CHRISTIAN SERVICE UNIVERSITY COLLEGE

WORKING CAPITAL MANAGEMENT PRATICES OF SACHET WATER PRODUCERS IN THE KUMASI METROPOLIS

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STATEMENT OF AUTHENTICITY

We have read the university regulations relating to plagiarism and certify that this report is all our own work and do not contain any unacknowledged work from any other source. We also declare that we have been under supervision for his report herein submitted.

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ABSTRACT

In a developing economy like Ghana, the contribution of small firms to the employment of the youth is highly recognised. Small firms employ a greater number of people in the country but their contribution towards revenue to the national budget seems negligible. The reason is that some of the firms do not manage their working capital as expected and this affects the viability of businesses

The objective of this study looked at the working capital management practices of sachet water producers in the Kumasi Metropolis. The study looked at the cash management practices (use of surplus cash, qualification of accounts officers and use of computers), inventory management (policies to determine inventory levels and production levels) and trade receivables management (credit sales, debt collection period and credit control policies) practices of the sachet water producers.

The study used both questionnaires and semi-structured interviews to investigate fifty sachet water producers from members of the sachet water association in the Kumasi Metropolis.

The results of the study showed that sachet water producers in the Kumasi Metropolis are not good at managing their working capital. It revealed that most of these sachet water producers do not manage the various elements of their working capital properly. Thus they do not invest surplus cash for profitable purpose, do not use computers and little qualification of accounts officers. On inventory management, most of the sample firms do not have any policy to determine their inventory levels. Again most of the firms sell on credit without any credit control policies and have no debt collection policy.

Recommendations on cash management, trade receivable management and inventory management which the study found to be problems with the sample sachet water producers have been suggested to the owners/managers. A further study on male and female manager's success and sampling of the whole Ashanti region is recommended.

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DEDICATION

This work is dedicated to the Almighty God for his guidance and support throughout this work.

The next one goes to our individual families for being with us through it all.

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DEPARTMENT OF BUSINESS STUDIES

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CHAPTER ONE

1.0 INTRODUCTION

1.1 BACKGROUND TO THE STUDY

Small firms play a critical role in providing job opportunities, nurturing a culture of entrepreneurship and opening up new business opportunities. They are recognised and acknowledged worldwide as vital and significant contributors to economic development, ability in generating potential entrepreneurs and skilled workers for the industrialization process of the country and others.

In the UK, SMEs make a major contribution to the health of the economy and help to diversify opportunity in the society. They are the foundation of the UK economy, generating value and making significant critical contributions to the economy. SMEs in the UK have increased in importance, measured in terms of their share of manufacturing, employment and output. The number of SME continues to rise as does the number of people classified as self employed. For example, in 1979 there were only 2.4 million SMEs in the UK. By the year 1999 the number had grown to 3.67 million (Burns, 2001). The SMEs are in many shapes and sizes: from high-growth start-ups to 'life-style" business and social enterprises. Together SMEs account for over 99 per cent of the total number of UK firms and generate 52 per cent of total turnover. SMEs employ 12.6 million people, which represent 56 per cent of the private sector workforce. SMEs now generate over a quarter of UK GDP (Burns, 2001). SMEs form part of the bedrock of local communities, contributing to both economic prosperity and social cohesion in towns and in rural areas.

The management of working capital is one of the most important aspects of the overall financial management practices of any organization. The existence of an efficient and effective working capital management can make a substantial difference between the success and failure of an enterprise. Research by Berryman, (1983) indicated that 'poor' or 'careless' working capital management is a major cause of SME failure. Some of the most important internal problems identified by Dodge et al, (1994) which contribute to SME failure are inadequate capital, cash flow management, and inventory control. The survey conducted by the Insolvency Practitioners Society (CIMA, 1994) in the UK also indicated that 20 per cent of firm failures were due to bad debts or poor receivable management.

Previous research findings related to working capital management practices indicated that if working capital management could be significantly improved in the SME sector, then few firms would fail, thus supporting the view that working capital management practices are extremely important for SMEs (Peel and Wilson, 1994).

In Ghana, available data from the Registrar General indicates that 90% of companies registered in 2006 are small and medium enterprises. This target group has been identified as the catalyst for the economic growth of the country as they are a major source of income and employment. Data from the Social Security & National Insurance Trust (SSNIT) reflects that, by size classifications the Ghanaian private sector is highly skewed, with 90% of companies employing less than 20 persons, and a small number of large-scale enterprises.

In a developing economy like Ghana, the share of business activity represented by the SME sector has increased considerably over the last decade of the 20th century. The dynamic role of SMEs as engines through which the growth of objectives of developing countries can be achieved has long been recognised. The percentage of labour employed by SMEs in Ghana is 15.5% and percentage

of GDP is 6%. The contribution of the SMEs to the encouragement of entrepreneurship, the achievement of economic objectives including poverty alleviation, the process of regional decentralization, and the employment is highly recognised.

However, the contribution of these SMEs to the national revenue budget through direct taxes is negligible. It is expected that these SMEs contribute significantly to the national revenue and the inability of some of them to manage their working capital efficiently is very worrying.

The government of Ghana is then propelled to increase prices of petroleum products to raise revenue for the country and depend on foreign aids and loans to sustain the economy. In proposing alternative solutions to generate more revenue to the consolidated fund, it has been suggested that the tax net be widened by taxing all SMEs in the informal sector.

Because there is the need for all firms in the country either big or small, to pay appropriate taxes to the government, and the fact that some of the SMEs do not manage their working capital efficiently which had adversely affected the viability of their businesses, there is the need to conduct a study to investigate, and identify the factors that prevent some SMEs from managing their working capital efficiently. Hence the decision to undertake this case studies.

1.2 STATEMENT OF THE PROBLEM

An initial study carried out on small and medium enterprise shows that most of the small and medium enterprises fade out of the market as a result of working capital management problem, owners/managers possess limited educational background, make all strategic decision about the business, lack of qualified accounting staffs to prepare accounts for them, no computers to manage their inventories and prepare their accounts. (Agyei-Mensah, 2010)

Again because of the many players in the market, most of them sell on credit to existing and new customers which most of these debts become bad. Another problem faced by these SMES is their cash conversion cycle. They normally buy on cash and give generous credit to their customers which mean more cash is needed to finance their activities. The research also revealed that access to finance is one of the major problems facing SMES in the Ashanti region. Moreover, inadequate government support for the industry is also another challenge facing SMES. (Agyei-Mensah, 2010)

According to Atrill (2006), there is evidence that many SMEs are not very good at managing their working capital and this has been cited as a major cause of their high failure rate compared with that of large businesses. From the above issues SMEs generally have problems with working capital management which causes most of them to collapse (Registrar General Department). Information from the (Sachet water producers association) shows most of the sachet water producers in the Kumasi Metropolis are SMES by size, number of people employed and capital requirement and are therefore likely to have working capital management problems. Sachet water production which has now become one of the growing industry in the Ashanti region, employs a greater number of people has to be studied to prevent them from facing working capital management problems.

The above problem poses the following questions to enable us know the working capital management practices of the sachet water producers in the Kumasi Metropolis;

- Are there enough structures and policies to achieve effective working capital management practices by sachet water producers in the Kumasi Metropolis?
- ➤ What factors account for effective management of working capital?

1.3 OBJECTIVES OF THE RESEARCH

In order to know the working capital management practices of the sachet water producers in the Kumasi metropolis, these objectives have been set;

- 1. To find out how sachet water producers in the Kumasi metropolis manage the various element of their working capital which involves the following;
 - Cash management
 - Inventory management
 - Trade receivables management
- 2. The outcome of the research will help to make recommendations for the sachet water producers in the Kumasi Metropolis.

1.4 SIGNIFICANCE OF THE STUDY

- The study contributed in finding out whether sachet water producers conform to an effective working capital management practices.
- 2. The study adds to the existing knowledge of effective and efficient working capital management practices for small firms.

1.5 SCOPE OF THE RESEARCH

The research looks into the management accounting/ finance aspect of a business. It will be more useful to users who have knowledge in the above subject area. The research work will only use the working capital management framework among other theories like ratios to determine the working capital management practices of the selected firms.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1Introduction

This chapter seeks to review various research works on the above topic and other related issues.

The areas of review include Small and medium scale enterprises (SMEs); definitions, general overview of SMEs in Ghana and challenges of SMEs, working capital management; definitions and components of working capital management and water; historical perspective of water in Ghana, global need for water and sanitation, importance of drinking water and history of sachet water production in Ghana.

2.2 Definition of Small and Medium Scale Enterprises (SMEs)

The issue of what constitutes a small or medium enterprise is a major concern in the literature. Different authors have usually given different definitions to this category of business. Researchers and policymakers have used a variety of criteria including; total worth; relatively size within industry; number of employees; value of products; annual sales or receipts; and net worth (Cochran, 1981).

SMEs have indeed not been spared with the definition problem that is usually associated with concepts which have many components. The definition of firms by size varies among researchers. Some attempt to use the capital assets while others use skill of labour and turnover level.

Others define SMEs in terms of their legal status and method of production. Storey (1994) tries to sum up the danger of using size to define the status of a firm by stating that in some sectors all firms may be regarded as small, whilst in other sectors there are possibly no firms which are small. The Bolton Committee (1971) first formulated an "economic" and "statistical" definition of a small firm. Under the "economic" definition, a firm is said to be small if it meets the following three criteria:

- 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;
- It is independent, in the sense of not forming part of a large enterprise.

Under the "statistical" definition, the Committee proposed the following criteria:

- 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;
- Applying the statistical definition in a cross-country comparison of the small firms' economic contribution

The Bolton Committee applied different definitions of the small firm to different sectors. Whereas firms in manufacturing, construction and mining were defined in terms of number of employees (in which case, 200 or less qualified the firm to be a small firm), those in the retail, services, wholesale, etc. were defined in terms of monetary turnover (in which case the range is 50,000-200,000 British Pounds to be classified as small firm). Firms in the road transport industry are classified as small if they have 5 or fewer vehicles. There have been criticisms of the Bolton definitions. These centre

mainly on the apparent inconsistencies between defining characteristics based on number of employees and those based on managerial approach.

The European Commission (EC) defined SMEs largely in term of the number of employees as follows:

- firms with 0 to 9 employees micro enterprises;
- 10 to 99 employees small enterprises;
- 100 to 499 employees medium enterprises.

Thus, the SME sector is comprised of enterprises (except agriculture, hunting, forestry and fishing) which employ less than 500 workers. In effect, the EC definitions are based solely on employment rather than a multiplicity of criteria. Secondly, the use of 100 employees as the small firm's upper limit is more appropriate, given the increase in productivity over the last two decades (Storey, 1994).

Finally, the EC definition did not assume the SME group is homogenous; that is, the definition makes a distinction between micro, small, and medium-sized enterprises. However, the EC definition is too all-embracing to be applied to a number of countries. Researchers would have to use definitions for small firms which are more appropriate to their particular "target" group (an operational definition). It must be emphasized that debates on definitions turn out to be sterile, unless size is a factor which influences performance. For instance, the relationship between size and performance matters when assessing the impact of a credit programme on a target group (Storey, 1994).

Weston and Copeland (1998) hold that definitions of size of enterprises suffer from a lack of universal applicability. In their view, this is because enterprises may be conceived of in varying terms. Size has been defined in different contexts, in terms of the number of employees, annual turnover, industry of enterprise, ownership of enterprise, and value of fixed assets.

Van der Wijst (1989) considers small and medium businesses as privately held firms with 1-9 and 10-99 people employed, respectively.

Jordan *et al* (1998) define SMEs as firms with fewer than 100 employees and less than €15 million turnover. Michaelas *et al* (1999) consider small independent private limited companies with fewer than 200 employees and López and Aybar (2000) considered companies with sales below €15 million as small

According to the British Department of Trade and Industry, the best description of a small firm remains that used by the Bolton Committee in its 1971 Report on Small Firms. This stated that a small firm is an independent business, managed by its owner or part-owners and having a small market share (Department of Trade and Industry, 2001). The UNIDO also defines SMEs in terms of number of employees by giving different classifications for industrialized and developing countries (see Elaian, 1996). The definition for industrialized countries is given as follows:

- Large firms with 500 or more workers;
- Medium firms with 100-499 workers;
- Small firms with 99 or less workers.

The classification given for developing countries is as follows:

- Large firms with 100 or more workers;
- Medium firms with 20-99 workers;
- Small firms with 5-19 workers;
- Micro firms with less than 5 workers.

It is clear from the various definitions that there is not a general consensus over what constitutes an SME. Definitions vary across industries and also across countries. In 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 defined `small company in respect of financial disclosure as companies employing 50 or less employees.

Whatever the definition and regardless of the size of the economy, the growth of the SMEs throughout the country is crucial to its economic growth. Research ICT Africa (RIA) in a survey published in May 2007, defined small and medium enterprises (SMEs) as enterprises having less than 50 employees as recommended by the African Development Bank.

2.2.1 SMEs definition in the Ghanaian context

There have been various definitions given for small-scale enterprises in Ghana but the most commonly used criterion is the number of employees of the enterprise (Kayanula and Quartey, 2000). In applying this definition, confusion often arises in respect of the arbitrariness and cut off points used by the various official sources. In its Industrial Statistics, the Ghana Statistical Service (GSS) considers firms with fewer than 10 employees as small-scale enterprises and their counterparts with more than 10 employees as medium and large-sized enterprises. Ironically, the GSS in its national accounts considered companies with up to 9 employees as SMEs (Kayanula and Quartey, 2000). The value of fixed assets in the firm has also been used as an alternative criterion for defining SMEs.

However, the National Board for Small Scale Industries (NBSSI) in Ghana applies both the "fixed asset and number of employees" criteria. It defines a small-scale enterprise as a firm with not more than 9 workers, and has plant and machinery (excluding land, buildings and vehicles) not exceeding 10 million Ghanaian cedis. The Ghana Enterprise Development Commission (GEDC), on the other hand, 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 continuous depreciation of the local currency as against major trading currencies often makes such definitions outdated (Kayanula and Quartey, 2000).

In defining small-scale enterprises in Ghana, 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).

2.2.2 A General Overview of the SME Sector in Ghana

In Ghana, available data from the Registrar General indicates that 90% of companies registered are micro, small and medium enterprises. This target group has been identified as the catalyst for the economic growth of the country as they are a major source of income and employment.

Data on this group is however not readily available. The Ministry of Trade and Industry (MOTI), in 1998 estimated that the Ghanaian private sector consists of approximately 80,000 registered limited companies and 220,000 registered partnerships.

Generally, this target group in Ghana is defined as:

Micro enterprises: Those employing up to 5 employees with fixed assets (excluding realty) not exceeding the value of \$10,000

Small enterprises: Employ between 6 and 29 employees with fixed assets of \$100,000

Medium enterprises: Employ between 30 and 99 employees with fixed assets of up to \$1 million.

Data from the Social Security & National Insurance Trust (SSNIT) reflects that, by size classifications, the Ghanaian private sector is highly skewed, with 90% of companies employing less than 20 persons, and a small number of large-scale enterprises.

A typical profile of this target group is as follows,

- 1. They are, dominated by one person, with the owner/manager taking all major decisions. The entrepreneur possesses limited formal education, access to and use of new technologies, market information, and access to credit from the banking sector is severely limited,
- 2. Management skills are weak, thus inhibiting the development of a strategic plan for sustainable growth.
- 3. This target group experiences extreme working capital volatility.
- 4. The lack of technical know-how and inability to acquire skills and modern technology impede growth opportunities.

Many non-financial constraints inhibit the success of such enterprises. SME owners are reluctant to be transparent or open up involvement of their businesses to outsiders. They seem to be unaware of or oblivious to the obligations and responsibilities they have toward capital providers, and the need

to acquire or seek support for technical services like accounting, management, marketing, strategy development and establishment of business linkages.

Management and support services are perceived to be cost prohibitive and non-value adding.

SMEs have not taken full advantage of Government-sponsored business support services such as the National Board for Small Scale Industries (NBSSI), which operates in the 10 regional capitals under the Ministry of Trade and Industries and the Ghana Regional Appropriate Technology and Industrial Service (GRATIS), a foundation that provides skill training and basic working capital tools for start-ups.

Policy interventions for the promotion of SMEs have generally had the following broad themes:

- Adequate support structure, transfer of appropriate technology
- Entrepreneurial training and labour skills development
- Access to sources of funds including reducing collateral requirements, and providing safeguards for the credit delivery system
- Promoting linkages between large and small industries

2.2.3 Characteristics of SMEs in Developing Countries

Fisher and Reuber (2000) enumerate a number of characteristics of SMEs in developing countries under the broad headings: labour characteristics, sectors of activity, gender of owner and efficiency. Given that most SMEs are one-person businesses, the largest employment category is working proprietors. This group makes up more than half the SME workforce in most developing countries; their families, who tend to be unpaid but active in the enterprise, make up roughly another quarter. The remaining portion of the workforce is split between hired workers and trainees or apprentices. SMEs are more labour intensive than larger firms and therefore have lower capital costs associated with job creation (Anheier and Seibel, 1987; Liedholm and Mead, 1987; Schmitz, 1995).

In terms of activity, they are mostly engaged in retailing, trading, or manufacturing (Fisher and Reuber, 2000). While it is a common perception that the majority of SMEs will fall into the first category, the proportion of SME activity that takes place in the retail sector varies considerably between countries, and between rural and urban regions within countries. Retailing is mostly found in urban regions, while manufacturing can be found in either rural or urban centres. However, the extent of involvement of a country in manufacturing will depend on a number of factors, including, availability of raw materials, taste and consumption patterns of domestic consumers, and the level of development of the export markets.

In Ghana, SMEs can be categorized into urban and rural enterprises. The former can be subdivided into "organized" and "unorganized" enterprises. The organized ones mostly have paid employees with a registered office, whereas the unorganized category is mainly made up of artisans who work in open spaces, temporary wooden structures, or at home, and employ few or in some cases no salaried workers (Kayanula and Quartey, 2000). They rely mostly on family members or apprentices. Rural enterprises are largely made up of family groups, individual artisans, women engaged in food production from local crops. The major activities within this sector include:- soap and detergents, fabrics, clothing and tailoring, textile and leather, village blacksmiths, tin-smithing, ceramics, timber and mining, bricks and cement, beverages, food processing, bakeries, wood furniture, electronic assembly, agro processing, chemical-based products and mechanics (Osei *et al.*, 1993; Kayanula and Quartey, 2000).

Majority of SMEs are female-owned businesses, which more often than not are home-based compared to those owned by males; they are operated from home and are mostly not considered in official statistics. This clearly affects their chances of gaining access to financing schemes, since

such programmes are designed without sufficient consideration of the needs of businesses owned by females. These female entrepreneurs often get the impression that they are not capable of taking advantage of these credit schemes, because the administrative costs associated with the schemes often outweigh the benefits. Prior empirical studies in Ghana have shown that female-owned SMEs often have difficulty accessing finance. Females are mostly involved in sole-proprietorship businesses which are mainly microenterprises and as such may lack the necessary collateral to qualify for loans (Aryeetey *et al*, 1994; Abor and Biekpe, 2006).

Measures of enterprise efficiency (e.g. labour productivity or total factor productivity) vary greatly both within and across industries. Firm size may be associated with some other factors that are correlated with efficiency, such as managerial skill and technology, and the effects of the policy environment. Most studies in developing countries indicate that the smallest firms are the least efficient, and there is some evidence that both small and large firms are relatively inefficient compared to medium-scale enterprises (Little *et al.*, 1987). It is often argued that SMEs are more innovative than larger firms. Many small firms bring innovations to the market place, but the contribution of innovations to productivity often takes time, and larger firms may have more resources to adopt and implement them (Acs *et al.*, 1999).

2.2.4 Contributions of SMEs to Economic Development

There is a general consensus that the performance of SMEs is important for both economic and social development of developing countries. From the economic perspective, SMEs provide a number of benefits (Advani, 1997). SMEs have been noted to be one of the major areas of concern to many policy makers in an attempt to accelerate the rate of growth in low-income countries. These enterprises have been recognized as the engines through which the growth objectives of developing

countries can be achieved. They are potential sources of employment and income in many developing countries.

SMEs seem to have advantages over their large-scale competitors in that they are able to adapt more easily to market conditions, given their broadly skilled technologies. They are able to withstand adverse economic conditions because of their flexible nature (Kayanula and Quartey, 2000). SMEs are more labour intensive than larger firms and therefore have lower capital costs associated with job creation (Anheier and Seibel, 1987; Liedholm and Mead, 1987; Schmitz, 1995). They perform useful roles in ensuring income stability, growth and employment. Since SMEs are labour intensive, they are more likely to succeed in smaller urban centres and rural areas, where they can contribute to a more even distribution of economic activity in a region and can help to slow the flow of migration to large cities. Due to their regional dispersion and their labour intensity, it is argued, small-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 (Kayanula and Quartey, 2000). SMEs contribute to a country's national product by either manufacturing goods of value, or through the provision of services to both consumers and/or other enterprises. This encompasses the provision of products and, to a lesser extent, services to foreign clients, thereby contributing to overall export performance. In Ghana and South Africa, SMEs represent a vast portion of businesses. They represent about 92% of Ghanaian businesses and contribute about 70% to Ghana's

entities in South Africa, contributing between 52% and 57% of GDP and providing about 61% of employment (CSS, 1998; Ntsika, 1999; Gumede, 2000; Berry *et al.*, 2002).

GDP and over 80% to employment. SMEs also account for about 91% of the formal business

From an economic perspective, however, enterprises are not just suppliers, but also consumers; this plays an important role if they are able to position themselves in a market with purchasing power:

their demand for industrial or consumer goods will stimulate the activity of their suppliers, just as their own activity is stimulated by the demands of their clients. Demand in the form of investment plays a dual role, both from a demand-side (with regard to the suppliers of industrial goods) and on the supply-side (through the potential for new production arising from upgraded equipment). In addition, demand is important to the income-generation potential of SMEs and their ability to stimulate the demand for both consumer and capital goods (Berry *et al.*, 2002).

2.2.5 Challenges of SMEs

According to Atrill (2006), there is evidence that many SMEs are not very good at managing their working capital and this has been cited as a major cause of their high failure rate compared with that of large businesses. The author asserts that small and medium enterprises often lack the resources to manage their trade debtors (receivables) effectively. He argued that it is not unusual for SMEs to operate without credit control department. This tends to mean that both expertise and the information required to make sound judgments concerning terms of sales and so on, may not be available. SME also lack proper debt collection procedures, such as prompt invoicing and sending out regular statements. This tends to increases the risks of late payment and defaulting debtors.

These risks probably tend to increase where there is an exclusive concern for growth. In an attempt to increase sales SME may be too willing to extend credit to customers that are poor credit risks. While this kind of problem can occur in businesses of all sizes, SMEs seem particularly susceptible. Another problem SMEs face is their lack of market power Atrill, (2006). Thus SMEs will often find themselves in a weak position when negotiating credit terms with larger business. Moreover, when a large customer exceeds the terms of credit, the small supplier may feel inhibited from pressing the

customer for payment in case future sales are lost. It seems that SMEs have a much greater proportion of overdue debts than large businesses.

An evidence of this was shown by a survey conducted by Credit Management Research Centre (CMRC) during April and June 2003 which indicated that SMEs, that is, those with annual sales turnover of less than £5 million, are likely to have to wait an average of 60 days for their trade debtors to pay, (Sunday Telegraph, 2003).

The reason for the delay suffered by SMEs probably relates to bargaining power of customers. Thus the customers of SMEs may well be larger ones, which can use threat, perhaps an implied one of withdrawing custom, to force SME to accept later trade debtor settlement.

In addition, a major survey conducted by the Insolvency Practitioner Society, (CIMA, 1994) indicated that 20 per cent of UK corporate failures (the vast majority of which are SMEs) were due to bad debts or poor credit management. According to Peel and Wilson (1994,), "if the financial working capital management practices in SMEs sector could be improved significantly, then fewer firms would fail and economic welfare would be increased substantially".

According to Dodge et al, (1994) some of the most internal problems of SMEs that need to be identified are, cash flow management and stock control. Atrill (2006) argues that lack of financial management skills within SMEs often creates problems in managing stock in an efficient and effective way.

The owners / managers of SMEs are not always aware that there are costs involved in holding too much stock and that there is also costs involved in holding too little. As an effective stock management system is good planning and budgeting systems, there should be reliable sales forecasts, or budgets, available for stock ordering purposes.

A survey conducted by Chittenden et al, (1998) on SMEs in UK indicated that only 78 per cent of respondents prepared sales budget. Stock management can also benefit from good reporting systems and the application of quantitative techniques for example the economic order quantity methods, to try to optimize stock levels. However, the survey also found that more than one-third of SMEs relied on manual methods of stock control, and the majority did not use stock optimisation techniques.

The management of cash raises similar issues to those relating to the management of stocks. There are costs involved both in holding too much and too little cash .In view of that, there is a need for careful planning and monitoring of cash flows over time (Atrill, 2006).

Chittenden et al, (1998) study found that only 63 per cent of the respondents prepared cash budget. It was also found that cash balances were generally proportionately higher for SMEs than for larger businesses. Again more than half of those SMEs in the survey held surplus cash balances on a regular basis.

2.3 Working Capital Management (WMC)

2.4 Definition of working capital

Working capital can be defined in so many ways. The importance of efficient working capital management is not new to the finance literature. The careful management of working capital is more vital in small and medium enterprises than it is for large organizations particularly as they are not likely to have access to financial expertise like the large enterprises, (Peel and Wilson, 1994). A company must be able to generate sufficient cash to be able to meet its immediate obligations and therefore continue trading. Inadequate working capital decisions and accounting information have been referenced consistently as causes of small and medium enterprises failure. According to Barrow (2001), there is enough evidence which points to small and medium enterprises being

inefficient users of working capital. As he puts it, "the smaller they are, the less efficient they tend to be".

The objective of working capital management is to maintain the level of net capital that maximizes the wealth of the firm's owner. Other importance of working capital management, according to Diacogiannis, (1994) includes the following;

- (1) There exists a direct relationship between working capital management and the firm's liquidity. Effective working capital management provides the firm with adequate liquidity both to pay its maturing short- term obligations as they come due and to conduct the firm's normal day-to-day operations. There are cases where firms fail because they do not maintain sufficient liquidity, even though they have growing sales.
- (2.) There exists a direct relationship between profitability and working capital management. The level of firm's working capital influences its profitability because of the cost involved in financing the firm's current assets.

Although working capital is the concern of all firms, it is the small firms that should address this issue more seriously. Given their vulnerability to a fluctuation in the level of working capital, they cannot afford to starve of cash. 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. The recent work of Howorth and Westhead (2003), suggest that small companies tend to focus on some areas of working capital management where they can expect to improve marginal returns.

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. Managing cash flow and cash conversion cycle is a critical component of overall financial management for all firms, especially those who are capital constrained and more reliant on short-term sources of finance (Walker and Petty, 1978; Deakins et al, 2001).

Given these peculiarities, Peel and Wilson (1996) have stressed the efficient management of working capital, and more recently good credit management practice as being pivotal to the health and performance of the small firm sector.

Along the same line, Berry et al (2002) finds that SMEs have not developed their financial management practices to any great extent and they conclude that owner-managers should be made aware of the importance and benefits that can accrue from improved financial management practices. The study conducted by De Chazal Du Mee (1998) revealed that 60% enterprises suffer from cash flow problems. Narasimhan and Murty (2001) stress on the need for many industries to improve their return on capital employed (ROCE) by focusing on some critical areas such as cost containment, reducing investment in working capital and improving working capital efficiency. The pioneer work of Shin and Soenen (1998) and the more recent study of Deloof (2003) have found a strong significant relationship between the measures of WCM and corporate profitability. Their findings suggest that managers can increase profitability by reducing the number of day's accounts receivable and inventories

2.5 Components of working capital

This section borrows heavily from the works of (BCCBWCmgmt) which identifies the components of working capital as including the following:

2.5.1Cash

Cash is probably the least productive asset you can have. Not only does it not earn anything, it actually loses purchasing power as a consequence of inflation. So why do firms hold cash? The three Keynsian motives for holding cash balances are:

- Transactions motive to conduct day-to-day business of paying for purchases, labor, etc.
- Precautionary motive to cover unexpected expenditures. If the delivery truck breaks down, it must be repaired or replaced if you want to stay in business.
- Speculative motive unusually good opportunities occasionally arise. If you have the money available, you can take advantage of these opportunities.

While cash is necessary to cover the transactions motive, the precautionary and speculative motives can be covered with the near money (or near cash) of marketable securities.

In order to maximize your cash balances, you can do one of two things; either accelerate the inflow of funds (ask for an advance on your salary) or delay the outflow of funds (postpone paying the phone bill until next month). But why would we want to maximize our cash holdings if it is the least productive asset? Because idle cash, either sitting in a checking account or tied-up in accounts receivable is extremely costly.

2.5.2 Trade Receivable

Trade receivables are generated when a firm offers credit to its customers. The first thing that needs to be addressed when establishing a credit policy is to set the standards by which a firm is judged in determining whether or not credit will be extended. There is what's known as the 5 Cs of credit:

- 1. Character the willingness of the borrower to repay the obligation
- 2. Capacity the capability of the borrower to earn the money to repay the obligation
- 3. Capital sufficient assets available to support operations (as opposed to a firm that is undercapitalized). Sometimes capital is interpreted to mean equity capital; i.e., to make sure the owners of the firm have sufficient money at stake to give them proper incentive to repay the loan and not let the company go bankrupt.
- 4. Collateral assets to support the loan which can be liquidated if default occurs
- 5. Conditions current and future anticipated conditions of the firm and the industry.

Once the credit standards have been set, the terms of credit need to be established. When must the customer pay? If they pay early, will they receive a discount? If they pay late, do they get charged a penalty? While the whole purpose of extending credit is to increase sales and, thus, gross profits, the expected increase in gross profits must be compared with the costs associated with extending credit to customers. These costs include:

- The time value of money tied up in accounts receivable
- Bad debts that occur
- Credit checks (to minimize bad debts)

- Collection costs
- Discounts for early payment (reduces revenues)
- Clerical costs associated with maintaining a credit department

Competitors will respond very quickly to a change in price. How many times have we seen the claims that "We will meet or beat any advertised price"? A change in credit policy, on the other hand, is a more subtle means of competing for customers and one that the competition will not necessarily respond to. In fact, many firms base their business on easy credit. How many times have we seen the advertisements where they tell us "Good credit? Bad credit? No credit? We don't care!" Of course, these firms will have larger bad debt expenses and larger financing costs, etc. Obviously, they will also need to have higher prices (higher gross profit margins) in order to cover these costs.

2.5.3 Inventories

Inventories (raw materials, work-in-process, finished goods) make up a large portion of most firm's current assets, and for many, total assets. As such, the extent to which a firm efficiently manages its inventories can have a large influence on its profitability. Thus, keeping abreast of inventory policy is critical to the profitability (and value) of the firm. Several factors influence the amount of inventory that a firm maintains. The most important of these include:

- Level of sales typically, the more sales a firm has, the more inventory it holds
- Length of time and technical nature of the production process The longer it takes to produce finished goods inventories from raw materials, the larger the amount of finished goods that a firm will typically hold (a safety stock). Also, if the production process is highly technical,

requiring that retooling be performed prior to each production run in order to assure that production is meeting specifications, larger amounts of inventory will be produced with each production run in order to minimize the set-up costs associated with retooling.

- Durability vs. Perishability If an inventory item is highly perishable, such as fresh vegetables, a small amount will be held. Similarly, fashions of clothes and car styles are "perishable" and will result in smaller inventories than durable goods such as tools and hardware.
- Costs Cost of holding inventories as well as costs of obtaining inventories will influence inventory sizes.

Inventory costs can be broken down into three major categories:

- A. Ordering Costs
- 1. Fixed costs stocking, clerical
- 2. Shipping costs often fixed
- 3. Missed quantity discounts an opportunity cost
- B. Carrying Costs
- 1. Time value of money tied-up in inventories
- 2. Warehousing costs
- 3. Insurance
- 4. Handling
- 5. Obsolescence, breakage, "shrinkage"
- C. Stock-out Costs

- 1. Lost sales
- 2. Loss of goodwill
- 3. Special shipping costs

2.6.0 WATER

2.6.1 Historical Perspective

This section of the work has been borrowed from the website of Ghana water company limited. The first public water supply system in Ghana, then Gold Coast, was established in Accra just before World War I. Extensions were made exclusively to other urban areas among them the colonial capital of Cape Coast, Winneba and Kumasi in the 1920s. (Ghana Water Company Limited). During this period, the water supply systems were managed by the Hydraulic Division of Public Works Department. With time the responsibilities of the Hydraulic Division were widened to include the planning and development of water supply systems in other parts of the country.

In 1948, the Department of Rural Water Development was established to engage in the development and management of rural water supply through the drilling of bore holes and construction of wells for rural communities. After Ghana's independence in 1957, a Water Supply Division, with headquarters in Kumasi, was set up under the Ministry of Works and Housing with responsibilities for both urban and rural water supplies.

During the dry season of 1959, there was severe water shortage in the country. Following this crisis, an agreement was signed between the Government of Ghana and the World Health Organisation (WHO) for a study to be conducted into the water sector development of the country. The study focused not only on technical engineering but also on the organisation of a national water and

sewerage authority and methods of financing. Furthermore the study recommended the preparation of a Master Plan for water supply and sewerage services in Accra-Tema covering the twenty-year period 1960 to 1980.

In line with the recommendations of the WHO, the Ghana Water and Sewerage Corporation (GWSC), was established in 1965 under an Act of Parliament (Act 310) as a legal public utility entity. GWSC was to be responsible for:

- Water supply and sanitation in rural as well as urban areas.
- The conduct of research on water and sewerage as well as the making of engineering surveys and plans.
- The construction and operation of water and sewerage works,
- The setting of standards and prices and collection of revenues.

2.6.2 Decline in operational efficiency of Ghana water sewerage company (GWSC)

In the late 1970s and early 1980s, the operational efficiency of GWSC declined to very low levels mainly as a result of the deterioration in pipe connections and pumping systems. A World Bank report in 1998 states that: "The water supply systems in Ghana deteriorated rapidly during the economic crises of the 1970's and early 1980's when Government's ability to adequately operate and maintain essential services was severely constrained."

In 1957, there were 35 pipe-borne water supply systems in the country. The number of pipe-borne systems rose to 69 in 1961 and then to 194 in 1979. At this time, there were 2,500 hand pumped borehole systems in the country and by 1984, additional 3000 boreholes had been drilled and fitted with hand pumps. However by the late 1980s and early 1990s, 33% of the water supply systems had

deteriorated greatly or completely broken down due to inadequate funding to carry out maintenance and rehabilitation.

2.6.3 Interventions by government of Ghana and donors to improve efficiency

To reverse the decline in water supply services, interventions in the area of sector reforms and project implementation were made in 1970, 1981 and 1988. These included interventions by the World Bank, IDA, donor countries and other external support agencies such as Austrian Government, Italian Government, Nordic Development Fund, the African Development Bank, Canadian International Development Agency, Department for International Development, KfW, GTZ, OECF, ECGD and CFD/ADF.

Though some gains were derived from these interventions, their general impact on service delivery was very disappointing. Due to the failure of these interventions to achieve the needed results, several efforts were made to improve efficiency within the water supply sector in Ghana especially during the era of the Economic Recovery Programme from 1983 to 1993.

During this period, loans and grants were sought from the World Bank and other donors for the initiation of rehabilitation and expansion programmes, to train personnel and to buy transport and maintenance equipment. In addition, user fees for water supply were increased and subsidies on water tariffs were gradually removed for GWSC to achieve self-financing. Although subvention for both operational and developmental programmes was withdrawn in 1986, government funding for development programmes continued.

The government at that time approved a formula for annual tariff adjustments to enable the corporation generate sufficient funds to cover all annual recurrent costs as well as attain some capacity to undertake development projects.

2.6.4 The water sector restructuring project (WSRP)

In 1987, a "Five-Year Rehabilitation and Development Plan" for the sector was prepared which resulted in the launching of the Water Sector Restructuring Project (WSRP). Multilateral and bilateral donors contributed \$140 million to support the implementation of the WSRP. The reforms were aimed at reducing unaccounted for water, introducing rationalisation through reduction of the workforce, hiring of professionals and training of the remaining staff. A strong focus in the WSRP was also on improved management and increased efficiency through organisational change of the water sector.

Accordingly, a number of organisational reforms within the Ghanaian water sector were initiated in the early 1990s. As a first step, responsibilities for sanitation and small towns water supply were decentralized from Ghana Water and Sewerage Corporation to the District Assemblies in 1993.

The Environmental Protection Agency (EPA) was established in 1994 to ensure that water operations did not cause any harm to the environment. The Water Resources Commission (WRC) was founded in 1996 to be in charge of overall regulation and management of water resources utilization. In 1997, the Public Utilities Regulatory Commission (PURC) came into being with the purpose of setting tariffs and quality standards for the operation of public utilities.

With the passage of Act 564 of 1998, Community Water and Sanitation Agency (CWSA) was established to be responsible for management of rural water supply systems, hygiene education and provision of sanitary facilities. After the establishment of CWSA, 120 water supply systems serving small towns and rural communities were transferred to the District Assemblies and Communities to manage under the community-ownership and management scheme.

Finally, pursuant to the Statutory Corporations (Conversion to Companies) Act 461 of 1993 as amended by LI 1648, on 1st July 1999, GWSC was converted into a 100% state owned limited liability, Ghana Water Company Limited, with the responsibility for urban water supply only. (Ghana Water Company Limited)

2.6.5 The Global Need for Improved Water and Sanitation

According to the World Health Organization (2004), 1.1 billion people did not have access to an improved water supply in 2002, and 2.3 billion people suffered from diseases caused by contaminated water. Each year 1.8 million people die from diarrhoeal diseases, and 90% of these deaths are of children under 5 (WHO, 2004). Besides causing death, water-related diseases also prevent people from working and leading active lives.

High quality bottled water is not considered 'improved' because of limitations concerning the potential quantity of supplied water. It is thus considered an "improved" source of drinking water only where there is a secondary source that is "improved". (WHO/UNICEF, 2000)

2.6.6 Ghana

Ghana is located in West Africa and has a total area of about 240,000km2 and a population of approximately 22.5 million. The climate is tropical in the south near the coast, and semi-arid towards the north. Although the official language of Ghana is English, at least 75 other local

languages are spoken. 63% of the population is Christian, 16% are Muslim (mostly in the Northern region) and 23% follow traditional indigenous beliefs (CIA, 2006).

The current environmental concerns in Ghana include soil erosion due to deforestation and overgrazing, recurring drought in the north which affects farming, and inadequate supplies of potable water (CIA, 2006).

The major diseases prevalent in Ghana are malaria, yellow fever, schistosomiasis (bilharzias), typhoid and diarrhoea. Diarrhoea is of particular concern since this has been identified as the second most common disease treated at clinics and one of the major contributors to infant mortality (UNICEF, 2004). The infant mortality rate currently stands at about 55 deaths per 1,000 live births (CIA, 2006). The major cause of diarrhoeal disease is lack of adequate sanitation and safe drinking water. After Sudan, Ghana has the highest incidence of dracunculiasis (guinea worm disease) in the world. 75% of these cases have been reported in Ghana's Northern Region (WHO, 2006).

2.7 Importance of water in Ghana

The eleven importance of water as given by (mangosteen-natural-remedies.com) involves the following;

2.7.1 Lose weight

Drinking water helps you lose weight because it flushes down the by-products of fat breakdown.

Drinking water reduces hunger; it's an effective appetite suppressant so you'll eat less. Plus, water has zero calories. Here are the further details on how to achieve fat loss by drinking water.

2.7.2 Natural Remedy for Headache

Helps to relieve headache and back pains due to dehydration. Although there are many other reasons contribute to headache, dehydration is the common one.

2.7.3 Look Younger with Healthier Skin

You'll look younger when your skin is properly hydrated. Water helps to replenish skin tissues, moisturizes skin and increase skin elasticity.

2.7.4 Better Productivity at Work

Your brain is mostly made up of water, thus drinking water helps you think better, be more alert and more concentrate.

2.7.5 Better Exercise

Drinking water regulates your body temperature. You'll feel more energetic when doing exercises and water helps to fuel your muscle.

2.7.6 Helps in Digestion and Constipation

Drinking water raises your metabolism because it helps in digestion. Fiber and water goes hand in hand so that you can have your daily bowel movement.

2.7.7 Less Cramps and Sprains

Proper hydration helps keep your joints and muscles lubricated, so you'll less likely get cramps and sprains.

2.7.8 Less Likely to Get Sick and Feel Healthy

Drinking plenty of water helps fight against flu and other ailments like kidney stones and heart attack. Water adds with lemon is used for ailments like respiratory disease, intestinal problems, rheumatism and arthritis etc. Another words one of the benefits of drinking water can improve our

immune system. Follow this link for further information on how lemon water can improve your health.

2.7.9 Relieves Fatigue

Water is used by the body to help flush out toxins and waste products from the body. If your body lacks of water, your heart, for instance, need to work harder to pump out the oxygenated blood to all cells, so are the rest of the vital organs, your organs will be exhausted and so are you.

2.7.10 Good Mood

Your body feels very good and that's why you feel happy.

2.7.11 Reduce the Risk of Cancer

Related to the digestive system, some studies show that drinking a healthy amount of water may reduce the risks of bladder cancer and colon cancer. Water dilutes the concentration of cancer-causing agents in the urine and shortens the time in which they are in contact with bladder lining.

2.8 History of sachet water in Ghana

Ghana as a result of making drinking water available to consumers at any place has gone through various stages. It started with selling water in from the early stages to the selling of water in hand tied sachet water to consumers. This received lots of criticisms as result of hygienic concerns. The sachet water came in to solve this problem by making water easily accessible to people at all places.

2.9 Summary

In conclusion, a lot of work has been done on small and medium scale enterprise and working capital management compared with the work on water. The review shows the importance of the research area in question. Different authors have given their various definitions and opinions concerning the areas of review. However, very limited work has been done on water and especially the sachet water production in Ghana. The review helped to identify secondary data which are relevant to our work. It also helped to know the gap between work on SMEs and sachet water production in Ghana and for that matter a good ground for this topic to be undertaken.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Introduction

This chapter deals with the methodology adopted in conducting the study. The chapter is organized as follows; research design, research area, population and sampling, research instrument (data collection technique), administration of instrument (data collection proceedings) and analysis of data.

3.2 Research Design

The research was purposed to assess the working capital management practices of sachet water producers in the Kumasi Metropolis. The design was a descriptive study and used both quantitative and qualitative tools to determine the working capital management practices of sachet water producers.

The study was based on the use of questionnaires and semi-structured interviews. These approaches were used in collecting data for the sample population to investigate, identify the challenges and ways to improve their activities and the way forward for the sachet water producers.

3.3 Research Area

This study was conducted among the Sachet Water Producers Association in the Kumasi Metropolis of Ashanti Region of Ghana to find out the working capital management practices of the sachet water producers because of the availability and accessibility of information and also ensures a more detailed investigation which would yield more valid and reliable results. The

owners and managers of the business constituted the population.

3.4 Population and sampling

The sample size was fifty (50) sachet water producers in the Kumasi Metropolis. The selected sample size will enable the researchers to identify the working capital management practice of the sachet water producers.

3.5 Research Instrument

The research used structured questionnaires and semi-structured interviews in collecting data. We prepared the Questionnaires with two pre-test questions to be responded by the owners and managers to ensure the validity and reliability of the study. The questions were designed in line with the purpose of the study. This instrument gave expected information about the operations of working capital management practices of sachet water producers.

3.6 Administration of instruments

The questionnaires were distributed to the sampled respondents. Replacement of questionnaires was done to replace ones which were not return by respondents. Questions including cash management, inventory, trade receivables and other general questions were asked in the questionnaires to know how they manage their working capital and some of the challenges they face. Again other semi-structured interview questions like appointment letters for employees, knowledge of economic order quantity model....... were also asked. Though it took nearly one month for all questionnaires, interviews and discussions to be completed the researchers handed over the questionnaires to the respondents in time and this gave them enough time to study the pattern of the questionnaires and to answer appropriately without being rushed.

3.7 Analysis of data

The data was organized into tables and figures based on the questionnaire given to respondents. The results were then analyzed and converted into percentages and other charts. The result was subsequently computed into percentages. Percentage (%) values, which were not round figures, were approximated to the nearest whole numbers. Diagrammatic representations of the statistical summaries of the result were presented in the form of pie charts, graphs frequency tables.

3.8 LIMITATION OF THE RESEARCH

The research on these sachet water producers in the Kumasi Metropolis has the following limitations. Thus the research work has a boundary/ parameters that it gathered information from.

- > Data was collected from only members of the sachet water producers in the Kumasi Metropolis sachet water producers.
- The research will use only the working capital management practice framework to determine the findings of the research.
- Male and female managers' successes in working capital were not considered.

CHAPTER FOUR

4.0 FINDINGS AND DISCUSSIONS

Findings working capital management practices of the sachet water producers in the Kumasi Metropolis.

4.1 Cash Management Practices

On cash management practices, the following findings are drawn from the investigation and discussion on cash management practices of Sachet water producers in the Kumasi Metropolis of Ashanti Region of Ghana.

4.1.1 Preparation of budget

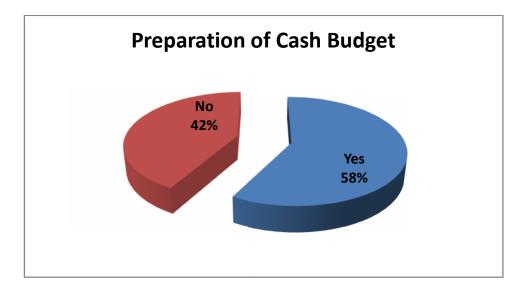


Figure 4.1

Firstly, about 58% of SMEs always prepare cash budgets. Considering the importance of efficient management of cash by SMEs, it is not surprising that only 42% of respondents claimed that they never prepare cash budgets. This finding is similar to a survey conducted by Chittenden et al (1998) which indicated that 63 % of those reporting firms prepared cash budgets.

On the other hand, about 70% of the sachet water producers interviewed determine cash balance based on the owner/manager experience.

This suggests that experience is more important than theory in practising cash management. In addition, only 22% of responding firms deposit cash daily, 56% weekly, 12% fourthnite and 10% do not deposit their cash at all.

4.1.2 Surplus Cash

The interviews conducted revealed that most of the reporting firms did not know how to use the temporary cash surplus for profitable purposes but rather invest their surplus cash elsewhere. This finding reveals that cash surplus rather than cash shortage is a problem for these sachet water producers.

That sachet water producers have to keep much more cash balance is recognised as essential under conditions of business environment uncertainty. However, this affects sachet water producer's profitability and a trade- off between liquidity and profitability needs to be considered carefully.

This is a sign of inefficient cash management practices which confirmed what Dodge et al (1994) indicated that cash flow management is an internal problem of SMEs which needed to be identified.

4.1.3Use of Computers

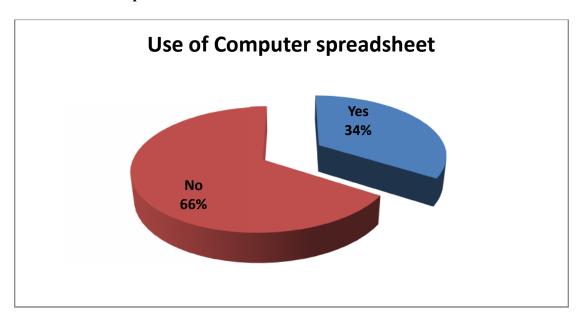


Figure 4.2

The current study revealed that a relatively high percentage of SMEs (66%) in the sample do not use computers in their operations. This has affected the ability of the businesses to keep track records of their accounting information and backups. The availability of affordable computers and suitable software has played an important role in promoting the practices of efficient working capital management in some firms.

In a survey of 129 small manufacturing firms in Quebec, Canada, Raymond and Thalmann (1982) discovered a predominance of accounting –related applications among computer software in use, particularly in the areas of accounting receivables, accounting payables, sales analysis and inventory. McChlery et al, (2004)"s study also identified the use of computerized accounting system as major factor in promoting efficient working capital management.

4.1.4 Qualification of accounts officers

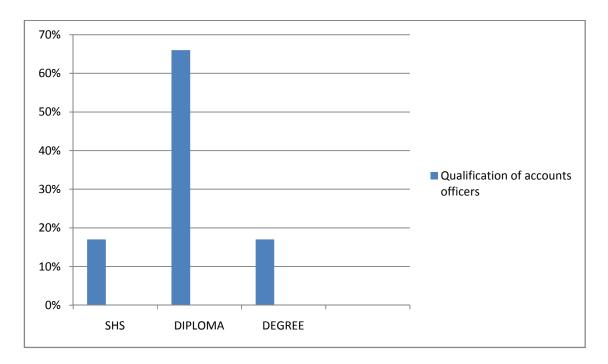


Figure 4.3

Out of the fifty sachet water producers, only twenty nine of them have accounts officers and the other twenty one do not have accounts officers. These people manage their accounting functions themselves which is a flaw in an effective working capital management. Their lack of requisite skills in accounting practice and various standards affect their ability to generate financial information for decision making in the business. This also makes it difficult for them to assess loan from banks and financial institutions.

Most of these sachet water producers assume they are saving money by employing 'cheap labour' that is unqualified personnel to carry out accounting functions. The practicing accountants the researcher talked to also confirmed that most SMEs owners/managers come to them when they have to present financial statements and cash flow to their bankers to support their loan applications.

This finding collaborates with what Mensah (2004) reported in his paper on `Financing SMEs in Ghana" that owners/managers of SMEs in Ghana perceived management and support services to be cost –prohibitive and non-value adding.

4.2 Trade Receivable Management Practices

4.2.1 Credit sales

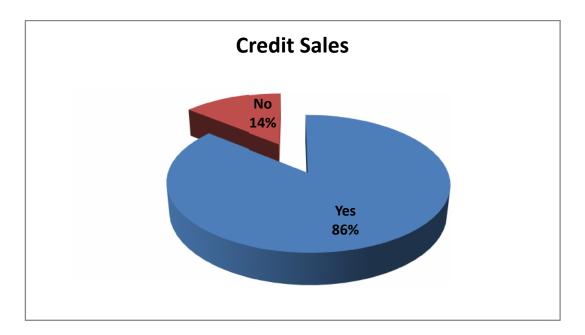


Figure 4.4

Regarding receivable management, 86% of SMEs always sell their products on credit. Most of the firms incur bad debts which they are unable to recover. However the owners/managers interviewed could not give the amount of bad debts on their total sales. Bad debts can be a major problem to sachet water producers, especially in the current economic climate where margins may already be squeezed and the high inflation rates may add salt into injury. Firms that provide most

or all products or services on credit to more or all of their customers are likely to experience bad debts situation on a large scale.

This finding shows that selling products on credit is a common trend among sachet water producers in the Kumasi Metropolis.

Again, the study found out that most of the sachet water producers review their levels of receivables and bad debts on their own discretion and it is not surprising that most of the reporting firms always experience bad debts.

4.2.2 Debt collection period

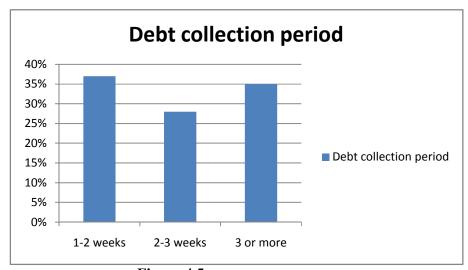


Figure 4.5

Findings on debt collection period reviewed that most of them takes long time to collect their debts from customers. Considering findings on trade payable periods, 54% of the firms buy on credit. Reconciling the two means more cash is needed to finance the operation of the business thereby resulting in the businesses having long cash conversion period.

4.2.3 Credit control

30% of them have policies to collect their debt. However from interviews with owners credit policies are most often set against the selling agent salaries. 70% of respondent firms have no policy to collect their debts but sell to any customer they come across. This is as a result of the numerous number of sachet water producers in the metropolis. With regards to employment of credit officer, only few of the reporting firms interviewed have a credit officer which means there is no clear cut procedure on how debts are collected.

This finding is similar to Grablowsky"s (1976) survey on accounts receivable management practices of SMEs which indicated that only 20% of overall firms employed a full-time credit officer. The owners /manager tended to neglect accounts receivables management because of its difficulty and because they found it distasteful.

This finding also collaborates with Atrill's (2006) assertion that SMEs lack the resources to manage their receivables effectively. He further argued that it is unusual for SME to operate without credit control department. These practices of the sachet water producers in Kumasi Metropolis tend to confirm that both expertise and the information required to make sound judgment concerning term of sales are not available. Hence the sachet water producers lack proper debt collection procedures such as prompt invoicing and sending out regular statements. This might cause the increase risk of late payment and defaulting debtors.

4.3 Inventory Management Practices

Finally, for inventory management practices, sachet water producers in the Kumasi Metropolis still have little knowledge of management theories. Despite this, they always review inventory

levels and prepare inventory budgets, but the ability of applying theories of inventory management in inventory budget is very limited.

4.3.1 Production level

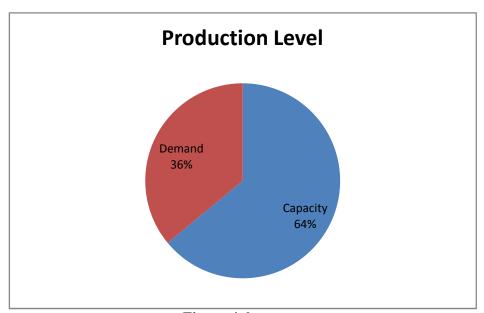


Figure 4.6

Concerning production levels 64% of the sachet water producers produce according to the capacity of their machine whereas 36% of them produce according to demand which is normally determine by the owners experience and not on any theory. Most of them have adequate storage facilities which in essence increase cost associated with holding too much inventory. This also leads to spoilage in most of the reporting firms inventories. 94% of the reporting firms have adequate storage facilities.

4.3.2 Inventory level determination

60% of the firms had no policy to determine inventory levels.

Most of them did not know anything about economic order quantity (EOQ) model when asked. This makes it difficult for the firms to know their re order levels and quantities which leads to shortages in inventory. Like cash management, the owner/manager's experience was again found to be more important than application of theories of inventory management.

This study revealed that the sachet water producers the in Kumasi Metropolis relied on manual methods of inventory control. This is similar to the survey conducted by Chittenden et al (1998) on SMEs in UK where more than one-third of respondents SMEs relied on manual methods of inventory control and the majority did not use inventory optimisation techniques.

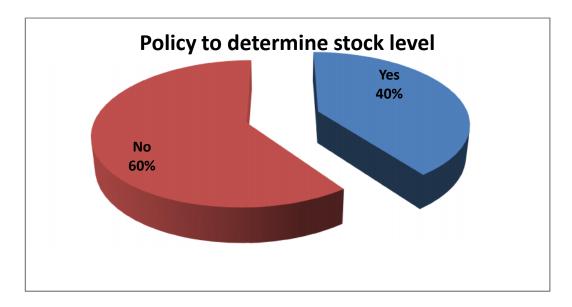


Figure 4.7

The findings of this study collaborate to a greater extent with the study of previous researchers which indicated that, careless working capital management practices is a major cause of SME

failure (Berryman, 1983) and cash flow management, inventory control and bad debts or poor receivable management are the most internal problems of SME (Dodge et al ,1994).

Peel and Wilson (1994) assert that if working capital management practices in SMEs could be significantly be improved, then few firms would fail and economic welfare would be increased substantially. In the light of this assertion by previous researchers, the current researcher would like to suggest to owners /managers that careful management of working capital is vital for the survival of their firms. Poor management of working capital means that funds are unnecessarily tied up in idle assets hence reducing liquidity and also reducing the ability to invest in productive assets such as plant and machinery, so affecting profitability

CHAPTER FIVE

5.0 CONCLUSION AND RECOMENDATION

5.1 CONCLUSION

The study can be concluded that sachet water producers in the Kumasi Metropolis are not good at managing their working capital. The study revealed that these sachet water producers do not manage the various elements of their working capital properly. Thus there are weak cash management, inventory management and trade receivable management. They relied on manual methods of inventory and majority does not know anything about economic order quantity model (EOQ). Owners/managers experience was found to be more important than application of theories of both inventory and cash balances in majority of the sachet water firms in the study. The sachet water producers lack resources to manage their receivables, no proper debt collection and no credit officers were employed.

In view of these it is concluded that sachet water producers in the Kumasi Metropolis do not manage their working capital properly.

5.2 Recommendations

In order to improve on the working capital management practices of sachet water producers in the Kumasi Metropolis of Ashanti Region of Ghana, the following recommendations are made to the owners/managers based on our findings:

5.2.1 Trade Receivables

Owners/Managers of sachet water producers should establish a credit control department with a full-time credit officer and follow credit control policy procedures

5.2.2 Cash Management

On cash management, owners/managers are to employ more qualify accounting staff to manage their accounting functions for them. Surplus cash should be routed into profitable investments. Surplus funds should be invested in overnight call accounts which yield high returns. This will help avoid keeping large cash balances in non-interest yielding current accounts

To help raise the standard of financial reporting in the sachet water industry, it is recommended that owners/managers should make good use of available computerized accounting packages. Computer spreadsheets are essential to modern organisations, as they allow managers to prepare a lot of financial reports. Owners/managers of sachet water producers should avail themselves with the various training programmes organised by government and other bodies to equip them with requisite skills needed to run the activities of their businesses. This will help improve their trading activities as poor managerial skills have commonly been associated with sachet water production failure.

5.2.3 Inventory Management

Owners/managers of sachet water producers must adopt a more economic theory of inventory management like the economic order model to determine the level of inventory to maintain. Again they should adopt the first-in-first-out (FIFO) method of issuing their products to sale point to avoid deterioration.

BIBLIOGRAPHY

Atrill, P (2006). Financial Management for Decision Makers, (4 th edition) Prentice Hall.

Ben K Agyei-Mensah, (2010) working capital management practices of small firms.

Berryman, J (1983) Small Business Failure and Bankruptcy, A Survey of the Literature, European Small Business Journal.

Bolton, J. E. (1971). "Report of the Committee of Inquiry on Small Firms", HMSO, London.

Deloof, D. (2003). "Does Working Capital Management affect Profitability of Belgian Firms"? Journal of Business Finance and Accounting, Vol 30 No 3 & 4 pp. 573 – 587.

Department of Trade and Industry, (2001). Small and Medium Enterprise (SME) – Definitions, http://www.dti.gov.uk/SME4/define.htm. Accessed on 20th April, 2011.

faculty.business.utsa.edu/kfairchild/classes/.../BCCBWCmgmt. Accessed on 25th April, 2011.

Grablowsky, B. J. (1984). "Financial Management of Inventory", Journal of Small Business Management, July, pp. 59-65.

Howorth, C. and Westhead, P. (2003). "The focus of working capital management in UK small firms" Management Accounting Research, Vol. 14 No. 2, pp. 94-111.

Jordan, J., J. Lowe, and P. Taylor, (1998). "Strategy and Financial Policy in U.K. Small Firms", Journal of Business Finance and Accounting, 25(1/2), pp. 1–27.

Kayanula, D. and P. Quartey, (2000). "The Policy Environment for Promoting Small and Medium-Sized Enterprises in Ghana and Malawi", Finance and Development Research Programme, Working Paper Series, Paper No 15, IDPM, University of Manchester.

López, G. J. and A. C. Aybar, (2000). "An Empirical Approach to the Financial Behaviour of Small and Medium Sized Companies", Small Business Economics, 14, pp. 55-63.

Mensah, S (2004) 'A review of SME Financing Schemes in Ghana' Paper presented at the UNIDO. Regional Workshop of Financing SMEs, Accra, Ghana. March, 15-16.

Michaelas, N., F. Chittenden, and P. Poutziouris, (1999). "Financial Policy and Capital Structure Choice in U.K. SMEs: Empirical Evidence from Company Panel Data", Small Business Economics, 12, 113-130.

Nsiah Hayford, (2009) Research Methods, a guidebook for students, Savant Grafix.

Osei, B., A. Baah-Nuakoh, K. A. Tutu, and N. K. Sowa, (1993). "Impact of Structural Adjustment on Small-Scale Enterprises in Ghana", in Helmsing, A. H. J. and Kolstee, T. H. (eds.), Structural Adjustment, Financial Policy and Assistance Programmes in Africa, IT Publications, London.

Peel, M. J. and Wilson, N (1994). 'Working Capital and Financial Management Practices in the Small Firm sector.' International Small Business Journal 14 (2).

Rowe,SME value and contribution to the UK economy. <u>www.buzzle.com,Julian</u>. Accessed on 16th March, 2011.

Sachet water producers association of Kumasi.

Small and medium enterprise statistics for the UK<u>WWW.accaglobal.com</u>. Accessed on 15th, February, 2011.

Steel, W. F. and L. M. Webster, 1991. "Small Enterprises in Ghana: Responses to Adjustment Industry", Series Paper, No. 33, The World Bank Industry and Energy Department, Washington DC.

Storey, D., 1994. "Understanding the Small Business Sector", Routledge, London.

Teal, F., 2002. "Background Information On Use Of Dataset: Regional Project On Enterprise Development (RPED) Ghana Manufacturing Sector Survey Waves I-V (1992-98)", Centre for the Study of African Economies, Institute of Economics and Statistics, University of Oxford, St. Cross Building, Manor Road, Oxford, OX1 3UL.

Van der Wijst, D., (1989). "Financial Structure in Small Business. Theory, Tests and Applications", Lecture Notes in Economics and Mathematical Systems, Vol. 320, Springer-Verlag, New York.

Walker, E. and Petty, W. (1978). "Financial Differences Between Large and Small Firms", Financial Management, Winter, pp61-68.

Weston, J. F. and Copeland, T. E., (1998). "Managerial Finance", CBS College Publishing, New York.

www.gwcl.com.gh/aboutus.php. Accessed of 15th May, 2011.

www.mangosteen-natural-remedies.com/benefits-of-drinking-water.html. Accessed on 5th May, 2011.

www.williamcronon.net). Accessed on 8th March, 2011.

APPENDIX A

DATA ANALYSES FOR THE RESEARCH

1. DATE OF BUSINESS FORMATION		
	NO.OF FIRMS	PERCENTAGE
2000-03	9	18%
04-07	28	56%
08-11	13	26%
TOTAL	50	100%
Source: Field survey	v, June 2011	

2.NUMBER OF E	MPLOYEES	
	NO.OF FIRMS	PERCENTAGE
9-19	16	32%
20-30	27	54%

10%
100%
)

A MEMBER	OF THE SACHET
ASSOCIATION	
NO.OF FIRM	IS PERCENTAGE
44	88%
6	12%
50	100%
rey, June 2011	
	ASSOCIATION NO.OF FIRM 44

4.SELL ON CREDIT		
	NO.OF FIRMS	PERCENTAGE
YES	43	86%
NO	7	14%
TOTAL	50	100%

	NO.OF FIRMS	PERCENTAGE
1-2WEEKS	16	37 %
2-3WEEKS	12	28%
3 AND MORE	15	35%
TOTAL	43	100%

	NO.OF FIRMS	PERCENTAGE
YES	12	28%
NO	31	72%
TOTAL	43	100%

8.HAVE PROVISION FOR BAD DEBTS		
	NO.OF FIRMS	PERCENTAGE
YES	33	77%
NO	10	23%
TOTAL	43	100%
Source: Field survey	, June 2011	

	NO.OF FIRMS	PERCENTAGE
DAILY	11	22%
WEEKLY	28	56%
FOURTH NIGHT	6	12%
NONE	5	10%
TOTAL	50	100%

10.HAVE PETTY CASH FOR EXPENSES		
	NO.OF FIRMS	PERCENTAGE
YES	42	84%
NO	8	16%
TOTAL	50	100%
Source: Field surv	ey, June 2011	

	NO.OF FIRMS	PERCENTAGE
YES	35	70%
NO	15	30%
TOTAL	50	100%

12. HAVE SEPI	SEPERATE ACCOUNT FOR THE BUSINES	
	NO.OF FIRMS	PERCENTAGE
YES	41	82%
NO	9	18%
TOTAL	50	100%

13. HAVE ACCOUNTS OFFICERS		
	NO.OF FIRMS	PERCENTAGE
YES	29	58%
NO	21	42%
TOTAL	50	100%
Source: Field sur	vey, June 2011	

14. QUALIFICATION OFFICER	OF THE	ACCOUNTS
	NO.OF FIRMS	PERCENTAGE
SHS	5	17%
DIPLOMA	19	66%
DEGREE	5	17%
TOTAL	29	100%
Source: Field survey, June 2	2011	

	NO.OF FIRMS	PERCENTAGE
YES	20	40%
NO	30	60%
TOTAL	50	100%

17. PRODUCED BASED ON WHAT		
	NO.OF FIRMS	PERCENTAGE
DEMAND	18	36%
CAPACITY	32	64%
TOTAL	50	100%

	NO.OF FIRMS	PERCENTAGE
YES	20	40%
NO	30	60%
TOTAL	50	100%

20. HAVE ADE	QUATE STORAGE FAC	ILITIES
	NO.OF FIRMS	PERCENTAGE
YES	47	94%
NO	3	6%
TOTAL	50	100%
Source: Field surve	y, June 2011	

21. BUY RAW MATERIALS ON CREDIT OR CASH	
NO.OF FIRMS	PERCENTAGE
27	54%
23	46%
50	100%
	27 23

22. HOW LONG DOES IT TAKE TO PAY BACK RAW MATERIALS BOUGHT ON CREDIT

	NO.OF FIRMS	PERCENTAGE
1WEEK	2	9%
2WEEKS	7	30%
3WEEKS	10	43%
ATFER 3WEEKS	4	18%
TOTAL	23	100%

Source: Field survey, June 2011

	NO.OF FIRMS	PERCENTAGE
YES	22	44%
NO	28	56%
TOTAL	50	100%

26. USE OF BUSINESS	COMPUTER SPI	READSHEETS IN
	NO.OF FIRMS	PERCENTAGE
YES	17	34%
NO	33	66%
TOTAL	50	100%
Source: Field surv	rey, June 2011	

	NO.OF FIRMS	PERCENTAGE
YES	37	74%
NO	13	26%
TOTAL	50	100%

Appendix B

Informative Group
Christian Service University College
Kumasi

Dear Sir/Madam,

QUESTIONNAIRE

The following questions form part of a study by students of Christian Service University College in Kumasi.

The study is researching into the working capital management practices of sachet water producers. Your firm has been selected as a sample for the proposed research work.

Your responses to these questions will enable us understand how sachet water producers manage their working capital and also contribute to the small and medium enterprise (smes) development in Ghana.

Please kindly answer these questions as truthfully and accurately as you can. We can assure you that the information provided will be used solely for its intended purpose. The data provided will be absolutely confidential. Please do not hesitate to comment on any part of the questionnaire that is not clear to you. We would also be pleased if you can make yourself available for interview on the operations of your firm.

The outcome of the study will be communicated to the sachet water association, other stakeholders and you will be informed if you so desire.

Thank you for your kind assistance.

1.	When was your business formed?
2.	State the number of employees
3.	Is your company a member of the sachet water producers' association? Yes () No ()
4.	Do you sell on credit? Yes () No ()
5.	If yes how long does it take to collect your money?
1.	-2weeks () 2-3weeks () 3 and more ()
1	-zweeks () z-sweeks () s and more ()
6.	Do you have policies to collect your debts? Yes () No ()
7.	If yes state the kind of policy
8.	Do you make provision for bad and doubtful debts? Yes () No ()
9.	When do you deposit your cash sales?
Da	aily () b) Weekly ()c) Fortnight () d) None ()
1.0	
10.	Do you keep petty cash for your expenses? Yes () No ()
11.	Do you pay yourself? Yes () No ()
12.	Do you have a separate account for the business? Yes () No ()
13.	Do you have an accounts officer? Yes () No ()
14.	If yes what is his qualification
15.	Have you accessed loan from the bank? Yes () No ()
16.	If no why
17.	Do you produce to meet customer demand or capacity of your machine?
De	mand () Capacity ()
18.	Do you have any policy to determine your stock level? Yes () No ()
19.	If yes state the kind of policy
20.	Do you have adequate storage facility? Yes () No ()
21.	Do you buy raw materials on credit or cash? Cash () Credit ()
22.	If on credit, how long does it take you to pay back?
23.	1 week () b) 2 weeks () c) 3 weeks () d) after 3 weeks ()
24.	Do you have an accountant in your company? Yes () No ()

25.	If no why
26.	Do you use computer spreadsheets in your company? Yes () No ()
27.	If no why
28.	Do you prepare cash budgets? Yes () No ()
29.	What do you think can help solve some of the challenges you face in your business.
	nment

Appendix C

CHRISTIAN SERVICE UIVERSITY COLLEGE

INFORMATIVE GROUP

SEMI-STRUCTURED INTERVIEW WITH SAMPLE FIRMS.

The following questions below are the various questions asked from respondent of the various sachet water producers in the Kumasi Metropolis.

- 1. Do you know anything on economic order quantity?
- 2. How do you review your inventory/stock levels, and how often?
- 3. How do you determine your business cash balance?
- 4. Do you invest surplus cash?
- 5. If yes where do you invest?
- 6. What percentage of your sales is on credit and on cash?
- 7. What percentage of sales do result in bad debts?

These questions were developed to support the formal questionnaires sent to the reporting firms. These forms of questions helped to clarify any hanging issue.