practices

39. How do you finance working capital shortfalls i.e. need for cash that arise from high trade receivables or high levels of inventory?
    ☐ Loans ☐ Reducing trade receivables ☐ Reducing inventory in the warehouse or shelves
    Others……

40. If your answer in the above question was 'loans', how would you rate the level of difficulty in repaying loans?
    ☐ Difficult ☐ Very Difficult ☐ Not at all difficult

41. How would you rate the level at which your inventory moves in terms of sales directly for cash or non-credit sales?
    Fast ☐ Very fast ☐ Not fast ☐

42. How would you rate the behaviour of customers generally towards paying their debts?
    Loyal (Pay right on time) ☐ Very loyal (pay before the expected time) ☐ Not Loyal(Pay after the expected time) Not ☐ all loyal (Never pay back) ☐

43. How do you manage slow moving/ obsolete inventory?
    ☐ Dispose them ☐ Sell them at reduced prices ☐ Keep them on the shelves/warehouse until they are sold

Thank You

Florence Amoaba Adu

Appendix 2:

Interview Guide

In addition to questionnaire questions,

- What qualification do you require to hire personnel for inventory and trade receivables
- Are you aware of models such as the economic order quantity, ABC model, re-order point, just-in-time and the computerized system for inventory control.
- Do you deem the use of computers or technology for stock control as sophisticated?
- Do you apply models such as the economic order quantity, ABC model, re-order point, just-in-time and the computerized system for inventory control.
- Which of the models is the simplest to use? If none mention another which is the simplest to use
- How practical do you find these models?
- Do you have a human resource department? If no, why?
- Do you offer credit beyond just customers, that is, friends and relations
- Do you keep financial statements.