

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,  
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**COLLEGE OF ART AND SOCIAL SCIENCES**

**SCHOOL OF BUSINESS**



**FINANCIAL MANAGEMENT PRACTICES AND PROFITABILITY OF  
SMALL AND MEDIUM-SCALE ENTITIES IN THE TAMALE  
METROPOLITAN AREA**

**By**

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requirement for the degree of**

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## **CANDIDATE'S DECLARATION**

I hereby declare that this thesis is the result of my own original work towards the award of Masters in Business Administration and that, to the best of my knowledge, it contains no material which has been presented wholly or partially for another degree in this University or elsewhere except where due acknowledgement has been made in the text.

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## SUPERVISOR'S DECLARATION

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## ABSTRACT

Small and Medium-sized Entities (SMEs) are very important to the economic growth and development of a nation. Unfortunately, a large number of SMEs in Ghana do not survive for a long period. This study believes that Prudent Financial Management Practices can help SMEs become profitable and for that matter stay in business for a long period of time. This study assessed the impact of financial management practices on the profitability of SMEs in the Tamale Metropolitan area of Ghana with a view to establishing a coherent model directed at improving profitability of SMEs in Ghana. The study used a sample of two hundred and thirty-two (232) SMEs operating in Tamale. The study was a cross sectional survey which used primary data predominantly. Multiplicative linear regressions together with Pearson's correlation co-efficient were used to analyse the data. The findings indicate that financial management practices such as working capital management, Financing, Investing, Financial reporting and Accounting Information Systems (AIS) impact positively on the profitability of SMEs, accounting for 77.4% of the variances in profitability of SMEs. The results further indicate that the application of Accounting Information Systems has the highest effect on profitability since a one percent (1%) increase in the application of Accounting Information Systems increases profitability by 0.39%. The study strongly recommends higher adherence to financial management practices. Policy makers, developments partners, owners, and managers of SMEs may use these findings to appreciate the importance of financial management practices to the sustainability of SMEs in Ghana.

## **DEDICATION**

This work is dedicated to my children Audrey, Alvin and Austin.

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## **LIST OF ABBREVIATIONS**

A D H E R	-	Adherence
A I S	-	Accounting Information System
C E	-	Capital Employed
F A M	-	Fixed Assets Management
F I N	-	Finance
F I N S A P	-	Financial Sector Adjustment Programme
F R A	-	Financial Report Analysis
F U S M E D	-	Fund for Small and Medium Enterprise
G E D C	-	Ghana Entrepreneur Development Commission
G D P	-	Gross Domestic Product
G R A T I S	-	Ghana Appropriate Technology Industrial Service Programme
G T Z	-	Deutsche Gesellschaft fuer Technische
I N V S T	-	Investment
I R R	-	Internal Rate of Return
S M E s	-	Small and Medium-Sized Enterprises
M A S L O C	-	Microfinance and Small Loans Centre
M I R R	-	Modernized Internal Rate of Return
M N C	-	Multinational Corporations
N B S S I	-	National Board for Small-Scale Industries
N G O	-	Non-Governmental Organization
N P B I T	-	Net Profit before Interest and Tax
N P V	-	Net Present Value
N S E	-	Nairobi Stock Exchange

OLS	-	Ordinary Least Square
PROF	-	Profitability of SMEs
ROA	-	Return on Assets
ROCE	-	Return on Capital Employed
ROE	-	Return on Equity
ROTE	-	The Return on Tangible Equity
US	-	United States
USA	-	United States of America
WCM	-	Working Capital Management

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

The importance of Small and Medium-Sized Entities (SMEs) to national development have been extensively suggested in literature (O'Neill 1993; Storey, 1994; Fisher & Reuber, 2000; Beck et al. 2004; Khan & Jawaid, 2004; Snodgrass & Winter, 2004). The Freedman study conducted in the United Kingdom confirms that a proportionate larger number of registered companies across the globe are SMEs and their contributions to economic growth and prosperity is quite significant. In Japan, SMEs have pronounced dominance, constituting about 99 percent of corporations in Japan (the Information Dissemination and Policy Promotion Division of Japan's Patent Office, 2009). In India, SMEs contribution to GDP is about Twenty percent, employing about 60 million people and producing nearly 8,000 products for both the local and international markets. Also in South Africa, SMEs constitutes about 91 percent of formal business entities, provide 61 percent employment and account for between 52 to 57 percent of South Africa's GDP (Abor & Quartey, 2010).

The story is not different in low income countries such as Ghana, predictably so because of their inability to attract investments in large scale and heavy capital demanding ventures. This is as a result of low capital formation coupled with the reluctance of foreign investors and Multinational Corporations (NMCs) to invest in underdeveloped economies, due largely to the unattractive business environments of these economies. The result is that, the size of businesses in many low income countries is limited to micro to medium in scale. In Uganda, SMEs account for 90 percent of Uganda's non farming workforce. (Ugandan Investment Authority Report,

2008) cited in (Abanis et al, 2013). A total estimate of 90 percent of businesses in Ghana are micro, small and medium scaled (Ghana Banking Survey, 2013) and contributed 70 percent to GDP in 2012 (Abor & Quartey, 2010).

In spite of the invaluable contributions of SMEs, they are fraught with a myriad of challenges threatening the very fabric of their survival. It is argued that a larger number of SMEs do not survive beyond their fifth anniversary (Westhead & Matlay, 2005). This is supported by a study undertaken by Boachie et al (2005) which showed that 60% of SMEs in Ghana fail within the first five years of existence. A number of reasons have been suggested as accounting for the non-performance of SMEs. (Levy, 1993; Lader, 1996; Simpson & Taylor, 2002; Abor & Biekpe, 2007; Cohen et al, 2007; BICA, 2013; Musa & Ibrahim, 2014; Adebisi & Gbegi, 2013).

Following some of the recommendations made by some of these scholars, the Governments of Ghana have over the years instituted programmes, policies and institutions to encourage, support and to help sustain SMEs in Ghana. Unfortunately, a large number of SMEs in Ghana still under perform.

As part of scholarly efforts to identify the causes of and solutions to the non-performance of SMEs, this study is aimed at developing a coherent profitability model that will serve as a guide for improving the performances of SMEs in Ghana, using Tamale as the study area. The study looks at the multiplicative impact of financial management constructs on SMEs' profitability in Ghana. The financial management constructs for the study are Working Capital Management, Financing, Investing, Financial Reporting and Accounting Information Systems.

## **1.2 Statement of the problem**

SMEs contribute significantly to the economic growth of Ghana. It accounts for about 85percent of manufacturing employment (Aryeetey, 2001). In 2012, SMEs contributed 70 percent to Ghana's GDP (Abor & Quartey, 2010). The sector continues to contribute significantly to the country's GDP, tax revenue, income generation, provision of goods and services, foreign exchange earnings and manufacturing exports. This situation has made SMEs a key driver of the Ghanaian economy. Therefore, it would be an understatement to say that the ability of SMEs to improve their profitability and performance in general is critical to the development of Ghana. As Fisher & Reuber (2000) aptly puts it: it is in the interest of the public for SMEs to thrive. Unfortunately, a large number of SMEs in Ghana do not survive. A study by Boachie et al (2005) showed that 60 percent of SMEs in Ghana collapse within the five years of commencement of operations. This is undoubtedly a worrying phenomenon.

In a bid to sustain SMEs in Ghana, a number of institutions and programmes have been established over the years to promote, encourage and sustain small businesses in Ghana. Prominent among these include, the Ghana Enterprise Development Commission (GEDC), National Board for Small Scale Industries (NBSSI), Ghana Appropriate Technology Industrial Service (GRATIS), the Financial Sector Adjustment Programme (FINSAP), Fund for Small and Medium Enterprises Development (FUSMED), Deutsche GesellschaftFuer Technische Zusammenarbeit (GTZ), Busac Fund, Microfinance and Small Loans Centre (MASLOC) and the establishment of Business Advisory Centres at the MMDAs.

These notwithstanding, SMEs in Ghana are still faced with operational challenges; threatening their survival. A number of reasons have been suggested as affecting the performance of SMEs in Ghana. These include poor quality management practices (Appiah et al, 2008); ineffective corporate governance structures (Abor & Biekpe, 2007); inadequate funding (Levy, 1993; Lader, 1996; BICA, 2013); and poor record keeping (Musa & Ibrahim, 2014). Others identified multiple taxation (Adebisi & Gbegi, 2013); lack of market (Simpson & Taylor, 2002);and intellectual capital challenges (Cohen et al, 2007).

However, a key organisational success factor is sound financial management. Having in place a sound financial management system to efficiently govern the incomes, expenses, assets and liabilities of the organisation is key to organisational performance (Abanis et al 2013). An organisation may have the best quality management practices, a large capital base, a large market share and benefit from low corporate tax rate; but may still risk collapse if it fails to manage its finances efficiently. The additional pressure that is brought to bear on Ghanaian businesses such as high competitive turbulence as a direct consequence of trade liberalisation; and unfavourable macroeconomic variables (inflation, high interest rates, unfavourable terms of trade and high exchange rates), makes it important that firms in Ghana employ the right performance tools to survive. Unfortunately, there appear to be no coherent performance model that would guide profitability improvement of SMEs in Ghana. Consequently, this study is aimed at assessing the impact of financial management constructs on the profitability of SMEs in Ghana, using Tamale as the study area.

### **1.3 Research Objectives**

The main objective of the study is to assess the impact of financial management constructs on the profitability of SMEs in Ghana. Specifically, the study seeks to:

1. Explore the financial management tools employed by SMEs in Tamale;
2. Measure the level of adherence of SMEs to Financial Management Practices;
3. Measure the profitability of SMEs in the Tamale Metropolitan area; and
4. To determine the effects of Financial Management Practices on the profitability of small and medium-Sized entities.
5. Compare the effects of owner-management and non-owner management of business on the profitability of SMEs.

### **1.4 Hypotheses**

In attempt to achieve the study objectives, the study hypothesised that:

1. SMEs in Tamale employ no financial management tools;
2. The level of adherence of SMEs to Financial Management Practices is low;
3. SMEs in the Tamale Metropolitan area are not profitable; and
4. Financial Management Practices have no impact on the Profitability of SMEs in the Tamale Metropolitan area.
5. There is no difference between the effects of owner-management and non-owner management on profitability of SMEs.

### **1.5 Significance of the Study**

This study would help to appreciate the relevance of prudent financial management practices to the profitability and sustainability of SMEs in Ghana. The profitability models can be used as guide for improving the performance of SMEs in Ghana. The

results of the study would indicate the opportunities that can be exploited by SMEs and the possible areas for support and intervention by stakeholders, development partners and government. The study should provide readers interested in establishing an SME understand the factors that influence the performance of SMEs, their competitive characteristics, the impact of sound financial management practices on the profitability of SMEs in addition to appreciating the comparative strengths and inefficiencies among SMEs. Every rational manager's desire is optimum productivity so as to achieve maximum profit for the organisation. However, higher productivity will not result in profit maximisation if the financial resources of the entity are not properly managed through the institution of sound financial management systems. Therefore, the findings of this study would be of relevance to the owners and managers of SMEs to appreciate the key role played by prudent financial management in the performance, viability and sustainability of their businesses.

### **1.6 Scope of the Study**

The research involved exploring and assessing the effect of financial management practices on the profitability of SMEs in the Tamale Metropolitan Area in the Northern Region of Ghana. The study covered all the SMEs (per the researcher's operational definition) within the Tamale Metropolitan Area. Relevant state organisations that were included in the study are the Ghana Revenue Authority and the Tamale Metropolitan Assembly.

### **1.7 Organisation of the Study**

This study is arranged under five chapters. The background information to the study, statement of the research problem, the objectives of the researcher, research hypotheses, significance of the study, scope of the study and organisation to the study

are contained in the first chapter. It also contains the definitions of key concepts used in the research work. Chapter two contains review of relevant literature to the study and the establishment of the theoretical and empirical frame work for the study. The third chapter establishes the methodology used in carrying out the study and the statistical tools used in the analysis of data. The presentation and analysis of both primary and secondary data is carried out in the fourth chapter. The fifth chapter concludes the study where the findings, summary, recommendations, conclusions and limitations of the research are established.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter describes the theoretical foundation of the study and provides a review of literature on the nature of financial management and its impact thereof on profitability. The chapter opens with an overview of theories and concepts of financial management. This is followed by a look at the relationship between financial management practices and profitability. Finally, the chapter concludes with empirical studies on the two variables.

#### **2.2 Overview of financial management**

The term “Finance” is traditionally defined as the study of funds management and how these funds are directed in order to achieve a particular objective of an entity. (Chandra, 2008).Chandra states that the objective of proper financial management is to make the most of returns that associate with reducing of financial risks at the same time. According to Brigham and Ehrhardt (2010), in financial management, it is important to understand the business intentions and financial functions before identifying the major components that constitute the short-term financial management or the working capital management in relation to the day-to-day operations of the business.

The concept of financial management also has to do with the creation of economic wealth, make best use of the share price for investors’ equity, planning and monitoring of the business’s financial assets, growing its profitability and making the most of the rate of returns on equity (Zietlow, Hankin, and Seidner, 2007). In firms,

financial management work well by examining the challenges and prospects of the firm. A critical financial issue confronting firms is the deployment of current assets and current liabilities which are the critical elements of net operational capital. Chandra (2008) maintains that the primary cause of the failure of an enterprise is the poor control and management of working capital internally amongst its components. The implication is that the manager of finance of an enterprise must be alert to the level of working capital changes. A number of theories explain financial management practices. This study however employs two of such theories. These include Residual Equity Theory and The Contingency Theory.

### **2.2.1 The Theory of Residual Equity**

The Residual Equity Theory stipulates that changes in asset assessment, income and in reserved earnings and variations in interest of other equity holders are all replicated in the residual equity of the common shareholders. Kitonga (2013) identified the specific equities as the entitlements of creditors and the equities of preferred stockholders. According to Kitonga, the balance sheet becomes: “Assets minus specific equities are equal to residual equity”. The investment of common investors in the balance sheet should be obtainable distinctly from the equities of preferred stockholders and equity holders precisely.

The aim of this theory is to provide a better financial reporting as a result of good financial management practices. In a successful condition the current value of common stock is reliant primarily upon the anticipation of future dividends. Also, the future financial standing is reliant upon expectations of total receipts minus precise pledged obligations, payments to specific equity holders and necessities for ploughing back. It is therefore important to note that since financial statements are not usually

set on the basis of likely liquidation, the information provided in respect of the residual equity should be useful in forecasting likely future financial standing to common stockholders.

These issues have been summarised by Kitonga as follows:

“In the balance sheet format this is stated as follows: ‘Assets minus liabilities are equal to residual equity’. The assets are assumed to be owned by the proprietor and the liabilities are the proprietor’s obligations. Revenues are increases in proprietorship and expenses are decreases. Thus the net income accrues directly to the owners, that is, it represents an increase in the wealth of the proprietors. The proprietorship is considered to be the net value of the business to the owners. It is a wealth concept” (Kitonga, 2013).

### **2.2.2 The Contingency Theory**

Pike (1986) explained the contingency theory in relation to business management to mean that the efficiency of resource allocation is not simply a matter of adopting complex, theoretically higher investment techniques and procedures but also attention must be given to the fit between the corporate setting and the design and operation of the capital budgeting system. Three characteristics of the corporate setting which are assumed to be related with the design and operation of a firm’s capital budgeting system have been emphasised by Pike.

Pike, according to Kitoga, (2013), identified firm’s organisational characteristics as the first of such aspects. In this regards, Pike argued that large companies are characterised by decentralisation and a more administratively oriented control plan concerning a higher degree of standardisation. Moreover, smaller and less complex

organisations tend to adopt interpersonal and simple control systems. However, Akas, Gordon & Pinches (1985) have a contradictory view and argued that firms will experience more benefits from using complex capital budgeting methods. This idea, according to Kitonga (2013), was based on findings of a study conducted by Sundemin 1980 which found out that the use of sophisticated capital budgeting methods is inversely related to environmental uncertainty (Kitonga, 2013).

Pike (1986) recognised environmental uncertainty as the second feature of firms and argued that the more mutable and random the context of operation is, the less suitable will be the highly bureaucratic, mechanistic capital budgeting arrangements. According to Pike, businesses working in highly indeterminate environments are assumed to benefit from complex investment approaches, mainly in appraising risk. Finally, Pike was concerned about behaviour characteristics of firms. In terms of behaviour characteristics, Pike recognises three characteristics, namely degree of professionalism, the history of the organisation and the management style. According to Kitonga (2013), Pike explained that an administratively-oriented capital budgeting control policy is assumed to be consistent with analytical style of management, a high degree of professional competence and a history of ordinary investment outcomes.

### **2.3 The concept of working capital**

Several interpretations have been given to the term working capital from different field of study such as finance, economics and business. According to Creswell (2003), the term is defined, in accounting and financial statement analysis, as “the firm’s short-term current assets and current liabilities”. Weston and Brigham (2005), also defined working capital as “a firm’s investment in short-term assets, cash, short-term securities, accounts receivables and inventories”.

The excess of current assets over current liabilities is referred to as net working capital (Colquitt, 1999) and it shows the ability of the firm to meet its short term financial obligations (Brealey and Myers, 2002). The idea of working capital can be viewed from two main perspectives: these are the business's investment in short term assets such as cash, accounts receivable, inventory, and other things outlined as current assets on the balance sheet of the firm that are necessary for the normal operation of the business and its investment in long term assets such as plants, machinery, lands, buildings among others.

Mukhopadhyay (2004) maintains that working capital is essential for any business to succeed. Adequate working capital is maintained by businesses for the smooth running of the firm. It is believed that when working capital is inadequate, fixed assets cannot be utilised efficiently and effectively and firms may suffer what is known as liquidation due to low liquidity position (Kavitha, 2007). When firms are not able to meet their debts at maturity it puts them in a bad financial position. This also affects the credit worthiness of the firm. Given the importance of the concept, Choyal (1991) describes it as "life blood" of firms. On the part of Kavitha (2007), this capital is just like the heart of firms and if it becomes weak, the business can barely prosper and survive. A business firm must maintain an adequate level of working capital in order to run its business smoothly for no business can operate successfully without an adequate amount of working capital.

Raising sufficient working capital is an essential requirement for any business start-up. However, raising working capital requirement may be different depending on the type of business the firm is involved in. For example working capital requirement for a sole proprietorship or partnership may differ from a limited liability company. That is, Limited liability companies can acquire working capital through floating of shares and debentures but sole proprietorship and partnerships are not allowed by law. However, operating a small business frequently require financial boost in times of crisis. It is therefore imperative to closely examine the concept of working capital in relation to small businesses. There are a number of options available to firms for acquiring working capital. Jones (2007) outlines these various ways of acquiring working capital.

Jones (2007) identified business cash advance as one of the most common modes of obtaining business finance. The prerequisite business finance is for the business to consent to credit transactions. Another mode of raising working capital is accounts receivables factoring. According to Jones, accounts receivables factoring involves buying and selling of accounts receivables in order to obtain immediate cash or working capital. This eventually increases the cash flow of the business. Accounts receivables factoring helps in acquiring cash for the product or the service rendered. It results in immediate cash inflow without creating any debt or transferring the business ownership. This practice helps in generating cash to fund payrolls, taxes due, increases in inventory, buy new equipment, tools and helps the business to negotiate for discounts due to availability of cash.

Lastly, selling of the business obsolete assets is another way of funding working capital. In situations where the business has variety of obsolete equipment due to

technological advancement can conveniently dispose such equipment to raise immediate cash for the purchase of new ones or turns to other pressing issues affecting the business. The concept of working capital is therefore of major significance to both internal and external analysis because of its close association with the current day to day running of a business.

Management of working capital appears to be crucial both at national and firm levels. Working capital management may be seen as pooling together the financial resources to invest into a particular venture. In recent years banks have placed more restrictions on the flow of bank credit to industries due to the global recession for the purpose of regulating working capital loans. Governments in even the wealthiest nations have had to come up with rescue packages to bail out their financial systems. Governments in their attempts to rescue these institutions, most of which form the back bone of their economies, have developed bail out programs which requires the establishment of working capital committees to evaluate and scrutinise the operations of these companies. These committees were given the mandate to put in place measures to avoid an economic downturn from totally derailing these businesses in the future.

The establishment of working capital management committees has been in existence for the past decade even though not much is heard about it in our part of the world. From 1979 to 1983, the reserve bank of India appointed various committees to examine the need for revision of the inventory norms, cash credit systems, prevailing style of bank credit and consider the effectiveness of the monitoring and follow up systems adopted by banks (Kumar, 2001), in order to ensure effective working capital management and ease cash flow within the banking sector of India.

The challenge of working capital management entails the difficulty of decision making regarding investment in various current assets with an objective of maintaining the liquidity of funds of the firm to meet its obligations promptly and efficiently. The prime focus of a working capital management committee is to decide upon the optimal level of investment in various current assets, optimal mix of short term funds in relation to long term capital and identify the suitable means of short term financing (Lorenzo, 2010). The management of working capital is unfinished without an over-all look at the management of current liabilities. Determining the appropriate levels of current assets and current liabilities in working capital management involves fundamental decisions regarding firm's liquidity and the composition of a firm's debts, according to Lorenzo.

The management of this short term asset is crucial because of its effects on the profitability and the subsequent value of the firm (Smith, 1980). According to (Blinder & Manccini, 1991), maintaining high inventory levels has a number of advantages such as reducing the cost of possible interruptions in the production process, or of loss of business due to the scarcity of products, reducing supply costs, and protecting against price fluctuations, among other advantages. Blinder and Manccini however warned that inventory levels should not be too high so as to thigh up resources.

Empirically, Shin and Soenen (1998) found out that reducing the cash conversion cycle to a reasonable extent increases the profitability of firms in their analysis of cash conversion cycle and profitability for a sample of firms listed on the US stock exchange during the period 1974-1994. Deloof (2003) also analysed a sample of large Belgian firms during the period 1992-1996 and confirmed that Belgian firms can

enhance their profitability by decreasing the number of days accounts receivable are outstanding and reducing inventories.

## **2.4 Financial Reporting and Analysis**

In business, financial reporting refers to the utilisation of financial reports and related documents to expedite managerial decisions, kinds of financial statements in use, statements useful to particular forms of business and methods of financial analysis used (McMahon, 1991). The literature on financial reporting and analysis and firm profitability is scant.

Ray and Hutchinson (1983) explored financial reporting and analysis practices in small growth enterprises and reported on financing and financial control practices in small, rapidly growing enterprises up to and following listing on the London Stock Exchange. The study examined the financial records of 33 "super growth" enterprises for 10 years preceding their listing, and for 4 years after the listing. For the purpose of comparison and benchmarking, the study also examined a matched sample of small enterprises that did not grow and achieve listing. The study found out that there was some propensity in the direction of more frequent financial reporting as the growth enterprises developed and became public companies. Nevertheless, the provision of historical financial reports did not vary markedly between the advanced businesses and a matched sample of non-growth enterprises.

Another study of importance was carried out by Davies in 1994. The study determined the association between financial reporting and financial analysis. It went further and examined significant associations between reporting and financial analysis on one hand and achieved growth rate and financial performance on the other hand.

Davies (1994), concludes that financially performing firms adopted sound reporting and financial analysis practices.

## **2.5 Accounting information system**

This segment explores the accounting system practices and the use of computer in accounting. The term “Accounting information system” refers to the nature and purpose of financial records, bookkeeping, cost accounting, and use of computers in financial record keeping and financial management, according to Kieu (2004). In the view of Orwel (2009), “accounting information system is a system of records usually computer-based, which combines accounting principles and concepts with the benefits of an information system and which is used to analyse and record business transactions for the purpose of preparing financial statements and providing accounting data to its users. Accounting information system assists in the analysis of accounting information provided by the financial statements”.

Romney (2009) argues that the biggest benefit of computer-based book-keeping information systems is that they mechanise and rationalise reporting. Thus the role of accounting information system in the development of enterprises cannot be overstated. Studies in the 1990’s such as Gul (1991), Chen (1993), Palmer (1994), and Gorton (1999) showed that accounting information system has a vital role in the growth of enterprises. The role of accounting information in business policy preparation of small- and medium- sized businesses was also studied by Tourna and Germanos in Greece. The study established that the use of accounting information, was the most important factor that expedited the design and carrying out of their strategic plans (Tourna & Germanos, 2000).The respondents (owner managers) explained that accounting information system was very helpful when planning

strategically with emphasis on activities such as profits, sales, costs, production outcomes and customer service.

It is also argued that financial accounting has remained the principal source of gen for internal administration in SMEs (McMahon, 2001). As early as 1982, Raymond and Magnenat-Thalmann studied the use of computer software applications in accounting. The study employed a sample of 129 small manufacturing businesses in a survey. Raymond alone in 1985 carried out a similar study in the province of Quebec. Similarly, Chen (1993) also explored the use of computer software in accounting and found that the utilisation of computer software was widespread in the small businesses studied. In conclusion, it is evident that the use of accounting information system in SMEs has long attracted the attention of several academics. It is also obvious that the previous studies described the characteristics of accounting information system practices but the empirical evidence of links between accounting information system practices and profitability of SMEs has not been examined.

## **2.6 Capital budgeting management/investment decisions**

Capital budgeting decisions have to do with committing capitals or funds for a time period extended beyond one year and may have an effect on a firm's strategic position within its industry (Fabozzi, 2009). The process of capital budgeting includes the initial investment screening and selection through the post completion audit of the project, according to Fabozzi. To determine if the benefits of an investment offset its costs, it is required that management first estimate the future cash flows related to the investment. The assessment of a project needs estimating not only the initial expenditure, but also the probable cash flows at the end of the project. Brigham and Ehrhardt (2008) maintained that this capital planning decisions are crucial to the

financial well-being of firms and that they are among the most vital decisions that managements of firms must make.

Given that capital budgeting decisions is very crucial to the growth and survival of businesses, it is important that decision-makers comprehend how to appraise projects appropriately so that they can make appropriate decisions concerning which projects to agree to take and which projects to discard. Brigham 1992, cited in Asuquo et al. (n. d), submitted that capital budgeting might be more vital to a smaller business than its larger matching part because of the lack of access to the public markets for funding.

Klammer (1973) studied the association between complex capital budgeting approaches and financial performance in US. The study established that, despite the increasing embracing of complex capital budgeting systems, there was no consistent substantial relationship between financial performance and capital budgeting practices. However Moore and Reichert (1989) in a similar study found out that firms adopting sophisticated capital budgeting techniques had better than average firm financial performance.

## **2.7 Fixed Asset Management**

Capital equipment is typically obtained at irregular intervals. It is also used up gradually in the production process, rather than as a part of the end product. On account of the comparatively long life time of equipment, it could take a very long period for it to be replaced and, some time at the time of replacement, old equipment could become technologically outmoded. Moreover the purchase of capital assets can most certainly exert an effect on an organisation's competitive advantage over the long term. Due to the fact that capital equipment involves large spending and non-

recurring outlay. Thus the purchase of capital equipment usually requires a relatively large capital outlay and may have some financial consequences.

This decision can therefore be considered as an investment which is financed from long-term, rather than from working capital. On this account, it is imperative to consider not only the purchase price of capital equipment, but also the total cost of ownership (Hugo et al., 2006). According to Hugo and others, if the appropriate purchasing decisions are made, capital equipment generates profits for the organisation whereas incorrect choices may have calamitous results for the business, since such equipment may not be sold over the short term. On this account, Burt, Dobler and Starling (Kitonga, 2013) advised that top management should consider the procurement of capital equipment with care.

## **2.8 Financing**

Financing decision is one of the critical managerial decisions that can greatly influence the growth and survival of firms. This follows the general believe that “many of the factors that contribute to business failure can be addressed using strategies and financial decisions that drive growth and the achievement of organizational objectives” (Makau & Kosimbei, 2014). According to Momba and Nyanumba (2013), the finance issue is the key basis for financial distress. Financing decisions can give rise to a particular capital structure and sub-optimal financing decision can result in business failure (Mwangi, Makau & Kosimbei, 2014). Given that all financing decisions aim at maximising wealth, it stands to reason that the immediate way of measuring the quality of financing decision is to assess the effects of such decisions on the performance of the firm.

This study argues that financial leverage which refers to the proportion of debt in the capital structure can, in the long run influence managerial decisions of firms. Capital structure has been well explained as a vital parameter from financial and economics point of view since it is connected with a firm's ability to meet the demands of various stakeholders (Jensen, 1986; Mwangi et al, 2014). Two broad sources of funding are available to firms. Businesses can assess funds from either internal or external sources. The internal sources of funds include reserved incomes while external sources include loans from financial establishments, trade credits, issuance of loan stock, and issuance of equity shares, according to Mwangi and others. These authors believed that the "creation of a capital structure, therefore, can influence the governance structure of a firm which, in turn, may influence the ability of a firm to make strategic choices" (Mwangi et al., 2014). Funding decisions which results into a given capital structure give rise to one category of decisions of managements.

Against these backgrounds, one can imagine the necessity to assess the influence of financing decisions on profitability of firms, especially SMEs. In one of such studies, Mwangi and others (2014) found out that financial leverage had significant negative relationship with firm performance as measured by return on assets (ROA) and return on equity (ROE).

Kieu (2001) provided a profitability model of SME in which firm success was established to be related to financial management practices and financial features. In this model according to Kieu, with the exception of debt ratios, all other variables including current ratio, total asset turnover, working capital management and short-term planning practices, fixed asset management and long-term planning practices,

and financial and accounting information systems were found to be significantly related to SME profitability (Kieu, 2001).

## **2.9 Definition and Measurement of Profitability**

Profitability is one of the most difficult attributes of SMEs to conceptualise and measure (Ross, Westerfield and Jaffe, 1999). Generally, the difference between revenues and costs is considered as profit in accounting. This measurement of profitability however ignores risk. From economics point of view, “a firm is profitable only if its profitability is greater than investors can achieve independently in the capital market” (Ross et al., 1999). On this basis, Ross and others propose some means to quantify profitability. These are: profit margin or return on sales, return on assets, and return on equity. According to Ross et al. (1999),

Profit margins are computed by dividing profits by total operating revenue and thus express profits as a percentage of total operating revenue. Return on assets is the ratio of income to average total assets, both before tax and after tax, and measures managerial performance. Return on equity is defined as net income divided by average stockholders' equity, and shows profit available for stockholders.

Another and a more commonly used indicator is the Return on Capital Employed (ROCE). The ratio is an accounting ratio used in finance, valuation, and accounting. The ROCE is computed as net profit before interest and tax (NPBIT) divided by capital employed (CE). The proportion is used to demonstrate the value the business gains from its liabilities. The return on capital employed is a better measurement of profitability than return on equity for instance because ROCE shows how well a company is using both its equity and debt to generate returns.

## **2.10 What are Small and Medium-Sized Entities (SMEs)?**

This section reviews the definitions of SMEs. The term Small Enterprise defies a single definition (Scarborough & Zimmerer, 1984; Back, 1985; Meredith, 1993). Many terms are used to refer to SME in both theory and in practice some of which are “small business”, “small enterprise”, “small firm”, “small company”, “small and medium enterprise”, and “small and medium-sized enterprise”, according to Nguyen (2001). A slight different may exist among these terms however the distinction is not the purpose of this study. Hence these terms are used interchangeably in this study.

Although there are several definitions of small and medium enterprises, descriptions are essentially categorised into two kinds: those based on qualitative features and those based on quantitative features of small and medium enterprises (Back, 1985; Nguyen, 2001).

### **2.10.1 Qualitative definitions**

Qualitatively, SMEs are defined based on their qualitative features. The qualitative definition has an advantage of attempting to capture the vital nature of small firms. These definitions however have a problem of varying from country to country and from industry to industry. According to Nguyen (2001), in the USA for instance, grounded on four key issues recognised by the 1947 Committee of Economic Development, the authorities describe a small business as the one which:

“has independent management; has capital supplied and ownership held by an individual or small group; has an area of operation which is localised in one community; and is small in relation to other firms in the industry. The Small Business Act of 1953 of USA also defines a small business as “one which is independently owned and operated and not dominant in its field of operation”.

In the UK, the qualitative descriptions accepted by the Bolton Committee (1971) acknowledged three major features of SMEs. The committee maintained that:

“Firstly, in economic terms, a small firm is one that has a relatively small share of the market, and is unable to influence the price or quantity of goods or services. Secondly, an essential characteristic of a small firm is that it is managed by its owner or part owner in a personalised way, and not through the medium of a formal management structure. Thirdly, it is also independent in the sense that it does not form part of a larger enterprise and that the owner-managers should be free from outside control in making their principal decisions”.

It could be observed that a small firm is one that is exclusively owned and managed by a person, or individuals in a partnership or by a proprietorship company and which has comparatively small share of the market in which it competes; is managed by oneself; is not part of a larger business or enterprise.

### **2.10.2 Quantitative definitions**

Quantitatively, SMEs are defined based on quantifiable features some of which may be hard to quantify. The size of an enterprise can be measured in several ways, some of which include number of employees, sales income, total assets, and net worth, according to Nguyen (2001). However the number of employee is the most widely used measure of size in qualitative definitions of small enterprise around the world, although sales income and total assets are also used (McMahon et al., 1993; Nguyen, 2001). Regarding the number of employee as a measure of firm size, 500 employees is used as the cut-off between small and other businesses in the USA (Back, 1985, p.4) while most researches in Australia have assumed a firm is small, if it employs less than 100 employees, according to Back.

The quantitative definitions of small firms also have its setbacks. Following Nguyen (2001), these definitions are very significant for they offer the bases for the execution of research and gathering statistical information. These definitions also offer numerical standards for the relative analysis between SMEs in one country and those in another country. However the quantifiable features of small businesses differ from industry to industry and from country to country. For instance, a business that is considered small in one industry such as cement manufacture may be considered as large in other industries such as hospitality or education. This study considered a business as small or medium if the employees are less than 100.

### **2.11 Empirical Review**

This section concerns itself with empirical studies related to the variables under investigation. Though empirical work in the field is scant, a few studies have been examined. Klammer (1973) in his research on the association between sophisticated capital budgeting methods and financial performance in US, found out that, despite the increasing acceptance of sophisticated capital budgeting methods, there was no consistent significant association between financial performance and capital budgeting methods. Moore and Reichert (1989) in their multivariate study of firm performance and use of modern analytical tools and financial techniques study in 500 firms in US, showed that firms adopting sophisticated capital budgeting practises had better than usual firm financial performance.

Nguyen (2001) also assessed the connection between financial management practices and profitability of SMEs in Vietnam. Nguyen focused on various financial management practices and financial characteristics and demonstrated the concurrent impact of financial management practices and financial characteristics on SME

profitability. The study further examined fixed (non-current) asset management practices of a sample of 99 trading and 51 manufacturing SMEs. The result was that approximately 80 percent of SMEs continuously or often assess capital projects before taking choices of investment and review the efficiency of utilising fixed assets after acquisitions. The study also found out that some 87 percent of SMEs reported use payback period methods in capital budgeting; whereas only 27 percent of the SMEs use the Net Present Value (NPV). According to Nguyen, these findings exposed the fact that SMEs highly regarded fixed asset management although their knowledge of financial management techniques was not outstanding” (Nguyen, 2001).

In Kenya, Mundu (1997) sought to review selected financial management practices adopted by small enterprises. The study found out that 66 percent of the respondents did not undertake cash budgeting, 70 percent of the business owners kept surplus cash with themselves and over 56 percent of the business owners were handling cash personally as the security to their money. Furthermore, more than 70 percent of the respondents sold on credit to those customers believed to be known by the business owner. Overdue accounts were followed up through reminders either by personal visits or telephone calls or both; 70 percent of the businesses charged prices on the basis of full cost plus margin which may be a mentally calculated price or selling at what the competitors are charging and only 16 percent of them kept cost control reports. Over 80 percent of the businesses had prepared a business plan with the most common reason being to get financing. These results led to the conclusion that the survival of SMEs heavily depended on the good practice of formal financial management. Similar studies explained above on the topic have reported a negative relationship of the capital budgeting methods and financial performance.

The management of finance helps to improve the profitability position of firms with the help of strong financial control devices such as budgetary control, ratio analysis and cost volume profit analysis (Paramasivan et al., 2009). Gabrielsson, Sasi and Darling (2004) brought to light the fact that finance strategy selections and finance management capabilities are shown to influence the advancement of rapidly growing SMEs along the globalisation process. McMahon and Holmes (1991) studied financial management practices of small firms and pointed out the fact that “financial management is crucial to the profitability, survival and well-being of small enterprises”. In addition, Kieu (2004) also conducted a study on the financial management practices and profitability of small and medium-sized enterprises and indicated that SME profitability is completely linked to the efficiency of principal components of financial management practices. The study concluded that the more efficient financial management practices adopted by an SME, the higher the profitability. By raising the efficiency of financial management practices, SMEs can improve their profitability (Kieu, 2004).

## CHAPTER THREE

### METHODOLOGY

#### 3.1 Introduction

This study seeks to empirically assess the impact of financial management constructs on the profitability of SMEs in Ghana. This chapter focuses on the methodology employed and specifically includes the research design, brief overview of the study area (Tamale), sample and sampling procedure, data collection instrument and procedure, and the analytical framework that were used in order to achieve the objective of the study.

#### 3.2 Study Design

The research is typically a cross sectional survey and is both quantitative and qualitative in nature.

#### 3.3 Sample and sampling procedure

Tamale has about 1318 SMEs according to the Northern Regional Office of the Ghana Revenue Authority. Procedures for determining sample size for continuous variables using Cochran's (1977) formulas was followed as shown below. The sample size is given as:

$$n_0 = \frac{t^2 * s^2}{d^2} = \frac{(1.96)^2 * (1.10)^2}{(0.21)^2} = 105 \quad (1)$$

Where t = value for selected alpha level of .025 in each tail = 1.96

s = estimate of standard deviation in the population = 1.10

d = acceptable margin of error for mean being estimated = .21.

Therefore, for a population of 1318, the required sample size is 105. However, since this sample size exceeds 5 percent of the population ( $1318 \cdot .05 = 65.9$ ), Cochran's (1977) correction formula should be used to calculate the final sample size. These calculations are as follows:

$$n_1 = \frac{n_0}{1 + \frac{n_0}{pop}} \quad (2)$$

Where  $n_1$  is the final sample size,  $n_0$  is the sample size calculated at the first stage while  $pop$  is the population size.

$$n_1 = \frac{105}{1 + \frac{105}{1318}} = 97.312 = 97 \quad (3)$$

Therefore the minimum sample size for the study is 97 SMEs. However the researcher increased the sample size to 400, representing 30.35 percent of the population. This is deemed large enough to enable meaningful conclusions on the population. Quota was given to each sector, as classified by the Ghana Revenue Authority. Individual SMEs were selected using random sampling. The distribution is illustrated in Table 1.

**Table 3.1: Sample distribution**

<b>Sector</b>	<b>Population</b>	<b>Sample</b>	<b>Percentage</b>
Agriculture	20	15	75.00%
Manufacturing	41	30	73.17%
Electric,gas, steam & air conditioning	4	0	0.00%
Water and waste management	5	0	0.00%
Construction	430	110	23.26%
Wholesale and retail	489	110	22.49%
Transport and storage	2	0	0.00%
Accommodation and food services	94	40	42.55%
Information and communication	16	4	25.00%
Finance and insurance	32	20	62.50%
Professional services	48	15	31.25%
Education	65	40	61.54%
Parks, entertainment & recreation	16	6	67.50%
Human health and social activities	30	10	33.33%
Others	26	0	0.00%
<b>Total</b>	<b>1318</b>	<b>400</b>	<b>30.35%</b>

**Source: Ghana Revenue Authority, Northern Regional Office**

### **3.4 Measurement of variables**

Profitability of SMEs (*PROF*) which is the dependent variable in this study was captured from the financial statements of the SMEs. It measures the profitability of SMEs in the year 2014 using the ratio of Return on Capital Employed (ROCE). The ROCE was calculated as net profit before interest and tax (NPBIT) divided by capital employed (CE). Symbolically,

$$ROCE = \frac{NPBIT}{CE} \quad (4)$$

$$\text{Where } CE = TotalAsset - CurrentLiability \quad (5)$$

The ROCE is computed as the net profit before interest and tax (NPBIT) as a ratio of capital employed (CE). The two aspects of this formula are subject to a variety of definitions.

Return on Capital Employed has been chosen for this study following a number of advantages it has over the other indicators of profitability. The ROCE is usually used to demonstrate the value a business gains from its assets and liabilities. Businesses generate value when they are able to generate returns on capital above the weighted average cost of capital. It can therefore fundamentally be used to show how much a firm is obtaining for its assets, or how much it is losing for its liabilities.

The ratio is also normally used to liken the efficiency of capital usage of firms within the same industry. The ROCE is a better measurement of profitability than return on equity for instance because the ROCE shows how well a firm is using both its equity and debt to generate a return. Other advantages of the ROCE lie in its tendency to focus the attention of management on the possible best profits on the available capital; serve as a standard for measuring the efficiency and effectiveness of management in managing the business as a whole and its sub-divisions. The ratio is also able to tie together the many faces of financial planning, sales objectives, cost control and profit goals; and give assessment of administrative results both within and outwardly;

Adherence (*ADHER*) to financial management practices was measured with sets of questions on various management practices using the Likert scoring system consisting of five categories of strongly agree (SA), agree (A), undecided (U), disagree (DA) and strongly disagree (SD). These items are in the Part II of the interview guide. The Likert scoring system weights have been assigned as: 5 for SA, 4 for A, 3 for U, 2 for DA, and 1 for SD.

For taking definite decisions, a grand mean and standard deviation were calculated for adherence index after the natural log was taken to smoothen the variables. Given the mean and standard deviation 4.50 and 0.311 respectively all respondents were divided into three categories on the basis of mean and standard deviation scores to give another variable, adherence categories(*ADHERcat*) as:

<i>ADHERcat</i>	Adherence Score
High	more than 4.81
Moderate	4.19to 4.81
Low	less than 4.19

Thus SMEs were classified as low, moderate and high adherers using the mean and standard deviation of adherence index in this way. In the first place, an SME with index one standard deviation above the mean is considered a high adherer. Two, an SME with index one standard deviation below the mean is considered a low adherer. Lastly, an SME with index less than one standard deviation above the mean or less than one standard deviation below the mean is a moderate adherer.

To identify the influence of the individual financial management practices (part II of the instrument) on profitability, the score was computed for the set of questions that measure each practice.

**Table 3.2: Measurement of variables**

<b>Variable</b>	<b>Description</b>	<b>Measurement</b>
PROF	Profitability of SMEs in 2014	Ratio (ROCE)
WCM	Working capital management	Indices
FAM	Fixed assets management	Indices
AIS	Accounting information system	Indices
FRA	Financial reporting analysis	Indices
INVST	Investment	Indices
FIN	Financing	Indices
ADHER	Adherence to financial management principles	Indices
ADHERCat	Adherence categories	0 = low 1 = moderate 3 = high
AGE	Age of SMEs	Years
Edu	Year of education of manager	Years
Owner_ger	Owner manager	1 = Owner manager 0 = otherwise

**Source: Author's construct, 2015**

The specific financial management practices examined which form the independent variables of the study are Working Capital Management (*WCM*), Fixed Assets Management (*FAM*), Investment (*INVST*), Financing (*FIN*), Accounting Information System (*AIS*), and Financial Report Analysis (*FRA*). The measurement of the variables is summarised in Table 3.1.

### **3.5 The Instrument for data collection**

The next logical step was selection of the instrument to measure the variables of this study. After having considered merits and demerits of various instruments, standardised interview guide emerged to be the most viable method due to the following advantages: Firstly, its validity and reliability. Secondly, it aptly serves the

purpose of this study. Finally, the questions involved some technicalities that needed to be explained due to the level of literacy of some of the respondents.

The interview guide was designed in line with the thorough literature review done by the researcher. The instrument has three parts: I, II and III. Part I elicited information on background of the SMEs, part II sought information on financial management practices and part III has to do with the profitability variable of the SMEs where profitability indicators were generated.

### **3.6 Data and Data collection procedure**

The study used primary data which was collected using a well-designed interview guide. The data was collected with the help of trained research assistants under the supervision of the researcher. The research assistants, who were chosen based on their educational and research background, were taken through the process and mechanism of conducting interviews so as to obtain the right response from the respondents in order to achieve the objective of the study.

After the preparation of the instrument, a pre-test was carried out in a similar district in the region. The pre-test was done to be certain that the research instrument was appropriate and understandable. Also it was to ensure the validity, reliability and unbiasedness of the data to be collected. The pre-test involved ten (10) SMEs. The test exposed some problems with certain questions which made some questions to be reframed and others taken out because they were irrelevant. Data from the pre-test was also used to estimate the parameters of the population so as to select appropriate sample size for the study.

### 3.7 Analytical Framework

A multivariate linear regression model was used for the analysis of the data. The empirical equation estimated was given as

$$PROF_i = \beta_0 + \beta_1 WCM_i + \beta_2 FAM_i + \beta_3 AIS_i + \beta_4 FRA_i + \beta_5 INVST_i + \beta_6 FIN_i + \mu_i$$

(6)

Where *WCM* is working capital management, *FAM* is fixed assets management, *AIS* is accounting information system, *FRA* is financial reporting analysis, *INVST* is Investment, and *FIN* is financing. The estimation was done using STATA version 13.

### 3.8 Ethical considerations

Permission was sought from the participants before the conduct of the study. This was done through sending of introductory letters to the management of the selected SMEs and their approval received before the commencement of the data collection. The researcher also made telephone calls and prior visits to management so that data gathering periods were scheduled at convenient hours in order not to unduly interrupt their work schedules. For the sake of anonymity, no names or any identifiable information from respondents were taken so as to prevent possible victimization. The respondents were informed that their participation will be voluntary and as such they could opt out at any stage of the research process.

### 3.9 Brief overview of Tamale

Tamale is officially known as Tamale Metropolitan District. It is the capital town of the Northern Region of Ghana. The town is the third city of Ghana and second land size. Tamale has a population of about 371,351 according to the 2010 population census (GSS, 2012) and this makes the town the third largest settlement in Ghana

(Mongabay, 2015) and the fastest growing city in West Africa (Ziem, 2013). Tamale is situated 600 kilometres north of Accra.



**Figure 3.1: Tamale in the northern region of Ghana**

Given the central location of Tamale (see figure 3.1), the town serves as a centre for all administrative and commercial events in the Northern Region. Tamale plays host to regional divisions of financial establishments and a substantial number of international non-governmental organisations. In the last few years, Tamale has witnessed significant transformation and development. The new dimension of the development in the area is the rush by various businesses to open branches in the area. For instance the hospitality and banking industries have grown significantly with new banks, hotels and guest houses built around the town.

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSION**

#### **4.1 Introduction**

The purpose of this study is to investigate the relationship between adherence to financial management practices and profitability of SMEs in the Tamale Metropolitan area of the Northern Region of Ghana. This chapter of the study presents the empirical analysis of practices and profitability of SMEs. Pearson's correlation coefficient and Ordinary Least Square estimates were used in the analysis of this research. The analysis involves 232 SMEs which have been in operation at least two years preceding the study.

#### **4.2 Characteristics of SMEs and respondents**

This section describes the distribution of the various characteristic variables of the SMEs including the dependent variable (profitability) and the various financial management practices that have been hypothesised to influence the dependent variable in this study.

##### **4.2.1 Sectorial Distribution of SMEs**

Table 4.1 illustrates the sectorial distribution of the firms. There were 232 SMEs that have information on the variables of interest. Out of this, 26 SMEs representing 11.21 percent belong to manufacturing businesses while 15 of them which account for 6.47 percent were financial institutions. The study also involves 35 each of hospitality and educational institutions accounting for 15.09 percent of the sample in each case.

**Table 4.1: Sectorial distribution of SMEs**

<b>Sector of SME</b>	<b>Frequency</b>	<b>Percent</b>
Manufacturing	26	11.21
Finance and insurance	15	6.47
Hospitality	35	15.09
Education	35	15.09
Agriculture	12	5.17
Wholesale & retail	58	25.00
Construction	30	12.93
Information and communication	3	1.29
Professional services	10	4.31
Human health	8	3.45
Total	232	100.0

**Source: Field work, 2015**

From table 4.1, Twelve (12) of the SMEs which accounted for 5.17 percent were also into agriculture while as many as 30 representing 12.93 percent are construction firms. There were also 58 retail firms presenting 25.00 percent while information and communication firms were 3 and accounted for 1.29 percent. The remaining were 10 professional service firms and 8 human health firms representing 4.31 percent and 3.45 percent respectively.

#### 4.2.2 Level of Education of Manager

Table 4.2 describes the educational level of the managers of firms used in the study.

**Table 4.2: Managers' highest level of education**

<b>Level of education</b>	<b>Frequency</b>	<b>Percent</b>
No formal education	0.00	0.00
Basic	20	8.62
Secondary	26	11.21
Diploma	46	19.83
First Degree	120	62.9
Postgraduate	20	8.62
Total	232	100.0

**Source: Field work, 2015**

From table 4.2, majority, 120 (62.9%), of the managers had a first degree in different areas of studies. The results also suggest all managers acquired at least basic education. There were 20 each of basic and postgraduate managers constituting 8.62 percent of the total managers. Twenty six (26) managers had secondary education while the remaining 46 managers representing 19.83 percent were diplomats.

### 4.2.3 Position of Respondents

The study was also interested in the position of respondents so as to ensure the reliability of the information sought. Table 4.3 shows the position of respondents in the firms studied. Out of the 232 respondents, 48 of them constituting 20.7 percent are owners of the firms studied while 44 (19.0%) were managers. The study also involves 32 accountants who constitute about 13.8 percent of the respondents.

**Table 4.3: Position of respondents**

<b>Position</b>	<b>Frequency</b>	<b>Percent</b>
Owner	48	20.7
Manager	44	19.0
Accountant	32	13.8
Others	108	46.6
Total	232	100.0

**Source: Field work, 2015**

The remaining 108 of the respondents who form about 46.6 percent hold other positions in the organisation.

### 4.2.4 Form of Business

Another characteristic of interest is the form of the businesses investigated. Table 4.4 illustrates the forms of the firms. Table 4.4 shows that most of the SMEs studies were sole proprietorship. Specifically, the study involves 166 sole proprietorship firms and this constitutes 71.6 percent of the 232 firms investigated. There were also 46 (19.83%) partnership firms and the remaining 20 (8.62%) were limited liability companies.

**Table 4.4: Types of firms**

<b>Types of firms</b>	<b>Frequency</b>	<b>Percent</b>
Sole proprietorship	166	71.6
Partnership	46	19.83
Limited liability Companies	20	8.62
Total	232	100.0

**Source: Field work, 2015****4.2.5 Distribution of Managers**

This study was also interested in comparing the performance of owner-managers and non-owner managers of firms. Table 4.5 shows the distribution of managers of the firms studied.

**Table 4.5: Owner-managers and non-owner managers of SMEs**

<b>Manager</b>	<b>Frequency</b>	<b>Percent</b>
Owner manager	106	45.7
Non-owner manager	126	54.3
Total	232	100.0

**Source: Field work, 2015**

The result in Table 4.5 shows that most of the firms studied are managed by non-owners. Non-owners were 126 and represented 54.3 percent of the studied sample. The remaining 106 firms were managed by the owners. Generally SMEs are managed by owners but this result looks otherwise. This is probably because of the large number of schools involved in the study. Most proprietors of private schools employ head teachers or administrators who manage the school on their behalf.

#### 4.2.6 Summary Statistics

Before analysing the relationship between profitability and financial management practices, the distributions of the various variables have been examined in Table 4.6. These variables include profitability, measured by Return on Capital Employed (ROCE), Financial Reporting and Analysis (FRA), Accounting Information System (AIS), financing, investment, Fixed Asset Management (FAM) and Working Capital Management (WCM).

**Table 4.6: Profitability and financial management practices in SMEs**

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
Profitability (%)	232	37.38759	11.2452	10.3	52.46
FRA	232	4.060345	1.087424	1	5
AIS	232	17.46552	4.999448	5	25
Financing	232	10.4569	2.857033	3	15
Investment	232	16.32759	5.537399	5	25
FAM	232	21.63793	5.827828	6	30
WCM	232	24.02586	7.803275	7	35
Adherence	232	93.97414	23.73828	31	133
Age	232	14.12069	8.227454	2	38
Education in years	232	14	2.766528	9	18

**Source: Field work, 2015**

The rest are adherence to financial management practices, education and the age of the business.

Table 4.6 indicates that on average, an SME used in this study is about fourteen (14) years of age and the age of the SMEs ranged from 2 to 38 years. The main variable of interest, profitability, has a minimum value of 10.3 percent and a maximum value of 52.46 percent. The table also suggests that on average, an SME in this study had profitability of 37.39 in the year 2014. The second principal variable, adherence to

financial management practices, has a maximum value of 133 and a minimum value of 31. The average adherence score however stands at 93.97. Years of education recorded a maximum of 18 and minimum of 9 with an average of 14. The implication is that there were managers with master's degree and there were others with only basic education. The mean of 14 suggests that on average, a manager used in this study has gone beyond a senior high school education.

With regards to the specific financial management practices, financial reporting and analysis ranged from 1 to 5 and has an average of 4.06 while accounting information system ranged from 5 to 25 with a mean of 17.47. Financing has a maximum of 15 and a minimum of 3 with an average of 10.46 while investment ranged from 5 to 25 and has a mean score of 16.33. Finally, the table also shows that fixed asset management recorded an average of 5.83 and ranged from 6 to 30 while working capital management ranged from 7 to 35 with a mean of 7.80.

Given that the standard deviations are quite large, the data have been smoothed by taking the natural log of the variables and presented in Table 4.7. This is done to reduce the variance of the variables so as to obtain more efficient estimates.

**Table 4.7: Transformed variables**

<b>Variable</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Min</b>	<b>Max</b>
lnPROF	232	3.560346	.380457	2.333114	3.960051
lnFRA	232	1.344798	.3832863	0	1.609438
lnAIS	232	2.806687	.3549433	1.609438	3.218876
lnFIN	232	2.2976	.3443508	1.098612	2.70805

**Table 4.7 cont'd: Transformed variables**

lnINVEST	232	2.724185	.3929645	1.609438	3.218876
lnFAM	232	3.02561	.3403237	1.791759	3.401197
lnWCM	232	3.105609	.4202562	1.94591	3.555348
lnADHER	232	4.501621	.3114703	3.433987	4.890349
lnAge	232	2.471762	.6241903	.6931472	3.637586
Owner manager	232	.4568966	.4992157	0	1
Edu in years	232	14	2.766528	9	18

**Source: Field work, 2015**

#### 4.2.7 Firm's Adherence to Financial Management Practices

Firm's level of adherence to financial management practices has been captured as the total score on all practices.

**Table 4.8: Firm's level of adherence to financial management practices**

<b>Adherence categories</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cum.</b>
Low	34	14.66	14.66
Moderate	180	77.59	92.24
High	18	7.76	100.00
Total	232	100.00	

**Source: Field work, 2015**

Based on the mean and the standard deviation, SMEs were classified into three categories as low, moderate and high as shown in Table 10. Table 10 suggests that majority (77.59%) of SMEs moderately adhered to financial management practices. In addition, 34 of the SMEs representing 14.66 percent of the sample poorly adhered to financial management practices while 18 of the firms accounting for 7.76 percent highly adhered to financial management practices.

### 4.3 Relationship between profitability and financial management practices

The study analysed relationship between level of adherence to financial management practices and profitability of SMEs using correlation analysis. Karl Pearson's coefficient of correlation has been used for this purpose. In this study, a direct scale has been used to measure both financial management practices and profitability. Higher scores mean high adherence and profitability, while lower scores indicate low level of adherence and profitability.

**Table 4.9: Correlation between profitability and financial management practices of SMEs**

	<b>lnPROF</b>	<b>lnADHER</b>	<b>lnAge</b>	<b>Edu</b>
Log of profitability	1.0000			
lnADHER	0.8798**	1.0000		
lnAge of business	0.6423**	0.5545**	1.0000	
Education of manager	0.5932**	0.6130**	0.3844**	1.0000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Source: Field work, 2015**

There were 232 cases (N) that had scores on both adherence and profitability. The Pearson correlation coefficient was positive ( $r = 0.8798$ ), indicating a strong positive relationship between adherence and profitability. This is because the Pearson correlation coefficient lies between 1.0 and 0.5. That is the more an SME adheres to financial management practices, the higher profit it will generate and vice versa. The coefficient of determination was 77.40 percent indicating that adherence to financial management practices explained 77.40 percent of the variance in profitability of

SMEs. This supports Asuquo et al (2011) who found positive relationships between financial management on SMEs' profitability.

#### **4.4 Effects of financial management practices on profitability of SMEs**

Given that the Pearson correlation coefficient could not explain the causal relationship between profitability and financial management practices, the study proceeded to employ regression to examine the effects of financial management practices on profitability. For the purpose of the regression, the variables of interest were linearized, by taking their natural logs, to smoothen the data. Table 4.10 illustrates the results of a simple Ordinary Least Square (OLS) estimation.

This simple regression analysis was done to estimate the effects of financial management practices on profitability of SMEs holding all other factors constant. This was done using the Ordinary Least Square (OLS) estimator in STATA version 13. The result from Table 4.10 indicates that adherence to financial management practices has positive effects on profitability. Specifically, a one percent (1%) increase in adherence to financial management practices, increases profitability by 1.07 percent all other factors held constant.

The post estimation statistics show that the model was robust. The F statistic of 1171.69 and a  $\text{prob} > F$  of 0.000 indicate that the hypothesis that the coefficients of the predictor is zero is rejected implying that the model is robust. The  $R^2$  value of 0.7740 is high for this kind of regression (cross sectional studies) implying that the model is robust and suggests that 77.40 percent of changes in profitability can be explained by changes in financial management.

**Table 4.10: Simple OLS estimates of adherence to financial management practice**

Robust						
lnPROFCoef.	Std. Err.	t	P>t	[95% Conf. Interval]		
lnADHER	1.074658	0.0313953	34.23	0.000	1.012799	1.136517
_cons	-1.277357	.146354	-8.73	0.000	-1.565723	-.9889914
F (1, 230) = 1171.69			Number of observations = 232			
Prob> F = 0.0000			R-squared = 0.7740			

**Source: Field Survey, 2015**

The implication is that adherence to financial management principles and best practices are a sure way to increase profits.

This result, though necessary, may not be realistic because variables do not behave in isolation (Obeng, 2014). Many variables are interrelated hence the need to control for confounding variables. Therefore to control for other variables, a multiple regression equation was formulated. This includes other variables that have been hypothesised to influence profitability. Table 4.11 shows the effects of financial management in the mist of other factors.

The post estimation statistics show that the model was robust. The F statistic of 360.92 and a prob> F of 0.000 indicate that the hypothesis that all the coefficients of the predictors except the constant is zero is rejected implying that the model is robust.

**Table 4.11: Multiple OLS estimates of adherence to financial management practices**

lnPROF	Robust					
	Coef.	Std. Err.	t	P>t	[95% Conf. Interval]	
lnADHER	.8556616	.0468312	18.27	0.000	.7633801	.9479432
lnAge	.1304206	.0270919	4.81	0.000	.0770357	.1838055
Edu	.0175997	.0202718	0.87	0.386	-.022346	.0575456
Employees	.0229393	.0187942	1.22	0.224	-.014095	.0599737
owner_manager	-.0599245	.0252986	-2.37	0.019	-.109775	-.0100731
_cons	-.6843281	.155198	-4.41	0.000	-.990148	-.3785079
F (1, 230) = 360.92			Number of observations = 232			
Prob> F = 0.0000			R-squared = 0.8180			

**Source: Field Survey, 2015**

The  $R^2$  value of 0.8180 is high and suggests that all the explanatory variables together explain 81.80 percent of the changes in the dependent variable. Specifically, 81.80 percent of the changes in profitability could be explained by all the exogenous variables taken together.

The estimated coefficient for log of adherence to financial management practices is significant in explaining the changes in profitability. It is significant at one (1) percent level and has a positive effect. The positive coefficient for financial management implies that an increase in an SME's adherence to financial management increases the profitability of the firm. More precisely, the coefficient of 0.8556 means that a one

percent (1%) increase in financial management practices, increases profitability by 0.86 percent, all things being equal.

The results also show that owner management of business reduces profitability. The coefficient of - 0.06 suggests that owner management of business has a probability of 0.06 of reducing profitability compared to non-owner management. The age of SMEs is also significant suggesting that older firms are more profitable. This may be described as “economies of experience”.

The post estimation statistics in Table 4.12 show that the model was robust. The F statistic of 230.54 and a probability > F of 0.000 indicate that the hypothesis that all the coefficients of the predictors except the constant is zero is rejected implying that the model is robust. The  $R^2$  value of 0.8119 is high and suggests that all the explanatory variables together explain 81.19 percent of the changes in the dependent variable. Specifically, 81.19 percent of the changes in profitability could be explained by the various financial management practices.

The individual financial management practices have various degrees of effects on profitability. The use of accounting information system seems to have greatest effect on profitability. The results indicate that a one percent increase in the application of accounting information system increases profitability by 0.39 percent. This coefficient is significant at one (1) percent level of significance.

**Table 4.12: Effects of financial management practices on profitability**

lnPROF	Coef.	Robust			[95% Conf.	Interval]
		Std. Err.	t	P>t		
lnFRA	.162626	.0641294	2.54	0.012	.036255	.2889969
lnAIS	.3889194	.0978438	3.97	0.000	.1961119	.5817268
lnFIN	.0475997	.0477314	1.00	0.320	-.0464581	.1416576
lnINVEST	.1551847	.0446778	3.47	0.001	.0671443	.2432252
lnFAM	.1179554	.0857281	1.38	0.170	-.0509772	.2868881
lnWCM	.1788261	.0679481	2.63	0.009	.04493	.3127222
_cons	.8057039	.1428537	5.64	0.000	.5242016	1.087206
F (1, 230) = 230.54		Number of observations = 232				
Prob> F = 0.0000		R-squared = 0.8119				

**Source: Field work, 2015**

This is followed by working capital management. This coefficient is significant at one (1) percent level of significance and has a positive effects on profitability. Specifically, the result indicate that a one percent increase in the adherence to working capital management practices increases profitability by 0.18 percent all other things being equal. This result confirms the work of Deloof (2003). It also supports Peel and Wilson (1996) who found out that efficient working capital management is particularly important for smaller companies.

The next significant financial management practice is financial reporting and analysis. This coefficient is significant at five (5) percent level of significance and has positive

effects on profitability. Specifically, the figure implies that a one percent increase in the adherence to financial reporting and analysis practices increases profitability by 0.16 percent holding all other things constant. Davies (1994) also found significant positive associations between financial reporting practices and achieved growth rate and financial performance.

The final significant financial management practice is the investment decisions. The result indicates that a one percent increase in the adherence to investment practices also increases profitability by 0.16 percent all other things being equal given that the coefficient is positive and significant at one (1) percent level of significance. It important to note that even though financing and fixed asset management are not significant in explaining profitability in this study, the practices have positive relationship with profitability given that their coefficient are positive.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

This final chapter summarizes the major findings of the empirical study undertaken on the relationship between financial management practices and profitability of small and medium scale entities in the Tamale Metropolis of the Northern Region, Ghana. The chapter has four sections including summary of major findings, conclusions, recommendations and study limitations.

#### 5.2 Summary of Major Findings

##### 5.2.1 Key findings

The following are the key findings of the study:

- a. Most of the SMEs studies were sole proprietorship. Specifically, the study involves 166 sole proprietorship firms and this constitutes 71.6 percent of the 232 firms investigated.
- b. Most of the firms were managed by non-owners.
- c. Owner management was found to reduce profitability as compared to non-owner management.
- d. On average, an SME is about fourteen (14) years of age.
- e. The SMEs were on average 37.39 percent profitable in the year 2014.
- f. Majority of SMEs moderately adhered to financial management practices. However 34 of the SMEs representing 14.66 percent poorly adhered to financial management practices while 18 of the firms accounting for 7.76 percent highly adhered to financial management practices.

- g. There is a strong positive relationship between adherence to financial management practices and profitability of SMEs. This was supported by a Pearson correlation coefficient of 0.8798.
- h. The coefficient of determination was 77.40 percent indicating that adherence to financial management practices explained 77.40 percent of the variance in profitability of SMEs.
- i. Adherence to financial management practices has positive effects on profitability. In a simple regression, it was found out that a one percent (1%) increase in adherence to financial management practices, increases profitability by 1.07 percent all other factors held constant.
- j. In a multiple regression, it was found out that a one percent (1%) increase in financial management practices, increases profitability by 0.86 percent, all things being equal.
- k. The use of accounting information system seems to have greatest effect on profitability. A one percent increase in the application of accounting information system increases profitability by 0.39 percent.
- l. A one percent increase in the adherence to working capital management practices increases profitability by 0.18 percent all other things being equal.
- m. A one percent increase in the adherence to financial reporting and analysis practices increases profitability by 0.16 percent holding all other things constant.
- n. A one percent increase in the adherence to investment practices also increases profitability by 0.16 percent all other things being.

- o. Even though financing and fixed asset management are not significant in explaining profitability in this study, the practices have positive relationship with profitability given that their coefficient is positive.

### **5.3 Conclusion**

Small and Medium-Sized Entities are important for national development (O'Neill 1993; Storey, 1994; Fisher & Reuber, 2000; Beck et al. 2004; Khan & Jawaid, 2004; Snodgrass & Winter, 2004). This entities accounts for about 85 percent of manufacturing employment (Aryeetey, 2001) and contribute significantly to the economic growth of Ghana. In spite of the invaluable contributions of SMEs, they are fraught with a myriad of challenges threatening the very fabric of their survival. It is argued that a larger number of SMEs do not survive beyond their fifth anniversary (Westhead & Matlay, 2005).

It is however believed that a key organisational success factor is sound financial management. Abanis et al. (2013) argued that having in place a sound financial management system to efficiently govern the incomes, expenses, assets and liabilities of the organisation is key to organisational performance. This study therefore was conducted to investigate the relationship between adherence to financial management practices and profitability of SMEs in the Tamale Metropolitan area of the Northern Region of Ghana. Specifically, the study sought to:

1. Explore the financial management tools employed by SMEs in Tamale;
2. Measure the level of adherence of SMEs to Financial Management Practices;
3. Measure the profitability of SMEs in the Tamale Metropolitan area; and
4. To determine the effect of Financial Management Practices on the profitability SMEs

5. To compare the effect of owner management and non-owner management on the profitability of SMEs

The research was typically a cross sectional survey and was both quantitative and qualitative in nature. The study used primary data which was collected using a well-designed interview guide. Pearson's correlation, simple regression and multiple linear regressions were used to analyse the data.

Based on the analysis and findings, the study concludes that:

1. The financial management practices employed in the tamale include accounting information system; working capital management; financial reporting and analysis; investment; financing; and fixed asset management. The study therefore rejects the hypothesis that SMEs in the Tamale employ no financial management practices.
2. Majority (77.59%) of SMEs moderately adhered to financial management practices. However 34 of the SMEs representing 14.66 percent poorly adhered to financial management practices while 18 of the firms accounting for 7.76 percent highly adhered to financial management practices. The study therefore rejects the hypothesis that the level of adherence of SMEs to Financial Management Practices is low.
3. Profitability of SMEs ranged from 10.3 percent to 52.46 percent but on average, an SME had a profitability of 37.39 percent in the year 2014. The study therefore rejects the hypothesis that SMEs in the Tamale Metropolitan area are not profitable.
4. Adherence to financial management practices has positive effects on profitability. The study therefore rejects the hypothesis that financial

Management Practices have no impact on the Profitability of SMEs in the Tamale Metropolitan area

5. Owner management have negative effect on profitability of SMEs compared to Non-owner management. Therefore, the hypothesis that there is no difference between the effects of owner-management and non-owner management on profitability of SMEs is rejected.

#### **5.4 Recommendations**

The study strongly recommends higher adherence to financial management practices. Specifically:

SMEs should adopt proper accounting information system by computerising their accounting processes.

SMEs should also strictly abide by working capital management principles.

Proper and appropriate investment and financing decisions should be taken seriously by SMEs.

SMEs should put in place effective Fixed Assets Management policies

Finally, SMEs should regularly do financial reporting and analysis to be able to identify financial weaknesses early enough.

Owners of SMEs should endeavour to employ the services of qualified managers rather trying to manage their businesses by themselves

### **5.5 Limitations of the Study**

The main limitation of the study is a problem of heterogeneity. This was due to the fact that the SMEs in the study area are of different sizes and are engaged in different types of activities. The study also suffered from low response rate due to the limited time available for the data collection. The response rate was 58 percent.

It was realized that many SMEs in the study area do not prepare proper financial statements and this may affect the correctness of the financial information given.

## REFERENCES

- Abanis T. Arthur S. and Ssekajugo D. (2014) Financial Management Practices and Business performance of Small and Medium Enterprises in Western Uganda *African Journal of Business Management* retrieved from [http://www.academicjournals.org/7\(38\)](http://www.academicjournals.org/7(38)) on 12<sup>th</sup> May, 2015
- Abdul, G .K. (2012). The Relationship of Capital Structure Decisions with Firm Performance: A Study of the Engineering Sector of Pakistan. *International Journal of Accounting and Financial Reporting*, 2(1), 2162-3082.
- Abor, J. & Quartey, P. (2010) Issues in SME Development in Ghana and South Africa
- Abor, J., and Biekpe, N. (2007). “Corporate governance, ownership structure and performance of SMEs in Ghana: implications for financing opportunities” *Corporate Governance: The international journal of business in society*,7(3), 288-300.
- Adebisi, J. F. & Gbegi, D.O. (2013). Effects of multiple taxation on the performance of small and medium scale business enterprises (a study of West African ceramics Ageokuta, kogi state). *Mediterranean Journal of Social Sciences*, 4(6,323).
- Adekunle, A.O & Sunday, O.K. (2010) Capital Structure and Firm Performance: Evidence from Nigeria. *European Journal of Economics, Finance and Administrative Sciences*, 25, 71-80
- Amboise G., & Gasse, Y. (1980). Performance in Small Firms and Utilization of Formal Management Techniques. *Proceeding of the Joint National Meeting TIMS/ORSA*, Washington.

- Ansah, O. S. (2011) Effective Management of Working Capital is the Life Blood of Every Business: An Assessment of Working Capital Management Practices within Ghana Water Company Limited
- Appiah Fening, F., Pesakovic, G., & Amaria, P. (2008) Relationship between quality management practices and performance of small and medium size enterprises (SMEs) in Ghana. *International Journal of Quality & Reliability Management*, 25(7), 694=708
- Arko S. K., (2012) Determining the Causes and Impact of Non Performing Loans on the operations of Microfinance Institutions: A Case of Sinapi ABA Trust.
- Arnold-McCulloch, R. S. and Lewis, J. (1986), Financial control in recently established small business, in T. Faulkner, G. Beaver, J. Lewis and A. Gibb (eds), Reading in small business, Gower Publishing, Andershot, England.
- Aryeetey, E. (2001) Priority Research Issues Relating to Regulation and Competition in Ghana. Centre for Regulation and Competition, Working Paper Series. No. 10.
- Asuquo, A. I., Effiong, S.A. Arzizeh, T. (n. d) The Effect of Financial Management Practices on The Profitability of Small and Medium Enterprises in Nigeria. *International Journal of Research in IT, Management and Engineering* retrieved from [www.gjmr.org](http://www.gjmr.org)2(3) on 20<sup>th</sup>july, 2015.
- Axelsson, H., Jakovicka, J. & Kheddache, M. (2002). Capital Budgeting Sophistication and Performance – A Puzzling Relationship. Unpublished Doctoral Thesis Graduate Business School, Goteborg University.

- Back, D. (1985), *Success in Small Business: the Role of the Financial Adviser*, Longman Professional, Sydney.
- Beck, T. & Levine, R. (2004). Stock Markets, Banks and Growth: Panel evidence. *Journal of Banking & Finance*, 28 (3,423-442).
- Blinder, A.S. & Maccini, L.J. (1991). The Resurgence of Inventory Research: What Have We Learned? *Journal of Economic Survey*; 5: 291-328.
- Boachie-Mensah, F.O. & Marfo –Yiadom, E. (2005) *Entrepreneurship and Small Business Management*. Accra: Ghana Universities Press.
- Bolton, J. E., (1971), *Report of the Committee of Inquiry on Small Firms*, Cmnd 4811, Her Majesty's Stationery Office, London.
- Brealey, R. A & Myers, S. C. (2002). *Brealey & Myers on Corporate Finance: Capital Investment and Valuation*. New York: McGraw-Hill.
- Brigham, E. F. & Ehrhardt, M. C. (2004). *Financial Management: Theory and Practice*, 11th Edition, South-Western College Publishers, New York.
- Chandra, P. (2008). *Financial Management: Theory and Practice*. New Delhi: Tata McGraw Hill Education Private Ltd.
- Chen, J. C. (1993). The Impact of Microcomputer Systems on Small Business: England, 10 Years Later. *Journal of Business Management*,31(3).
- Chen, P. H. (1983). Getting the most out of your first company system, *American Journal of Small Business*, 4(2), p. 1 – 11.
- Cochran, W. G. (1977). *Sampling Techniques* (3rd ed.). New York: John Wiley & Sons.

- Cohen, Sandra: Kaimenakis, Nikolaos Learning Organisations. Apr 2007.vol.14 Issue 3, p241-262. 22p. DOI:10.1108/09696470710739417
- Cohen, W. A. (1989). *The Entrepreneur and Small Business Financial Problem Solver*, John Wiley & Sons, New York.
- Collis J (2002). Financial information and the management of small private companies. *J. Small Bus. Enterprise Dev.* 9(2):10-16
- Colquitt, L., Sommer, D., & Godwin, N. (1999).Determinants of Cash Holdings by Property Liability Insurers. *The Journal of Risk and Insurance*; 66 (3): 401-415
- Creswell, J.W. 2003. *Research Design: Qualitative, Quantitative and Mixed Methods Approach*. Second edition. London: Sage Publications.
- Davis, D., (1996), *Business Research for Decision making*, 4th Edition, Duxbury Press.
- Deloof, M. (2003). Does Working Capital Management Affect Profitability of Belgian Firms *Journal of Business Finance & Accounting*; 30 (3/4): 573-587.
- Department of Industry, Technology and Commerce, (1992), *second annual report small business in Australia*, Australian Government Publishing Service, Canberra, Australia Capital Territory.
- DeThomas, A. R. and Fredenberger, W. B., (1985), Accounting Needs of Very Small Business. *CPA Journal*, 55(10), p. 15 – 22.
- Ebaid, E. I. (2009). The impact of capital-structure choice on firm performance: empirical evidence from Egypt. *The Journal of Risk Finance*, 10(5), 477-487.

- Ellehausen, G. E., & Wolken, J. D. (1993). The Demand for Trade Credit: An Investigation of Motives for Trade Credit Use by Small Businesses, Working Paper, The Federal Reserve Board.
- Fabozzi, F. J., & Pamela, P. D. (2009). *Capital Markets, Financial Management, and Investment Management* (1st ed). John Wiley & Sons, Inc., Hoboken, New Jersey Canada.
- Farhoodmand, F. and Hryck, G. P. (1985). The Feasibility of Computers in the Small Business Environment. *American Journal of Small Business*, 9(4), p. 15 – 22.
- Fazzari, S. M., & Petersen, B. (1993). Working Capital and Fixed Investment: New evidence on Financing Constraints, *Rand Journal of Economics*, 24, 328-342.
- Fisher, E. & Reuber R. (2000). Industrial Clusters and SME promotion in developing countries (No.3). Commonwealth Secretariat
- Garcia-Teruel PJG, Solano PM (2007). Effects of Working Capital Management on SME Profitability”, *Int. J. Managerial Finance*. 3(2): 164-177
- Ghana Banking Survey (2013): Harnessing the Potential of SMEs (taken from <https://www.pwc.com,gh/en/publications/Ghana-banking-survey-2013.jhtml>)
- Ghana Statistical Service (2012). 2010 Population and Housing Census: Summary Report of Final Results. Ghana Statistical Service, Accra.
- Ghosh, C., Nag, R. & Sirmans, C. (2000). The pricing of seasoned equity offerings: evidence from REITs. *Real Estate Economics*, 28, 363-84.

- Gitman, L. J. (2005). *Principles of Management Finance*. Pearson Addison Wesley  
San Diego State University.
- Gleason, K., Mathur, L. & Mathur, I. (2000). The Interrelationship between Culture,  
Capital Structure and Performance: Evidence from European Retailers,  
*Journal of business research*, 50, 185-191.
- Gorton, M., (1999) Use of Financial Management Techniques in the UK – Based  
Small and Medium Sized Enterprises: Empirical Research Findings. *Journal  
of Financial Management and Analysis*, 12(1), p. 56 – 64.
- Gul, F. A., (1991), The Effects of Management Accounting Systems and  
Environmental Uncertainty on Small Business Manager's Performance.  
*Accounting and Business Research*, Vol. 22, No. 85, p.57 – 61.
- Hadlock, C. & James, C. (2002). Do banks provide financial slack? *Journal of  
Finance*, 57,1383-420.
- Haka, Gordon & Pinches (1985). *The Accounting Review*; 60(4), pp. 651-669.
- Hugo, W.M.J. Badenhorst-Weiss J. a. and Rooyen D. C. (2002). *Purchasing and  
Supply Management*. 4th ed, Pretorial: J. L. Vanschaik Publishers.
- Javed, B. & Akhtar, S. (2012) Interrelationships between Capital Structure and  
Financial Performance, Firm Size and Growth: Comparison of industrial  
sector in KSE: *European Journal of Business and Management*, 4(15), 148-  
157.

- Jensen, M. & Meckling, W. (1976). Theory of the Firm: Managerial Behaviour, Agency Costs and Capital Structure, *Journal of Financial Economics*, 3, 305-360.
- Johnson, M. (2004). "Revving Up the Working Capital Cycle," [www.allbusiness.com/ /accounting/959776-1.html] (Retrieved 27th January, 2010).
- Karlsson, A. (1996). *AttTjänaPengarpåPengar – Cash Management*. Skriftserien nr 31. Ernst & Young. Stockholm
- Kaumbuthu, A.J. (2011) The relationship between capital structure and financial performance: a study of firms listed under industrial and allied sector at the NSE, (MBA Dissertation, university of Nairobi ,2011). Retrieved from <http://erepository.uonbi.ac.ke>.
- Kavitha, N. (2007). "Understanding of Working Capital," Faculty Column. (Accessed on 27th January, 2010) [<http://www.indianmba.com>].
- Kenya Vision 2030, Popular Version (2007). Government Of the Republic of Kenya. Nairobi Kenya
- Kerlinger, F. N., & Lee, H. B. (2000) Foundations of behavioural research (4th ed.). Fort Worth, TX: Harcourt.
- Khan J, Jawaid G (2004) Clusters and Entrepreneurship: Implications for Innovation in a Developing Economy, *J. Dev. Entrpr.* 9 (3) 201-219.
- Kieu, M. N. (2004). Financial Management and Profitability of Small and Medium Enterprises, DBA Thesis.

- Kitonga, K. G. (2013). The Relationship between Financial Management Practices and Financial performance in the shipping industry in Kenya. Kenya
- Klammer, T. (1973).The Association of Capital Budgeting Techniques with Firm Performance. The Accounting Review; Vol. 48, No. 2, pp 353-364.
- Kotey B (1999). Debt Financing and Factors Internal to Business', Int. Small Bus. J. 17 (3): 14-24.
- Kumar, A.V. (2001). Working Capital Management. India: Northern Book Centre.
- Lois S, Annette A (2005). Support for Growth-oriented Women Entrepreneurs in Uganda. International Labour Organization, Geneva, Switzerland
- Lorenzo, P. (2010). Working Capital Management. Oxford Scholarship On-line: England
- Maina, L. & Kondongo, O. (2013). Capital Structure and Financial Performance in Kenya: Evidence from Firms Listed at the Nairobi Securities Exchange. Paper Presented at the Jomo Kenyatta University of Science and Technology Research Conference, Kenya.
- Maness T. S. & Zietlow, J. T. (2005).Short-term Financial Management. South-Western/Thomson Learning, Ohio.
- Marfo, Y.E. (1999). Essentials of Financial Management, Cape Coast: Germain Publications

- Mathuva, D. M. (2010) “The influence of Working Capital Management Components on Corporate Profitability: A Survey on Kenyan Listed Firms”, *Research Journal of Business Management*, Vol.4, No. 1, pp. 1-11,
- McMahon R. G. P., Holmes S, Hutchinson P. J, and Forsaith D. M. (1993). *Small Enterprise Financial Management: Theory and Practice*, Sydney, New South Wales: Harcourt Brace.
- McMahon, G. P., & Holmes, S. (1991). Small business financial management practices in North America: a literature review, *Journal of Small Business Management*, 29(1).
- McMahon, R. G. P. (1995), *Financial Management for Small Business*, 2<sup>nd</sup> edition, CCH Australia
- McMahon, R. G. P. and Stanger, A. M. J. (1995), Understanding the Small Enterprise Financial Objective Function, *Entrepreneurship: Theory and Practice*, Summer,1995.
- McMahon, R. G. P., (1999), Financial Reporting To Financiers by Australian Manufacturing SMEs, *International Small Business Journal*, 18(1) p. 35 – 52.
- McMahon, R. G. P., Holmes, S., Hutchinson, P. J., Forsaith, D. M. (1993), *Small Enterprise Financial Management: Theory and Practice*, Harcourt Brace, Sydney
- Meredith, G. G. (1986), *Financial Management of the Small Enterprise*, McGraw-Hill, Sydney, New South Wales.

- Modigliani, F., & Miller, M. H. (1958). The Cost of Capital, Corporate Finance, and the Theory of Investment, *American Economic Review*, 48, 261-297.
- Mongabay (2015) "The largest cities in Ghana, ranked by population". Retrieved June 20, 2015 from mongabay.com.
- Moore, J. & Reichert, A. (1989). A Multivariate Study of Firm Performance and the Use of Modern Analytical Tools and Financial Techniques. *Interfaces*; 19(3).
- Mukhopadhyay, D. (2004). Working Capital Management in Heavy Engineering Firms - A case study. *Management Accountant – Calcutta*: 39(4): 317-323.
- Musah, A. & Ibrahim, M. (2014) Record keeping and the Bottom Line: Exploring the relationship between Record Keeping and Business Performance among Small and Medium Enterprises (SMEs) in the Tamale Metropolis of Ghana. *Research Journal on Finance and Accounting*, 5(2, 107-117).
- Mwangi, I. C. Anyango, M.O & Ameyia, S (2012) Capital Structure Adjustment, Speed of Adjustment and Optimal Target Leverage among Firms Quoted on the Nairobi Stock Exchange. *International Journal of Humanities and Social Science*, 2(9), 100-114
- Mwangi, L. W. Makau, M. S. Kosimbei, G. (2014) Relationship between Capital Structure and Performance of Non-Financial Companies Listed In the Nairobi Securities Exchange, Kenya. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics* retrieved from [www.globalbizresearch.org](http://www.globalbizresearch.org) I(2) on 15<sup>th</sup> May, 2015.

- Nguyen K (2001). Financial Management and Profitability of Small and Medium Enterprises: DBA Thesis. Southern Cross University, Lismore NSW
- Nguyen, K. Minh (2001), Financial Management and Profitability of Small and Medium Enterprises', DBA thesis, Southern Cross University, Lismore, NSW.
- O'Neill, K., (1993) Focus on Growth-Fostering Small Enterprise, Keynote Address in Proceedings of the Joint SEAAANZ and IIE Small Enterprise Conference, Newcastle Australia: IIE University of Newcastle Press.
- Obeng L. Martin (2014) Contract Management Practices and Contractual Judgement Debts in Developing Countries: Evidence from Ghana. Unpublished DBA Thesis. Paris School of Business.
- Palmer, K. N., (1994) Financial Information Used By Small Independent Retailers. *The CPA Journal*, April, 64(4).
- Paramasivan, C., & Subramanian, T. (2009). Financial management (1st). New Age International (P) Ltd., Publishers.
- Pass, R. & Pike, C. (1987). Management of Working Capital: A Neglected Subject. *Management Decision*. Vol. 25 (1), pp. 18-24.
- Peacock, R. W., (1988). Small Business Bankruptcy, *Accounting forum*, 1(3), 51-52
- Peel, M. J. and Wilson, N., (1996), Working Capital and Financial Management Practices In the Small Firm Sector. *International Small Business Journal*, 14(2), p.52 – 68.
- Petersen, M.A. & Rajan, R.G. (1997). Trade credit: theories and evidence. *Review of Financial Studies*; 10: 661-91.

- Petty, J. W. (1991). Research in Small-Firm Entrepreneurial Finance: A Note on Developing a Paradigm, *Journal of Small Business Finance*, 1(1), 89-90.
- Pieterse A. (2012) Working Capital Management Practices of Small and Medium Enterprises in the Western Region. A Survey of Selected SMEs in the Sekondi- Takoradi Metropolis
- Rausch, E. N., (1982). *Financial Management for Small Business*. New York: Amacom.
- Ray, G. and Hutchison, P. J. (1983), *The financing and financial control of small enterprise development*, Gower Publishing, Aldershot, England.
- Raymond, L. (1985), Organizational Characteristics and MIS Success in the Context of Small Business, *MIS Quarterly* 9(1), p. 37 – 52.
- Raymond, L., and Magnenat-Thalmann, N. (1982). Information system in small business: Are they used in Managerial Decisions? *American Journal of Small Business*, 6(4), p. 20-26.
- Romney et al, (2009). *Accounting Information Systems*, Upper Saddle River. New Jersey Pearson Prentice Hall.
- Ross, S. A., Westerfield, R. W. and Jaffe, J. (1999), *Corporate Finance*, 5th edition, Irwin and McRaw-Hill, Boston.
- Saeedi, A. & Mahmoodi, I. (2011). Capital Structure and Firm Performance: Evidence from Iranian Companies. *International Research Journal of Finance and Economics*, 70, 20-29.

- Salazar L. A., Soto C. R. & Mosqueda E. R (2012).The Impact of Financing Decisions and Strategy on Small Business Competitiveness. *Global Journal of Business Research*, 6(2), 93-103
- Scarborough, N. M and Zimmerer, T. W. (1984), *Effective small business management*, 2nd edition, Merrill Publishing Company.
- Shin, H.H. and Soenen, L. (1998).Efficiency of working capital and corporate profitability. *Financial Practice and Education*, 8: 37- 45.
- Simerly, R. & Li, M. (2000). Environmental Dynamism, Financial Leverage and Performance: A Theoretical Integration and an Empirical Test. *Strategic Management Journal*, 21, 31-49.
- Simpson, M. & Taylor, N. (2002).The role and relevance of marketing in SMEs towards a new model. *Journal of small business and enterprise development*, 9(4,370-382).
- Snodgrass, D. R., & Winkler, J. P., (2004). Enterprise Growth Initiatives: Strategic Directions and Options, Prepared for the US Agency for International Development, bureau of Economic Growth, Agriculture and Trade. Final Report: Development Alternatives, INC (DAI).
- Soldofsky, R. M. (1964), Capital Budgeting Practices In Small Manufacturing Companies, in D. G. Lukett and K. A. Fox (eds), *Studies in the factor market for small business firms*, Iowa State University, Ames, Iowa.
- Storey, D. J. (1994), *Understanding the Small Business Sector*, London: Routledge.

- Teruel, P. J. G., & Solano, P. M. (2007). Effects of Working Capital Management on SME profitability, *International Journal of Managerial Finance*, 3(2), 164-177.
- Thomas, J. and Evanson, R. V., (1987), An empirical investigation of association between financial ratio use and small business success, *Journal of Business and Accounting*, 14(4).
- Tourna E., Germanos G., (2000) The Role of Accounting Information on Business Strategy Formulation of Small- And Medium- Sized Enterprises in Greece.
- Uyar Ali (2009). The Relationship of Cash Conversion Cycle with Firm Size and Profitability: An Empirical Investigation in Turkey. *International Research Journal of Finance and Economics*, Euro Journals Publishing, Inc. ISSN 1450-2887 Issue 24
- Westhead, P. & Matlay, H. (2005) Graduate Employment in SMEs: a Longitudinal Perspective. *Journal Small Business and Enterprise Development*, 12 (3, 353-365).
- Whited, T. M. (1992). Debt, Liquidity Constraints, and Corporate Investment: Evidence from Panel Data, *Journal of Finance*, 47, 1425-1460.
- Wobshet, M. (2014) Impact of Working Capital Management on Firms' Performance: The Case of Selected Metal Manufacturing Companies in Addis Ababa, Ethiopia. Jimma, Ethiopia.
- Ziem (2013) Tamale – West Africa's Fastest Growing City. Retrieved from [www.ghanaweb.com](http://www.ghanaweb.com) on 20 June, 2015

## APPENDICES

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,

KUMASI

SCHOOL OF BUSINESS

INTERVIEW GUIDE FOR SMEs

This interview is part of a research thesis which attempts to find the impact of financial management practices on profitability of SMEs in Tamale. The information sought from you would be kept strictly confidential and would be used only for research purposes. Kindly co-operate to make this study a success.

### PART I

BACKGROUND INFORMATION

1. Your position in the Company:.....
2. What type of organisation is your business:
  - a. Sole proprietorship
  - b. Partnership
  - c. Limited liability company
3. How many branches does the company have in Ghana? .....
4. How many employees does the business have?.....
5. For how many years has the business been in operation in Tamale? .....
6. What services does your company provide? .....
7. What is the highest educational level of the owner/manager
  - a. No formal education
  - b. Basic level
  - c. Secondary education
  - d. Diploma

- e. First degree
- f. Masters' degree
- g. Doctorate

8. Is the manager different from the ownership of the business? (Yes) (No)

**Part II:**

Please choose any one answer for each of the following statements. The five options given are:

**SA** - Strongly Agree, **A** – Agree, **U** – Undecided **DA**– Disagree and **SD** - Strongly Disagree

<b>Section A: Working Capital management</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
1. The company has a working capital management system					
2. Maintains inventory records which are updated regularly					
3. Receivables management system is fully automated					
4. Optimal cash balances are maintained by the company at all times					
5. Maintains proper records for all payables					
6. Ensures there is sufficient cash flow to meet daily needs					
7. Prepares cash flow forecasts to identify future surpluses and deficits					
<b>Section B: Fixed Assets Management</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
8. The company maintains a non-current assets register					
9. The non-current assets have been tagged/labelled					
10. Movement of non-current assets have to be authorised by senior management					

11. Non-current assets count is carried out every year					
12. Capital expenditure on non-current assets must be authorised by senior management					
13. The repair and maintenance of non-current assets is carried out regularly					
<b>Section D: Investment</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
14. Your business ploughs back all profit into the business					
15. Your business invests into other businesses					
16. Your business invests into only short-term projects					
17. Your business invests into only long-term projects					
18. Your business invests into both short-term and long-term projects					
<b>Section E: Financing</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
19. Business is financed with loans from financial institutions					
20. Business is financed by buying and selling of accounts receivables in order to obtain immediate cash					
21. Business is financed selling of the business obsolete assets					
<b>Section F: Accounting Information System</b>	<b>SA</b>	<b>A</b>	<b>U</b>	<b>D</b>	<b>SD</b>
22. There is an accountant separate from the cashier					
23. The organization uses Accounting software					
24. When cash sales occur, do all receipts have pre-numbered identification?					
25. Authenticated duplicates of the deposit slips are retained and reconciled to the corresponding amounts in the cash					

receipts records					
26. Are all resulting discrepancies investigated and resolved by internal auditor					

**SECTION G: Financial reporting and analysis**

27. What kinds of financial statements are regularly prepared in your business

(May circle more than one)?

- a. Balance sheet
- b. Income statement (Profit and loss statement)
- c. Statement of cash flows
- d. Statement of funds
- e. Other (please specify) .....

28. Who is responsible for preparing and analysing financial statement of your business? (Please tick)

- a. Owner..... ( )
- b. Manager.....( )
- c. Chief accountant.. ( )
- d. Employed accountant..... ( )
- e. External accountant..... ( )
- f. Never does it..... ( )

29. How often the financial statements of your business are prepared and analysed

(Please tick)?

- a. Monthly..... ( )
- b. Quarterly..... ( )
- c. Annually..... ( )
- d. Never..... ( )

30. What kinds of financial analysis are currently used in your business? (May

circle more than one)

- a. Ratio analysis ..... ( )
- b. Trend analysis ..... ( )
- c. Both ..... ( )
- d. Other (please specify) .....

31. Does your business apply computers in financial reporting and analysis?

- a. Never ..... ( )
- b. Rarely ..... ( )
- c. Sometimes ..... ( )
- d. Often ..... ( )
- e. Always ..... ( )

32. If yes, what area is your computer applied? (Please tick the number that applies)

- a. Financial reporting ..... ( )
- b. Financial analysis ..... ( )
- c. Both ..... ( )
- d. Other (please specify) .....

33. In your opinion, the financial statements of the company are prepared in line with the financial accounting standards

- a. Strongly Agreed
- b. Agreed
- c. Undecided
- d. Disagreed
- e. Strongly Disagreed

### Part III

Please provide the following estimate for the year 2014:

<b>2014 Estimate of</b>	<b>Amount GH¢</b>
<b>34. Fixed assets</b>	
<b>35. Current assets</b>	
<b>36. Current liability</b>	
<b>37. Total net profit after tax and interest</b>	
<b>38. Total Interest paid</b>	
<b>39. Total Tax Obligation</b>	